# The Collin College Catalog

Academic Year: 2017-18
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Spring 2018

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The programs, policies, statements, fees and courses contained herein are subject to continual review and evaluation. Please refer to the college website for the latest updates. Collin College reserves the right to make changes or deletions at any time without notice. This publication is intended for information only and is not intended as a contract.

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# **ABOUT COLLIN COLLEGE**

### **College Mission Statement**

Collin College is a student- and community-centered institution committed to developing skills, strengthening character and challenging the intellect.

### **Vision Statement**

Delivering a brighter future for our students and communities.

### **Core Values**

We have a passion for:

- Learning
- Service and Involvement
- Creativity and Innovation
- Academic Excellence
- Dignity and Respect
- Integrity

### Philosophy and Purpose Statement

Through its campuses, centers and programs, Collin County Community College District fulfills community and industry needs and its statutory charge by providing:

- Academic courses in the arts and sciences to transfer to senior institutions.
- Programs leading to baccalaureate degrees, associate degrees or certificates, including technical programs, designed to develop marketable skills and promote economic development.
- Continuing adult education programs for academic, professional, occupational and cultural enhancement.
- Developmental education and literacy programs designed to improve the basic skills of students.
- A program of student support services, including counseling and learning resources designed to assist individuals in achieving their educational and career goals.
- Workforce, economic and community development initiatives designed to meet local and state needs.
- Other purposes as may be directed by the Board and/or the laws of the State of Texas.

## **Equal Opportunity Statement**

Collin College is an equal opportunity institution and provides educational and employment opportunities without discrimination on the basis of race, color, religion, sex, age, national origin, disability, veteran status, or other legally protected class. In accordance

with the Americans with Disabilities Act as amended in 2008 and Section 504 of the Vocational Rehabilitation Act of 1973, Collin College provides accommodations as required by law to afford equal educational opportunities to all people. Linda Qualia, the Student ADA/Title IX/504 Coordinator, can be located at the Spring Creek Campus, Room D136; 972-881-5779.

For more information or to request accommodation services for students, contact ACCESS (Accommodations at Collin College for Equal Support Services) at 972.881.5898 (Voice). For persons who are deaf, hard of hearing, or have speech impairments, please contact the ACCESS office at 972.516.5056. The Collin College ACCESS Department Video Phone number is 214.299.8216. Upon request to the ACCESS Office, the college catalog can be converted to an accessible format for vision or print-oriented disabilities.

### **Accreditation Status**

Collin County Community College District is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate degrees and certificates. Contact the Commission at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404.679.4500 for questions about the accreditation of Collin County Community College District. Note: The Commission is to be contacted only if there is evidence that appears to support the institution's significant non-compliance with a requirement or standard.

### **Accrediting Bodies**

Accreditation Commission for Education in Nursing (ACEN); American Culinary Federation Education Foundation; American Dental Association's Commission on Dental Accreditation (CODA); Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM); Commission on Accreditation for Respiratory Care (CoARC); Commission on Accreditation of Allied Health Education Programs (CAAHEP) through the Committee on Accreditation of Emergency Medical Services Professions (CoAEMSP); Commission on Accreditation of Allied Health Education Programs (CAAHEP) through the Accreditation Review Council on Educa-tion in Surgical Technology and Surgical Assisting (ARC/STSA); Commission on Accreditation of Allied Health Education Programs (CAAHEP) through the Committee on Accreditation for Polysomnographic Technologist Education (CoAPSG); National Association for the Education of Young Children (NAEYC).

# **CAMPUS AND WEBSITE INFORMATION**

### **Campuses and Locations**

To see map of campuses, visit <a href="http://www.collin.edu/campuses">http://www.collin.edu/campuses</a>

### Allen Center (AL)

Allen High School 300 Rivercrest Blvd. Allen, Texas 75002 972,377,1060

### Central Park Campus (CPC)

2200 W. University Drive McKinney, Texas 75071 972.548.6790

### Collin Higher Education Center (CHEC)

3452 Spur 399 McKinney, Texas 75069 972.599.3100

### Courtyard Center (CYC)

4800 Preston Park Blvd. Plano, Texas 75093 972,985,3790

### Preston Ridge Campus (PRC)

9700 Wade Blvd. Frisco, Texas 75035 972.377.1790

### Rockwall Center (RW)

2610 Observation Trail Rockwall, TX 75032 214.771.4573

### Spring Creek Campus (SCC)

2800 E. Spring Creek Parkway Plano, Texas 75074 972.881.5790

### Collin College Web Link Directory

http://www.collin.edu

### **Board of Trustees**

http://www.collin.edu/leadership/board\_of\_trustees.html

### Leadership Team

http://www.collin.edu/leadership/leadershipteam.html

### **Academic Administrators**

http://www.collin.edu/leadership/provostsanddeans.html

#### Faculty

http://hb2504.collin.edu/ (course syllabi, professors' curricula vitae)

### ACCESS - Disability Support Services

http://www.collin.edu/studentresources/disabilityservices/

#### Athletics

http://www.collin.edu/athletics

### Center for Scholarly and Civic Engagement

http://www.collin.edu/academics/csce

### Continuing Education and Workforce Development

http://www.collin.edu/ce

### Fitness Centers/Intramurals

http://www.collin.edu/intramurals

#### **Honors Institute**

http://www.collin.edu/academics/honors

### **Learning Communities**

http://www.collin.edu/learningcomm

#### Law Enforcement Academy

http://www.collin.edu/department/lawenforcement/

#### National Technical Honor Society

https://orgsync.com/95652/chapter

### Service Learning

http://www.collin.edu/academics/servicelearning

#### **Student Organizations**

http://www.collin.edu/campuslife/student\_orgs.html

#### The Arts Gallery

http://www.collin.edu/theartsgallery

### The Center for Advanced Studies In

Mathematics and Natural Sciences

http://www.collin.edu/academics/casmns/

### Weekend College

http://www.collin.edu/academics/weekendcollege/

# **QUICK REFERENCE GUIDE**

Allen Center (AL)		Collin Higher Education Cen	ter (CHEC)	
General Information			()	
		Associate Vice President - Academic O	utreach	
Central Park Campus (CPC)			972.599.3121	
Student Services		Collin College Police Department	972.578.5555	
ACCESS		Cougar News (Online Newspaper)		
Admissions	972.548.6710	Information Center	972.599.3100	
Advising	972.548.6782	Transfer Programs	972.599.3121	
Bookstore		Administrative Departments		
Career Services		Title IX Coordinator for Complaints		
Center for Academic Assistance		Against Employees		
Collin College Police Department	972.578.5555	Business Office		
Cooperative Work Experience:		Cashier's Office		
Co-ops/Internships		Dean of Students and Title IX Coo		
Counseling Services		Complaints Against Students	972.881.5604	
Dean of Students	972.881.5604	District President's Office	972.758.3800	
eCollin Support Center		Executive Vice President		
Financial Aid/Veterans Affairs	972.548.6760	Foundation (Scholarships)		
Fitness Center		Plant Operations	972.599.3155	
Information Center		Public Relations	972.758.3895	
Library		Senior Vice President Acad. Workforce		
Math Lab	972.548.6896	and Enroll. Services	972.758.3883	
Maximizing Academic Progress Progr	am	Senior Vice President of Organizationa		
(MAPP)	972.548.6782	and System Effectiveness	972.985.3780	
Student Computer Lab		Vice President of Administrative		
Student and Enrollment Services	972.548.6770	Services/CFO		
Student Life		Vice President of Advancement	972.758.3895	
Student Technical Support 24/7		Vice President of Student and		
Testing Center	972.548.6849	Enrollment Services	972.599.3150	
Transfer Programs	972.985.3734	CHEC Four-year University Representa	tives	
Writing Center	972.548.6857	Texas A&M University-Commerce	972.599.3122	
Administrative Departments		Texas Tech University		
Associate Faculty Office	972.548.6830	Texas Woman's University	972.599.3124	
Cashier's Office	972.548.6616	The University of Texas at Dallas	972.599.3127	
Collaborative Instruction Center	972.548.6830	University of North Texas	972.599.3126	
Dean of Student and				
Enrollment Services		Courtyard Center (CYC)		
eLearning		Student Services		
Facilities Scheduling Coordinator		Admissions	972.985.3721	
Plant Operations		Bookstore		
Texas Success Initiative (TSI) Info	972.548.6773	Collin College Police Department	972.578.5555	
Vice President/Provost	972.548.6800	Registration	972.985.3790	
Divisions		Administrative Departments		
Academic Affairs	214.491.6270	Cashier's Office		
Health Sciences and Emergency		Plant Operations	972.985.3777	
Services		Texas Success Initiative (TSI) Info	972.548.6773	
Nursing	972.548.6772	Vice President Workforce and		
		Economic Development	972.985.3717	
		Divisions		
		Continuing Education	972.985.3750	

Preston Ridge Campus (PR	(C)	Spring Creek Campus (SCC)	
Student Services		Student Services	
ACCESS	972.881.5950	ACCESS	
Admissions	972.377.1710	ADA/Section 504 Coordinator	972.881.5779
Advising	972.377.1779	Admissions	972.881.5710
Bookstore	972.377.1680	Advising	972.881.5782
Collin College Police Department	972.578.5555	THE ARTS gallery	972.881.5873
Cooperative Work Experience:		Bookstore	
Co-ops/Internships	972.377.1594	Center for Scholarly and	
Counseling Services		Civic Engagement (CSCE)	972.881.5927
Dean of Students		Child Development Lab School	
eCollin Support Center		Collin College Police Department	
Financial Aid/Veterans Affairs		Cooperative Work Experience:	, 72.0 7 0.0000
Fitness Center		Co-ops/Internships	972 377 1594
Information Center		Career Services	
Library		Counseling Services	
Math Lab		Dean of Students	
Maximizing Academic Progress Progress		eCollin Support Center	
(MAPP)		Financial Aid/Veterans Affairs	
Student Computer Lab		Fitness Center	
Student and Enrollment Services		Food Services	
Student Life		Honors Institute	
Student Technical Support 24/7		Information Center	
Testing Center		International Student Office	
Transfer Programs		Library	
Writing Center	972.377.1576	Math Lab	
Administrative Departments		Maximizing Academic Progress Program	
Cashier's Office	972.377.1638	(MAPP)	
Dean of Student and		Service Learning	972.881.5927
Enrollment Services	972.881.5902	Student Computer Lab	
eLearning	972.881.5870	Student and Enrollment Services	972.881.5627
Facilities Scheduling Coordinator	972.377.1743	Student Life	972.881.5788
Instruction Office - Lawler Hall		Student Technical Support 24/7	972.377.1777
(LH158)	972.377.1554	Testing Center	
Instruction Office - Founders Hall		Transfer Programs	
(F243)	972.377.1506	Tutoring	
Instruction Office - J Building		Wellness Center	
(J240)	972.377.1064	Writing Center	
Instruction Office - Library		Administrative Departments	
(L222)	972.377.1585	Cashier's Office	972.881.5634
Instruction Office - University Hall		Dean of Student and	, , 2.001.000 1
(U111)	972 377 1585	Enrollment Services	972 377 1595
Plant Operations		eLearning	
Texas Success Initiative (TSI) Info		Facilities Scheduling Coordinator	
Vice President/Provost Office			
Divisions		Instruction Office (B103) Instruction Office (K237)	072 881 5750
Academic Affairs	072 277 1004		
		Instruction Office (L215)	
Computer Science, Engineering Tecl		Plant Operations	9/4.081.3090
and Human Services	409.303.1900	Texas Success Initiative (TSI) Info	
D. J. J. C. (DW)		Vice President/Provost Office	9/2.881.5//0
Rockwall Center (RW)	04.4.774.4570		
General Information	214.//1.45/3		

# 2017-2018 ACADEMIC CALENDAR

<b>FALL 2017</b>		May 7-13	Spring final exam week
Aug. 18	All College Day	May 11	Collin College 2017-2018
C	(All campuses closed)		Commencement at 7 p.m.
Aug. 28	Fall classes begin		
Sept. 4	Labor Day Holiday	SUMMER	2018
	(All campuses closed)	May 14	Three-Week May classes begin
Sept. 11	Fall census date	May 15	Three-Week May census date
Sept. 22	Plano Balloon Festival - Spring	May 18	Three-Week May last day to
	Creek Campus closes at 3	,	withdraw
	p.m.	<b>May 28</b>	Memorial Day Holiday
Sept. 23-24	Plano Balloon Festival - Spring	J	(Campuses closed)
	Creek Campus closed	May 29	Three-Week May final exams
Oct. 20	Fall last day to withdraw	June 4	Five-Week June and 10-Week
Nov. 22-26	Thanksgiving Holiday	Julie 1	Summer classes begin
D 44.47	(All campuses closed)	June 7	Five-Week June census
Dec. 11-17	Fall final exam week	June 12	10-Week Summer census date
Dec. 18	Wintermester classes begin		
Dec. 19 Dec. 22	Wintermester census date	June 19	Five-Week June last day to withdraw
Dec. 22 Dec. 18-22	Wintermester last day to withdraw Wintermester classes meet	T 1 4	
	2 Winter break	July 4	Independence Day Holiday
Dec. 25-jaii.	(Campuses closed)		(Campuses closed)
	, <u>-</u>	July 5	10-Week Summer last day to withdraw
SPRING 201		July 6	Five-Week June final exams
Jan. 3	Wintermester classes resume	July 6	Fourth of July make-up day for
Jan. 10	Wintermester final exams	J = J =	Five-Week June and 10-Week
Jan. 15	MLK Holiday (All campuses		Summer MW classes
	closed except for events at SCC)	July 9	Five-Week July classes begin
Jan. 16	Spring classes begin	July 12	Five-Week July census date
Jan. 29	Spring census date	July 24	Five-Week July last day to
March 9	Spring last day to withdraw	July 27	withdraw
March 12-15	Spring Break (No classes)	Aug. 9.0	
March 16-18	Spring Break	Aug. 8-9	10-Week Summer final exams
N. 1.20	(Campuses closed)	Aug. 9	Five-Week July final exams
March 30-	Spring Holiday		
April 1	(Campuses closed)		

# **AWARDS AT A GLANCE**

### **Academic Transfer Awards**

# Associate of Arts (AA) Degrees

Associate of Arts - General Studies

Associate of Arts - Business Field of Study

Associate of Arts - Communication Field of Study

Associate of Arts - Criminal Justice Field of Study

Associate of Arts - Music Field of Study

# Associate of Science (AS) Degrees

Associate of Science – General Studies Associate of Science – Computer Science Field of

Associate of Science - Engineering Field of Study

# Associate of Arts in Teaching (AAT) Degrees

Associate of Arts in Teaching – Early Childhood-Grade 6

Associate of Arts in Teaching – Middle Grades (Grades 4-8)

Associate of Arts in Teaching – High School (Grades 8-12)

### **Academic Certificates**

Certificate - Core Curriculum Completion

Certificate - Business Field of Study

Certificate - Communication Field of Study

Certificate - Computer Science Field of Study

Certificate - Criminal Justice Field of Study

Certificate - Engineering Field of Study

Certificate - Music Field of Study

### **Workforce Awards**



## **Animation & Game Art**

(Career Cluster: Arts, A/V Technology & Communications)

Also see Video Production

AAS – Animation & Game Art
Certificate Level 1 – Animation & Game Art
Certificate Level 3 - ESC – Advanced Animation &
Game Art Production



## **Biotechnology**

(Career Cluster: Science, Technology, Engineering & Math)

Certificate Level 2 – Biotechnology



### **Business Management**

(Career Cluster: Business Management & Administration)

AAS - Business Management

Business Management Track

Human Resources Management Track

Certificate Level 1 – Business Management Certificate Level 1 – Human Resources

Management



# **Business Office Support Systems**

(Career Cluster: Business Management & Administration)

AAS - Business Office Support Systems

**OSA – Accounting Support** 

OSA – Business Office Support Systems

Certificate Level 1 – Business Office Support Systems

Certificate Level 1 - Medical Office Support



Also see Child Development / Early Childhood and Associate of Arts in Teaching (AAT)

AAS - Child Development

OSA - Child Development Associate Training

OSA – Child Development Administration of Programs for Children

Certificate Level 1 - Child Development

Certificate Level 1 – Child Development Associate



# Child Development / Early Childhood

(Career Cluster: Education & Training)

Also see Child Development and Associate of Arts in Teaching (AAT)

Certificate Level 1 – Early Childhood Educator Certificate Level 1 – Infant and Toddler Educator



# **Computer Networking**

(Career Cluster: Information Technology)

### AAS - Computer Networking

Integrated Networking Technologies Track Infrastructure Track — with Cisco focus Systems Track — with Microsoft focus

OSA – All Tracks: Entry-Level Network Support Integrated Networking Technologies Track

Certificate Level 1 – Integrated Networking Cloud Technician

Certificate Level 1 – Integrated Networking Virtualization and Storage Technician

Certificate Level 2 – Integrated Networking Administrator

Certificate Level 3 – ESC – Networking Systems Professional (CCNP)

<u>Infrastructure Track – with Cisco focus</u>

Certificate Level 1 – Infrastructure Technician (CCNA)

Certificate Level 1 – Wireless Infrastructure Technician

Certificate Level 2 – Infrastructure Administrator Systems Track – with Microsoft focus

Certificate Level 1 – Systems Software Technician (MCSA)

Certificate Level 1 - Systems Technician

Certificate Level 2 – Systems Administrator

Certificate Level 3 – ESC – Networking Systems Professional (CCNP)



# Computer Systems

(Career Cluster: Information Technology)

### AAS - Computer Systems

Computer Support Track Information System Track Database Development Track

OSA – Computer Applications

OSA - Help Desk Support

Certificate Level 1 – Computer Support

Certificate Level 2 - Information System

Certificate Level 2 – Database Development



# Computer-Aided Drafting and Design

(Career Cluster: Architecture & Construction)

AAS - Computer-Aided Drafting and Design

OSA - AutoCAD

Certificate Level 1 – Computer-Aided Drafting and Design

Certificate Level 1 – Advanced Computer-Aided Drafting and Design



### **Culinary Arts**

(Career Cluster: Hospitality & Tourism)

Also see Pastry Arts

AAS – Culinary Arts Certificate Level 1 – Culinary Arts

Certificate Level 1 - Advanced Culinary Arts



# Diagnostic Medical Sonography

(Career Cluster: Health Science)

AAS - Diagnostic Medical Sonography



# **Dental Hygiene**

(Career Cluster: Health Science)

AAS - Dental Hygiene



# **E-Business Development**

(Career Cluster: Information Technology)

### AAS - E-Business Development

E-Business Track
Web Development Track
C# .NET Development Track
Mobile Application Development Track

OSA - Web Commerce

Certificate Level 1 – E-Business Development

E-Commerce Track Web Development Track

Certificate Level 1 – Mobile Application Development

Certificate Level 2 – C# .NET Development



# Electronic Engineering Technology

(Career Cluster: Manufacturing & Energy)

AAS – Electronic Engineering Technology Certificate Level 1 – Electronic Engineering Technology



# **Emergency Medical Services Professions**

(Career Cluster: Law, Public Safety, Corrections & Security)

AAS – Emergency Medical Services Professions OSA – Emergency Medical Services Professions Certificate Level 1 – Advanced EMT Certificate Level 1 – Paramedic



# **Fire Academy**

(Career Cluster: Law, Public Safety, Corrections & Security)

Also see Fire Science

AAS – Basic Firefighter Certification Certificate Level 1 – Basic Firefighter



### Fire Science

(Career Cluster: Law, Public Safety, Corrections & Security)

Also see Fire Academy

AAS – Fire Officer Certification OSA – Fire Officer Candidate Certificate Level 1 – Fire Officer



# Geospatial Information Science (GIS)

(Career Cluster: Information Technology)

AAS – Geospatial Information Science (GIS)
Certificate Level 1 – Geospatial Information
Science (GIS)



## **Graphic Design**

(Career Cluster: Arts, A/V Technology & Communications)

Also see Photography, Commercial

AAS - Graphic Design

Certificate Level 1 - Graphic Design

Certificate Level 3 - ESC – Advanced Design Illustration

Certificate Level 3 - ESC – Motion Graphics Certificate Level 3 - ESC – User Experience

Design



### **Green Interior Design**

(Career Cluster: Architecture & Construction)

AAS – Green Interior Design
OSA – Green Interior Design
Certificate Level 1 – Green Interior Design
Certificate Level 1 – Advanced Green Interior
Design



# Health Information Management

(Career Cluster: Health Science)

Also see Health Information Management Medical Coding and Billing

AAS - Health Information Management



# Health Information Management / Medical Coding and Billing

(Career Cluster: Health Science)

Also see Health Information Management

Certificate Level 1 - Medical Coding and Billing



Also see Health Information Management Certificate – Medical Coding and Billing

### AAS - Health Professions

Certified Nurse Aide (CNA) Track Electrocardiograph Technician (EKG) Track Emergency Medical Technician (EMT) Track Patient Care Technician (PCT) Track Phlebotomy Technician (PHLEB) Track

### **OSA - Health Professions**

Certified Nurse Aide (CNA) Track Electrocardiograph Technician (EKG) Track Phlebotomy Technician (PHLEB) Track

### OSA – Patient Care Technician

### Certificate Level 1 - Health Professions

Certified Nurse Aide (CNA) Track Electrocardiograph Technician (EKG) Track Patient Care Technician (PCT) Track Phlebotomy Technician (PHLEB) Track

Certificate Level 1 – Emergency Medical Technician (EMT)



# Hospitality and Food Service Management

(Career Cluster: Hospitality & Tourism)

### AAS - Hospitality and Food Service Management

Hotel / Restaurant Management Track Meetings and Event Management Track

Certificate Level 1 – Hotel / Restaurant Management

Certificate Level 1 – Meetings and Event Management



### **HVAC**

(Career Cluster: Manufacturing)

AAS – HVAC (Heating, Ventilation, Air Conditioning)

Certificate Level 1 – HVAC (Heating, Ventilation, Air Conditioning)

Certificate Level 2 - HVAC (Heating, Ventilation, Air Conditioning)



# Information Systems Cybersecurity

(Career Cluster: Information Technology)

AAS – Information Systems Cybersecurity
Certificate Level 1 – Information Systems
Cybersecurity
Certificate Level 1 – CISSP Information Systems

Cybersecurity Professional



# Interpreter Education Program (IEP)

(Career Cluster: Human Services)

Also see Associate of Arts – American Sign Language (Deaf Education) for academic transfer coursework.

AAS – Interpreter Education Program (IEP)
Certificate Level 2 – ASL Studies
Certificate Level 3 – ESC – Interpreting in Medical
Settings



## Marketing

(Career Cluster: Marketing)

AAS – Marketing Certificate Level 1 – Marketing Certificate Level 1 – Entrepreneurship



### Music, Commercial (Career Cluster: Arts, A/V Technology & Communications)

Also see Associate of Arts – Music Field of Study, an academic transfer program.

AAS - Commercial Music

Certificate Level 1 – Audio Engineering

Studio Track

Live Sound Track

Certificate Level 2 - Music Business



# **Nursing (RN)**

(Career Cluster: Health Science)

AAS - Nursing (RN)

Nursing (RN) Bridge for LVN/Paramedic/Medic



# Paralegal / Legal Assistant

(Career Cluster: Law, Public Safety, Corrections & Security)

AAS – Paralegal / Legal Assistant Certificate Level 2 – Paralegal General



# **Pastry Arts**

(Career Cluster: Hospitality & Tourism)

Also see Culinary Arts

AAS – Pastry Arts

Certificate Level 1 – Pastry Arts

Certificate Level 1 – Advanced Pastry Arts



# Photography, Commercial

(Career Cluster: Arts, A/V Technology & Communications)

Also see Graphic Design and Associate of Arts – Photography for academic transfer coursework.

AAS – Commercial Photography
Certificate Level 1 – Studiio Production
Certificate Level 2 – Commercial Photography
Specialist



# **Police Academy**

(Career Cluster: Law, Public Safety, Corrections & Security)

Also see Continuing Education Basic Peace Officer program

Certificate Level 1 – Basic Peace Officer



# Polysomnographic Technology

(Career Cluster: Health Science)

AAS – Polysomnographic Technology Certificate Level 1 – Polysomnographic Technology



## **Real Estate**

(Career Cluster: Business Management & Administration)

AAS – Real Estate Certificate Level 1 – Real Estate Salesperson



# **Respiratory Care**

(Career Cluster: Health Science)

AAS – Respiratory Care



# Supply Chain Management

(Career Cluster: Transportation, Distribution and Logistics)

AAS – Supply Chain Management Certificate Level 1 – Purchasing Certificate Level 1 – Logistics



# Surgical Technology

(Career Cluster: Health Science)

AAS – Surgical Technology Certificate Level 1 – Central Sterile Processing



### Video Production

(Career Cluster: Arts, A/V Technology & Communications)

Also see Animationn & Game Art

AAS - Video Production

Certificate Level 1 - Video Production



### Welding

(Career Cluster: Architecture & Construction)

AAS - Welding

Foundry/Metalsmithing Track
Welding Technology Track
Certificate Level 1 – Welding Technology
Certificate Level 1 – Foundry/Metalsmithing
Foundry Metalsmithing Focus
Metal Sculpting Focus

# **ADMISSIONS AND REGISTRATION**

### **Admissions Policies**

Collin College operates under an "open door" policy. Students who are 18 years of age or older are eligible for admission. Other students may be admitted under the special admission requirements that follow. The college reserves the right to guide the placement of students through assessment, which may include interviews and a review of past academic achievement.

Registration options are enhanced and delays may be avoided by completing all admission requirements in advance of registration. In all admissions policies and practices, Collin College does not discriminate on the basis of race, color, religion, sex, national origin, age, disability or veteran status in accordance with federal law.

Official transcripts are required from all regionally accredited colleges/universities attended. Failure to provide a transcript will result in future registration at Collin College being blocked and ineligibility to receive Collin College transcripts. If no college/ university has been attended, a high school transcript or GED is required. Documents and transcripts submitted for admission become the property of Collin College and will not be returned to the applicant.

### **Admission To Special Programs**

Programs and certificates in dental hygiene, fire academy and fire science certification, nursing, child development, polysomnographic technology, health information management, emergency medical services professions, pastry arts and culinary arts, competency-based business management certificate, respiratory care and surgical technology have specific program admissions criteria and require approval to enroll. Refer to the catalog and/or contact the academic department office for information on requirements.

### Air Force and Army ROTC

Collin College students are given the opportunity to participate in the Air Force and Army ROTC programs as crosstown students at the University of North Texas in Denton, Texas.

Students are required to attend an academic class, leadership laboratory and physical training at the University of North Texas once a week during the Fall and Spring academic semesters.

The ROTC mission is to develop quality leaders to serve our country as officers in the United States Air Force or Army. As a part of the program, you will prepare yourself to become an Air Force or Army officer while completing your degree as a college student. Students may participate in the four-year or three-year programs.

Students enroll in ROTC classes at the same time and in the same manner as other Collin courses. Business and Computer Systems administers the offering of Air Force and Army ROTC courses for Collin College; students register and pay via Collin College in accordance with published payment deadlines. For more information please visit <a href="www.afrotc.unt.edu">www.afrotc.unt.edu</a>, <a href="armyrotc.unt.edu">armyrotc.unt.edu</a>, or e-mail <a href="det835@unt.edu">det835@unt.edu</a>.

# College Wide Identification (CWID) and E-mail

Students at Collin College are issued a College Wide ID (CWID) nine-digit number to be used instead of their Social Security number to access their records when they are admitted to the college.

Official communication between students and faculty/staff is through the college wide e-mail system, CougarMail, which is accessed through the campus portal CougarWeb. For login information, contact the Admissions Office or visit <a href="http://www.collin.edu">http://www.collin.edu</a>.

# Students New To Collin First-Time Freshmen

Students 18 years and older who have never attended a college/university must submit the following for admission:

- 1. A completed application online at <a href="http://www.collin.edu">http://www.collin.edu</a>.
- A final, official high school transcript or GED.
- 3. Official TSI documentation.
- 4. Proof of meningitis vaccination, if needed.
- 5. Participate in New Student Orientation.
- 6. Complete training on preventing sexual violence.

### Applicants Without a U.S. Diploma/GED

Students under age 18 without a U.S. high school diploma or equivalent and no longer involved in a high school program applying for admission must:

- 1. Complete an Application for Admission (online).
- 2. Provide documentation that the student is no longer enrolled in a high school program.

- Submit an official transcript from the last U.S. high school attended.
- Complete the TSI Assessment with the Pre-Assessment Activity or provide proof of exemption/waiver.
- Provide proof of meningitis vaccination, if needed.
- 6. Provide written parental/guardian permission for students under 18 years of age.
- 7. Contact a special admissions coordinator/advisor.
- 8. Students admitted under this policy are not eligible for Title IV benefits.

Applicants over 18 years of age admitted without a GED or high school diploma will be strongly encouraged to complete the GED during the first semester of his/her enrollment at Collin College. Information about GED testing is available through the Texas Education Agency's website at <a href="http://www.tea.state.tx.us">http://www.tea.state.tx.us</a>. Additionally, the Collin County Adult Literacy Council, through its website and help line, offers a referral service for North Texas (<a href="http://www.ccalc.org">http://www.ccalc.org</a>).

### **Home-School Student Admissions**

To be admitted, all home-schooled students under the age of 18 must:

- 1. Complete an Application for Admission (online).
- 2. Provide Official Home School Transcript.
- Complete the TSI Assessment with the Pre-Assessment Activity or provide proof of exemption/waiver.
- Provide proof of meningitis vaccination, if needed.
- 5. Submit signed High School Student Enrollment Permission Form with appropriate signatures.
- 6. Complete training on preventing sexual violence.

### High School Student Enrollment Concurrent Enrollment/Dual Credit

The High School Concurrent Enrollment/Dual Credit program is designed for high-school-aged students who are ready to begin earning college credits. All students are encouraged to participate.

High school students interested in concurrent enrollment or dual credit admission to Collin College must:

- 1. Complete an Application for Admission (online).
- 2. Provide Official High School Transcript.
- Complete the TSI Assessment with the Pre-Assessment Activity or provide proof of exemption/waiver.
- Provide proof of meningitis vaccination, if needed.
- Submit signed High School Student Enrollment Permission Form with appropriate signatures.
- 6. Complete training on preventing sexual violence.

Students not applying through their high school dual credit program may contact a Special Admission Coordinator for admissions and course availability information. (Due to state law, not all college courses are available for dual credit or concurrent enrollment.)

Students needing academic accommodations must apply and be approved with ACCESS.

#### **International Students**

Students on temporary visas or holding permanent residence cards may be eligible for admission. To verify residency status, students are required to present their visa or permanent resident card with their application to the Admissions Office.

### International Student Admissions (F-1 Visa)

The following deadlines are required for degree-seeking students residing outside of the United States seeking the F-1 student visa:

- Fall semester June 1
- Spring semester Nov. 1
- Summer semesters April 1

All international students must submit the following to the International Students Office (ISO) at Spring Creek Campus in Room G103:

- 1. One of the following:
  - a. TOEFL Internet-based Test (iBT) score of 71 or higher.
  - b. TOEFL Paper-based Test (PBT) score of 525 or higher.
  - c. TOEFL Computer-based Test (CBT) score of 197 or higher.
  - d. IELTS (International English Language Testing System) score of 6.5 or higher.
- A letter of Guarantee dated within six months of the beginning of the semester and the supporting financial evidence statement. For sponsors residing inside the United States: An Affidavit of Support form dated within six

- months of the beginning of the semester and the supporting evidence statement.
- 3. An official transcript (mark sheets, school records) from the last school attended.
- 4. Copy of passport ID page showing official name, date of birth and citizenship.
- Proof of receiving the bacterial meningitis vaccine, if needed.
- 6. Complete training on preventing sexual violence.

Upon arrival at Collin College, all original immigration documents including a valid visa (I-94 arrival/departure record), a valid passport, the I-20 and the original financial documents will be copied and kept on file with ISO.

All students are required to take the Pre-Assessment Activity and the Texas Success Initiative (TSI) assessment prior to enrolling in credit classes.

Foreign transcripts will not be evaluated. I-20s will not be issued for students seeking entrance into the United States on a permanent basis.

Tuition and fees should be paid in full prior to the first class day. There is no financial aid available for international students.

# Transfer international students within the United States (F-1 Visa)

In addition to the above requirements the following items must also be submitted:

- A copy of current I-20, passport, visa and I-94.
- 2. Transfer Verification Form from the international student advisor at the last college or university attended.
- Official TSI test scores or documentation. See TSI section for details.
- 4. Institutional TOEFL score-reports of 525 (or
- 5. higher) from The University of Texas at Arlington, The University of Dallas, or the University of Phoenix will be accepted in lieu of an official TOEFL score report. Students who can document graduation from the Intensive English Language Institute of the University of North Texas or have completed Freshman English with a "C" or better will be exempt from the TOEFL requirement.
- 6. Official transcripts from all colleges/universities attended in the United States with a minimum GPA of 2.0. To ensure enrollment degree-seeking transfer students should submit admission requirements prior to the deadlines listed in the Registration Guide or online at <a href="http://www.collin.edu">http://www.collin.edu</a>.

For more information, contact the International Students Office at Spring Creek Campus, Room G103, 972.516.5012. To download the required forms, go to: <a href="http://www.collin.edu/gettingstarted/advising/international">http://www.collin.edu/gettingstarted/advising/international</a>.

### **Transferring to Collin College**

Transfer students who are in good standing academically at the last institution of higher education they attended are eligible for admission to Collin College. An official college transcript from all regionally accredited colleges/universities attended, proof of meningitis vaccination (if needed) and TSI status documentation is required.

Students who transfer to Collin College from other institutions of higher education may be awarded credit according to the conditions that follow.

- 1. Credit must have been earned at a regionally
- accredited institution of higher education.
   Foreign transcripts will not be evaluated or accepted.
- 3. An official transcript from all regionally accredited institutions of higher education attended by the student must be on file at Collin College.
- 4. Official course descriptions from the catalog under which the student attended may be required for evaluation.
- 5. Credit for courses equivalent to those listed in the Collin College Catalog will be accepted if the courses are required on the student's degree plan for graduation. Other credits may be accepted in lieu of elective courses depending on the student's area of study.
- Only the highest grade and credits earned for a repeated course at a previous institution will be applied toward degree or program requirements.
- 7. Grades of "D" are accepted from other institutions; however, a cumulative GPA of 2.0 is required for graduation. Grades of "F" and "T" will not transfer.
- 8. Waivers for physical education requirements may be granted for medical reasons. A written statement from a physician and one additional hour of electives are required. Credit for PHED courses is awarded for military training upon receipt of a student's DD214 (Honorable Discharge).
- While there is no limit on the number of hours that can be transferred into Collin College from other institutions, there is an 18 credit hour residency requirement to earn an associate degree from Collin College. Students

- obtaining certificates containing 18 hours or less must complete 15 hours of coursework in residence at Collin College. Petitions to transfer credits into certificates containing 18 hours or less may be made to the academic dean through the degree plan coordinator.
- Time limits and minimum grade requirements may be imposed for transfer work into select areas of study. Contact the academic chair or academic dean for details.
- Collin College does not evaluate transcripts or award transfer credit earned at foreign institutions; however, students may be eligible for credit through examination at the college.
- Fall 1985 through Summer 2008 transfer work was included in students' overall GPA.
   Beginning Fall 2008 transfer work is not included in GPA.

Collin College degree plan coordinators conduct official transcript evaluations. Students must be currently admitted to Collin College to request a degree plan.

#### **Academic Fresh Start**

State law (Education Code, Sec. 51.931) allows students who are residents of Texas and who have academic credits earned 10 or more years prior to the starting date of the semester in which they seek admission to Collin College to have those credits or grades not considered in the admission decision. This allows students to begin a new course of study with a clear academic record.

**Note:** This is an all or nothing option. Students are not able to pick and choose which courses to include or exclude. If the "Academic Fresh Start" option is selected, credits for any courses taken 10 or more years ago will not be counted. This means that

- Courses taken previously cannot be used to fulfill new prerequisite requirements.
- Courses taken previously cannot be counted towards the new degree.
- Courses taken previously will not be counted in the new GPA calculations.

Students must complete the admissions process, including providing information on all colleges or universities previously attended and providing official transcripts from all schools attended.

Students under the Fresh Start provision must still meet the criteria for the <u>Texas Success Initiative</u>. Additional notes:

 Academic Fresh Start must be claimed upon application to Collin College and will not be applicable to currently enrolled students.

- Once the "Right to an Academic Fresh Start" provision has been claimed, and the student has enrolled, the provision cannot be reversed.
- An applicant may use the Academic Fresh Start provision only once at Collin College.

### **Applying for Fresh Start**

Students must submit an application for Fresh Start prior to enrollment at Collin College, preferably at the time of admission. The application is available through the Registrar's Office. Students will not be granted Fresh Start until they have completed their admissions file. The Application for Fresh Start should be completed, signed, and returned to the Registrar's Office.

### **Approval of Fresh Start Application**

The final authority on applying or interpreting the State law (Education Code, Sec. 51.931), Right to an Academic Fresh Start is the Registrar.

#### Effect on Financial Aid

Academic Fresh Start impacts only your academic record. For more information on the impact on financial aid, please contact the Financial Aid/Veterans Affairs office.

### **New Student Orientation**

All First-Time In College students (freshmen) are required to complete New Student Orientation prior to registration. The purpose of orientation is to provide a comprehensive overview of available campus services, resources and opportunities. Students who are unable to attend the on-campus orientation can complete online orientation.

For additional information including dates and reservations, please call 972.881.5902, e-mail orientation@collin.edu or visit the website at http://www.collin.edu/orientation.

### **Training on Preventing Sexual Violence**

All entering freshmen and transfer students must attend an orientation on Collin College's campus sexual assault policy. Participation in this orientation must be completed prior to registration. The training can be accessed in CougarWeb.

### **Residence Requirements**

To be considered a Texas resident for tuition purposes, students must have clearly established a domicile in

Texas for the 12 months preceding enrollment. Documentation of Texas residency is required.

An in-county student is an individual who is a resident of Texas and who resides in Collin County on or before the census date of the term.

- 2. An out-of-county student is a resident of Texas who resides outside of Collin County on the census date of the term.
- 3. An out-of-state student is an individual who has not resided in Texas for 12 months preceding registration. Most students on temporary visas will also be classified as nonresidents for tuition purposes. Contact Student and Enrollment Services for visas eligible for in-state residency.

The responsibility for registering under the proper residency classification is that of the student, and any question concerning the student's right to classification as a resident of Collin County must be clarified prior to enrollment at Collin College. Students not documenting county or state residency prior to census date of the term will be charged the higher rate. Tuition refunds due to residency changes will only be made for college errors if documentation was not submitted before census, see the academic calendar for date. Changes of address, name, etc. must be reported promptly to the Admissions Office. This enables students to receive registration and other information from various college departments and programs. Changes of address affecting residency should be reported promptly to the Admissions Office.

Students (age 24 and under) who are a dependent of a Texas resident should contact the Admissions Office for more information.

### **Documents to Support Residency**

Documentation of Texas residency will be required in order to pay in-state tuition. Generally, the following documents may be used in meeting residency requirements:

- Texas public, private, home school or high school transcript (if enrolled the last 12 months) showing three years of attendance and a graduation date.
- State identification card
- Texas driver's license
- Voter's registration card

### **Ad Valorem Waivers**

Students who have not lived in Texas for the 12 months preceding registration, but who own residential property in Collin County, may be eligible for an ad valorem waiver. A copy of the deed or most recent property tax statement is required for verification. If this waiver is based on a student's (under age 24)

parents' property ownership, go to Student and Enrollment Services for the proper form to complete. This form must be completed each semester until Texas residency has been established (12 months); ad valorem waivers expire and additional residency must be provided. Property owners on most types of temporary visas are not eligible for the ad valorem waiver. Students and/or their parents must generally be U.S. citizens or permanent residents to be eligible for an ad valorem waiver.

## **Returning Students**

Former Collin College students who have not been enrolled at Collin College during the preceding 12 months will need to reapply for admission. An application for readmission, an official transcript from all regionally-accredited colleges or universities attended, documentation of TSI status and proof of receiving the bacterial meningitis vaccination (if needed) are required.

### **Students on Academic Suspension**

See the "Academic Standards" section or contact an academic advisor on any campus for more information.

# Registration Procedures Collin College Registration Guide

A Registration Guide is available at the information desk at CPC, PRC and SCC and online at: <a href="https://www.collin.edu/academics/class-schedule.html">www.collin.edu/academics/class-schedule.html</a>. The guide contains valuable information on important dates and deadlines, registration procedures, tuition and fees, student services and more.

### **Online Registration**

Registration is completed online only. Online registration provides students with an opportunity to register early in courses for the upcoming semester. This process is designed for students who have completed admissions, TSI requirements, assessment requirements and have met with an academic advisor. See the current Collin College Registration Guide for a listing of dates, times and complete instructions.

### Add/Drop

Students may add classes through the CougarWeb system through the first four days of classes during the long semesters and during the first day of class of the summer or mini-semester terms. For express and weekend courses, registration deadlines will vary. For 16-week classes, there is a registration hard deadline on the fourth day of the semester.

Registration for any course will result in full tuition and fee assessment for the course hours. Any course dropped on or after the first day of each term or minisemester will result in charges for the dropped course as determined by the state refund guidelines and approved tuition rates.

All students must initiate the process to be dropped from classes prior to the first class day or they will be required to make payment for tuition and fees assessed. Students receiving financial aid may not be automatically dropped from classes.

Drops and/or withdrawals may be made online through the posted Last Day to Withdraw for the term (see Academic Calendar for dates).

# **Registration for Continuing Education** and Workforce Development Classes

Each semester Collin College offers continuing education classes to community members through Continuing Education and Workforce Development. Registration for these classes can be done in five ways:

- Online registration: (credit card only) Go to <a href="http://www.collin.edu/ce">http://www.collin.edu/ce</a> to see instructions or go to the Continuing Education online registration site to view the current Continuing Education class offerings and register for classes.
- Walk-in registration: Available at Courtyard Center, Central Park, Preston Ridge or Spring Creek campuses. Times are listed in the current Continuing Education Career Skills Training Schedule.
- 3. Phone-in registration: (VISA, MasterCard or
- 4. Discover only) Call 972.548.6855 or 972.985.3711. Times and dates are listed in the current Continuing Education Career Skills Training Schedule.
- 5. Mail-in registration: Send your registration
- information to: Registration, Collin College, Courtyard Center, 4800 Preston Park Blvd., Box 12, Plano, Texas 75093. See the current Continuing Education Career Skills Training Schedule for registration deadlines.
- Fax-in registration: (credit card only) Check the current Continuing Education Career Skills Training Schedule for fax availability. Fax your registration to 972.985.3723 or 972.548.1702.

### **Student ID Cards**

All credit students at Collin College are required to have a Student ID card to use services provided by college offices and labs including the Admissions Office, Collin bookstores, Career Services, computer labs, fitness centers, libraries, math labs, Student Life and the Testing Center. Student ID cards are produced by Student Life. Student ID office hours are listed in the Collin College Student Handbook.

Once the student has registered and paid for their courses, the ID card will be issued in accordance with the dates posted in the Important Dates section of the Registration Guide. Students must show a form of photo identification in order to have their student ID card issued. The ID card will be valid district-wide throughout the student's tenure at the college. Student ID cards will be automatically reactivated each semester after the student enrolls in courses and pays the corresponding tuition and fees.

For a fee, a replacement ID card will be reissued for students whose card has been lost, stolen or damaged; who have had a name change; or who would prefer a new photo. Only currently enrolled students with valid picture ID may request a replacement student ID card. Contact Student Life for more information.

### **Assessment and Testing Services**

Testing Centers are located at Central Park, Preston Ridge and Spring Creek campuses for the Texas Success Initiative (TSI) Assessment for course placement, higher level math assessment, credit by exam testing, limited instructional testing, ESL assessments and proctoring of correspondence exams. Collin College is an official testing site for ACT (American College Testing Program) and CLEP (College-Level Examination Program). The Testing Centers are monitored by surveillance equipment.

### **TSI-Texas Success Initiative**

The TSI Assessment is a program designed to determine if the student is ready for college-level course work in the general areas of reading, writing and mathematics. All incoming college students in Texas are required to take the TSI Assessment, unless exemption has been met. Based on assessment results, a student may either be enrolled in a college-level course that matches his/her skill level or placed in the appropriate developmental course or intervention to improve skills and prepare the student for success in college-level courses.

Students wanting to enroll only in English as a Second Language coursework can do so without having taken the TSI assessment.

### **Mandatory Pre-Assessment Activity**

Before taking the initial TSI Assessment, a student must participate in a Pre-Assessment Activity

(https://www.collin.edu/preassessment/). This activity includes the following:

- An explanation of the importance of the TSI Assessment.
- Practice test questions and feedback.
- An explanation of developmental education options, if the minimum passing standard is not met
- Information on campus and community resources to assist the student.
- A Certificate of Completion will be printed at the end of this Activity, which is required to take the TSI Assessment.

Students may seek exemption from TSI based on:

- a composite ACT score of 23 or higher (with individual Mathematics and English scores of no less than 19).
- a combined SAT score of 1,070, Reading and Math only (with a minimum of 500 in Mathematics and Reading).
- TAKS (11th grade or higher) with a minimum qualifying score of 2,200 Math and ENLA 2,200 with Writing sub-score of 3.
- or high school end-of-course STAAR with a minimum qualifying score of 4,000 in English III and 4,000 in Algebra II.

Note: STAAR and TAKS scores can be no more than five years old.

### **Partial Exemptions**

Students with an ACT composite score of 23 (or higher) can be exempt from TSI Math with an ACT Math score of 19 (or higher) even if the ACT English is less than 19. Students with an ACT composite score of 23 or higher can be exempt from the TSI Reading and TSI Writing with an ACT English score of 19 (or higher) even though the ACT Math may be less than 19.

Students with a SAT combined Reading and Math score of 1,070 (or higher) can be exempt from TSI Math with a SAT Math score of 500 (or higher) even though the SAT Reading may be less than 500. Students with a combined SAT Reading and Math score of 1,070 (or higher) even though the SAT Math may be less than 500 can be exempt from TSI Reading and TSI Writing.

Students with a TAKS Math score of 2,200 (or higher) can be exempt from TSI Math. Likewise, a TAKS ENLA score of 2,200 with a writing sample of 3 exempts a student from TSI Reading and Writing.

Students with a STAAR Algebra II score of 4,000 are exempt from TSI Math. Students with a STAAR

English III score of 4,000 are exempt from TSI Reading and Writing.

New students will be required to furnish the college with necessary proof regarding TSI status.

NOTE: For specific current information about the PAA or TSI Assessment, contact the Director of Testing at 972.548.6773. All students must be assessed or provide proof of prerequisites prior to enrolling in certain courses. Developmental classes and tutorial assistance are available for students who need or want this support. Transfer students must provide documentation of TSI status. Documentation may be in the form of official TSI score reports or official transcripts.

#### Waivers

Students can be waived from TSI requirements if they:

- are a high school junior with qualifying PLAN, PSAT, ACT Aspire or English II and/or Algebra I STAAR scores.
- are pursuing a Level I workforce certificate of no more than 42 hours. To obtain this waiver, you must contact the Director of Testing office at 972.548.6773.
- are serving on active duty as a member of the armed forces of the United States, the Texas National Guard or as a member of a reserve component of the armed forces of the United States and have been serving for at least three years preceding enrollment (documentation required).

### **Mandatory Advising Holds**

Students who are below college level in one or two Texas Success Initiative (TSI) areas (reading, writing or mathematics) are required to meet with an academic advisor or complete an online session during their first semester at Collin College. Students will be required to have regular contact with an advisor until they are TSI complete in all three areas.

For students who do not place at college level in all three Texas Success Initiative (TSI) areas (reading, writing and mathematics), a meeting with an advisor is required in addition to mandatory course registration in EDUC 1300/PSYC 1300, Learning Framework.

### **English as a Second Language (ESL)**

New students wanting to enroll in an ESL course must take the ESL New Student Assessment and meet with an advisor. ESL New Student Assessment scores are valid for one year. These scores are used for course placement only and do not affect the admission status of students.

Students interested in taking ESL classes through Continuing Education may call 972.985.3750 for assessment instructions.

### **Other Testing Services**

The testing centers also offer testing in the following areas:

- CLEP College-Level Examination Program
- ACT American College Testing Program
- Credit by exam subject tests designed by college faculty
- Correspondence testing

Collin College codes for these tests are:

- CLEP 2290
- ACT (Central Park Campus) 40460
- ACT (Spring Creek Campus) 42090

Students requiring more information on the above programs should contact the Director of Testing at 972.548.6773.

### Non-Traditional College Credit (NTCC)

Various credit options enable persons who have acquired knowledge and skills in non-traditional ways to demonstrate academic achievement. For enrolled students, or students enrolled within the past year, credit may be given for college-level experience as demonstrated by acceptable test results regardless of the means by which the knowledge was acquired, except for college credit that has been previously granted. Students may also receive credit for some previous military training. Please note that a fee for test administration and transcript recording may be assessed.

Without special permission from the Executive Vice President, no more than 18 hours of non-traditional credit may be counted toward a degree. However, if the student has an International Baccalaureate (IB) diploma, a total of 24 hours of non-traditional credit may be awarded. The institution may grant fewer than 24. Non-traditional credit will be added to the transcript (upon request) only after six hours of traditional, non-transfer credit is achieved at Collin College.

For additional information regarding the College-Level Examination Program (CLEP), departmental examinations, Advanced Placement (AP), International Baccalaureate (IB) or Armed Forces credit, contact the Director of Testing or the Registrar's Office.

### **Advanced Placement Examination (AP)**

Students who have received college-level training in secondary school and who have scores of three, four or five on the appropriate Advanced Placement examination may be granted, on request, placement and credit for comparable courses at the college. After enrolling, students must complete six semester hours at Collin College before credit is given. For more information contact the Director of Testing at 972.548.6773.

# AP Examination – Collin College Equivalent

Art/Drawing I – ARTS 1316 Art General (2-D or 3-D) - ARTS 1311 Art History – ARTS 1303 Biology - BIOL 1406 and 1407 Calculus (AB) - MATH 2413 Calculus (BC) - MATH 2413 (Score of 3) MATH 2413 and 2414 (Score of 4 or 5) Chemistry - CHEM 1411 and 1412 Computer Science (A) - COSC 1436 Economics (Macro) - ECON 2301 Economics (Micro) - ECON 2302 English Language and Composition -ENGL 1301 (score of 3) ENGL 1301 and 1302 (score of 4 or 5) English Literature and Composition -ENGL 1301 (score of 3) ENGL 1301 and 1302 (score of 4 or 5) Environmental Science I - ENVR 1401 European History - HIST 2311 and 2312 French Language - FREN 1411 and 1412 German Language - GERM 1411 and 1412 Government - GOVT 2305 Human Geography—GEOG 1302 Music Appreciation – MUSI 1306 Music Theory - MUSI 1311 Physics 1 - PHYS 1401 Physics 2 – PHYS 1402 Physics C - Mechanics—PHYS 2425 Physics C – Electrical and Magnetic—PHYS 2426 Psychology - PSYC 2301 Spanish Language – SPAN 1411 and 1412 Statistics - MATH 1342 U.S. History - HIST 1301 and 1302 World History - HIST 2311 and 2312

### **Armed Forces Credit**

In addition to using credit earned at other institutions to achieve advanced placement at the college, students may also receive such standing by presenting evidence of having satisfactorily completed a program of military training for which equivalent college credit may be given in accordance with the American Council on Education Standards and Recommendations. The degree plan coordinator evaluates Armed Forces credit. Credit for military training will be awarded upon receipt of a student's DD214 (Honorable Discharge).

# **College-Level Examination Program** (CLEP)

Most publicly-supported colleges and universities have agreed to accept as transfer credits all CLEP credit granted by regionally accredited institutions using the criteria below. Students planning to use CLEP credit to meet degree requirements at other institutions should check the requirements of the receiving institution. CLEP General Exams are not evaluated for credit at Collin College. The college uses the following criteria for CLEP Subject Examination evaluation:

- 1. CLEP credit shall be recorded on transcripts with a "CR" in order to be clearly recognized as credit earned by examination.
- Collin College will not replace an existing grade with CLEP credit, including a grade of "W." Please note: a course must be dropped before census date to avoid a "W" grade.
- 3. Credit is awarded for CLEP Subject
  Examination scores at or above the 70th
  percentile. See the Collin website or contact
  the Director of Testing for specific passing
  scores. Official score reports should be sent
  to the Director of Testing. The college code
  for Collin College is 2290.

For each CLEP examination, a non-refundable administrative and examination fee will be charged. For information on taking a CLEP subject exam, please contact the Director of Testing at 972.548.6773.

### **Credit by Exam (Departmental Exams)**

Credit for some courses may be granted upon successful completion of a comprehensive examination over the content of the course. A nonrefundable fee is charged for each course examination. Students must be currently enrolled or enrolled within the past year and have earned at least six credit hours at Collin College to receive credit by examination.

Credit by exam may be attempted only once for any given course. Students currently enrolled in the course they wish to test out of must test or withdraw prior to the census date of the enrolled semester. The student must score at or above the 70th percentile to receive credit for the course.

# Credit for Prior Learning through Continuing Education

Students who have taken Cisco Networking (CCNAonly) or real estate licensure courses through Collin Continuing Education may be eligible to receive college credit for those courses. The requirements to receive college credit are:

1. The CE courses were completed within the past 12 months.

- 2. Successful completion of the same end-ofcourse final assessment as the credit students.
- 3. The course was not repeated more than once.
- 4. A non-refundable fee will be assessed for each course that is transcripted.

A maximum of 50 percent of the courses required for the industry certification/license and taken as CE courses can be applied toward a credit certificate or degree. Non-traditional credit will be added to the transcript only after six hours of traditional, non-transfer credit is achieved at Collin College. No more than 18 hours of non-traditional credit may be counted toward a degree.

For additional information regarding Cisco certification or real estate licensure, contact the Director of Engineering and Technology or the Chair of Real Estate as appropriate.

### International Baccalaureate Diploma (IB)

The International Baccalaureate diploma is an international program of courses and exams offered at the high school level. Collin College will award up to 24 hours course-specific college credit in subject appropriate areas on all IB exam scores of 4 or above, with an IB diploma or up to 18 hours with an IB certificate. Student must have an official IB transcript sent to Collin College.

Collin College will maintain in residence course work minimums and the non-traditional credit maximum for more than 18 hours will be allowed only for IB credit. For more information, contact the Director of Testing at 972.548.6773.

### **Articulated High School College Credits**

Students who elected to take Collin College articulated courses in high school may be eligible to receive college credit for those courses upon high school graduation. These credits are completely tuition free and are awarded based on successful completion of an end-of-course competency assessment.

The requirements to receive college credit are:

- 1. Earn a passing grade\* on the end-of-course competency based assessment in high school.
- Earn six non-developmental Collin College education credits and submit the petition for articulated credit within 12 months of high school graduation to a special admissions coordinator.
- Submit an official final high school transcript along with the petition. Articulated high school credits must be notated on the high school transcript.

Upon completion of the above steps, the college credits that a student is qualified for will be applied to the college transcript at the end of the college grading cycle. Credit will only be given for college level coursework, no developmental education levels will be awarded. For more information, call the Dual Credit Office at 469.365.1850.

\*Passing course grades may vary, check with a special admissions coordinator for details.

# FINANCIAL POLICIES AND PROCEDURES

## **Cost Per Credit Hour Example \***

Per Hour	In- County	Out-of- County	Out- of- State
Tuition	\$44	\$86	\$147
Student Activity Fee	\$2	\$2	\$2
•	\$46	\$88	\$149

### **Tuition and Fee Schedule \***

Credit	In- County**	Out of County**	Out of State/ Country**
Hours	\$46 cr hour	\$88 cr hour	\$149 cr hour
1	\$48	\$90	\$204 ***
2	\$94	\$178	\$300
3	\$140	\$266	\$449
4	\$186	\$354	\$598
5	\$232	\$442	\$747
6	\$278	\$530	\$896
7	\$324	\$618	\$1,045
8	\$370	\$706	\$1,194
9	\$416	\$794	\$1,343
10	\$462	\$882	\$1,492
11	\$508	\$970	\$1,641
12	\$554	\$1,058	\$1,790
13	\$600	\$1,146	\$1,939
14	\$646	\$1,234	\$2,088
15	\$692	\$1,322	\$2,237
16	\$738	\$1,410	\$2,386
17	\$784	\$1,498	\$2,535
18	\$830	\$1,586	\$2,684
19	\$876	\$1,674	\$2,833
20	\$922	\$1,762	\$2,982
21	\$968	\$1,850	\$3,131

#### \$2 Student record fee included in above fees

- \* Subject to change by the Collin College Board of Trustees \*\* Does not include \$50/hour tuition charge for designated
- non-fundable course tuition.
  \*\*\* Includes \$200 minimum required by law

### Fees

Other fees are applied as required regardless of residency.

Student Records fee\*\*\*\* \$2 per term Immunization Management Fee (designated Health Science/Nursing programs):\*\*\*\* \$30

Audit fee\*\*\*\* \$25 per course

Credit by Exam fee\*\*\*\* \$30 per course

Lab and Special Course fees. Board Approved per lab/course (see term Registration Guide for details)

Late Registration fee\*\*\*\* \$10 Returned Check fee\*\*\*\* \$25 Credit Card Charge Back fee\*\*\*\* \$25 Installment Plan Service charge\*\*\*\* \$25 Late Installment Payment fee\*\*\*\* \$25 Transcript Fee\*\*\*\* \$5 each

\*\*\*\* Non-refundable

NOTE: Firefighters qualifying for a tuition and lab fee waiver are required to pay the Student Activity and Special Course fees.

NOTE: Valedictorians qualifying for a tuition waiver are required to pay all fees.

NOTE: Veterans qualifying for a Hazelwood Exemption are required to pay the Student Activity, Student Record, non-fundable course tuition charges and Special Course fees.

NOTE: Instructional fees for Continuing Education courses can be found in the current Continuing Education Schedule of Classes.

### Non-Fundable Course Tuition

Students enrolled in courses that are not funded by the State of Texas will be charged a higher tuition rate for each course at a rate of \$50 per credit hour. These include local needs courses not approved by the Texas Higher Education Coordinating Board for funding. See the Collin College website

https://www.collin.edu/gettingstarted/register/withdr awal.html for a complete list of courses charged the higher tuition rate.

#### **Payment**

MasterCard, VISA and Discover cards, as well as cash and checks, are accepted as payment. Checks are processed electronically through the Automated Clearing House (ACH). When writing a check or using a credit card, students must also show a picture identification card and provide their Campus Wide ID (CWID) number. Incomplete and/or unsuccessful payments may result in additional fees. A payment plan option is available prior to the start of each term.

#### Refunds

Refund calculations are based on the state-mandated refund policy. Full (100 percent less non-refundable fees) refund credits are only assessed for courses dropped prior to each term's first class day. Each term's first class day is based on the week the course

<sup>\*\*\*</sup> Includes \$200 minimum required by law Lab and special course fees vary by lab/course.

begins, not the first day of an individual's class. As of the first class day, credits assessed for dropped or withdrawn courses will be less than 100 percent, ranging from 70 to 0 percent, per the refund policy.

Registration refunds are processed approximately two weeks after the first class day of the primary part of term and financial aid disbursements approximately a week later after course activity is certified. The complete refund policy is listed in the Collin College Registration Guide.

### **Exemptions and Waivers**

Partnering with the State of Texas to ensure affordability of higher education for all students, Collin offers numerous State and local Board authorized tuition and/or fee exemptions and waivers for eligible students. The exemption and waivers table (beginning on page 23) outlines the exemptions and waivers offered, the Collin office to contact, summary data on eligibility, nature of exemption/waiver offered, and authorizing citation/policies.

Eligible students should contact the responsible Collin office to ascertain what documentation is required to prove eligibility. Proof of exemption/ waiver eligibility must be provided for each term of attendance at Collin. Students are responsible for meeting any eligibility requirements and providing required documentation to Collin in compliance with payment deadline requirements to consider exemptions/waivers as a source of funding for the term.

# **Student Financial Responsibility**

Registration is required for students to attend courses at Collin College, and registration constitutes a contractual financial obligation and agreement to pay tuition and fee charges for which the student is liable. Student tuition bills (e-bill) are posted online and are accessed through CougarWeb. Billing notices are sent to the student's college assigned email address, the official means of communication with Collin students.

Payment deadlines and student account balances are available online. Meeting payment deadline requirements is the student's responsibility, regardless of whether an e-bill is received. Each term has an advertised early registration payment deadline (see term specific Registration Guide). After the initial payment deadline date, any balance on the student account is due the same day the charge is incurred. Funding must be in place in compliance with payment deadlines to ensure course enrollment status.

Unfunded balances may result in course registration being changed to a dropped/withdrawn status. It is the student's responsibility to review student account balances, comply with financial aid eligibility requirements and third party funding guidelines, and meet payment deadline requirements. Student accounts with an unpaid debt are subject to changes in course registration status, holds preventing registration, withholding grades, transcripts and degrees. Delinquent accounts may be placed with an outside collection agency and/or reported to the national credit bureau system.

Students are responsible for all late fees, percentage-based collection fees (not to exceed 33.33 percent), attorney fees, interest, and any costs and charges necessary for the collection of any amount not paid when due. All disputes about registration or payment will be governed in accordance with the laws of the State of Texas. The venue for any lawsuit regarding collection of a delinquent debt will be in Collin County, Texas.

### Per Texas Education Code 54.007(2)(d):

A STUDENT WHO FAILS TO MAKE FULL PAYMENT OF TUITION AND MANDATORY FEES, INCLUDING ANY INCIDENTAL FEES, BY THE DUE DATE MAY BE PROHIBITED FROM REGISTERING FROM CLASSES UNTIL FULL PAYMENT IS MADE. A STUDENT WHO FAILS TO MAKE FULL PAYMENT PRIOR TO THE END OF THE SEMESTER OR TERM MAY BE DENIED CREDIT FOR THE WORK DONE THAT SEMESTER OR TERM.

### **Drop for Non-Payment**

Students with unfunded balances not in compliance with payment deadline requirements are subject to all courses being dropped for non-payment, regardless of partial payments. Details of payment requirements and deadlines are published in the registration guide.

# EXEMPTIONS AND WAIVERS AVAILABLE AT COLLIN COLLEGE

Optional (O) or Mandatory (M)	Exemption (E) or Waiver (W)	Description	Collin Office to Contact	Texas Residency Requirement	Exempted/ Waived	Statute Program	Texas Statute/ Administrative Rules/Board Policy
М	W	Waiver - Continuous Military Dependent	Student Enrollment Services	No, continuous domicile required	To resident tuition rate	Military in Texas	TEC 54.241(c)
М	W	Waiver - Economic Development	Student Enrollment Services	No	To resident tuition rate	Economic Development	TEC 54.222
М	W	Waiver - Faculty and Dependents	Student Enrollment Services	No	To resident tuition rate	College Teachers, Profs, etc.	TEC 54.211
М	W	Waiver - Foreign Service	Student Enrollment Services	No	To resident tuition rate	Foreign Service Officer	TEC 54.206
М	W	Waiver - Military and Dependents	Student Enrollment Services	No, but active duty orders or continuous presence	To resident tuition rate	Military in Texas	TEC 54.241
M	W	Waiver - NATO Alien	Student Enrollment Services	No	To resident tuition rate	NATO Members and Families	TEC 54.232
M	W	Waiver- Teacher Research Assistant	Student Enrollment Services	No	To resident tuition rate	Teaching and Research Assistants	TEC 54.212
М	W	Waiver - Veterans and Dependents	Student Enrollment Services	No, DD214 plus	To resident tuition rate	Military in Texas	TEC 54.241(i and k)
М	Е	Exemption - Deaf and Blind	ACCESS Office	Yes	Tuition and fees	Deaf or Blind	TEC 54.364
М	Е	Exemption - Adoption	Financial Aid	No	Tuition and fees	Adopted	TEC 54.367
M	E	Exemption - Child of Clinical Nursing Preceptor	Financial Aid	Yes	Tuition, not to exceed \$500	Preceptors and/or their Children	TEC 54.356/Ch 22, Sub P
M	E	Exemption - Child of Disabled Fire/Police Officer	Financial Aid	No	Tuition and fees	Children of Disabled Firemen/Peace Officers	TEC 54.351
М	Е	Exemption - Child of POW/MIA	Financial Aid	Yes (POW sponsor)	Tuition and fees	Children of POWs and MIAs	TEC 54.343
M	E	Exemption - Child of Professional Nursing Staff	Financial Aid	Yes	Tuition pro- rated per employment percentage	Children of Nursing Faculty	TEC 54.355/Ch 22, Sub O
М	E	Exemption - Child, Hazlewood Legacy	Financial Aid	Yes	Tuition and lab fees not funded by Chapter 33 benefits	Hazlewood-Legacy recipients	TEC 54.341 (k)
M	E	Exemption - Child/Spouse of Deceased Public Servant	Financial Aid	No	Books, tuition, and fees	Dependents of Deceased Public Servants	TEC 54.3TEC 54
М	Е	Exemption - Clinical Nursing Preceptor	Financial Aid	Yes	Tuition, not to exceed \$500	Preceptors and/or their Children	TEC 54.356/Ch 22, Sub P
М	Е	Exemption - Fire Science Undergraduate	Financial Aid	TX Employee	Tuition and lab fees only	Firefighters taking Fire Science Courses	TEC 54.353/Ch 22, Sub T
M	E	Exemption - Foster Care Undergraduate	Financial Aid	No	Tuition and fees	Foster Care/TX Dpt Family Protective Svs	TEC 54.366
М	Е	Exemption - Hazlewood Dependent, Disabled sponsor	Financial Aid	Yes	Tuition and lab fees not funded by Chapter 33 benefits	Hazlewood- child/spouse of disabled	TEC 54.341 (a-2) and (b)(1)

M	E	Exemption - Hazlewood Eligible Dependent	Financial Aid	Yes	Tuition and lab fees not funded by Chapter 33 benefits	Hazlewood- child/spouse of deceased	TEC 54.341 (a.2) and (b)(1)
М	E	Exemption - Hazlewood UG	Financial Aid	Yes at time of enlistment	Tuition and lab fees not funded by Chapter 33 benefits	Hazlewood- Veterans	TEC 54.341 (a)
М	E	Exemption - Non-funded Course Tuition	Student Enrollment Services	Yes	Board approved excess tuition charges for identified course	Approved exceptional circumstances	Texas Statute/ Administrative Rules Title 19, Part 1, Chapter 13(f)
M	E	Exemption - Law Enforcement	Financial Aid	TX Employee	Tuition and lab fees only	Peace Officer Exemption	TEC 54.3531
М	Е	Exemption - Prisoner of War	Financial Aid	Yes	Tuition and fees	Ex-Prisoners of War	TEC 54.342
М	E	Exemption - Texas Guaranteed Tuition Plan Residency	Student Enrollment Services, then Bursar / Cashier	No	To resident tuition rate	Texas Prepaid Plan	TEC 54.621.c
М	E	Exemption - Texas Tuition Promise Fund	Bursar / Cashier	No	Tuition charges which exceed program payment	Texas Prepaid Plan	TEC 54.621.c
M	Е	Waiver - Texas National Guard Tuition Reimbursement	Bursar / Cashier	No	Tuition and fees up to amount allocated by adjutant general	National Guard Waiver	TEC 54.345
0	W	Waiver - Competitive Scholarship	Athletic Department	No	Non-resident to resident tuition rate	Competitive Scholarship	TEC 54.213/Ch 21, Sub SS
0	W	Waiver - Good Neighbor	Student Enrollment Services	No	Tuition as approved by THECB	Good Neighbor/Students from Other Nations of the American Hemisphere	TEC 54.331/CH 21, Sub K
0	E	Waiver - Collin Support Staff	Student Enrollment Services	Yes	Out of county to in county tuition	Community College District Employees	TEC 130.0851
0	E	Exemption - Ad Valorem Residency	Student Enrollment Services	No	To resident tuition rate	Ad Valorem	TEC 130.0032(a)
0	E	Exemption - Contract Training	Center for Workforce and Economic Development	No	Tuition to resident rate for eligible courses	Agreement with Junior College District	TEC 130.0081
0	E	Exemption - Disabled Police Officer	Financial Aid	Yes	Tuition and fees	Disabled Police Officer	TEC 54.352
0	E	Exemption - High School Concurrent	Academic Partnership and Testing Center	No, attending local high school and on free and reduced lunch	Tuition and fees	Dual Enrollment-Jr College	TEC 130.008/54.216
0	E	Exemption - Highest Ranking Graduate	Student Enrollment Services	No-TX high school grad	Tuition	Highest Ranking HS Scholar	TEC 54.301
0	E	Exemption - Senior Citizen, 65 and older	Student Enrollment Services	Yes	Tuition for up to 6 hours	Senior Citizen 65+ for 6 hours	TEC 54.365 (b and c)
0	E	Waiver - Board Reciprocal County Agreement	Student Enrollment Services	No	To resident tuition rate	Inter-institutional Academic Programs	TEC 54.368/130.0032

# FINANCIAL AID AND OTHER RESOURCES

### **Financial Aid**

As a service to Collin College students, the Financial Aid Office administers a comprehensive financial aid program that includes grants, loans and part-time employment for those who meet the eligibility requirements. A primary purpose of the Collin College financial aid program is to provide assistance for students who might otherwise find it difficult or impossible to attend college. All students are encouraged to apply for financial aid.

If students have questions or need assistance, they can contact the Financial Aid Office via phone or visit any campus Financial Aid Office. Financial aid staff is trained to assist students in realizing their educational goals by answering questions, providing appropriate forms and instructions, and referring students to other resources as needed.

For more information, please visit the Financial Aid Office webpage at: <a href="https://www.collin.edu/gettingstarted/financialaid/">https://www.collin.edu/gettingstarted/financialaid/</a>.

Students receiving financial aid should not withdraw from all of their classes without first consulting the Financial Aid Office. In addition, all financial aid students must become familiar with the standards of academic progress required to remain eligible for financial aid.

Federal law requires a financial aid student to complete at least 60 percent of each semester. If a student completely withdraws before the 60 percent point in the semester, that student will need to repay a portion of the financial aid funds received. A financial aid student who earns a grade of "F" for all courses in a semester must have at least one (1) instructor provide proof to the Financial Aid Office that the student was in an academically related activity for 60 percent of the semester. Otherwise, that student will owe money back to the financial aid program.

### **Applying For Aid**

Students can apply for aid online using the Free Application for Federal Student Aid (FAFSA) located at <a href="http://www.fafsa.ed.gov">http://www.fafsa.ed.gov</a>. Collin College's Title IV School Code is **016792** and must be reported on the FAFSA application in order for aid to be processed by Collin College.

### **Deadlines**

Students must apply for financial aid each year. Students wanting to receive priority consideration should apply as early as possible. The new FAFSA is typically available Oct. 1 each year. Students who meet the priority deadline will have aid in place before the payment deadline. Students who miss the priority deadline will still be processed. However, these students should make arrangements to pay for their own tuition, fees, books, and supplies before the payment deadline. A file is considered having met the priority deadline if the FAFSA is on file, and any/all required documentation is complete, correct, and submitted by the priority deadline.

### Priority deadlines are as follows:

Fall Semester – April 1 Spring Semester – Nov. 1 Summer Semesters – March 1

# Financial Aid Programs – Federal Assistance

Actual award amounts are determined by federal guidelines, a demonstration of need and the student's enrollment. Collin College participates in the following financial aid programs:

### **Federal Pell Grant**

Eligibility for the Pell Grant is based on the financial need of the student and/or the student's family, as well as the student's enrollment status.

Financial need is determined by the U.S. Department of Education from information provided on the student's FAFSA (Free Application for Federal Student Aid). The standard formula, established by Congress, produces an Expected Family Contribution (EFC) that indicates how much a student, and their spouse or family, is expected to contribute financially toward the cost of their education. EFC's within a particular range (varies by year and consists of those students determined to have the "most need") will be eligible for Pell Grant provided the student meets all other eligibility criteria.

In general, only undergraduate students are eligible to receive a Pell Grant. A student who has earned a baccalaureate or a first professional degree is not eligible to receive a Pell Grant.

# Federal Supplemental Educational Opportunities Grant (FSEOG)

FSEOG is limited by the availability of funds and is awarded to those students considered to have exceptional financial need. Priority is given to federal Pell Grant recipients.

### **Federal Work Study**

Students demonstrating financial need may be considered for the work study program. Students are employed part-time at various jobs on campus or at other College District approved sites. Students are allowed to earn the amount designated in their award package as long as they maintain a 2.0 GPA and are enrolled in at least 6 credit hours.

### **Federal Direct Loan Program**

This program permits students to borrow low-interest loans from the Department of Education provided the student is enrolled and attending at least half time and otherwise meets eligibility criteria. The federal government pays interest on the subsidized (need based) amount borrowed until the student graduates or ceases to be enrolled at least half time. Unsubsidized loans (non-need based) are also available to otherwise eligible students. Students are responsible for the interest accruing on these loans while attending school. The interest rate for subsidized and unsubsidized loans for the 2016-2017 academic year was 3.76 percent.

# Direct Parent Loans to Undergraduate Students (PLUS)

PLUS loans are available to parents who want to borrow money to help defray the cost of their dependent children's education. Like Direct loans, PLUS loans are offered by the Department of Education. Parents may borrow up to the cost of attendance minus any other educational resources and financial aid awarded to students. These loans have a higher interest rate than direct loans and the borrower is responsible for paying all the interest that accrues. The interest rate on PLUS loans for the 2016-2017 year was 6.31 percent

### Financial Aid Programs – State Assistance

### **Texas Public Education Grant (TPEG)**

The TPEG program is a state financial aid program designed to assist students in attending state-supported colleges. Students must demonstrate financial need and be making satisfactory academic progress toward their educational goals. The actual amount of the grant varies depending on the availability of funds to the college, the student's financial condition and enrollment, and other aid, the student may be receiving.

### **Texas Equal Opportunity Grant (TEOG)**

Community college students working on their first associate's degree may be eligible for this grant if they:

- Are a Texas resident
- Do not have a felony drug conviction
- Are within their first 30 hours of college
- Registered for Selective Service, if required
- Have an Expected Family Contribution (EFC) as determined by FAFSA of \$4,800 or less for initial awards and unmet need for renewal awards
- Are enrolled at least half-time (six hours).

Students who meet the qualifications are eligible for up to 75 hours at a community college. Additionally, a student receiving this grant may become eligible for the Texas Grant once they transfer to a university. For the first year, students must meet the college's Satisfactory Academic Progress (SAP) requirements. (Please refer to the Institutional Policy of Satisfactory Academic Progress listed below for more information.) To continue receiving this grant, the student must complete 24 hours each academic year, maintain a 2.5 cumulative GPA, and complete at least 75 percent of their coursework.

For additional information about either of the above grants, please contact the Financial Aid Office.

### **Satisfactory Academic Progress (SAP)**

School policy: 34 CFR 668.16(e); Student eligibility: 34 CFR 668.32(f), 34 CFR 668.34

To be considered administratively capable, a school must have a satisfactory academic progress policy for a Federal Student Aid (FSA) recipient that is the same as or more strict than the school's standards for a student enrolled in the same educational program who is not receiving assistance under a FSA program. Basic Elements of a Satisfactory Progress Policy

According to these federal rules, a school's policy must contain certain basic elements:

- a <u>qualitative component</u> consisting of grades or comparable factors that are measurable against a norm (a GPA component)
- a <u>quantitative component</u> that consists of a maximum time frame in which a student must complete his or her educational program, subdivided into increments (aka the 150 percent rule)
- a measurement of progress, meaning the student must be completing a certain percentage of classes to be considered making adequate progress.

### Student Eligibility

To be eligible for Federal Student Aid (FSA) funds, a student must make satisfactory academic progress as defined by the school.

### What is your SAP Status?

An explanation of the different SAP statuses can be found on the college's website at <a href="http://www.collin.edu/shared/shared\_finaid/pdf/Explanation">http://www.collin.edu/shared/shared\_finaid/pdf/Explanation</a> of SAP.pdf. Students can also see this explanation in the financial aid section of their CougarWeb.

## Institutional Policy of Satisfactory Academic Progress for Financial Aid (Effective November 2013)

This is an official statement of Collin College policy related to the financial aid operational definition of Satisfactory Academic Progress for students at Collin College effective for 2013-14 and subsequent academic years.

At the end of each period of enrollment, the Financial Aid Office evaluates satisfactory academic progress of all enrolled students. This evaluation considers Financial Aid GPA\*, the percentage of hours completed and maximum allowed hours attempted. Please note the evaluation takes place at the end of fall, spring and summer III (the summer calculation is inclusive of all summer terms (Maymester, Summer I, II and III).

At the end of each period of enrollment, a student must meet the following requirements:

### I. Grade Point Average (GPA) Requirement

A student must maintain a Financial Aid GPA\* of 2.0 or higher in order to receive federal student aid. The Financial Aid GPA is the calculation of grades from all credit coursework, including developmental and ESL coursework. Please note, that the Financial Aid GPA\* may differ from the Academic GPA.

### II. Percent Completion Requirement

A student must complete 67 percent of all attempted hours; calculated by dividing the total number of hours the student has successfully completed by the total number of hours attempted.

- a. Successfully completed hours: Passing grades of A, B, C and D, (including developmental and ESL coursework), accepted transfer coursework and repeated courses (one time only for previously passed course).
- b. Attempted hours: Withdrawals, grades of F, incomplete courses, repeated courses, courses taken during the summer sessions, developmental and ESL coursework, accepted

transfer coursework and all hours for which student received passing grades are counted toward attempted hours. Please note, all periods of enrollment count when assessing progress, even periods in which a student does not receive federal student aid.

### III. Maximum Time Frame Requirement

The maximum number of hours a student may attempt is limited to 150 percent of the published length of the program. For example, a certificate program that requires 30 hours would have a maximum time frame of 45 credit hours.

All hours, including those taken while not receiving Title IV aid, those taken under a different major, hours attempted during summer sessions, remedial hours, ESL hours and hours transferred in from previous/other institutions, etc., shall be counted towards total hours attempted and earned. Students that reach the maximum time frame are immediately given a status of "Exceeds Max Hours," making them ineligible for any student aid, including student loans, state aid, etc.

### Complete Withdrawal

A student who completely withdraws from a semester while on student aid or receives grades of "F," "W," and/or "F" in all coursework in a given semester *will immediately be placed on financial aid suspension* and is no longer eligible to receive any student aid. This includes all summer coursework.

This type of suspension can only be removed from the next semester of enrollment with an appeal for rare, extenuating circumstances. Note: All outstanding charges must be paid before an appeal can be considered.

Students in this category who do not have a rare, extenuating circumstance may be able to regain their student aid eligibility in a future term by completing the following steps:

- Complete and pass at least 12 credit hours on their own
- Be meeting the SAP requirements (i.e., a cumulative financial aid GPA of at least a 2.0 and a completion rate of at least 67%. The student cannot be at or over the maximum hours.)
- Submit a new appeal detailing the student's plan for successful completion of their academic goals.

If the appeal is approved, the student will be placed on academic plan for one semester. At the end of that semester, the student must maintain the SAP requirements or they will lose eligibility permanently.

# Failure to Meet the Standards of Academic Progress - GPA and Percent Completion

A student who fails to meet the requirements in I and/or II above will automatically be placed on *warning* for the next semester of enrollment. Students on warning will still be able to receive student financial aid they would otherwise be eligible to receive.

At the end of the next semester of enrollment, the student must be making Financial Aid satisfactory academic progress (Financial Aid GPA\* of 2.0 or greater and a cumulative percent completion of 67 percent or higher.) If the student is not making satisfactory academic progress by the end of the semester, they will automatically be placed on financial aid suspension and will no longer be eligible for any student aid including loans, state aid, etc.

Students on financial aid suspension for Financial Aid GPA\* and/or percent completion will remain on suspension until such time that the Financial Aid GPA\* and/or percent completion reaches the minimum requirements. Once the minimum requirements are met, the student will again be considered to be in good standing.

# The Appeal Process - GPA, Percent Completion and Complete Withdrawal

In rare circumstances, a student is allowed to appeal his/her financial aid suspension. These circumstances may include a *serious* personal illness documented by a doctor, the *serious* illness of an immediate family member where the doctor documents that the student was required to give care to the family member and other rare, exceptional circumstances that prevent a student from attending class. The circumstances must have occurred during the semester(s) of attendance.

Please note that appeals will not be accepted without documentation and that appeals submitted with documentation are not automatically approved. The deadline for submitting an appeal is 30 days after the official first day of classes for a semester.

A student who meets the condition to appeal must complete and submit the Financial Aid Satisfactory Academic Progress Appeal form, along with *required documentation* that supports the rare circumstances, to the Financial Aid Office. The appeal must also contain a *typed* letter explaining the circumstances that the student faced and what measures have been taken so that the same problem does not negatively impact their academic progress.

### The Appeal Process - Maximum Timeframe

An appeal to request an extension of hours can be submitted if there are extenuating circumstances that caused the student not to be able to complete within the 150 percent time period, but those circumstances must be documented. Extenuating circumstances include: a *serious* personal illness documented by a doctor, the *serious* illness of an immediate family member where the doctor documents that the student was required to give care to the family member and other rare, exceptional circumstances that prevent a student from attending class.

A student who meets the condition to appeal must complete and submit the Financial Aid Request for Extension of Max Hours form and a degree audit, along with *required documentation* that supports the rare circumstances, to the Financial Aid Office. The appeal must also contain a *typed* letter explaining the circumstances that the student faced and what measures have been taken so that the same problem does not negatively impact their academic progress. A student is not allowed to appeal the maximum time frame if his/her Financial Aid GPA\* is below 2.0 and/or completion rate is below 67 percent.

#### The Appeals Committee

An appeals committee has been established at Collin College to review all financial aid appeals. The committee will meet as needed to review the appeals. The determination of the appeal will be sent to the student through CougarWeb. Appeals without documentation or that do not meet the requirements of the appeal process will automatically be denied.

A student, whose appeal is approved for GPA or percent completion, must complete a financial aid academic plan. In order to remain eligible for financial aid while on an academic plan, the student may not withdraw from any coursework and must make a grade of at least "C" in every class until the student is back in good standing. A student whose appeal is approved for maximum timeframe will have the approved hours added to the 150 percent of the program length. All decisions of the Financial Aid Appeals Committee are final.

#### Additional Information: Return of Title IV Funds

Title IV aid is earned in a prorated manner on a per diem basis up to and including the 60 percent point in the term. After the 60 percent point all aid is considered earned. The percentage earned is calculated by dividing the number of days completed by the number of days in the repayment period. It is the unearned percentage of aid that determines the amount that must be returned to the Title IV program(s) in the following order: Unsubsidized Direct Loan, Subsidized

Direct Loan, Direct Parent PLUS Loan, Pell Grant and SEOG. The student is not responsible for returning funds to any program to which the students owes \$50 or less. The grant funds returned by the student are applied to the following sources in the order indicated, up to the total amount disbursed from that grant program minus any grant funds the school is responsible for returning to that program. Title IV Grant Program sources include: Pell and SEOG.

The Department of Education considers a student who earns all "F"s to have unofficially withdrawn unless an instructor can prove otherwise. The college, as well as the student may be required to return to the federal government the unearned portion of the Title IV funds. The institution will require students to repay charges resulting from the institution's portion of the return of unearned Title IV aid. This may cause the student to owe both the college and the federal government. Students withdrawing prior to disbursement may be eligible for a post-withdrawal disbursement. Students who are considering withdrawing should contact the Financial Aid Office for a thorough explanation of how this policy will affect them.

# Financial Aid Programs – Other Tuition Exemptions

State tuition waivers and exemptions provide qualifying students with exemptions from certain tuition and fee charges in public colleges.

For the 2014-2015 year, the State of Texas Legislature updated the rules and requirements for exemptions under SB1210. The new rules state that for most types of exemptions, students must:

- Be seeking a degree or certificate
- Have prior credit evaluated and applied toward the degree or certificate\* (this includes both transfer work and any prior credits earned at Collin College)
- Meet the Financial Aid satisfactory academic progress requirement of a 2.0 GPA (excludes hours earned exclusively by examination, hours earned when the student is dualenrolled and hours earned for developmental coursework)
- Have not completed, at the beginning of each semester, more than 30 hours over and above the number of hours required by the degree or certificate in which the student is enrolled.

If on the completion of any semester, a student fails to meet any of the above eligibility requirements, the student may not receive the exemption for the next semester in which the student enrolls. Students may become eligible in a subsequent semester if they complete a semester or semesters on their own and are once again meeting the eligibility requirements.

For students with a rare, extenuating circumstance (as described in the Financial Aid section), they may submit an appeal with supporting documentation. See the instructions for submitting appeals in the Financial Aid section of this catalog or on the College's website at: <a href="http://www.collin.edu/gettingstarted/financialaid/SAP.html">http://www.collin.edu/gettingstarted/financialaid/SAP.html</a>.

Contact either the Financial Aid Office or Student and Enrollment Services for additional information regarding a specific waiver or exemption. A few of the state exemptions and waivers are listed below.

#### **Financial Aid Exemptions**

Deaf/blind students • adopted students and students who were in foster care • children of deceased or disabled fireman and peace officers • children of prisoners of war or persons missing in action • firemen enrolled in fire science courses • police officers enrolled in law enforcement or criminal justice courses • children of professional nursing staff • Hazlewood Act • orphans of national guard members

#### **Admissions Waivers**

Ad-valorem tax • concurrent enrollment • contract training for out of district students • dual agreement with Dallas County • senior citizen

#### **Veterans Educational Benefits**

Students requesting veterans educational benefits at Collin College should submit all documentation to the Financial Aid (FA)/ Veterans Affairs (VA) Office at least **six weeks prior** to registration, if possible. The steps necessary to do this include:

- Gain admission to Collin College through the Admissions Office.
- Submit a degree plan request and all required VA forms to the Financial Aid/Veterans Affairs Office.
- Ensure all official transcripts from prior institutions are submitted to the degree plan coordinator (Registrar's Office) for transfer evaluation.\*

PLEASE NOTE: Only after an official degree plan is on file will notification of enrollment be sent to the Department of Veterans Affairs. Only classes that are

<sup>\*</sup>In order for prior credit to be evaluated, students must submit a degree request form to the Financial Aid office (not to Admissions).

on the official degree plan will be paid for. It is the student's responsibility to ensure the degree program selected is a program approved by the Texas Workforce Commission and the Department of Veterans Affairs.

\* A degree plan will NOT be completed until all OFFICIAL transcripts and the DD214 (where applicable) are on file with the Admissions Office. Failure to submit all official transcripts (and the DD214 where applicable) in a timely manner will result in a delay of certification of enrollment and/or non-certification if the student registers for courses for which previous credit may be granted.

Any class that is recommended but not required by a degree program cannot be certified with the VA. Additionally, classes required for graduation at another institution, but not by Collin College, cannot be certified. Developmental courses will only be certified if the student has assessed into the course(s) and only if the class is a "traditional" class. A traditional class is where the student physically attends the class and a teacher instructs the class at each meeting. Online, pod, flex and blended courses are all considered distance courses (not traditional courses) by the VA. Therefore, they are not eligible for certification.

Veteran students' enrollment is certified according to the date of registration as long as the degree evaluation has been completed. Therefore, it is strongly recommended that veteran students register for classes as early as possible each semester.

It is the student's responsibility to notify the Financial Aid/Veterans Affairs Office whenever they change their schedule (i.e., add or drop classes). The student is responsible for registering for the correct courses. The VA will only pay for courses required for graduation. Please be careful when taking elective course. They may not be eligible for certification.

It is assumed that continuing students want to be certified for any subsequent enrollment unless they notify the Financial Aid/Veterans Affairs Office in writing. Requests for certification of a prior term will be processed in accordance with standard VA policy and will not be processed ahead of the normal scheduled workload for that term.

If the student has not been in attendance for two regular 16-week semesters, additional VA documents will be required, as well as any transcripts from any schools in attendance during the break.

All degree plan changes must be made through the financial aid/veterans affairs office. Please contact the

FA/VA Office on campus. Allow at least six weeks for the new degree plan request to be evaluated. It is the student's responsibility to notify the FA/VA Office once the degree plan has been completed.

#### Veterans Academic Progress

Students receiving veterans benefits must maintain satisfactory academic progress while attending Collin College. Satisfactory academic progress is defined as:

- Maintaining a 2.0 cumulative GPA. Students failing to make satisfactory academic progress will be reported to the Veterans Regional Office as being on academic suspension at the end of the second consecutive semester when the cumulative GPA remains below 2.0. Developmental courses will be included to determine the cumulative GPA.
- 2. A grade of "D" or better received at Collin College or any other college is a passing grade and may not be repeated for benefits. If a non-punitive grade of "T" is assigned to a course and is not converted to a punitive grade, this will be reported to the Veterans Affairs Regional Office within 30 days and benefits will be reduced accordingly. Students receiving a grade of "F" may repeat the course with benefits **one time** at Collin College.
- Withdrawal from a class, whether self-initiated or otherwise, may result in the student being obligated to repay any overpayment of benefits unless the VA approves written extenuating circumstances submitted by the student.
- 4. Regular class attendance is required to provide necessary documentation of attendance.

## **Collin College Foundation Scholarships**

Through generous contributions from individuals, corporations and private foundations, the Collin College Foundation awards scholarships to students annually. Scholarships, available to both new and continuing students, provide opportunities to pursue academic excellence and secure the degrees of choice. Awards are based on financial need, field of study, civic engagement, academic achievement and merit. Transfer scholarships are also available, although limited. All students are encouraged to apply.

Students are encouraged to visit the Foundation website at <a href="http://www.collin.edu/foundation">http://www.collin.edu/foundation</a>. Please check the Foundation website for priority deadlines for submitting applications. Scholarship applications are accepted online only.

## **Athletic and Departmental Scholarships**

Scholarships are also available for men's and women's basketball and tennis. Athletic Competitive Scholarships are awarded on the basis of athletic ability, contribution to Collin College as a student-athlete and NJCAA eligibility.

Scholarships are awarded in compliance with National Junior College Athletic Association by-laws. Contact the Athletic Department for scholarship information. Additional scholarships may be available through academic departments. For more information, contact the respective dean.

# **ACADEMIC POLICIES**

#### **Academic Standards**

All students are encouraged to work toward achieving their goals and maintaining scholastic progress throughout their enrollment at the college.

#### **Good Academic Standing**

Students are considered in good academic standing if a 2.0 or better grade cumulative GPA is maintained.

#### **Academic Progress**

Academic Progress occurs when a student has earned a term GPA of at least a 2.0.

# **Maximizing Academic Progress Program** (MAPP)

The Maximizing Academic Progress Program (MAPP) assists students whose cumulative GPA has fallen below 2.0. Students in this status are required to:

- meet with an Academic Advisor to develop an individualized plan for success. An Unsatisfactory Progress Hold will be placed on students' records.
- enroll in classes before the probation deadline for the term (see Registration Guide "Important Dates" for exact deadline). This includes regular classes (i.e., 16-week) and all express and flex entry classes.

Students who do not earn a cumulative 2.0 GPA will be placed on one of the following academic actions:

- Academic Warning
- Academic Probation
- Academic Suspension

#### **Academic Warning**

Academic Warning occurs immediately following the first semester students do not maintain Good Academic Standing. Students will be limited to a maximum of 13 credit hours per semester. No Maymester/Wintermester registration will be permitted. A hold will be placed on the students' registration status requiring them to meet with an Advisor. Students will complete a MAPP Contract and Personal Academic Action Plan. Students will submit a Progress Report (PR) prior to the semester withdrawal date (see Registration Guide "Important Dates" for exact deadline).

Students will be removed from *Academic Warning* the semester that *Good Academic Standing* is achieved.

#### **Academic Probation**

Academic Probation occurs immediately following Academic Warning. Students, who do not raise their cumulative GPA up to a 2.0, will be required to meet with an Advisor prior to the next term's registration. Students will be limited to a maximum 13 credit hours per semester. Students will complete a MAPP Contract and the Continual Academic Action Plan in conjunction with a Learning Framework class (EDUC 1300 or PSYC 1300) or Learning and Study Strategies Inventory (LASSI).

Students will submit a Progress Report (PR) prior to the semester withdrawal date (see Registration Guide "Important Dates" for exact deadline). Students entering Academic Probation for a Maymester/Wintermester term will only be permitted to enroll in a Learning Framework class (EDUC 1300 or PSYC 1300). If students maintain Academic Progress, they will be able to continue to enroll for future semesters and complete a Progress Report until Good Academic Standing is achieved.

#### **Academic Suspension (one year)**

Academic Suspension occurs when students on Academic Probation do not maintain Academic Progress. Students on Academic Suspension cannot enroll for one (1) academic year. Students who participate in early registration and do not maintain Academic Progress by the end of the semester, will be dropped from their classes for the subsequent semester and will be placed on Academic Suspension.

#### **Appeals**

Students placed on Academic Suspension have the right to appeal to the Academic Progress Appeals Committee (APAC). The process allows students to appeal a suspension for unsatisfactory academic progress based upon: (a) the death of a relative, (b) an injury or illness of the student or (c) extenuating circumstances. Students can only appeal one (1) time during their tenure at Collin.

# Readmission after a Period of Academic Suspension

After one year of Academic Suspension, students can reapply to Collin College under an Academic Proba-tion status and must continue to maintain Academic Progress each semester. Students must meet with an Academic Advisor to obtain a MAPP contract, Continual Academic Action Plan and Progress Report before the probation deadline (see Registration Guide "Important Dates" for exact deadline).

## Transfer Students on Probation, Suspension or Dismissal from Other Colleges

Transfer Students on probation, suspension or dismissal from other colleges will be admitted to Collin College on Good Academic Standing. Contact Academic Advising for details.

## **Adding/Dropping Courses**

Adding classes to a student's schedule may be made online through the first four days of classes during the long semesters and during the first day of summer or mini-semester terms. For 16-week classes, there is a registration hard deadline of the fourth day of the semester.

Registration for any course will result in full tuition and fee assessment for the course hours. Any course dropped on or after the first day of each term or minisemester will result in charges for the dropped course as determined by the state refund guidelines and approved tuition rates.

Students may withdraw from a course with a grade of "W" through the end of the eighth class week during a regular (16-week) term, through Tuesday of the third week of classes in a short (five-week) summer term and through Thursday of the fifth week of classes in a long (10-week) summer term online. Contact the Registrar's Office for withdrawal deadlines for other terms.

International students should contact the International Student Office, and students receiving financial aid or veteran's assistance should see the appropriate college official before dropping or withdrawing. See "Withdrawal from the College" on page 37 for exact procedures.

Students should contact their professors prior to initiating a drop or withdrawal. A student who discontinues class attendance and does not officially drop or withdraw from the course will receive a performance grade.

#### **Auditing Courses**

Students who are auditing classes will not receive grades or credit for the course, but their transcript will indicate that the course was audited. Students who are auditing classes will not be required to take tests; however, participation in regular class activities is expected. Applied music lessons (MUAP), computer systems, developmental education, engineering, foreign language, ROTC, sign language, studio arts and technology classes may not be audited. (Continuing Education offers foreign language classes. See the current Continuing Education Schedule of Classes.)

Any student intending to audit a course may register for that course in person on the first day of classes. Audit students are subject to the usual registration process and must meet all admissions policies and guidelines. A non-refundable audit fee is assessed for each class in addition to regular tuition and fees. Students who audit are not eligible to print from computers in the library or computer lab.

Those registering for credit during this time may not later change their status to audit (non-credit). However, audit students may change to credit status prior to the term's census date. Students admitted under special admissions are not eligible to audit.

#### **Class Attendance**

Regular classroom attendance is expected of all students. Professors determine class attendance requirements; therefore, students should ascertain each professor's attendance policy on the first day of the class. Students who receive Department of Veterans Affairs educational benefits must conform to attendance and academic standards as established by the college. Please contact Financial Aid or Veteran Affairs for more information.

# **Enrollment Verification for Students** (Self-Service)

This program provides students with online access to enrollment verification services from the National Student Clearinghouse. By using a link on the college website, students can achieve the following:

- Print a certificate of enrollment that can be forwarded to a health insurer, housing provider, credit issuer, employment agency or other student service providers.
- View enrollment information that may have been provided to a student service provider.
- View electronic notifications and deferment forms that have been sent to lenders, service providers and guarantors.
- View a list of their lenders and link to realtime student loan information details, such as outstanding principal balance and the next payment due date that some lenders provide. Go to <a href="http://www.collin.edu">http://www.collin.edu</a>. Click on the CougarWeb link and log into CougarWeb. Click on the Home Page tab. Click on "Enrollment Verification" under the Student Quick Links tab. Follow the instructions for printing an enrollment verification.

Students may contact the National Student Clearinghouse directly at 703.742.7791 or www.studentclearinghouse.org for further questions concerning their enrollment verifications.

## **Religious Holy Days**

In accordance with Section 51.911 of the Texas Education Code, the college will allow a student who is absent from class for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within a reasonable time. Students are required to file a written request with each professor within the first 15 days of the semester to qualify for an excused absence. A copy of the state rules and procedures regarding holy days and the form for notification of absence from each class under this provision are available from Student and Enrollment Services.

# **Grading System**

At the completion of each term, the college will determine the student's semester and cumulative grade point averages, which will be recorded on the student's official transcript. Grades earned in developmental education courses are not included in the grade point average. Grades are available through the CougarWeb Registration system.

Grad	le Points Per Semester Hour
A Excellent	4
B Above Average	3
C Average	2
D Below Average	1
F Failure	0
W Withdrawn	0
(Not included in GPA	or Earned Hours)
WS	0
Withdrawal Affected	
(Not included in GPA	
Counts in State six W/	
WZ	0
Withdrawn by Depart	
(Not included in GPA	
I Incomplete	0
IP in Progress (0 grade points per ser	nester hour. Student completed 70
percent but has not rea	
AD	
A - Developmental	0
BD	
B – Developmental	0
CD	
C – Developmental	0
DD	
D – Developmental	0
FD	
F – Developmental	0
AT Excellent	0 (Transfer)
BT Above Average	0 (Transfer)
CT Average	0 (Transfer)
DT Below Average 0	
AU Audit	0
(Not included in GPA	or Earned Hours)
CR Credit	urs but not GPA Hours. Used for
`	follege Level Exam Program, Credit by
Exam, Articulated Cred	
P Pass	0
(Not included in GPA	or Earned Hours)
T Non Course Base	0
TASP remediation	
X R III R CG( 1	0
Pending Dean of Stude	-
XF	0 mont of Foilure
Administrative Assign (Not included in GPA	
XW	0
Administrative Withda	
(Not included in GPA	
$\overline{\mathbf{Z}}$	No grade reported. Instructor did
	not assign a grade.
ZW	0
Administrative withdr	aw due to a fraudulent act of scholas-

Administrative withdraw due to a fraudulent act of scholastic dishonesty. (Not included in GPA or Earned Hours)

## **Incomplete Grades and Contracts**

The "I" grade is assigned only for extenuating circumstances. Incomplete contracts must be agreed to and signed by the student, professor, chair and appropriate academic dean before the end of the term in order for a grade of "I" to be assigned.

The contract must define the exact requirements (not to exceed 20 percent of the coursework) the student is to fulfill in order to receive a performance grade. If remaining work is greater than 20 percent of the coursework, the approval of the Vice President/ Provost is required. Requirements of incomplete contracts must be completed as specified in the contract, but no later than the end of the next long semester.

The contract will state that if the work is not completed as specified, the grade will be changed to a performance grade based on the quality and amount of work completed. If the instructor does not initiate a grade change by the end of the next semester, the grade will be changed by the Registrar's Office to an "F" or other performance grade indicated on the original contract.

#### Pass/Fail Grade Option

Non-degree seeking students may select a pass/fail grade option for foreign language, sign language and creative writing courses. This option is not available for students working toward a degree plan or intending to transfer to another institution. To select a pass/fail grade, complete the appropriate form at the Admissions Office on or before the census date of the term. Pass/fail students may change their status to credit before the census date of the term in the Admissions Office.

#### **Repeating Courses**

Beginning Fall 2016, Texas residents attempting a course more than twice at Collin College are subject to regular tuition plus an additional \$50 per semester credit hour. Undergraduate courses attempted at Collin College with a graded status of A, B, C, D, F, I, W (withdrawals after census), and AU (Audit) will be evaluated for repeat limits.

Refer to the Collin College website for a complete list of courses exempt from the course repeat tuition and how to qualify for exemptions from the higher tuition rate. www.collin.edu/gettingstarted/register/withdrawal.html

Students in excess of 27 Developmental Education hours will be assessed the authorized \$50 per hour additional tuition.

Grades of all courses taken will be recorded on the student's transcript. When a course is repeated:

- Only one course/grade will be counted in a student's GPA
- The highest grade will be used in GPA calculations

Courses repeated before Fall 2008 will have only the last grade and credits earned (whether higher or lower) used in computing the GPA and applied toward degree or program requirements.

Veterans should consult a VA Certifying Official in the Office of Financial Aid/Veterans Affairs before repeating any course. Students planning to transfer to another college or university should check with a Collin College academic advisor or with receiving institutions for their repeat policies.

#### Graduation

The college offers Associate of Arts, Associate of Arts in Teaching, Associate of Science and Associate of Applied Science degrees and certificate programs. Students who plan to graduate from Collin College should request a degree plan prior to the completion of 30 credit hours. Students must be currently admitted to Collin College to request a degree plan.

Students may graduate under any approved degree plan from the preceding five years as long as they were enrolled during that year; however, students may benefit from graduating under the requirements of the current degree plan. Degrees and certificates that have been deactivated by the Texas Higher Education Coordinating Board (THECB) must be completed within three years of the date the program ended.

A student who completes specific course requirements for a degree or certificate with a minimum cumulative grade point average of 2.0 is a candidate for graduation. Any student who entered Collin College prior to Fall 2008 and had transfer coursework transcripted will have those transfer course grade points included in their Collin College grade point average.

TSI requirements must be complete in order to be considered a candidate for graduation.

Associate of Arts, Associate of Arts in Teaching,
Associate of Science, Associate of Arts or Science in a Field of Study or Associate of Applied Science degree honors will be awarded to students with the following cumulative grade point average at Collin College:

4.0 Summa cum laude 3.75-3.99 Magna cum laude 3.5-3.74 Cum laude

Honors are calculated using all Collin College collegelevel coursework and transcripted transfer coursework prior to Fall 2008. (Grades earned in developmental education courses are not included.)

Students participating in commencement ceremonies must purchase graduation regalia (cap and gown) from the college bookstore.

## **Associate Degrees**

Students may earn the following degrees:

- Associate of Arts or Associate of Science
- Associate of Arts in Teaching
- Associate of Arts or Science in a Field of Study and Certificate
- Associate of Applied Science and certificates
- Texas Certificate

To graduate, students must complete a minimum of 18 credit hours at Collin and satisfy all other degree requirements. Non-traditional and developmental course credit do not meet this residency requirement. Candidates for an associate degree should submit an application for graduation at the beginning of the semester of degree completion.

#### **Certificate Programs**

Students obtaining certificates containing 18 hours or less must complete 15 hours of coursework in residence at Collin College. Petitions for transfer credits into certificate programs containing 18 hours or less may be made to the academic dean through the degree plan coordinator. Students earning certificates may participate in commencement ceremonies. Candidates for a certificate should submit an application for graduation at the beginning of the semester of completion.

## **Occupational Skills Awards**

Occupational Skills Awards (OSA) are nine to 14 credit hour awards that add to the student's marketability or make the student eligible for immediate employment. These awards are also designed as a stepping stone toward earning certificates or the AAS degree.

#### **Graduate Guarantee for AAS Graduates**

The Graduate Guarantee shall be used for accountability purposes. The guarantee shall ensure the graduate's employer that the graduate has met program competencies and shall offer up to nine tuition-free hours of education for a program graduate judged by

the employer to be unable to perform on the job the competencies as specified in the college program. The program can be initiated by the employer or graduate, within 90 days of the graduate's initial employment, by submitting a written request to the Vice President/Provost.

#### **Summer Graduates**

Students with six hours or less remaining toward completion of an associate degree may participate in the current year's graduation ceremonies provided they are pre-registered for the appropriate summer courses. Students planning to complete graduation requirements during a summer session and participate in graduation ceremonies must file for graduation by the preceding spring semester deadline. Otherwise, summer graduates may participate in the following year's ceremonies.

#### **High Academic Achievement**

All students who complete 12 or more quality credit hours during a regular (16-week) term with a current 3.5 GPA or above qualify for the Deans' List. All students who complete 12 or more quality credit hours during a regular (16-week) term with a current 4.0 GPA qualify for the President's List.

#### **Student Records**

## **Procedure to Inspect Education Records**

Students may inspect and review their education records upon written request to the Registrar. Students should submit a written request to the Registrar that identifies as precisely as possible the record or records they wish to inspect. Contact the Registrar for procedures on students' rights of inspection, review and correction of educational records.

#### **Disclosure of Education Records**

Collin College will disclose information from a student's education records with the student's prior consent or as permitted by law. Examples of disclosure not requiring a student's prior consent include the following:

- To other school officials who Collin College has determined to have legitimate educational interests;
- 2. To officials of another school in which the student seeks or intends to enroll, or where the student is already enrolled so long as the disclosure is for purposes related to the student's enrollment or transfer;
- To certain officials of the United States
   Department of Education, the Comptroller
   General, and state and local educational

- authorities in connection with certain state or federally supported education programs;
- 4. In connection with a student's request for or receipt of financial aid, as necessary to determine the eligibility, amount or conditions of the financial aid, or to enforce the terms and conditions of the aid;
- If required by a state law requiring disclosure that was adopted before Nov. 19, 1974;
- To organizations conducting studies for or on behalf of educational agencies or Collin College;
- 7. To accrediting organizations to carry out their accrediting functions;
- To comply with a judicial order or a lawfully issued subpoena;
- 9. If legal action is initiated, Collin College may disclose relevant information from a student's education records to the court, without a court order or subpoena;
- 10. In connection with a health or safety emergency, Collin College may disclose information from education records to appropriate persons whose knowledge of the information is necessary to protect the health or safety of the student or other individuals;
- 11. Directory information (as defined below) in accordance with FERPA, unless the student restricts directory information;
- 12. To the student and/or the parent of a student who is a dependent for tax purposes;
- 13. Final results of the disciplinary proceeding to alleged complainant/victim of a crime of violence and/or a non-forcible sex offense;
- 14. To a parent of a student under the age of 21 who has committed a disciplinary violation with respect to the use or possession of alcohol or a controlled substance; and/or
- 15. The disclosure concerns sex offenders and other individuals required to register under Section 170101 of the Violent Crime Control and Law Enforcement Act of 1994, 42 U.S.C. 14071, and the information was provided to Collin College (for additional information, see Section 6.22, Registered Sex Offenders).

#### **Directory Information**

In compliance with the Family Educational Rights and Privacy Act (FERPA) of 1974, Federal Law 99-380, information classified as "Directory Information" may be released to a qualified individual or organization that files a written request with the Registrar without the consent of the student.

Directory information is defined as:

- 1. Student name
- 2. Student address

- 3. Home phone number
- 4. Major field(s) of study
- 5. Participation in officially recognized activities and sports
- 6. Weight and height of athletic team members
- 7. Dates of attendance/enrollment
- Most recent previous educational institution attended
- 9. Degrees and awards received
- 10. Photograph

A student may request that directory information be withheld from the public by completing the "Release of Student Information" form in CougarWeb. If no request is filed, directory information will be released upon inquiry. Filed requests are valid until revoked by the student in writing. Directory information is the only part of a student's record that may be released without the student's prior written permission, except with regard to the law that provides for disclosure without consent.

Students may also authorize parents or other individuals access to their grades by completing the "Release of Student Information" form in CougarWeb.

#### **Student Classifications**

**Freshman:** A student who has successfully completed fewer than 30 quality hours.

**Sophomore:** A student who has successfully completed 30 or more quality hours, but has not earned an associate's degree.

**Full-time:** A student enrolled for 12 credit hours or more in a regular (16-week) semester, six credit hours or more in a five-week summer session, or nine credit hours or more in a 10-week summer session.

**Part-time:** A student enrolled for 11 credit hours or less in a regular (16-week) semester, five credit hours or less in a five-week summer session, or eight credit hours or less in a 10-week summer session. *Classification varies for courses meeting on alternative or accelerated schedules.* 

#### Student Load

A full-time student load is a minimum of 12 credit hours per 16-week semester. Students taking 11 credit hours or less per 16-week semester are classified as part time students. Full-time status during the summer sessions or accelerated sessions may vary.

For clarification, see Student Classifications or contact the Registrar. Students may, with special permission from the Registrar, enroll for more than 18 credit hours during a regular session and seven hours in a summer session. Permission will not be granted unless the student has a 3.0 cumulative grade point average and plans to carry no more than 21 hours during a regular (16-week) semester or nine hours during a summer session. Students are limited to one course (maximum three credit hours) during the Maymester and Wintermester sessions.

# **Student Right To Know**

Under the terms of the Student Right to Know Act, the college maintains and annually updates student persistence, graduation rates, transfer rates and other relevant statistics. To access this information, go to Collin's Institutional Research Office website <a href="http://www.collin.edu/aboutus/statistics/">http://www.collin.edu/aboutus/statistics/</a>.

## **Transfer of Credit**

The ultimate goal at Collin College is to produce educated and productive students, knowledgeable in their chosen field of study. As part of Collin College's commitment to transfer students, the college has partnered with various colleges and universities to establish transfer articulation agreements, special preadmission agreements and degree plans that provide students access to and linkages with their baccalaureate degree-granting institutions. Not only do these partnerships help students transition from Collin College to their chosen four-year institution – they also foster a more confident and successful student. Transfer resources for students are located on the Transfer U website at <a href="http://transferu.collin.edu">http://transferu.collin.edu</a>.

#### **Common Course Numbering**

To help meet the transfer needs of its students, Collin College is a member of the Texas Common Course Numbering System (TCCNS) Consortium. All Texas community/junior colleges and many Texas universities are also using this numbering system.

The Texas Common Course Numbering System provides a shared, uniform set of course designations for students and their advisors to use in determining both course equivalency and degree applicability of transfer credit on a statewide basis.

Students should not assume that only courses with common course numbers will transfer and should see a Collin College academic advisor for assistance.

#### **Guarantee for Transfer Credit**

Collin College guarantees the transferability of course credits to Texas colleges and/or universities that participate in the Guarantee for Transfer Credit program. The guarantee applies to students who have met the requirements for its Associate of Arts, Associate of Arts in Teaching or Associate of Science

degrees and students who have met the 60 credit hour transfer plan.

This guarantee is designed for Collin College students who have made firm decisions about their major and the transfer college or university to which they plan to transfer, and who have followed a written transfer guide for that transfer institution.

If these courses are rejected, a student may take tuitionfree alternate courses at Collin College that are deemed acceptable by the college or university to which he/she wishes to transfer. Special conditions that apply to the guarantee program are available on request.

#### **Resolution of Transfer Disputes**

Collin College works closely with colleges and universities to make the transfer process as smooth as possible for courses transferred to Collin College from the other institutions and follows guidelines to resolve transfer disputes.

The Texas Higher Education Coordinating Board has established procedures (see next page) to be followed when transfer credit for lower division courses listed in the Academic Course Guide Manual (ACGM) is disputed. The individual courses covered by this procedure are defined in the coordinating board's guide entitled, "Transfer of Credit Policies and Curricula."

# **Procedures for Resolution of Transfer Disputes**

The following procedures shall be followed by public institutions of higher education in the resolution of credit transfer disputes involving lower-division courses. If an institution of higher education does not accept course credit earned by a student at another institution of higher education, the receiving institution shall give written notice to the student and to the sending institution that transfer of the course is denied. The receiving institution will also give the reasons for denying credit for a particular course or set of courses at the request of the sending institution. The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with board rule and/or guidelines.

If the transfer dispute is not resolved to the satisfaction of the student or the sending institution within 45 days after the date the student received written notice of denial, the institution whose credit is denied for transfer shall notify the commissioner of the denial.

The Commissioner of Higher Education or the commissioner's designee shall make the final determination about the dispute concerning the

transfer of course credit and give written notice of the determination to the involved student and institutions.

## **Transcripts**

Requests for official transcripts are made online through the college website (www.collin.edu) and cost \$5 each.

# Withdrawal from the College Withdrawal Policy: Texas Education Code 51.907 Course Drop Limit Provisions

Students who enroll as an entering freshman or a first-time college student in undergraduate courses at any Texas public community college, technical institute, health sciences institution or any public university offering undergraduate courses must comply with the legislation of TEC51.907.

TEC51.907 states that students who enroll for the first time during the fall 2007 semester or any subsequent semester are subject to the course drop limit of six course drops. This includes any course a transfer student has dropped at another institution.

Students may withdraw with a grade of "W" through the end of the eighth week during the regular (16-week) semester or Tuesday of the third week during the short five-week summer term and through Thursday of the fifth week in a long 10-week summer term.

Prior to withdrawing, students should talk with their professor(s) and/or their advisors. Students who need to withdraw from class(es) may do so online or in person in the Student and Enrollment Services area at any campus. Students may withdraw online through the posted last day to withdraw unless the student has holds or is an International Student. These students must come to a campus admissions office. The withdrawal dates are listed in the academic calendar.

Students may also withdraw from the college by mailing a written request for such action. The request must include the student's signature, address, CWID number, date of birth, phone number(s) and the course names and numbers. The date postmarked on the envelope will be the official withdrawal date.

Students should contact their professor prior to initiating a drop or withdrawal. Withdrawal from the college must be student initiated. Students who discontinue class attendance and do not officially withdraw will receive a performance grade for the course.

# STUDENT AND ENROLLMENT SERVICES

## Advising

The Advising Department is dedicated primarily to assisting students in defining and achieving their academic goals. This is an integral component necessary for each student's success at Collin College.

Productive advising is dependent upon a continuous collaboration between the advisor and the student. Students can contact an advisor in the Advising Department located within the Student and Enrollment Services Center on their campus.

Successfully achieving academic goals requires active and timely participation from both students and advisors. Therefore, students are strongly encouraged to meet with an advisor each semester to evaluate their academic progress and pre-plan their next registration. Advisors and their phone numbers are listed by instructional division in the college catalog. The Student Responsibilities for academic planning are:

- Read and respond to your CougarMail
- Maintain regular contact with your advisor/ academic planning coach during each semester
- Be an active learner by participating fully in the advising experience
- Keep a personal record of your progress toward meeting your academic goals
- Clarify goals and provide your advisor/academic planning coach with accurate information
- Be knowledgeable about Collin College instructional programs
- Be prepared and accept responsibility for your decisions

#### **Academic Ethics**

Collin College expects all members of the academic community to demonstrate honesty and integrity in every endeavor. Plagiarism, collusion, cheating and other acts of scholastic dishonesty lessen the entire process of learning and acquiring knowledge.

For more information on Scholastic Dishonesty, see the current Collin College Student Handbook or contact the Dean of Students Office.

# Disability Support Services ACCESS Accommodations at Collin College for Equal Support Services

Collin College provides equal access to education and safeguards against discrimination by offering specialized services and reasonable accommodations to qualified students with a disability. Students apply for services through the ACCESS office and provide the appropriate documentation before they may be granted accommodations. Students must be admitted to Collin College before applying. Documentation from licensed professionals (psychologist, diagnostician or physician) will be reviewed. Specific documentation guidelines may be found on the ACCESS website and/or through meeting with an ACCESS advisor. Students seeking accommodations should contact the ACCESS Office at least one month before the services are needed. Services are available for students at all campus locations.

Each semester, a new letter of accommodation must be obtained and presented to your professors in order to receive approved accommodations. Students should contact their ACCESS advisor immediately if they are having difficulty in their classes or having problems with their requested accommodations.

Special testing arrangements for students with approved ACCESS status can be made with an ACCESS office on any campus and must be done at least five days in advance. Limited space and arrangement of staff require preparation. Students must take exams on the campus for which they are enrolled.

Assistive technology and software are available on each campus for students with disabilities. Please contact the ACCESS Office for more information.

Dual credit students needing accommodations for their Collin College classes are required to apply for and be approved for academic accommodations through the ACCESS Office. Disability support services received in high school do not automatically transfer into the college setting. Make application at least one (1) month before classes begin.

The ACCESS office gathers the required paperwork for the Deaf/blind tuition exemption. The student must bring the following information to be considered for a tuition exemption: certificate of deafness or blindness; letter of good moral character; high school transcript, diploma, or GED; statement of purpose with degree or certificate declared; proof of residency; and meet all other entrance requirements as outlined by Admissions and Records. This information should be provided at least one month before the student attends Collin College and before the payment deadline. Subsequently, each semester immediately after registering for classes, students must contact the ACCESS office to obtain a tuition exemption or their classes will be dropped. The Deaf/blind tuition exemption does not apply to all courses and will be determined on a per-course, persemester basis. The final decision on this exemption is determined by the Financial Aid Office, based on Satisfactory Academic Progress. A tuition exemption is not an academic accommodation.

All campuses are accessible to individuals with disabilities. For information on these and related services, contact the ACCESS Office at 972.881.5898. ACCESS Offices are located in rooms B335 at Central Park Campus, F144 at Preston Ridge Campus and D140 at Spring Creek Campus.

#### **Career Services**

Career Services is a division of Collin College focused on empowering students with career information and employment development skills and resources for long term success. Career Services operates in a virtual office format. For individualized service, students will be directed to the appropriate campus and staff. For questions, or to schedule an appointment, please email: <a href="mailto:career@collin.edu">career@collin.edu</a>.

# **Counseling Services**

Call or stop by your preferred campus counselor office to set up an initial appointment or email <a href="mailto:personalcounseling@collin.edu">personalcounseling@collin.edu</a>.

Collin's Counseling Services is designed to meet the needs of the Collin College student with compassion, honesty and confidentiality. All issues are taken seriously, and no problem is "too small' to discuss. Counseling Services offers crisis counseling, individual counseling, and group counseling as well as workshops, on-line resources, and referrals to community assistance.

Information shared in the counseling setting is protected by state and federal laws and will not be disclosed without your written permission. In instances of imminent harm to self or others, permission may not be needed.

Licensed Professional Counselors are located at Central Park Campus, Preston Ridge Campus and Spring Creek Campus. Evening hours are available. Contact <a href="mailto:personalcounseling@collin.edu">personalcounseling@collin.edu</a> or <a href="mailto:career@collin.edu">career@collin.edu</a> for more information.

## **Collin College Police Department**

The Collin College Police Department, in partnership with students, staff, faculty and visitors, enables learning and personal growth for all individuals by establishing and maintaining an educational environment that is civil, unbiased, welcoming, supportive, enriching and safe. This is accomplished through open communication, service, integrity, vigilance, diligence, veracity and compassion for the members of the community it serves.

Police officers employed by Collin College are peace officers licensed by the State of Texas. They are first responders for all law enforcement, fire and medical emergencies on Collin College campuses. Collin College police officers have full authority to enforce Texas laws and College regulations.

Collin College police officers are empowered to enforce all Texas motor vehicle laws authorized by the Board of Trustees and parking regulations established under section 51.205 of the Higher Education Code on all property owned or controlled by Collin County Community College.

Collin College police officers provide a multitude of services including, but not limited to, investigation of criminal acts, security at events on campus, coordination of medical and fire department responses to campus, safety escorts, parking enforcement and traffic control, jump starts, identification of unsafe conditions.

Should you require the services of the Collin College police department, call 972-578-5555.

#### **Reporting Emergencies**

All emergencies, whether medical, fire, natural disaster or law enforcement, on any Collin College campus should be reported immediately to Collin College police at 972-578-5555. The police department telecommunicator will assign officers to respond along with any fire or medical personnel needed.

If an emergency arises at an off-campus location, immediately call 911.

### **Carrying of Handguns on Campus**

Effective Aug. 1, 2017, in compliance with Texas Government Code, Section 411.2031, individuals with a valid License to Carry a Handgun issued by the Texas Department of Public Safety may carry a concealed handgun on the property of Collin County Community College. Individuals so licensed, must comply with all applicable state law and regulations established by Collin College for carrying a concealed handgun on

campus, to include areas of each campus where concealed carry of the handgun is restricted. These areas will be properly identified by signage as specified under Section 30.06 of the Texas Penal Code.

## **Sex Offender Registration**

Individuals who are required to register under the State of Texas Sex Offender Registration Program must register with the Collin College Police Department within seven days of attending classes, working on a Collin College campus, whether for the institution or a contractor, or engaging in any activity that would regularly require them to be on a Collin College campus. These individuals are also required to notify the Collin College Police Department when they will no longer be coming to a Collin College campus.

Collin College complies with the Sex Crimes Prevention Act (Section 1601 of Public Law 106-386) and the Jacob Wetterling Crimes Against Children and Sexually Violent Offender Registration Act. For more information, contact the Collin College Police Department at 972.578.5555 or visit the department's website at: <a href="http://www.collin.edu/campuspolice">http://www.collin.edu/campuspolice</a>.

#### **Drug Free Campuses**

In compliance with the Drug-Free Schools and Communities Act Amendment of 1989 (Public Law 101-226) and Texas House Resolution 2253 and Senate Resolution 645 (passed in 1987), the college forbids the unlawful delivery, manufacture, possession, sale, purchase, use or distribution of illegal controlled substances (as defined in the Texas Controlled Substance Act) such as alcoholic beverages, steroids, inhalants, herbal/ "natural" euphoriants, look-alike products, substances referred to as "designer drugs" and the inappropriate or illegal use of over-the-counter or prescription medication at the college, on college property, at Century Court Apartments or while attending college-sponsored activities on or off campus.

For more information, refer to the current Collin College Student Handbook, Dean of Students, Director of Counseling or Director of Human Resources. Information can also be found at <a href="https://www.collin.edu/campuspolice/">www.collin.edu/campuspolice/</a>.

#### **Emergency Closing of the College**

If classes have been cancelled, an announcement will be posted on the college's website (<a href="www.collin.edu">www.collin.edu</a>) and through CougarAlert. In addition, announcements will be made on local radio and television stations. A decision to cancel classes will usually be made by 4 p.m. for evening classes and by 6 a.m. for day classes.

## CougarAlert

CougarAlert is the official emergency notification system for Collin College, providing critical information via text message, phone message, e-mail or social media. CougarAlert may be triggered for evacuation, inclement weather, power outages or unscheduled closure but not for promotional purposes. During emergencies, go to <a href="www.collin.edu">www.collin.edu</a> for details. If a closure notice is not posted on the website, the college is open. College-issued e-mail and home phone numbers are automatically loaded for students, but text messaging and additional e-mails can be added. See <a href="www.collin.edu">www.collin.edu</a> /cougaralert.html for instructions. (Standard text messaging fees from service providers may apply.)

#### **Health Services**

The college is dedicated to the total well-being of its students. Health fairs, alcohol and drug awareness programs and aerobic and other fitness courses are geared toward student wellness. Although the college does not employ a nurse or physician, first aid supplies are available at the VP/Provost offices, Information Center, Fitness Center, Physical Plant, Student Life offices and academic department offices on each campus. Please visit

http://pol.tasb.org/Policy/Code/304?filter=FFAC to read the corresponding board policies [FFAC (LOCAL) and FFAC (LEGAL)] associated with this section.

#### **Communicable Diseases**

Each institution of higher education, including each college district, shall make available the institution's policy on HIV infection and AIDS to students by including the policy in the student handbook if practicable or by any other method. Education Code 51.919(b)

#### **AIDS Information**

Collin College has adopted the HIV/AIDS Model Workplace Guidelines approved by the Texas Department of State Health Services. These guidelines, the College District's AIDS policy, and a brochure developed by the Texas Department of State Health Services (TDSHS) entitled, "HIV and AIDS: Facts You Should Know" are available upon request from Counseling Services or at

http://www.dshs.texas.gov/hivstd/info/hiv/.
Confidentiality of these requests will be honored.

#### **Basis For Action**

The College District's decisions involving persons who have communicable diseases shall be based on current and well-informed medical judgements concerning the diseases, the risks of transmitting the illnesses to others,

the symptoms and special circumstances of each individual who has a communicable disease, and a careful weighing of the identified risks and the available alternatives for responding to a student with a communicable disease.

#### **Nondiscrimination**

The College District shall not discriminate in enrollment against any student solely on the ground that the student has a communicable disease. A member of the student body of the College District shall not be denied access to a College District facility, program, function, or campus activity solely on the grounds that the student has a communicable disease. The College District reserves the right to exclude a person with a communicable disease from College District facilities, programs, functions, and campus activities if the College District makes a medically based determination that the restriction is necessary for the welfare of the person who has the disease and/or welfare of the other members of the College District Community.

#### **Privacy**

The College District shall comply with all pertinent statutes and regulations that protect the privacy of persons in the College District community who have a communicable disease. The College District shall ensure that procedural safeguards sufficient to maintain the strictest confidence about persons who have HIV infection are in effect throughout the College District.

#### **Bacterial Meningitis**

This information is being provided to all new college students in the state of Texas. Bacterial Meningitis is an infection of the brain and spinal cord that causes inflammation of the membranes that surround the brain. Several different types of bacteria can cause meningitis. The leading cause of bacterial meningitis in the United States is Neisseria meningitides, also called meningococcal meningitis (CDC, Meningococcal Disease, 2017).

Bacterial meningitis strikes around 600-1,000 each year with the greatest risk of contraction affecting adolescents and young adults (National Meningitis Association, 2017).

Symptoms may vary but may include some or all of the following:

- High fever
- Rash or purple patches on skin
- Light sensitivity
- Confusion and sleepiness
- Severe headache
- Vomiting

- Stiff neck
- Nausea
- Seizures

There may be a rash of tiny, red-purple spots caused by bleeding under the skin. These can occur anywhere on the body. This is a sign of a very serious infection that needs immediate medical care.

#### How is Bacterial Meningitis diagnosed?

Diagnosis is made by a medical provider and is usually based on a combination of clinical symptoms and laboratory results from spinal fluid and blood tests. Early diagnosis and treatment can greatly improve the likelihood of recovery.

#### How is the disease transmitted?

The disease is spread through air droplets or through direct contact with infected people. Direct contact can happen when people kiss, cough, share drinks or cigarettes, or if they provide certain types of medical aid to a person with bacterial meningitis. When it is spread, exposed people typically become ill within three (3) to seven (7) days (CDC, Meningococcal Meningitis, 2013).

# Who is at an increased risk of getting bacterial meningitis?

Vaccination against meningococcal disease is recommended for persons at an increased risk of getting bacterial meningitis. Those persons include, but are not limited to, adolescents from ages 11–18 years, college freshman living in dormitories (or sharing apartments), anyone who has a damaged spleen or whose spleen has been removed, and people who have been exposed to meningitis during an outbreak (CDC, Vaccination Information Statement, 2016).

# What are the possible consequences of the disease?

While most people recover fully, 10-15 percent of people who have blood or brain infections caused by Nisseria meningitidis will die. About 19 percent of people who survive meningococcal disease will have permanent effects such as hearing loss, brain damage or the loss of a limb (National Meningitis Association, 2017).

#### Can the disease be treated?

Antibiotic treatment, if received early, can save lives and chances of recovery are increased. However, permanent disability or death can still occur. Vaccinations are available and should be considered for:

Those living in close quarters

• College students 22 years old or younger

Vaccinations are effective against four of the five most common bacterial types that cause 70 percent of the disease in the United States (but does not protect against all types of meningitis).

Vaccination takes seven to 10 days to become effective, with protection lasting three to five years. After five years, you will need to get a booster. The cost of vaccine varies, so check with your health care provider. Vaccination is very safe – most common side effects are redness and minor pain at injection site for up to two days.

#### How can I find out more information?

Contact your own health care provider. Contact Collin County Health Care Services at 972.548.5500 (McKinney) or 972.424.1460 ext. 5500 (metro). Contact websites:

https://www.cdc.gov/meningitis/bacterial.html or http://www.collincountytx.gov/healthcare services/Pages/default.aspx.

#### **Immunizations**

Due to recent measles outbreaks, the Texas State Board of Health is requesting students born after Jan. 1, 1957, confirm appropriate immunizations or immunity to the following diseases: tetanus/ diphtheria, mumps, measles and rubella.

#### **Mental Health Leave of Absence**

The College District may permit a temporary leave of absence for a student due to a mental health condition. The leave of absence will be at the request of the student or designee and must occur by the following deadlines:

Fall Semester – First Monday in December Spring Semester –First Monday in May Summer I – Last Friday in June Summer II/III – Last Friday in July

For detailed information, see FFAB (LOCAL) at <a href="http://pol.tasb.org/Policy/Code/304?filter=FFAB">http://pol.tasb.org/Policy/Code/304?filter=FFAB</a>.

# Strategies of Behavioral Intervention Committee

Collin College's Strategies of Behavior Intervention (SOBI) Committee provides a process to refer and assist students who may exhibit concerning behavior. SOBI responds to such behavior by providing assistance and/or redirection while preserving a constructive learning environment. SOBI intervention is not a substitute for the disciplinary process. Reports of Student Code of Conduct

violations will be referred directly to the Dean of Students Office.

To refer concerning behavior, submit a referral online at <a href="http://www.collin.edu/studentresources/SOBI">http://www.collin.edu/studentresources/SOBI</a> or contact SOBI directly at sobi@collin.edu.

#### **Student Code of Conduct**

Collin College students are both citizens and members of the academic community. As citizens and students, they enjoy the same freedom of speech, peaceful assembly and right of petition that other citizens enjoy. As members of the academic community, they are subject to the obligations that are theirs by virtue of this membership.

Collin College expects its students to conduct themselves in a manner that reflects credit upon the institution they represent. There are two basic standards of behavior required of all students:

- 1. They shall adhere to Collin College policies and municipal county, state and federal laws; and
- 2. They shall not interfere with or disrupt the orderly educational processes of Collin College.

Students are entitled to only those immunities or privileges by law as enjoyed by other citizens. For more information, contact the Dean of Students Office. To review the complete Student Code of Conduct, please refer to the current Collin College Student Handbook.

#### Student Life

Student Life enhances students' learning and development by engaging them outside of the classroom through co-curricular, civic, educational, leadership, and social opportunities. We enrich each student's college experience by providing a wide variety of interactive opportunities including; student organizations, social, cultural, and civic events; entertainment; and educational activities.

See Student Life (<a href="http://www.collin.edu/campuslife/studentlife/">http://www.collin.edu/campuslife/studentlife/</a>) for detailed information on how to get involved in student activities, student organizations and institutional governance.

#### **Involvement in Institutional Governance**

Students are encouraged to become involved with institutional governance by expressing their thoughts and feelings about college policies, procedures and activities. The President, vice presidents and all college employees are interested in student ideas, opinions and suggestions.

# **EDUCATIONAL SERVICES**

#### **Bookstore**

For information on store hours, call: 972.548.6680 (Central Park Campus), 972.985.3710 (Courtyard Center for Professional and Economic Development), 972.377.1680 (Preston Ridge Campus), 972.881.5680 (Spring Creek Campus) or visit the bookstore website at http://collin.bncollege.com

#### **Forms of Payment**

Cash, Visa, MasterCard, Discover, and Financial Aid.

#### **Refund Policy**

**TEXTBOOKS** 

- A full refund will be given in your original form of payment if textbooks are returned during the first week of classes with original receipt.
- "Short term" class textbooks are only returnable during the first week of classes.
- "One day" course textbooks are only returnable prior to the start of class.
- For schedule changes and dropped classes, a full refund will be given in your original form of payment during the first 30 days of term with proof of a schedule change and original receipt.
- No refunds on unwrapped loose-leaf books or shrink-wrapped titles which do not have the wrapping intact.
- No refunds on digital content once accessed.
- Textbooks must be in original condition.
- No refunds or exchanges without original receipt.

# GENERAL READING BOOKS, NOOK® DEVICES, SOFTWARE, AUDIO, VIDEO and SMALL ELECTRONICS

- A full refund will be given in your original form of payment if merchandise is returned within 14 days of purchase with original receipt in original packaging.
- Opened software, audio books, DVDs, CDs, music and small electronics may not be returned. They can be exchanged for the same item if defective.
- Merchandise must be in original condition.
- No refunds or exchanges without original receipt.

#### ALL OTHER MERCHANDISE

- A full refund will be given in your original form of payment with original receipt.
- Without a receipt, a store credit will be issued at the current selling price.
- Cash back on merchandise credits or gift cards will not exceed \$1.
- No refunds on gift cards, prepaid cards, phone cards, newspapers or magazines.
- Merchandise must be in original condition.

#### FAIR PRICING POLICY

Barnes & Noble College Booksellers comply with local weights and measures requirements. If the price on your receipt is above the advertised or posted price, please alert a bookseller and we will gladly refund the difference.

#### **Textbook Buyback Policy**

Bring your textbooks back to the bookstore at the end of the term to get up to 50 percent cash back. Finals week is the best time to get the most cash back, so sell early!

Books must include all original materials (CDs, workbooks, etc.) and a valid school ID is required at the time of buyback. Buyback is limited to one copy of a title per customer. Textbooks must be in the following condition.

- Clean and in re-salable condition
- All pages, bindings and covers must be intact
- No water damage, excessive highlighting or writing
- Old editions and custom books may have little or no value

Please check with the bookstore for more details.

#### **Textbook Rental Agreement**

This rental agreement is a contract between you and Barnes & Noble College Booksellers, LLC (BNC) and applies to your rental of textbooks and/or course related materials from us. This agreement sets forth your rights and obligations and should be read carefully. Please also visit our online rental service on www.bnctextbookrental.com (the Website). When accessing the Services on the website, by clicking "I Agree" or "I Accept" you agree to the terms and conditions of this Agreement, our privacy policy, and our terms of use, and any other documents incorporated into the website from which you accessed the Service. You agree that this agreement is legally binding between you and the company. We may modify this agreement from time to time as posted on the Website. It is important that you review

the website regularly to ensure you are aware of any changes.

For questions regarding this agreement please contact your campus bookstore.

#### TERMS AND CONDITIONS

- You must be 18 years of age or older.
- All information provided by you in connection with this agreement must be accurate and complete.
- You must have a valid personal credit card on file with us at all times.
- Rented materials remain the full property of BNC. Your acceptance of rented materials and paying rental fees entitles you to use the property of BNC for a limited amount of time. At the end of the rental period, this agreement will terminate and you will lose all rights to the rented materials.
- Rented materials can be purchased during the first two weeks of classes only.
- Rented materials must be returned to the bookstore from which they were originally rented by the rental return date designated by us at the time of rental in salable condition. Salable condition will be determined by us in our sole discretion, but generally means book spine intact, no excessive damage or water damage to cover or contents, all original pages intact, all original components present, and no excessive highlighting, writing or other markings. Normal use highlighting and writing is permitted.
- You are responsible for loss or theft of all rented materials. Rented materials not returned by the rental return date or returned on or before that date not in salable condition will be subject to non-return fees equal to 75 percent of the new book price at the time of rental) plus a 7.5 percent processing fee. Non-return fees will be automatically charged to the credit card on file for this agreement. In the event that the credit card on file for this agreement is no longer valid or if the purchasing limit on such credit card has been exceeded, we will contact you for, and you agree to promptly pay in full, the non-return fees
- If you have not returned the rented materials by the rental return date and we are unable to charge your credit/debit card, it is your responsibility to pay the non-return fees immediately. You will be notified via email if your credit/debit card was declined and have 15 days to pay the fees before your account

- and any information, including personally identifiable information, you have provided to us is turned over to a third party collection agency ('agency').
- You agree that BNC and any agency it hires to collect non-return fees may contact you via email and you confirm that you are the only person who opens e-mail at the address you have provided or that if anyone else opens email at the address you have provided, you waive any claims of a violation of your privacy or of potential third party disclosure if persons other than you view your e-mail. Additionally, you agree that BNC and any agency it hires may contact you via U.S. Mail, telephone or cellular telephone should such contact information be provided by you or obtained as provided below regarding your failure to return rented materials or pay applicable non-return fees.
- You authorize BNC to share details of your rental transactions with the College, University, or School at which you are enrolled and you acknowledge that your College, University, or School may provide BNC with contact information, including but not limited to, your e-mail address, student address, home address, home telephone number and cellular telephone number, which may be different than the information you provided to us, for the purpose of contacting you regarding failure to return Rented Materials or open non-return fees.
- Returns shipped UPS, USPS or other carriers must be postmarked and shipped on or before the rental return date.
- Standard tax rates apply and vary by state.

Other conditions may apply. See <a href="https://www.bnctextbookrental.com">www.bnctextbookrental.com</a> for details.

# **Experiential Learning Labs**

A variety of learning laboratories are in use at the college to facilitate experiential learning by students including the American Sign Language Laboratory, the Computer Writing Classroom, the Math Labs, Student Computer Labs and the Writing Center.

# American Sign Language and Interpreting Laboratories

The American Sign Language (ASL) Laboratory is designed to simulate, as close as possible, a deaf culture environment on a college campus. The college employs native or near-native ASL language models who work with students to develop culturally appropriate

behavior, second language acquisition and interpreting skills with continuous language exposure. The ASL Laboratory is located at the Spring Creek Campus in Room BB108. The Interpreting Laboratory is at the Spring Creek Campus in Room D210. Hours of operation are posted outside the lab each semester.

#### **Math Labs**

The Math Labs assist Collin College students enrolled in developmental mathematics, college-level mathematics and natural science courses that have mathematics-based assignments. The staff includes faculty, lab instructors and tutors. Students may use videos, graphing calculators and computers to complete homework assignments. Hours for drop-in assistance vary and are posted at each campus.

The CPC Math Lab is Room C220 and can be reached at 972-548-6896. The PRC Math Lab is in Founder's Hall Room F148, with the phone number 972-377-1639. The SCC Math Lab is in Room D203. Call 972-881-5921 for assistance with that lab.

#### **Writing Centers**

The Collin College Writing Centers provide a place for students to seek advice on writing assignments in courses across the curriculum. Each center's primary purpose is to help students strengthen their writing skills by guiding them through the various stages of the writing process.

Writing Centers are located at the Central Park, Preston Ridge and Spring Creek campuses. An appointment schedule is conveniently posted near the door of each center, and walk-ins are welcome at posted times.

For further information, call the Writing Center (Central Park Campus, 972.548.6857; Preston Ridge Campus, 972.377.1576 or Spring Creek Campus, 972.881.5843) or visit the Writing Center homepage at <a href="http://www.collin.edu/studentresources/writing">http://www.collin.edu/studentresources/writing</a> center. Each Writing Center offers a series of free workshops each semester to provide additional support for writing. Information about these workshops is available on the Writing Center homepage under "Workshops (by Campus)."

Students may access the online services (OWL - Online Writing Lab) by going to the Writing Center homepage and clicking on "Access OWL."

# The Library System

Collin College's library system, with branches on the Central Park, Preston Ridge and Spring Creek campuses, embodies the college's commitment to academic excellence. The Collin College president and Board of Trustees believe that first rate libraries are central to maintaining a scholarly community and fostering student success.

#### **Facilities**

Central Park Campus opened a 46,000-square-foot library in the summer of 2009. A library of comparable size, 50,000 square feet, was opened at the Preston Ridge Campus in 2005, and a new Spring Creek library of 57,750 square feet opened in 2013. The Collin College libraries were visited over one million times last year. New high speed, networked computers are provided for students in each library. All libraries also have laptops available for check out, wireless network access and printers. Private study rooms provide quiet space for individual and group study or media viewing.

#### **On-Site Services and Materials**

Each campus library holds large collections of scholarly books, journals, music recordings and videos. Reference librarians provide quick assistance with essays or presentations and are invaluable for in-depth research. Liaison librarians consult with faculty members to prepare print and online instructions for students on how to best use the library's vast electronic and hard copy resources to complete specific assignments. Individual students are also encouraged to make appointments with reference librarians for one-on-one research assistance.

Traditional services, such as book check out and interlibrary loan, are available at each library. In order to share materials, the library electronic catalog system allows students to have books sent to them from another campus.

Faculty members may place material on reserve at a circulation desk for in-library use or may choose to make documents available on the web through the library's electronic reserves system.

# Services and Collections for Off-Campus Students

All library electronic resources and services are available through CougarWeb. The library website is a portal to millions of authoritative documents, scholarly databases, streaming media and full-text electronic journals and books. Online library services provided include voicemail, e-mail, texting and chat reference, as well as the library catalog, electronic reserves and interactive tutorials. These services may be accessed by computers and mobile devices to benefit distance learners, off-campus students, as well as students present in one of the libraries.

Visit the Library tab on CougarWeb for more information about these services and resources.

#### **Electronic Collections**

More than 100 different electronic collections are available to Collin College students wherever they have access to CougarWeb. Streaming video of Shakespeare plays from the BBC, the Smithsonian's collection of music from around the world, the New York Times archived from 1850, and thousands of current full text medical and technology books, animations and videos are just a small sample of what is available.

#### **Special Services**

Adaptive equipment for the visually impaired is available for student use at each library through each campus's Access Office. Scanning software can read papers, books or webpages aloud to users.

The Consumer Health Information Center, located at the Central Park Campus Library, offers faculty, staff, students and community members an extensive collection of materials on a wide range of medical conditions. Materials are selected to be accurate, reliable and useful to laypersons wishing to manage their own health care, assist their loved ones or conduct academic research on health topics. Skilled and experienced librarians are available to assist in the use of this special collection.

#### **Study Skills Seminars**

Developmental Education (DE) offers free Study Skills Seminars that teach students basic academic skills to increase college success. A schedule of these free seminars is published each semester and copies are available at the Information Center on each campus.

## **Testing Services**

Testing Centers are located at Central Park, Preston Ridge and Spring Creek campuses for proctoring, credit by exam testing, limited instructional testing, assessment for course placement and tests for TSI purposes. Collin College is an official testing site for the ACT (American College Testing Program) and CLEP (College-Level Examination Program).

## **Tutoring**

Collin College offers free small group tutoring for all students. Online tutoring is available and can be used from a mobile application. Private tutor lists are provided and paid for at the student's own expense. For information about tutoring, contact the Coordinator of Student Support Services at the Spring Creek Campus, Room D140, 972.881.5128 or visit the tutoring website.

# **LEARNING OPPORTUNITIES**

Collin College offers four unique types of learning opportunities for students.

#### Non-credit Coursework

Developmental Pre-college level foundational coursework in Mathematics, Integrated Reading/Writing, and English as a Second Language (ESL) designed to enable students to achieve college success.

Continuing Education (CEUs) provides opportunities for lifelong learning and workforce training when a college degree is not desired

#### Credit Programs

Academic Programs prepare a student for transfer to a baccalaureate college or university.

Workforce Degrees and Certificates to prepare a student for immediate entry-level employment or advancement

## NON-CREDIT COURSEWORK

# **Developmental Education (DE) courses**

#### What is Developmental Education?

DE courses are designed to provide students with basic skills needed to achieve success in college-level courses and to complete TSI (Texas Success Initiative) requirements.

DE includes courses in English as a Second Language, Developmental Mathematics and Integrated Reading/Writing courses. The instructional formats of DE courses vary and include computer-based, lecture, online, express, weekend, self-paced and non-course-based formats.

#### Do DE credits apply to a degree?

Although students receive grades for DE courses, those DE courses do not apply toward a degree or certificate, the DE credit does not transfer to other institutions, and the DE grades are not calculated as part of the GPA shown on transcripts (but DE grades might be considered when applying for scholarships, financial aid, veteran benefits, etc.).

#### Who is required to take DE?

If a student's scores on the basic skills assessment indicate that a student would be better prepared by taking

a DE course prior to enrolling in a college-level course in a related field, the student must enroll in the DE course and complete the sequence before enrolling in college-level courses in that field of study. Collin requires that students demonstrating a need for remediation in reading, writing or mathematics complete the appropriate sequence of DE courses in consecutive semesters, although the student is not required to attend Collin College during summer semesters. For students who do not place at college-level courses in all three Texas Success Initiative (TSI) areas of reading, writing and mathematics, a meeting with an Academic Advisor is required as well as mandatory course registration in EDUC 1300 Learning Frameworks.

#### Learning to Learn

EDUC 1300 Learning Frameworks is a college credit course that examines learning based on research and the theory of learning psychology. This course is available for all students who want to enrich their understanding of how to learn, enhance their study skills, and explore their own strengths and weaknesses as learners in order to develop effective personal learning strategies to increase their likely success in other college courses. For more information, see EDUC 1300 in the course description section.

#### **Study Skills Seminars**

Developmental Education (DE) offers free Study Skills Seminars that teach students basic academic skills to increase college success. A schedule of these free seminars is published each semester and copies are available at the Information Center on each campus.

#### **DE** limits

DE courses may be taken for a combined total of no more than 27 credit hours without incurring additional fees of \$50 per credit hour. This additional fee is applied because the state of Texas will not pay a state subsidy for any DE credit hours in excess of 27 credit hours. In addition, students may attempt to successfully complete any DE course only twice before incurring additional fees. Dropping a course before census day does not count as an attempt. After two unsuccessful attempts, students must pay an additional \$50 per credit hour (i.e., for a three hour course, additional fees are calculated as 3 X \$50 = \$150 additional tuition). Or the student may complete the course at another institution and provide proof of successful course completion upon returning to Collin College.

Home school and high school students are not permitted to enroll in DE courses. Call the DE office at 972.881.5720 for additional information

#### Administrative Withdrawal

Participation in class is an essential requirement for success. A student should maintain contact with the instructor if unable to attend class or complete an assignment on time. If more than 20 percent of the meetings of a Developmental Education class are missed between the beginning of class and the college withdrawal date, a student may be administratively withdrawn from the class. Administrative withdrawal may have academic, financial, financial aid and visa implications. Withdrawal will count toward Collin's Repeat Policy and the 27-hour limitation on DE courses that cause a payment penalty to apply to compensate for lost state subsidy. Administrative withdrawal will take place after the full refund period, and if a student is administratively withdrawn from the course, the student will not be eligible for a tuition refund. For questions about the administrative withdrawal policy, please contact the instructor or an advisor.

## **Developmental Education Departments**

#### **Developmental Mathematics**

Collin College offers pre-algebra and algebraic skills courses to enable students to acquire a solid foundation for successful performance in college level mathematics courses. Among the courses offered to promote success are:

MATH 0302 Pre-Algebra, MATH 0305 Beginning Algebra, MATH 0310 Intermediate Algebra, and MATH 0406 Introductory Algebra.

#### **Developmental Math Pathways**

All Developmental Math students are encouraged to visit with an Academic Advisor to help determine the most appropriate path to meet their education/career goals as well as consideration for the requirements of potential transfer college or university programs. Students who are placed into Developmental Mathematics at Collin have an option of two pathways to complete their Developmental Math sequence:

- Algebra Intensive Path. This path helps prepare students for MATH 1314/1414 College Algebra; MATH 1324 Mathematics for Business and Social Sciences; and higher level math classes. Students who are seeking careers in Science, Technology, Engineering, and Mathematics (STEM) fields should follow this path.
- Quantitative Literacy Path. This path helps prepare students for MATH 1342 Elementary

Statistical Methods and MATH 1332 Contemporary Mathematics. Most developmental math students who follow the quantitative literacy path can expect to complete their developmental math sequence in one semester. If a student enters the Non-Stem pathway via MATH 0305/0406 and moves directly to MATH 1332 or 1342 and THEN wishes to go into Algebra, he or she is required to complete MATH 0310 or be placed into Algebra through testing.

Students must take an assessment (via the Testing Center) for placement purposes. Once placed in a course, many support services are provided to enable students to succeed. Among the services are the Math Lab, video tapes of lectures on specific topics, tutoring, study skills seminars, and scheduled review sessions.

#### **Integrated Reading and Writing (INRW)**

The ability to write clearly and accurately is critical to success in academic and professional pursuits. The Integrated Reading and Writing program provides instruction in all aspects of planning and producing academic prose in preparation for the TSI writing assessment and for ENGL1301.

INRW 0300 Introduction to Integrated Reading/Writing, INRW 0405 Integrated Reading /Writing I, and INRW 0315 Integrated Reading /Writing II.

#### English as a Second Language (ESL) courses New Student Information about testing and registration information

Collin College offers English for speakers of other languages to build their confidence and skills in listening/speaking, grammar, reading, writing, and vocabulary development. Classes are designed for various interests, personal needs, academic needs, and skill levels. New students wanting to take ESL classes must complete the ESL New Student Assessment.

Information about the assessment process is available at the Testing Centers at the Spring Creek, Preston Ridge and Central Park campuses. Assessment scores are valid for one year. These scores are used for course placement only and do not affect the admission status of students. Students interested in taking ESL classes through Continuing Education should call 972.985. 3750 for assessment instructions.

The ESL program includes the following courses:
ESLC 0305 ESL Oral Communication, Intermediate
ESLC 0310 ESL Oral Communication, Advanced
ESLC 0320 ESL Oral Communication,
Pronunciation/Accent Reduction

2017-18 Collin College Catalog, (Effective Spring 2018), Ed. 5. Rev. 10-12-17 Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

ESLG	0305 E	ESL Gram	ımar for	: Non	ı-Nativ	ve Spea	kers,
	It	ntermedia	ite I				
			_				

ESLG 0310 ESL Grammar for Non-Native Speakers, Intermediate II

ESLG 0315 Grammar for Non-Native Speakers, Advanced

ESLR 0215 ESL Reading and Vocabulary, Advanced

ESLR 0305 ESL Reading and Vocabulary, Intermediate I

ESLR 0310 ESL Reading and Vocabulary, Intermediate II

ESLV 0310 ESL Reading and Vocabulary, Idioms

ESLW 0215 Writing for Non-Native Speakers, Advanced

ESLW 0305 Writing for Non-Native Speakers, Intermediate I

ESLW 0310 Writing for Non-Native Speakers, Intermediate II

COSU 0301 Test Taking and Study Skills for Non-Native English Speakers

For more information, see the course listing in the course description section of the catalog.

## **Continuing Education Opportunities**

Collin's Continuing Education program has its own home page and registration system, separate from academic, workforce and developmental learning. CE offerings vary from semester to semester in order to meet local training demands and to provide seasonal and current event offerings. The most current information is always available on-line at <a href="http://www.collin.edu/ce/">http://www.collin.edu/ce/</a>

#### **Quality Learning Opportunities**

Collin College Continuing Education is the leading career skills training institution for adults who are not seeking a degree. More than 70 industry recognized certificate series and certification preparation training programs are offered in the information technology, management, administrative, finance, logistics, health care, education, creative, service and hospitality career fields.

# If you have Financial Aid or a Third Party is paying for your tuition, do not enroll online.

The online system cannot recognize the funds and will drop you from your courses. Please call 972.985.3711 for CE Registration staff to enroll you.

# What is the difference between a credit course and a Continuing education course?

Credit courses are generally taken as part of a degree program and provide college credits. Non-credit courses are offered to provide a purposeful and systematic process of acquiring and recording lifetime learning for individuals who are not enrolled in a formally structured curriculum. Successful completion of Non-credit courses are recorded as Continuing Education Units (CEU)s.

# Why would I want to take Continuing Education courses?

These are courses you take to increase your knowledge of skills-either to help you on the job or for your personal enrichment. You will not earn "traditional" college credits toward a degree, although you may earn Continuing Education Units or CEUs which will be recorded on a Continuing Education transcript as Continuing Education Units (CEUs). Some courses may last only a couple of hours; others may meet over several weeks.

#### What are Continuing Education Units (CEUs)?

CEUs are recognized nationally to record satisfactory completion of certain approved occupationally related programs. Courses are offered throughout the county at a variety of sites depending on the types of courses and availability of facilities.

One CEU is awarded for each ten (10) contact hours of instruction included in a specified Continuing education program or activity. Successful completion is attendance-based, unless otherwise noted with "Passed Competencies: under "CEUs Earned." Ninety percent attendance is required for successful completion. For transcript requests call, 972.985.3721.

# How can I get more information about the contents of a course?

Visit the Syllabus Depot which has expanded information for the courses offered by Continuing Education (CE).

# Are there any prerequisites for Continuing Education courses?

Many courses specify prerequisite knowledge. These prerequisites are stated to ensure students have prior knowledge & skills required to get the best out of the course & to be successful in that course. We recommend that you take the time to talk to the CE Advisor or Program Director for the course area by going to the CE url: http://www.collin.edu/ce/.

# Will I receive a certificate once I complete my course?

Continuing Education does not offer certificates for any individual courses. Certificates are only awarded for completion of a Certificate Series of courses. However, you may request an official school transcript. Continuing Education Units (CEUs) are awarded for successful course completion.

#### Locations for Continuing Education classes

Continuing Education classes are located at the Courtyard Center as well as other various locations. See the CE: url:

http://www.collin.edu/ce/ for a list of locations and maps.

#### Concurrent Enrollment

The Continuing Education Division works closely with the credit program to offer concurrent enrollment in some credit classes. Participants in concurrent courses are expected to attend class regularly, complete all assignments and take tests. Space is limited for concurrent participants.

Concurrent students earn Continuing Education Units (CEUs), not semester credit hours. Refunds are based on Continuing Education Department refund policy. If you wish to receive semester credit hours for a concurrent course, you must enroll through the credit registration process rather than through Continuing Education. For more information, call 972.881.5114 or for McKinney residents, 972.548.6790 ext. 5114.

#### **Career Clusters**

The table that follows lists basic recurring CE courses by Career Clusters. Clusters contain occupations in the same field of work that require similar skills. Use Career Clusters to view the programs offered by Collin College to help develop educational plans for obtaining the necessary knowledge, competencies, and training for success in a particular career pathway. Collin College educational opportunities are listed for continuing education courses, series and programs. On the web, simply click on the program name to access more

information about it. Details about related continuing education options may be found by accessing Collin's Continuing Education website at <a href="http://www.collin.edu/ce/">http://www.collin.edu/ce/</a>

For more information about Career Clusters, see:

Texas Workforce Commission Texas Cares http://www.texascaresonline.com/clusters/clusters.asp

The National Career Clusters<sup>TM</sup> Framework website <a href="http://careerlink.com/students/career-clusters/">http://careerlink.com/students/career-clusters/</a>

Collin College offers credit programs and continuing education opportunities in 15 career clusters:

- Architecture & Construction
- Arts, A/V Technology, & Communications
- Business Management & Administration
- Education &Training
- Finance
- Government & Public Administration
- Health Science
- Hospitality & Tourism
- Human Services
- Information Technology
- Law, Public Safety, Corrections & Security
- Manufacturing & Energy.

# Continuing Education By Career Clusters



Programs Offered	Contact Hours
AutoCAD Courses	42
Construction Project Management	
Certificate Series	72
Interior Design Concepts for Certificate.	
Series	72

6	Arts, A/V Technology & Communications
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Programs Offered	Contact Hours
Digital Photography Certificate Series	148
Graphic Designer Certificate Series	189-213
Digital Marketing Certificate Series	113-156
Web Developer Certificate Series	147-156

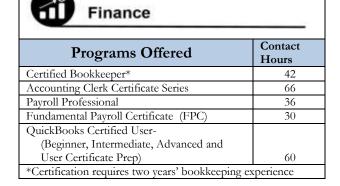
# Business Management & Administration

Programs Offered	Contact Hours	
Administrative Assistant Certificate Series	150	
Mediation and Dispute Resolution Cert.		
Training	40	
Entrepreneurship Certificate Series	66 -73	
Enterprise Computing (SAP)		
SAP Overview	24	
Overview of SAP ERP (Enterprise Resource		
Planning)	24	
Overview of SAP FICO (Financial and		
Control)	24	
Overview of SAP CRM (Customer		
Relationship Management)	24	
<ul> <li>Overview of SAP SCM (Supply Chain</li> </ul>		
Management)	24	
Fitness Entrepreneur Certificate Series	69	
Human Resources Management Certificate		
Series	72	
Insurance Professional Certificate Series	64	
Marketing Brand Management Certificate		
Series	48	
Marketing Project Certificate Series	48	

Business Management & Administration		
	continued	
Operation and Supply Chain Management		
Certificate Series	48	
SHRM® - CP and SHRM® - SCP		
Certification Exam Preparation	36	
Project Management Certificate Series	72	
Project Management Certification Exam		
Preparation	15	
QuickBooks Certified User (Beginner,		
Intermediate, Advanced and User		
Certificate Prep)	60	
Sports Management Certificate Series	72	
Supervisory Management Certificate Series*	72	
Credit and Continuing Education Real Estat	e courses may	

Education & Training	
Programs Offered	Contact Hours
Montessori Certificate. Series	120
Training & Development Certificate Series	75
Instructional Design and Development Cert.	84

be taken concurrently







Programs Offered	Contact Hours		
Certified Nurse Assistant	100		
Clinical Medical Assistant	350		
Community Health Worker	208		
Dental Assistant	150		
EKG Technician	186		
Health Unit Coordinator	232		
Medical Coding Certificate Series	352		
Optional Externship	160		
Medical Billing Certificate Series	216		
Optional Externship	120		
Medical Secretary Certificate Series	275		
Optional Externship	120		
Ophthalmic Assistant / Optician Certificate	80		
Patient Care Technician	210		
Nurse Aide	100		
Phlebotomy	60		
• EKG	50		
Pharmacy Technician Certificate	194		
Phlebotomy Technician Certification	184		
Radiology Training (NCT)	120		
RN Refresher	160		
Veterinary Assistant Program	618		

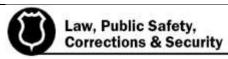


Programs Offered	Contact Hours
Basic Food Preparation	80
Advanced Food Preparation	80
Fundamentals of Baking	80
Nutrition and Menu Planning	48
Introduction to Hospitality	48
Certified Wedding and Event Planner	40
Home Landscaping Certificate Series	32
S.M.A.R.T. Corporate Event Planning	40

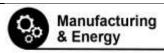
Information
Technology

Programs Offered	Contact Hours
Cisco Certified Network Associate Cert.	
Series*	320
Cisco Certified Network Professional	
Cert. Series**	288
Comp TIA A+ Certification	36
Comp TIA Net+ Certification	36
Comp TIA Security+ Certification	36
EC-Council***	50
Hacking and Penetration Testing	30
Certified Cyber Forensics Professional	30
(CCFP)	30
Certified Information Systems Auditor	30
(CISA)	30
Certified Information Systems Security	30
	20
Professional (CISSP)	30
MCCAE D : C	
MCSA Exam Preparation Courses:	40
• MCSA 70-410 Installing & Configuring	10
Windows Server 2012	40
• MCSA 70-411 Administering Windows	10
Server 2012	40
<ul> <li>MCSA 70-412 Configuring Advanced</li> </ul>	10
Windows Server 2012 Services	
MCSE Exam Preparation Courses (after	
completion of MCSA):	
<ul> <li>MCSA 70-461 Querying MS SQL</li> </ul>	40
Server 2012	
• MCSA 70-462 Admin MS SQL Server	40
2012 Databases	
MCSA 70-463 Admin MS SQL Server	40
2012 Databases	
Oracle Certification Preparation Courses	
1	4.0
Oracle DB: SQL Fundamentals	40
Oracle DB: Install and Upgrade	16
Workshop	
Oracle DB: Admin Workshop	40
<ul> <li>Oracle DB: Backup and Recovery</li> </ul>	40
Workshop	
Oracle DB: Managing Multitenant	16
Architecture	
• Oracle DB: Program with PL/SQL	40
VMware-Install, Configure, Manage	40
	40
VMWare vsphere: Optimize & Scale	40

- \* Concurrent enrollment to complete equivalent of 4 credit courses (CE courses, each at 80 contact hours).
- \*\* Concurrent enrollment to complete 3 credit courses (CE courses each at 96 contact hours).
- \*\*\* This course covers the objectives of the Certified Ethical Hacker (CEH) and uses CEH text-books as well as a CEH certified instructor. However, this is not an official EC Council course.



Programs Offered	Contact Hours
Advanced Practice Paramedic	208
Basic Peace Officer Program	752
Driver/Operator – Pumper Certification	64
Fire Investigator Certification	160
Family Law Mediation Training	40
Fire Inspector Certification	227



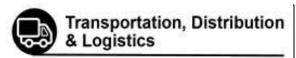
Programs Offered	Contact Hours
Principles of LEAN Enterprise Certificate	
Series	48
AutoCAD – Individual Courses	18-24
Solid Works – Individual Courses (Beginner-	
Advanced)	18-24



Programs Offered	Contact Hours
Internet Marketing Certificate Series	144
Marketing Project Certificate Series	48
Marketing Brand Management Certificate	48
Series	

# Science, Technology, Engineering & Mathematics

Programs Offered	Contact Hours
Certificate in Basic and Commercial	
Wiring	51
Certified Fiber Optics Technician	
(CFOT)	24
Certified Fiber Optics Specialist – Testing	
/ Maintenance (CFOS/T)	16
Certified Fiber Optics Specialist –	
Splicing (CFOS/S)	14



Programs Offered	Contact Hours
Professional Truck Driving (CDL)	
• Part I	100
Part II	100
Logistics and Materials Management Cert.	
Series	48

## **CREDIT PROGRAMS**

# Smart Planning for A Degree Program or Area of Study

Collin College offers a variety of plans designed to prepare students for a college or university degree. Some options include pursuing an associate degree of arts or science (AA or AS) or an associate of arts in teaching (AAT); completing the General Education Core certificate; a Field of Study; or beginning coursework in a pre-professional program. Applied Associate of Science (AAS) workforce degrees and certificates prepare a student for immediate employment.

## **Choose A Program and Award**

If you need help selecting a program that matches your skills and personality, go to Collin's Career Services for help identifying your career goals. To obtain workforce details (such as projected earned wages) for programs offered at Collin College and other Texas schools, explore Career Coach and the Texas CREWS website. Before you register, choose an area of study or a degree/certificate. It is important to establish a degree plan, outlining all of the courses needed and the sequence as well as the semester in which the courses will be taken. Work with a Collin College Academic Advisor to complete the two-page form: a "Request for Degree /Certificate Plan". The degree plan will help you make the right decisions so that you avoid taking courses that do not apply to your degree or certificate. If you are planning to earn a 4-year baccalaureate degree, choose the 4-year college(s) you want to attend and select a baccalaureate degree as soon as possible. It is important to consider the specific degree requirements of the colleges where you want to transfer. Make these choices early in the planning process; ideally, when you first start at Collin. If uncertain about a transfer institution, try picking one or two top choices. Work with a Collin College Academic Advisor to determine which courses

#### Stay on Track

Plan ahead for registration each semester. It is important to meet with a Collin College Academic Advisor at least a few weeks before Priority Registration to ensure that you are taking courses that apply to your degree plan and keep you on track toward your ultimate goals. Advisors help ensure you are following your degree plan in the most efficient way possible.

from Collin will apply to the transfer institution.

Run your personalized Degree Audit every semester before registering. The Degree Audit report shows which requirements for your degree/program you've completed, and which ones you still need to complete. It also gives lists of courses you can use to complete specific core, elective and program requirements. The degree audit can be accessed by logging onto CougarWeb and clicking on "Degree Audit" in the Student Quick Links box. Note, courses that you are currently taking and for which you do not yet have a grade do not show up on the degree audit, so you will need to include them in determining remaining requirements.

#### Know before you go

Students who complete a Degree Program (AA, AS, AAS) or the Core Curriculum at Collin College are more likely to be successful (compared to those who do not complete an award) as they continue their education at other higher education institutions.

Meeting with a Collin College Academic Advisor helps to ensure that you take only the courses you need. This can save your time and money.

## **Choosing a Plan Year**

Students who plan to transfer to a college or university have a choice to make regarding the requirements for graduation. Specifically, they may choose to graduate in accordance with the program requirements that are in effect during one of their terms of enrollment. If a degree or certificate is terminated during their enrollment, they will have three years in which to complete the terminated program under the old requirements. They should consult a Collin academic advisor or the program description for the year of their choice to learn about all requirements and limitations that may apply. Students are advised to keep a copy of the program requirements and transfer guide(s) in effect during their enrollment at Collin College. Students should also keep their course syllabi to assist with transfer.

# Advanced Study Opportunities Advanced Study In Mathematics And Natural Sciences

The Center for Advanced Study in Mathematics and Natural Sciences (CASMNS) provides speakers, research opportunities for selected students, and advanced study opportunities in biology, chemistry, geology, mathematics, and physics.

Students desiring CASMNS opportunities should speak with a CASMNS faculty member during CASMNS orientation to schedule an interview, and if appropriate, the student will be assigned a supporting instructor.

#### **Honors Coursework**

The Honors Institute at Collin College can provide a student with a challenging learning experience designed for students with advanced academic skills and a

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commitment to learning. Honors courses are specially designated academic course sections, shown in the registration schedule by an "H" at the end of a course number. Enrollment in an honors course will be recorded on the student's transcript and may qualify the student for honors scholarships. The student must have a 3.5 cumulative grade point average (GPA) to be eligible for enrollment in honors courses.

# Pre-Professional Studies for Academic Transfer Students

Professional schools, such as architecture, business, chiropractic, dental, engineering, law, medicine, pharmacy, and veterinary medicine require varying amounts of undergraduate preparation. Many of the required courses at the freshman and sophomore levels are offered at Collin. It is the responsibility of students to know the exact requirements for admission to the specific professional school to which they are applying.

Every Texas public baccalaureate includes the 42-credit core curriculum as part of its degree requirements. The state of Texas guarantees that any Texas public institution will accept core credits from any other Texas public institution and that these core credits will apply toward a baccalaureate degree. Completing the core curriculum at Collin College will save a student money because the tuition per credit hour is lower than at any public four-year institution.

For additional information and specific Texas and out-ofstate requirements, consult a Collin academic advisor.

#### **Pre-Architecture**

Collin offers the general education courses commonly required for students entering a baccalaureate degree program leading to careers in architecture, landscape architecture, building construction, and urban and regional planning.

#### **Pre-Health Studies**

Pre-Health studies include areas such as:

- Pre-Chiropractic, Pre-Clinical Lab Sciences,
- Pre-Dental
- Pre-Medicine
- Pre-Pharmacy
- Pre-Physician's Assistant
- Pre-Veterinary Medicine

Collin offers the courses that are most commonly recommended for the first two years of Pre-Chiropractic, Pre-Dental, Pre-Medicine, Pre-Pharmacy, and Pre-Veterinary Medicine programs at most colleges and universities. These courses provide a basic foundation in medical science and help establish basic clinical reasoning and clinical skills. Most English, mathematics and science courses have prerequisite requirements.

#### Pre-Law

An applicant for admission to a school of law must have received, or have completed, all requirements for a baccalaureate degree from a college or university of approved standing prior to beginning work in a school of law. Future law school students should complete the core curriculum and take courses that emphasize written and oral skills, research into problems facing society, logical reasoning, and business practices.

For this occupation, students should consider courses in the following disciplines:

- Accounting
- Humanities
- Business
- Philosophy
- Economics
- Psychology
- English
- Sociology

Speech

History

Course selections should always be discussed with a Collin academic advisor to ensure that students take the correct courses for their particular pre-law baccalaureate program at their intended transfer institution.

Pre-law students are encouraged to take the Law School Admission Test (LSAT) during the semester prior to completing the baccalaureate degree.

## **ACADEMIC PROGRAMS**

## **Associate Degrees and Certificates**

An Associate of Arts (AA), Associate of Arts in Teaching (AAT) or Associate of Science (AS) is awarded to students who earn a minimum of 60 college-level credit hours, which include 42 credit hours of General Education Core and 18 credit hours of degree requirements and general studies electives.

The AA, AAT and AS degrees are designed for students planning to transfer course credits to a baccalaureate degree program at a college or university. Students should visit with an academic advisor to select courses that apply to their AA, AAT, or AS degree

#### **Degree Requirements**

#### **Associate of Arts Degree Requirements**

The following requirements must be met for an AA:

- 1. Earn a minimum of 60 college-level credit hours.
- 2. Complete the General Education Core of 42 credit hours.
- 3. Earn a minimum cumulative grade point average (GPA) of 2.0.
- 4. Earn a minimum of 18 credit hours at Collin College.
- 5. Complete a minimum of 18 additional credit hours of degree requirements and general studies electives.
- 6. Complete the degree requirement for the AA degree:
- 7. At least one sophomore-level literature course (3 credit hours). This requirement may simultaneously meet the Language, Philosophy & Culture Core requirement.

#### **Associate of Science Degree Requirements**

The following requirements must be met for an AS:

- 1. Earn a minimum of 60 college-level credit hours.
- Complete the General Education Core of 42 credit hours.
- 3. Earn a minimum cumulative grade point average (GPA) of 2.0.
- 4. Earn a minimum of 18 credit hours at Collin College.
- 5. Complete a minimum of 18 additional credit hours of degree requirements and general studies electives.
- 6. Complete the degree requirement for the AS degree:
  - Complete at least six credit hours of mathematics from the following list: MATH 1314 or 1414, 1316, 1342, 2305, 2318, 2320, 2412, 2413, 2414, 2415. Three credit hours of this mathematics requirement will also meet the Mathematics Core requirement.
  - Complete at least 8 credit hours of Life and Physical Sciences from the following list:
    - o BIOL1406, 1407, 1414, 1415, 2401, 2402, 2406, 2416, 2421
    - o CHEM 1411, 1412, 2423, 2425;
    - o ENVR 1401, 1402
    - o GEOL 1403, 1404
    - o PHYS 1401, 1402, 2425, 2426

A Science course sequence is recommended. Completion of two of these Science courses with a grade of D or better will meet the six-credit hour Life and Physical Sciences Core requirement and two credit hours from the lab portion will be applied to the 6-credit hour Component Area Option Core requirement.

#### **Associate of Arts in Teaching Degree Requirements**

An Associate of Arts in Teaching (AAT) meets the lower division requirements for bachelor degree programs that lead to initial Texas teacher certification. For an AAT degree, you must meet the following requirements:

- 1. Earn a minimum of 60 college-level credit hours.
- Complete the General Education Core of 42 credit hours.
- 3. Earn a minimum cumulative grade point average (GPA) of 2.0. Students should be aware that most four-year colleges require a minimum cumulative GPA of 2.5 for admission to their teacher certification programs.
- 4. Earn a minimum of 18 credit hours at Collin College.
- 5. Complete all the courses listed for one of three AAT diplomas:
  - AAT-Early Childhood-Grade 6
  - AAT-Middle Grades (Grades 4-8)
  - AAT-High School (Grades 8-12)

#### AA and AS Fields of Study

AA and AS degrees may have state-recognized Fields of Study (FOS) Transfer Curricula, which are available in six (6) fields. The certificate of completion for a specific FOS is awarded to guarantee transfer of the courses contained in the FOS curriculum freely among Texas public colleges. The FOS courses are equivalent to the first two years of program coursework in a related bachelor's degree.

Fields of Study are available in the following disciplines:

- Business
- Communication
- Computer Science
- Criminal Justice
- Engineering
- Music

## **GENERAL EDUCATION CORE**

The Texas Education Code requires all public colleges and universities to have a General Education Core and every degree has a General Education Core requirement. General Education Core is defined as "the curriculum in the liberal arts, humanities, sciences, and political, social and cultural history that all undergraduate students of a particular Texas institution of higher education are required to complete before receiving an associate or baccalaureate degree. The General Education Core focuses on strengthening six basic competencies that help define the educated person: Communication skills, critical thinking, empirical and quantitative reasoning, teamwork, social responsibility, and personal responsibility.

## **Core Curriculum Completion Certificate**

A Core Curriculum Completion Certificate is awarded to all students completing Collin's General Education Core. The State of Texas guarantees acceptance by a public four-year university of any complete General Education Core transferred from any other Texas public college.

The General Education Core at Collin College is the collection of 42 credit hours of general education courses selected by Collin faculty in eight areas that have been approved by the Texas Higher Education Coordinating Board to build a basic core of knowledge. Course options are displayed by area and discipline in the AA/AS/AAT General Education Core Table. Unless otherwise stated, all general education core course options shown in the General Education Core Table can be used to satisfy both core and degree requirements for the AA, AS or AAT degrees.

Students should visit with an academic advisor to ensure the best selection of courses to complete the General Education Core and/or an associate degree, and to transfer to their chosen major for a baccalaureate.

#### Becoming Core Complete for Students Who Transfer

All core courses in the Life and Physical Sciences Component at Collin College earn four credit hours, which are distributed as three hours applied to the 6-credit hour requirement for the Life and Physical Sciences Core Component, and one lab credit hour applied to the Component Area Option (CAO) requirement. There are several transfer scenarios for becoming core complete for the student who transfers in 3, 6 or 7 credit hours of Life and Physical Sciences.

If a student transfers to Collin with one 3-credit hour Life and Physical Science course with a grade of D or better, three credit hours will be applied toward the 6-credit hour Life and Physical Sciences Core requirement. The student will need to take one additional Life and Physical Science Core course at Collin.

If a student transfers in six or seven credit hours of Life and Physical Sciences with a grade of D or better, the student will have met the 6-credit hour requirement for the Life and Physical Sciences Core Component.

To meet the 6-credit hour requirement in the Collin Option Component, all students who transfer to Collin with 3, 6 or 7 credit hours of Life and Physical Sciences Core coursework, will need to take or transfer in one Core Speech course, and PHED 1164, 1304, 1338, EDUC 1300\*, PSYC 1100\*, 1300\* or any core course not used to meet the requirement of another component in order to be Core complete in both the Life and Physical Sciences Core Component and the Collin Option Component. If a student earns more than 42 core credit hours, the extra hours may be applied to degree requirements.

\*These are equivalent courses; only one may be taken: EDUC 1300, PSYC 1100 or PSYC 1300

ponent and . 1302 or 2311  ent *  or 1414, 1316, 1342, 2320, 2412, 2413, 241  4, 1325, 1332*, 1350,  g regarding degree appligher-level mathematic es Component ** 1407, 1414, 1415, 240* 2416, 2421 , 1412, 2423, 2425	3 C  The sati AA req  The app AA  licability. s course.  6 Cru  1, A to sec rec  The sati AA	redit Hours  redit Hours  ese courses isfy the AS, , & AAT Math uirement  ese courses bly only to the or AAT  Some majors	
and . 1302 or 2311  ent *  or 1414, 1316, 1342, 2320, 2412, 2413, 241  4, 1325, 1332*, 1350,  g regarding degree appligher-level mathematic  es Component **  1407, 1414, 1415, 240* 2416, 2421	3 C  The sati AA req  The app AA  licability. s course.  6 Cru  1, A to sec rec  The sati AA	redit Hours  see courses sisfy the AS, , & AAT Math uirement  see courses oly only to the or AAT  Some majors  edit Hours  wo-course quence is ommended. see courses sisfy the AS,	
ent *  or 1414, 1316, 1342, 2320, 2412, 2413, 241  4, 1325, 1332*, 1350, gregarding degree appligher-level mathematic  es Component **  1407, 1414, 1415, 240, 2416, 2421	The sati AA req  The app AA  licability. s course.  6 Cru  1, A to second a	ese courses isfy the AS, & AAT Math uirement ese courses oly only to the or AAT Some majors edit Hours  wo-course puence is ommended. ese courses isfy the AS,	
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res Component ** 1407, 1414, 1415, 240 2416, 2421	6 Cro	wo-course uuence is ommended.	
1407, 1414, 1415, 240 <sup>-</sup> 2416, 2421	1, A to second rec	wo-course quence is ommended. ese courses isfy the AS,	
2416, 2421	A for second rec	quence is ommended. ese courses isfy the AS,	
, 1412, 2423, 2425	rec The sati	ommended. ese courses isfy the AS,	
	sati AA	isfy the AS,	
, 1402			
, 1404		Science requirement.	
, 1402, 2425, 2426	Stu trar with cre Life Sci sho "Be	dents who nsfer to Collin n fewer than 8 dit hours of a & Physical ence credits suld see ecoming Core emplete"	
1409, 2404, 2420			
	The	ese courses	
, 1402, 1445, 1447	only satisfy the AA or AAT	or AAT	
		quirement.	
5	1409, 2404, 2420 5 , 1402, 1445, 1447 , 1404, 1405, 1410, 14	1409, 2404, 2420 5 The only AA'	

040 Languaç	ge, Philosophy & Culture C	omponent 3 Credit Hours
English	ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343	These courses also satisfy the AA sophomore literature requirement.
History	HIST 2311, 2312, 2321, 2322	
Humanities	HUMA 1301	
Philosophy	PHIL 1301, 1304, 2303, 2306, 2307, 2321	
050 Creative	Arts Component	3 Credit Hours
Dance	DANC 2303	
Music	MUSI 1306, 1307, 1310	
Theatre	DRAM 1310, 2361, 2362, 2366, 2367	
Visual Arts	ARTS 1301, 1303, 1304, 1313	
060 America	n History Component	6 Credit Hours
History	HIST 1301, 1302, 2301	
070 Governr	nent / Political Science Cor	nponent
		6 Credit Hours
Government	GOVT 2305 and 2306	
080 Social a	nd Behavioral Sciences Co	mponent 3 Credit Hours
Anthropology	ANTH 2302, 2346, 2351	
Economics	ECON 2301, 2302	
Psychology	PSYC 2301	
Sociology	SOCI 1301, 1306	
090 Collin O	ptions	6 Credit Hours
Area 1 – Speech 3 credit hours	SPCH 1311, 1315, 1321	
Area 2 - 3 credit hours	EDUC 1300*, PHED 1164, 1304, 1338, PSYC 1100*, 1300*, Or Any core course not used to meet the requirement of another component.  * Only one of these courses may be taken.	Students who complete 8 credit hours of Life and Physical Sciences will have 2 of those credit hours apply to the 090 Collin Options, Area 2 requirement. See core course options that may be used to fulfill the remaining 1 credit hour requirement. If a student earns more than 42 core credit hours, the extra hours may be applied to degree requirements.

Note: Students who transfer to Collin with 3-7 credit hours of Life & Physical Science credits should see "Becoming Core Complete" on the previous page for more information.

# ASSOCIATE OF ARTS DEGREE (AA)

The Associate of Arts degree provides general academic courses and electives for students who plan to transfer to a college or university. Because of the various transfer requirements at colleges and universities, and to ensure enrollment in appropriate courses, students should verify course transferability and degree applicability with a Collin academic advisor and/or the college or university that they plan to attend.

# AA Fields of Study (FOS) and General Studies Electives

## Accounting

Students who are planning to major in Accounting as part of a bachelor's degree at a four-year university should refer to the **Business Field of Study**. Students should complete the AA <u>General Education Core</u> and take ACCT 2301 and ACCT 2302.

# Air Force and Army ROTC

Collin College students are given the opportunity to participate in the Air Force or Army ROTC program as crosstown students at the **University of North Texas in Denton, Texas**.

Students are required to attend an academic class, leadership laboratory and physical training at the University of North Texas once a week during the fall and spring academic semesters.

The ROTC mission is to develop quality leaders to serve our country as officers in the United States Air Force or Army. As a part of the program, you will prepare yourself to become an Air Force or Army Officer while completing your degree as a college student. Students may participate in four-year or three-year programs.

Students enroll in ROTC classes at the same time and in the same manner as other Collin courses. Collin's Business and Computer Systems Division administers the offering of ROTC courses for Collin College; students register and pay via Collin College in accordance with published payment deadlines. For more information please visit www.afrotc.unt.edu or www.armyrotc.unt.edu

## American Sign Language

Also see AAS - Interpreter Education Program (IEP)

The Associate of Arts degree with coursework in American Sign Language provides general academic courses and electives that enable students who intend to major in Deaf Education or Deaf Studies to transfer to a college or university.

American Sign Language coursework is designed to provide students with essential, foundational ASL skills, familiarity with deaf culture and an introduction to the discipline of education.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

#### **Recommended Electives**

SGNL	1401	Beginning American Sign Language I
SGNL	1402	Beginning American Sign
		Language II
SGNL	2301	Intermediate American Sign Language
		I
SGNL	2302	Intermediate American Sign Language
		II
SLNG	1211	Fingerspelling and
		Numbers 1,*
SLNG	1347	Deaf Culture
<b>EDUC</b>	1301	Introduction to the Teaching
		Profession <sup>2</sup>
<b>EDUC</b>	2301	Introduction to Special Populations <sup>2</sup>

- 1. Recommended for students pursuing degrees in Deaf Studies.
- 2. Recommended for students pursuing degrees in Deaf Education.

# Anthropology

Anthropology takes as its subject the unity and diversity of our single human species in its total history. Its intellectual origins are in both the natural sciences and the humanities. Anthropology concerns itself with real people living now and throughout history. Hence anthropology asks questions such as "What defines being human?" "Who are the ancestors of modern humans?" "What are our physical traits?" "How do we behave?" "Why are

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<sup>\*</sup> Students should verify course transferability with the Collin academic advisor and/or the college or university that they plan to attend.

there variations and differences among different groups of humans?" "How has the evolutionary past of humans influenced social organization and culture?" Most importantly anthropologists seek to ask themselves the twin questions of "What in my world gives rise to my reaction to what other folks do?" and "What in their world makes it sensible for them to do what they do, even if it would never occur to me to do the same thing?"

Anthropology students will gain skills essential to better understand the complexity of the human world and the role of human beings within that complex world. Collin students who study anthropology will gain a foundation in the discipline sufficient for them to transfer to a university program.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

#### Recommended Electives

ANTH	2301	Physical Anthropology
ANTH	2302	Introduction to Archeology
ANTH	2346	General Anthropology
ANTH	2351	Cultural Anthropology
BIOL	2404	Human Anatomy and Physiology Basic
BIOL	2416	Genetics
ENGL	2332	World Literature I
GEOG	1302	Human Geography
PHIL	2306	Introduction to Ethics
PSYC	2301	General Psychology
SOCI	1301	Introduction to Sociology

#### Art

Also see academic Photography courses

The Visual Arts Program offers foundation-level courses in drawing, design, art appreciation and art history as well as courses focused on traditional studio disciplines such as painting, watercolor, ceramics, sculpture, printmaking, and jewelry/art metals. In addition to courses, exposure to seminars in professional practices helps students prepare to function as visual artists. Our spacious labs provide access to professional quality equipment, including printing presses, computers, printers, ceramic kilns, electric pottery wheels, and a metal-casting foundry. Our gallery space, THE ARTS Gallery, exposes students to the works of current professional artists and showcases student work in both open and juried student shows. Finally, our instructors are highly trained, practicing artists who are dedicated to helping each student explore and research the visual arts and, thereby, reach his or her highest level of skill and creativity.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

#### **Recommended Electives**

ARTS 1301 Art Appreciation

	- o o Pp
ARTS	1303 Art History I (Prehistoric to
	the 14th Century)
ARTS	1304 Art History II (14th Century to the present)
ARTS	1311 Design I (2-dimensional)
ARTS	1312 Design II (3-dimensional)
ARTS	1316 Drawing I
ARTS	1317 Drawing II
ARTS	2311 Design III (may be 2-D, 3-D, color,
	or combinations thereof)
ARTS	2316 Painting I
ARTS	2317 Painting II
ARTS	2323 Figure Drawing I
ARTS	2324 Figure Drawing II
ARTS	2326 Sculpture I
ARTS	2327 Sculpture II
ARTS	2333 Printmaking I
ARTS	2334 Printmaking II
ARTS	2341 Jewelry / Art Metals I
ARTS	2342 Jewelry / Art Metals II
ARTS	2346 Ceramics I
ARTS	2347 Ceramics II
	2348 Digital Photography I
ARTS	2349 Digital Photography II
ARTS	2366 Watercolor I
ARTS	2367 Watercolor II

# **Business Field of Study**

An Associate of Arts with a Business Field of Study requires 60 credit hours

ARTS 2389 Academic Co-op Arts/Photography

Students interested in careers in business or who are planning to major in accounting, business administration, finance, international business, management, or marketing for a baccalaureate degree should follow the Business Field of Study curriculum. Students completing the Business Field of Study curriculum will receive a certificate, and the course credits will transfer to any Texas public college or university that offers bachelor's degrees in various areas of business.

# Certificate – Business Field of Study 21 credit hours

# Required General Education Core Courses 9 credit hours

ECON 2301	Principles of Macroeconomics
MATH 1325	Calculus for Business and Social
	Sciences 1, 2
SPCH 1321	Business and Professional
	Communication (preferred)
	-OR-SPCH 1315 Public Speaking

# Other Required Courses 12 credit hours

ACCT	2301	Principles of Financial Accounting
ACCT	2302	Principles of Managerial Accounting
BCIS	1305	Business Computer Applications
ECON	2302	Principles of Microeconomics

The Required General Education Core courses listed above satisfy the Component Area Option-Speech requirement; the Social and Behavioral Sciences component; and the Mathematics component.

To earn the AA degree, in addition to the Field of Study Certificate, complete the remaining 33 credit hours of the 42 hour <u>General Education Core</u> requirements and recommended elective credit hours.

#### **Recommended Business Transfer Courses**

The following recommended courses may also be taken toward a bachelor's degree; however, they are not part of the FOS, nor do they satisfy any General Education Core requirements.

MATH 1376	Calculus for Business and
	Economics II
MATH 2373	Matrices, Vectors, and Linear
	Programming

These courses will transfer to a specific 2+2 baccalaureate program. Please check with your advisor to learn whether they will transfer to the four-year program of your choice. There is an additional fee for these courses.

# Recommended Electives to complete AA 6 credit hours

BUSI 1301	Business Principles 3
BUSI 2301	Business Law <sup>3</sup>
MATH 1342	Elementary Statistical
	Methode 3

- 1. Collin Prerequisite: MATH 1314, 1414, or 1324. Please check with the receiving college or university for prerequisite requirements.
- 2. MATH 2413, 2414, or 2415 may also be used.
- 3. Please check with the receiving college or university for transfer requirements.

# **Communication Field of Study**

An Associate of Arts with a Communication Field of Study requires 60 credit hours.

#### **Program Options:**

#### **Certificate – Communication Field of Study**

Advertising/Public Relations (Sub-Area)
General Communication (Sub-Area)
Journalism/Mass Communication (Sub-Area)
Radio and Television Broadcasting/Broadcast
Journalism (Sub-Area)

Collin offers four sub-areas of the Communication Field of Study (FOS). The sub-areas are: Advertising / Public Relations, General Communication (Communication Studies / Speech Communication / Speech and Rhetorical Studies / Organizational Communication), Journalism / Mass Communication, and Radio and Television Broadcasting / Broadcast Journalism. Upon completion of the Field of Study curriculum, a certificate will be awarded to acknowledge completion and readiness to transition from an associate level to a baccalaureate (BA / BS) level, at any Texas public institution.

Listed below are the requirements for each Communication Field of Study sub-area:

# Certificate – Communication Field of Study *Advertising/Public Relations (Sub-Area)*

12 credit hours

#### Required Courses Competency Area 1 6-9 credit hours

COMM 1307 Introduction to Mass Communication COMM 2300 Media Literacy COMM 2330 Introduction to Public Relations

# Competency Area 2 3-6 credit hours

COMM 2332 Radio / Television News COMM 2339 Writing for Radio, Television, and Film

# Recommended Electives to complete AA (If not used above)

### 6 credit hours

COMM 2330 Introduction to Public Relations COMM 2332 Radio / Television News SPCH 1318 Interpersonal Communication

# Certificate – Communication Field of Study General Communication (Sub-Area)

12 credit hours

# Required Courses Competency Area 1

#### 6 credit hours

SPCH 1311 Introduction to Speech Communication <sup>1</sup>

SPCH 1318 Interpersonal Communication

# Competency Area 2

#### 6 credit hours

SPCH 1315 Public Speaking <sup>1</sup>
SPCH 1321 Business and Professional
Communication <sup>1</sup>

SPCH 2335 Argumentation and Debate

1. One of these courses will meet the Component Area Option - Speech Component of the General Education Core.

# Recommended Electives to complete AA

(If not used above)

9 credit hours

COMM 1307 Introduction to Mass Communication

COMM 2300 Media Literacy

COMM 2331 Radio / Television Announcing

COMM 2332 Radio / Television News

# Certificate – Communication Field of Study Journalism / Mass Communication (Sub-Area)

12 credit hours

# **Required Courses**

#### Competency Area 1

# 6-9 credit hours

COMM 1307 Introduction to Mass Communication COMM 1335 Introduction to Electronic Media

COMM 2300 Media Literacy

COMM 2330 Introduction to Public Relations

# Competency Area 2

# 3-6 credit hours

COMM 2332 Radio / Television News

COMM 2339 Writing for Radio, Television and Film

# Recommended Electives to complete AA (If not used above)

### 6 credit hours

COMM 2330 Introduction to Public Relations COMM 2332 Radio / Television News SPCH 1318 Interpersonal Communication

# Certificate – Communication Field of Study Radio and Television Broadcasting / Broadcast Journalism (Sub-Area)

12 credit hours

# **Required Courses**

# Competency Area 1

# 6-9 credit hours

COMM 1307	Introduction to Mass Communication
COMM 1335	Introduction to Electronic Media
COMM 2300	Media Literacy
COMM 2366	Introduction to Cinema

#### Competency Area 2

#### 3-6 credit hours

COMM 2331	Radio / Television Announcing
COMM 2332	Radio / Television News
COMM 2339	Writing for Radio, Television and Film

# Recommended Electives to complete AA (If not used above)

#### 6 credit hours

COMM 2330	Introduction to Public Relations
COMM 2332	Radio / Television News
SPCH 1318	Interpersonal Communication

To earn the AA degree, in addition to the Field of Study Certificate, complete the remaining <u>General Education</u> <u>Core</u> requirements and recommended elective credit hours.

- Before taking MATH-1332, check with an academic adviser regarding degree applicability. Some baccalaureate majors or institutions may require a higher-level mathematics course. See Mathematics Options.
- 2. If you are working toward the General Communication Sub-Area of the Communication Field of Study, you have met this requirement. All other component areas of the General Education Core must be completed. See Collin Options — Area 2.
- 3. Students completing the Life and Physical Sciences coursework at Collin will have fulfilled two credit hours in the CAO, leaving only one additional credit hour needed to fulfil this area. See Collin Options Area 2.

<sup>\*</sup> Note: A student may only take one of these courses. See <u>Collin</u> Options – Area 2.

# **Criminal Justice Field of Study**

An Associate of Arts with a Criminal Justice Field of Study requires 60 credit hours.

The Associate of Arts - Criminal Justice Field of Study degree provides general academic courses and electives which enable students who intend to major in criminal justice or criminology to transfer these credits to a college or university which offers baccalaureate degrees in criminal justice or criminology. Students planning to transfer will have a solid foundation upon which to build as they pursue further studies in criminal justice or criminology.

Upon completion of the Field of Study curriculum, a certificate will be awarded to acknowledge completion and readiness to transition from an associate level to a baccalaureate (BA / BS) level, at any Texas public institution.

The FOS includes the five specified courses listed below. Students may also add an additional six credit hours of course work from the "Recommended Electives" which may be transferred by local agreement to the university or which may be required by the receiving university, as long as the additional course work does not duplicate content already covered in the other FOS courses.

# Certificate – Criminal Justice Field of Study

15 credit hours

# **Required Courses**

CRIJ 1301	Introduction to Criminal Justice
CRIJ 1306	Court Systems and Practices
CRIJ 1310	Fundamentals of Criminal Law
CRIJ 2313	Correctional Systems and Practices
CRIJ 2328	Police Systems and Practices

To complete the AA degree, in addition to the Field of Study Certificate, complete the remaining <u>General</u> <u>Education Core</u> requirements and recommended elective credit hours.

# Criminal Justice Electives to complete AA 3 credit hours

CRIJ 1307	Crime in America
CRIJ 1313	Juvenile Justice System
CRIJ 2314	Criminal Investigation

CRIJ 2323 Legal Aspects of Law Enforcement

# **Dance**

Collin's Dance Department has a strong reputation for excellence in dance education, choreography and performance, propelling students into several prestigious university dance programs. The dance curriculum includes multiple levels of ballet, modern dance, jazz, tap, dance appreciation, improvisation, choreography and performance classes.

Dance courses focus on movement fundamentals, technique, performance and choreography. The curriculum provides a comprehensive approach to learning dance by integrating the aesthetics, historical, critical, cultural and fundamental aspects of dance as an art form.

Students interested in additional dance experience may audition for Collin's student dance company. The mission of the company is to produce contemporary dance works at the highest level of artistic excellence. The dance company attends and performs at the American College Dance Festival annually and has received the Gala Award at that festival six times and has performed at the National festival, too. Dance auditions for the dance company are held prior to the fall semester.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

recommende	Licetives
DANC 1110	Tap Dance
DANC 1112	Dance Practicum
DANC 1128	Ballroom and Social Dance
DANC 1151	Freshman Dance Performance
DANC 1201	Dance Composition - Improvisation
DANC 1241	Beginning Ballet
DANC 1245	Beginning Modern Dance
DANC 1247	Beginning Jazz Dance
DANC 1301	Dance Composition - Choreography
DANC 1305	World Dance
DANC 2151	Sophomore Dance Performance
DANC 2241	Intermediate Ballet
DANC 2245	Intermediate Modern Dance
DANC 2247	Intermediate Jazz Dance
DANC 2303	Dance Appreciation
DANC 2389	Academic Cooperative

# **Economics**

Students who are planning to major in economics as part of a bachelor's degree at a four-year university should refer to the Business Field of Study. Students should complete the AA <u>General Education Core</u> and take ECON 2301 and ECON 2302.

# **Education**

See Associate of Arts in Teaching (AAT) and Child Development (AAS) program.

# **English**

English courses promote the development of critical reading, thinking and writing skills. Composition and rhetoric courses focus on writing as a process requiring planning, analysis, and research leading to the creation of expository and argumentative essays.

The department offers a variety of literature courses that satisfy the Life, Philosophy and Culture Core. Sophomore-level courses include surveys in global and national literatures and genre-specific courses in poetry, drama, short story, and novel. Electives in creative writing and technical writing are also available.

Writing Centers, available on each campus, provide students with professional consultation in composing, writing and revising assignments in a variety of disciplines.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

### **Recommended Electives**

ENGL 2307	Creative Writing I
ENGL 2308	Creative Writing II
ENGL 2311	Technical and Business Writing
ENGL 2322	British Literature I
ENGL 2323	British Literature II
ENGL 2327	American Literature I
ENGL 2328	American Literature II
ENGL 2332	World Literature I
ENGL 2333	World Literature II
ENGL 2342	Introduction to Literature I –
	Short Story and Novel

ENGL 2343 Introduction to Literature II –
Poetry and Drama
X4XX Foreign Language Sequence I
X4XX Foreign Language Sequence II

# French

French coursework provides the essential language background for the advanced study of French; for competency in understanding, speaking and writing the language, and for a more rapid acquisition of other foreign languages (particularly romance languages such as Spanish). The courses are oral-proficiency based in order to enable the student to converse in French as quickly as possible.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

#### **Recommended Electives**

FREN	1411	Beginning French I
FREN	1412	Beginning French II
FREN	2311	Intermediate French I
FREN	2312	Intermediate French II

# German

German coursework provides the essential language background for the advanced study of German; for competency in understanding, speaking, and writing the language and for a more rapid acquisition of other foreign languages (particularly Germanic languages such as Dutch). The courses are oral-proficiency based in order to enable students to converse in German as quickly as possible.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

GERM 1411	Beginning German I
GERM 1412	Beginning German II
GERM 2311	Intermediate German I
GERM 2312	Intermediate German II

# Government

Department Website:

www.collin.edu/department/politicalscience/

An Associate of Arts degree with coursework in Government is a stepping-stone to a liberal arts education. The second step is a bachelor's degree from a college or university. The Government department features introductory courses in political science emphasizing American and Texas politics. The courses emphasize contemporary political analysis, critical thinking, and hands-on experiential learning exercises.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

#### Recommended Electives

GOVT	2304	Introduction to Political Science
GOVT	2311	Mexican-American Politics
CRIJ	1301	Introduction to Criminal Justice
ECON	2301	Principles of Macroeconomics
ECON	2302	Principles of Microeconomics
PHIL	2303	Introduction to Formal Logic
PHIL	2306	Introduction to Ethics
PSYC	2301	General Psychology
	X4XX	Foreign Language Sequence I
	X4XX	Foreign Language Sequence II

# History

History coursework offers foundational knowledge for students interested in completing an associate degree as well as students pursuing a bachelor's degree. The American History survey courses meet the state's requirement for six hours of American history. In addition to the survey courses, the History department also offers courses in Western Civilizations, Texas History, African-American History, World History and Mexican-American History.

To earn an associate degree, complete the 42 credit hour <u>General Education Core</u>, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

#### Recommended Electives

HIST	2301	Texas History
HIST	2311	Western Civilization I
HIST	2312	Western Civilization II
HIST	2327	Mexican-American History I
HIST	2328	Mexican-American History II

HIST	2381	African-American History
<b>ECON</b>	2301	Principles of Macroeconomics
<b>ECON</b>	2302	Principles of Microeconomics
PHIL	1301	Introduction to Philosophy
PHIL	2303	Introduction to Formal Logic
PSYC	2301	General Psychology
SOCI	1301	Introduction to Sociology
	X4XX	Foreign Language Sequence I
	X4XX	Foreign Language Sequence II

# **Music Field of Study**

An Associate of Arts with a Music Field of Study requires 60 credit hours. Music also has a <u>workforce</u> program.

The Associate of Arts - Music Field of Study provides the approved courses for music majors intended to transfer to a college or university. The curriculum offers the required music theory, ear training, keyboard skills, music literature, private applied study and ensemble participation that all music majors must complete during their freshman and sophomore years. Upon completion of the Field of Study curriculum, a certificate will be awarded to acknowledge completion and readiness to transition from an associate level to a baccalaureate (BA / BS) level, at any Texas public institution.

Students should consult with the college or university that they plan on attending before taking additional courses beyond those outlined in the Associate of Arts - Music Field of Study.

# Certificate – Music Field of Study 31 credit hours

# Ensemble

4 credit hours

MUEN X1XX Ensemble (4 semesters) <sup>1</sup>

# Applied Study

8 credit hours

MUAP X2XX Applied Music (4 semesters) <sup>2</sup>

# Theory / Sight Singing & Ear Training 16 credit hours

MUSI	1116	Sight Singing & Ear Training I
MUSI	1117	Sight Singing & Ear Training II
MUSI	1311	Music Theory I
MUSI	1312	Music Theory II
MUSI	2116	Sight Singing & Ear Training III
MUSI	2117	Sight Singing & Ear Training IV
MUSI	2311	Music Theory III
MUSI	2312	Music Theory IV

# Literature

#### 3 credit hours

MUSI 1307 Music Literature <sup>3</sup>

# Recommended Courses for Piano Proficiency Keyboard (Piano) Competency

#### 4 credit hours

MUSI	1181	Piano Class I <sup>4</sup>
MUSI	1182	Piano Class II 4
MUSI	2181	Piano Class III 4
MUSI	2182	Piano Class IV 4

Baccalaureate Music programs require piano proficiency although the piano skills courses are not part of the guaranteed transfer block. Students are encouraged to take the keyboard competency courses in addition to completion of the **Music Field of Study** prior to transfer. Students may take a barrier exam to identify the need to take the courses.

# **AA** General Education Core Requirements for Music Field of Study

25 credit hours

To earn the AA degree, in addition to the Field of Study Certificate, complete the following <u>General Education</u> <u>Core</u> requirements:

# Communication

#### 3 credit hours

ENGL 1301 Composition I

# Mathematics

3 credit hours

MATH 1314 College Algebra

(See Mathematics options)

# Life and Physical Sciences

### 4 credit hours

PHYS 1410 Physics of Music and Sound

(See Natural Sciences options)

#### Social and Behavioral Sciences

#### 3 credit hours

PSYC 2301 General Psychology

-OR-

SOCI 1301 Introduction to Sociology

# Government / Political Science

#### 6 credit hours

GOVT 2305 Federal Government (Federal constitution and topics)

GOVT 2306 Texas Government (Texas constitution and topics)

# American History

#### 6 credit hours

HIST	1301	United States History I
HIST	1302	United States History II

- 1. Student must complete 4 credit hours of MUEN courses.
- 2. Student must complete 8 credit hours of MUAP courses. With approval of the Department Chair, the student may be allowed to take MUAP-X1XX.
- 3. Required Core component under Creative Arts.
- 4. All Music Field of Study students must see the Department Chair. With permission of the Department Chair, student may take four elective music (MUAP, MUEN or MUSI) credits.
- \* Please note: Before taking MATH-1332, check with an academic adviser regarding degree applicability. Some institutions may require a higher-level mathematics course.

# **Philosophy**

Philosophy coursework is foundational for men and women dedicated to the pursuit of knowledge. Students become acquainted with the main problems of philosophy. Emphasis is placed on philosophical thinking that enables graduates to integrate their work and their lives.

To earn an associate degree, complete the 42 credit hour <u>General Education Core</u>, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

PHIL	1301	Introduction to Philosophy
PHIL	1304	Introduction to World Religions
PHIL	2303	Introduction to Formal Logic
PHIL	2306	Introduction to Ethics
PHIL	2307	Introduction to Social and
		Political Philosophy
PHIL	2321	Philosophy of Religion
ANTH	2351	Cultural Anthropology
<b>ENGL</b>	2322	British Literature I
<b>ENGL</b>	2323	British Literature II
<b>ENGL</b>	2332	World Literature I
<b>ENGL</b>	2333	World Literature II
GOVT	2304	Introduction to Political Science
HIST	2311	Western Civilization I
HIST	2312	Western Civilization II
	X4XX	Foreign Language Sequence I
	X4XX	Foreign Language Sequence II

# **Photography**

Photography also has a workforce program.

The photography world is now the imaging universe. Contemporary industry paradigm change dictates a new breed of visual athlete. Photography coursework will produce a student with the visual literacy needed to function in today's image-obsessed environment. Technical skills with critical software / hardware applications, as well as creative and conceptual understanding are covered in great detail.

This diverse elective area includes intensive artistic investigations into traditional film-based photography techniques and approaches; including advanced darkroom and alternative processes; studio lighting for portrait, fashion and product; comprehensive creative solutions; installation and image / text issues; graphic design specifics and contemporary digital workflow.

The state-of-the-art photography facility is one of the best in the state and includes a fully-equipped 20 work station MAC lab, a digital media room with Nikon / Imacon / Epson scanners and 20 Epson printers from 13 to 44 inches, a double studio with Profoto strobe set-ups and a continuous artificial lighting set-up for digital video, a 20 enlarger archival black and white dark room and film processing room; an alternative processing room and black arts facilities with a Davey board cutter; and equipment check out with digital, 35mm, medium and large format film cameras, and portable strobe lighting equipment available.

To earn an associate degree, complete the 42 credit hour <u>General Education Core</u>, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

#### **Recommended Electives**

ARTS	1313	Foundations of Art
ARTS	2336	Papermaking / Bookbinding I
ARTS	2348	Digital Photography I
ARTS	2349	Digital Photography II
ARTS	2356	Photography I / Darkroom
ARTS	2357	Photography II / Darkroom
ARTS	2389	Academic Co-op Arts / Photography

# **Psychology**

An Associate of Arts degree with coursework in psychology serves as a foundation for continued studies in the discipline. Because most careers in psychology require an advanced degree, many students transfer to a college or university to complete the Bachelor's degree and apply for admission to a graduate program in psychology. The Collin psychology coursework features a variety of introductory courses exploring the principles of behavior and mental processes. Course offerings include general psychology, life-span psychology, human sexuality, psychology of personality and social psychology. These courses emphasize psychological theory and research, the historical context of the development of the field, and the use of psychological concepts as a tool for better understanding what it means to be a human being. Many courses in Psychology require participation in hands-on, experiential assignments that emphasize the application of course material.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

#### **Recommended Electives**

PSYC	1300	Learning Framework
PSYC	2301	General Psychology
PSYC	2306	Human Sexuality
PSYC	2314	Life-Span Growth and Development
PSYC	2315	Psychology of Adjustment
PSYC	2316	Psychology of Personality
PSYC	2319	Social Psychology
SOCI	1301	Introduction to Sociology
SOCI	1306	Social Problems
SOCI	2301	Marriage and the Family

# Sociology

#### **Department Website:**

www.collin.edu/department/sociology

Sociology coursework at Collin is designed to provide students with essential life skills and a deeper understanding of themselves, others and the various social worlds that they inhabit. Sociology examines how social factors affect both behavior and the potential consequences of that behavior. It seeks to uncover the existence of social patterns, explain how social patterns come to be and explore the consequences of such patterns for different individuals, groups, collectives, and society at large.

As such, sociology courses at Collin enable students to comprehend the widespread social changes that accompany the twenty-first century. Critical thinking skills and a global perspective – attributes that will benefit students regardless of their major - are strongly emphasized in Sociology courses.

Students pursuing an Associate of Arts degree with general studies electives in sociology will gain a solid foundation in the discipline and be well prepared to transfer into a university program of their choice.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

#### **Recommended Electives**

SOCI	1301	Introduction to Sociology
SOCI	1306	Social Problems
SOCI	2301	Marriage and the Family
SOCI	2306	Human Sexuality
SOCI	2319	Minority Studies
ANTH	2351	Cultural Anthropology
PSYC	2301	General Psychology
PSYC	2314	Life-Span Growth and Development
PSYC	2316	Psychology of Personality
PSYC	2319	Social Psychology

# Spanish

The Associate of Arts degree with general studies electives in Spanish provides the essential language background for the advanced study of Spanish; for the mastery of the competencies in listening, speaking and writing the language; and for a more rapid acquisition of other foreign languages (such as romance languages like French). The courses are oral-proficiency based in order to enable the student to converse in Spanish as quickly as possible.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

# **Recommended Electives**

Recommended Electives		
SPAN	1411	Beginning Spanish I
SPAN	1412	Beginning Spanish II
SPAN	2311	Intermediate Spanish I
SPAN	2312	Intermediate Spanish II
SPAN	2313	Spanish for Native / Heritage Speakers
SPAN	2315	Spanish for Native /
		Heritage Speakers II

# **Theatre**

Theatre coursework introduces students to the aesthetic and analytical elements of theatrical productions. It offers a full curriculum of theatre study including work in beginning and advanced acting, musical theatre, voice and diction, stage and lighting design, costume design and stage makeup, theatre history and script analysis, and specialty courses in circus skills, stunt work, stage combat, stage management, and acting for the camera. The labs enable students to have hands-on experiences through performances, as well as shop and crew assignments. Studies include contemporary theories and classical aspects of theatrical productions.

Theatre coursework at Collin College has been nationally recognized and Collin students have been awarded the national championship of collegiate drama. Additionally, numerous Collin College alumni have worked on Broadway. Theatre faculty and students have diverse experience in professional stage and motion picture work.

The state-of-the-art theatre facility is comprised of three separate performance spaces including the 350-seat John Anthony Theatre, the 120-seat Black Box Theatre and the intimate ALT Lab Theatre. The multimillion-dollar complex also houses two dressing rooms, a theatre box office, a costume vault and construction shop, a scene and paint shop, in addition to numerous acting and directing classroom spaces.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

# Recommended Electives

DRAM 1120	Theatre Practicum I
DRAM 1121	Theatre Practicum II
DRAM 1161	Musical Theatre I
DRAM 1162	Musical Theatre II
DRAM 1310	Introduction to Theater
DRAM 1322	Stage Movement
DRAM 1323	Basic Theatre Practice
DRAM 1330	Stagecraft I
DRAM 1341	Makeup
DRAM 1342	Introduction to Costume
DRAM 1351	Acting I
DRAM 1352	Acting II
DRAM 2331	Stagecraft II
DRAM 2336	Voice for the Theater
DRAM 2351	Acting III
DRAM 2352	Acting IV
DRAM 2361	History of Theater I
DRAM 2362	History of Theater II

Ι

DRAM 2366 Introduction to Cinema
DRAM 2367 Development of the Motion Picture II

DRAM 2389 Academic Co-op – Drama

# ASSOCIATE OF ARTS IN TEACHING (AAT)

60 credit hours

Collin College offers courses that fulfill the state requirements for an **Associate of Arts in Teaching** (AAT). Completion of an AAT is designed to meet the lower division requirements for baccalaureate programs that lead to initial Texas teacher certification. The degree plan best suited to the desired certification should be followed and transferred to a university to complete Texas teacher certification requirements.

Students should contact the teacher education program at the specific college or university to which they plan to transfer for detailed information prior to registering. Contact names and phone numbers are available from the Collin academic advisor, or go to <a href="http://transferu.collin.edu">http://transferu.collin.edu</a>.

Please be aware that TECA courses have been removed from the AAT, but these courses are still transferable. Students who have previously taken, or have the ability to take, additional courses should check with the college or university to which they plan to transfer to see how TECA courses will apply to the degree.

To earn the AAT degree, students must complete a minimum of 60 credit hours including all of the required courses listed for the AAT specialization which the student has selected (listed below). Students should be aware that most four-year institutions require a minimum cumulative GPA of 2.5 to be accepted into their teacher certification program.

# **AAT Degree Requirements**

For an AAT degree, you must meet the following requirements:

- 1. Earn a minimum of 60 college-level credit hours.
- 2. Complete the <u>General Education Core</u> of 42 credit hours.
- 3. Earn a minimum cumulative grade point average (GPA) of 2.0. Students should be aware that most four-year colleges require a minimum cumulative GPA of 2.5 for admission to their teacher certification programs.
- 4. Earn a minimum of 18 credit hours at Collin College.
- 5. Complete all the courses listed for one of three AAT diplomas:
  - AAT Early Childhood Grade 6
  - AAT Middle Grades (Grades 4-8)
  - AAT High School (Grades 8-12)

# AAT - Early Childhood - Grade 6

The AAT – Early Childhood – Grade 6 is designed for the student pursuing a Certification for only the elementary grades. Areas are: Generalist; Bilingual Generalist; ESL Generalist; other content area teaching field / academic disciplines / interdisciplinary TBA.

# Required Courses 16 credit hours

Introduction to the Teaching Profession
Introduction to Special Populations
Mathematics for Teachers
(Fundamentals of Mathematics I)
Mathematics for Teachers II
(Fundamentals of Mathematics II)
Additional Lab Science
Course <sup>1</sup>

1. Check with the Collin academic advisor and the receiving college or university for recommended courses in teaching field prior to registering.

# Recommended Elective to complete an AAT 2 credit hour

CDEC 12701 Introduction to Teaching ESL

1. Prior to enrolling in this course, please meet with the Education Academic Advisor or the Education Discipline Lead.

# **AAT – Middle Grades (Grades 4-8)**

The AAT – Middle Grades (Grades 4-8) is for grade 4-8 and Early Childhood-Grade 12 Special Education. The AAT is designed to satisfy the lower-division requirements for bachelor's degrees leading to initial Texas teacher certification in all Grades 4-8 certification areas and EC-12 Special Education. The Grade 4-8 Certification areas are: Generalist; Bilingual Generalist; ESL Generalist; English Language Arts & Reading; English Language Arts & Reading and Social Studies; Mathematics; Science; Mathematics and Science; Social Studies; other content area teaching fields / academic disciplines / interdisciplinary TBA.

Early Childhood to Grade 12 Special Education Certification areas are: EC - 12 Special Education; other content area teaching fields / academic disciplines / interdisciplinary TBA. This degree is for students who want to teach grades EC-Grade 4 and higher.

# Required Courses 16 credit hours

EDUC 1301	Introduction to the Teaching Profession
EDUC 2301	Introduction to Special Populations
MATH 1350	Mathematics for Teachers I
	(Fundamentals of Mathematics I)
MATH 1351	Mathematics for Teachers II
	(Fundamentals of Mathematics II)
XXXX x4xx	Additional Lab Science
course 1	

1. Check with the Collin academic advisor and the receiving college or university for recommended courses in teaching field prior to registering.

# Recommended Electives to complete an AAT 2 credit hours

CDEC 1270 <sup>1</sup> Introduction to Teaching ESL

1. Prior to enrolling in this course, please meet with the Education Academic Advisor or the Education Discipline Lead.

# AAT – High School (Grades 8-12)

The AAT – High School (Grades 8-12) is for grades 8-12 and other Early Childhood-Grade 12. Licensure is designed to satisfy the lower-division requirements for bachelor's degrees leading to initial Texas teacher certification in all grades 8-12 and specialized EC - 12 certification areas. The Grades 8 - 12 Certification areas are: History; Social Studies; Mathematics; Life Sciences; Physical Sciences; Science; English Language Arts & Reading; Computer Science; Technology Applications; Health Science Technology Education; Speech; Journalism; Business Education; Marketing Education; Mathematics & Physics; Agricultural Sciences & Technology; Technology Education; Languages other than English; Family and Consumer Sciences; Dance; Mathematics & Physical Science & Engineering; Human Development and Family Studies; Hospitality; Nutrition and Food Sciences; other content area teaching fields / academic disciplines / interdisciplinary TBA.

# Required Courses 18 credit hours

# Education Courses 6 credit hours

EDUC 1301 Introduction to the Teaching Profession EDUC 2301 Introduction to Special Populations

# Additional Required Courses 12 credit hours

Additional Twelve (12) credit hours of courses in academic disciplines or content area teaching fields <sup>1</sup>

 Check with the Collin academic advisor and the receiving college or university for recommended courses in teaching field prior to registering.

# ASSOCIATE OF SCIENCE DEGREE (AS)

# Fields of Study (FOS) and Electives

The Associate of Science degree provides general academic courses and electives for students who plan to transfer to a college or university. Because of the various transfer requirements at colleges and universities and to ensure enrollment in appropriate courses, students should verify course transferability with the Collin academic advisor and/or the college or university that they plan to attend.

# **Biology**

The Associate of Science degree with Biology coursework provides an educational foundation to prepare students to pursue university studies leading to a bachelor's degree in a science-related field. Today, more than ever, an understanding of biology is critical to human life and the future of the planet. Fast-paced developments in medicine, genetics, and environmental issues can be bewildering without basic knowledge of biological science. An excellent instructional staff, computer-aided instruction, state-of-the-art laboratory facilities, and an emphasis on current research give students in Biology courses at Collin a personalized, high quality educational experience.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

#### **Recommended Electives**

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BIOL 1322	2 General Nutrition
BIOL 2389	Academic Co-op Biology
BIOL 2401	Anatomy and Physiology I
BIOL 2402	2 Anatomy and Physiology II
BIOL 2406	Environmental Biology
BIOL 2416	Genetics
BIOL 2421	Microbiology for Science Majors
CHEM 1411	General Chemistry I
CHEM 1412	2 General Chemistry II
CHEM 2423	Organic Chemistry I
CHEM 2425	Organic Chemistry II
HITT 1305	Medical Terminology I
MATH 1342	

PHYS	1401	College Physics I
PHYS	1402	College Physics II
PHYS	2425	University Physics I
PHYS	2426	University Physics II

# **Chemistry**

#### **Department Website:**

http://www.collin.edu/chemistry

The Associate of Science degree with Chemistry coursework establishes an academic foundation for further studies in the sciences. Courses include general chemistry and organic chemistry, as well as an introduction to chemistry designed for students who are novices in the science disciplines. Solving problems in chemistry requires creativity and curiosity, as well as logic and reasoning. An excellent instructional staff, computer-aided instruction, laboratory facilities, and current scientific literature give students in chemistry courses at Collin a personalized, high quality educational experience.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

#### Recommended Electives

recommende	d Liccuves
CHEM 2389	Academic Co-op Chemistry
CHEM 2423	Organic Chemistry I
CHEM 2425	Organic Chemistry II
MATH 2320	Differential Equations
MATH 2415	Calculus III
PHYS 2425	University Physics I
PHYS 2426	University Physics II

2017-18 Collin College Catalog, (Effective Spring 2018), Ed. 5. Rev. 10-12-17 Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

# **Computer Science Field of Study**

The Associate of Science degree with Computer Science coursework prepares students for work in a variety of related areas. In particular, students are prepared for transfer to a college or university where they can specialize in such disciplines as computer science and computer software engineering. The coursework for a Bachelor of Science degree in computer science is similar at most colleges and universities. However, the student is advised to consult an academic advisor when deciding upon which university to attend and which course of study to pursue.

Computer Science Field of Study (FOS) curriculum is a set of courses that will satisfy the lower division requirements for a bachelor's degree in a specific academic area at a baccalaureate institution. If a student successfully completes the Field of Study curriculum, that block of courses may be transferred to a baccalaureate institution. The FOS must be substituted for that institution's lower division requirements within the degree program for the Field of Study into which the student transfers. The student shall receive full academic credit toward the degree program for the FOS block of courses transferred.

Within the Computer Science FOS there are courses listed which will satisfy requirements for both the AS General Education Core and the FOS. There are two tracks offered in the FOS (C++ Track and Java Track). Both tracks cover the same fundamental theory and material but use different languages.

Upon completion of the Computer Science Field of Study curriculum, a certificate will be awarded to acknowledge completion and recognize preparedness to transition from an associate level to a baccalaureate (BA/BS) level, at any Texas public institution.

# **Certificate – Computer Science Field of Study**

30 credit hours

# Required General Education Core Courses 12 credit hours

MATH 2413 Calculus I<sup>1</sup>

PHYS 2425 University Physics I<sup>1</sup> PHYS 2426 University Physics II<sup>1</sup>

# Other Required Courses 18 credit hours

COSC 1436 Programming Fundamentals I (C++) <sup>2</sup>

COSC 2325 Computer Organization <sup>3</sup>

MATH 2414 Calculus II <sup>1</sup>

Select from one of the following tracks.

#### C++ Track Content Courses

COSC 1437 Programming Fundamentals II (C++) <sup>2</sup> COSC 2336 Programming Fundamentals III (C++) <sup>2</sup>

# Java Track Content Courses

COSC 1337 Programming Fundamentals II (Java) <sup>2</sup> COSC 2436 Programming Fundamentals III (Java) <sup>2</sup>

An Associate of Science may also be earned with the Computer Science Field of Study. To earn the AS degree, in addition to the Field of Study Certificate, complete the remaining General Education Core requirements:

- 1. It is recommended that students complete the math sequence, physics sequence, and computer science sequence at the same institution to reduce the likelihood of potential gaps in the curriculum.
- 2. COSC 1436 and COSC 1337/1437 are preparatory and sequential in nature; however, not all courses are required for the Computer Science major at all universities but may apply to general degree requirements.
  - a) COSC 1436 is not part of the Computer Science major requirements at The University of Texas at Austin, the University of Texas at Arlington, The University of Texas at Dallas, and Texas A&M University.
  - b) COSC 1337 and COSC 1437 are not part of the Computer Science major requirements at The University of Texas at Austin. Preparatory courses such as COSC 1436 and COSC 1337/1437 will assist students who need additional background but do not apply toward the computer science major requirements.
- 3. COSC 2325/2425 is not part of the Computer Science major requirements at The University of Texas at Austin, The University of Texas at Dallas, or Texas A&M University but may be applied to general degree requirements.

# **Engineering Field of Study**

An Associate of Science with an Engineering Field of Study requires 60 credit hours.

The Engineering Field of Study is preparation for a Bachelor of Science in several disciplines within the school of engineering at a college or university. The completed Engineering Field of Study is designed to transfer to any Texas public college or university. Upon completion of the Field of Study curriculum, a certificate will be awarded to acknowledge completion and recognize preparedness to transition from an associate level to a baccalaureate (BA/BS) level, at any Texas public institution.

# Certificate – Engineering Field of Study

29 credit hours

# Required General Education Core Courses 11 credit hours

MATH 2320 Differential Equations <sup>1</sup> PHYS 2425 University Physics I <sup>1</sup> PHYS 2426 University Physics II <sup>1</sup>

# Other Required Courses 18 credit hours

MATH 2413 Calculus II <sup>1</sup>
MATH 2414 Calculus II <sup>1</sup>
MATH 2415 Calculus III <sup>1</sup>

ENGR 2301 Engineering Mechanics I <sup>1</sup>

Select one of the following two courses:

ENGR 2302 Engineering Mechanics II <sup>1</sup> ENGR 2305 Electrical Circuits I <sup>1</sup>

To earn the AS degree, in addition to the Field of Study Certificate, complete the remaining <u>General Education</u> <u>Core</u> requirements.

# **Environmental Science**

# Department Website:

http://www.collin.edu/geology

Environmental science is a multidisciplinary field concerned with the interaction of processes that shape our natural environment, more specifically understanding the potential causes of environmental problems and possible solutions to them. Students pursuing an Associate of Science degree with coursework in Environmental Science will find that this field requires the understanding of a number of disciplines, including the biological, chemical, and physical sciences; occupational health and safety; engineering; economics; and law.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

ENVR 1401	Environmental Science I
ENVR 1402	Environmental Science II
BIOL 1406	Biology for Science Majors I
BIOL 1407	Biology for Science Majors II
BIOL 2406	Environmental Biology
CHEM 1411	General Chemistry I
GEOL 1403	Physical Geology
GEOL 1445	Oceanography
GEOL 1447	Introduction to Meteorology
MATH 1342	Elementary Statistical Methods
MATH 2413	Calculus I
PHYS 1401	College Physics I

# Geology

# **Department Website:**

http://www.collin.edu/geology

The science of geology seeks to understand the earth and the natural processes that act within the earth's environment. The basic concepts of geology overlap several disciplines within the natural sciences. Knowledge of geology provides a background for careers in natural resources, meteorology, energy, engineering, geophysics, the environmental field and education. The Associate of Science degree with coursework in geology prepares the student to pursue university studies leading to a Bachelor of Science Degree.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

#### **Recommended Electives**

GEOL 1305	Environmental Science –
	Natural Disasters
GEOL 1403	Physical Geology
GEOL 1404	Historical Geology
GEOL 1445	Oceanography
GEOL 1447	Introduction to Meteorology
GEOL 2389	Academic Co-op Geology
BIOL 2406	Environmental Biology
CHEM 1411	General Chemistry I
CHEM 1412	General Chemistry II
ENGL 2311	Technical and Business Writing
ENVR 1401	Environmental Science I
MATH 1342	Elementary Statistical Methods
MATH 2413	Calculus I
MATH 2414	Calculus II
PHYS 2425	University Physics I
PHYS 2426	University Physics II

# **Industrial Engineering**

Industrial Engineering is a very important area of engineering today. Industrial Engineers configure today's factories for efficiency, facilitate them to produce macrotechnologies (e.g. jet engines or turbines) or microtechnologies (e.g. nanotechnology or microprocessors). An Associate of Science degree with coursework in Industrial Engineering is a critical stepping-stone to an engineering education. The second step is a bachelor's degree from a college or university. In support of our Collin-Texas A&M University (TAMU)-Commerce Bachelor of Science in Industrial Engineering Articulation

Agreement, students should follow recommended electives that are consistent with the agreement.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

#### **Recommended Electives**

CHEM 1411	General Chemistry I <sup>1</sup>
COSC 1436	Programming Fundamentals I (C++) <sup>1</sup>
DFTG 1309	Basic Computer-Aided Drafting <sup>2</sup>
DFTG 2319	Intermediate Computer-Aided Drafting <sup>2</sup>
ENGR 1201	Introduction to Engineering <sup>2</sup>
ENGR 2301	Engineering Mechanics I <sup>1</sup>
ENGR 2302	Engineering Mechanics II <sup>1</sup>
ENGR 2305	Electrical Circuits I <sup>1</sup>
MATH 2414	Calculus II <sup>1</sup>

<sup>1.</sup> Please check prerequisites for this course.

# **Mathematics**

#### Department Website:

http://www.collin.edu/math

The Mathematics department offers courses that meet general mathematics requirements for associate degrees and for transfer and technical programs. More advanced courses prepare students for majors in mathematics, science, and engineering. Most courses include a graphing calculator or computer use, and lab components that emphasize applications of mathematical concepts. Collin features a mathematics laboratory providing personal, computer, and audio-visual tutorial assistance.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

MATH 1314 <sup>1</sup>	College Algebra
MATH 1316	Plane Trigonometry
MATH 1342	Elementary Statistical Methods
MATH 1414 <sup>1</sup>	College Algebra
MATH 2305	Discrete Mathematics
MATH 2318	Linear Algebra
MATH 2320	Differential Equations
MATH 2412	Pre-Calculus Math

<sup>2.</sup> This course will transfer to a specific 2+2 engineering program. Please check with your advisor to learn whether the course will transfer to the Industrial Engineering program of your choice.

MATH 2413	Calculus I
MATH 2414	Calculus II
MATH 2415	Calculus III
ENGL 2311	Technical and Business Writing
ENGL 23XX	Any Literature course
PHIL 2303	Introduction to Formal Logic

<sup>1.</sup> Students may take either MATH 1314 or MATH 1414, but not both.

# Physical Education/Kinesiology

Students may earn an Associate of Science degree with coursework in Physical Education by taking general studies electives that explore the inter-relatedness of several fields of study. Physical skills and knowledge are acquired through the physical education activity and theory classes. Offerings in the humanities, social sciences and biological sciences also prepare the student for a career in physical education.

# **Athletic Training**

Athletic training encompasses the prevention, diagnosis, and intervention of emergency, acute and chronic medical conditions involving impairment, functional limitations, and disabilities. Athletic trainers function under a physician's direction and are employed in a variety of settings including: athletic facilities, schools, clinics, hospitals, physician's offices, sports venues and more.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

# **Recommended Electives**

Recom	menaec	Electives
BIOL	1322	Nutrition and Diet Therapy
PHED	1142	Varsity Conditioning I
PHED	1144	Varsity Sports I
PHED	1304	Personal / Community Health
PHED	1306	First Aid
PHED	1338	Concepts of Physical Fitness
PHED	2142	Varsity Conditioning II
PHED	2144	Varsity Sports II
PHED	2156	Taping and Bandaging
PHED	2356	Care and Prevention of Athletic Injuries

# **General Physical Education**

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

#### **Recommended Electives**

PHED	1301	Foundations of Kinesiology
PHED	1304	Personal / Community Health
PHED	1306	First Aid
PHED	1336	Introduction to Sports Management
PHED	1338	Concepts of Physical Fitness

# **Sports Management**

"Sports Management" refers to the business and operations side of the sports industry. In college athletics or professional sports organizations, for example, sports management professionals may be found performing a wide variety of tasks, including marketing, advertising, ticket sales, ordering and maintaining equipment and supplies, public relations, team travel coordination and ensuring compliance with league rules.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

PHED	1301	Foundations of Kinesiology
PHED	1336	Introduction to Sports Management
ACCT	2301	Principles of Financial Accounting
<b>ECON</b>	2301	Principles of Macroeconomics
ECON	2302	Principles of Microeconomics

# **Physics**

# Department Website:

http://iws.collin.edu/mbrooks/physics/

The science of physics seeks to understand the physical universe and deals with the behavior of matter and energy at the most fundamental level. By observation, physicists search for the basic principles that explain natural phenomena. The concepts of physics overlap many disciplines. Knowledge of physics provides a strong background for careers in science, engineering, computer technology, or education.

The Associate of Science degree with coursework in Physics prepares the student to pursue university studies leading to a bachelor's degree. The basic AS program, with coursework at the general physics level, prepares students for further education in fields such as biology, medicine, or secondary education. Students seeking a bachelor's degree in fields such as physics, engineering, or computer science will require the more advanced mathematics and physics General Education Core options.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

To earn an associate degree, complete the 42 credit hour General Education Core, and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

#### Recommended Electives

MATH 2320 Differential Equations MATH 2412 Pre-Calculus Math MATH 2415 Calculus III	MATH 2412	Pre-Calculus Math
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# **General Physics Level**

Students seeking baccalaureate degrees in biology or premedicine should select general physics courses.

### **University Physics Level**

Students seeking advanced degrees in science and engineering fields should select advanced levels of physics and mathematics courses (such as the courses listed below) for the AS degree.

PHYS 2425	University Physics I
PHYS 2426	University Physics II
MATH 2413	Calculus I
MATH 2414	Calculus II

# WORKFORCE EDUCATION PROGRAMS

# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS)

The Associate of Applied Science degree (AAS) is awarded upon completion of a prescribed program of study designed to prepare students to enter and compete in the job market. Eighteen credit hours must be earned in residency at Collin College. AAS curricula enable the graduate to enter an occupation with marketable skills, an acceptable level of technical competency, and the ability to communicate effectively. In addition, an AAS degree helps prepare students for life-long learning.

# **AAS Degree Plan Requirements**

AAS degrees require 60-68 credit hours with at least half of the coursework in a technical specialty area of the degree. All AAS degrees require a minimum of 15 credit hours of general education.

# GENERAL EDUCATION COMPONENT

The 15 credit hours of general education coursework must be distributed as follows:

- At least three semester credit hours from humanities/fine arts;
- At least three semester credit hours from social/ behavioral sciences; and,
- At least three semester credit hours from natural sciences/ mathematics.

Faculty select the general education courses in each workforce degree to complement the technical courses in the area of study. Some AAS degree plans allow students to choose from a selection of specified courses to meet their general education requirements. See the specific degree plan for general education requirements. If options are listed in the degree plan, refer to the table of AAS General Education Courses to view the available course choices.

(See the table of AAS General Education Courses on the next page.)

# **AAS GENERAL EDUCATION COURSES**

SEE SPECIFIC DEGREE PLAN FOR REQUIRED COURSES OR ANY OPTIONS. REFER TO THIS TABLE ONLY IF THE DEGREE PLAN INDICATES OPTIONS ARE AVAILABLE OR THAT STUDENTS MAY SELECT AN ALTERNATIVE TO THE COURSE LISTED.

Natural Sciences / Mathematics Area		
Mathematics	MATH 1314 or 1414, 1316, 1324, 1325, 1332*, 1342, 1350, 1351, 2305, 2318, 2320, 2412, 2413, 2414, 2415	
Biology	BIOL 1406, 1407, 1408, 1409, 1414, 1415, 2401, 2402, 2404, 2406, 2416, 2420, 2421	
Chemistry	CHEM 1405, 1411, 1412, 2423, 2425	
Environmental Science	ENVR 1401, 1402	
Geology	GEOL 1401, 1402, 1403, 1404, 1445, 1447	
Physics	PHYS 1401, 1402, 1403, 1404, 1405, 1410, 1415, 1417, 2425, 2426	
Humanities / Fine Arts Area		
Dance	DANC 2303	
English	ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343	
History	HIST 2311, 2312, 2321, 2322	
Humanities	HUMA 1301	
Music	MUSI 1306, 1307, 1310	
Philosophy	PHIL 1301, 1304, 2303, 2306, 2307, 2321	
Theatre	DRAM 1310, 2361, 2362, 2366, 2367	
Visual Arts	ARTS 1301, 1303, 1304, 1313	

<sup>\*</sup> Check with academic advising regarding transferability. Some majors or institutions may require a higher level mathematics course.

Social / Behavioral Sciences Area	
Anthropology	ANTH 2302, 2346, 2351
Economics	ECON 1301, 2301, 2302
Government	GOVT 2305, 2306
History	HIST 1301, 1302, 2301
Psychology	PSYC 2301
Sociology	SOCI 1301, 1306

SPEECH COURSES	
SEE THE SPECIFIC DEG DETERMINE IF THERE REQUIREMENT. NOT A PLANS HAVE THIS REQ	IS ANY SPEECH ALL AAS DEGREE
Speech	SPCH 1311, 1315, 1321

# **Workforce Certificate Programs**

In addition to the Associate of Applied Science workforce degrees, Collin College offers a variety of certificates in applied science fields.

Collin offers certificate programs designed to meet specific employment needs of the community. Students who enroll in certificate programs are generally interested in re-entering the job market after an absence, changing careers, or upgrading job-related skills in order to enhance employment specialization. Although certificates are normally one year in length, the specific number of credit hours varies by program area.

A Level One Certificate consists of 15-42 credit hours. Students in Level One Certificates are not required to meet the Texas Success Initiative (TSI) requirements. Level One Certificates do not have a general education requirement.

Level Two Certificate programs consist of 30-51 credit hours. Students in all Level Two Certificates must meet the requirements of the Texas Success Initiative (TSI). An Occupational Skills Award (OSA) is a sequence of credit courses totaling 9-14 credit hours. An Enhanced Skills Certificate (ESC) requires the completion of an AAS or higher degree prior to completing 6-12 additional credit hours in a specific program area.

# **Workforce Program Career Clusters**

Career Clusters contain occupations in the same field of work that require similar skills. Use Career Clusters to view the programs offered by Collin College to help identify programs in similar occupations. Educational plans for programs in a shared career cluster will provide the necessary knowledge, competencies, and training for success in a particular career pathway. Collin College educational opportunities are listed for credit programs. On the web, simply click on the program name to access more information about it. If using the printed catalog, detail about credit programs will be found in an alphabetical listing of program names labeled with the appropriate career cluster. Details about related continuing education options may be found by accessing Collin's Continuing Education website at http://www.collin.edu/ce/

For more information about Career Clusters, see: Texas Workforce Commission Texas Cares http://www.texascaresonline.com/clusters/clusters.asp

The National Career Clusters<sup>TM</sup> Framework website <a href="http://careerlink.com/students/career-clusters/">http://careerlink.com/students/career-clusters/</a>
Collin College offers credit programs and continuing education opportunities in 15 career clusters:

- Architecture & Construction
- Arts, A/V Technology, & Communications
- Business Management & Administration
- Education &Training
- Finance
- Government & Public Administration
- Health Science
- Hospitality & Tourism
- Human Services
- Information Technology
- Law, Public Safety, Corrections & Security
- Manufacturing & Energy

# WORKFORCE PROGRAMS BY CAREER CLUSTER



# **Credit Programs and Awards**

# Computer-Aided Drafting and Design

AAS – Computer-Aided Drafting and Design OSA – AutoCAD

Certificate Level 1 – Computer-Aided Drafting and Design Certificate Level 1 – Advanced Computer Aided-Drafting and

# **Green Interior Design**

AAS – Green Interior Design

OSA – Green Interior Design Certificate Level 1 – Green Interior Design

Certificate Level 1 – Advanced Green Interior Design

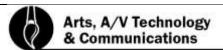
# Welding

AAS - Welding

- Welding Technology Track
- Foundry/Metalsmithing Track

Certificate Level 1 – Welding Technology Certificate Level 1 – Foundry/Metalsmithing

- Metal Sculpting Focus
- Foundry Metalsmithing Focus



# Credit Program and Awards

#### Animation & Game Art

Also see Video Production

AAS – Animation & Game Art

Certificate Level 1 – Animation & Game Art

Certificate Level 3 – ESC – Advanced Animation & Game Art Production

# **Graphic Design**

AAS – Graphic Design

Certificate Level 1 – Graphic Design

Certificate Level 3 – ESC – Advanced Design Illustration

Certificate Level 3 – ESC – Motion Graphics

Certificate Level 3 – ESC – User Experience Design

### Music, Commercial

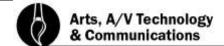
Also see Associate of Arts – Music Field of Study an academic transfer

AAS - Commercial Music

Certificate Level 1 - Audio Engineering

- Studio Track
- Live Sound Track

Certificate Level 2 – Music Business



continued

# Photography, Commercial

Also see Associate of Arts – Photography for academic transfer coursework.

AAS - Commercial Photography

Certificate Level 1 – Studio Production

Certificate Level 2 - Commercial Photography Specialist

#### Video Production

Also see Animation & Game Art

AAS - Video Production

Certificate Level 1 - Video Production



# **Credit Programs and Awards**

# **Business Management**

AAS - Business Management

- Business Management Track
- Human Resources Management Track

Certificate Level 1 - Business Management

Certificate Level 1 – Human Resources Management

# **Business Office Support Systems**

AAS – Business Office Support Systems

OSA – Accounting Support

OSA – Business Office Support Systems

Certificate Level 1 – Business Office Support Systems

Certificate Level 1 – Medical Office Support

# Real Estate

AAS - Real Estate

Certificate Level 1 – Real Estate Salesperson\*

\*Credit and Continuing Education Real Estate courses may be taken concurrently



# Credit Programs and Awards

### Child Development

Also see Child Development / Early Childhood and Associate of Arts in Teaching (AAT)

AAS - Child Development

OSA - Child Development Administration of Programs for Children

OSA - Child Development Associate Training

Certificate Level 1 – Child Development Associate

Certificate Level 1 - Child Development

# Child Development / Early Childhood

Also see Child Development and

Associate of Arts in Teaching (AAT)

Certificate Level 1 – Early Childhood Educator

Certificate Level 1 - Infant and Toddler Educator



# Credit Programs and Awards

# Dental Hygiene

AAS - Dental Hygiene

# Diagnostic Medical Sonography

AAS - Diagnostic Medical Sonography

# Health Information Management

Also see Health Professions / Medical Coding and Billing AAS – Health Information Management

# Health Information Management/ Medical Coding and Billing

Also see Health Professions

Certificate Level 1 - Medical Coding and Billing

## **Health Professions**

See Also Health Information Management Certificate – Medical Coding and Billing

AAS - Health Professions

- Certified Nurse Aide (CNA) Track
- Electrocardiograph Technician (EKG) Track
- Emergency Medical Technician (EMT) Track
- Patient Care Technician (PCT) Track
- Phlebotomy Technician (PHLEB) Track

OSA – Health Professions

- Certified Nurse Aide (CNA) Track
- Electrocardiograph Technician (EKG) Track
- Phlebotomy Technician (PHLEB) Track

OSA - Patient Care Technician

Certificate Level 1 - Health Professions

- Certified Nurse Aide (CNA) Track
- Electrocardiograph Technician (EKG) Track
- Patient Care Technician (PCT) Track
- Phlebotomy Technician (PHLEB) Track

Certificate Level 1 – Emergency Medical Technician (EMT)

# Nursing (RN)

AAS - Nursing (RN)

Nursing (RN) Bridge for LVN / Paramedic / Medic

#### Polysomnographic Technology

AAS - Polysomnographic Technology

Certificate Level 1 – Polysomnographic Technology

# **Respiratory Care**

AAS - Respiratory Care

### Surgical Technology

AAS – Surgical Technology

Certificate Level 1 – Central Sterile Processing



# Hospitality & Tourism

# Credit Programs and Awards

# **Culinary Arts**

Also see Pastry Arts

AAS – Culinary Arts

Certificate Level 1 – Culinary Arts

Certificate Level 1 - Advanced Culinary Arts

# Hospitality and Food Service Management

AAS - Hospitality and Food Service Management

- Hotel / Restaurant Management Track
- Meetings and Event Management Track

Certificate Level 1 – Hotel / Restaurant Management Certificate Level 1 – Meetings and Event Management

# Pastry Arts

Also see Culinary Arts

AAS - Pastry Arts

Certificate Level 1 - Pastry Arts

Certificate Level 1 – Advanced Pastry Arts



# **Credit Programs and Awards**

# Interpreter Education Program (IEP)

Also see Associate of Arts – American Sign Language for academic transfer coursework

AAS – Interpreter Education Program (IEP)

Certificate Level 1 - ASL Studies

Certificate Level 3 – ESC – Interpreting in Medical Settings



# Credit Programs and Awards

# Computer Networking

AAS - Computer Networking

- Data Technologies Track with LAN/WAN focus
- Infrastructure Track with Cisco focus
- Systems Track with Microsoft focus

OSA – All Tracks: Entry-Level Network Support Technician

Data Technologies Track - with LAN/WAN focus

Certificate Level 1 – Enterprise Services Technician

Certificate Level 1 – Data Services Professional

Certificate Level 2 - Enterprise Services Professional

Infrastructure Track - with Cisco focus

Certificate Level 1 – Enterprise Network Field-Support Technician

Certificate Level 1 – Computer Networking Support Technician (CCNA)

Certificate Level 2 – Enterprise Network Professional

Certificate Level 3 – ESC – Enhanced Network Professional

Systems Track — with Microsoft focus

Certificate Level 1 – Systems Technician

 $\label{eq:computer Networking Technology Software} \ensuremath{\text{(MCSA)}}$ 

Certificate Level 2 – Enterprise Systems Professional

Certificate Level 3 – ESC – Enhanced Network Professional



continued

# **Computer Systems**

AAS - Computer Systems

- Computer Support Track
- Information System Track
- Database Development Track

OSA - Computer Applications

OSA - Help Desk Support

Certificate Level 1 – Computer Support

Certificate Level 2 – Information System

Certificate Level 2 – Database Development

# **E-Business Development**

AAS – E-Business Development

- E-Business Track
- Web Development Track
- C# .NET Development Track
- Mobile Application Development Track

OSA – Web Commerce

Certificate Level 1 - E-Business Development

- E-Commerce Track
- Web Development Track

Certificate Level 1 - Mobile Application Development

Certificate Level 2 – C# .NET Development

# Geospatial Information Science (GIS)

AAS – Geospatial Information Science (GIS)

Certificate Level 1 – Geospatial Information Science (GIS)

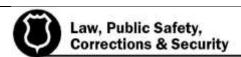
# **Information Systems Cybersecurity**

AAS - Information Systems Cybersecurity

Certificate Level 1 – Information Systems Cybersecurity

Certificate Level 1 – CISSP Information Systems Cybersecurity

Professional



# **Credit Programs and Awards**

# **Emergency Medical Services Professions**

AAS – Emergency Medical Services Professions

OSA - Emergency Medical Services Professions

Certificate Level 1 - Advanced EMT

Certificate Level 1 - Paramedic

### Fire Academy

Also see Fire Science

AAS - Basic Firefighter Certification

Certificate Level 1 - Basic Firefighter

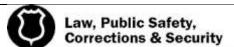
# Fire Science

Also see Fire Academy

AAS - Fire Officer Certification

OSA - Fire Officer Candidate

Certificate Level 1 - Fire Officer



continued

# Paralegal / Legal Assistant

AAS - Paralegal / Legal Assistant

Certificate Level 2 - Paralegal General

# Police Academy

Also see Continuing Education Basic Peace Officer program Certificate Level 1 - Basic Peace Officer



# **Credit Programs and Awards**

# Electronic Engineering Technology

AAS - Electronic Engineering Technology Certificate Level 2 – Electronic Engineering Technology

#### **HVAC**

AAS – HVAC (Heating, Ventilation, Air Conditioning Certificate Level 1 – HVAC (Heating, Ventilation, Air Conditioning Certificate Level 2 - HVAC (Heating, Ventilation, Air Conditioning



# **Credit Programs and Awards**

# Marketing

AAS - Marketing

Certificate Level 1 - Marketing

Certificate Level 1 – Entrepreneurship



# Science, Technology, Engineering & Mathematics

# **Credit Programs and Awards**

Biotechnology

Certificate Level 2 - Biotechnology



### **Credit Programs and Awards**

Supply Chain Management

AAS - Supply Chain Management Certificate Level 1 - Purchasing Certificate Level 1 – Logistics

# WORKFORCE DEGREE PLANS BY PROGRAM

The listing of degree plans that provide the specific requirements for each degree or certificate award is alphabetical. Each unique program is marked with the icon representing the career cluster to which that program belongs. For example, the Biotechnology program is marked with the icon that shows a beaker and test tube, representing lab work associated with the Biotechnology field.



# **Animation & Game Art**

Also see Video Production

## **Program Options:**

AAS – Animation & Game Art
Certificate Level 1 – Animation & Game Art
Certificate Level 3 – ESC – Advanced Animation
& Game Art Production

For over twenty years, the Communication Design department (formerly Applied Graphic Design Technology) at Collin has offered industry-standard education in the creative service fields of animation, digital video, graphic design, web and interactive design. All full-time faculty have industry experience and all associate faculty are practicing professionals. Current industry practices and standards are a central component of classroom instruction. There is an elective option for the most diligent students to earn credit through local industry internships. Guest speakers from industry are featured regularly.

The 3-D Animation Track emphasizes creative concept development and technical skills in the execution of 3-D animation and 3-D still imagery for advertising, industrial visualization, entertainment and corporate communication. The Game Art Track emphasizes concept development for games as well as 2-D and 3-D art and animation skills for the computer gaming industry. Students will also learn level design and the integration of high-end 3-D computer graphics with game engines in a group project environment.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

# AAS – Animation & Game Art

60 credit hours

## FIRST YEAR

First Se	emester	
ARTC	1305	Basic Graphic Design
ARTC	1325	Introduction to Computer Graphics
ARTV	1345	3-D Modeling and Rendering I
ARTV	1371	Storyboard and Concept
		Development
<b>ENGL</b>	1301	Composition I
FLMC	1301	History of Animation Techniques

#### Second Semester

ARTC 1302	Digital Imaging I
ARTV 1341	3-D Animation I
FLMC 1331	Video Graphics and Visual Effects I
GAME 1303	Introduction to Game Design and
	Development
GEN ED	Mathematics / Natural Sciences
	course

#### SECOND YEAR

# First Semester

ARTV 1303	Basic Animation
ARTV 2345	3-D Modeling and Rendering II
GAME 2325	3-D Animation II – Character
	Set-Up
GEN ED	<u>Humanities / Fine Arts</u> course
GEN ED ARTV 1351	Humanities / Fine Arts course Digital Video
_	

### Second Semester

occoma ocmics	ici
ARTV 2335	Portfolio Development for
	Animation (Capstone)
ARTV 2351	3-D Animation II
GEN ED	Social / Behavioral Sciences course
<u>SPCH</u> <u>1311</u>	Introduction to Speech
	<u>Communication</u>
	(See Speech Options)

# Certificate Level 1 – Animation & Game Art

42 credit hours

### FIRST YEAR

### First Semester

ARTC	1325	Introduction to Computer Graphics
ARTV	1345	3-D Modeling and Rendering I
ARTV	1371	Storyboard and Concept
		Development
FLMC	1301	History of Animation Techniques

# **Second Semester**

ARTV 1303 Basic Animation	
ARTV 1341 3-D Animation I	
FLMC 1331 Video Graphics and Visual	
Effects I	
GAME 1303 Introduction to Game Design	and
Development	

### SECOND YEAR

#### First Semester

ARTV 2345	3-D Modeling and Rendering II
GAME 2325	3-D Animation II – Character
	Set-Up
ARTV 1351	Digital Video
or	
GAME 2359	Game and Simulation Group Projec

# **Second Semester**

ARTV	2335	Portfolio Development for
		Animation (Capstone)
ARTV	2351	3-D Animation II

# Certificate Level 3: ESC – Advanced Animation & Game Art Production <sup>1</sup>

12 credit hours

ELECTIVE \*

ARTV 2371	Advanced Skill Development
	for Animation and Games
FLMC 2331	Video Graphics and Visual
	Effects II
ELECTIVE *	

- 1. Prior to being admitted into this award, the student must have earned an AAS in Animation & Game Art, Graphic Design, or Video Production. Please contact the Associate Dean for additional information.
- \* Elective (6 credit hours): ARTC-2305, GAME-2309, GAME-2336, GAME-2341, MUSC-1327



# Program Option: Certificate Level 2 – Biotechnology

Collin's Biotechnology Program prepares students for entry level positions in biological research and industrial laboratories. Returning students can also benefit from the new methods and technologies related to agriculture, medicine, pharmaceuticals, and other applications.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

# Certificate Level 2 – Biotechnology 27 credit hours

Students must be TSI complete.

BIOL 1414 and BIOL 1415 will transfer to a specific 2+2 baccalaureate program. Please check with your advisor to learn whether these courses will apply to the four-year program of your choice.

#### First Semester

BIOL	1406	Biology for Science Majors I
BIOL	1414	Introduction to Biotechnology I
BIOL	1415	Introduction to Biotechnology II
CHEM	1411	General Chemistry I

# Second Semester

BIOL 2416 Genetics <sup>1</sup>

BITC 2386 Internship - Biology Technician /

Biotechnology Laboratory Technician

(Capstone) <sup>2</sup>

BITC 2431 Cell Culture Techniques

1. May substitute BIOL-2421 or CHEM-2423

2. May substitute BITC-2441



# **Department Website:**

http://www.collin.edu/department/business/

# Program Options: AAS - Business Management

Business Management Track Human Resources Management Track

Certificate Level 1 – Business Management Certificate Level 1 – Human Resources Management

Business management is no longer a field just for people who desire to be managers. Organizations are giving all individuals within their structures more responsibility than before and requiring more knowledge of them.

Collin's Business Management degree provides students the ability to relate with others, the skills to work in teams, the knowledge to initiate change, and the experience to solve problems in the workplace. Topics include basic management philosophies and theories, organizational psychology, as well as, business strategy development, implementation and evaluation skills. This degree is also excellent for people who wish to major in another field but need business and management skills.

Through transfer agreements, students may earn their Associate of Applied Science (AAS) degree in Business Management from Collin and transfer to numerous universities in Texas where Collin courses may be applied toward Bachelor of Applied Arts and Sciences (BAAS) and Bachelor of Applied Technology (BAT) degrees.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

# **AAS – Business Management Business Management Track**

60 credit hours

FIRST YEAR		FIRST YEAR		
First Semester		First Semester	•	
BMGT 1307	Team Building	BMGT 1341	Business Ethics	
BMGT 1327	Principles of Management	BMGT 2303	Problem Solving and Decision	
BMGT 1341	Business Ethics		Making	
BMGT 2303	Problem Solving and Decision	HRPO 2303	Employment Practices	
	Making	HRPO 2304	Employee Relations	
MATH 1342	Elementary Statistical Methods	MATH 1342	Elementary Statistical Methods	
	(See Mathematics options)		(See Mathematics options)	
Second Semes	ter	Second Semester		
BMGT 1305	Communications in Management	BMGT 1305	Communications in Management	
BMGT 1344	Negotiations and Conflict	BMGT 1344	Negotiations and Conflict	
	Management		Management	
BMGT 2309	Leadership	HRPO 2306	Benefits and Compensation	
HRPO 2307	Organizational Behavior	HRPO 2307	Organizational Behavior	
MRKG 1311	Principles of Marketing	MRKG 1311	Principles of Marketing	
SECOND YE	AR	SECOND YE	AR	
First Semester		First Semester	•	
BUSG 2309	Small Business Management /	BUSG 2309	Small Business Management /	
Entrepreneurship			Entrepreneurship	
ENGL 1301	Composition I	ENGL 1301	Composition I	
HRPO 2301	Human Resources Management	HRPO 2301	Human Resources Management	

# **Second Semester**

IBUS 2341

SPCH 1321

ACNT 1303	Introduction to Accounting I 1
BMGT 2311	Change Management
BMGT 2341	Strategic Management
	(Capstone) <sup>2</sup>
ECON 1301	Introduction to Economics <sup>3</sup>
GEN ED	<u>Humanities / Fine Arts</u> course

Communication

(See Speech options)

Intercultural Management Business and Professional

- 1. May substitute ACCT 2301
- 2. May substitute BMGT 2382 with written approval of the Associate Dean
- 3. May substitute ECON 2301, ECON 2302 or PSYC 2301

# Second Semester

IBUS 2341

SPCH 1321

ACNT 1303	Introduction to Accounting I <sup>1</sup>
BMGT 2311	Change Management
BMGT 2341	Strategic Management (Capstone) <sup>2</sup>
ECON 1301	Introduction to Economics <sup>3</sup>
GEN ED	Humanities / Fine Arts course

Communication

(See Speech options)

Intercultural Management

Business and Professional

**AAS – Business Management Human Resources Management Track** 

60 credit hours

- 1. May substitute ACCT 2301
- 2. May substitute BMGT 2382 with written approval of the Associate Dean
- 3. May substitute ECON 2301, ECON 2302 or PSYC 2301

# Certificate Level 1 – Business Management

18 credit hours

#### First Semester

BMGT 1307 Team Building

BMGT 1327 Principles of Management

BMGT 1341 Business Ethics

#### Second Semester

BMGT 2303 Problem Solving and

Decision Making

BMGT 2309 Leadership

HRPO 2307 Organizational Behavior

(Capstone)

# Certificate Level 1 – Human Resources Management

18 credit hours

# FIRST YEAR

First Semester

BMGT 1344 Negotiation and Conflict

Resolution

HRPO 2301 Human Resources Management

HRPO 2304 Employee Relations

### Second Semester

HRPO 2303 Employee Practices

HRPO 2306 Benefits and Compensation HRPO 2307 Organizational Behavior

(Capstone)



#### Department Website:

www.collin.edu/department/boss

### **Program Options:**

AAS – Business Office Support Systems

OSA - Accounting Support

OSA – Business Office Support Systems

Certificate Level 1 – Business Office Support

Systems

Certificate Level 1 - Medical Office Support

The **Business Office Support Systems** Program is designed to incorporate both the technical and behavioral aspects of careers in the general or medical fields. Areas of study include: office keyboarding; word processing, desktop publishing; proofreading and editing; records and information management; business correspondence and communications; database, presentation, and spreadsheet software; office management; and manual and computerized office accounting.

Some of the courses required for this AAS degree are also excellent preparation for the experienced secretary who plans to take the Certified Professional Secretary exam. The secretary who has already passed the CPS exam may apply for academic credit from Collin to be applied toward the AAS degree in Business Office Support Systems.

Students planning to transfer to a college or university should check with the Collin academic advisor. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

AAS – Business	Office	<b>Support</b>
Systems		

60 credit hours

# First Semester

ACNT 1303	Introduction to Accounting I
POFT 1307	Proofreading and Editing
POFT 1319	Records and Information
	Management I
POFT 1329	Beginning Keyboarding

#### **Second Semester**

COSC 1	301	Introduction to Computing 1
ENGL 1	301	Composition I
POFI 2	2301	Word Processing – MS Word
POFT 2	2301	Intermediate Keyboarding

# Summer Semester

Summer Semester		
HUMA 1301	Introduction to Humanities I	
	(See <u>Humanities / Fine Arts</u> options)	
<u>SPCH</u> <u>1311</u>	Introduction to Speech	
	Communication	
	(See Speech options)	

# SECOND YEAR

#### First Semester

ACNT	1311	Introduction to Computerized
		Accounting
ITSC	1309	Integrated Software Applications I –
		MS Office
POFI	2331	Desktop Publishing for the Office -
		MS Office
POFT	2303	Speed and Accuracy Building

### **Second Semester**

<b>ECON</b>	<u>1301</u>	Introduction to Economics
		(See Social / Behavioral Sciences
		options)
ITSW	1304	Introduction to Spreadsheets – Excel
ITSW	1310	Introduction to Presentation
		Graphics Software <sup>2</sup>
<b>MATH</b>	1332	Contemporary Mathematics
		(Quantitative Reasoning) 3

## **Summer Semester**

POFT	1349	Administrative Office Procedures II
		(Capstone)
POFT	2312	Business Correspondence and
		Communication

- 1. May substitute BCIS 1305
- 2. May substitute HITT 1305 or HITT 1353
- 3. May substitute MATH 1324 or MATH 1314

# **OSA – Accounting Support**

12 credit hours

## First Semester

ACNT	1303	Introduction to Accounting I
ACNT	1311	Introduction to Computerized
		Accounting
ITSC	1309	Integrated Software
		Applications I – MS Office
POFT	1329	Beginning Keyboarding

# OSA – Business Office Support Systems

12 credit hours

### First Semester

ITSC	1309	Integrated Software
		Applications I – MS Office
POFI	2301	Word Processing
POFT	1319	Records and Information
		Management I
POFT	1329	Beginning Keyboarding

# Certificate Level 1 – Business Office Support Systems

30 credit hours

### First Semester

ACNT 1303	Introduction to Accounting I 1
POFT 1307	Proofreading and Editing
POFT 1319	Records and Information
	Management I
POFT 1329	Beginning Keyboarding

# Second Semester

ITSC	1309	Integrated Software
		Applications I – MS Office
POFI	2301	Word Processing – MS Word
POFT	2301	Intermediate Keyboarding
POFT	2303	Speed and Accuracy Building

### **Summer Semester**

POFT	1349	Administrative Office Procedures I
		(Capstone)
POFT	2312	Business Correspondence and
		Communication

1. May substitute ACNT 1311

# Certificate Level 1 – Medical Office Support

30 credit hours

# First Semester

HITT	1305	Medical Terminology I
POFT	1307	Proofreading and Editing
POFT	1319	Records and Information
		Management I
POFT	1329	Beginning Keyboarding

#### Second Semester

HITT	1353	Legal and Ethical Aspects
		of Health Information
ITSC	1309	Integrated Software
		Applications I – MS Office
POFI	2301	Word Processing – MS Word
POFT	2301	Intermediate Keyboarding

#### Summer Semester

POFT	1349	Administrative Office
		Procedures II (Capstone)
POFT	2312	Business Correspondence
		and Communication



Also see Child Development / Early Childhood and Associate of Arts in Teaching (AAT)

#### **Program Options:**

AAS - Child Development

OSA - Child Development Administration of Programs for Children

OSA - Child Development Associate Training Certificate Level 1 - Child Development Certificate Level 1 - Child Development Associate

Collin's Child Development program has received accreditation from the National Association for the Education of Young Children (NAEYC). It is the only program in Texas to have NAEYC accreditation and to also hold Exemplary Status with the Texas Higher Education Coordinating Board. The Child Development degree and certificate programs are designed to prepare individuals for continued coursework at a four-year university and for entrylevel positions working with young children and their families.

The coursework can also be applicable as in-service training for teachers, administrators, nannies, and family day home providers. A developmental approach is emphasized which promotes optimal physical, social, emotional, and cognitive growth of children. Students learn management skills that allow them to provide quality programs in safe, nurturing environments.

The Child Development Associate (CDA) program provides performance-based training of childcare professionals who work with children from birth through age five. These caregivers demonstrate their ability to nurture children's physical, social, emotional, and intellectual growth in a child development framework.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability. Students who wish to obtain a bachelor's degree in Child Development should know that Texas Woman's University (TWU) accepts Collin College's AAS in Child Development and need to check with an advisor at TWU.

Note 1: TECA is the prefix for transfer courses.

Note 2: All CDEC and TECA courses, except

TECA-1354, require the student to complete a weekly one-hour lab component.

#### **Program Requirements**

To participate in the Child Development Lab School and receive credit for the lab component of courses, the following requirements must be met:

1. Enroll in a Collin child development course. Click on the correct lab manual on the Child Development and Education Program website at:

<u>http://iws.collin.edu/childdevelopment</u> related to the course the student is enrolled.

- 2. Within the first week of the first child development course, students must complete a mandatory child development-early childhood-education orientation and provide paperwork necessary to begin class, including, but not limited to, a copy of acceptable tuberculosis test results. Continuing students must submit acceptable tuberculosis results every year.
- 3. Complete and sign a student record form as a contract to ensure the following:
  - Verification that the student has read and agrees to abide by the Texas Minimum Standards for child care centers

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- Verification that the student has read and agrees to follow the laboratory student guidelines
- Information provided to a criminal history check by the Texas Department of Protective and Regulatory Services
- Provide a notarized affidavit that confidentiality and professional discretion will be observed at all times
- Personal release for videotaping for instructional purposes
- Complete a Degree Plan (two-part document found on Collin's website under Getting Started / Admissions / Forms or in the Admissions Office) and submit to an advisor

College records should always contain current personal information. It is the student's responsibility to keep this information current.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

# AAS – Child Development

60 credit hours

# FIRST YEAR

First Semester	
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Child Guidance
Observation and Assessment
Composition I
Educating Young Children
Child Growth and Development

# Second Semester

occoma ocinics	ICI
CDEC 1270	Introduction to Teaching ESL
EDUC 1300	Learning Frameworks
<u>GEN ED</u>	Social / Behavioral Sciences
	course
SPCH 1311	Introduction to Speech
	Communication
	(See Speech Options)
TECA 1303	Families, School, and Community
	•

#### SECOND YEAR

#### First Semester

CDEC 1313	Curriculum Resources for
	Early Childhood Programs
CDEC 1359	Children with Special Needs
CDEC 2304	Child Abuse and Neglect
CDEC 2371	Using Technology in the
	Classroom
TECA 1318	Wellness of the Young Child
ELECTIVE *	

#### Second Semester

CDEC 1358	Creative Arts for Early
	Childhood
CDEC 2166	Practicum - Child Care
	Provider / Assistant (Capstone)
GEN ED	Humanities / Fine Arts course
GEN ED	Mathematics / Natural Sciences
	course

ELECTIVE \*

# OSA – Child Development Administration of Programs for Children

9 credit hours

CDEC 2326	Administration of Programs
	for Children I
CDEC 2328	Administration of Programs
	for Children II
CDEC 2336	Administration of Programs
	for Children III

Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

# OSA – Child Development Associate Training

9 credit hours

CDEC 1317	Child Development Associate
	Training I
CDEC 2322	Child Development Associate
	Training II
CDEC 2324	Child Development Associate
	Training III

Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

<sup>\*</sup> Electives (6 credit hours): CDEC-1317, CDEC-1321, CDEC-1385, CDEC-2307, CDEC-2322, CDEC-2324, CDEC-2326, CDEC-2328, CDEC-2336, or CDEC-2340

# Certificate Level 1 – Child Development

27 credit hours

### FIRST YEAR

### First Semester

CDEC 1313	Curriculum Resources for
	Early Childhood Programs
CDEC 1323	Observation and Assessment
TECA 1311	Educating Young Children
TECA 1318	Wellness of the Young Child
TECA 1354	Child Growth and Development
Second Semes	ter
CDEC 1319	Child Guidance
CDEC 1359	Children with Special Needs
CDEC 1270	Introduction to Teaching ESL
CDEC 2166	Practicum - Child Care
	Provider / Assistant (Capstone)
TECA 1303	Families, School and Community

# Certificate Level 1 – Child Development Associate

16 credit hours

CDEC	1317	Child Development
		Associate Training I
CDEC	2166	Practicum - Child Care Provider /
		Assistant (Capstone)
CDEC	2322	Child Development Associate
		Training II
CDEC	2324	Child Development Associate
		Training III
TECA	1318	Wellness of the Young Child
TECA	1354	Child Growth and Development



Also see Child Development and Associate of Arts in Teaching (AAT)

# **Program Options:**

Certificate Level 1 - Early Childhood Educator Certificate Level 1 - Infant and Toddler Educator

Collin's Child Development-Early Childhood program has received accreditation from the National Association for the Education of Young Children (NAEYC). It is the only program in Texas to have NAEYC accreditation and to also hold Exemplary Status with the Texas Higher Education Coordinating Board. The Child Development A.A.S. degree and child development and child development-early childhood certificate programs are designed to prepare individuals for entry-level and administrative positions working with young children and their families. The coursework can also be applicable as in-service training for teachers, administrators, nannies, and family day home providers. A developmental approach is emphasized which promotes optimal physical, social, emotional, and cognitive growth of children. Students learn management skills that allow them to provide quality programs in safe, nurturing environments.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability. You may wish to look into the Associate of Arts in Teaching degree.

Note 1: TECA is the prefix for transfer courses.

Note 2: All CDEC and TECA courses, except

TECA-1354, require the student to complete a weekly one-hour lab component.

### **Program Requirements**

To participate in the Child Development Lab School and receive credit for the lab component of courses, the following requirements must be met:

1. Enroll in a Collin child development course. Click on the correct lab manual on the Child Development and Education Program website at:

<u>http://iws.collin.edu/childdevelopment</u> related to the course the student is enrolled.

- 2. Within the first week of the first child development course, students must complete a mandatory child development-early childhood-education orientation, and provide paperwork necessary to begin class, including, but not limited to, a copy of acceptable tuberculosis test results. Continuing students must submit acceptable tuberculosis results every year.
- 3. Complete and sign a student record form as a contract to ensure the following:
  - Verification that the student has read and agrees to abide by the Texas Minimum Standards for child care centers
  - Verification that the student has read and agrees to follow the laboratory student guidelines
  - Information provided to a criminal history check by the Texas Department of Protective and Regulatory Services

2017-18 Collin College Catalog, (Effective Spring 2018), Ed. 5. Rev. 10-12-17 Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

- Provide a notarized affidavit that confidentiality and professional discretion will be observed at all times
- Personal release for videotaping for instructional purposes

Our records should always contain current personal information. It is the student's responsibility to keep this information current.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

# Certificate Level 1 – Early Childhood Educator

(This certificate covers Special Education from Infancy through the School-Age child.)

28 credit hours

### First Semester

CDEC	1319	Child Guidance
CDEC	1323	Observation and Assessment
CDEC	1359	Children with Special Needs
TECA	1311	Educating Young Children
TECA	1354	Child Growth and Development

#### Second Semester

CDEC	2166	Practicum - Child Care
		Provider / Assistant (Capstone)
CDEC	2304	Child Abuse and Neglect
CDEC	2340	Instructional Techniques for
		Children with Special Needs
TECA	1303	Families, School, and Community
TECA	1318	Wellness of the Young Child

# Certificate Level 1 – Infant and Toddler Educator

25 credit hours

#### First Semester

CDEC	1321	The Infant and Toddler
CDEC	1323	Observation and Assessment
CDEC :	2304	Child Abuse and Neglect
TECA	1303	Families, School, and Community
TECA	1311	Educating Young Children

### **Second Semester**

CDEC	1359	Children with Special Needs
CDEC	2166	Practicum - Child Care Provider /
		Assistant (Capstone)
TECA	1318	Wellness of the Young Child
TECA	1354	Child Growth and Development
		*



# **Computer Networking**

# **Program Options:**

AAS - Computer Networking

- Integrated Networking Technologies Track
- o Infrastructure Track
- Systems Track

Occupational Skills Award (OSA) – Entry-Level Network Support (Shared by all tracks)

# **Integrated Networking Technologies Track**

Certificate Level 1 – Integrated
Networking Cloud Technician
Certificate Level 1 – Integrated
Networking Virtualization and
Storage Technician
Certificate Level 2 – Integrated
Networking Administrator
Certificate Level 3 – Networking
Systems Professional (CCNP)
(Shared by Integrated Networking
Technologies and Systems Tracks)

#### Infrastructure Track (Cisco focus)

Certificate Level 1 – Infrastructure Technician (CCNA) Certificate Level 1 – Wireless Infrastructure Technician Certificate Level 2 – Infrastructure Administrator

# Systems Track (Microsoft focus)

Certificate Level 1 – Systems Software
Technician (MCSA)
Certificate Level 1 – Systems Technician
Certificate Level 2 – Systems
Administrator
Certificate Level 3 – Networking
Systems Professional (CCNP)
(Shared by Integrated Networking
Technologies and Systems Tracks)

The Computer Networking program prepares graduates who will be able to design and install secure network systems based on customer requirements, monitor and maintain network traffic and security, and maintain network hardware and software. Courses and hands-on labs in this program will assist the graduate in preparing to take a variety of Cisco, Microsoft, and CompTIA certification examinations.

The Computer Networking – Infrastructure track prepares graduates to design and install secure network systems with a focus on managing network devices. Courses and hands-on labs in this track specifically prepare students for the Cisco Certified Network Associate (CCNA) the Cisco Certified Network Professional (CCNP) professional certification exams.

The Computer Networking – Systems track prepares graduates to design and secure network systems with a focus on managing servers. Courses and hands-on labs in this track prepare students for the Microsoft Certified Solutions Associate – Server 2016, and the Cisco Certified Entry-level Technician (CCENT).

The Computer Networking – Integrated Networking Technologies track prepares graduates to design and secure network systems with a focus on cloud, storage, and virtualization networking technologies. Courses and hands-on labs in this track prepare students for the broad spectrum of networking technologies and help prepare students for the Cisco Certified Entry-level Technician (CCENT) as well as Information Storage Management (EMC), and VmWare vSphere certification among others.

Students planning to transfer to a college or university should check with a Collin academic advisor prior to beginning the program.

Many of the CPMT, ITCC, ITMT, ITNW, ITSC, and ITSY courses are offered in eight-week express sessions.

		* Electiv		and it have
	mputer Networking Networking Technologies	CPMT 1		credit hours) IT Essentials I: PC Hardware and Software Recommended for students with limited IT
60 Credit Hou	rs	ITCC 2	2312	CCNA 3: Scaling Networks Recommended with ITCC 2313
FIRST YEAR		ITCC 2	2313	CCNA 4: Connecting Networks Recommended with ITCC 2312
First Semeste	r Network+	ITSC 1	1342	Shell Programming – Scripting New option to meet industry demand
ITCC 1314	CCNA 1: Introduction to Networks			iven option to meet industry demand
ITCC 1340	CCNA 2: Routing and Switching Essentials	Any ITC above.	C, ITN	MT, ITNW, or ITSY course not listed
ITNW 1370	Cloud+ Computing Essentials			
<u>GEN</u> <u>ED</u>	Mathematics course	– or the for the C	CCNL CCNP	2 (CCNA 3) and ITCC 2313 (CCNA 4) A professional certification – are prerequisites courses in the concurrent or postgraduate
Second Seme				ls Certificate, but are not part of the Integrated
ITNW 1351 ITCC* 2312	Fundamentals of Wireless LANS CCNA 3: Scaling Networks Preferred elective; see other options*	Technolo	ogies de <sub>i</sub>	gree track unless they are selected as electives.
ITSC 1316	Linux Installation and Configuration			mputer Networking
ITCC* 2313	CCNA 4: Connecting Networks Preferred elective; see other options*	Infrast 60 Credit		ure Track (Cisco focus)
ITCC 2341	CCNA Security	FIRST Y	VEAR	
0r	F 1 1 27 6	First Ser		
ITSY 1300	Fundamentals of Information Security (Security +)	ITNW 1 ITCC 1	1358 1314	Network+ CCNA 1: Introduction to Networks
SECOND YE	CAR		1340	CCNA 2: Routing and Switching Essentials
First Semeste		ITNW 1	1351	Fundamentals of Wireless LANS
ITSY 2300	Operating System Security	GEN EI		Mathematics course
ENGL 1301	Composition I		_	
ITMT 1373	Networking with Windows Server 2016	Second S	Semes	ster
<u>SPCH</u> <u>1321</u>	Business and Professional	ENGL 1		Composition I
<u> 51 C11 1521</u>	Communication	ITCC 2		CCNA Security
ITMT 1372	Installation, Storage and		2312	CCNA 3: Scaling Networks
	Computing with Windows Server		2313	CCNA 4: Connecting Networks
	2016	ELECTI	IVE *	
Second Seme	ster	Summer	r Semo	ester
ITNW 2373	Information Storage	<u>GEN ED</u>	<u>)</u>	Social / Behavioral Sciences
11111 4515	Management (EMC)			course
ITNW 2375	VmWare vSphere:	<u>GEN</u> <u>ED</u>	<u>)</u>	<u>Humanities / Fine Arts</u> course
	Installation, Configuration	CECON	D ME	A D
	and Management	SECON First Se		
ITNW 2376	Advanced Topics in		meste: 2354	r CCNP R&S ROUTE
	Computer Systems Networking	TTCC 2	2 <i>22</i> 4	COND DOCCOUNT CH

and Collaborative Technologies

<u>Humanities / Fine Arts</u> course

Social / Behavioral Sciences Course

(Capstone)

<u>GEN</u> ED

GEN ED

ITCC

ITMT 1372

ITSY 2300

2355

CCNP R&S SWITCH

Server 2016

Installation, Storage and

Computing with Windows

Operating System Security

Second Semes	ster	Summer Ser	nester
ITCC 2356	CCNP R&S TSHOOT	GEN ED	Social / Behavioral
1100 2550	(Capstone)	GEN ED	Sciences course
SDCH 1221	Business and Professional	ENCI 1201	
<u>SPCH 1321</u>		<u>ENGL</u> <u>1301</u>	Composition I
ITMT 1373	Communication	CECOND V	EAD
11M1 13/3	Networking with Windows	SECOND Y	
ELECTIVE *	Server 2016	First Semest	
ELECTIVE *		GEN ED	Mathematics course
<b>₩ 171</b>	1. 1	ITSC 1316	
* Electives (6			Configuration
CPMT 1305	IT Essentials I: PC Hardware and	ITSY 2300	1 6 3
	Software Recommended for	<u>SPCH</u> 1321	Business and Professional
THIS CO. LEVE	students with limited IT		Communication
ITSC 1342	Shell Programming – Scripting		
	New option to meet industry	Second Sem	ester
	demand	ITMT 2305	Designing and Implementing a
Any ITCC, ITI	MT, ITNW or ITSY course not listed		Server Infrastructure
above.		ITMT 2304	Implementing and Advanced
			Server Infrastructure (Capstone)
	2 (CCNA 3) and ITCC 2313 (CCNA 4)	GEN ED	Humanities / Fine Arts course
– or the CCN	A professional certification — are prerequisites	ELECTIVE	
for the CCNP.		ELECTIVE	
		ELECTIVE	
	mnutar Natworking		
	mputer Networking	* Electives	(9 credit hours)
Systems Tr	ack (Microsoft focus)	CPMT 1305	IT Essentials I: PC Hardware
60 Credit Hour	rs ·	C1W1 1505	and Software Recommended for
			students with limited IT
FIRST YEAR		ITCC 2312	
First Semester	r	1100 2312	Recommended with ITCC 2313
ITNW 1358	Network+	ITCC 2313	
ITMT 1371	Configuring and Supporting	1100 2313	Recommended with ITCC 2312
	Microsoft Windows 10 (70-698)	ITSC 1342	
ITMT 1372	Installation, Storage and	1130 1342	8 8 1 8
	Computing with Windows	ITNW 1351	New course to meet industry demand
	Server 2016	111NW 1551	Fundamentals of Wireless LANS
ITCC 1314	CCNA 1: Introduction to	TTCC 22.41	Highly Recommended
	Networks	ITCC 2341	CCNA Security
ITCC 1340	CCNA 2: Routing and	A TTCC T	Highly Recommended
	Switching Essentials	2 1	TMT, ITNW, or ITSY course not listed
	0	above.	
Second Semes	ster	Notes ITCC 2	312 (CCN 1/2) and ITCC 2312 (CCN 1/4)
ITMT 1373	Networking with Windows		312 (CCNA 3) and ITCC 2313 (CCNA 4) NA professional certification – are
	Server 2016		
		prerequisites j	for the CCNP.
ITMT 1374	Identity with Windows		
ITMT 1374	Identity with Windows Server 2016		
	Server 2016	OSA	
ITMT 1374 ITCC* 2312	Server 2016 CCNA 3: Scaling Networks		ov all tracks
ITCC* 2312	Server 2016 CCNA 3: Scaling Networks Preferred elective; see other options*	– Shared l	oy all tracks
	Server 2016 CCNA 3: Scaling Networks Preferred elective; see other options* Fundamentals of Information	– Shared l Entry-Lev	el Network Support
ITCC* 2312 ITSY 1300	Server 2016 CCNA 3: Scaling Networks Preferred elective; see other options* Fundamentals of Information Security (Security +)	– Shared l	el Network Support
ITCC* 2312	Server 2016 CCNA 3: Scaling Networks Preferred elective; see other options* Fundamentals of Information Security (Security +) CCNA 4: Connecting Networks	- Shared I Entry-Lev 9 credit hours	rel Network Support
ITCC* 2312 ITSY 1300	Server 2016 CCNA 3: Scaling Networks Preferred elective; see other options* Fundamentals of Information Security (Security +)	– Shared l Entry-Lev	rel Network Support  IT Essentials I: PC Hardware and
ITCC* 2312 ITSY 1300	Server 2016 CCNA 3: Scaling Networks Preferred elective; see other options* Fundamentals of Information Security (Security +) CCNA 4: Connecting Networks	- Shared I Entry-Lev 9 credit hours CPMT 1305	IT Essentials I: PC Hardware and Software
ITCC* 2312 ITSY 1300	Server 2016 CCNA 3: Scaling Networks Preferred elective; see other options* Fundamentals of Information Security (Security +) CCNA 4: Connecting Networks	- Shared I Entry-Lev 9 credit hours CPMT 1305 ITNW 1358	IT Essentials I: PC Hardware and Software Network+
ITCC* 2312 ITSY 1300	Server 2016 CCNA 3: Scaling Networks Preferred elective; see other options* Fundamentals of Information Security (Security +) CCNA 4: Connecting Networks	- Shared I Entry-Lev 9 credit hours CPMT 1305	IT Essentials I: PC Hardware and Software Network+ Fundamentals of Information
ITCC* 2312 ITSY 1300	Server 2016 CCNA 3: Scaling Networks Preferred elective; see other options* Fundamentals of Information Security (Security +) CCNA 4: Connecting Networks	- Shared I Entry-Lev 9 credit hours CPMT 1305 ITNW 1358	IT Essentials I: PC Hardware and Software Network+

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# **Integrated Networking Technologies Track**

# **Certificate Level 1**

- Integrated Networking Technologies Track

# **Integrated Networking Cloud Technician**

18 Credit Hours

#### FIRST YEAR

#### First Semester

ITNW	1358	Network+
ITCC	1314	CCNA 1: Introduction to
		Networks
ITCC	1340	CCNA 2: Routing and
		Switching Essentials

#### Second Semester

ITSY	2300	Operating System Security
ITNW	1351	Fundamentals of Wireless
		LANS (Capstone)
ITNW	1370	Cloud+ Computing Essentials

# **Certificate Level 1**

# - Integrated Networking Technologies Track

# **Integrated Networking Virtualization** and **Storage Technician**

18 Credit Hours

# FIRST YEAR

First Se	emester	
ITNW	1358	Network+

11111	1550	I TOUR OTH .
ITNW	1370	Cloud+ Computing Essentials
ITMT	1372	Installation, Storage and
		Computing with Windows
		Server 2016

### Second Semester

ITMT	1373	Networking with Windows
		Server 2016
ITNW	2373	Information Storage
		Management (EMC)
ITNW	2375	VmWare vSphere: Installation,
		Configuration and
		Management (Capstone)

# **Certificate Level 2**

# Integrated Networking TechnologiesTrack

# **Integrated Networking Administrator**

45 Credit Hours

# FIRST YEAR

First Se	emester	
ITNW	1358	Network+
ITCC	1314	CCNA 1: Introduction to
		Networks
ITCC	1340	CCNA 2: Routing and Switching
		Essentials
ITNW	1370	Cloud+ Computing Essentials
Second	Semest	ter
ITSY	2300	Operating System Security
ITMT	1372	Installation, Storage and
		Computing with Windows
		Server 2016
ITCC*	2312	CCNA 3: Scaling Networks
		Preferred elective; see other
		options*
ITCC*	2313	CCNA 4: Connecting Networks
		Preferred elective; see other

# SECOND YEAR

#### First Semester

ITNW	1351	Fundamentals of Wireless LANS
ITSC	1316	Linux Installation and
		Configuration
ITMT	1373	Networking with Windows
		Server 2016
ITCC	2341	CCNA Security
or		•
ITSY	1300	Fundamentals of Information
		Security (Security +)

options\*

#### **Second Semester**

11NW 23/3	Information Storage Management
	(EMC)
ITNW 2375	VmWare vSphere: Installation,
	Configuration and Management
ITNW 2376	Advanced Topics in Computer
	Systems Networking and
	Collaborative Technologies
	(Capstone)

# \* Electives (6 credit hours)

CPMT 1305 IT Essentials I: PC Hardware
And Software Recommended for
students with limited IT

# **Certificate Level 2**

# - Integrated Networking Technologies Track

# \* Electives (continued)

	<del></del>		
ITCC	2312	CCNA 3: Scaling Networks	
		Recommended with ITCC 2313	
ITCC	2313	CCNA 4: Connecting Networks	
		Recommended with ITCC 2312	
ITSC	1342	Shell Programming – Scripting	
		New option to meet industry	
		demand	
ITCC	2341	CCNA Security	
		Highly Recommended	

Any ITCC, ITMT, ITNW, or ITSY course not listed above.

Note: ITCC 2312 (CCNA 3) and ITCC 2313 (CCNA 4)

– or the CCNA professional certification – are prerequisites
for the CCNP courses in the concurrent or postgraduate
Enhanced Skills Certificate, but are not part of the Integrated
Technologies degree track unless they are selected as electives.

# Certificate Level 3

# Shared by Integrated Networking Technologies Track and Systems Track

# Networking Systems Professional (CCNP)

9 Credit Hours

# FIRST YEAR

#### First Semester

ITCC	2354	CCNP R&S ROUTE
ITCC	2355	CCNP R&S SWITCH
ITCC	2356	CCNP R&S TSHOOT

Note: CCNA 3 and CCNA 4 – or the professional certification – are prerequisites for the CCNP courses but are not part of the degree tracks unless they are selected as electives.

# **Infrastructure Track (Cisco focus)**

# **Certificate Level 1**

# - Infrastructure Track

# Infrastructure Technician (CCNA)

18 Credit Hours

#### FIRST YEAR

### First Semester

ITNW	1358	Network+
ITCC	1314	CCNA 1: Introduction to
		Networks
ITCC	1340	CCNA 2: Routing and Switching
		Essentials

#### Second Semester

ITCC	2341	CCNA Security
ITCC	2312	CCNA 3: Scaling Networks
		(Capstone)
ITCC	2313	CCNA 4: Connecting Networks

# Certificate Level 1

# - Infrastructure Track

# Wireless Infrastructure Technician

18 Credit Hours

#### FIRST YEAR

#### First Semester

IINW	1358	Network+
ITCC	1314	CCNA 1: Introduction to
		Networks
ITCC	1340	CCNA 2: Routing and Switching
		Essentials

### **Second Semester**

ITNW	1351	Fundamentals of Wireless LANS
ITCC	2341	CCNA Security
ITSY	2300	Operating System Security

## **Certificate Level 2**

## - Infrastructure Track

#### Infrastructure Administrator

45 Credit Hours

#### FIRST YEAR

#### First Semester

ITNW 1358 Network+ ITCC 1314 CCNA 1: Introduction to Networks ITCC 1340 CCNA 2: Routing and Switching

Essentials Fundamentals of Wireless LANS ITNW 1351

#### **Second Semester**

ITCC 2341 **CCNA Security** ITCC 2312 CCNA 3: Scaling Networks ITCC 2313 CCNA 4: Connecting Networks ELECTIVE \*

#### SECOND YEAR

#### First Semester

ITCC 2354 CCNP R&S ROUTE CCNP R&S SWITCH ITCC 2355 Installation, Storage and ITMT 1372 Computing with Windows Server 2016 ITSY 2300 Operating System Security

#### **Second Semester**

ITCC 2356 CCNP R&S TSHOOT (Capstone) ITMT 1373 Networking with Windows Server 2016 ELECTIVE \*

#### \* Electives (6 credit hours)

CPMT 1305 IT Essentials I: PC Hardware and Software Recommended for students with limited IT ITSC 1342 Shell Programming – Scripting New option to meet industry demand CCNA Security Highly ITCC 2341 Recommended

Any ITCC, ITMT, ITNW, or ITSY course not listed above.

## **Systems Track (Microsoft focus)**

## Certificate Level 1

- Systems Track

## Systems Software Technician (MCSA)

18 Credit Hours

#### FIRST YEAR

#### First Semester

ITNW 1358 Network+ ITMT 1371 Configuring and Supporting Microsoft Windows 10 (70-698) ITMT 1372 Installation, Storage and Computing with Windows

Server 2016

#### Second Semester

ITMT	1373	Networking with Windows
		Server 2016
ITMT	1374	Identity with Windows
		Server 2016 (Capstone)
ITSY	1300	Fundamentals of Information
		Security (Security +)

## **Certificate Level 1**

## Systems Track

## **Systems Technician**

24 Credit Hours

#### FIRST YEAR

### First Semester ITNW 1358

,,,,	1000	1 100 11 0111
ITMT	1371	Configuring and Supporting
		Microsoft Windows 10 (70-698)
ITMT	1372	Installation, Storage and
		Computing with Windows
		Server 2016
ITCC	1314	CCNA 1: Introduction to
		Networks

Network+

#### Second Semester

occome	Cilico	tC1
ITCC	1340	CCNA 2: Routing and Switching
		Essentials
ITMT	1373	Networking with Windows
		Server 2016
ITMT	1374	Identity with Windows
		Server 2016 (Capstone)
ITSY	1300	Fundamentals of Information
		Security (Security +)

			ITCC	2313	CCNA 4: Connecting Networks Recommended with ITCC 2312
Cert	ificato	e Level 2			
	tems T		ITSC	1342	Shell Programming – Scripting New option to meet industry demand
	<b>ms Ad</b> dit Hour	<b>ministrator</b> s	ITNW		Fundamentals of Wireless LANS Highly Recommended
	' YEAR emester		ITCC	2341	CCNA Security Highly Recommended
ITNW		Network+	Any IT	CC ITN	MT, ITNW, or ITSY course not listed
ITMT		Configuring and Supporting Microsoft Windows 10 (70-698)	above.	33,111	,, 0
ITMT	1372	Installation, Storage and Computing with Windows Server 2016	- or t	he CCN	2 (CCNA 3) and ITCC 2313 (CCNA 4) A professional certification – are prerequisites courses in the concurrent or postgraduate
ITCC	1314	CCNA 1: Introduction to Networks	Enha	nced Skill	ls Certificate, but are not part of the Systems less they are selected as electives.
Second	1 Semes	tor	Cort	ificat	e Level 3
	1340	CCNA 2: Routing and Switching Essentials	– Sha	red by	Integrated Networking
ITCC*	2312	CCNA 3: Scaling Networks  Preferred elective; see other			gies Track and Systems Track
ITMT	1373	options* Networking with Windows Server 2016	(CCN	_	Systems Professional
ITSY	1300	Fundamentals of Information	, 0100	110010	
		Security (Security +)	FIRST	'YEAR	
0000	NID NID	A.D.	First S	emester	t
	ND YE		ITCC	2354	CCNP R&S ROUTE
ITCC*	emester 2313	CCNA 4: Connecting Networks Preferred elective; see other	ITCC	2355 2356	CCNP R&S SWITCH CCNP R&S TSHOOT
ITMT ITSC	1374 1316	options* Identity with Windows Server 2016 Linux Installation and Configuration	certific	ration – a ort of the S	and CCNA 4 — or the professional re prerequisites for the CCNP courses but are systems degree track unless they are selected as
Second	1 Semes	ter			
ITSY	2300	Operating System Security		<b>C</b> -	
ITMT	2305	Designing and Implementing a Server Infrastructure		Coi	nputer Systems
	2304	Implementing and Advanced Server Infrastructure (Capstone)		m Opti	
ELECT	IIVE*				ter Systems oort Track
* Elect		credit hours) IT Essentials I: PC Hardware	Inform Datal	nation Sys base Deve	stem Track lopment Track
		and Software Recommended for students with limited IT	OSA –	Help D	iter Applications Desk Support vel 1 – Computer Support
ITCC	2312	CCNA 3: Scaling Networks Recommended with ITCC 2313	Certifi	cate Lev	vel 2 – Computer Support vel 2 – Information System vel 2 – Database Development
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2017-18 Collin College Catalog, (Effective Spring 2018), Ed. 5. Rev. 10-12-17 Please refer to http://www.collin.edu/academics/programs/index.html for the most current information. Computer Systems is an exciting field that presents many opportunities for a student who is proficient in applications, support, and/or database development. The rapid spread of computers and information technology has generated a need for highly-trained workers to design and develop new information systems that use these technologies to meet the needs of the business organization. The skills acquired in this program will enable the student to solve problems that are encountered when working in this everchanging and growing field. These skills include planning and developing new computer systems while applying the resources of existing systems to additional operations.

This degree program offers tracks in information systems, computer support and database development. Areas of study include business applications, business programming, management skills, database programming, computer applications and technical skills. The degree can provide a broad business background and professional skills needed to succeed in a career in computer information systems.

Three certificates are offered, which can be applied toward the AAS degree. The certificates provide the knowledge to update current job requirements. After successfully completing a certificate, students can continue toward an AAS degree in Computer Systems.

Two Occupational Skills Awards are also offered, providing quick acknowledgement of success with minimum coursework. After successfully completing an award, students can continue to work toward a certificate and then an AAS degree.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

## AAS – Computer Systems Computer Support Track

60 credit hours

## FIRST YEAR

First	Semester
-------	----------

BCIS 1305	Business Computer Applications
ECON 1301	Introduction to Economics
	(See Social / Behavioral Sciences
	Options)
ENGL 1301	Composition I
ITSC 1305	Introduction to PC
	Operating Systems
GEN ED	Mathematics course

#### **Second Semester**

CPMT 1305	IT Essentials I: PC Hardware
	and Software
ITSE 1311	Beginning Web Programming
ITSW 1304	Introduction to Spreadsheets – Excel
GEN ED	<u>Humanities / Fine Arts</u> course
GEN ED	Speech course

#### SECOND YEAR

#### First Semester

ENGL 2311	Technical and Business Writing
ITNW 1358	Network+
ITSW 1307	Introduction to Database
	– Access
ITSW 1310	Introduction to Presentation
	Graphics Software
MRKG 1301	Customer Relationship
	Management <sup>1</sup>

#### Second Semester

COSC	1315	Introduction to Computer
		Programming <sup>2</sup>
ITSC	2339	Personal Computer Help
		Desk Support
ITSC	2380	Cooperative Education –
		Computer and Information
		Sciences, General (Capstone) <sup>3</sup>
ITSE	1301	Web Design Tools – Graphics
ITSY	1300	Fundamentals of Information
		Security (Security+)

- 1. May substitute BMGT-1307 or BMGT-1344
- 2. May substitute COSC-1436
- 3. May substitute INEW-2330

## AAS – Computer Systems Information System Track

60 credit hours

-		* ***	
ни	ST	YE	ΑR

First Se	emester	
BCIS	1305	<b>Business Computer Applications</b>
<b>ECON</b>	<u>1301</u>	Introduction to Economics
		(See Social / Behavioral Sciences
		Options)
<b>ENGL</b>	<u>1301</u>	Composition I
ITSW	1310	Introduction to Presentation

Graphics Software

Mathematics course

#### **Second Semester**

GEN ED

COSC	1315	Introduction to Computer
		Programming <sup>1</sup>
ITSE	1311	Beginning Web Programming
ITSW	1304	Introduction to Spreadsheets
		– Excel
GEN E	ED_	<u>Humanities / Fine Arts</u> course
GEN ED		Speech course

## SECOND YEAR

#### First Semester

BMGT 130	07 T	eam Building
ENGL 23	11 T	echnical and Business Writing
IMED 230	)9 Ir	nternet Commerce 2
ITNW 135	58 N	letwork+
ITSW 130	)7 Ir	ntroduction to Database
	_	Access

#### **Second Semester**

ITSC	2380	Cooperative Education –
		Computer and Information
		Sciences, General (Capstone) <sup>3</sup>
ITSE	2309	Database Programming –
		SQL
ITSY	1300	Fundamentals of Information
		Security (Security +)
BUSIN	IESS EI	LECTIVE <sup>4</sup>
TECH	NICAL	ELECTIVE 5

- 1. May substitute COSC-1436
- 2. May substitute GISC-1411
- 3. May substitute INEW-2330
- 4. Any BMGT, BUSG, BUSI, IBUS course not listed above, excluding any Cooperative Education or Software Project course
- 5. Any COSC, GISC, IMED, ITCC, ITMT, ITNW, ITSC, or ITSE course not listed above, excluding any Cooperative Education or Software Project course

## AAS – Computer Systems Database Development Track

60 credit hours

FIRST VI	$\Xi AR$

First Se	emester	
COSC	1315	Introduction to Computer
		Programming <sup>1</sup>
<b>ECON</b>	<u>1301</u>	Introduction to Economics
		(See Social / Behavioral Sciences
		Options)
ITSW	1304	Introduction to Spreadsheets
		– Excel
ITSW	1307	Introduction to Database
		- Access
<u>MATH</u>	<u>1324</u>	Mathematics for Business and
		Social Sciences
		(See Mathematics options)

#### **Second Semester**

COSC 1337	Programming Fundamentals II
	(Java) <sup>2</sup>
ENGL 1301	Composition I
ITNW 1358	Network+
ITSE 2309	Database Programming – SQL
MATH 1342	Elementary Statistical Methods

#### SECOND YEAR

#### First Semester

ENGL 2311	Technical and Business Writing
ITSE 1311	Beginning Web Programming
ITSE 2370	Descriptive Analytics
ITSW 2370	SAS Programming
<u>GEN ED</u>	Speech course

#### Second Semester

ITSC	2380	Cooperative Education - Computer and Information
		Sciences, General (Capstone) <sup>3</sup>
ITSE	2347	Advanced Database
		Programming
ITSE	2354	Advanced Oracle PL/SQL
ITSY	1300	Fundamentals of Information
		Security (Security+)
GEN 1	ED	Humanities / Fine Arts course

- 1. May substitute COSC-1436
- 2. May substitute COSC-1437
- 3. May substitute INEW-2330

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## **OSA – Computer Applications**

9 credit hours

ITSW	1304	Introduction to Spreadsheets – Excel
ITSW	1307	Introduction to Database – Access
ITSW	1310	Introduction to Presentation
		Graphics Software

Note: Some of the courses in these award programs may require prerequisites. Please check the course descriptions.

## OSA – Help Desk Support

12 credit hours

CPMT	1305	IT Essentials I: PC Hardware
		and Software
ITNW	1358	Network+
ITSC	1305	Introduction to PC Operating
		Systems
ITSC	2339	Personal Computer Help Desk
		Support

Note: Some of the courses in these award programs may require prerequisites. Please check the course descriptions.

## **Certificate Level 1 – Computer Support**

30 credit hours

#### **Summer Semester**

ITSE	1311	Beginning Web Programming
ITSW	1304	Introduction to Spreadsheets – Excel

## First Semester

${\rm CPMT}$	1305	IT Essentials I: PC Hardware
		and Software
ITNW	1358	Network+
ITSC	1305	Introduction to PC Operating
		Systems
ITSW	1310	Introduction to Presentation
		Graphics Software

#### **Second Semester**

ITSC	2339	Personal Computer Help Desk
		Support
ITSC	2380	Cooperative Education –
		Computer and Information
		Sciences, General (Capstone) <sup>1</sup>
ITSY	1300	Fundamentals of Information
		Security (Security+)
MRKC	G 1301	Customer Relationship Management <sup>2</sup>

1. May substitute INEW-2330

2. May substitute BMGT-1307 or BMGT-1344

# **Certificate Level 2 – Information System**

30 credit hours

Students must be TSI complete.

#### **Summer Semester**

BCIS	1305	<b>Business Computer Applications</b>
COSC	1315	Introduction to Computer
		Programming

#### **First Semester**

IMED	2309	Internet Commerce <sup>1</sup>
ITNW	1358	Network+
ITSW	1304	Introduction to Spreadsheets
		– Excel
ITSW	1310	Introduction to Presentation
		Graphics Software

#### Second Semester

BMGT	1307	Team Building <sup>2</sup>
ITSC	2380	Cooperative Education –
		Computer and Information
		Sciences, General (Capstone) <sup>3</sup>
ITSW	1307	Introduction to Database
		– Access
ITSY	1300	Fundamentals of Information
		Security (Security+)

1. May substitute GISC-1411

2. May substitute BMGT-1344 or BUSI-1301

3. May substitute INEW-2330

# Certificate Level 2 – Database Development

30 credit hours

Students must be TSI complete.

#### Summer Semester

ITSW	1304	Introduction to Spreadsheets
		– Excel
ITSW	1307	Introduction to Database
		- Access

First Semester			
COSC 1315	Introduction to Computer		
	Programming <sup>1</sup>		
ITNW 1358	Network+		
ITSE 2309	Database Programming – SQL		
ITSW 2370	SAS Programming		
MATH 1342	Elementary Statistical Methods		

#### **Second Semester**

ITSE 2347 Advanced Database

Programming (Capstone)
Advanced Oracle PL/SOL

ITSE 2354 Advanced Oracle PL/SQL ITSY 1300 Fundamentals of Information

Security (Security+)

1. May substitute COSC-1436



# Computer-Aided Drafting and Design

#### **Program Options:**

AAS – Computer-Aided Drafting and Design OSA – AutoCAD

Certificate Level 1 – Computer-Aided Drafting and Design

Certificate Level 1 – Advanced Computer-Aided Drafting and Design

High-tech industries are constantly creating new career opportunities in exciting, highly specialized fields. The degree opportunities in Computer-Aided Drafting and Design (CADD) provide both an educational foundation in computer-aided design and insight into current industry practices. Students in Collin's intensive CADD hands-on training program are taught the skills a designer, CADD operator, architect, or engineer needs for successful CADD operations.

Students planning to transfer to a college or university should check with the Collin academic advisor. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

# AAS – Computer-Aided Drafting and Design

60 credit hours

#### FIRST YEAR

## First Semester

DFTG 1309 Basic Computer-Aided Drafting

ENGL 1301 Composition I MATH 1314 College Algebra

(See Mathematics / Natural Sciences

options)

SPCH 1321 Business and Professional

Communication (See Speech options)

#### **Second Semester**

DFTG 1372 SOLIDWORKS Essentials DFTG 2319 Intermediate Computer-Aided

Drafting

DFTG 2328 Architectural Drafting

- Commercial

MATH 1316 Plane Trigonometry

#### Summer

GEN ED

<u>Humanities / Fine Arts</u> course

**ELECTIVE \*** 

## SECOND YEAR

## First Semester

DFTG 1317	Architectural Drafting – Residential
DETEC 1000	3.5.1. 1. 1.75. 61

DFTG 1333 Mechanical Drafting

DFTG 2373 Advanced SOLIDWORKS

PHYS 1401 College Physics I

#### **Second Semester**

DFTG 2350 Geometric Dimensioning

and Tolerancing (Capstone) 1

DFTG 2432 Advanced Computer-Aided

Drafting<sup>2</sup>

PHYS 1402 College Physics II

GEN ED Social / Behavioral Sciences

course

1. May substitute DFTG 2381

2. May substitute COSC 1436

**2.** 1.129 the think 0.000 1.150

\* Elective Pathways (3 credit hours).

Architectural Options: ARCE 1352 or ARCE 2352

Civil Options: DFTG 2321 or GISC 1411

Mechanical Options: RBTC 1305

General Options: DFTG 1371, COSC 1315, DFTG

1345, ENGL 2311 or ENTC 1323

## OSA - AutoCAD

9 credit hours

This program prepares students to design and draft in 2 dimensions and 3 dimensions. Also, students will be taught how to customize AutoCAD to enhance productivity.

Prerequisite: Basic computer skills. Having working knowledge of geometry will be a plus for students.

#### FIRST YEAR

#### First Semester

DFTG 1305 Technical Drafting

DFTG 1309 Basic Computer-Aided Drafting

#### Second Semester

DFTG 2319 Intermediate Computer-Aided Drafting

Note: Some of the courses in these award programs may require prerequisites. Please check the course descriptions

## Certificate Level 1– Computer-Aided Drafting and Design

18 credit hours

#### FIRST YEAR

#### First Semester

DFTG 1305 Technical Drafting

DFTG 1309 Basic Computer-Aided Drafting

**ELECTIVE\*** 

#### **Second Semester**

DFTG 1372 SOLIDWORKS Essentials DFTG 2319 Intermediate Computer-Aided

Drafting

DFTG 2328 Architectural Drafting -

Commercial

#### \* Elective Pathways (3 credit hours):

Architectural Options: ARCE 1352 Civil Options: DFTG 2321, GISC 1411 Mechanical Options: RBTC 1305

General Options: COSC 1315, ENTC 1323

Note: Upon successful completion of this certificate, students are eligible to take the Autodesk certification exams.

# Certificate Level 1 – Advanced Computer-Aided Drafting and Design

27 credit hours

#### FIRST YEAR

DFTG 1305 Technical Drafting

DFTG 1309 Basic Computer-Aided Drafting

#### **Second Semester**

DFTG 1372 SOLIDWORKS Essentials DFTG 2319 Intermediate Computer-Aided

Drafting

DFTG 2328 Architectural Drafting

- Commercial

#### SECOND YEAR

#### First Semester

DFTG 1317 Architectural Drafting

- Residential

DFTG 2373 Advanced SOLIDWORKS

#### **Second Semester**

DFTG 2350 Geometric Dimensioning and Tolerancing (Capstone) <sup>1</sup>

ELECTIVE \*

1. May substitute DFTG 2381

\* Elective Pathways (3 credit hours): Architectural Options: ARCE 1352, ARCE 2352 Civil Options: DFTG 2321, GISC 1411 Mechanical Options: DFTG 1333, RBTC 1305 General Options: COSC 1315, ENTC 1323



Also see Pastry Arts

#### Department Website:

http://www.collin.edu/hospitality

**Program Options:** 

AAS - Culinary Arts

Certificate Level 1 – Culinary Arts

Certificate Level 1 – Advanced Culinary Arts

Students completing the **Culinary Arts** program at Collin College will be qualified for a variety of handson food preparation positions and career advancement in the food service industry. The food service industry is the largest private sector employer in the United States. The

curriculum at Collin College emphasizes a broad selection of hands-on food preparation courses, building on culinary foundation skills that will allow the student to be effective in a commercial kitchen environment. Collin College's culinary career education offers classes in the daytime and in the evening. The curriculum is designed by industry experts and taught by experienced food service management professionals. The degree program offers an Associate of Applied Science in Culinary Arts. A Certificate in Culinary Arts is also available.

#### **TRANSFER**

Students planning to transfer to a college or university should check with a Collin academic advisor. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

## ACCREDITATION

The Culinary Arts Program is fully accredited by the American Culinary Federation Education Foundation. They may be contacted at:

180 Center Place Way

St. Augustine, FL 32095

800.624.9458

http://www.acfchefs.org

## ADMISSION REQUIREMENTS

Students are required to attend mandatory Culinary Arts Orientation. Please visit the program website (<a href="http://www.collin.edu/department/ihce/">http://www.collin.edu/department/ihce/</a>) for dates and times.

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

## AAS – Culinary Arts

60 credit hours

An American Culinary Federation (ACF) accredited program. Students will be eligible for Certified Culinarian (CC) upon graduation.

#### FIRST YEAR

#### First Semester

CHEF 1301	Basic Food Preparation ~
CHEF 1305	Sanitation and Safety 1, 2 ~
CHEF 2331	Advanced Food Preparation ~
ENGL 1301	Composition I

HAMG 1321 Introduction to Hospitality Industry~

#### **Second Semester**

CHEF	1341	American Regional Cuisine ~
CHEF	1345	International Cuisine ~
IFWA	1310	Nutrition and Menu Planning ~
RSTO	1325	Purchasing for Hospitality
		Operations ~
GEN ED		Humanities / Fine Arts course

#### Third Semester

MATH	1332	Contemporary Mathematics
		(Quantitative Reasoning)
		(See Mathematics options)
PSTR	1301	Fundamentals of Baking ~

## SECOND YEAR

#### **First Semester**

CHEF 1310	Garde Manger ~
HAMG 1324	Hospitality Human Resources
	Management ~

GEN ED Social / Behavioral Sciences course

ELECTIVE \*

## **Second Semester**

CHEF 1314 A La Carte Cooking

(Capstone)

CHEF 2380 Cooperative Education –

Culinary Arts / Chef

Training ~

RSTO 1304 Dining Room Service

SPCH 1321 Business and Professional

Communication

(See Speech Options)

- 1. Certification in ServSafe
- 2. Certification in Food Protection Management

## Certificate Level 1 – Culinary Arts

24 credit hours

#### FIRST YEAR

#### First Semester

CHEF	1301	Basic Food Preparation ~
CHEF	1305	Sanitation and Safety 1, 2 ~
CHEF	2331	Advanced Food Preparation ~
PSTR	1301	Fundamentals of Baking ~

#### **Second Semester**

CHEF	1310	Garde Manger (Capstone) ~
CHEF	1341	American Regional Cuisine ~
CHEF	1345	International Cuisine ~
IFWA	1310	Nutrition and Menu Planning ~

<sup>~</sup>Taught in eight-week format

- 1. Certification in ServSafe
- 2. Certification in Food Protection Management

# Certificate Level 1 – Advanced Culinary Arts

12 credit hours

Prior to being admitted to this program, students must provide official documentation showing they have earned a Certificate or AAS in Culinary Arts

## FIRST YEAR

#### First Semester

CHEF 2302 Saucier ~

IFWA 1319 Meat Identifying and

Processing~

#### **Second Semester**

CHEF 1302 Principles of Healthy Cuisine ~ CHEF 2336 Charcuterie (Capstone) ~

~Taught in eight-week format

<sup>~</sup>Taught in eight-week format

<sup>\*</sup> Elective (3 credit bours): CHEF 1302~, CHEF 2302~, CHEF 2336~, HAMG 1313~, HAMG 1340~, HAMG 2301~, HAMG 2332~, HAMG 2337~, IFWA 1319~, PSTR 1305~, PSTR 1306~, PSTR 2301~, RSTO 2307~ or TRVM 2301



## Department Website:

http://www.collin.edu/dentalhygiene/

## Program Options: AAS - Dental Hygiene

Licensure Notice: Students who have been involved with the criminal system, please be advised that your background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

The Dental Hygiene Program is designed to prepare individuals to become licensed health care professionals who specialize in non-surgical periodontal therapy and oral health education. A broad-based education in biological sciences, humanities, dental sciences and clinical technologies prepares the graduate for work, under the supervision of a dentist, in private practice and community settings as a member of the dental health team.

Dental Hygiene is a two-year program that begins during the fall semester each year. Classes are scheduled at the Central Park Campus in McKinney. Enrollment is limited, and admission to the program is competitive. Courses listed in the curriculum must be taken in sequence to assure progression in content from simple to complex. Clinical students are required to submit a physical, dental and visual acuity report upon entrance to the program.

Dental Hygiene students must meet eligibility requirements for licensure as established by the State Board of Dental Examiners

(http://www.tsbde.state.tx.us) in the State of Texas. If a student has reason to believe he/she is ineligible for licensure, he/she should contact the Board regarding their specific concerns prior to entrance into the program.

A drug scan, background check and CPR with AED certification for health professionals will be required upon acceptance into the program. Requirements for dental hygiene licensure as set by the Texas State Board of Dental Examiners (TSBDE) defines that

individuals be "of good moral character." All individuals accepted into the program must meet licensure eligibility requirements. Information received from the background check or drug scan may result in dismissal from the program.

The applicant must be in good health and emotionally stable and must furnish physical, dental and eye examination records. Forms will be provided by the dental hygiene department. In addition, the state of Texas requires the applicant to provide proof of all immunizations required by the state as defined in the Texas Administrative Code. \*Other requirements include Hepatitis B vaccination and titer and annual TB testing, annual Flu vaccine, Varicella titer and Tetanus vaccine. A letter of declination must be signed if the candidate is unable to receive the Hepatitis B series.

Applicants who believe they are at an increased risk of contracting an infectious disease should seek testing and counseling prior to making application to the Dental Hygiene Program. All students accepted into the program are expected to follow standard precautions and are financially responsible for any necessary testing / treatment resulting from an occupational incident and/or communicable disease exposure. No student is allowed to deliver patient care in any setting until he/she has mastered material on safety / standard precautions with satisfactory accuracy.

The student is awarded an AAS degree upon successful completion of the program. The graduate is eligible for national and regional examinations.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

# FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities with or without accommodations for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in "Functional Abilities / Core Performance Standards" documents provided in the program information and application packets. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college

ACCESS department as soon as this program is of interest.

#### ACCREDITATION

Collin's Dental Hygiene Program is accredited by the American Dental Association's Commission on Dental Accreditation (CODA) and has been granted the accreditation status of approval without reporting requirements. The council is a specialized accrediting body recognized by the Department of Education.

#### SPECIAL ADMISSION REQUIREMENTS

Admission to this program is selective. Admission to the college does not guarantee admission to the Dental Hygiene Program. Registration is by permission only. Information and applications may be obtained from the Dental Hygiene Program Director or dental hygiene website at

http://www.collin.edu/dentalhygiene/.

- Provide proof of high school graduation or
- Complete pre-entrance course requirements with a minimum 2.5 GPA
- Earn a grade of "C" or better in all courses applicable to the Dental Hygiene program
- Submit official copies of all college transcripts
- Complete the PSB exam with a satisfactory
- Completion of immunizations required by the Texas Department of State Health Services (TDSHS) \*.
- Submit a typed, one -page essay that discusses why dental hygiene has been selected as a profession
- Submit two reference forms: one from an employer and one from an educator
- Completion of an Observation Form: Observing of a dental office / Registered Dental Hygienist
- Completion of a personal interview with the Program Director and faculty

## AAS – Dental Hygiene

68 credit hours

Note: All science and mathematics courses that are part of the curriculum, but completed at a regionally accredited institution, must have been completed within five years of the fall semester of the admission year in order to receive transfer

### PRE-ENTRANCE REQUIREMENTS

BIOL	2401	Anatomy and Physiology I 1
BIOL	2402	Anatomy and Physiology II
BIOL	2420	Microbiology for
		Non-Science Majors
CHEM	1405	Introduction to Chemistry I

#### FIRST YEAR

#### First Semester

DHYG 1201	Orofacial Anatomy, Histology and
	Embryology
DHYG 1304	Dental Radiology
DHYG 1431	Preclinical Dental Hygiene
ENGL 1301	Composition I
<u>SPCH</u> 1311	Introduction to Speech
	<u>Communication</u>
	(See Speech options)

#### Second Semester

DHYG 1207	General and Dental Nutrition
DHYG 1219	Dental Materials
DHYG 1227	Preventive Dental Hygiene
	Care
DHYG 1235	Pharmacology for the
	Dental Hygienist
DHYG 1261	Clinical I - Dental Hygienist
<u>PSYC</u> <u>2301</u>	General Psychology 1

#### SECOND YEAR

#### First Semester

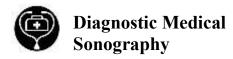
DHYG 1211	Periodontology
DHYG 1215	Community Dentistry
DHYG 1239	General and Oral Pathology
DHYG 2153	Dental Hygiene Practice
DHYG 2201	Dental Hygiene Care I
DHYG 2361	Clinical II - Dental Hygienist

#### Second Semester

DHYG 2102	Applied Community Dentistry
DHYG 2231	Dental Hygiene Care II
	(Capstone)
DHYG 2363	Clinical III - Dental Hygienist
GEN ED	Humanities / Fine Arts course
SOCI 1301	Introduction to Sociology

1. No course substitutions

<sup>\*</sup> It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Director. In such cases the applicant must sign a declination form. All immunizations must be complete before the first clinical visit.



## Program Option: AAS – Diagnostic Medical Sonography

NOTE: This program is pending SACSCOC approval. It is anticipated to start in Fall 2018."

The Diagnostic Medical Sonography program is designed to prepare graduates for employment in the health industry in the sonography profession. An Associate Degree in Applied Science is awarded at completion of the program of study. The student is also eligible to take the American Registry of Diagnostic Medical Sonographers licensing examination for Registered Sonographers (ARDMS). The Sonography program consists of classroom, laboratory and clinical learning experiences.

## FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities with or without accommodations for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in "Functional Abilities / Core Performance Standards" documents provided in the program information and application packets. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

## ACCREDITATION

Collin College Diagnostic Medical Sonography is seeking accreditation from the Commission on Accreditation of Allied Health Education Programs (25400 U.S. Highway 19 North, Suite 158. Clearwater, FL 33763; 727.210.2350; <a href="www.caahep.org">www.caahep.org</a>) with the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography (6021 University Boulevard, Suite 500, Ellicott City, MD 21043; 443-973-3251; <a href="www.jrcdms.org">www.jrcdms.org</a>).

#### SPECIAL ADMISSION REQUIREMENTS

Admission to this program is selective. Admission to the college does not guarantee admission to the Diagnostic Medical Sonography Program. Registration is by permission only. Information and applications may be obtained online or from the Health Sciences and Emergency Services division office. To apply, students must:

- Submit the required application form by the designated deadline.
- Application and acceptance into Collin College.
- Submit official copies of all college transcripts.
- Complete Collin College reading, writing and mathematics assessments.
- Complete Psychological Services Bureau (PSB) Health Occupations Aptitude Exam.
- Document acceptable findings on drug screens, background checks and physical/mental competencies.
- Complete program admission criteria (see Admission Packet).
- Complete immunizations required by the Texas Department of State Health Services (TDSHS)\*
- \* It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Coordinator. In such cases, the applicant must sign a declination form. All immunizations must be complete before assignment to clinical training.

**Health Insurance** - All Sonography students are required to show proof of health insurance prior to starting clinical rotations each semester.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

Students planning to transfer to a college or university should check with the Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

2017-18 Collin College Catalog, (Effective Spring 2018), Ed. 5. Rev. 10-12-17 Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

# AAS – Diagnostic Medical Sonography

64 credit hours

BIOL 2404	Human Anatomy and
	Physiology Basic
HPRS 1204	Basic Health Profession Skills
HPRS 1206	Essentials of Medical
	Terminology
<u>MATH</u> 1314	College Algebra <sup>1</sup>
PHYS 1405	Conceptual Physics

#### FIRST YEAR

## First Semester

DMSO 1202	Basic Ultrasound Physics
DMSO 1210	Introduction to Sonography
DSVT 1103	Introduction to Vascular
	Technology
ENGL 1301	Composition I
<u>PSYC</u> 2301	General Psychology
	(See Social / Behavioral
	Sciences options)

#### **Second Semester**

DMSO 1242	Intermediate Ultrasound
	Physics
DMSO 1251	Sonographic Sectional
	Anatomy
DMSO 1341	Abdominopelvic Sonography
DMSO 1360	Clinical I - Diagnostic
	Medical Sonography /
	Sonographer and Ultrasound
	Technician
<u>SPCH</u> <u>1311</u>	Introduction to Speech
	Communication
	(See Speech options)

#### SECOND YEAR

#### First Semester

First Semester	
DMSO 2253	Sonography of Superficial
	Structures
DMSO 2254	Neorosonology
DMSO 2341	Sonography of Abdominopelvic
	Pathology
DMSO 2362	Clinical II - Diagnostic Medical
	Sonography / Sonographer and
	Ultrasound Technician
DMSO 2405	Sonography of Obstetrics /
	Gynecology

#### **Second Semester**

DMSO	2230	Advanced Ultrasound and
		Review (Capstone)
DMSO	2342	Sonography of High Risk
		Obstetrics
DMSO	2363	Clinical III - Diagnostic Medical
		Sonography / Sonographer and
		Ultrasound Technician
<u>PHIL</u>	<u>2306</u>	Introduction to Ethics
		(See <u>Humanities / Fine Arts</u>
		options)

1.111.

1. May substitute MATH 1324, MATH 1342, MATH 1414, or MATH 2412



## **E-Business Development**

#### **Program Options:**

## AAS - E-Business Development

E-Business Track
Web Development Track
C# .NET Development Track
Mobile Application Development Track

#### OSA - Web Commerce

#### Certificate Level 1 – E-Business Development

E-Commerce Track Web Development Track

## Certificate Level 1 – Mobile Application Development

#### Certificate Level 2 - C# .NET Development

With the global impact of web and mobile technologies, interactive web and mobile technology professionals are in demand. The E-Business Development Program prepares students for this role, teaching them to create websites and applications for the distribution of information, web-based tutorials, business presence, and e-commerce

This degree program offers tracks in e-business, web development, mobile development and .NET development. Areas of study include e-business, web authoring, e-commerce, web-based applications, mobile-based applications and business .NET applications. The degree provides a broad business background and professional skills needed to succeed in a career in e-business.

Three certificates are also offered, which can be applied toward the AAS degree. The certificates provide the knowledge to update current job requirements. After successfully completing a certificate, students may continue to work toward an

AAS degree in E-Business Development.

In deciding which track to pursue, consider your personal and professional interests. If your interest is in e-business and e-commerce we recommend the e-business track. If your interest is in web programming and creating web sites, the track you should pursue is web development. If your interest is in creating mobile applications, we recommend our mobile development track. In mobile development we offer development for Android, and iPhone (iOS) applications. For those who are interested in developing in a .NET environment, we recommend the .NET track. Our .NET track focuses on application development with C# language.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

## AAS – E-Business Development E-Business Track

60 credit hours

#### FIRST YEAR

#### First Semester

BCIS	1305	Business Computer	
		Applications <sup>1</sup>	
<u>ENGL</u>	<u>1301</u>	Composition I	
ITSE	1311	Beginning Web	
		Programming	
ITSW	1307	Introduction to	
		Database – Access	
GEN ED		Mathematics course	

#### Second Semester

Second	Semes	ter
IMED	1341	Interface Design
ITNW	1358	Network+
ITSE	1301	Web Design Tools – Graphics
ITSE	2302	Intermediate Web
		Programming
ITSW	1310	Introduction to Presentation
		Graphics Software

## Summer Semester

ECON 1301	Introduction to Economics
	(See Social / Behavioral Sciences

options)

GEN ED Humanities / Fine Arts course

#### SECOND YEAR

#### First Semester

IMED	2309	Internet Commerce
ITSE	2313	Web Authoring
ITSY	1300	Fundamentals of Information
		Security (Security+)
GEN E	ED_	Speech course
ELECTIVE *		-

#### Second Semester

BUSG 2309	Small Business Management/
	Entrepreneurship <sup>2</sup>
IMED 2311	Portfolio Development
	(Capstone) <sup>3</sup>
MRKG 2312	e-Commerce Marketing

- 1. May substitute COSC-1301
- 2. May substitute BMGT-1307 or BMGT-1341
- 3. May substitute INEW-2330 or ITSC-2380

# **AAS – E-Business Development**Web Development Track

60 credit hours

#### FIRST YEAR

First	Semester
1 1131	ocincotti

COSC 1315	Introduction to Computer
	Programming <sup>1</sup>
ENGL 1301	Composition I
ITSE 1311	Beginning Web
	Programming
ITSW 1307	Introduction to Database -
	Access
GEN ED	Mathematics course

#### **Second Semester**

<b>IMED</b>	1341	Interface Design
ITSE	1301	Web Design Tools –
		Graphics
ITSE	2302	Intermediate Web
		Programming
ITSE	2309	Database Programming - SQL
ELECT	TVE*	

Summer Semester		
ECON 1301	Introduction to Economics	
	(See Social / Behavioral Sciences	
	options)	
GEN ED	Humanities / Fine Arts	
Course		

<sup>\*</sup> Elective (3-4 credit hours): Any COSC, GISC, IMED, ITNW, ITSC, ITSE, ITSW, or ITSY course not listed above, excluding any Cooperative Education or Software Project course

#### SECOND YEAR

T	0	
First	Sem	ACTAP

IMED 2309	Internet Commerce <sup>2</sup>
ITNW 1358	Network +
ITSE 2313	Web Authoring
GEN ED	Speech course

#### Second Semester

IMED	2311	Portfolio Development
		(Capstone) <sup>3</sup>
ITSE	1306	Introduction to PHP
ITSE	1374	Mobile Web
ITSY	1300	Fundamentals of Information
		Security (Security +)
1. May substitute COSC-1436 or ITSE-1332		

## AAS – E-Business Development **C#** .NET Development Track

60 credit hours

#### FIRST YEAR

#### First Semester

ENGL	1301	Composition I
ITSE	1311	Beginning Web Programming
ITSE	1332	Introduction to Visual Basic
		.NET Programming <sup>1</sup>
ITSW	1307	Introduction to Database –
		Access
GEN ED		Mathematics course

## Second Semester

IMED	1341	Interface Design
ITNW	1358	Network+
ITSE	1301	Web Design Tools - Graphics
ITSE	1330	Introduction to C#
		Programming
ITSE	2302	Intermediate Web
		Programming

#### Summer Semester

ECON	1301	Introduction	to Economics
	1.7(7)	HILLOCIUCIIOII	TO EXCOHORDICS

(See Social / Behavioral Sciences

options)

GEN ED Humanities / Fine Arts course

## SECOND YEAR

#### First Semester

ITSE	2309	Database Programming – SQL
ITSE	2353	Advanced C# Programming
		with ASP.NET
ITSY	1300	Fundamentals of Information
		Security (Security +)
GEN I	${\operatorname{ED}}$	Speech course
ELEC	TIVE *	_
Secon	d Semes	ter

Second	Semes	otti
INEW	2330	Comprehensive Software
		Project: Planning and
		Design (Capstone) <sup>2</sup>
ITSE	2338	C# Database Development
		with ADO.NET and LINQ

**ELECTIVE\*** 

1. May substitute COSC-1315 or COSC-1436 2. May substitute IMED-2311 or ITSC-2380

## AAS – E-Business Development **Mobile Application Development Track**

60 credit hours

#### FIRST YEAR

First S	Semester
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	Programming <sup>1</sup>
ENGL 1301	Composition I
ITSE 1311	Beginning Web Programming
ITSW 1307	Introduction to Database – Access
GEN ED	Mathematics course

COSC 1315 Introduction to Computer

### Second Semester

COSC	1337	Programming Fundamentals II
		(Java)
<b>IMED</b>	1341	Interface Design
ITSE	1301	Web Design Tools - Graphics
ITSE	1371	iOS Programming
		Fundamentals (Swift)
ITSE	2302	Intermediate Web Programming

Summer Semester		
ECON 1301	Introduction to Economics	
	(See Social / Behavioral Sciences	
	Options)	
GEN ED	Humanities / Fine Arts course	
SECOND YEAR		
First Semester		

<sup>2.</sup> May substitute MRKG-2312

<sup>3.</sup> May substitute INEW-2330 or ITSC-2380

<sup>\*</sup> Elective (3-4 credit hours): Any COSC, GISC, IMED, ITNW, ITSC, ITSE, ITSW, or ITSY course not listed above, excluding any Cooperative Education or Software Project course

<sup>\*</sup> Electives (6 credit hours): Any COSC, GISC, IMED, ITNW, ITSC, ITSE, ITSW, or ITSY course not listed above, excluding any Cooperative Education or Software Project course

ITNW 1358	Network+	IMED	2311	Portfolio Development
ITSE 1373	Android Mobile Programming I			(Capstone) <sup>2</sup>
ITSE 2309	Database Programming – SQL			
ITSE 2310	iOS Application Programming			BCIS-1305
<u>GEN ED</u>	Speech course	2. May s	substitute	INEW-2330 or ITSC-2380
Second Semes	ster	C 45	<u>.</u>	. Il 1
INEW 2330	Comprehensive Software	Certi	incate	e Level 1 – E-Business
	Project: Planning and Design	Deve	lopm	ent
	(Capstone) <sup>2</sup>	Web 1	Develo	pment Track
ITSE 1374	Mobile Web		it hours	•
ITSY 1300	Fundamentals of			
	Information Security (Security +)	Summe	er Seme	ster
	(Security +)	ITSE	1311	Beginning Web Programming
1. May substitute		First Se	emester	
2. May substitute	e ITSC-2380	IMED		Interface Design
		ITSE	1301	Web Design Tools –
	1.0			Graphics
	eb Commerce	ITSE	2302	Intermediate Web
9 credit hours				Programming
D. (ED. 2000		ITSW	1307	Introduction to Database –
IMED 2309 ITSE 1301	Internet Commerce			Access
ITSE 1301	Web Design Tools – Graphics	Canand	l Semes	***
ITSE 1311	Beginning Web	ITSE	1306	Introduction to PHP
1102 1011	Programming	_	1374	Mobile Web
	8	ITSE	2309	Database Programming –
Note: Some of th	e courses in these award programs may require			SQL
prerequisites. P	lease check the course descriptions.	ITSE	2313	Web Authoring
		Summe	er Seme	ster
Certificat	e Level 1 – E-Business	IMED		Portfolio Development
				(Capstone) 1
Developm				
E-Commer		1. May s	substitute	INEW-2330 or ITSC-2380
30 credit hours				
Summer Sem	ester	Certi	ificate	e Level 1 – Mobile
ITSE 1311	Beginning Web Programming	Appl	icatio	n Development
			it hours	•
First Semeste				
IMED 1341	Interface Design	Summe	er Seme	ster
IMED 2309	Internet Commerce	COSC		Introduction to Computer
ITSW 1307	Introduction to Database –	Progran	nming	
ITSW 1310	Access Introduction to Presentation	E: .0		
115W 1510	Graphics Software 1		emester	
	Grapines outware	ITSE	1301 1311	Web Design Tools – Graphics Beginning Web Programming
Second Semes	ster	ITSE ITSW	1307	Introduction to Database –
BUSG 2309	Small Business Management/	110 W	1307	Access
	Entrepreneurship	Option	1*	
ITNW 1358	Network+	Γ		
TTCE 2212	VV7 - 1- A 41'			

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Second Semester

ITSE 1374 Mobile Web

ITSE 2313

MRKG 2312

Summer Semester

Web Authoring

e-Commerce Marketing

ITSE 2309 Database Programming – SQL

Option 2\*

#### **Summer Semester**

INEW 2330 Comprehensive Software Project: Planning and Design (Capstone) <sup>1</sup>

1.May substitute ITSC-2380

\* The options are a two-course sequence focusing on iOS or Android skills. You must take both courses in either the iOS or the Android sequence. Option 1: ITSE 1371 (SWIFT) or COSC 1337 (Java)

Option 1: ITSE 1371 (SWIFT) or COSC 1337 (Java, Option 2: ITSE 2310 (iOS) or ITSE 1373 (Android)

# Certificate Level 2 – C# .NET Development

30 credit hours

Students must be TSI complete.

#### Summer Semester

ITSE 1311 Beginning Web Programming ITSE 1332 Introduction to Visual Basic .NET Programming <sup>1</sup>

#### First Semester

IMED 1341 Interface Design
 ITSE 1330 Introduction to C# Programming
 ITSE 2302 Intermediate Web Programming
 ITSW 1307 Introduction to Database – Access

## Second Semester

ITSE 2309 Database Programming – SQL
ITSE 2338 C# Database Development with ADO.NET and LINQ
ITSE 2353 Advanced C# Programming with ASP.NET

### Summer Semester

INEW 2330 Comprehensive Software Project: Planning and Design (Capstone) <sup>3</sup>

1. May substitute COSC-1315 or COSC-1436

2. May substitute IMED-2311 or ITSC-2380



### **Program Options:**

AAS – Electronic Engineering Technology Certificate Level 1 – Electronic Engineering Technology

#### Students in the **Electronic Engineering**

**Technology Program** will receive training in several diversified areas of electronics. This program emphasizes the application of mathematical theorems and applied physics toward the design and analysis of electronic circuits. Students will be exposed to a combination of classroom theory and hands-on laboratory design and analysis experiments.

Program curriculum and laboratory equipment have been formally evaluated and endorsed by an advisory committee consisting of members of the electronics industry.

Through articulation agreements, students can transfer their completed program toward a bachelor's degree into several colleges and universities. Students planning to transfer to a college or university should check with the Collin academic advisor. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

# AAS – Electronic Engineering Technology

60 credit hours

#### FIRST YEAR

#### First Semester

CETT	1407	Fundamentals of Electronics
CETT	1425	Digital Fundamentals
<b>ENGL</b>	<u>1301</u>	Composition I
TECM	1343	Technical Algebra and Trigonometry

#### Second Semester

CETT 1409	DC-AC Circuits
CETT 1445	Microprocessor
RBTC 1405	Robotic Fundamentals
GEN ED	Humanities / Fine Arts cours

#### Summer

SPCH 1321 Business and Professional

Communication
(See Speech options)

#### SECOND YEAR

#### First Semester

CETT	2471	Emerging Topics in Engineering
		Technology
INTC	1307	Instrumentation Test Equipment
<b>PHYS</b>	1405	Conceptual Physics

## ELECTIVE \*

#### **Second Semester**

CETT 1457	Linear Integrated Circuits
ECON 1301	Introduction to Economics
EECT 2439	Communications Circuits (Capstone)
ELECTIVE *	,

<sup>\*</sup> Electives (6 credit hours): DFTG 1372, EECT 2380, or RBTC 2345

# Certificate Level 1 – Electronic Engineering Technology

34 credit hours

#### FIRST YEAR

## First Semester

CETT	1407	Fundamentals of Electronics
CETT	1425	Digital Fundamentals
TECM	1343	Technical Algebra and Trigonometry

#### **Second Semester**

CETT	1409	DC-AC Circuits
CETT	1445	Microprocessor

#### SECOND YEAR

#### First Semester

CETT	2471	Emerging Topics in Engineering
		Technology
INTC	1307	Instrumentation Test Equipment

## INTC 1307 Instrumentation Test Equipment

#### **Second Semester**

CETT	1457	Linear Integrated Circuits
EECT	2439	Communications Circuits (Capstone)



#### Department Website:

http://www.collin.edu/ems

**Program Options:** 

AAS – Emergency Medical Services Professions OSA – Services Professions Certificate Level 1 – Advanced EMT Certificate Level 1 – Paramedic

Collin's Emergency Medical Services Professions program establishes an excellent foundation for careers in emergency medicine and other related healthcare fields.

This program has three options: The OSA – Emergency Medical Services Professions prepares students for entry-level positions. Students completing the Certificate – EMS Paramedic are well positioned for higher paying jobs. Completion of the AAS – Emergency Medical Services Professions degree will benefit students seeking promotion in the EMS field.

This program prepares students for skills proficiency verification by the training program medical director; and written and practical exam administered by National Registry. A licensed paramedic has an associate's degree (or higher) and tests on the same skills for EMT-Paramedic.

Licensure Notice: Students who have been involved with the criminal system, please be advised that your background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

Once a student successfully completes requirements for the National Registry, he or she may become certified by the Texas Department of State Health Services EMS Division. Both levels of certification require periodic and specific recertification hours and activities to continue to practice as an emergency medical technician.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

#### ACCREDITATION

The Collin College Emergency Medical Technician – Paramedic program is accredited by the Commission on Accreditation of Allied Health Education Programs (http://www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP). They may be contacted at: 1361 Park Street Clearwater, FL 33756 727.210.2350 http://www.caahep.org

#### FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

Regulations governing this program require all applicants to meet specific functional abilities – some are without accommodations – for admission and / or successful completion of the program. The specific functional requirements are found in Functional Abilities / Core Performance Standards documents provided in the program information and application packets. Students who think they may not be able to meet the functional standards and need accommodations are encouraged to contact the ACCESS department or Program Director as soon as this program is of interest.

#### ADMISSION REQUIREMENTS

Admission to this program is selective. Admission to the college does not guarantee admission to the Emergency Medical Services Program. Registration is by permission only. Information and applications may be obtained from the Program Director, the EMS Office, or the EMS website at <a href="http://www.collin.edu/EMS">http://www.collin.edu/EMS</a>.

- Provide proof of high school graduation or GED
- 18 years of age
- Complete program application
- Complete ACCUPLACER Reading Comprehension test (Minimum score 78);
   Complete ACCUPLACER Arithmetic test (Minimum score 78);
   Complete WritePlacer test (Minimum score 4)
- Be certified as American Heart Association CPR Basic Life Support (BLS) or Red Cross CPR for the Healthcare Provider.
- Personal interview
- Drug test
- Criminal history check

- Complete immunizations required by the Texas Department of State Health Services (TDSHS). \*
- Applicant must be in academic good standing with a 2.0 or higher GPA

**Health Insurance** – All Emergency Medical Services students are required to show proof of health insurance prior to starting clinical rotations each semester.

## AAS – Emergency Medical Services Professions or Certificate – EMS Paramedic (Paramedic Students) Additional Admission Requirements:

- Texas Department of State Health Services or National Registry EMT – Basic Certification
- Successful completion of designated career aptitude test (offered at specific times throughout the year)
- Completion of local college assessments in reading, writing and mathematics (must place at or above college-level in all assessments)

## **AAS – Emergency Medical Services Professions**

60 credit hours

A student who has the EMT - Basic certification has met the first three EMSP course requirements.<sup>1</sup>

#### **PREREQUISITES**

EMSP	1160	Clinical - Emergency Medical
		Technician (EMT Paramedic)
		– Basic <sup>1</sup>
<b>EMSP</b>	1371	Introduction to Emergency
		Medical Technician (EMT) 1
EMSP	1501	Emergency Medical Technician <sup>1</sup>
<b>ENGL</b>	<u>1301</u>	Composition I

#### FIRST YEAR

First Se	emester
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1 1131 0		
BIOL	2401	Anatomy and Physiology I <sup>2</sup>
EMSP	1438	Introduction to Advanced
		Practice
EMSP	2206	Emergency Pharmacology
EMSP	1356	Patient Assessment and
		Airway Management

PHED 1100 Beginning Weight Training <sup>3</sup>

#### Second Semester

BIOL	2402	Anatomy and Physiology II <sup>2</sup>
EMSP	1161	Clinical - Emergency Medical
		Technician (EMT Paramedic) –
		Advanced I
EMSP	2444	Cardiology
EMSP	2534	Medical Emergencies

#### Summer

EMSP	1162	Clinical - Emergency Medical
		Technician (EMT Paramedic) –
		Advanced II
<b>EMSP</b>	1355	Trauma Management

#### **SECOND YEAR**

#### First Semester

EMSP 2160	Clinical - Emergency Medical
	Technician (EMT Paramedic) –
	Advanced III
EMSP 2305	EMS Operations
EMSP 2330	Special Populations
GEN ED	Humanities / Fine Arts course
GEN ED	Social / Behavioral Sciences course
0 10	

#### Second Semester

<b>EMSP</b>	2143	Assessment Based
		Management (Capstone)
<b>EMSP</b>	2267	Practicum – Emergency
		Medical Technician
		(EMT Paramedic)

#### 2. No substitutions

3. May substitute PHED-1102, PHED-1104,	
PHED-1106, PHED-1111, PHED-1112,	
PHED-1114, PHED-1116, PHED-1117,	
PHED-1118, PHED-1120, PHED-1121,	
PHED-1126, PHED-1127, PHED-1131,	
PHED-1136, PHED-1137, PHED-1140,	
PHED-1147, PHED-1148 or PHED-1164	1

# OSA – Emergency Medical Services Professions

9 credit hours

A student who has the EMT - Basic certification has met these EMSP requirements.

EMSP	1160	Clinical - Emergency
		Medical Technician (EMT
		Paramedic) - Basic
<b>EMSP</b>	1371	Introduction to Emergency
		Medical Technician (EMT)
<b>EMSP</b>	1501	Emergency Medical
		Taalamiaiam

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<sup>\*</sup> It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Director. In such cases, the applicant must sign a declination form. All immunizations must be complete before the first clinical visit.

# Certificate Level 1 – Advanced EMT

25 credit hours

#### **PREREQUISITES**

A student who has the EMT - Basic certification has met the first three EMSP course requirements.<sup>1</sup>

EMSP	1160	Clinical - Emergency Medical
		Technician (EMT Paramedic)
		– Basic <sup>1</sup>
EMSP	1371	Introduction to Emergency
		Medical Technician (EMT) 1
EMSP	1501	Emergency Medical
		Technician <sup>1</sup>

#### FIRST YEAR

## First Semester

EMSP	1438	Introduction to Advanced
		Practice
EMSP	2206	Emergency Pharmacology
EMSP	1356	Patient Assessment and
		Airway Management

#### **Second Semester**

EMSP	2305	EMS Operations
EMSP	1355	Trauma Management
EMSP	1161	Clinical - Emergency Medical
		Technician (EMT Paramedic) –
		Advanced I (Capstone)

## Certificate Level 1 – Paramedic

42 credit hours

This certificate contains all the coursework in the Advanced EMT certificate <u>plus</u> seven (7) additional courses which will qualify the student for career advancement as a Paramedic..

#### PREREQUISITES

A student who has the EMT - Basic certification has met the first three EMSP course requirements.<sup>1</sup>

EMSP	1160	Clinical - Emergency Medical Technician (EMT Paramedic) - Basic <sup>1</sup>
EMSP	1371	Introduction to Emergency
		Medical Technician (EMT) 1
<b>EMSP</b>	1501	Emergency Medical
		Technician 1

# FIRST YEAR First Semester

EMSP	1438	Introduction to Advanced
		Practice
EMSP	2206	Emergency Pharmacology
EMSP	1356	Patient Assessment and
		Airway Management

#### Second Semester

0000110		
<b>EMSP</b>	2305	EMS Operations
<b>EMSP</b>	1355	Trauma Management
<b>EMSP</b>	1161	Clinical - Emergency Medical
		Technician (EMT Paramedic) –
		Advanced I (Capstone)

#### Third Semester

The seven (7) additional courses which follow will qualify the student for the Paramedic career advancement..

EMSP 2444 Cardiology

## SECOND YEAR

#### **First Semester**

<b>EMSP</b>	1162	Clinical - Emergency Medical
		Technician (EMT Paramedic)
		– Advanced II

#### **Second Semester**

<b>EMSP</b>	2534	Medical Emergencies
<b>EMSP</b>	2330	Special Populations
<b>EMSP</b>	2160	Clinical - Emergency Medical
		Technician (EMT Paramedic)
		- Advanced III

#### Third Semester

EMSP	2267	Practicum – Emergency
		Medical Technician
		(EMT Paramedic)
EMSP	2143	Assessment Based
		Management (Capstone)



Also see Fire Science

## Program Options: AAS – Basic Firefighter Certification Certificate Level 1 – Basic Firefighter

Licensure Notice: Students who have been involved with the criminal system, please be advised that your background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

Collin College's Fire Academy is one of the most highly regarded programs in the state. Fire Academy graduates from Collin College can be found throughout Texas - all of them making a difference in their communities.

This certification program was developed to prepare students for a career as a professional firefighter. The Collin College Fire Academy meets the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for certification as a basic firefighter.

Many fire departments require applicants to complete basic firefighter training before they take a fire department entrance exam. Students accepted into the Fire Academy will also complete Emergency Medical Technician (EMT) training for state certification. This program awards 32 credits.

Students are accepted into the Fire Academy on a competitive basis. Students interested in enrolling in the Fire Academy should contact the Fire Science Office at 972.548.6836. Fire Academy application packets may be printed from the Fire Science website: <a href="http://www.collin.edu/firescience">http://www.collin.edu/firescience</a> or students may pick-up an application at either the Fire Science or Advising Office. Students may request to receive an application by mail.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

## FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

Regulations governing this program require all applicants to meet specific functional abilities – some are without accommodations – for admission and / or successful completion of the program. The specific functional requirements are found in the Functional Abilities / Core Performance Standards documents provided in the program information and application packets. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the ACCESS department or Program Director as soon as this program is of interest.

# ADDITIONAL ADMISSIONS REQUIREMENTS FOR FIREFIGHTER CERTIFICATION COURSES:

- 18 years of age
- Provide proof of high school graduation or GED
- Complete Collin College application
- Complete program application
- Complete ACCUPLACER Reading Comprehension test (Minimum score 78)
- Complete ACCUPLACER Arithmetic test (Minimum score 78)
- Complete WritePlacer test (Minimum score 4)
- Complete the physical ability exam and personal interview scheduled through the Program Director
- Criminal history check
- Applicant must be in academic good standing with a 2.0 or higher GPA

Registration is by permission only. Additional information may be obtained from the Fire Science/EMS Office, the Health Sciences, Biology and Chemistry Office or at the Fire Science website: http://www.collin.edu/firescience.

# AAS – Basic Firefighter Certification

60 credit hours

## FIRST YEAR First Semester

CHEM 1405	Introduction to Chemistry I <sup>1</sup>
ENGL 1301	Composition I
FIRT 1301	Fundamentals of Fire Protection
MATH 1332	Contemporary Mathematics
	(Quantitative Reasoning)
	(See Mathematics options)

## **Second Semester**

EMSP	1160	Clinical - Emergency Medical
		Technician (EMT Paramedic) –
		Basic <sup>3</sup>
EMSP	1371	Introduction to Emergency
		Medical Technician (EMT) <sup>2</sup>
EMSP	1501	Emergency Medical Technician <sup>2</sup>
FIRT	1315	Hazardous Materials I
<u>GOVT</u>	<u>2306</u>	Texas Government (Texas
		constitution and topics) 3
GEN E	D	Humanities / Fine Arts course

#### SECOND YEAR

## **First Semester**

FIRS	1301	Firefighter Certification I
FIRS	1407	Firefighter Certification II
FIRS	1313	Firefighter Certification III
FIRS	1319	Firefighter Certification IV
FIRT	1327	Building Construction in
		the Fire Service

## **Second Semester**

FIRS	1323	Firefighter Certification V
FIRS	1329	Firefighter Certification VI
FIRS	1433	Firefighter Certification VII
		(Capstone)
FIRT	1338	Fire Protection Systems

- 1. May substitute BIOL-1408
- 2. A student that has the EMT Basic certification has met this requirement.
- 3. No substitutions

# Certificate Level 1 – Basic **Firefighter**

32 credit hours

## First Semester

EMSP	1160	Clinical - Emergency Medical
		Technician (EMT Paramedic)
		- Basic <sup>1</sup>
EMSP	1371	Introduction to Emergency
		Medical Technician (EMT) 1
EMSP	1501	Emergency Medical Technician <sup>1</sup>
FIRS	1301	Firefighter Certification I
FIRS	1407	Firefighter Certification II
FIRS	1313	Firefighter Certification III

## **Second Semester**

FIRS	1319	Firefighter Certification IV
FIRS	1323	Firefighter Certification V
FIRS	1329	Firefighter Certification VI
FIRS	1433	Firefighter Certification VII
		(Capstone)

1. A student that has the EMT – Basic certificate has met this requirement.



Also see Fire Academy

#### **Department Website:**

http://www.collin.edu/firescience

Program Options: AAS – Fire Officer Certification OSA – Fire Officer Candidate Certificate Level 1 – Fire Officer

The firefighter with a well-balanced educational background will be better prepared to serve and protect the community. Collin's Fire Science program is designed to give current and future Fire Officers the certifications and experience necessary for effective decision-making and leadership skills in the fire department. Students acquire the technical knowledge needed to combat the fire problems created by modern living and develop leadership skills required of the Fire Officer. The program meets the requirements of the Texas Commission on Fire Protection (TCFP). Students certified in Texas as a Basic Firefighter are eligible to take the State Certification Exams for Fire Instructor I, II; and Fire Officer I, II after successfully completing selected courses in the Fire Officer Certificate program. Firefighters interested in enrolling in the Fire Officer Certification program should contact the Fire Science Office at 972.548.6836.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

Full-time, full-paid firefighters employed by any political subdivision or active volunteer firefighters meeting the firefighter exemption criteria enrolled in the Fire Science courses within Collin's Fire Science program may be exempt from paying tuition and laboratory fees for select credit courses.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

## FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

Regulations governing this program require all applicants to meet specific functional abilities – some are without accommodations – for admission and / or successful completion of the program. The specific functional requirements are found in the Functional Abilities / Core Performance Standards documents provided in the program information and application packets. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the ACCESS department or Program Director as soon as this program is of interest.

Registration is by permission only. Additional information may be obtained from the Fire Science/EMS Office, the Health Sciences, Biology and Chemistry Office or at the Fire Science website: <a href="http://www.collin.edu/firescience">http://www.collin.edu/firescience</a>.

## AAS – Fire Officer Certification

60 credit hours

## FIRST YEAR First Semester

ECON 1301	Introduction to Economics
ENGL 1301	Composition I
MATH 1332	Contemporary Mathematics
	(Quantitative Reasoning)
	(See Mathematics options)
PSYC 2301	General Psychology <sup>2</sup>

#### Second Semester

CHEM 1405	Introduction to Chemistry I <sup>3</sup>
FIRT 1315	Hazardous Materials I
GOVT 2306	Texas Government (Texas
	constitution and topics)
GEN ED	<u>Humanities / Fine Arts</u> course
<u>SPCH</u> 1311	Introduction to Speech
	<u>Communication</u>
	(See Speech Options)

#### SECOND YEAR

#### First Semester

ENGL	2311	Technical and Business
		Writing
FIRT	1327	Building Construction in
		the Fire Service
FIRT	1442	Fire Officer I
FIRT	2305	Fire Instructor I
FIRT	2309	Firefighting Strategies and
		Tactics I

#### **Second Semester**

FIRT	1338	Fire Protection System
FIRT	1349	Fire Administration II
		(Capstone)
FIRT	1443	Fire Officer II
FIRT	2307	Fire Instructor II
FIRT	2351	Company Fire Officer

- 1. May substitute ECON-2301 or ECON-2302
- 2. May substitute ANTH-2302, ANTH-2346, ANTH-2351, GOVT-2305, HIST-1301, HIST-1302, HIST-2301, SOCI-1301 or SOCI-1306
- 3. May substitute BIOL-1408

## **OSA – Fire Officer Candidate**

10 credit hours

FIRT	1442	Fire Officer I
FIRT	2305	Fire Instructor I
FIRT	2309	Firefighting Strategies
		and Tactics I

Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

## Certificate Level 1 – Fire Officer

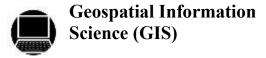
17 credit hours

#### First Semester

FIRT	1442	Fire Officer I
FIRT	2305	Fire Instructor I

#### **Second Semester**

FIRT	1443	Fire Officer II
FIRT	2307	Fire Instructor II
FIRT	2309	Firefighting Strategies
		and Tactics I (Capstone)



### **Program Options:**

AAS – Geospatial Information Science (GIS) Certificate Level 1 – Geospatial Information Science (GIS)

Geospatial Information Science (GIS) uses hardware, software, and data to analyze and display location-based information. GIS allows us to easily visualize information in a form that aids the decision-making process. GIS allows us to solve spatial problems in business, government, environmental studies, and geological studies, etc., and present the information in a way that is easy to understand and interpret. GIS specialties include remote sensing, geospatial intelligence, image analysis, etc. According to the U.S. Department of Labor, job growth in this field is expected to be "faster than average" with annual wages of between \$38,800 and \$70,010.

# AAS – Geospatial Information Science (GIS)

60 credit hours

## FIRST YEAR

#### First Semester

ENGL	1301	Composition I
GISC	1411	Introduction to Geographic
		Information Systems (GIS)
GISC	1421	Introduction to Raster-Based
		Geographic Information
		Systems (GIS)
ITSW	1307	Introduction to Database -
		Access

#### **Second Semester**

COSC	1315	Introduction to Computer
		Programming <sup>1</sup>
GISC	1301	Cartography and Geography
		in Geographical Information
		Systems (GIS) and Global
		Positioning Systems (GPS)
GISC	2420	Intermediate Geographic
		Information Systems (GIS)
ITSW	1304	Introduction to Spreadsheets - Excel
GEN E	ED_	Mathematics / Natural Sciences
		course

2017-18 Collin College Catalog, (Effective Spring 2018), Ed. 5. Rev. 10-12-17 125 Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

#### SECOND YEAR

#### First Semester

ENGL 2311 Technical and Business Writing
GISC 2335 Programming for Geographic
Information Systems (GIS)
GISC 2402 Geographic Information
Systems (GIS) Design with
Raster Analysis

GEN ED Humanities / Fine Arts course ITSE 1311 Beginning Web Programming

#### Second Semester

DFTG 1309 Basic Computer-Aided Drafting

GEN ED Social / Behavioral Sciences

course

GISC 2231 Advanced Problems in

Geographic Information

Systems (GIS) <sup>2</sup> (Capstone)

GEN ED Speech course

ELECTIVE \*

1. May substitute COSC-1436, ITSE-1332, or ITSE-2302 2. May substitute GISC-2281

# Certificate Level 1 – Geospatial Information Science (GIS)

18 credit hours

## First Semester

GISC 1411 Introduction to Geographic Information Systems (GIS)
GISC 1421 Introduction to Raster-Based Geographic Information Systems (GIS)

#### Second Semester

GISC 2402 Geographic Information Systems (GIS) Design with Raster Analysis GISC 2420 Intermediate Geographic Information Systems (GIS)

#### Third Semester

GISC 2231 Advanced Problems in Geographic Information Systems (GIS) (Capstone) <sup>1</sup>

1. May substitute GISC-2281



**Program Options:** 

AAS - Graphic Design

Certificate Level 1 - Graphic Design

Certificate Level 3 - ESC - Advanced Design

Illustration

Certificate Level 3 - ESC - Motion Graphics Certificate Level 3 - ESC - User Experience

Design

For over twenty years, the Communication Design department (formerly Applied Graphic Design Technology) at Collin has offered industry-standard education in the creative service fields of animation, digital video, graphic design, web and interactive design. All full-time faculty have industry experience and all associate faculty are practicing professionals. Current industry practices and standards are a central component of classroom instruction. There is an elective option for the most diligent students to earn credit through local industry internships. Guest speakers from industry are featured on an ongoing basis.

This program's overall emphasis is on traditional graphic design and art direction concepts applied to technical skills for print and web media. The Print Track focuses on strong concept development skills and production techniques in print and other media. The Web Track focuses on website development, web animation and interactive media. Both tracks prepare students for careers in advertising, commercial art and visual communication. Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

# AAS – Graphic Design

60 credit hours

# FIRST YEAR First Semester

GEN ED

ARTC 1305 Basic Graphic Design
ARTC 1325 Introduction to Computer
Graphics
ARTS 1316 Drawing I
ARTV 1371 Storyboard and Concept
Development

Mathematics / Natural Sciences course

2017-18 Collin College Catalog, (Effective Spring 2018), Ed. 5. Rev. 10-12-17 Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

<sup>\*</sup> Elective (3 credit hours: BIOL-2406, ENVR-1401, GEOG-1301, GEOG-1302, GEOG-1303, GEOL-1305, GEOL-1401, or GEOL-1402

## Second Semester ARTC 1302

Digital Imaging I ARTC 1327 **Typography** 

Computer Illustration I ARTC 1353 History of Communication ARTC 2311

Graphics

ENGL 1301 Composition I

#### Third Semester

ARTC 1317 Design Communication I SPCH 1311 Introduction to Speech

Communication (See Speech

Options)

#### SECOND YEAR

#### First Semester

ARTC 1313 Digital Publishing I ARTC 1349 Art Direction I

GEN ED Humanities / Fine Arts course

(ARTS 1301 preferred)

IMED 1316 Web Design I

#### Second Semester

ARTC 2335 Portfolio Development for Graphic Design (Capstone)

FLMC 1331 Video Graphics and Visual

Effects I

GEN ED Social / Behavioral Sciences course

ARTC 2347 Design Communication II

IMED 2315 Web Design II

## Certificate Level 1 – Graphic Design

42 credit hours

#### FIRST YEAR

## First Semester

ARTC	1305	Basic	Graphic	Design

Introduction to Computer Graphics ARTC 1325

ARTS 1316 Drawing I

ARTV 1371 Storyboard and Concept

Development

#### Second Semester

ARTC	1302	Digital Imaging I
ARTC	1327	Typography

ARTC 1353 Computer Illustration I ARTC 2311 History of Communication

Graphics

#### SECOND YEAR

#### First Semester

		=
ARTC	1313	Digital Publishing I
ARTC	1317	Design Communication I
1 DETC	40.40	4 To 1 T

ARTC 1349 Art Direction I IMED 1316 Web Design I

#### Second Semester

ARTC 2335 Portfolio Development for

Graphic Design (Capstone)

ARTC 2347 Design Communication II

IMED 2315 Web Design II

## **Enhanced Skills Certificates**

Prior to being admitted into any of the awards listed below, the student must have earned an AAS in Graphic Design, Animation or Digital Video. Please contact the Department Chair for additional information.

## Certificate Level 3 – ESC – Advanced Design Illustration

12 credit hours

ARTC 1321 Illustration Techniques I ARTC 2305 Digital Imaging II ARTC 2340 Computer Illustration II

**ELECTIVE** \*

## Certificate Level 3 - ESC - Motion **Graphics**

12 credit hours

ARTV 1345 3-D Modeling and Rendering I

ARTV 1351 Digital Video

FLMC 2331 Video Graphics and Visual

Effects II

MUSC 1327 Audio Engineering I

# Certificate Level 3 - ESC – User **Experience Design**

9 credit hours

Art Direction II ARTC 2349

ARTC 2371 User Experience Design

ELECTIVE \*

<sup>\*</sup> Elective (3 credit hours): ARTS-1317, ARTS-2323, ARTS-2348

<sup>\*</sup> Elective (3 credit hours): ARTC-2305 or ARTC-2340



## Department Website:

Design

http://www.collin.edu/iad

Program Options:

AAS – Green Interior Design

OSA – Green Interior Design

Certificate Level 1 – Green Interior Design

Certificate Level 1 – Advanced Green Interior

The **Green Interior Design** Program prepares students to enter the world of spatial design. Specialized knowledge needed by an architect or interior designer includes spatial composition, drafting, space planning, building codes, and materials. Electives allow for more in-depth study of architecture, interior design, or illustration. Students are immediately valuable to employers upon graduation with our strong curriculum in CAD drafting. The program's strengths in advanced levels of drafting and modeling means students can position themselves within interior and architectural design firms to further their training and development in their respective fields. The Green Interior Design program provides courses that are helpful to students who seek to enhance their knowledge of Green

Interior Design is a state-licensed profession and all state requirements must be met before either title can be used.

Design, as well as expanding their marketability.

Students planning to transfer to a college or university should check with the Collin academic advisor. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

All new students: Please contact one of the Green Interior Design faculty or the college academic advisor prior to registering for any INDS courses. Please call 972.377.1029 to make an appointment with a faculty member.

## **AAS – Green Interior Design**

60 credit hours

## FIRST YEAR

	_
First	Semester

DFTG 1309	Basic Computer-Aided Drafting
INDS 1301	Basic Elements of Design
INDS 1341	Color Theory and Application
INDS 1371	Introduction to Green Design
<u>SPCH 1321</u>	Business and Professional
	Communication (See Speech
	options)

#### Second Semester

INDS	1349	Fundamentals of Space
		Planning
INDS	1351	History of Interiors I
INDS	1372	Computer-Aided Drafting
		for Interior Designers
<b>MATH</b>	<u>1324</u>	Mathematics for Business
		and Social Sciences (See
		Mathematics options)

#### Summer

ENGL	1301	Composition I
INDS	1352	History of Interiors II

#### SECOND YEAR

### First Semester

GEN ED		Humanities / Fine Arts course
<b>INDS</b>	1373	Green Interiors
<b>INDS</b>	2313	Residential Design I
<b>INDS</b>	2315	Lighting for Interior
		Designers

## Second Semester

INDS 1315	Materials, Methods and
	Estimating
INDS 1345	Commercial Design I
INDS 2374	Sustainable Living
GEN ED	Social / Behavioral Sciences
	course

#### Summer

INDS	2330	Interior Design Building
		Systems (Capstone) 1

1. May substitute INDS 2380

## **OSA – Green Interior Design**

12 credit hours

#### FIRST YEAR

#### First Semester

DFTG 1309 Basic Computer-Aided

Drafting

INDS 1371 Introduction to Green Design

#### **Second Semester**

INDS 1372 Computer-Aided Drafting for

Interior Designers

INDS 1373 Green Interiors

Note: Some of the courses in these award programs may require prerequisites. Please check the course descriptions.

# Certificate Level 1 – Green Interior Design

21 credit hours

#### FIRST YEAR

#### First Semester

DFTG	1309	Basic Computer-Aided
		Drafting
INDS	1301	Basic Elements of Design
INDS	1341	Color Theory and Application
INDS	1371	Introduction to Green
		Design

#### **Second Semester**

INDS	1351	History of Interiors I <sup>1</sup>
INDS	1372	Computer-Aided Drafting
		for Interior Designers
		(Capstone)
INDS	1373	Green Interiors

inds 1373 Green interior

1. May substitute INDS 1352

# Certificate Level 1 – Advanced Green Interior Design

42 credit hours

#### FIRST YEAR

## First Semester

DFTG	1309	Basic Computer-Aided Drafting
INDS	1301	Basic Elements of Design
INDS	1341	Color Theory and Application
<b>INDS</b>	1371	Introduction to Green Design

#### Second Semester

INDS	1351	History of Interiors I
INDS	1372	Computer-Aided Drafting
		for Interior Designers
INDS	1373	Green Interiors

#### **Summer Semester**

INDS 1352 History of Interiors II

#### SECOND YEAR

#### First Semester

INDS	1349	Fundamentals of Space
		Planning
INDS	2313	Residential Design I
INDS	2315	Lighting for Interior
		Designers

#### **Second Semester**

INDS	1315	Materials, Methods and
		Estimating
<b>INDS</b>	1345	Commercial Design I

#### Summer

INDS	2330	Interior Design Building
		Systems (Capstone)



Also see Health Information Management / Medical Coding and Billing

#### Department Website:

http://www.collin.edu/him

#### Program Option:

AAS - Health Information Management

Licensure Notice: Students who have been involved with the criminal system, please be advised that your background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

Health Information Management, often referred to as the business side of medicine, has rapidly expanded in scope and importance as healthcare shifts to a data driven, quality focused, patient centered industry. Initiatives like the electronic record, meaningful use, and accountable care have impacted healthcare and moved health information management from backstage to center stage.

The Associate of Applied Science (AAS) in Health Information Management (HIM) at Collin College is a 60 credit hour (two academic years) degree program preparing students for a career in health information management, as a health information professional. The program has been accredited by the Commission on Accreditation for Health Informatics and Information Management (CAHIIM) education. Upon successful completion of the coursework and the credential exam (facilitated by the American Health Information Management Association (AHIMA)), the graduate may use the designation RHIT behind the professional signature. Curriculum is based on the AHIMA Foundation's curricular competencies for the-Registered Health Information Technician (RHIT) credential and is approved by the Texas Higher Education. The program requires selective admission.

The Collin College Health Information Management program has a partnership with the College of St. Scholastica, the nation's oldest health information management program. Collin College HIM graduates have the opportunity to continue their HIM Bachelor of Science (BS) studies online with St. Scholastica and sit for the RHIA certification. This academic agreement maximizes the transfer of Collin credit and allows Collin students to complete some BS courses at Collin with Collin's lower tuition costs. For more information, see your Collin Advisor.

#### ACCREDITATION

The AAS in Health Information Management is accredited through the CAHIIM. They may be contacted at:

233 N. Michigan Ave., 21st floor Chicago, IL 60601-5800 312.233.1100 www.cahiim.org

#### SPECIAL ADMISSION REQUIREMENTS

Admission to the AAS - HIM program is selective and based on a point system. Admission is limited to 25 students per semester. Application deadlines are the 2<sup>nd</sup> Friday in November and 2<sup>nd</sup> Friday in May. The application is found on the HIM program website: <a href="https://www.collin.edu/him">www.collin.edu/him</a> under "Forms" and should be submitted to the department office via email, fax, or mail by the appropriate deadline.

# Eligibility requirements for application to AAS-HIM program:

- Complete Collin College Admission requirements
- Complete Collin College reading, writing and mathematics assessments, placing at the College-Level (TSI Testing).
- Overall GPA of 2.5. Please note that a grade of "C" or better must be earned in all HIM specific courses including HITT-1305, HITT-2471 and BIOL-2404.
- Completion of the Test of Essential Academic Skills (TEAS), prior to Application Deadline, with satisfactory results.
   Registration details on the department webpage <a href="www.collin.edu/him">www.collin.edu/him</a>
- Complete HIM packet.A complete HIM packet includes:
  - Completed HIM Application:
  - Consent for background check
  - o Consent for drug screening
  - Immunization documentation List of required immunizations are on the HIM webpage Note: Hepatitis B is typically a 7 month process. The TB screen and flu vaccine have a 12 month expiration.
  - O Signed Functional Abilities / Core
    Performance Standards for Health Information
    Management Program Clinical Expectations.
    Students who think they may not be able
    to meet the functional standards and
    need accommodation are encouraged to
    contact the college ACCESS department
    as soon as this program is of interest.
  - A 500 word essay explaining why you have chosen to become a Health Information professional.
- Two letters of reference from employers or teachers (not family or friends) that can attest to your professionalism. Letters should be emailed to <u>Michelle Millen</u>, Program Director: <u>MMillen@collin.edu</u>
- TEAS test scores Applicants must score a 60% or better on three of the four tested areas.

#### After Admission

 Earn a grade of "C" or better in all major course work and maintain a 2.5 GPA to continue in the HIM program  All Clinical requirements may be found on the webpage at www.collin.edu/him
 Submit all necessary documentation for Clinical consideration PRIOR to first Clinical experience. The Clinical courses are HITT-1160 and HITT-2361.

# AAS – Health Information Management

60 credit hours

#### PRE-ENTRANCE REQUIREMENTS

- A) Students planning to apply for admission to the program must have completed, or be in the process of completing, the courses listed below. Students are required to achieve a grade of "C" or better in HITT 1305, BIOL 2404 and HITT 2471
  - 1) BIOL 2404, Human Anatomy and Physiology Basic
  - 2) ENGL 1301, Composition I
  - 3) HITT 1305, Medical Terminology I
  - 4) HITT 2471, Pathophysiology and Pharmacology
  - 5) <u>HUMA1301</u>, Introduction to Humanities I (See <u>Humanities / Fine Arts</u> options)
  - 6) Social / Behavioral Sciences course
- B) Students entering the program must be prepared to enter college-level mathematics by either completion of MATH 0310 or by placement at the MATH 1314, College Algebra level.

The following layout is a suggestion of course progression. It reflects the course load for a full-time student. Students may take classes part-time. All courses listed in the degree plan are available online, with the exception of the clinical courses.

#### **PREREQUISITES**

BIOL 2404	Human Anatomy and
	Physiology Basic <sup>1</sup>
ENGL 1301	Composition I
HITT 1305	Medical Terminology I
HITT 2471	Pathophysiology and
	Pharmacology
<u>HUMA 1301</u>	Introduction to Humanities I
	(See <u>Humanities / Fine Arts</u>
	options)
GEN ED	Social / Behavioral Sciences
	Course

#### FIRST YEAR

#### First Semester

HITT	1301	Health Data Content and
		Structure
HITT	1311	Health Information Systems
HITT	1341	Coding and Classification Systems
HPRS	2232	Health Care
		Communications
MATH.	1342	Elementary Statistical
		Methods

#### **Second Semester**

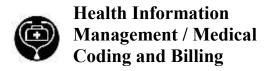
HITT	1160	Clinical I - Health
		Information / Medical
		Records Technology
HITT	1345	Health Care Delivery Systems
HITT	1353	Legal and Ethical Aspects
		of Health Information
HITT	2346	Advanced Medical Coding
HITT	2435	Coding and Reimbursement
		Methodologies

#### SECOND YEAR

#### First Semester

First Semester		emester	
	HITT	2249	RHIT Competency Review
	HITT	2339	Health Information
			Organization and Supervision
	НІТТ	2361	Clinical II - Health
			Information / Medical
			Records Technology
			(Capstone)
	HITT	2443	Quality Assessment and
			Performance Improvement

<sup>1.</sup> No course substitutions



#### Also see Health Information Management

## Department Website:

http://www.collin.edu/him

#### **Program Options:**

Certificate Level 1 - Medical Coding and Billing

The Medical Coding and Billing Certificate is a 30 credit hour on-line program that will prepare the

student for workforce as a medical coder / biller. The curriculum is based on the American Health Information Management Association's (AHIMA) competencies.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

# Certificate Level 1 – Medical Coding and Billing

30 credit hours

#### **PREREQUISITES**

BIOL	2404	Human Anatomy and
		Physiology Basic
HITT	1305	Medical Terminology I
HITT	2471	Pathophysiology and
		Pharmacology

## FIRST YEAR

#### First Semester

HITT	1301	Health Data Content and
		Structure
HITT	1311	Health Information Systems
HITT	1341	Coding and Classification
		Systems

#### **Second Semester**

HITT	1353	Legal and Ethical Aspects of
		Health Information
HITT	2346	Advanced Medical Coding
		(Capstone)
HITT	2435	Coding and Reimbursement
		Methodologies

Note: Students may take HITT-2245, Coding Certification Exam Review, after completing this certificate, to better prepare for the certification exam.



#### **Department Website:**

collin.edu/department/healthprofessions/

#### Program Options: AAS – Health Professions

Certified Nurse Aide (CNA) Track Electrocardiograph Technician (EKG) Track Emergency Medical Technician (EMT) Track Patient Care Technician (PCT) Track Phlebotomy Technician (PHLEB) Track

#### OSA - Health Professions -

Certified Nurse Aide (CNA) Track Electrocardiograph Technician (EKG) Track Phlebotomy Technician (PHLEB) Track

#### OSA – Patient Care Technician Certificate Level 1 – Health Professions

Certified Nurse Aide (CNA) Track Electrocardiograph Technician (EKG) Track Patient Care Technician (PCT) Track Phlebotomy Technician (PHLEB) Track

## Certificate Level 1 – Emergency Medical Technician (EMT)

The Associate of Applied Science (AAS) – Health Professions curriculum is divided into five tracks, allowing the student to focus on the specialization area that best fits their career goals. Additionally, the Certificate – Health Professions curriculum is divided into four areas, with the Certificate – Emergency Medical Technician to align with the student's area of specialization. There are also three

Occupational Skills Awards (OSA) that will provide skills for entry-level employment. Each of these awards build on the next level – OSA to Certificate to AAS – allowing the student to build their knowledge and skills as they progress the different levels of awards.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

The curriculum contains both transfer and workforce courses. The workforce courses are mainly offered at the Central Park Campus (CPC). For additional

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## FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities with or without accommodations for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in "Functional Abilities / Core Performance Standards" documents provided in the program information and application packets. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

Prior to enrolling in any clinical courses, students must complete all immunizations required by the Texas Department of State Health Services (TDSHS)\*. All required workforce courses require a minimum grade of "C" to continue in the program.

\* It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Coordinator. In such cases, the applicant must sign a declination form. All immunizations must be complete before assignment to clinical training.

**Health Insurance** - All Health Profession students are required to show proof of health insurance prior to starting clinical rotations each semester.

## AAS – Health Professions Certified Nurse Aide (CNA) Track

60 credit hours

## FIRST YEAR

First Se	emester	
BIOL	1406	Biology for Science Majors I
<b>ENGL</b>	<u>1301</u>	Composition I
<u>GOVT</u>	<u>2305</u>	Federal Government (Federal
		constitution and topics) 1
HIST	1301	United States History I
HITT	1305	Medical Terminology I

## Second Semester

ENGL	1302	Composition II
HITT	1311	Health Information Systems
HPRS	1204	Basic Health Profession Skills <sup>2</sup>
<b>HPRS</b>	2232	Health Care Communications
<b>SPCH</b>	<u>1311</u>	Introduction to Speech
		Communication
		(See Speech Options)

#### **Summer Semester**

MATH 1314	College Algebra
	(See Mathematics options)

#### SECOND YEAR

#### First Semester

HITT	1353	Legal and Ethical Aspects
		of Health Information
HPRS	1303	End of Life Issues
HPRS	2301	Pathophysiology
NURA	1301	Nurse Aide for Health Care

#### **Second Semester**

HITT 1345	Health Care Delivery Systems
HITT 2328	Introduction to Public Health
HPRS 1310	Introduction to Pharmacology
NURA 1160	Clinical – Nursing Aide and
	Patient Care Assistant
GEN ED	Humanities / Fine Arts course

#### **Summer Semester**

HPRS 2374 Trends in Healthcare (Capstone)

1. May substitute ANTH-2302, ANTH-2346, ANTH-2351, ECON-1301, ECON-2301, ECON-2302, GOVT-2306, HIST-1302, HIST-2301, PSYC-2301, SOCI-1301 or SOCI-1306 2. May substitute HPRS-1271

## AAS – Health Professions Electrocardiograph Technician (EKG) Track

60 credit hours

<b>FIRST</b>	YEAR	
First Se	emester	
BIOL	1406	Biology for Science Majors I
ENGL	1301	Composition I
GOVT	2305	Federal Government
		(Federal constitution and
		topics) 1
HIST	1301	United States History I
HITT	1305	Medical Terminology I
		9,
Second	Semest	er
<b>ENGL</b>	1302	Composition II

<b>ENGL</b>	1302	Composition II
HITT	1311	Health Information Systems
HPRS	1204	Basic Health Profession Skills <sup>2</sup>
HPRS	2232	Health Care Communications
<b>SPCH</b>	1311	Introduction to Speech
		Communication
		(See Speech Options)

#### **Summer Semester**

MATH 1314 College Algebra (See Mathematics options)

#### SECOND YEAR

## First Semester

DSAE	1340	Diagnostic Electrocardiography
ECRD	1111	Electrocardiography
HITT	1353	Legal and Ethical Aspects
		of Health Information
HPRS	1303	End of Life Issues
HPRS	2301	Pathophysiology

#### **Second Semester**

HITT 1345	Health Care Delivery Systems
HITT 2328	Introduction to Public Health
HPRS 1310	Introduction to Pharmacology
GEN ED	<u>Humanities / Fine Arts</u> course

## Summer Semester

HPRS	2374	Trends in Healthcare
		(Capstone)

1. May substitute ANTH-2302, ANTH-2346, ANTH-2351, ECON-1301, ECON-2301, ECON-2302, GOVT-2306, HIST-1302, HIST-2301, PSYC-2301, SOCI-1301 or SOCI-1306 2. May substitute HPRS-1271

## AAS – Health Professions Emergency Medical Technician (EMT) Track

60 credit hours

## FIRST YEAR

First Semester			
BIOL	1406	Biology for Science Majors I	
<b>ENGL</b>	<u>1301</u>	Composition I	
<b>GOVT</b>	<u>2305</u>	Federal Government (Federal	
		constitution and topics) 1	
HIST	1301	United States History I	
HITT	1305	Medical Terminology I	
Second Semester			

#### Second Semester

ENGL	1302	Composition II
HITT	1311	Health Information Systems
<b>HPRS</b>	1204	Basic Health Profession Skills <sup>2</sup>
<b>HPRS</b>	2232	Health Care Communications
<b>SPCH</b>	<u>1311</u>	Introduction to Speech
		<u>Communication</u>
		(See Speech Options)

#### **Summer Semester**

MATH 1314 College Algebra

(See Mathematics options)

# SECOND YEAR First Semester

EMSP	1160	Clinical – Emergency Medical
		Technician (EMT Paramedic)
		– Basic
EMSP	1371	Introduction to Emergency
		Medical Technician (EMT)
EMSP	1501	Emergency Medical Technician
HITT	1353	Legal and Ethical Aspects
		of Health Information

#### **Second Semester**

HITT 1345	Health Care Delivery Systems
HPRS 1191	Special Topics in Health
	Professions and Related
	Sciences, Other
HPRS 1310	Introduction to Pharmacology
HPRS 2301	Pathophysiology
GEN ED	Humanities / Fine Arts course

#### **Summer Semester**

HPRS 2374 Trends in Healthcare (Capstone)

1. May substitute ANTH-2302, ANTH-2346, ANTH-2351, ECON-1301, ECON-2301, ECON-2302, GOVT-2306, HIST-1302, HIST-2301, PSYC-2301, SOCI-1301 or SOCI-1306 2. May substitute HPRS-1271

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# AAS – Health Professions Patient Care Technician (PCT) Track

60 credit hours

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FIR	<b>5</b> 1	Y P.	AR

First	Semester
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BIOL 1406	Biology for Science Majors I
ENGL 1301	Composition I
<b>GOVT</b> 2305	Federal Government (Federal
	constitution and topics) 1
HIST 1301	United States History I
HITT 1305	Medical Terminology I

#### Second Semester

cecona centester		
ENGL	1302	Composition II
HITT	1311	Health Information Systems
HPRS	1204	Basic Health Profession Skills
HPRS	2232	Health Care Communications
<u>SPCH</u>	<u>1311</u>	Introduction to Speech
		Communication
(See Speech Options)		

# Summer Semester

MATH 1314	College Algebra
	(See Mathematics options)

#### SECOND YEAR

#### First Semester

11100 00	TITESTEL	
DSAE	1340	Diagnostic Electrocardiography
ECRD	1111	Electrocardiography
HITT	1353	Legal and Ethical Aspects
		of Health Information
HPRS	2301	Pathophysiology
NURA	1301	Nurse Aide for Health Care

#### Second Semester

HITT	1345	Health Care Delivery Systems
HPRS	1310	Introduction to Pharmacology
PLAB	1160	Clinical – Phlebotomy
PLAB	1323	Phlebotomy
GEN E	ED	Humanities / Fine Arts course

## Summer Semester

HPRS	1191	Special Topics in Health
		Professions and Related
		Sciences, Other
NURA	1160	Clinical - Nursing Aide and
		Patient Care Assistant
		(Capstone)

1. May substitute ANTH-2302, ANTH-2346, ANTH-2351, ECON-1301, ECON-2301, ECON-2302, GOVT-2306, HIST-1302, HIST-2301, PSYC-2301, SOCI-1301 or SOCI-1306 2. May substitute HPRS 1271

## **AAS – Health Professions**

## Phlebotomy Technician (PHLEB) Track

60 credit hours

#### FIRST YEAR

First	Semester	
тиы	Schlester	

BIOL 1406	Biology for Science Majors I
ENGL 1301	Composition I
GOVT 2305	Federal Government (Federal
	constitution and topics) 1
HIST 1301	United States History I
HITT 1305	Medical Terminology I

### **Second Semester**

ENGL	1302	Composition II
HITT	1311	Health Information Systems
HPRS	1204	Basic Health Profession Skills <sup>2</sup>
HPRS	2232	Health Care Communications
<b>SPCH</b>	1311	Introduction to Speech
		Communication
		(See Speech Options)

#### **Summer Semester**

MATH 1314 College Algebra (See Mathematics options)

## SECOND YEAR

### First Semester

HITT	1353	Legal and Ethical Aspects
		of Health Information
HITT	2328	Introduction to Public Health
<b>HPRS</b>	1303	End of Life Issues
HPRS	2301	Pathophysiology

#### Second Semester

HITT	1345	Health Care Delivery Systems
HPRS	1310	Introduction to Pharmacology
PLAB	1160	Clinical – Phlebotomy
PLAB	1323	Phlebotomy
GEN ED		Humanities / Fine Arts course

#### **Summer Semester**

HPRS 2374 Trends in Healthcare (Capstone)

1. May substitute ANTH-2302, ANTH-2346, ANTH-2351, ECON-1301, ECON-2301, ECON-2302, GOVT-2306, HIST-1302, HIST-2301, PSYC-2301, SOCI-1301 or SOCI-1306 2. May substitute HPRS-1271

## **Occupational Skills Awards**

Courses used in these awards, except HITT-1305 and HPRS-1271, are offered at the Central Park Campus and through dual-credit at select high schools. Please contact the Health Sciences, Biology and Chemistry Office at the Central Park Campus (CPC), Room B122G, or call 972.548.6679 for additional information.

## OSA – Health Professions Certified Nurse Aide (CNA) Track

9 credit hours

HITT	1305	Medical Terminology I
HPRS	1271	Introduction to the
		Healthcare System <sup>1</sup>
NURA	1160	Clinical – Nursing Aide and
		Patient Care Assistant
NURA	1301	Nurse Aide for Health Care

#### 1. May substitute HPRS-1204

Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

## OSA – Health Profession Electrocardiography (EKG) Track

9 credit hours

DSAE	1340	Diagnostic Electrocardiography
ECRD	1111	Electrocardiography
HITT	1305	Medical Terminology I
HPRS	1271	Introduction to the Healthcare
		System <sup>1</sup>

## 1. May substitute HPRS-1204

Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

## OSA – Health Professions Phlebotomy (PHLEB) Track

9 credit hours

HITT	1305	Medical Terminology I
HPRS	1271	Introduction to the
		Healthcare System 1
PLAB	1160	Clinical – Phlebotomy
PLAB	1323	Phlebotomy

1. May substitute HPRS-1204

Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

## **OSA – Patient Care Technician**

This award requires successful CNA, PHLEB and EKG course completion.

12 credit hours

DSAE 1340	Diagnostic Electrocardiography
ECRD 1111	Electrocardiography
NURA 1160	Clinical – Nursing Aide and
	Patient Care Assistant
NURA 1301	Nurse Aide for Health Care
PLAB 1160	Clinical – Phlebotomy
PLAB 1323	Phlebotomy

Note: This award requires permission to register for courses. Please contact Dr. Westcott, jwestcott@collin.edu, for more information.

## Certificate Level 1 – Health **Professions**

#### Certified Nurse Aide (CNA) Track

15 credit hours

#### FIRST YEAR

#### First Semester

Basic Health Profession Skills 1 HPRS 1204 HITT 1305 Medical Terminology I

#### **Second Semester**

NURA 1301 Nurse Aide for Health Care ELECTIVE \* ELECTIVE \*

#### Third Semester

NURA 1160 Clinical - Nursing Aide and Patient Care Assistant (Capstone)

1. May substitute HPRS 1271

\* Elective (6 credit hours): HITT-1311, HITT-1345, HITT-1353, HITT-2328, HPRS-1303, HPRS-1310, HPRS 2232, HPRS-2301

## Certificate Level 1 – Health **Professions**

### Electrocardiograph Technician (EKG) Track

15 credit hours

#### FIRST YEAR

#### First Semester

HPRS 1204 Basic Health Profession Skills 1 Medical Terminology I HITT 1305

#### Second Semester

DSAE 1340 Diagnostic Electrocardiography (Capstone)

ECRD 1111 Electrocardiography

ELECTIVE \* ELECTIVE \*

1. May substitute HPRS 1271

\* Elective (6 credit hours): HITT-1311, HITT-1345, HITT-1353, HITT-2328, HPRS-1303, HPRS-1310, HPRS 2232, HPRS-2301

## Certificate Level 1 – Health **Professions**

#### Patient Care Technician (PCT) Track

17 credit hours

#### FIRST YEAR

#### First Semester

Basic Health Profession Skills <sup>1</sup> HPRS 1204 HITT 1305 Medical Terminology I

#### Second Semester

DSAE 1340	Diagnostic Electrocardiography
ECRD 1111	Electrocardiography
PLAB 1160	Clinical – Phlebotomy
PLAB 1323	Phlebotomy
NURA 1301	Nurse Aide for Health Care

#### **Summer Semester**

NURA 1160 Clinical – Nursing Aide and Patient Care Assistant (Capstone)

1. May substitute HPRS-1271

## Certificate Level 1 – Health **Professions**

#### Phlebotomy Technician (PHLEB) Track

15 credit hours

#### FIRST YEAR

#### First Semester

HPRS 1204 Basic Health Profession Skills 1 HITT 1305 Medical Terminology I

#### Second Semester

PLAB 1160 Clinical – Phlebotomy (Capstone) PLAB 1323 Phlebotomy ELECTIVE \* ELECTIVE \*

1. May substitute HPRS 1271

\* Elective (6 credit hours): HITT-1311, HITT-1345, HITT-1353, HITT-2328, HPRS-1303, HPRS-1310, HPRS 2232, HPRS-2301

## Certificate Level 1 – Emergency Medical Technician (EMT)

16 credit hours

#### FIRST YEAR

#### First Semester

2404	Human Anatomy and
	Physiology Basic
1305	Medical Terminology I
1160	Clinical – Emergency Medical
	Technician (EMT Paramedic)
	<ul><li>Basic (Capstone)</li></ul>
1371	Introduction to Emergency
	Medical Technician (EMT)
1501	Emergency Medical Technician
	1160 1371



#### Department Website:

http://www.collin.edu/hospitality

#### Program Options: AAS – Hospitality and Food Service Management

Hotel / Restaurant Management Track Meetings and Event Management Track

Certificate Level 1 – Hotel / Restaurant Management Certificate Level 1 – Meetings and Event

Certificate Level 1 – Meetings and Event Management

Students completing the Hospitality and Food Service Management program at Collin will be qualified for a variety of mid-management positions and career advancement in the hospitality industry.

The Hospitality and Food Service Management curriculum emphasizes problem-solving, creativity and industry involvement, in addition to practical on-the-job experience. Upon completion of this degree, the student will have achieved over 300 hours of work experience directly related to this chosen field.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

Day and night classes are open-entry courses that provide a flexible schedule and meet a variety of individual needs.

#### **ACCREDITATION**

The Hospitality & Foodservice Management program is accredited by the Accreditation Commission for Programs in Hospitality Administration (ACPHA). http://www.acpha-cahm.org/

#### **TRANSFER**

Articulation agreements are being developed with nationally recognized hospitality programs such as the Texas Tech University – Restaurant, Hotel & Institutional Management, Business & Hotel Management School, Lucerne – Switzerland, and the Conrad N. Hilton School of Hotel & Restaurant Management – University of Houston.

Students planning to transfer to a college or university should check with a Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

## AAS – Hospitality and Food Service Management

### **Hotel / Restaurant Management Track**

60 credit hours

#### FIRST YEAR

#### First Semester

Sanitation and Safety 1, 2
Composition I
Introduction to Hospitality
Industry~
Hospitality Legal Issues
Introduction to Convention /
Meeting Management ~

#### **Second Semester**

HAMG 1313	Front Office Management ~
HAMG 1324	Hospitality Human Resources
	Management ~
HAMG 2337	Hospitality Facilities
	Management~
GEN ED	Humanities / Fine Arts course
RSTO 1325	Purchasing for Hospitality
	Operations ~

# Third Semester GEN ED Social / Behavioral Sciences course MATH 1332 Contemporary Mathematics (Quantitative Reasoning) (See Mathematics options)

#### SECOND YEAR

#### First Semester

HAMG 2301	Principles of Food and
	Beverage Operations ~
HAMG 2307	Hospitality Marketing
	and Sales ~
HAMG 2380	Cooperative Education –
	Hospitality Administration /
	Management, General ~
SPCH 1321	Business and Professional
	<u>Communication</u>
	(See Speech Options)

#### **Second Semester**

HAMG 2305	Hospitality Management
	and Leadership (Capstone) ~
HAMG 2332	Hospitality Financial
	Management~
RSTO 2307	Catering
ELECTIVE *	C

<sup>~</sup> Offered in eight-week format

- 1. Certification in ServSafe
- 2. Certification in Food Protection Management

## AAS – Hospitality and Food Service Management Meetings and Event Management Track

60 credit hours

#### FIRST YEAR

#### First Semester

ENGL 1301	Composition I
HAMG 1321	Introduction to Hospitality
	Industry~
HAMG 1340	Hospitality Legal Issues
TRVM 1327	Special Events Design ~
TRVM 2301	Introduction to Convention /
	Meeting Management ∼

Second Semester

GEN ED Humanities / Fine Arts course

HAMG 1324	Hospitality Human Resources
	Management ~
TRVM 1323	Group Tour Operations ~
TRVM 2341	International Convention /
	Meeting Management ~
TRVM 2355	Exposition and Trade Show
	Operations ~

#### Third Semester

GEN ED	Social / Behavioral Sciences
	course
MATH 1332	Contemporary Mathematics
	(Quantitative Reasoning)
	(See Mathematics options)

#### SECOND YEAR

#### First Semester

I iist scinester	
HAMG 2301	Principles of Food and
	Beverage Operations ~
HAMG 2307	Hospitality Marketing and
	Sales ~
<u>SPCH</u> 1321	Business and Professional
	<u>Communication</u>
	(See Speech Options)
TRVM 2380	Cooperative Education –
	Tourism and Travel Services
	Management~

#### **Second Semester**

HAMG 2305	Hospitality Management and
	Leadership (Capstone) ~
HAMG 2332	Hospitality Financial
	Management~
RSTO 2307	Catering ~
ELECTIVE *	<u> </u>

<sup>~</sup>Offered in eight-week format

<sup>\*</sup> Elective (3 credit hours): CHEF 1301, PSTR 1301, TRVM 1323~, TRVM 1327~, TRVM 2341 or TRVM 2355~

<sup>\*</sup> Elective (3 credit hours): CHEF 1301, CHEF1305, HAMG 1313~, HAMG 2337~ or PSTR 1301~

## Certificate Level 1 – Hotel / Restaurant Management

21 credit hours

#### FIRST YEAR

#### First Semester

CHEF 1305 Sanitation and Safety <sup>1,2</sup> ~
HAMG 1321 Introduction to Hospitality
Industry ~
HAMG 1340 Hospitality Legal Issues
RSTO 1325 Purchasing for Hospitality
Operations ~

#### Second Semester

HAMG 1313 Front Office Management ~ HAMG 1324 Hospitality Human Resources Management ~

HAMG 2337 Hospitality Facilities Management ~ (Capstone)

~Offered in eight-week format

1. Certification in ServSafe

2. Certification in Food Protection Management

## Certificate Level 1 – Meetings and Event Management

21 credit hours

#### FIRST YEAR

#### First Semester

HAMG 1321 Introduction to Hospitality
Industry~
HAMG 1340 Hospitality Legal Issues
TRVM 1327 Special Events Design ~
Introduction to Convention /
Meeting Management ~

#### Second Semester

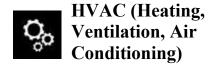
TRVM 1323 Group Tour Operations ~ TRVM 2341 International Convention / Meeting Management ~

(Capstone)

TRVM 2355 Exposition and Trade Show

Operations ~

~ Offered in eight-week format



#### **Program Options:**

AAS – HVAC (Heating, Ventilation, Air Conditioning)

Certificate Level 1 – HVAC (Heating, Ventilation, Air Conditioning) Certificate Level 2 – HVAC (Heating, Ventilation, Air Conditioning)

The Heating, Ventilation, Air Conditioning (HVAC) program at Collin offers an AAS degree, Certificate Level 2, and Certificate Level 1. Students from the program will be prepared to work in the residential HVAC industry installing and servicing gas and electric furnaces and heat pump systems. Students will learn how to work safely and responsibly within EPA guidelines and standards that apply to HVAC. They will be able to identify and use HVAC equipment, components, and tools while understanding their functions within the HVAC industry. They will also learn common mechanical, electrical, and electronic components such as compressors, switches, thermostats, motors and fans. Additionally, they will work with heat pumps, heating units, ac units, refrigeration units, and more.

The student is awarded an AAS, Certificate Level 1 or Certificate Level 2 upon successful completion of the corresponding program. Students who complete the program are eligible for the EPA 608 certification examination and can apply to the Texas Department of Licensing and Regulation for an AC and Refrigeration Technician License.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

Students planning to transfer to a college or university should check with the Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

## AAS – HVAC (Heating, Ventilation, Air Conditioning)

60 credit hours

First Semester	
ENGL 1301	Composition I
	TIP I P

HART 1256 EPA Recovery Certification Preparation HART 1301 Basic Electricity for HVAC

HART 1307 Refrigeration Principles HART 1403 Air Conditioning Control

Principles

#### Second Semester

Second	Semest	er
HART	1441	Residential Air Conditioning
HART	1445	Gas and Electric Heating
HART	2449	Heat Pumps
<u>SPCH</u>	<u>1321</u>	Business and Professional
		<u>Communication</u>
		(See Speech options)

#### SECOND YEAR

#### First Semester

HART 2436 Air Conditioning Troubleshooting HART 2438 Air Conditioning Installation and Startup

HART 2442 Commercial Refrigeration GEN ED Mathematics course

#### Second Semester

Introduction to Economics <sup>1</sup>
Practicum – Heating, Air
Conditioning and Refrigeration
Technology/Technician
(Capstone)
Residential Air Conditioning
Systems Design
Advanced Electricity for HVAC
<u>Humanities / Fine Arts</u> course

1. May substitute ECON 2301, ECON 2302, or PSYC 2301

## Certificate Level 1 – HVAC (Heating, Ventilation, Air Conditioning)

24 credit hours

#### FIRST YEAR

First Semester	First	Sem	ester
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HART 1256	EPA Recovery Certification
	Preparation
HART 1301	Basic Electricity for HVAC
HART 1307	Refrigeration Principles
HART 1403	Air Conditioning Control
	Principles

#### Second Semester

HART 1441	Residential Air Conditioning
HART 1445	Gas and Electric Heating
HART 2449	Heat Pumps

Verification of Workplace Competencies: Obtaining Industry Certification (NATE)

## Certificate Level 2 – HVAC (Heating, Ventilation, **Air Conditioning)**

42 credit hours

Students must be TSI complete.

#### FIRST YEAR

#### First Semester

ENGL 1301	Composition I
HART 1256	EPA Recovery Certification
	Preparation
HART 1301	Basic Electricity for HVAC
HART 1307	Refrigeration Principles
HART 1403	Air Conditioning Control
	Principles

#### Second Semester

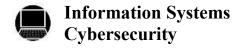
HART	1441	Residential Air Conditioning
HART	1445	Gas and Electric Heating
HART	2449	Heat Pumps
SPCH	1321	Business and Professional
		Communication (See Speech options)

#### SECOND YEAR

#### **Second Semester**

HART	2436	Air Conditioning
		Troubleshooting
HART	2438	Air Conditioning Installation
		and Startup
HART	2442	Commercial Refrigeration
Verificai	tion of W	orkplace Competencies: Obtaining Industry
Čertifi	cation (N	IATE)

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#### **Program Options:**

AAS – Information Systems Cybersecurity Certificate Level 1 – Information Systems Cybersecurity

Certificate Level 1 – CISSP Information Systems Cybersecurity Professional

The Information Systems Cybersecurity AAS degree prepares students for a career in cybersecurity management and support in addition to the tasks relating to network management, system administration, technical support, hardware/software installation, and equipment repair. The program graduate will be able to design and install secure network systems based on customer requirements, monitor and maintain network traffic and security, and maintain network hardware and software.

Courses and hands-on labs in this program will assist the graduate in preparing to take a variety of Cisco, Microsoft, and CompTIA certification examinations.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

## AAS – Information Systems Cybersecurity

60 credit hours

#### FIRST YEAR

First	Seme	ster

ITNW 1358 Network +

CPMT 1305 IT Essentials I: PC Hardware

and Software

ITMT 1371 Configuring and Supporting

Microsoft Windows 10 (70-698)

ITMT 1372 Installation, Storage and

Computing with Windows

Server 2016

GEN ED Mathematics course

#### **Second Semester**

<u>GEN ED</u>	Social / Behavioral Sciences
	course

ITCC 1314 CCNA 1: Introduction to

Networks

ITMT 1373 Networking with Windows

Server 2016

ITSC 1316 Linux Installation and

Configuration

**ELECTIVE \*** 

#### Summer

ENGL	1301	Composition I
ITCC	1340	CCNA 2: Routing and
		Switching Essentials

#### SECOND YEAR

#### First Semester

ITSY	2300	Operating System Security
ITSY	2301	Firewalls and Network Security
ITSY	2342	Incident Response
		and Handling

ELECTIVE \*

#### Second Semester

GEN ED		<u>Humanities / Fine Arts</u> course
ITSY	2341	Security Management Practices
		(Capstone)
ITSY	2343	Computer System Forensics
<b>SPCH</b>	1321	Business and Professional
		<u>Communication</u>
	(See Sp	eech Options)

<sup>\*</sup> Electives (6 credit hours): ITSY-1300 (recommended) or ITSY-2572 (recommended), or any ITCC, ITNW, ITMT, or ITSY course not listed above

Note: Many ITCC, ITMT, ITNW and ITSY courses are offered in eight-week express sessions.

## Certificate Level 1 – Information **Systems Cybersecurity**

33 credit hours

#### FIRST YEAR

#### First Semester

ITNW 1358 Network + ITCC 1314 CCNA 1: Introduction to Networks ITMT 1372 Installation, Storage and Computing with Windows

Server 2016

#### **Second Semester**

ITCC	1340	CCNA 2: Routing and
		Switching Essentials
ITMT	1373	Networking with Windows
		Server 2016

ELECTIVE \*

#### SECOND YEAR

#### First Semester

ITSY	2300	Operating System Security
ITSY	2301	Firewalls and Network
		Security
ITSY	2342	Incident Response and
		Handling

#### Second Semester

ITSY	2341	Security Management
		Practices (Capstone)
ITSY	2343	Computer System Forensics

<sup>\*</sup> Elective (3-5 credit hours): ITMT-2304, ITSY-1300 or ITSY-2572

Note: Many ITCC, ITMT, ITNW, and ITSY courses are offered in eight-week express sessions.

## Certificate Level 1 – CISSP **Information Systems Cybersecurity Professional**

17 credit hours

#### First Semester

Network + ITNW 1358 **ELECTIVE\*** 

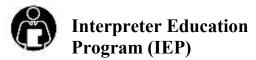
ITSY 1300 Fundamentals of

#### Second Semester

1101	1500	i dildailicitatis of
		Information Security
ITSY	2341	Security Management
		Practices
ITSY	2572	Certified Information Systems
		Security Professional (CISSP)
		Common Body of Knowledge
		Domain Instruction (Capstone)

<sup>\*</sup> Elective (3 credit hours): Any ITSY course not listed above, with consent of the Associate Dean

Note: Many ITCC, ITMT, ITNW, and ITSY courses are offered in eight-week express sessions.



Also see Associate of Arts – American Sign Language for academic transfer coursework.

#### **Program Options:**

AAS - Interpreter Education Program (IEP) Certificate Level 2 - ASL Studies Certificate Level 3 - ESC - Interpreting in **Medical Settings** 

(Note: Beginning January 2012, in order to become a Texas BEI Certified Interpreter, you must have an associate degree or have earned 60 credit hours from an accredited college or university.)

Licensure Notice: Students who have been involved with the criminal system, please be advised that your background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

Because of the passage of the Americans with Disabilities Act, there is currently a national and statewide shortage of interpreters. Moreover, the quality as well as the quantity of the interpreters that the market demands is increasing.

The Interpreter Education Program (IEP) provides a focused and balanced education for students who desire to become sign language interpreters. With an emphasis on receptive skills, the program concentrates on synthesizing the study of American Sign Language (ASL), Deaf culture and interpreting as a profession.

Interpreting requires excellence in ASL and a thorough knowledge of oneself and one's ethics because interpreters are privy to confidential information. To confirm adequate proficiency in ASL, IEP students are required to complete the IEP Language Assessment prior to beginning their second year in the program. Students must complete the assessment in order to continue in the IEP program. Students who do not successfully pass any part of the assessment may continue in the program but must complete skills development – including workshops, lab materials, interaction with ASL Lab assistants, group study, community events, online materials – that strengthens their language skills.

Collin's IEP program has a greater number of deaf professors and ASL assistants than non-deaf teachers and ASL assistants, which provides students the opportunity to become fluent in ASL and to develop culturally appropriate behaviors and responses.

Vaccination Requirements for Interpreters in a Healthcare Setting: As of January 1, 2012, the Joint Commission has a requirement that all on-site Contract Medical Interpreters are current on all immunizations. This has become known as "hospital ready". Proof of Immunization records required: Hepatitis B (requires 7 months to get all 3 shots required), annual Tuberculosis "TB" screening and annual Influenza. Some agencies also require proof of MMR, DTAP, and Varicella. Contact your physician and ask for a statement of current vaccinations. If you do not meet all the requirements above, please schedule an appointment with your physician and obtain your needed immunizations. These immunizations will be required prior to some onsite observations.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

#### PASS / FAIL OPTION

Non-degree-seeking students may take a sign language class as pass / fail. Degree-seeking students should not pursue this option. The pass / fail option will not satisfy the degree-seeking transfer requirements.

Note: Students may not convert a pass / fail grade to a letter grade. Foreign language classes, including sign language, cannot be audited.

## AAS – Interpreter Education Program (IEP)

65 credit hours

## FIRST YEAR Fall Semester

ENGL 1301	Composition I
MATH 1314	College Algebra
	(See Mathematics Options)
SGNL 1401	Beginning American Sign
	Language I +
SLNG 1215	Visual / Gestural
	Communication (Fall
	Semester only)

#### **Spring Semester**

SGNL 1402	Beginning American Sign	
	Language II +	
SLNG 1207	Intra-lingual Skills Development	
	for Interpreters (Spring Semester only)	
SLNG 1347	Deaf Culture	
<u>SPCH 1311</u>	Introduction to Speech	
	Communication	
	(See Speech Options)	
Summer Semester		
SGNL 2301	Intermediate American Sign	

SGNL	2301	Intermediate American Sign
		Language I +
SLNG	1211	Fingerspelling and Numbers
SLNG	1321	Introduction to the
		Interpreting Profession

Note: Prior to registering for the Second Year coursework, the IEP Language Assessment is required.

#### SECOND YEAR

#### Fall Semester

SGNL 2302	Intermediate American Sign
	Language II +
SLNG 1350	Sign-to-Voice (Fall Semester only)
SLNG 2301	Interpreting I (Fall Semester only)
GEN ED	Social / Behavioral Sciences
	course

#### **Spring Semester**

PHIL 2306 Introduction to Ethics <sup>1</sup>

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SLNG	2186	Internship I - Sign Language
		Interpretation and Translation
SLNG	2302	Interpreting II (Spring Semester only)
SLNG	2303	Transliterating (Spring Semester only)
SLNG	2311	Interpreting in Specialized Settings
		(Spring Semester only)

#### **Summer Semester**

SLNG	1291	Special Topics in Sign Language
		Interpreter (Summer Semester only)
SLNG	2331	Interpreting III (Summer Semester only)
SLNG	2387	Internship II - Sign Language
		Interpretation and Translation
		(Capstone) (Summer Semester only)

1. May substitute DRAM-1310, DRAM-2361, DRAM-2362, DRAM-2366, DRAM-2367, ENGL-2322, ENGL-2323, ENGL-2327, ENGL-2328, ENGL-2332, ENGL-2333, ENGL-2342, ENGL-2343, HIST-2311, HIST-2312, HIST-2321, HIST-2322, HUMA-1301, PHIL-1301, PHIL-1304, PHIL-2303, PHIL-2307 or PHIL-2321

+ American Sign Language courses are also transfer courses and may be used, at some institutions, to satisfy a Foreign Language requirement.

#### Certificate Level 2 – ASL Studies

35 credit hours

Student must meet Texas Success Initiative (TSI) collegereadiness standards. See the Dean to file a degree plan for this certificate before registering for required courses marked with an asterisk.

#### FIRST YEAR

#### Fall Semester

ENGL 1301 \* Composition I

Beginning American Sign SGNL 1401

Language I +

SLNG 1215 Visual / Gestural

Communication (Fall Semester

only)

SLNG 1347 Deaf Culture

#### **Spring Semester**

SGNL 1402 Beginning American Sign

Language II +

SLNG 1207 Intra-lingual Skills Development

for Interpreters (Spring Semester

only)

SPCH 1311 \* Introduction to Communication

#### **Summer Semester**

SGNL 2301 Intermediate American Sign Language I +

SLNG 1211 Fingerspelling and Numbers

> (Summer Semester only) Introduction to the Interpreting

Profession (Summer Semester only)

#### SECOND YEAR

#### Fall Semester

SLNG 1321

SGNL 2302 Intermediate American Sign

Language II +

**SLNG 1350** Sign-to-Voice (Capstone)

(Fall Semester only)

+American Sign Language courses are also transfer courses and may be used, at some institutions, to satisfy a Foreign Language requirement.

## Certificate Level 3 - ESC -**Interpreting in Medical Settings**

7 credit hours

Prior to being admitted into this award, the student must have earned an AAS in Interpreter Education Program (IEP), or earned a Texas BEI Certified Interpreter certification.

#### FIRST YEAR

#### First Semester

HITT 1305 Medical Terminology I

#### **Second Semester**

SLNG 2189 ESC Internship - Sign

Language Interpretation and

Translation (Capstone)

SLNG 2371 Interpreting in the Medical

Setting



#### Department Website:

http://www.collin.edu/department/business/

Program Options:

AAS – Marketing
Certificate Level 1 – Entrepreneurship
Certificate Level 1 – Marketing

Marketing incorporates professional education courses to prepare individuals for career paths with retail or wholesale organizations, profit or non-profit organizations, governmental agencies, and academic institutions.

Collin's Marketing program is designed to give a thorough background in aspects of marketing for students new to marketing and to provide methods for improving skills for people already employed in marketing careers. Marketing students who have questions should visit with the Discipline Lead.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

Through a transfer agreement, students may earn their Associate of Applied Science (AAS) degree in Marketing from Collin and transfer to numerous universities in Texas where their Collin courses may be applied toward Bachelor of Applied Arts and Science (BAAS) and Bachelor of Applied Technology (BAT) degrees.

Students planning to transfer to a college or university should check with the Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

### AAS – Marketing

60 credit hours

### FIRST YEAR

-		-				
F	irst	Se	m	es	ter	•

BMGT 1307	Team Building
BMGT 2303	Problem Solving and
	Decision Making
MATH 1332	Contemporary Mathematics
	(Quantitative Reasoning)
	(See Mathematics options)
MRKG 1301	Customer Relationship
	Management (Fall semester only)
MRKG 1311	Principles of Marketing

#### Second Semester

BMGT BMGT BUSG	1341	Communications in Management Business Ethics Small Business Management /
2000		Entrepreneurship
<b>ENGL</b>	1301	Composition I
IBUS	1354	International Marketing
		Management (Offered Spring
		Semester only)
MRKG	2349	Advertising and Sales
		Promotion (Offered Spring Semester only)

#### SECOND YEAR

#### First Semester

BMGT 1327	Principles of Management
GEN ED	Humanities / Fine Arts course
IBUS 2341	Intercultural Management
MRKG 2312	e-Commerce Marketing
MRKG 2333	Principles of Selling (Offered
	Fall Semester only)

#### Second Semester

Introduction to Economics <sup>1</sup>
Marketing Research and
Strategies <sup>2</sup> (Offered Spring
Semester only)
Cooperative Education –
Marketing / Marketing
Management, General
(Capstone) <sup>3</sup>
Business and Professional
Communication
(See Speech options)

- 1. May substitute ECON-2301, ECON-2302 or PSYC-2301
- 2. May substitute BUSG-1307
- 3. May substitute BUSG-2371, with consent of Discipline Lead (prior to registering)

## Certificate Level 1 – Entrepreneurship

18 credit hours

#### FIRST YEAR

#### First Semester

BUSG 1307 Entrepreneurship and
Economic Development
BUSG 2309 Small Business Management /
Entrepreneurship
MRKG 1311 Principles of Marketing

#### Second Semester

MRKG 2333

MRKG 2312 e-Commerce Marketing
BUSG 2371 Entrepreneurship Experience
(Capstone) <sup>2</sup>

1. May substitute ACCT-2301, ACNT-1303 or

Principles of Selling <sup>1</sup>

2. For approval, students must meet with the Discipline Lead for the Marketing Program to determine which program packets are required for course completion.

## Certificate Level 1 – Marketing

18 credit hours

#### FIRST YEAR

#### First Semester

IBUS 1354

BMGT 2303 Problem Solving and
Decision Making

MRKG 1301 Customer Relationship
Management

MRKG 1311 Principles of Marketing

Second Semester

BMGT 1341 Business Ethics

BUSG 2309 Small Business Management /
Entrepreneurship (Capstone)

Management

International Marketing



Also see Associate of Arts – Music Field of Study, an academic transfer program.

#### **Department Website:**

http://www.collin.edu/department/music

#### **Program Options:**

AAS - Commercial Music

Certificate Level 1 - Audio Engineering

Studio Track Live Sound Track

#### Certificate Level 2 - Music Business

Collin's Commercial Music program provides career training in performance, audio engineering, sound reinforcement, electronic music, composition and songwriting. Students can earn a two-year degree as well as two different one-year certificates. The coursework for the one-year certificates is included in the two-year degree.

The Audio Engineering Certificate has two "tracks". The *Studio Track* focuses on recording, mixing and mastering. The *Live Sound Track* focuses on designing, setting up and running sound reinforcement for live events. The courses concentrate on building the skills necessary to successfully work in the music industry as either a Mixing Engineer or Live Sound Engineer.

The Music Business Certificate addresses the demands for working in the music industry in marketing and management positions such as artist promotions, concerts and tours, merchandising, social networking, etc.

The Associates of Applied Science (AAS) in Commercial Music is a broader two-year degree which includes general education and traditional music courses beyond the courses in Music Business or Audio Engineering.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

#### **AAS - Commercial Music**

60 credit hours

#### FIRST YEAR

#### First Semester

ARTC	1325	Introduction to Computer Graphics
MUSB	1305	Survey of the Music Business
MUSC	1327	Audio Engineering I ~
MUSI	1303	Fundamentals of Music

#### Second Semester

Second	Second Semester			
MUSC	1313	Commercial Music Theory I		
MUSC	2427	Audio Engineering II ~		
MUSI	1116	Sight Singing & Ear Training 1 <sup>1</sup>		
<u>SPCH</u>	1321	Business and Professional		
		<u>Communication</u>		
(See Speech Options)				
FLECT	'IVE *			

ELECTIVE \*

#### SECOND YEAR

#### First Semester

ENGL 1301	Composition I
MUSB 2301	Music Marketing
MUSC 1331	MIDI I
MUSP 1113	Introductory Group Piano I <sup>2</sup>
GEN ED	Mathematics / Natural Sciences
	course

ELECTIVE \*

#### **Second Semester**

MUSB 2350	Commercial Music Project
	(Capstone) <sup>3</sup>
MUSC 1405	Live Sound I
MUSC 2351	Audio for Video
MUSI 1307	Music Literature 4
MUSP 1114	Introductory Group Piano II 5
<u>GEN ED</u>	Social / Behavioral Sciences
	course

- 1. Required for Commercial Music Majors
- 2. May substitute MUSI-1181 or MUSP-1110, departmental permission required
- 3. May substitute MUSB-2380, departmental permission required
- 4. Required to fulfill the Humanities / Fine Arts requirement
   No course substitutions
- 5. May substitute MUSI-1182 or MUSP-1110 or MUSP-2235, departmental permission required

- ~ Audio Engineering courses (MUSC-1327, MUSC-2427, MUSC-2447 and MUSC-2448) are offered in both eight- and sixteen-week formats. Students planning to follow the curriculum outline above may need to take the courses in the eight-week format in order to meet the prerequisite requirements.
- \* Electives (minimum of 7 credit hours) If not used in degree requirements: Any MUAP, any MUEN, MUSB-1341, MUSB-2345, MUSB-2355, MUSB-2380, MUSC-1209, MUSC-1321, MUSC-1323, MUSC-1333, MUSC-2313, MUSC-2314, MUSC-2330, MUSC-2345, MUSC-2355, MUSC-2356, MUSC-2403, MUSC-2447, MUSC-2448, MUSC-2453, MUSI-1117, MUSI-1181, MUSI-1182, MUSI-1183, MUSI-1184, MUSI-1192, MUSI-1193, MUSI-1310, MUSI-1312, MUSI-2116, MUSI-2117, MUSI-2181, MUSI-2182, MUSI-2311, MUSI-2312, MUSP-1104, MUSP-1105, MUSP-1110, MUSP-1117, MUSP-1127, MUSP-1151, MUSP-1153, MUSP-1202, MUSP-2230, MUSP-2233, MUSP-2235, MUSP-2237 or MUSP-2249

## Certificate Level 1 – Audio Engineering Studio Track

31 credit hours

#### FIRST YEAR

#### **Summer Semester**

MUSC 1327 Audio Engineering I ~

#### First Semester

MUSB	1305	Survey of the Music Business
MUSB	2301	Music Marketing
MUSC	1405	Live Sound I
MUSC	2427	Audio Engineering II ~

#### Second Semester

MUSC	1323	Audio Electronics
MUSC	1331	MIDI I
MUSC	2447	Audio Engineering III ~
MUSC	2448	Audio Engineering IV ~
		(Capstone)

MIJCC 1222 A.- J. - El------

~ Audio Engineering courses (MUSC-1327, MUSC-2427, MUSC-2447 and MUSC-2448) are offered in both eight- and sixteen-week formats. Students planning to follow the curriculum outline above would need to take the courses in the eight-week format in order to meet the prerequisite requirements.

## Certificate Level 1 – Audio Engineering Live Sound Track

31 credit hours

#### FIRST YEAR

#### **Summer Semester**

MUSC 1327 Audio Engineering I ~

#### First Semester

MUSB 130	5 Survey of	f the Music Business
MUSB 134	1 Concert 1	Promotion and
	Venue M	lanagement
MUSC 140	5 Live Sou	nd I
MUSC 242	7 Audio Et	ngineering II ~

#### **Second Semester**

MUSC	1323	Audio Electronics
MUSC	1331	MIDI I
MUSC	2403	Live Sound II
MUSC	2453	Live Sound III (Capstone)

~ Audio Engineering courses (MUSC-1327 and MUSC-2427) are offered in both eight- and sixteen-week formats. Students planning to follow the curriculum outline above would need to take the courses in the eight-week format in order to meet the prerequisite requirements.

## Certificate Level 2 – Music Business

33 credit hours

Students must be TSI complete.

#### FIRST YEAR

**Summer Semester** 

MUSB 1305 Survey of the Music Business

#### First Semester

1 1100 00	TITESTEL	
MUSB	1341	Concert Promotion and
		Venue Management
MUSB	2301	Music Marketing
MUSC	1327	Audio Engineering I
MUSI	1310	American Music
SPCH	1321	Business and
		Professional Communication

#### Second Semester

MUSB 2345 Live Music and Talent Management MUSB 2350 Commercial Music Project

(Capstone)

MUSC 1331 MIDI I

ELECTIVE \*\*
ELECTIVE \*\*

\*\* Elective - (minimum of 6 credit hours): MUSB-2355, MUSB-2380, MUSC-1321, MUSC-1405, MUSC-2355, MUSC-2356 or MUSC-2427



#### Department website:

http://www.collin.edu/nursing

Program Options:

AAS – Nursing (RN)

Nursing (RN) Bridge for LVN /

Paramedic / Medic

Collin's Associate Degree Nursing (ADN) Program prepares students to make application to the Texas Board of Nursing (Texas BON) for licensure as a registered nurse through the NCLEX-RN examination. The Nursing curriculum is approved by the Texas BON and accredited by the Accreditation Commission for Education in Nursing (ACEN). Students must meet eligibility requirements for licensure as established by the Texas BON.

Licensure Notice: Students who have been involved with the criminal system, please be advised that your background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

If an individual has reason to believe he/she is ineligible for licensure, he/she may petition the Texas BON for a declaratory order. Upon application to the nursing program, you must show your eligibility to take the NCLEX-RN exam through outcomes letter that will be issued by the Texas BON if the declaratory order is approved. To check your eligibility, please review the following questions. If you answer "yes" to any one of the following questions, you must have the declaratory order from

the Texas BON completed prior to applying to the nursing program.

- Have you ever been convicted of a misdemeanor (other than a class C misdemeanor traffic violation)?
- Have you ever been convicted of a felony?
- Have you ever pled nolo contender, no contest, or guilty?
- Have you ever received deferred adjudication?
- Have you ever been placed on community supervision or court-ordered probation, whether or not adjudicated guilty?
- Have you ever been sentenced to serve jail or prison time or court-ordered confinement?
- Have you ever been granted pre-trial diversion?
- Have you ever been arrested or have any pending criminal charges?
- Have you ever been cited or charged with any violation of the law?
- Have you ever been subject of a courtmartial; Article 15 violation; or received any form of military judgment, punishment, or action?

## Contact the Nursing Department for further information.

Collin County healthcare facilities support the ADN program. Several healthcare facilities throughout the Metroplex are used for the clinical experience. The role of the nurse continues to change in an evolving healthcare system.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

#### FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities - with or without accommodations - for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in the Functional Abilities / Core Performance Standards documents provided in the program information on the Nursing website <a href="http://www.collin.edu/nursing">http://www.collin.edu/nursing</a>. Students who think they may not be able to meet the functional standards and need accommodation are

encouraged to contact the college ACCESS department as soon as this program is of interest.

#### **ACCREDITATION**

The Nursing Program is fully accredited by the Accreditation Commission for Education in Nursing (ACEN). They may be contacted at: 3343 Peachtree Road NE, Suite 850 Atlanta, GA 30326 404.975.5000 www.acenursing.org

#### SCHOLARSHIPS

Various scholarships are available to students when they have been accepted into the Nursing Program. Most scholarships are awarded based on financial need. Other types of monetary support are available through the college's Financial Aid Office.

## ADDITIONAL ADMISSIONS REQUIREMENTS

Admission to the Nursing Program is selective. Admission to the college does not guarantee admission to the Nursing Program. Registration is by permission only. Information and applications may be obtained from the Nursing Office or the Nursing website: http://www.collin.edu/nursing.

- Complete pre-entrance course requirements with a minimum 2.5 GPA
- Earn a grade of "C" or better in all courses applicable to the Nursing program
- Submit official copies of all college transcripts to include Collin College
- Complete the PSB (Nursing School Aptitude Exam) prior to the Jan. 31<sup>st</sup>, March 31<sup>st</sup> or Aug. 31<sup>st</sup> deadline with a satisfactory result
- Successful completion of drug screen, background check and physical / mental competencies, and dental exam
- Submit a current American Heart Association CPR for Health Care workers
- Provide a current negative TB test
- Complete a declaratory order from the Texas BON, if needed
- Show positive titer immunizations required by the Texas Department of State Health Services (TDSHS) \*
- \* It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Clinical Coordinator.

Health Insurance – All nursing students are required to show proof of health insurance prior to starting clinical rotations each semester.

Placement in mathematics and English courses is based upon the results of each student's assessments and subjects completed before admission.

### Nursing (RN)

The Nursing curriculum allows for deep learning and promotes higher level clinical judgment. Students focus on generalities of specifically identified concepts and then apply those concepts within the context of specific priority exemplars. A great advantage of concept-based learning, from a curriculum point-ofview, is that it provides an efficient content management process. Nursing concepts are divided into two categories: Health Care Concepts, and Professional Nursing Concepts. These concepts are learned in the classroom and applied using sound clinical judgment in practical settings such as the campus hospital and Health Sciences Simulation labs as well as in local healthcare facilities.

## AAS – Nursing (RN)

60 credit hours

#### **PREREQUISITES**

<b>BIOL</b>	<u>2401</u>	Anatomy and Physiology I 1
BIOL	2402	Anatomy and Physiology II 1
BIOL	2420	Microbiology for Non-Science
		Majors

#### FIRST YEAR

#### First Semester

<u>2301</u>	General Psychology 1
1125	Professional Nursing
	Concepts I
1128	Introduction to Health
	Care Concepts
1161	Clinical I – Nursing –
	Registered Nurse Training
1216	Professional Nursing
	Competencies
1430	Health Care Concepts I
	2301 1125 1128 1161 1216 1430

#### Second Semester

PSYC	2314	Life-Span Growth and
		Development
RNSG	1126	Professional Nursing
		Concepts II
RNSG	1533	Health Care Concepts II
RNSG	2361	Clinical II – Nursing –
		Registered Nurse Training

#### SECOND YEAR

#### First Semester

<u>ENGL</u> <u>1301</u>	Composition I
RNSG 1137	Professional Nursing
	Concepts III
RNSG 1538	Health Care Concepts III
RNSG 2362	Clinical III – Nursing –
	Registered Nurse Training

#### Second Semester

occoma ocmics	tC1
RNSG 2138	Professional Nursing
	Concepts IV (Capstone)
RNSG 2363	Clinical IV – Nursing –
	Registered Nurse Training
RNSG 2539	Health Care Concepts IV
GEN ED	Humanities / Fine Arts course

1. No course substitutions

## Nursing (RN) Bridge for LVN / Paramedic / Medic

60 credit hours

#### **PREREQUISITES**

<b>BIOL</b>	<u>2401</u>	Anatomy and Physiology I <sup>1</sup>
<b>BIOL</b>	<u>2402</u>	Anatomy and Physiology II 1
BIOL	2420	Microbiology for
		Non-Science Majors
<b>PSYC</b>	<u>2301</u>	General Psychology 1
PSYC	2314	Life-Span Growth and Development

Nursing faculty will determine the application and approval process. Students accepted into the Bridge for LVN / Paramedic / Medic Program will receive credit for the following courses: RNSG-1125, RNSG-1126 RNSG-1161, RNSG-1430,

and RNSG-1533

#### FIRST YEAR

#### Summer

RNSG 1118	Transition to Professional
	Nursing Competencies
RNSG 1128	Introduction to Health Care
	Concepts
RNSG 1163	Clinical – Nursing Transition
	from LVN / Paramedic / Medic
RNSG 1324	Concept-Based Transition to
	Professional Nursing Practice

#### SECOND YEAR

#### First Semester

ENGL 1301	Composition I
RNSG 1137	Professional Nursing
	Concepts III
RNSG 1538	Health Care Concepts III
RNSG 2362	Clinical III – Nursing –
	Registered Nurse Training

#### Second Semester

RNSG 2138	Professional Nursing
	Concepts IV (Capstone)
RNSG 2363	Clinical IV – Nursing –
	Registered Nurse Training
RNSG 2539	Health Care Concepts IV
GEN ED	Humanities / Fine Arts course

1. No course substitutions



#### Program Options: AAS – Paralegal / Legal Assistant Certificate Level 2 – Paralegal General

Collin College's Paralegal Program is approved by the American Bar Association (ABA).

Law firms, corporations and governmental agencies hire paralegals/legal assistants to manage an array of legal responsibilities under the direction and supervision of a licensed attorney. Paralegals must be proficient in computer skills, legal terminology and legal procedures. The AAS degree in Paralegal / Legal Assistant provides excellent training in these areas and offers opportunities for specialization. This program does not qualify a graduate to take a state bar exam, represent clients in court, give legal advice, or provide independent legal services. Successful completion of the AAS Paralegal/Legal Assistant program meets the current eligibility requirements to qualify to take the Certified Paralegal Examination. Students should contact the National Association of Legal Assistants (NALA) for changes or alternate qualifications to sit for the CP Exam.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

#### Paralegal Program Goals

Consistent with the core values of the district, the mission of the paralegal studies program is to further the paralegal profession by providing specialized training and education in law and legal procedure that will produce graduates who are prepared to enter the legal workforce with sufficient technology skills and a firm understanding of the ethical responsibilities of the attorney and paralegal.

The goals of the paralegal program are:

- 1. The program will reflect a diverse student body.
- The program will produce graduates who possess the legal knowledge and technology skills necessary to qualify them for employment in a legal work environment.
- 3. The program will produce graduates who demonstrate an understanding of their ethical responsibility in the legal profession.
- 4. The program will emphasize written communication skills.
- The program will promote opportunities to service the needs of the local community and encourage pro bono and public interest causes.

Texas Woman's University (TWU) and Collin Paralegal/Legal Assistant programs entered an articulation agreement effective fall 1999, which establishes a plan for students to obtain an AAS degree from Collin and a Bachelor of Science in Government - Legal Studies Emphasis degree from TWU. Collin College established a similar articulation agreement with Texas A&M University-Commerce, effective fall 2004, for the Bachelor of Arts/Science in Political Science with Emphasis in Paralegal Studies degree.

Admission to the Paralegal / Legal Assistant Associate of Applied Science Program is open to all students. Students with a prior degree **may be** eligible for admission to the Level II Paralegal General Certificate program. See certificate pre-entrance requirements.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

2017-18 Collin College Catalog, (Effective Spring 2018), Ed. 5. Rev. 10-12-17 Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

## AAS – Paralegal / Legal Assistant

60 credit hours

#### FIRST YEAR

#### First Semester

ENGL 1301	Composition I
LGLA 1303	Legal Research
LGLA 1307	Introduction to Law and
	the Legal Professions
MATH 1314	College Algebra <sup>1</sup>

#### Second Semester

		.01
GOVT	2305	Federal Government (Federal
		constitution and topics) <sup>2</sup>
LGLA	1305	Legal Writing
LGLA	1342	Federal Civil Litigation
LGLA	2303	Torts and Personal Injury Law

#### Summer

ENGL	1302	Composition II
LGLA	1351	Contracts
LGLA	2311	Business Organizations
<u>PHIL</u>	<u>2303</u>	Introduction to Formal Logic <sup>3</sup>
		(See <u>Humanities / Fine Arts</u>
		Options)

#### SECOND YEAR

#### First Semester

Texas Civil Litigation LGLA 1344 LGLA 1355 Family Law Speech course GEN ED

LAW ELECTIVE \*

#### **Second Semester**

LGLA	1353	Wills, Trusts and
		Probate Administration
LGLA	2339	Certified Paralegal Exam
		Review (Capstone) <sup>4</sup>
T A W/ T	LECTI	VII: *

LAW ELECTIVE \* LAW ELECTIVE \*

- 1. May substitute MATH-1316, MATH-1324, MATH-1332, MATH-1342, MATH-1350, MATH-1351, or MATH-1414
- 2. May substitute GOVT-2306; no other substitutions
- 3. Recommended for students planning to take the LSAT.

## Certificate Level 2 – Paralegal General

36 credit hours

#### **Pre-Entrance Requirements**

Admission to the college or the degree program does not guarantee admission to the Paralegal General Certificate Program. Prior to admission to the certificate program, students must provide official documentation showing that they have earned a Bachelor of Arts, Bachelor of Science, Bachelor of Business Administration, Associate of Arts, Associate of Science, or Associate of Arts for Teaching degree to demonstrate that they have met the American Bar Association requirements of having successfully developed critical reasoning, writing skills, and oral communication skills by completing at least eighteen semester credits of general education courses.

#### First Semester

LGLA	1303	Legal Research
LGLA	1307	Introduction to Law and
		the Legal Professions
LGLA	1342	Federal Civil Litigation
LGLA	2333	Advanced Legal Document
		Preparation

#### Second Semester

LGLA 1305 Legal Writing LGLA 2303 Torts and Personal Injury Law LAW ELECTIVE \* LAW ELECTIVE \*

#### Third Semester

LGLA	1344	Texas Civil Litigation
LGLA	1351	Contracts
LGLA	2311	Business Organizations
LGLA	2339	Certified Paralegal Exam
		Review (Capstone) <sup>1</sup>

- 1. Students should contact the National Association of Legal Assistants (NALA) for current exam eligibility requirements.
- \* Law Electives (6 credit hours): LGLA-1323, LGLA-1343, LGLA-1353, LGLA-1355, LGLA-1380, LGLA-2307, LGLA-2309, LGLA-2313, or LGLA-2323

<sup>\*</sup> Law Electives (9 credit hours): LGLA-1323, LGLA-1343, LGLA-1380, LGLA-2307, LGLA-2309, LGLA-2313, LGLA-2323, or LGLA-2333



## **Pastry Arts**

Also see Culinary Arts

#### Department Website:

http://www.collin.edu/hospitality

Program Options:
AAS – Pastry Arts
Certificate Level 1 – Pastry Arts
Certificate Level 1 – Advanced Pastry Arts

Students completing the Pastry Arts program at Collin College will be qualified for a variety of handson bakery positions in the food service industry. The food service industry is the largest private sector employer in the United States. The curriculum at Collin College emphasizes a broad selection of handson food preparation courses, building on baking and pastry foundation skills that will allow the student to be effective in a commercial bakeshop environment. Collin College's Pastry Arts career education offers classes in the daytime and in the evening. The curriculum is designed by industry experts and taught by experienced pastry professionals. The degree program offers an Associate of Applied Science in Pastry Arts. A Certificate in Pastry Arts is also available.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

#### TRANSFER

Students planning to transfer to a college or university should check with a Collin academic advisor. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

#### **ACCREDITATION**

The Culinary Arts Program is fully accredited by the American Culinary Federation Education Foundation. They may be contacted at:

180 Center Place Way St. Augustine, FL 32095 800.624.9458 http://www.acfchefs.org

#### ADMISSION REQUIREMENTS

Students are required to attend mandatory Pastry Arts Orientation. Please visit the program website (<a href="http://www.collin.edu/department/ihce/">http://www.collin.edu/department/ihce/</a>) for dates and times.

Note: Pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, hending, and working around open flames and with cleaning chemicals.

### AAS – Pastry Arts

60 credit hours

An American Culinary Federation (ACF) accredited program. Students will be eligible for Certified Pastry Culinarian (CPC) upon graduation.

#### FIRST YEAR

#### First Semester

CHEF 1301	Basic Food Preparation
CHEF 1305	Sanitation and Safety 1, 2
ENGL 1301	Composition I
HAMG 1321	Introduction to Hospitality
	Industry
PSTR 1301	Fundamentals of Baking

#### Second Semester

IFWA 13	0 Nutritio	on and Menu Planning
<u>MATH</u> 13:	S2 Conten	nporary Mathematics
	(Quant	itative Reasoning)
	(See Ma	athematics options)
PSTR 13	95 Breads	and Rolls
PSTR 13	0 Pies, Ta	arts, Teacakes
	and Co	okies
RSTO 13	25 Purchas	sing for Hospitality
	Operati	ions

#### Third Semester

PSTR 1306	Cake Decorating I
GEN ED	Humanities / Fine Arts course

#### SECOND YEAR

#### First Semester

HAMG 1324	Hospitality Human Resources
	Management
PSTR 2301	Chocolates and Confections
PSTR 2307	Cake Decorating II
GEN ED	Social / Behavioral Sciences
	course

#### Second Semester

PSTR	2331	Advanced Pastry Shop
		(Capstone)
PSTR	2380	Cooperative Education –
		Baking and Pastry Arts /
		Baker / Pastry Chef
<b>SPCH</b>	<u>1321</u>	Business and Professional
		<u>Communication</u>
		(See Speech options)

#### ELECTIVE \*

- 1 Certification in ServSafe
- 2 Certification in Food Protection Management
- \* Elective (3 credit hours): CHEF 2331, HAMG 1313 ~, HAMG 1340, HAMG 2301 ~, HAMG 2332 ~, HAMG 2337 ~, RSTO 2307 ~ or TRVM 2301

## **Certificate Level 1 – Pastry Arts**

24 credit hours

#### FIRST YEAR

#### First Semester

CHEF	1301	Basic Food Preparation
CHEF	1305	Sanitation and Safety 1, 2
IFWA	1310	Nutrition and Menu Planning
PSTR	1301	Fundamentals of Baking

#### Second Semester

PSTR	1305	Breads and Rolls
PSTR		
		Cake Decorating I
PSTR	1310	Pies, Tarts, Teacakes and
		Cookies (Capstone)
PSTR	2301	Chocolates and Confections

- 1. Certification in ServSafe
- 2. Certification in Food Protection Management

## Certificate Level 1 – Advanced Pastry Arts

36 credit hours

Prior to being admitted to this program, students must provide official documentation showing they have earned a Certificate or AAS in Pastry Arts.

#### **PREREQUISITES**

#### First Semester

CHEF	1301	Basic Food Preparation
CHEF	1305	Sanitation and Safety 1, 2
IFWA	1310	Nutrition and Menu Planning
PSTR	1301	Fundamentals of Baking

#### Second Semester

000011		
PSTR	1305	Breads and Rolls
PSTR	1306	Cake Decorating I
PSTR	1310	Pies, Tarts, Teacakes and
		Cookies (Capstone)
PSTR	2301	Chocolates and Confections

#### ADVANCED PASTRY ARTS COURSES

#### First Semester

PSTR	1312	Laminated Dough, Pate a
		Choux and Donuts
PSTR	1340	Plated Desserts

#### Second Semester

PSTR	1342	Quantity Bakeshop Production
		(Capstone)
PSTR	1343	Bakery Operations and
		Management

- 1. Certification in ServSafe
- 2. Certification in Food Protection Management



## Photography, Commercial

Associate of Arts – Photography for academic transfer coursework.

#### Department Website:

https://www.collin.edu/photography

#### **Program Options:**

AAS - Commercial Photography Certificate Level 1 - Studio Production Certificate Level 2 – Commercial Photography Specialist

The photography programs at Collin College strive to prepare students for placement into the commercial photography industry. The department teaches historic and contemporary photographic practices and offers training for students to pursue a career in photography. After completion of the AAS Commercial Photography degree, or commercial photography certificates, a student will be prepared in a variety of commercial shooting styles, natural, studio, and location lighting, management of a commercial studio, assisting professionals photographers, art directors, and stylists and be prepared to freelance and/or start an independent photography practice.

<sup>~</sup>Taught in eight-week format

Students planning to transfer to a college or university should check with the Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

## AAS – Commercial Photography

60 credit hours

#### FIRST YEAR

#### First Semester

<u>ARTS</u>	<u>1313</u>	Foundations of Art
		(See <u>Humanities / Fine Arts</u> options)
ARTS	2348	Digital Photography I
PHTC	1371	Book, Design, and
		Presentation
<b>ENGL</b>	<u>1301</u>	Composition I
PHTC	2340	Photographic Studio
		Management

#### **Second Semester**

GEN E	ED	Mathematics / Natural Sciences
		course
PHTC	1300	Digital Photography II
PHTC	1353	Portraiture I
PHTC	2331	Architectural Photography
CREA'	TIVE C	OURSE <sup>1</sup>

#### SECOND YEAR

#### First Semester

PHTC	1341	Color Photography I
PHTC	2349	Digital Photography III
PHTC	2371	Video for Photographers
<u>SPCH</u>	<u>1321</u>	Business and Professional
		<u>Communication</u>
		(See Speech options)

TECHNICAL COURSE 2

#### Second Semester

PHTC	1345	Illustrative Photography I
PHTC	2343	Portfolio Development
		(Capstone)
PHTC	2353	Portraiture II
PHTC	2380	Cooperative Education –
		Commerical Photography
<b>SOCI</b>	<u>1301</u>	Introduction to Sociology
		(See Social / Behavioral
		Sciences options)

- 1. Select one Creative course (3 hours): ARTS 1311, ARTS 2356 or PHTC 1343
- 2. Select one Technical course (3 hours): PHTC 1347, PHTC 1351 or PHTC 2342

## Certificate Level 1 – Studio Production

15 credit hours

#### FIRST YEAR

#### First Semester

ARTS	1313	Foundations of Art
ARTS	2348	Digital Photography I

#### Second Semester

PHTC 1353 Portraiture I

PHTC 2371 Video for Photographers

(Capstone)

CREATIVE COURSE 1

1. Select one Creative course (3 hours): ARTS 2356 or PHTC 1300

## Certificate Level 2 – Commercial Photography Specialist

36 credit hours

Prior to being admitted into this program, the student must have earned the Certificate Level 1 – Studio Production or have permission of the Associate Dean.

Students must be TSI complete.

#### FIRST YEAR

#### **First Semester**

PHTC 1300	Digital Photography II
PHTC 1371	Book, Design and
	Presentation
PHTC 2340	Photographic Studio
	Management
CREATIVE CO	

#### Second Semester

PHTC 1341	Color Photography I
PHTC 2331	Architectural Photography
PHTC 2349	Digital Photography III
TECHNICAL	COURSE <sup>2</sup>

#### SECOND YEAR

#### First Semester

PHTC 1345	Illustrative Photography I
PHTC 2343	Portfolio Development
	(Capstone)
PHTC 2353	Portraiture II
PHTC 2380	Cooperative Education –
	Commercial Photography

- 1. Select one Creative course (3 hours): ARTS 2356 or PHTC 1343
- 2. Select one Technical course (3 hours): PHTC 1347, PHTC 1351 or PHTC 2342
- 2017-18 Collin College Catalog, (Effective Spring 2018), Ed. 5. Rev. 10-12-17 Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.



Also see Continuing Education Basic Peace Officer program

#### Department Website:

http://iws2.collin.edu/lawenforcement

#### Program Option: Certificate Level 1 – Basic Peace Officer

The Certificate - Basic Peace Officer program is designed to allow the student to become a certified peace officer in the State of Texas and, simultaneously, provide a pathway to a college degree. The curriculum is developed by the Texas Commission on Law Enforcement (TCOLE) and is specifically designed to provide the basic skills and knowledge needed to meet the requirements for basic certification as a peace officer for the State of Texas. In order to become a licensed basic peace officer in the State of Texas, students must successfully complete curriculum approved by TCOLE and pass the Peace Officer Licensing Exam. Students may also choose to attend the Basic Peace Officer course as a non-credit program.

Licensure Notice: Students who have been involved with the criminal system, please be advised that your background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

The mission of the Basic Peace Officer courses (BPOC) is to provide the student with the foundational skills necessary to successfully police a free society in a professional, ethical, and effective manner.

#### **ADMISSION REQUIREMENTS:**

All students must complete the admission process required by Collin College. Prospective students applying to the Basic Peace Officer Program are classified as: Sponsored and Non-Sponsored. Sponsored applicants are employed by a law enforcement agency, meet all the requirements of *TCOLE Rule 217*, and are being sent through the course by that law enforcement agency. Non-sponsored applicants include all other individuals applying to the Basic Peace Officer Program.

Additional information may be obtained from the Collin College Law Enforcement Academy website at <a href="http://iws2.collin.edu/lawenforcement">http://iws2.collin.edu/lawenforcement</a> or by calling 972.548.6813.

- All prospective students must meet the "Minimum Enrollment Requirements" for training as a Texas Peace Officer as established by TCOLE Rule 217.1 Minimum Standards for Enrollment and Initial Licensure. (See website at: <a href="http://iws2.collin.edu/lawenforcement/">http://iws2.collin.edu/lawenforcement/</a> for these requirements.)
- 2. All sponsored students must provide a notarized letter signed by the head of the sponsoring law enforcement agency stating the student meets the minimum enrollment requirements as established by TCOLE.
- 3. All non-sponsored applicants must successfully complete all phases of the Basic Peace Officer Program entrance assessment process, meet the minimum enrollment requirements established by TCOLE and be recommended by the oral board.
- 4. State law requires all new students under the age of 22 entering a higher education institution to show proof of having the bacterial meningitis vaccination or booster 10 days prior to the start of term in which they are attending.

The Basic Peace Officer Program is offered in both a part-time and full-time format. The full-time day program requires 19 weeks for completion. The part-time program requires approximately 43 weeks for completion. The classes are conducted at the Central Park Campus in McKinney, Texas.

## Certificate Level 1 – Basic Peace Officer

24 credit hours

## FIRST YEAR First Semester

CJLE	1506	Basic Peace Officer I
CJLE	1512	Basic Peace Officer II
CJLE	1518	Basic Peace Officer III
CJLE	1524	Basic Peace Officer IV
CJLE	1429	Basic Peace Officer V (Capstone)



#### **Department Website:**

www.collin.edu/sleep

## Program Options: AAS – Polysomnographic Technology Certificate Level 1 – Polysomnographic Technology

The Collin College Polysomnographic Technology Program prepares students for an allied health specialty in the clinical care and management of sleep disorders. Sleep medicine is a growing field with more than 80 sleep disorders identified, and an estimated 60 million people in the United States suffering from at least one sleep disorder. As more patients seek diagnosis and treatment of their sleep disorders, the demand for qualified polysomnographic technologists grows.

Polysomnographic technologists conduct the sleep studies that allow physicians to diagnose and treat patients suffering from sleep disorders. Through this program, Collin College students are prepared to enter the growing and challenging field of sleep medicine by equipping them with the skills and fundamental knowledge to effectively monitor, manage, and treat sleep disorders under medical supervision.

The Polysomnographic Technology Program offers two degree options: an Associate of Applied Science (AAS) and a Certificate. The 22-month AAS degree track is for students who do not have a background in healthcare. The 9-month Certificate is for individuals who are board registered in any healthcare field -- AND/OR-- have a minimum of one year of current work experience in a sleep lab/center. Spaces in the Polysomnographic Technology Program are limited.

Upon graduation from either award, the graduate is eligible to sit for the Board of Registered Polysomnographic Technologists exam to become a Registered Polysomnographic Technologist (RPSGT) and/or the American Board of Sleep Medicine exam to become a Registered Sleep Technologist (RST).

Licensure Notice: Students who have been involved with the criminal system, please be advised that your background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also

have the right to request a criminal history evaluation letter from the applicable licensing agency.

Mathematics and science courses that are part of the curriculum but completed at a regionally accredited institution must have been completed within five years of the fall semester of the admission year in order to receive transfer credits. The minimum passing grade for all Polysomnographic Technology lecture, lab and clinical course work is a C..

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

#### FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities—with or without accommodations—for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in the Functional Abilities / Core Performance Standards documents provided in the program information on the Polysomnographic Technology website: <a href="http://www.collin.edu/sleep">http://www.collin.edu/sleep</a>. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

#### ACCREDITATION

The Collin College Polysomnographic Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs (http://www.caahep.org) upon the recommendation of the Committee on Accreditation for Polysomnographic Technologist Education (http://www.coapsg.org). They may be contacted at:

Commission on Accreditation of Allied Health Education Programs 25400 U.S. Highway 19 North, Suite 158 Clearwater, FL 33763 727.210.2350 http://www.caahep.org

## ADDITIONAL ADMISSION REQUIREMENTS

Registration is by permission only. Information and applications may be obtained online at <a href="http://www.collin.edu/sleep">http://www.collin.edu/sleep</a> or the Health Sciences Division Office. To apply, students must:

- Submit the required application form by the designated deadline
- Provide proof of high school graduation or
- Submit official copies of all college transcripts
- Complete Collin College reading, writing and mathematics assessments
- Complete Psychological Services Bureau (PSB) Health Occupations Aptitude Exam
- Document acceptable findings on drug screens, background checks and physical/mental competencies
- Complete program admission criteria (see Admission Packet)
- Completion of immunizations required by the Texas Department of State Health Services (TDSHS) \*

**Health Insurance -** All Polysomnographic Technology students are required to show proof of health insurance prior to starting clinical rotations each semester.

#### PROGRAM COMPLETION REQUIREMENTS

In addition to completion of all polysomnographic technology course work, students are required to complete and pass a capstone Registered Polysomnographic Technologist (RPSGT) practice exam and a comprehensive capstone clinical simulation. Both the RPSGT capstone exam and clinical simulation will take place during the final semester of the program, which is the spring semester of the second year for AAS students and the spring semester for Certificate students.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

## AAS – Polysomnographic **Technology**

60 credit hours

#### PRE-ENTRANCE REQUIREMENTS

- A) Students planning to apply for admission to the program must have the following courses completed with a grade of "C" or better before the application deadline.
  - 1) BIOL-2404, Human Anatomy and Physiology Basic
  - 2) HPRS-1204, Basic Health Profession Skills
- B) Students entering the program must be prepared to enter college-level mathematics by either completion of MATH-0310 or by placement at the MATH-1314, College Algebra level. Students must complete MATH-1314, College Algebra during or before the fall semester of the program admission year.

Note: All science and mathematics courses that are part of the curriculum, but completed at a regionally accredited institution, must have been completed within five years of the fall semester for the fall semester of the admission year in order to receive transfer credit.

#### **PREREOUISITES**

THEREQUITES		
BIOL	2404	Human Anatomy and
		Physiology Basic
<b>HPRS</b>	1204	Basic Health Profession Skills

#### FIRST YEAR

#### First Semester

<u>ENGL 1301</u>	Composition I
MATH 1314	College Algebra
	(See Mathematics options)
PSGT 1215	Introduction to
	Polysomnography
PSGT 1310	Neuroanatomy and Physiology
RSPT 1207	Cardiopulmonary Anatomy
	and Physiology

#### Second Semester

PSGT	1205	Neurophysiology of Sleep
PSGT	1340	Sleep Disorders
PSGT	1400	Polysomnography I
RSPT	1237	Basic Dysrhythmia
		Interpretation
<b>SPCH</b>	<u>1311</u>	Introduction to Speech
		Communication
		(See Speech Options)

<sup>\*</sup> It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Coordinator. In such cases, the applicant must sign a declination form. All immunizations must be complete before assignment to clinical

#### Third Semester (Summer)

PSGT 1360 AAS Clinical I –

Polysomnography

#### SECOND YEAR

#### First Semester

PSGT 2205 Sleep Scoring and Staging

PSGT 2360 AAS Clinical II –

Polysomnography

PSGT 2411 Polysomnography II

GEN ED Social / Behavioral Sciences

course

#### Second Semester

PSGT 2250 Infant and Pediatric

Polysomnography

PSGT 2271 Pharmacology for

Polysomnography

PSGT 2272 Polysomnography Exam

Preparation (Capstone)

PSGT 2361 AAS Clinical III –

Polysomnography

GEN ED Humanities / Fine Arts

course

## Certificate Level 1 – Polysomnographic Technology

28 credit hours

#### PRE-ENTRANCE REQUIREMENTS

Prior to being admitted to this program, students must provide official documentation showing they have earned board registry in any health care field - AND/OR- they have a minimum of one year, current work experience in a sleep lab/center.

#### FIRST YEAR

#### First Semester

PSGT 1260	Certificate Clinical I –
-----------	--------------------------

Polysomnography

PSGT 1400 Polysomnography I

PSGT 1573 Polysomnographic Anatomy

and Physiology

RSPT 1237 Basic Dysrhythmia Interpretation

#### **Second Semester**

PSGT 1340 Sleep Disorders

PSGT 2205 Sleep Scoring and Staging

PSGT 2250 Infant and Pediatric

Polysomnography

PSGT 2260 Certificate Clinical II -

Polysomnography

PSGT 2272 Polysomnography Exam

Preparation (Capstone)

PSGT 2411 Polysomnography II



#### **Department Website:**

http://www.collin.edu/realestate/

### **Program Options:**

AAS - Real Estate

Certificate Level 1 - Real Estate Salesperson

Real estate is a dynamic field in which highly motivated men and women can and do create their own success stories. The degree program in real estate is designed with flexibility to allow students to successfully achieve a goal, whether it be personal knowledge, receipt of a degree, completion of a certificate program, transfer to a college or university, or real estate licensure.

Licensure Notice: Students who have been involved with the criminal system, please be advised that your background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

Students will explore a variety of topics including fundamentals and principles of real estate; sources of financing; state and federal influences on financing; legal rights of owners, buyers and brokers; property appraisal; contract negotiations; and closing. An excellent instructional staff and a cooperative education program with local brokers give real estate students at Collin a personalized, practical, high quality educational experience.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

2017-18 Collin College Catalog, (Effective Spring 2018), Ed. 5. Rev. 10-12-17 Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

#### AAS – Real Estate

60 credit hours

This degree provides the required real estate courses for the Texas Salesperson Exam.

#### FIRST YEAR

#### First Semester

Each of these courses is offered as a 5-week express course. Recommended sequence of courses:

RELE 1301 Principles of Real Estate I
RELE 1338 Principles of Real Estate II

RELE 2301 Law of Agency RELE 1311 Law of Contracts

RELE 1300 Contract Forms and Addenda

RELE 1319 Real Estate Finance

#### **Second Semester**

ENGL 1301 Composition I GOVT 2305 Federal Government

(Federal constitution and topics)

GEN ED Speech course REAL ESTATE ELECTIVE\* REAL ESTATE ELECTIVE\*

#### SECOND YEAR

#### First Semester

BUSI 1301 Business Principles

ECON 1301 Introduction to Economics 1

ENGL 1302 Composition II

HIST 1301 United States History I <sup>2</sup>

REAL ESTATE ELECTIVE\*

#### Second Semester

<u>GEN ED</u> <u>Humanities / Fine Arts</u> course <u>MATH</u> 1332 <u>Contemporary Mathematics</u> (Quantitative Reasoning) <sup>3</sup>

REAL ESTATE ELECTIVE \*
GENERAL ELECTIVE \*\*

- 1. May substitute ECON-2301 or ECON-2302
- 2. May substitute ANTH-2346, ANTH-2351, HIST-1302, HIST-2301, PSYC-2301, or SOCI-1301
- 3. May substitute MATH-1324 or MATH-1314 (recommended for transfer students)
- \* Real Estate Electives (12 credit hours): RELE-1303, RELE-1307, RELE-1315, RELE-1321, RELE-1325, or RELE-2331.
- \*\* General Elective (3credit hours): ACCT-2301, BMGT-1327, BUSG-2309, GOVT-2306, ITSW-1304, or RELE-1380.

## Certificate Level 1 – Real Estate Salesperson

18 credit hours

This certificate provides the required real estate courses for the Texas Salesperson Exam.

Recommended sequence of courses:

RELE 1301 Principles of Real Estate I RELE 1338 Principles of Real Estate II

RELE 2301 Law of Agency RELE 1311 Law of Contracts

RELE 1300 Contract Forms and Addenda

RELE 1319 Real Estate Finance



#### Department Website:

http://www.collin.edu/rcp

#### Program Option: AAS - Respiratory Care

Collin's Respiratory Care Program prepares individuals for an allied health specialty in clinical care and management of respiratory disorders. The 22-month program graduates students with an Associate of Applied Science (AAS) degree and qualifies the individual to apply for the Therapist Multiple Choice and Clinical Simulation Exams given by the National Board for Respiratory Care.

Licensure Notice: Students who have been involved with the criminal system, please be advised that your background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

Science courses that are part of the curriculum but completed at a regionally accredited institution, must have been completed within five years of the fall semester of the admission year in order to receive transfer credits. The minimum passing grade for all Respiratory Care lecture, lab and clinical course work is a C.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

Spaces in the Respiratory Care Program are limited. Please see the Respiratory Care Program Information Packet, at <a href="http://www.collin.edu/rcp">http://www.collin.edu/rcp</a> for details on the selective admission process.

#### **ACCREDITATION**

The Respiratory Care Program is accredited by the Commission on Accreditation for Respiratory Care (CoARC). They may be contacted at:

Commission on Accreditation for Respiratory Care 1248 Harwood Road Bedford, Texas 76021-4244 Phone: 817.283.2835

Fax: 817.354.8519

#### FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities - with or without accommodations - for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in the Functional Abilities / Core Performance Standards documents provided in the program information on the Respiratory Care website:

http://www.collin.edu/rcp . Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

## ADDITIONAL ADMISSION REQUIREMENTS

Registration is by permission only. Information and applications may be obtained online at <a href="http://www.collin.edu/rcp">http://www.collin.edu/rcp</a> or the Health Sciences, Biology and Chemistry Office. To apply, students must:

- Submit the required application form by the designated deadline
- Submit official copies of all college transcripts to the Respiratory Care Program Director.
- Complete Collin College reading, writing and mathematics assessments
- Overall GPA of 2.5 with a minimum grade of "C" in all prerequisite courses

- Complete Psychological Services Bureau (PSB), Health Occupations Aptitude Exam prior to the application deadline
- Agree to criminal background check.
   Findings from the background check that do not meet clinical affiliation specification will result in the student not being admitted to the program
- Once admitted, student must pass a drug screen at the student's expense, when requested and as directed by the program
- Attend a student orientation prior to the start of the first semester in the program
- Successfully complete all program admission criteria (see Application Packet)
- Complete all immunizations required by the Texas Department of State Health Services (TDSHS) \*
- \* It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. All immunizations must be complete before assignment to clinical training.

**Health Insurance** - All Respiratory Care students are required to show proof of health insurance prior to starting clinical rotations and must maintain coverage while in the program.

#### PROGRAM COMPLETION REQUIREMENTS

In addition to successfully completing the respiratory care curriculum, students are required to successfully complete a comprehensive Therapist Multiple Choice (TMC) Self-Assessment Examination and a Clinical Simulation Self-Assessment Examination during the second year of the program.

- 1. A TMC Practice exam will be given in the fall semester of the second year.
- A TMC Self-Assessment Examination will be given in the spring semester of the second year.
  - Clinical Simulation Self-Assessment Examination will be given in the spring semester of the second year.
- Meet all Collin College graduation requirements.

Satisfactory completion of these exams is required for graduation from the program. Students who do not pass any of these exams will be required to complete prescribed remediation assignments and retest. The program reserves the right to limit the number of retests. Repeat testing will be at student expense.

#### CRT TRANSITION PROGRAM

The program, after admission to the college, offers a transition option to allow students who hold a CRT credential, have regionally accredited college credit in entry level respiratory care, and have one year of recent clinical experience as a respiratory therapist to enter the second year of the Respiratory Therapy Program, receive their degree and become registry-eligible. Content and clinical skill competency tests must be satisfactorily completed for students to enter this option. Contact the Program Director for more information.

## AAS – Respiratory Care

66 credit hours

#### PRE-ENTRANCE REQUIREMENTS

A. Students planning to apply for admission to the program must have three of the four following prerequisite courses completed with a grade of "C" or better before the application deadline.

1) BIOL 2401 Anatomy and Physiology I

2) BIOL 2402 Anatomy and Physiology II

3) HPRS 1272 Microbiology for Health Professions

4) HPRS 1204 Basic Health Profession Skills

Note: All science and mathematics courses that are part of the curriculum, but completed at a regionally accredited institution, must have been completed within five years of the fall semester for the fall semester of the admission year in order to receive transfer credit.

#### **PREREQUISITES**

BIOL	2401	Anatomy and Physiology I 1
BIOL	2402	Anatomy and Physiology II 1
HPRS	1204	Basic Health Profession Skills
HPRS	1272	Microbiology for Health
		Professions

#### FIRST YEAR

#### First Semester

I Hot O	cincotti	
RSPT	1160	Clinical I - Respiratory
		Care Therapist
RSPT	1201	Introduction to Respiratory
		Care
RSPT	1307	Cardiopulmonary Anatomy
		and Physiology
RSPT	1410	Respiratory Care Procedures I

#### Second Semester

RSPT 1361	Clinical II - Respiratory Care Therapist
RSPT 1411	Respiratory Care Procedures II
RSPT 2217	Respiratory Care Pharmacology
RSPT 2310	Cardiopulmonary Disease
<u>GEN ED</u>	<u>Humanities / Fine Arts</u> course
Summer RSPT 1362	Clinical III - Respiratory

RSPT	1362	Clinical III - Respiratory
		Care Therapist
RSPT	2471	Respiratory Care Procedures III

#### SECOND YEAR

#### First Semester

<b>PSYC</b>	2301	General Psychology 2
RSPT	2255	Critical Care Monitoring
RSPT	2353	Neonatal / Pediatric
		Cardiopulmonary Care
RSPT	2360	Clinical IV - Respiratory
		Care Therapist

#### **Second Semester**

ENGL 1301	Composition I
RSPT 2130	Respiratory Care Examination
	Preparation
RSPT 2139	Advanced Cardiac Life Support
RSPT 2147	Specialties in Respiratory Care
RSPT 2231	Simulations in Respiratory Care
RSPT 2361	Clinical V - Respiratory Care
	Therapist (Capstone)

1 No course substitutions

2. May substitute SOCI-1301



## **Supply Chain Management**

#### Department Website:

http://www.collin.edu/department/supplychain/

#### **Program Options:**

AAS – Supply Chain Management Certificate Level 1 – Logistics Certificate Level 1 – Purchasing

The Supply Chain Management program offered by Collin College will provide students with the knowledge and skills necessary to gain competency in the management of supply chain activities, including logistics, purchasing, inventory, and warehouse management. The program prepares students for employment in a variety of roles in the rapidly

growing supply chain management field which currently employs over 6 million people and is anticipated to grow by 1.4 million jobs over the coming years. The Dallas/Fort Worth region is a national leader in supply chain services with 500 motor carriers, 50 air cargo carriers, 3 freight rail lines, 3 major airports and 250 area firms.

Students planning to transfer to a college or university should check with the Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

## AAS - Supply Chain Management

60 credit hours

#### FIRST YEAR

#### First Semester

BMGT 1313	Principles of Purchasing
BMGT 1344	Negotiations and Conflict
	Management
ENGL 1301	Composition I
ITSC 1309	Integrated Software
	Applications I – MS Office
SPCH 1321	Business and Professional
	<u>Communication</u>
	(See Speech options)

#### Second Semester

ACNT 1303	Introduction to Accounting I 1
BMGT 1307	Team Building
ECON 1301	Introduction to Economics <sup>2</sup>
GEN ED	Humanities / Fine Arts course
IBUS 1341	Global Supply Chain
	Management

#### SECOND YEAR

#### First Semester

BMGT 1309	Information and Project
	Management
BMGT 2309	Leadership
BUSI 2301	Business Law
LMGT 1319	Introduction to Business
	Logistics
MATH 1324	Mathematics for Business
	or Social Sciences 3

#### **Second Semester**

BMGT 1341	Business Ethics
BMGT 2303	Problem Solving and
	Decision Making
IBUS 2332	Global Business Simulation
	(Capstone) <sup>4</sup>
LMGT 1325	Warehouse and Distribution
	Center Management
LMGT 2330	International Logistics
	Management

- 1. May substitute ACCT 2301
- 2. May substitute ECON 2301 or ECON 2302
- 3. May substitute MATH 1332 or 1314
- 4. May substitute LMGT 2388

## **Certificate Level 1 – Logistics**

18 credit hours

#### FIRST YEAR

#### First Semester

BMGT 1309	Information and
	Project Management
BMGT 2309	Leadership
LMGT 1319	Introduction to Business
	Logistics

#### Second Semester

BMGT 2303	Problem Solving and
	Decision Making
LMGT 1325	Warehouse and Distribution
	Center Management
LMGT 2330	International Logistics
	Management (Capstone)

## **Certificate Level 1 – Purchasing**

18 credit hours

#### FIRST YEAR

#### First Semester

BMGT 1313	Principles of Purchasing
BMGT 1344	Negotiations and Conflict
	Management
ITSC 1309	Integrated Software
	Applications I – MS Office

#### **Second Semester**

ACNT 1303	Introduction to Accounting I
BMGT 1307	Team Building
IBUS 1341	Global Supply Chain
	Management (Capstone)



#### **Department Website:**

https://www.collin.edu/surgtech

Program Options:

AAS – Surgical Technology

Certificate Level 1 – Central Sterile Processing

The Associate of Applied Science (AAS) in Surgical Technology at Collin College is an 18-month program (two academic years) that will prepare the student for an entry-level position as a surgical technologist. First year of the program consists of prerequisites and general education courses. Upon completion of the first year, the student may apply for admission into the program through the Special Admission Requirements listed below.

The course of study consists of approved courses from the Workforce Education course Manual of Texas. These courses must be taken in full sequence to assure progression of content from simple to complex. The Surgical Technology curriculum is approved by the Texas Higher Education Coordinating Board and modeled after the Association of Surgical Technologists national curriculum.

The Surgical Technology Program is a recipient of the Merit Award from the National Board of Surgical Technology and Surgical Assisting (NBSTSA) for achievement of graduate pass rates on the Certified Surgical Technologist (CST) examination.

Licensure Notice: Students who have been involved with the criminal system, please be advised that your background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

#### SPECIAL ADMISSION REQUIREMENTS

Admission to the program is selective and competitive. Students must apply for admission and meet all requirements of external clinical facilities participating in the program. These requirements include drug screens, background checks, selected immunizations and proof of personal health insurance. Consult the program's Admission Packet available on the website

https://www.collin.edu/surgtechfor more details.

- Submit an application for admission to Collin College Admission department
- Submit completed application to Surgical Technology Program (see Admission Packet at <a href="https://www.collin.edu/surgtech">https://www.collin.edu/surgtech</a>) by the application deadline (no later than the second Friday in April).
- Incomplete applications will NOT be considered for selection.
- An interview with the Admissions committee will be scheduled.
- Submit physical exam documentation, signed and dated.
- Provide proof of high school graduation or GED
- Overall GPA of 2.5 from all college courses completed and applicable to the surgical technology degree plan.
- Current Healthcare Provider CPR from the American Heart Association.
- Complete Psychological Services Bureau (PSB) Health Occupations Aptitude Exam prior to application deadline.
- Completion of or current enrollment in the prerequisite four pre-entrance required courses with a grade of 'C' or above and a cumulative prerequisite course GPA of 2.5.
   These courses are listed below and include: BIOL-2401, BIOL-2402, HITT-1305 and HPRS-1204. If prerequisite courses are being completed during the spring preceding admission, students will automatically receive conditional enrollment pending completion of prerequisites with a cumulative prerequisite GPA of 2.5.
- Students must be prepared to enter collegelevel mathematics by either completion of MATH 0310 or by placement at the MATH 1314 College Algebra level.
- Submit a handwritten one- to two-page essay that discusses why surgical technology has been selected as a profession.
- Submit two reference forms: one from an employer and one from an educator.

 These letters should be directly mailed by whomever writes them to: Attn: Director of Surgical Technology Program, Health Sciences, Biology and Chemistry Office, Collin College, 2200 W. University DR, McKinney, Texas 75071.

#### ONCE ADMITTED TO THE PROGRAM:

- Participate in assessment of Core
   Performance Standards as defined by College
   policy and be reviewed by the ACCESS
   department if accommodations are
   necessary. (To review Core Performance
   Standards, see the Surgical Technology
   website at <a href="https://www.collin.edu/surgtech">https://www.collin.edu/surgtech</a>)
- Pass a drug screen at the student's expense when requested by the program. Positive drug screens can result in students not being admitted to the program.
- Agree to a criminal background check.
   Findings from the background check that do not meet clinical affiliation specifications will result in the student not being admitted to the program.
- Purchase liability insurance prior to clinical rotations.
- Attend a student orientation prior to the start of each semester.
- Complete all immunizations required by the Texas Department of State Health Services (TDSHS)\*.

**Health Insurance** — All Surgical Technology students are required to show proof of health insurance prior to starting clinical rotations each semester.

**NOTE**: Students interested in admission to the program for summer semester should see their physician and begin immunizations four (4) months prior to the beginning of the semester.

#### FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities, with or without accommodations, for successful completion of the program, and to function safely and effectively in the variety of professional settings. The specific functional requirements are found in the Functional Abilities / Core Performance Standards

documents provided in the program information packet and on the Surgical Technology website. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

#### **ACCREDITATION**

The Collin College AAS – Surgical Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Accreditation Review Committee on Surgical Technology and Surgical Assisting (ARCSTA).

They may be contacted at:

1361 Park Street Clearwater, FL 33756 727.210.2350

http://www.caahep.org

The Central Sterile Processing (CSP) curriculum is approved by the International Association of Healthcare Central Service Materiel Management (IAHCSMM). Recipients of this certificate are eligible to sit for the national certification exam.

Students interested in the program should see the academic advisor for consultation and consult the college website for more specific information. An admission packet is available upon request from the Dean of Health Sciences Office and on the Surgical Technology website.

## AAS – Surgical Technology

60 credit hours

#### FIRST YEAR

#### First Prerequisite Semester

BIOL 2401 Anatomy and Physiology I <sup>1</sup>
ENGL 1301 Composition I
HPRS 1204 Basic Health Profession Skills
SPCH 1311 Introduction to Speech
Communication
(See Speech Options)

#### Second Prerequisite Semester

BIOL 2402 Anatomy and Physiology II HITT 1305 Medical Terminology I PSYC 2301 General Psychology <sup>2</sup> GEN ED Humanities / Fine Arts course

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<sup>\*</sup> It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. All immunizations must be complete before the first clinical day.

#### SECOND YEAR

#### First (Summer) Semester

Basic Skills of Surgical SRGT 1271

Technology

SRGT 1409 Fundamentals of

Peri-operative Concepts

and Techniques

#### Second Semester

HITT	1202	Medical Terminology II
11111	1505	
HPRS	2300	Pharmacology for Health
		Professions
SRGT	1441	Surgical Procedures I
SRGT	1461	Clinical - Surgical
		Technology I

#### **Third Semester**

BIOL	2420	Microbiology for Non-Science
		Majors
SRGT	1171	Transition to Practice for the
		Surgical Technologist
SRGT	1442	Surgical Procedures II
SRGT	2130	Professional Readiness
SRGT	2561	Clinical - Surgical
		Technology II (Capstone)

1 No course substitutions

2. May substitute SOCI-1301

## Certificate Level 1 – Central **Sterile Processing**

16 credit hours

#### FIRST YEAR

#### First Semester

HPRS	1470	Central Sterile Processing I
HPRS	1370	Central Sterile Processing II
<b>HPRS</b>	1471	Central Sterile Processing III

#### **Second Semester**

HPRS 1561 Clinical – Health Services / Allied Health / Health

Sciences, General (Capstone)



Also see Animation

#### **Program Options:** AAS - Video Production Certificate Level 1 - Video Production

For over twenty years, the Communication Design department (formerly Applied Graphic Design Technology) at Collin has offered industry-standard education in the creative service fields of animation, digital video, graphic design, web and interactive design. All full-time faculty have industry experience and all associate faculty are practicing professionals. Current industry practices and standards are a central component of classroom instruction. There is an elective option for the most diligent students to earn credit through local industry internships. Guest speakers from industry are featured on an ongoing basis.

Video Production focuses on developing the concept, design and production skills necessary for creating digital video content in any delivery format. Students will learn scriptwriting, storyboarding, video production with cameras, audio and lighting as well as nonlinear editing using industry-standard tools and techniques.

Students planning to transfer to a college or university should check with Collin academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

#### AAS – Video Production

60 credit hours

#### FIRST YEAR

#### First Semester

ARTC	1325	Introduction to Computer
		Graphics
ARTS	2348	Digital Photography I <sup>1</sup>
ARTV	1371	Storyboard and Concept
		Development
DRAM	2366	Introduction to Cinema
ENGL	1301	Composition I

#### **Second Semester**

ARTC	1302	Digital Imaging I
ARTC	1305	Basic Graphic Design
ARTV	1303	Basic Animation
ARTV	1351	Digital Video
MUSC	1327	Audio Engineering I
RTVB	1329	Scriptwriting

#### SECOND YEAR

#### First Semester

ARTV 2320	Team Program Production I
FLMC 1331	Video Graphics and Visual
	Effects I
RTVB 2330	Film and Video Editing
GEN ED	Mathematics / Natural Science
	course

#### **Second Semester**

FLMC 2331	Video Graphics and Visual
	Effects II
RTVB 2340	Portfolio Development
	(Capstone)
GEN ED	<u>Humanities / Fine Arts</u> course
GEN ED	Social / Behavioral Sciences
	course
SPCH 1311	Introduction to Speech
	Communication
(See Spe	<u>eech</u> Options)

1. May substitute ARTS-2356 or PHTC-1311

## Certificate Level 1 – Video Production

42 credit hours

#### FIRST YEAR

First	Semester
тиві	Semester

ARTC 1325	Introduction to Computer
	Graphics
ARTS 2348	Digital Photography I <sup>1</sup>
ARTV 1371	Storyboard and Concept
	Development
DRAM 2366	Introduction to Cinema
MUSC 1327	Audio Engineering I

#### **Second Semester**

ARTC	1302	Digital Imaging I
ARTV	1351	Digital Video
FLMC	1331	Video Graphics and Visual
		Effects I
RTVB	1329	Scriptwriting

#### SECOND YEAR

#### First Semester

ARTV	1303	Basic Animation
ARTV	2320	Team Program Production I
FLMC	2331	Video Graphics and Visual
		Effects II
RTVB	2330	Film and Video Editing

#### **Second Semester**

RTVB 2340 Portfolio Development (Capstone)

1. May substitute ARTS-2356 or PHTC-1311



## Program Options:

AAS – Welding

Foundry / Metalsmithing Track Welding Technology Track

Certificate Level 1 – Foundry / Metalsmithing Certificate Level 1 – Welding Technology

Collin College offers an AAS in Welding with two tracks and two Level 1 certificates, Foundry / Metalsmithing and Welding Technology. The AAS gives the student the ability to get a degree in Welding or Foundry / Metalsmithing or a combination, while the certificates are designed to qualify students in specific processes such as welding, metal sculpting, and foundry / metalsmithing. This will prepare students for entry-level welding jobs, as well as prepare them to go into business for themselves.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

The Welding program will be housed at the Spring Creek campus in room A185. The department has a foundry and TIG, MIG and stick welders.

Instructor of the welding program has an MFA in Sculpture and is AWS (American Welding Society) CWE (Certified Welding Educator) certified.

Students planning to transfer to a college or university should check with the Collin academic advisors. Also

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## AAS – Welding

## Foundry / Metalsmithing Track

60 credit hours

#### FIRST YEAR

First	Semester

MATH 1332	Contemporary Mathematics
	(Quantitative Reasoning)
	(See Mathematics options)
WLDG 1428	Introduction to Shielded
	Metal Arc Welding (SMAW)
WLDG 1434	Introduction to Gas Tungsten
	Arc Welding (GTAW)
WLDG 1530	Introduction to Gas Metal
	Arc Welding (GMAW)

#### Second Semester

ENGL 1301	Composition I
SPCH 1321	Business and Professional
	<u>Communication</u>
	(See Speech options)
WLDG 1401	Metalsmithing
WLDG 1405	Art Metals

#### SECOND YEAR

#### First Semester

<u>GEN ED</u>	<u> Humanities / Fine Arts</u> course
TECHNICAL C	OURSE 1 *
TECHNICAL C	OURSE 2 *
WLDG 1408	Metal Sculpture

#### Second Semester

GEN ED	Social / Behavioral Sciences
	course
TECHNICAL O	COURSE 3 *
WLDG 1425	Introduction to Oxy-Fuel
	Welding and Cutting
WLDG 2451	Advanced Gas Tungsten Arc
	Welding (GTAW)

<sup>\*</sup> The options are a three-course sequence focusing on Metal Sculpting or Metalsmithing. You must take all 3 course options from a single focus.

#### Metal Sculpting Focus (12 credit hours)

Technical Course 1: WLDG 2441 Power

Hammer

Technical Course 2: WLDG 2447 Advanced

Gas Metal Arc Welding

(GMAW)

Technical Course 3: WLDG 2440 Advanced

Metal Sculpture

(Capstone)1

#### <u>OR</u>

#### Metalsmithing Focus (12 credit hours)

Technical Course 1: WLDG 1471 Introduction

To Foundry Practices

Technical Course 2: WLDG 2443 Advanced

Shielded Metal Arc Welding (SMAW)

Technical Course 3: WLDG 2471 Advanced

> Foundry Practices (Capstone)1

## AAS – Welding Welding Technology Track

60 credit hours

#### FIRST YEAR

<u>MATH</u> 1332	Contemporary Mathematics
	(Quantitative Reasoning)
	(See Mathematics options)
WLDG 1428	Introduction to Shielded Metal
	Arc Welding (SMAW)
WLDG 1434	Introduction to Gas
	Tungsten Arc Welding (GTAW)
WLDG 1530	Introduction to Gas Metal
	Arc Welding (GMAW)

#### Second Semester

ENGL 1301	Composition I
SPCH 1321	Business and Professional
	<u>Communication</u>
	(See Speech options)
WLDG 1413	Introduction to Blueprint
	Reading for Welders
WLDG 1435	Introduction to Pipe Welding

<sup>1.</sup> May substitute WLDG 2480, with consent of Associate Dean

#### SECOND YEAR

#### First Semester

WLDG 2451 Advanced Gas Tungsten

Arc Welding (GTAW)

WLDG 2443 Advanced Shielded Metal

Arc Welding (SMAW)

WLDG 2453 Advanced Pipe Welding <sup>1</sup>

GEN ED <u>Humanities / Fine Arts</u> course

#### Second Semester

WLDG 1425 Introduction to Oxy-Fuel

Welding and Cutting

WLDG 2413 Intermediate Welding

Using Multiple Processes

(Capstone) <sup>2</sup>

WLDG 2431 Advanced Blueprint

Interpretation and

Cost Analysis

GEN ED Social / Behavioral Sciences

course

1. May substitute WLDG 2450

2. May substitute WLDG 2480, with consent of Associate

## Certificate Level 1 – Foundry / Metalsmithing

41 credit hours

#### FIRST YEAR

#### First Semester

WLDG 1401 Metalsmithing WLDG 1405 Art Metals

WLDG 1434 Introduction to Gas Tungsten

Arc Welding (GTAW)

WLDG 1530 Introduction to Gas Metal

Arc Welding (GMAW)

#### Second Semester

TECHNICAL COURSE 1 \* WLDG 1408 Metal Sculpture

WLDG 1428 Introduction to Shielded

Metal Arc Welding (SMAW)

#### SECOND YEAR

#### First Semester

TECHNICAL COURSE 2 \*
TECHNICAL COURSE 3 \*

WLDG 2451 Advanced Gas Tungsten

Arc Welding (GTAW)

#### Metal Sculpting Focus (12 credit hours)

Technical Course 1: WLDG 2441 Power

Hammer

Technical Course 2: WLDG 2447 Advanced

Gas Metal Arc Welding

(GMAW)

Technical Course 3: WLDG 2440 Advanced

Metal Sculpture

(Capstone)1

#### <u>OR</u>

#### Metalsmithing Focus (12 credit hours)

Technical Course 1: WLDG 1471 Introduction

to Foundry Practices

Technical Course 2: WLDG 2443 Advanced

Shielded Metal Arc Welding (SMAW)

Technical Course 3: WLDG 2471 Advanced

Foundry Practices

(Capstone)1

1. May substitute WLDG 2480, with consent of Associate Dean

## Certificate Level 1 - Welding Technology

36 credit hours

#### FIRST YEAR

#### First Semester

WLDG 1428	Introdu	action t	to S	Shielde	ed l	Metal
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Arc Welding (SMAW)

WLDG 1434 Introduction to Gas Tungsten Arc

Welding (GTAW)

WLDG 1435 Introduction to Pipe Welding

#### Second Semester

WLDG 1413 Introduction to Blueprint

Reading for Welders

WLDG 2443 Advanced Shielded Metal Arc

Welding (SMAW)

WLDG 2451 Advanced Gas Tungsten Arc

Welding (GTAW)

#### SECOND YEAR

#### First Semester

WLDG 2431 Advanced Blueprint

Interpretation and Cost Analysis

WLDG 2413 Intermediate Welding Using

Multiple Processes (Capstone) <sup>1</sup>

WLDG 2453 Advanced Pipe Welding <sup>2</sup>

- 1. May substitute WLDG 2480, with consent of Associate Dean
- 2. May substitute WLDG 2450, with consent of Associate Dean
- 2017-18 Collin College Catalog, (Effective Spring 2018), Ed. 5. Rev. 10-12-17 Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

<sup>\*</sup> The options are a three-course sequence focusing on Metal Sculpting <u>or</u> Metalsmithing. You must take <u>all</u> 3 course options from a single focus.

## **COURSE DESCRIPTIONS**

## **Understanding Course Types and Credit Hours**

### **Course Types**

- indicates an academic transfer course that may apply to a baccalaureate degree.
- (CE) indicates a Continuing Education course that may apply to training or meet licensure and certification requirements for professional development
- (D) indicates a developmental pre-college course that does not apply to an associate degree or transfer.
- (W) indicates a workforce course that may not transfer or apply to a baccalaureate degree.

Technical or workforce courses are designated by a (W) at the end of their course description. Workforce courses provide an opportunity for students to obtain skills and knowledge needed for career exploration, licensure, and specific job qualifications. Workforce courses do not always transfer or apply to academic degree programs at four-year colleges and universities. Some programs have transfer or articulation agreements in place to facilitate the transfer of workforce credits. Check with an academic advisor or transfer institution for more information.

#### **Course Names and Course Numbers**

Course names and numbers contain useful information. In the Texas Common Course Numbering System each course is identified by a four-character "rubric" (i.e. discipline abbreviation) and a 4-digit number: The **rubric** is always four upper-case alphabetic characters. The first digit of the **course number** denotes the academic level of the course; the second digit denotes the credit value of the course in semester hours; and the third and fourth digits establish course sequencing and/or distinguish the course from others of the same level, credit value, and rubric. The course ACCT 2301 is used to illustrate this system.

## Rubric → ACCT 2301

 $\underline{\text{Course level}} = 1^{\text{st}} \text{ digit}$ 

0 = pre-college

1 = freshman

2 = sophomore

 $\underline{\text{Credit value}} = 2^{\text{nd}} \text{ digit}$ 

Credit value of the course, expressed in semester hours. Typically credit value ranges from 0-4 semester credit hours (SCH).

Course ID =  $3^{rd}$  &  $4^{th}$  digits

The course ID is used to uniquely identify the course within the course name.

#### Course numbers beginning with zero (0)

Course numbers beginning with zero include developmental education, English as Second Language (ESL) courses, and study skills courses. These courses prepare students to be successful in college-level work. They are not college-level courses and therefore do not apply to college degrees or other awards, nor do they transfer.

## Course numbers beginning with one (1) or higher

Any course with a number that starts with a one (1) or higher is considered a college-level course. Completion of a college-level course with a D or higher will earn college credit.

#### **Earned Course Credit Hours**

Credit hours are earned upon successful completion of college credit courses. Each degree, certificate or award requires the completion of a specific number of credit hours. The second digit in a course number indicates the number of credit hours earned upon successful completion of the course.

## • Course Rubrics / Subjects

o Listed Alphabetically By Subject 173-174

Listed Alphabetically By Rubric 175-176

• Course Descriptions 177-274

#### Alphabetized Subject List

Subject/Rubric Title	Subject/ Rubric	Subject/Rubric Title	Subject/ Rubric
Accnting/Office Systs	ACNT	Dance	DANC
Accounting	ACCT	Dental Hygiene	DHYG
Air Force ROTC	AERS	Desktop Publishg Word	GRPH
Anthropology	ANTH	Diagnostic Electrocardiography	DSAE
Arabic	ARAB	Diagnostic Medical Sonography	DMSO
Army ROTC	MILS	DMS – Vascular Sonography	DSVT
Arts/Photography	ARTS	Economics	ECON
Biology	BIOL	Education	EDUC
Biotechnology	BITC	Elect/Electronic Comm	EECT
Business - Human Resource	HRPO	Electrical - Circuits	ENGT
Business Administration	BUSI	Electrocardiography	ECRD
Business Management	BMGT	Electronic Enginrng	ENTC
Chemistry	CHEM	Electronic Engnrng/Equip	INTC
Child Development	CDEC	Electronic Technology	CETT
Child Dvelpmnt/Tching	TECA	Emergency Medical Servs	EMSP
Chinese	CHIN	Engineering	ENGR
College Success	COSU	Engineering Technology	BIOM
Comm Design - Anim/Video	FLMC	English	ENGL
Comm Design - Animation	ARTV	Environmental Science	ENVR
Comm Design - Game	GAME	ESL Grammar	<b>ESLG</b>
Comm Design - Graphic	ARTC	ESL Listening/Convers	ESLC
Comm Design - Photo	PHTC	ESL Reading	ESLR
Comm Design - Video	RTVB	ESL Vocabulary	ESLV
Comm/Jour/Spch/Phot	COMM	ESL Writing	ESLW
Comp Aided Drfting/Dsgn	DFTG	Fire Technology	FIRT
Computer Aided Drafting	ARCE	Firefighter	FIRS
Computer Applications	ITSW	French	FREN
Computer Infrmtion Sys	ITSC	Geographic Infrmton Sys	GISC
Computer Maintenance Tech	CPMT	Geography	GEOG
Computer Media / Graph Ds	IMED	Geology	GEOL
Computer Networking	ITCC	German	GERM
Computer Netwrking Tech	ITNW	Government	GOVT
Computer Programming	INEW	Health Info - Medical	HPRS
Computer Science	COSC	Health Info Technology	HITT
Computer Syst Secrity	ITSY	Heating, Ventilation & Air Conditioning	HART
Computer Systems	BCIS	History	HIST
Computer/Web Progrmmg	ITSE	Hotel - Management	RSTO
Criminal Justice	CRIJ	Hotel - Tourism	TRVM
Culinary - Nutrition	IFWA	Hotel/Restaurant Mgmt	HAMG
Culinary Arts	CHEF	-	

Subject/Rubric Title	Subject/	Subject/Rubric Title	Subject/ Rubric
Subject/ Rubite Title	Rubric		Rubiic
		Paralegal/Legal Asstnt	LGLA
Humanities	HUMA	Pastry Arts	PSTR
Integrated Read/Writing	INRW	Philosophy	PHIL
Interior & Arch Design	INDS	Physical Education	PHED
Interpreter Prep/Deaf	SLNG	Physical Science/Physics	PHYS
Italian	ITAL	Phlebotomy	PLAB
Japanese	JAPN	Polysomnographic Technology	PSGT
Law Enforcement/Police Science	CJLE	Psychology	PSYC
Management MSWinSrv	ITMT	Real Estate	RELE
Marketing	MRKG	Respiratory Care	RSPT
Marketing - Business	BUSG	Robotics	RBTC
Marketing - International	IBUS	Russian	RUSS
Mathematics	MATH	Semiconductor Mnfctring	SMFT
Music	MUSI	Sign Language	SGNL
Music Ensemble	MUEN	Social Work	SOCW
Music, Applied	MUAP	Sociology	SOCI
Music, Business	MUSB	Spanish	SPAN
Music, Commercial	MUSC	Speech	SPCH
Music, Comrcial Perform	MUSP	Supply Chain Management	LMGT
Nursing	RNSG	Surgical Technology	SRGT
Nurse Assistant/Aide	NURA	Theatre / Drama	DRAM
Office Admin-Office	POFI	Welding	WLDG
Office Systems Tech	POFT		

### ALPHABETIZED RUBRIC LIST

Subject/Rubric Title	Subject/		
	Rubric	Subject/Rubric Title	Subject/
Accounting	ACCT	ESL Listening/Convers	<b>Rubric</b> ESLC
Accnting/Office Systs	ACNT	Environmental Science	ENVR
Air Force ROTC	AERS	ESL Listening/Convers	ESLC
Anthropology	ANTH	ESL Grammar	ESLG
Arabic	ARAB	ESL Reading	ESLR
Computer Aided Drafting	ARCE	ESL Vocabulary	ESLV
Comm Design - Graphic	ARTC	ESL Writing	ESLW
Arts/Photography	ARTS	Firefighter	FIRS
Comm Design - Animation	ARTV	Fire Technology	FIRT
Computer Systems	BCIS	Comm Design - Anim/Video	FLMC
Biology	BIOL	French	FREN
Engineering Technology	BIOM	Comm Design - Game	GAME
Biotechnology	BITC	Geography	GEOG
Business Management	BMGT	Geology	GEOL
Marketing - Business	BUSG	German	GERM
Business Administration	BUSI	Geographic Infrmton Sys	GISC
Child Development	CDEC	Government	GOVT
Electronic Technology	CETT	Desktop Publishg Word	GRPH
Culinary Arts	CHEF	Hotel/Restaurant Mgmt	HAMG
Chemistry	CHEM	Heating, Ventilation & Air Con	HART
Chinese	CHIN	History	HIST
Law Enforcement/Police Science	CJLE	Health Info Technology	HITT
Comm/Jour/Spch/Phot	COMM	Health Info - Medical	HPRS
Computer Science	COSC	Business - Human Resource	HRPO
College Success	COSU	Humanities	HUMA
Computer Maintenance Tech	CPMT	Marketing - International	IBUS
Criminal Justice	CRIJ	Culinary - Nutrition	IFWA
Dance	DANC	Computer Media / Graph Ds	IMED
Comp Aided Drfting/Dsgn	DFTG	Interior & Arch Design	INDS
Dental Hygiene	DHYG	Computer Programming	INEW
Diagnostic Medical Sonography Theatre / Drama	DMSO DRAM	Integrated Read/Writing	INRW INTC
Diagnostic Electrocardiography	DSAE	Electronic Engnrng/Equip Italian	ITAL
DMS – Vascular Sonography	DSVT	Computer Networking	ITCC
Economics	ECON	Management MSWinSrv	ITMT
Electrocardiography	ECRD	Computer Netwrking Tech	ITNW
Education	EDUC	Computer Infrmtion Sys	ITSC
Elect/Electronic Comm	EECT	Computer/Web Programmg	ITSE
Emergency Medical Servs	EMSP	Computer Applications	ITSW
English	ENGL	Computer Syst Secrity	ITSY
Engineering	ENGR	Japanese	JAPN
Electrical - Circuits	ENGT	Paralegal/Legal Asstnt	LGLA
Electronic Enginrng	ENTC	Supply Chain Management	LMGT
Environmental Science	ENVR		

Subject/Rubric Title	Subject/ Rubric
Mathematics	MATH
Army ROTC	MILS
Marketing	MRKG
Music, Applied	MUAP
Music Ensemble	MUEN
Music, Business	MUSB
Music, Commercial	MUSC
Music	MUSI
Music, Comrcial Perform	MUSP
Nurse Assistant/Aide	NURA
Physical Education	PHED
Philosophy	PHIL
Comm Design - Photo	PHTC
Physical Science/Physics	PHYS
Phlebotomy	PLAB
Office Admin-Office	POFI
Office Systems Tech	POFT
Polysomnographic Technology	PSGT
Pastry Arts	PSTR
Psychology	PSYC
Robotics	RBTC
Real Estate	RELE
Nursing	RNSG
Respiratory Care	RSPT
Hotel - Management	RSTO
Comm Design - Video	RTVB
Russian	RUSS
Sign Language	SGNL
Interpreter Prep/Deaf	SLNG
Semiconductor Mnfctring	SMFT
Sociology	SOCI
Social Work	SOCW
Spanish	SPAN
Speech	SPCH
Surgical Technology	SRGT
Child Dvelpmnt/Tching	TECA
Hotel - Tourism	TRVM
Welding	WLDG

### **Alphabetized Listing**

### ACCT 2301 Principles of Financial Accounting

This course is an introduction to the fundamental concepts of financial accounting as prescribed by U.S. generally accepted accounting principles (GAAP) as applied to transactions and events that affect business organizations. Students will examine the procedures and systems to accumulate, analyze, measure, and record financial transactions. Students will use recorded financial information to prepare a balance sheet, income statement, statement of cash flows, and statement of shareholder' equity to communicate the business entity's results of operations and financial position to users of financial information who are external to the company. Students will study the nature of assets, liabilities, and owners' equity while learning to use reported financial information for purposes of making decisions about the company. Students will be exposed to International Financial Reporting Standards (IFRS). Lab required. Prerequisite: Meet TSI collegereadiness standard for Mathematics; or equivalent. 3 credit hours. (A)

### ACCT 2302 Principles of Managerial Accounting

This course is an introduction to the fundamental concepts of managerial accounting appropriate for all organizations. Students will study information from the entity's accounting system relevant to decisions made by internal managers, as distinguished from information relevant to users who are external to the company. The emphasis is on the identification and assignment of product costs, operational budgeting and planning, cost control, and management decision making. Topics include product costing methodologies, cost behavior, operational and capital budgeting, and performance evaluation. Lab required. Prerequisite: ACCT 2301. 3 credit hours. (A)

### ACNT 1303 Introduction to Accounting I

A study of analyzing, classifying, and recording business transactions in a manual and computerized environment. Emphasis on understanding the complete accounting cycle and preparing financial statements, bank reconciliations, and payroll. Lab required. 3 credit hours. (W)

### ACNT 1311 Introduction to Computerized Accounting

Introduction to utilizing the computer in maintaining accounting records with primary emphasis on a general ledger package. Lab required. 3 credit hours. (W)

### AERS 1105 The Air Force Today I

Introduces students to the U.S. Air Force and the Air Force Reserve Officer Training Corps (AFROTC); includes Officership, professionalism, military customs and courtesies, and officer opportunities and benefits. AFROTC cadets must register for Leadership Laboratory as it complements this course with followership experience. 1 credit hour. (A)

### AERS 1106 The Air Force Today II

Introduces students to the U.S. Air Force and the Air Force Reserve Officer Training Corps (AFROTC); includes Officership, professionalism, military customs and courtesies, and officer opportunities and benefits. AFROTC cadets must register for Leadership Laboratory as it complements this course with followership experience. 1 credit hour. (A)

### AERS 2103 The Development of Air Power I

Introduces students to the U.S. Air Force and the Air Force Reserve Officer Training Corps (AFROTC); includes Officership, professionalism, military customs and courtesies, and officer opportunities and benefits; AFROTC cadets must register for Leadership Laboratory as it complements this course with followership experience. 1 credit hour. (A)

### AERS 2104 The Development of Air Power II

Introduces students to the U.S. Air Force and the Air Force Reserve Officer Training Corps (AFROTC); includes Officership, professionalism, military customs and courtesies, and officer opportunities and benefits; AFROTC cadets must register for Leadership Laboratory as it complements this course with followership experience. 1 credit hour. (A)

### ANTH 2301 Physical Anthropology

The study of human origins and bio-cultural adaptations. Topics may include primatology, genetics, human variation, forensics, health, and ethics in the discipline. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### ANTH 2302 Introduction to Archeology

The study of the human past through material remains. The course includes a discussion of methods and theories relevant to archeological inquiry. Topics may include the adaption of agriculture, response to environmental charge, the emergence of complex societies, and ethics in the discipline. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### ANTH 2346 General Anthropology

The study of human beings, their antecedents, related primates, and their cultural behavior and institutions. Introduces the major subfields: physical and cultural anthropology, archeology, linguistics, their applications, and ethics in the discipline. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### ANTH 2351 Cultural Anthropology

The study of human cultures. Topics may include social organization, institutions, diversity, interactions between human groups, and ethics in the discipline. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### ANTH 2389 Academic Co-op Anthropology

Integrates on-campus study with practical hands-on work experience in anthropology. In conjunction with class seminars, the student will set specific goals and objectives in the study of anthropology. Contact the Cooperative Work Experience Office. Prerequisites: Consent of Associate Dean and meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### ANTH 2401 Physical Anthropology

Lecture: The study of human origins and bio-cultural adaptations. Topics may include primatology, genetics, human variation, forensics, health, and ethics in the discipline.

Lab: Includes demonstrations of the major principles of the lecture section. Additionally, an overview of human origins and cultural adaptations combining study of our nearest relatives, the chimpanzees, with the analysis of reproductions of fossil bones. Unit concerning forensic anthropology explains how crimes can be solved from analysis of skeletal material; students work with replicas of human bone.

Opportunity to participate in field trip to zoo. Lab required. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

### ARAB 1411 Beginning Arabic I

This course, which is designed for students with little or no prior training in the language, focuses on developing the four basic skills of speaking, reading, writing and listening, as well as the study of selected aspects of Arabic civilization. Instruction is enhanced by the use of audio and video materials. Lab required. 3 credit hours. (A)

#### ARAB 1412 Beginning Arabic II

This course is a continuation of ARAB 1411. It continues the development of the four basic skills of speaking, reading, writing and listening, as well as the study of selected aspects of Arabic civilization. Instruction is enhanced by the use of audio and video materials. Lab required. Prerequisite: ARAB 1411 or consent of Associate Dean. 3 credit hours. (A)

### ARCE 1352 Structural Drafting

A study of structural systems including concrete foundations and frames, wood framing and trusses, and structural steel framing systems. Includes detailing of concrete, wood, and steel to meet industry standards including the American Institute of Steel Construction and The American Concrete Institute. Lab required. Prerequisite: DFTG 1309. 3 credit hours. (W)

### ARCE 2352 Mechanical and Electrical Systems

The properties of building materials (assemblies), specifications, codes, vendor references, and uses of mechanical, plumbing, conveying, and electrical systems as they relate to architecture for residential and commercial construction. Lab required. Prerequisite: DFTG 1317. 3 credit hours. (W)

#### ARTC 1302 Digital Imaging I

Digital imaging using raster image editing and/or image creation software: scanning, resolution, file formats, output devices, color systems, and image-acquisitions. Lab required. Prerequisite: ARTC 1325. 3 credit hours. (W)

### ARTC 1305 Basic Graphic Design

Graphic design with emphasis on the visual communication process. Topics include basic terminology and graphic design principles. Lab required. 3 credit hours. (W)

### ARTC 1313 Digital Publishing I

The fundamentals of using digital layout as a primary publishing tool and the basic concepts and terminology associated with typography and page layout. Lab included. Prerequisites: ARTC 1305 and ARTC 1325. 3 credit hours. (W)

#### ARTC 1317 Design Communication I

Study of design development relating to graphic design terminology, tools and media, and layout and design concepts. Topics include integration of type, images and other design elements, and developing computer skills in industry standard computer programs. Lab required. Prerequisites: ARTC 1327 and ARTC 1353. Prerequisite/Concurrent enrollment: ARTC 1302. 3 credit hours. (W)

### ARTC 1321 Illustration Techniques I

A study of illustration techniques in various media. Emphasis on creative interpretation and the discipline of draftsmanship for visual communication of ideas. Lab required. Prerequisite: ARTS 1316. 3 credit hours. (W)

### ARTC 1325 Introduction to Computer Graphics

A survey of design concepts, terminology, processes, and procedures. Topics include computer graphics hardware, digital images, digital publishing, vector-based graphics, and interactive multimedia. Lab required. 3 credit hours. (W)

### ARTC 1327 Typography

A study of letterforms and typographic concepts as elements of graphic communication. Emphasis on developing a current, practical typographic knowledge based on industry standards. Lab required. Prerequisites: ARTC 1305 and ARTC 1325. 3 credit hours. (W)

### ARTC 1349 Art Direction I

Creation of projects in art direction for advertising graphic campaigns for products, services, or ideas. Topics include all campaign procedures from initial research and creative strategy to final execution and presentation of a comprehensive project. Lab required. Prerequisite: ARTC 1317. 3 credit hours. (W)

### ARTC 1353 Computer Illustration I

Use of the tools and transformation options of an industry-standard vector drawing program to create complex illustrations or drawings. Includes principles of layout and design and manipulation of text and graphics. Lab required. Prerequisite: ARTC 1325. 3 credit hours. (W)

### ARTC 1394 Special Topics in Animation, Interactive Technology, Video Graphics and Special Effects

Topics address recently identified current events, skills knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. Lab required. 3 credit hours. (W)

### **Advanced 3-D Applications**

Study of advanced computer graphics techniques using software applications adopted by the animation, visual effects and game industries. Topics will include 3-D modeling, animation, dynamics, texturing, shading, rendering and compositing in industry-standard production pipelines. Prerequisite: ARTV 1345 or consent of instructor.

#### Illustration for Digital Media

Development of drawing techniques applied to visual concept development for animation, visual effects and games. Emphasis on traditional art methods and media for use in narrative and interactive storytelling and communication. Prerequisite: Consent of Associate Dean.

#### ARTC 2301 Illustration Techniques II

Advanced study of illustration media and techniques using digital and/or traditional tools. Emphasis on conceptualization and composition. Lab required. Prerequisite: ARTC 1321 or consent of Associate Dean. 3 credit hours. (W)

### ARTC 2305 Digital Imaging II

Principles of digital image processing and digital painting. Emphasis on raster-based imaging and the creative aspects of electronic illustration for commercial or fine art applications. Lab included. Prerequisite: ARTC 1302. 3 credit hours. (W)

### ARTC 2311 History of Communication Graphics

Survey of the evolution of graphic arts in relation to the history of art. Includes formal, stylistic, social, political, economic, and historical aspects. Emphasis on art movements, schools of thought, individuals, and technology as they interrelate with graphic arts. 3 credit hours. (W)

### ARTC 2335 Portfolio Development for Graphic Design

Preparation of a portfolio comprised of completed graphic design projects. Evaluation and demonstration of portfolio presentation methods based on the student's specific area of study. Lab required. Prerequisite: Consent of Associate Dean. 3 credit hours. (W)

### ARTC 2340 Computer Illustration II

Advanced use of software applications and/or various media with emphasis on output procedures, the resolution of complex design issues, and concept development. Lab required. Prerequisite: ARTC 1353. 3 credit hours. (W)

### ARTC 2347 Design Communication II

An advanced study of the design process and art direction. Emphasis on form and content through the selection, creation, and integration of typographic, photographic, illustrative, and design elements. Lab required. Prerequisites: ARTC 1317 or ARTC 1349 and ARTC 1327. 3 credit hours. (W)

#### ARTC 2349 Art Direction II

Mastery of advanced art direction projects with emphasis on selected topics in advertising campaigns. Includes written, oral, and visual skills. Lab required. Prerequisite: ARTC 1349. 3 credit hours. (W)

### ARTC 2371 User Experience Design

An advanced study of design as it applies to user experience in digital media. Emphasis on form, function as it relates to usability, accessibility, ergonomics, human factors, system performance, branding and content through the development of interface architecture and compositional layouts. The selection and creation of visual assets including the integration of typographic, photographic, illustrative, and design elements. Lab required. Prerequisites: ARTC 1317, ARTC 1327 and IMED 1316. 3 credit hours. (W)

### ARTS 1301 Art Appreciation

A general introduction to the visual arts designed to create an appreciation of the vocabulary, media, techniques, and purposes of the creative process. Students will critically interpret and evaluate works of art within formal, cultural, and historical context. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

### ARTS 1303 Art History I (Prehistoric to the 14th century)

A chronological analysis of the historical and cultural contexts of the visual arts from prehistoric times to the 14th century. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A) Note: Students should expect additional supply costs.

### ARTS 1304 Art History II (14th century to the present)

A chronological analysis of the historical and cultural contexts of the visual arts from the 14th century to the present day. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A) Note: Students should expect additional supply costs.

### ARTS 1311 Design I (2-dimensional)

An introduction to the fundamental terminology, concepts, theory, and application of two-dimensional design. Lab required. 3 credit hours. (A) Note: Students should expect additional supply costs.

### ARTS 1312 Design II (3-dimensional)

An introduction to the fundamental terminology, concepts, theory, and application of three-dimensional design. Lab required. 3 credit hours. (A) Note: Students should expect additional supply costs.

### ARTS 1313 Foundations of Art

Introduction to the creative media designed to enhance artistic awareness and sensitivity through the creative and imaginative use of art materials and tools. Includes art history and culture through the exploration of a variety of art works with an emphasis on aesthetic judgment and growth. Additionally, the examination of the change in art creation based on the advancement of tools and materials pushing art production from optic technology in Renaissance painting to mechanical art to technology based art. 3 credit hours. (A)

### ARTS 1316 Drawing I

A foundation studio course exploring drawing with emphasis on descriptive, expressive and conceptual approaches. Students will learn to see and interpret a variety of subjects while using diverse materials and techniques. Course work will facilitate a dialogue in which students will engage in critical analysis and begin to develop their understanding of drawing as a discipline. Lab required. 3 credit hours. (A) Note: Students should expect additional supply costs.

### ARTS 1317 Drawing II

A studio course exploring drawing with continued emphasis on descriptive, expressive and conceptual approaches. Students will further develop the ability to see and interpret a variety of subjects while using diverse materials and techniques. Course work will facilitate a dialogue in which students will employ critical analysis to broaden their understanding of drawing as a discipline. Lab required. Prerequisite: ARTS 1316. 3 credit hours. (A) Note: Students should expect additional supply costs.

### ARTS 2311 Design III (may be 2-D, 3-D, color, or combinations thereof)

Elements and principles of art using two- and three-dimensional concepts. Additionally, this is a studio course that allows for further study of the elements and principles of art using two-dimensional and/or three-dimensional concepts. Emphasis is placed on the resolution of complex two-dimensional and/or three-dimensional design problems. Lab required. Prerequisite: ARTS 1311 or ARTS 1312. 3 credit hours. (A) Note: Students should expect additional supply costs.

#### ARTS 2316 Painting I

Introduction to painting including use of materials, techniques, color study, and composition. Various painting styles will be practiced. Lab required. Prerequisite: ARTS 1316. 3 credit hours. (A) Note: Students should expect additional supply costs.

### ARTS 2317 Painting II

Increases the student's ability to use various techniques, color, and composition with acrylics, oils, and other media. Explores realistic and abstract approaches to painting. Emphasis on design, imagination, personal expression and painting style. Lab required. Prerequisite: ARTS 2316. 3 credit hours. (A) Note: Students should expect additional supply costs.

### ARTS 2323 Figure Drawing I

Drawing of the life model including instruction in anatomical and creative approaches to figure drawing. Emphasis on personal expression and creativity. Lab required. Prerequisite: ARTS 1316. 3 credit hours. (A) Note: Students should expect additional supply costs.

#### ARTS 2326 Sculpture I

Study of three-dimensional form and introduction to sculpture techniques including basic methods of modeling, construction, and simple casting procedures. Exploration of various media including stone, wood, metal, plaster, and paper. Lab required. 3 credit hours. (A) Note: Students should expect additional supply costs.

### ARTS 2333 Printmaking I

Introduction to the process of intaglio and relief printing including linoleum cuts, etching, aquatint, collagraph, and monotypes. Lab required. 3 credit hours. (A) Note: Students should expect additional supply costs.

### ARTS 2341 Jewelry/Art Metals I

Exploration of wearable and small sculptural forms using non-ferrous and precious metals. Metal construction and jewelry making techniques including soldering, lost wax casting, cold connections, patinas and surface embellishment. Lab required. 3 credit hours. (A) Note: Students should expect additional supply costs.

### ARTS 2346 Ceramics I

Introduction to ceramic design and methods including hand building techniques and use of the potter's wheel. Explores clays, glazing, and firing techniques including stoneware and raku. Lab required. 3 credit hours. (A) Note: Students should expect additional supply costs.

### ARTS 2347 Ceramics II

Further study of ceramic design, method, and media with exploration of various clays, glaze compositions, and kiln operations. Emphasis on creative expression and personal style. Lab required. Prerequisite: ARTS 2346. 3 credit hours. (A) Note: Students should expect additional supply costs.

### ARTS 2348 Digital Photography I

This is a foundational digital photography course. It is a studio art course that explores the potential of the computer hardware and software medium for visual, conceptual, and practical uses in the visual arts. It includes camera operation and professional image workflow, composition, supplemental lighting and exposure control. Lab required. 3 credit hours. (A) Note: Students should expect additional supply costs.

#### ARTS 2356 Photography I/Darkroom

Introduction to photography: basic camera operations and darkroom techniques; emphasis on visual imagination and design. Lab required. 3 credit hours. (A) Note: Students should expect additional supply costs.

### ARTS 2357 Photography II/Darkroom

Intermediate black-and-white course; emphasis on developing a visual language, problem solving, craftsmanship, and learning to edit personal work. Technical considerations include print and negative quality, use of studio lighting, and large format cameras. Lab required. Prerequisite: ARTS 2356. 3 credit hours. (A) Note: Students should expect additional supply costs.

### ARTS 2366 Watercolor I

Introduction to watercolor including instruction in the use of brushes, papers, materials, and various painting techniques on wet and dry paper. Gain experience in mixing colors, color methods, and problem solving in the use of technique and in skillful observation of composition and painting style. Lab required. 3 credit hours. (A) Note: Students should expect additional supply costs.

### ARTS 2389 Academic Co-op Arts/Photography

Integrates on-campus study with practical hands-on work experience in art/photography. In conjunction with class seminars, the student will set specific goals and objectives in the study of art. Contact the Cooperative Work Experience Office. 3 credit hours. (A)

### ARTV 1303 Basic Animation

Examination of animation concepts, principles, and storyboard for basic production. Emphasizes creating movement and expression utilizing traditionally or digitally generated image sequences. Lab required. Prerequisite: ARTC 1325. 3 credit hours. (W)

#### ARTV 1341 3-D Animation I

Intermediate level 3-D course introducing animation tools and techniques used to create movement. Emphasis on using the principles of animation. Lab required. Prerequisite: ARTV 1345 or consent of Instructor. 3 credit hours. (W)

#### ARTV 1343 Digital Sound

Digitizing sound and incorporating it into video games, multimedia or web projects for various delivery systems. Emphasizes compression issues, sampling, synchronizing, and resource management. Lab required. 3 credit hours. (W)

### ARTV 1345 3-D Modeling and Rendering I

Techniques of three-dimensional (3-D) modeling utilizing industry standard software. Includes the creation and modification of 3-D geometric shapes, use of a variety of rendering techniques, camera, light sources, texture, and surface mapping. Lab required. Prerequisite/Concurrent enrollment: ARTC 1325. 3 credit hours. (W)

### ARTV 1351 Digital Video

Producing and editing video and sound for multimedia or web productions. Emphasizes capture, editing, and outputting of video using a digital video workstation. Lab required. Prerequisites: ARTC 1325 and ARTV 1371. 3 credit hours. (W)

### ARTV 1371 Storyboard and Concept Development

Storyboarding for film, video and animation. Visual concept development for linear and interactive media. Lab required. 3 credit hours. (W)

### ARTV 2301 2-D Animation I

Skill development in the use of software to develop storyboards and two-dimensional animation including creating, importing, and sequencing media elements to create multimedia presentations. Emphasis on conceptualization, creativity, and visual aesthetics. Lab required. Prerequisite: ARTV 1303. 3 credit hours. (W)

### ARTV 2320 Team Program Production I

Students assume roles in a production team using techniques and equipment to create short-form production(s). Lab required. Prerequisite: ARTV 1351. 3 credit hours. (W)

#### ARTV 2330 2-D Animation II

Advanced study of technical aspects of animation. Emphasizes aesthetic design, storytelling and completion of an animation project. Includes application of advanced skills and knowledge. Lab required. Prerequisite: ARTV 2301. 3 credit hours. (W)

### ARTV 2335 Portfolio Development for Animation

A course in the development of a professional portfolio to showcase the student's skills in animation. Includes self-promotion, resumes, portfolio distribution, and interview techniques. Lab required. Prerequisite: Consent of Associate Dean. 3 credit hours. (W)

### ARTV 2341 Advanced Digital Video

Advanced digital video techniques for post-production. Emphasizes integration of special effects and animation for film, video, and the Internet. Exploration of new and emerging compression and video streaming technologies. Lab required. Prerequisite: ARTV 1351. 3 credit hours. (W)

### ARTV 2345 3-D Modeling and Rendering II

A studio course focused on advanced 3-D modeling and rendering techniques using industry standard software, modeling techniques, camera settings, lighting, and surfacing to develop detailed environments. Lab required. Prerequisite: ARTV 1345. 3 credit hours. (W)

#### ARTV 2351 3-D Animation II

Advanced level 3-D course utilizing animation tools and techniques used to develop movement. Emphasis on advanced animation techniques. Lab required. Prerequisite: ARTV 1341. 3 credit hours. (W)

### ARTV 2371 Advanced Skill Development for Animation and Games

An upper level course in the development of concepts and execution of assets for 2D/3D animation and games. The student's incoming skill level and abilities are reviewed and areas of improvement are targeted. Includes the integration of aesthetic and technical skills as introduced in various lower level courses. Lab required. Prerequisite: GAME 2325, or consent of Associate Dean. 3 credit hours. (W)

### BCIS 1305 Business Computer Applications

Students will study computer terminology, hardware, and software related to the business environment. The focus of this course is on business productivity software applications and professional behavior in computing, including word processing (as needed), spreadsheets, databases, presentation graphics, and business-oriented utilization of the Internet. Prerequisite: Meet TSI college-readiness standard for Reading; or equivalent. 3 credit hours. (A)

### BIOL 1322 Nutrition and Diet Therapy

This course introduces general nutritional concepts in health and disease and includes practical applications of that knowledge. Special emphasis is given to nutrients and nutritional processes including functions, food sources, digestion, absorption, and metabolism. Food safety, availability, and nutritional information including food labels, advertising, and nationally established guidelines are addressed. 3 credit hours. (A)

### BIOL 1323 Nutrition and Diet Therapy II

Applications of nutrition principles and techniques of nutrition care for healthy individuals and patients/clients at nutritional risk. Nutrition risk screening, interviewing/counseling methods, diet evaluation, basic diet calculations, and documentation. 3 credit hours. (A)

### BIOL 1406 Biology for Science Majors I

Lecture: Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included. Lab: Laboratory activities will reinforce the fundamental principles of living organisms, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Study and examination of the concepts of cytology, reproduction, genetics, and scientific reasoning are included. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

### BIOL 1407 Biology for Science Majors II

Lecture: The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Lab: Laboratory activities will reinforce study of the diversity and classifications of life, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Lab required. Prerequisite: BIOL 1406. 4 credit hours. (A) Note: This course includes dissection in lab.

### BIOL 1408 Biology for Non-Science Majors I

Lecture: Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Lab: Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Lab required. 4 credit hours. (A)

### BIOL 1409 Biology for Non-Science Majors II

Lecture: This course will provide a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology. Lab: Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology. Lab required. Prerequisite: BIOL 1408. 4 credit hours. (A) Note: This course includes dissection in lab.

### BIOL 1414 Introduction to Biotechnology I

Overview of classical genetics, DNA structure, the flow of genetic information, DNA replication, gene transcription, protein translation. Principles of molecular biology and genetic engineering techniques, including restriction enzymes and their uses, major types of cloning vectors, construction of libraries, Southern and Northern blotting, hybridization, PCR, DNA typing. Applications of these techniques in human health and welfare, medicine, agriculture and the environment. Introduction to the human genome project, gene therapy, molecular diagnostics, forensics, creation and uses of transgenic plans and animal and animal cloning and of the ethical, legal, and social issues and scientific problems associated with these technologies. Relevant practical exercises in the above areas. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard

for Reading and Writing; or equivalent. 4 credit hours. (A) Note: This course will transfer to a specific 2+2 baccalaureate program. Please check with your advisor to learn whether the course will transfer to the four-year program of your choice. There is an additional fee for this course.

### BIOL 1415 Introduction to Biotechnology II

Lecture to focus on an integrative approach to study biomolecules with an emphasis on protein structures, functions and uses in the modern bioscience laboratory. Students will investigate the mechanisms involved in the transfer of information from DNA sequences to proteins to biochemical functions. The course will integrate biological and chemical concepts with techniques that are used in research and industry. Critical thinking will be applied in laboratory exercises using inquiry-based approaches, troubleshooting and analyzing experimental data. Lab required. Prerequisite/Concurrent enrollment: BIOL 1414. 4 credit hours. (A) Note: This course will transfer to a specific 2+2 baccalaureate program. Please check with your advisor to learn whether the course will transfer to the four-year program of your choice. There is an additional fee for this course.

### BIOL 2389 Academic Co-op Biology

Integrates on-campus study with practical hands-on work experience in biology. In conjunction with class seminars, the student will set specific goals and objectives in the study of biology. Contact the Cooperative Work Experience Office. Prerequisite: BIOL 1406 or BIOL 1408. 3 credit hours. (A)

### BIOL 2401 Anatomy and Physiology I

Lecture: Anatomy and Physiology I is the first part of a two course sequence. It is a study of the structure and function of the human body including cells, tissues and organs of the following systems: integumentary, skeletal, muscular, nervous and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. Lab: The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include integumentary, skeletal, muscular, nervous, and special senses. Lab required. Prerequisite: BIOL 1406 with a grade of "C" or better within the last three years or satisfactory score on the BIOL 2401 Readiness Test. We strongly recommend that you successfully complete BIOL 1406. 4 credit hours. (A)

### BIOL 2402 Anatomy and Physiology II

Lecture: Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. Lab: The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Lab required. Prerequisite: Biology 2401 with a grade of "C" or better within the last five years. 4 credit hours. (A)

### BIOL 2404 Human Anatomy and Physiology Basic

A one-semester survey of the structure and function of the human body, including discussion and study of cells, tissues, organs, and systems. Lab required. 4 credit hours. (A)

### BIOL 2406 Environmental Biology

Lecture: Principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research. Lab: Laboratory activities will reinforce principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research. Lab required, including field trips. 4 credit hours. (A)

### BIOL 2416 Genetics

Study of the principles of molecular and classical genetics, and the function and transmission of hereditary material. Special emphasis on molecular genetics and genetic engineering. Lab required. Prerequisite: BIOL 1406. 4 credit hours. (A)

### BIOL 2420 Microbiology for Non-Science Majors

Lecture: This course covers basic microbiology and immunology and is primarily directed at pre-nursing, pre-allied health, and non-science majors. It provides an introduction to historical concepts of the nature of microorganisms, microbial diversity, the importance of microorganisms and acellular agents in the biosphere, and their roles in human and animal diseases. Major topics include bacterial structure as well as growth, physiology, genetics, and biochemistry of microorganisms. Emphasis is on medical microbiology, infectious diseases, and public health. Lab: This course covers basics of culture and identification of bacteria and microbial ecology. This course is primarily directed at pre-nursing and other pre-allied health majors and covers basics of microbiology. Emphasis is on medical microbiology, infectious diseases, and public health. Lab required. Prerequisite: BIOL 2401 with a grade of "C" or better within the last three years, and Prerequisite/Concurrent enrollment in BIOL 2402 with a grade of "C" or better within the last three years. 4 credit hours. (A)

### BIOL 2421 Microbiology for Science Majors

Lecture: Principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. The course will also examine the interactions of microbes with each other, hosts, and the environment. Lab: Laboratory activities will reinforce principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. The course will also examine the interactions of microbes with each other, hosts, and the environment. Lab required. Prerequisites: BIOL 1407 and CHEM 1411. 4 credit hours. (A) BIOM 1355 Medical Electronic Applications Presentation of sensors, transducers, and supporting circuits used in medical instrumentation devices. Lab required. 3 credit hours. (W)

### BIOM 2280 Cooperative Education -Biomedical Technology Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 2 credit hours. (W)

### BIOM 2380 Cooperative Education -Biomedical Technology Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

### BITC 1350 Special Studies and Bioethical Issues of Biotechnology

Current events, skills, attitudes, and behaviors pertinent to biotechnology and relevant to the professional development of the student. Includes exploration of ethical and legal behaviors in the context of the biotechnology industry. Prerequisites: BIOL 1414 and BIOL 1415 or Consent of Instructor. 3 credit hours. (W)

#### BITC 2350 Bioinformatics

Current topics in bioinformatics, proteomics, and computational biology. Includes methods for high-throughput data collection, storing, and accessing biological data. Covers programs and algorithms used to analyze data. Prerequisite: BITC 2411 or consent of Instructor. 3 credit hours. (W)

### BITC 2386 Internship-Biology Technician/Biotechnology Laboratory Technician

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Contact the Cooperative Work Experience Office. Prerequisite: Completed 9 hours of biotechnology courses and consent of Instructor. Major Requirement: Biotechnology. 3 credit hours. (W)

### BITC 2411 Biotechnology Laboratory Instrumentation

Theory, applications, and safe operation of various biotechnology-related analytical instruments. Addresses separation and identification techniques including electrophoresis, spectrophotometry, and chromatography. Lab required. Prerequisites: BIOL 1414 and BIOL 1415 or consent of Instructor. 4 credit hours. (W)

### BITC 2431 Cell Culture Techniques

Theory and applications of cell culture techniques. Laboratory emphasis on the principles and practices of applications such as initiation, cultivation, maintenance, and preservation of cell lines. Lab required. Prerequisite: BIOL 1406 or consent of Instructor. 4 credit hours. (W)

### BITC 2441 Molecular Biology Techniques

In-depth coverage of the theory and laboratory techniques in molecular biology with an emphasis on gene expression and regulation, recombinant DNA, and nucleic acids. Lab required. Prerequisites: BIOL 1414 and BIOL 1415 or consent of Instructor. 4 credit hours. (W)

### BMGT 1305 Communications in Management

Basic theory and processes of communication skills necessary for the management of an organization's workforce. 3 credit hours. (W)

BMGT 1307 Team Building

Principles of building and sustaining teams in organizations. Includes team dynamics, process improvement, trust and collaboration, conflict resolution, and the role of the individual in the team. 3 credit hours. (W)

### BMGT 1309 Information and Project Management

Critical path methods for planning and controlling projects. Includes time/cost tradeoffs, resource utilization, stochastic considerations, task determination, time management, scheduling management, status reports, budget management, customer service, professional attitude, and project supervision. 3 credit hours. (W)

### BMGT 1313 Principles of Purchasing

The purchasing process as it relates to such topics as inventory control, price determination, vendor selection, supply chain management, negotiation techniques, and ethical issues in purchasing. 3 credit hours. (W)

### BMGT 1327 Principles of Management

Concepts, terminology, principles, theories, and issues in the field of management. 3 credit hours. (W)

#### BMGT 1341 Business Ethics

Discussion of ethical issues, the development of a moral frame of reference, and the need for an awareness of social responsibility in management practices and business activities. Includes ethical corporate responsibility. 3 credit hours. (W)

### BMGT 1344 Negotiations and Conflict Management

Theories which aid in the diagnosis of interpersonal and intergroup conflict. The role of manager as negotiator, intermediary, and problem solver. 3 credit hours. (W)

### BMGT 2303 Problem Solving and Decision Making

Decision-making and problem-solving processes in organizations utilizing logical and creative problem solving techniques. Application of theory is provided by experiential activities using managerial decision tools. 3 credit hours. (W)

### BMGT 2309 Leadership

Leadership and its relationship to management. Prepares the student with leadership and communication skills needed to motivate and identify leadership styles. 3 credit hours. (W)

### BMGT 2311 Change Management

Knowledge, skills, and tools that enable a leader/organization to facilitate change in a participative style. 3 credit hours. (W)

#### BMGT 2341 Strategic Management

Strategic management process, including analysis of how organizations develop and implement a strategy for achieving organizational objectives in a changing environment. Prerequisite: BMGT 1327.

Prerequisite/Concurrent enrollment: BMGT 2311. 3 credit hours. (W)

### BMGT 2382 Cooperative Education -Business Administration and Management, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

### BUSG 1307 Entrepreneurship and Economic Development

Overview of entrepreneurship as an economic development strategy. Includes community support systems for entrepreneurs. 3 credit hours. (W)

### BUSG 2309 Small Business Management /Entrepreneurship

Starting, operating, and growing a small business. Includes essential management skills, how to prepare a business plan, accounting, financial needs, staffing, marketing strategies, and legal issues. 3 credit hours. (W)

### BUSG 2371 Entrepreneurship Experience

Career-related activities associated with the operation of one's own business. This course will allow the student to identify and implement the necessary knowledge and skills required to be a successful business owner. Prerequisite: Consent of Discipline Lead. 3 credit hours. (W)

### **BUSI** 1301 Business Principles

This course provides a survey of economic systems, forms of business ownership, and considerations for running a business. Students will learn various aspects of business, management, and leadership functions; organizational considerations; and decision-making processes. Financial topics are introduced, including accounting, money and banking, and securities markets. Also included are discussions of business challenges in the legal and regulatory environment, business ethics, social responsibility, and international business. Emphasized is the dynamic role of business in everyday life. 3 credit hours. (A)

### BUSI 1307 Personal Finance

Personal financial issues including financial planning, insurance, budgeting, credit, home ownership, savings and tax problems. 3 credit hours. (A)

### BUSI 2301 Business Law

The course provides the student with foundational information about the U.S. legal system and dispute resolution, and their impact on business. The major content areas will include general principles of law, the relationship of business and the U.S. Constitution, state and federal legal systems, the relationship between law and ethics, contracts, sales, torts, agency law, intellectual property, and business law in the global context. Prerequisite: High school coursework in U.S. history and government; or equivalent. 3 credit hours. (A)

### CDEC 1270 Introduction to Teaching ESL

An overview of ESL education. Topics include awareness of cultural diversity, assessment strategies, teaching techniques, instructional activity development and historical / philosophical concepts of ESL education. Lab required. 2 credit hours. (W)

### CDEC 1313 Curriculum Resources for Early Childhood Programs

A study of the fundamentals developmentally appropriate curriculum design and implementation in early care and education programs for children birth through age eight. Lab required. 3 credit hours. (W)

### CDEC 1317 Child Development Associate Training I

Based on the requirements for the Child Development Associate credential (CDA). Topics include CDA overview, observation skills, and child growth and development. The four functional areas of study are creative, cognitive, physical, and communication. Lab required. 3 credit hours. (W)

### CDEC 1319 Child Guidance

An exploration of guidance strategies for promoting pro-social behaviors with individual and groups of children. Emphasis on positive guidance principles and techniques, family involvement, and cultural influences. Lab required. 3 credit hours. (W)

#### CDEC 1321 The Infant and Toddler

A study of appropriate infant and toddler programs (birth to age 3), including an overview of development, quality routines, learning environments, materials and activities, and teaching/guidance techniques. Lab required. 3 credit hours. (W)

### CDEC 1323 Observation and Assessment

A study of observation skills, assessment techniques, and documentation of children's development. Lab required. 3 credit hours. (W)

### CDEC 1358 Creative Arts for Early Childhood

An exploration of principles, methods and materials for teaching music, movement, visual arts, and dramatic play through process-oriented experiences to support divergent thinking for children birth through age eight. Lab required. 3 credit hours. (W)

### CDEC 1359 Children with Special Needs

A survey of information regarding children with special needs including possible causes and characteristics of exceptionalities, intervention strategies, available resources, referral processes, the advocacy role, and legislative issues. Lab required. 3 credit hours. (W)

### CDEC 1385 Cooperative Education - Child Development

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. Prerequisite: Consent of Associate Dean. 3 credit hours. (W)

### CDEC 2166 Practicum - Child Care Provider/Assistant

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisite: Consent of Associate Dean. 1 credit hour. (W)

### CDEC 2304 Child Abuse and Neglect

Methods used in the identification of physical, emotional, and sexual abuse and neglect with an emphasis on developing skills for working with children and families. Includes methods of referral to public and private agencies that deal with investigation and treatment. Lab required. 3 credit hours. (W)

### CDEC 2307 Math and Science for Early Childhood

Exploration of principles, methods, and materials for teaching children math and science concepts and process skills through discovery and play. Lab required. 3 credit hours. (W)

### CDEC 2322 Child Development Associate Training II

A continuation of the study of the requirements for the Child Development Associate credential (CDA). The six functional areas of study include safe, healthy, learning environment, self, social, and guidance. Lab required. 3 credit hours. (W)

### CDEC 2324 Child Development Associate Training III

Continuation of the requirements for the Child Development Associate credential (CDA). The three functional areas of study include family, program management, and professionalism. Lab required. 3 credit hours. (W)

### CDEC 2326 Administration of Programs for Children I

Application of management procedures for early care and education programs. Includes planning, operating, supervising, and evaluating programs. Topics cover philosophy, types of programs, policies, fiscal management, regulations, staffing, evaluation, and communication. Lab required. 3 credit hours. (W)

### CDEC 2328 Administration of Programs for Children II

An in-depth study of the skills and techniques in managing early care and education programs, including legal and ethical issues, personnel management, team building, leadership, conflict resolution, stress management, advocacy, professionalism, fiscal analysis, technical applications in programs and planning parent education / partnerships. Lab required. 3 credit hours. (W)

### CDEC 2336 Administration of Programs for Children III

An advanced study of the skills and techniques in administering early care education programs. Lab required. 3 credit hours. (W)

### CDEC 2340 Instructional Techniques for Children with Special Needs

Exploration of development and implementation of curriculum for children with special needs. Lab required. 3 credit hours. (W)

### CDEC 2371 Using Technology in the Classroom

An overview of technology, media and digital information in education. This course includes a review of research on the impact, as well as methodology on effective use, of technology and media on children and teachers in the classroom and in curriculum planning and presentation. Lab required. 3 credit hours. (W)

### CETT 1303 DC Circuits

A study of the fundamentals of direct current including Ohm's law, Kirchhoff's law, and circuit analysis techniques. Lab required. 3 credit hours. (W)

#### CETT 1305 AC Circuits

A study of the fundamentals of alternating current including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance. Lab required. Prerequisite: CETT 1303 or consent of Associate Dean. 3 credit hours. (W)

#### CETT 1329 Solid State Devices

A study of diodes and other semiconductor devices, including analysis of static and dynamic characteristics, biasing techniques, and thermal considerations. Lab required. 3 credit hours. (W)

#### CETT 1407 Fundamentals of Electronics

Applies concepts of electricity, electronics, and digital fundamentals; supports programs requiring a general knowledge of electronics. Lab required. Corerequisite: TECM 1343 or consent of Instructor. 4 credit hours. (W)

### CETT 1409 DC-AC Circuits

Fundamentals of DC circuits and AC circuits operation including Ohm's law, Kirchhoff's laws, networks, transformers, resonance, phasors, capacitive and inductive circuit analysis techniques. Lab required. Prerequisites: CETT 1407 and TECM 1343. 4 credit hours. (W)

### CETT 1425 Digital Fundamentals

Formerly CETT 1325

An entry level course in digital electronics to include numbering systems, logic gates, Boolean algebra, and combinational logic. Lab required. 4 credit hours. (W)

### CETT 1445 Microprocessor

Formerly CETT 1345

An introductory course in microprocessor software and hardware: its architecture, timing sequence, operation, and programming. Discussion of appropriate software diagnostic language and tools. Lab required. Prerequisites: CETT 1407 and CETT 1425, or consent of Instructor or Discipline Lead. 4 credit hours. (W)

### CETT 1457 Linear Integrated Circuits

Formerly CETT 1357

A study of the characteristics, operations and testing of linear integrated circuits. Applications include instrumentation and active filtering. Lab required. Prerequisite: CETT 1409 or consent of Instructor or Discipline Lead. 4 credit hours. (W)

2017-18 Collin College Catalog, (Effective Spring 2018), Ed. 5. Rev. 10-12-17 Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

### CETT 2380 Cooperative Education-Computer Engineering Technology/Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

### CETT 2471 Emerging Topics in Engineering Technology

Topics address identified emerging technology developments, skills, knowledge pertinent to the technology or occupation and relevant to the professional development of the student. Lab required. Prerequisites: CETT 1409 and CETT 1425, or consent of Instructor. 4 credit hours. (W)

### CHEF 1301 Basic Food Preparation

A study of the fundamental principles of food preparation and cookery to include Brigade System, cooking techniques, material handling, heat transfer, sanitation, safety, nutrition, and professionalism. Lab required. Prerequisite: Mandatory Culinary / Pastry Arts Orientation. 3 credit hours. (W)

### CHEF 1302 Principles of Healthy Cuisine

Introduction to the principles of planning, preparation, and presentation of nutritionally balanced meals. Alternative methods and ingredients will be used to achieve a healthier cooking style. Lab required. Prerequisites: CHEF 2331 with a grade of "C" or better and IFWA 1310. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

### CHEF 1305 Sanitation and Safety

A study of personal cleanliness; sanitary practices in food preparation; causes, investigation, control of illness caused by food contamination (Hazard Analysis Critical Control Points); and work place safety standards. 3 credit hours. (W)

### CHEF 1310 Garde Manger

A study of cold foods and garnishes. Emphasis on design, techniques, and display of fine foods. Lab required. Prerequisite / Concurrent enrollment: CHEF 2331 with a grade of "C" or better. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

#### CHEF 1314 A La Carte Cooking

A course in a la carte or "cooking to order" concepts. Topics include menu and recipe interpretation and conversion, organization of work station, employment of appropriate cooking methods, plating, and saucing principles. Lab included. Prerequisites: CHEF 1310, CHEF 1341, CHEF 1345, and PSTR 1301. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

### CHEF 1341 American Regional Cuisine

A study of the development of regional cuisine's in the United States with emphasis on the similarities in production and service systems. Application of skills to develop, organize, and acquire knowledge of recipe strategies and production systems. Professional chef uniform and kitchen tools required. Lab required. Prerequisite / Concurrent enrollment: CHEF 2331 with a grade of "C" or better. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

### CHEF 1345 International Cuisine

The study of classical cooking skills associated with the preparation and service of international and ethnic cuisines. Topics include similarities between food production systems used in the United States and other regions of the world. Professional chef uniform and kitchen tools required. Lab required. Prerequisite / Concurrent enrollment: CHEF 2331 with a grade of "C" or better. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

### CHEF 2302 Saucier

Instruction in the preparation of stocks, soups, classical sauces, contemporary sauces, accompaniments, and the pairing of sauces with a variety of foods. Lab included. Prerequisite: CHEF 2331 with a grade of "C" or better. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

#### CHEF 2331 Advanced Food Preparation

Advanced concepts of food preparation and presentation techniques. Identify and prepare breakfast meats, eggs, cereals, and batter products, discuss the applicability of convenience, value added, further processed or par cooked food items; and demonstrate food presentation techniques and writing standardized recipes. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: CHEF 1301 with a grade of "C" or better and CHEF 1305 with a grade of "C" or better. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

#### CHEF 2336 Charcuterie

Advanced concepts in the construction of sausages, pates, and related force meat preparations. Lab required. Prerequisites: CHEF 1301, CHEF 1305 and CHEF 2331. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

### CHEF 2380 Cooperative Education - Culinary Arts/Chef Training

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisites: CHEF 1301 with a grade of "C" or better and CHEF 1305 with a grade of "C" or better. 3 credit hours. (W)

### CHEM 1405 Introduction to Chemistry I

For non-science majors. Survey of chemistry including scientific calculations, chemical equations, theory of atoms and bonding, states of matter, nuclear chemistry, elementary thermodynamics, and acid-base chemistry. Lab and recitation required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

#### CHEM 1411 General Chemistry I

Lecture: Fundamental principles of chemistry for majors in the sciences, health sciences, and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, properties of gases, and an introduction to thermodynamics and descriptive chemistry.

<u>Lab</u>: Basic laboratory experiments supporting theoretical principles presented in CHEM 1311; introduction of the scientific method, experimental design, data collection and analysis, and preparation of laboratory reports. High school chemistry is strongly recommended. Prerequisite: MATH 1314 equivalent or higher level within the last 5 years with a grade of "C" or better, and meet TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

### CHEM 1412 General Chemistry II

<u>Lecture</u>: Chemical equilibrium; phase diagrams and spectrometry; acid-base concepts; thermodynamics; kinetics; electrochemistry; nuclear chemistry; an introduction to organic chemistry and descriptive inorganic chemistry.

Lab: Basic laboratory experiments supporting theoretical principles presented in CHEM 1312; introduction of the scientific method, experimental design, chemical instrumentation, data collection and analysis, and preparation of laboratory reports. Prerequisite: CHEM 1411 within the last five years with a grade of "C" or better. 4 credit hours. (A) CHEM 2389 Academic Co-op Chemistry Integrates on-campus study with practical hands-on work experience in chemistry. In conjunction with class seminars, the student will set specific goals and objectives in the study of chemistry. Contact the Cooperative Work Experience Office. 3 credit hours. (A)

### CHEM 2423 Organic Chemistry I

Lecture: Fundamental principles of organic chemistry will be studied, including the structure, bonding, properties, and reactivity of organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. This course is intended for students in science or preprofessional programs. Lab: Laboratory activities will reinforce fundamental principles of organic chemistry, including the structure, bonding, properties, and reactivity of organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. Methods for the purification and identification of organic compounds will be examined. Lab and recitation required. Prerequisite: CHEM 1412 within the last five years with a grade of "C" or better. 4 credit hours. (A)

### CHEM 2425 Organic Chemistry II

Lecture: Advanced principles of organic chemistry will be studied, including the structure, properties, and reactivity of aliphatic and aromatic organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. This course is intended for students in science or preprofessional programs. Lab: Laboratory activities reinforce advanced principles of organic chemistry, including the structure, properties, and reactivity of aliphatic and aromatic organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. Lab and recitation required. Prerequisite: CHEM 2423 within the last 5 years with a grade of "C" or better. 4 credit hours. (A)

### CHIN 1411 Beginning Chinese I

Introduction to the basic skills of speaking, reading, writing, and listening with attention to selected aspects of Chinese culture; designed for students with little or no previous language training. Instruction is enhanced by the use of tapes, slides, and video cassettes. Lab required. 4 credit hours. (A)

### CHIN 1412 Beginning Chinese II

Continuation of CHIN 1411. Lab required. Prerequisite: CHIN 1411 or consent of Associate Dean. 4 credit hours. (A)

### CHIN 2311 Intermediate Chinese I

Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture. Prerequisite: CHIN 1412 or consent of Associate Dean. 3 credit hours. (A)

### CHIN 2312 Intermediate Chinese II

Continuation of CHIN 2311, emphasizing conversation and reading skills. Prerequisite: CHIN 2311 or consent of Associate Dean. 3 credit hours. (A)

### CJLE 1429 Basic Peace Officer V

Supplemental course taken in conjunction with Basic Peace Officer I, II, III, and IV. Satisfies or exceeds the Texas Commission on Law Enforcement (TCOLE) approved Basic Peace Officer Training Academy. Additionally, this course incorporates the following sections of TCOLE Course 1000 Strategies of Defense - Racial Profiling and the Law; Identity Crimes; Asset Forfeiture; Criminal Investigation. The entire basic peace officer training will be reviewed to prepare students for the state licensing exam. Lab required. Prerequisite: Admission to the Basic Peace Officer Program and consent of the Law Enforcement Academy Director or Designee. Prerequisite/Concurrent enrollment: CJLE 1506, CJLE 1512, CJLE 1518 and CJLE 1524. Major Requirement: Certificate - Basic Peace Officer. 4 credit hours. (W)

### CJLE 1506 Basic Peace Officer I

Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer II, III, IV and V (supplement) to satisfy the Texas Commission on Law Enforcement (TCOLE) approved Basic Peace Officer Training Academy. Additionally, this course incorporates the following sections of TCOLE Course 1000: Introduction and Orientation; TCOLE Rules; Fitness and Wellness, and Stress Management; Professional Policing; Professionalism

and Ethics; U. S. and Texas Constitutions, Bill of Rights, and Criminal Justice System; Multiculturalism and Human Relations; Code of Criminal Procedure; Arrest, Search and Seizure; Penal Code. Lab required. Prerequisite: Admission to the Basic Peace Officer Program and consent of the Law Enforcement Academy Director or Designee. Corequisite: CJLE 1512. Major Requirement: Certificate - Basic Peace Officer. 5 credit hours. (W)

#### CJLE 1512 Basic Peace Officer II

Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer I, III, IV and V (supplement) to satisfy the Texas Commission on Law Enforcement (TCOLE) approved Basic Peace Officer Training Academy. Additionally, this course incorporates the following sections of TCOLE Course 1000: Traffic, Intoxicated Driver and Standardized Field Sobriety Testing; Civil Process and Liability; Texas Alcoholic Beverage Code; Health and Safety Code - Controlled Substances Act; Family Code and Juvenile Issues; Force Options. Lab required. Prerequisite: Admission to the Basic Peace Officer Program and consent of the Law Enforcement Academy Director or Designee. Corequisite: CJLE 1506. Major Requirement: Certificate - Basic Peach Officer. 5 credit hours. (W)

### CJLE 1518 Basic Peace Officer III

Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer I, II, IV and V (supplement) to satisfy the Texas Commission on Law Enforcement (TCOLE) approved Basic Peace Officer Training Academy. Additionally, this course incorporates the following sections of TCOLE Course 1000: Written and Verbal Communications; Introductory Spanish; Strategies of Defense -Mechanics of Arrest; Strategies of Defense - Firearms; Emergency Medical Assistance; Problem Solving and Critical Thinking. Lab required. Prerequisite: Admission to the Basic Peace Officer Program and consent of the Law Enforcement Academy Director or Designee. Prerequisite/Concurrent enrollment: CJLE 1506 and CJLE 1512. Corequisite: CJLE 1524. Major Requirement: Certificate - Basic Peace Officer. 5 credit hours. (W)

### CJLE 1524 Basic Peace Officer IV

Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer I, II, III and V (supplement) to satisfy the Texas Commission on Law Enforcement (TCOLE) approved Basic Peace Officer Training Academy. Additionally, this course incorporates the following sections of TCOLE Course

1000: Emergency Communications; Professional Police Driving; Patrol/Consular Notification; Victims of Crime; Family Violence and Related Assaultive Offenses; Crisis Intervention Training (CIT)/Mental Health Code; Hazardous Materials Awareness. Lab required. Prerequisite: Admission to the Basic Peace Officer Program and consent of the Law Enforcement Academy Director or Designee. Prerequisite/Concurrent enrollment: CJLE 1506 and CJLE 1512. Major Requirement: Certificate - Basic Peace Officer. 5 credit hours. (W)

### COMM 1307 Introduction to Mass Communication

Survey of basic content and structural elements of mass media and their functions and influences on society. Additionally, a study of mass media in the United States with emphasis on newspapers, magazines, radio, film, publishing, the internet and television; history of mass media and the business models that support them; and the role and responsibility of mass media in modern society. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### COMM 1335 Introduction to Electronic Media

An overview of the development, regulation, economics, social impact, and industry practices in electronic media. Additionally, an historical and critical comparison of the first two broadcast media as they have evolved, this course includes discussion of important historical issues that resonate with contemporary media concerns' including intellectual property and patent rights, aesthetics and production values, censorship and freedom of speech, broadcast ethics, ratings fallibility, public responsibility and emotional contagion. The course also discusses the development and necessary metamorphosis of each medium in response to contemporary events, social change, and the encroachment of new technology, new media and alternative delivery methods. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### COMM 2300 Media Literacy

Criticism and analysis of the function, role, and responsibility of the mass media in modern society from the consumer perspective. Includes the ethical problems and issues facing each media format, with the effect of political, economic, and cultural factors on the operation of the media. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### COMM 2330 Introduction to Public Relations

Exploration of the history and development of public relations. Presentation of the theory behind and process of public relations, including the planning, implementation, and evaluation of PR campaigns. Additionally, exploration of current trends in the profession and overview of how the process is carried out in different public relations specializations. The student is recommended to complete either COMM 1307 or SPCH 1311 prior to registering for this course, but not required. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### COMM 2331 Radio / Television Announcing

Principles of, and practice in, radio and TV announcing, including the study of voice (diction, pronunciation, and delivery) as it relates to mediated contexts and experience in news announcing, interviewing, and acting in commercial. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### COMM 2332 Radio/Television News

The preparation and analysis of news styles for the electronic media. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### COMM 2339 Writing for Radio, Television, and Film

Designed to train the student in all typical forms of broadcast and film writing, including news, commercial copy, critique and commentary, radio theatre, comedy and dramatic teleplay, and screenplay. Course provides both writing and production experiences. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### COMM 2366 Introduction to Cinema

Survey and analyze cinema including history, film techniques, production procedures, selected motion pictures, and cinema's impact on and reflection of society. Lab required. Prerequisite: ARTS 2348 or PHTC 1311 or consent of Associate Dean. 3 credit hours. (A) Note: Students may take either DRAM 2366 or COMM 2366, but not both.

### COMM 2389 Academic Co-op Communication

For students with interest or major in mass communications, radio, TV, or film. Integrates oncampus study with practical hands-on work experience in communication. In conjunction with class seminars, the student will set specific goals and objectives in the study of communication. Contact the Cooperative Work Experience Office. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### COSC 1301 Introduction to Computing

Overview of computer systems hardware, operating systems, the Internet and application software including word processing, spreadsheets, presentation graphics, and databases. Current topics such as the effect of computers on society, and the history and use of computers in business, educational, and other interdisciplinary settings are also studied. This course is not intended to count toward a student's major field of study in business or computer science. Prerequisite: Meet TSI college-readiness standard for Reading; or equivalent. 3 credit hours. (A)

### COSC 1315 Introduction to Computer Programming

Introduction to computer programming for solving a variety of problems. This course is intended for non-computer science and non-computer engineering majors. Emphasis on the fundamentals of design, development, testing, implementation, and documentation of computer programs. Includes problem solving with structured techniques and algorithms using pseudo code and/or graphical representations. Additionally, course also includes introduction to language syntax, data types, algorithms, input/output and arrays. Lab required. 3 credit hours. (A)

### COSC 1337 Programming Fundamentals II (Java)

This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite: COSC 1315 or COSC 1436 or consent of Associate Dean. 3 credit hours. (A) Note: Students may take either COSC 1337 or COSC 1437 but not both.

### COSC 1436 Programming Fundamentals I (C++)

This course introduces the fundamental concepts of structured programming, and provides a comprehensive introduction to programming for computer science and technology majors. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. This course assumes computer literacy. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite: Meet TSI college-readiness standard for Mathematics; or equivalent. 4 credit hours. (A)

### COSC 1437 Programming Fundamentals II (C++)

This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite: COSC 1436 or consent of Associate Dean. 4 credit hours. (A) Note: Students may take either COSC 1337 or COSC 1437 but not both.

#### COSC 2325 Computer Organization

The organization of computer systems is introduced using assembly language. Topics include basic concepts of computer architecture and organization, memory hierarchy, data types, computer arithmetic, control structures, interrupt handling, instruction sets, performance metrics, and the mechanics of testing and debugging computer systems. Embedded systems and device interfacing are introduced. Additionally, this class is taught with Intel assembly language.

Prerequisites: COSC 1436 or consent of Associate Dean. 3 credit hours. (A)

### COSC 2336 Programming Fundamentals III (C++)

Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), searching, sorting, recursion, and algorithmic analysis. Programs will be implemented in an appropriate object oriented language. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite: COSC 1437 or consent of Associate Dean. 3 credit hours. (A) Note: Students may take either COSC 2336 or COSC 2436 but not both.

### COSC 2436 Programming Fundamentals III (Java)

Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), searching, sorting, recursion, and algorithmic analysis. Programs will be implemented in an appropriate object oriented language. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite: COSC 1337 or consent of Associate Dean. 4 credit hours. (A) Note: Students may take either COSC 2336 or COSC 2436 but not both.

### COSU 0301 Test-Taking and Study Skills for Non-Native English Speakers

This class will prepare non-native English speaking students for success by providing instruction and practice in test-taking techniques as well as exposing them to the expectations and realities of college academic coursework. Topics that will be covered include information processing, memory, strategic learning, self-regulation, goal setting, motivation, educational planning, and learning styles. Techniques of study such as organization, time-management, listening/speaking/reading/writing in a lecture or classroom setting, note-taking, research skills, and test preparation will be covered. This course will be particularly beneficial to students who are required to complete the TOEFL or the IELTS prior to admission to college or university. Prerequisites: ESLC 0310, ESLR 0310 and ESLW 0310, or consent of ESL Testing Coordinator or ESL Associate Dean. 3 credit hours. (D)

### CPMT 1305 IT Essentials I: PC Hardware and Software

Provides comprehensive overview of computer hardware and software and an introduction to advanced concepts addressed by CISCO CCENT certification. Lab required. 3 credit hours. (W) CRIJ 1301 Introduction to Criminal Justice This course provides a historical and philosophical overview of the American criminal justice system, including the nature, extent, and impact of crime; criminal law; and justice agencies and processes. 3 credit hours. (A)

### CRIJ 1306 Court Systems and Practices

This course is a study of the court system as it applies to the structures, procedures, practices and sources of law in American courts, using federal and Texas statutes and case law. 3 credit hours. (A)

### CRIJ 1307 Crime in America

American crime problems in historical perspective, social and public policy factors affecting crime, impact and crime trends, social characteristics of specific crimes, and prevention of crime. 3 credit hours. (A)

### CRIJ 1310 Fundamentals of Criminal Law

This course is the study of criminal law including application of definitions, statutory elements, defenses and penalties using Texas statutes, the Model Penal Code, and case law. The course also analyzes the philosophical and historical development of criminal law and criminal culpability. 3 credit hours. (A)

#### CRIJ 1313 Juvenile Justice System

A study of the juvenile justice process to include specialized juvenile law, role of the juvenile law, role of the juvenile courts, role of police agencies, role of correctional agencies, and theories concerning delinquency. 3 credit hours. (A)

### CRIJ 2313 Correctional Systems and Practices

This course is a survey of institutional and non-institutional corrections. Emphasis will be placed on the organization and operation of correctional systems; treatment and rehabilitation; populations served; Constitutional issues; and current and future issues. 3 credit hours. (A)

### CRIJ 2314 Criminal Investigation

Investigative theory; collection and preservation of evidence; sources of information; interview and interrogation; uses of forensic sciences; case and trial preparation. 3 credit hours. (A)

### CRIJ 2323 Legal Aspects of Law Enforcement

Police authority; responsibilities; constitutional constraints; laws of arrest, search, and seizure; and police liability. 3 credit hours. (A)

### CRIJ 2328 Police Systems and Practices

This course examines the establishment, role and function of police in a democratic society. It will focus on types of police agencies and their organizational structure, police-community interaction, police ethics, and use of authority. 3 credit hours. (A)

### DANC 1110 Tap Dance

Instruction in the fundamental techniques and concepts associated with Tap dance. May be repeated one time for additional degree credit. Lab required. 1 credit hour. (A)

Note: Students may take DANC 1110, DANC 1128, DANC 1151 and DANC 2151 for a combined total of no more than 18 credit hours.

### DANC 1112 Dance Practicum

Practicum in dance related topics with emphasis on practical skills necessary for the field. May be repeated one time for additional degree credit. Prerequisite: Consent of Instructor. 1 credit hour. (A) NOTE: May be repeated one time for additional credit.

#### DANC 1128 Ballroom and Social Dance

Introductory instruction in the fundamental techniques and concepts associated with Ballroom and Social Dance. May be repeated one time for additional degree credit. Lab required. 1 credit hour. (A) Note: Students may take DANC 1110, DANC 1128, DANC 1151 and DANC 2151 for a combined total of no more than 18 credit hours.

### DANC 1151 Freshman Dance Performance

Instruction in dance performance through experiential projects at the freshman level. May be repeated one time for additional degree credit. Lab required. Prerequisite: Audition. 1 credit hour. (A) Note: Students may take DANC 1110, DANC 1128, DANC 1151 and DANC 2151 for a combined total of no more than 18 credit hours.

### DANC 1201 Dance Composition - Improvisation

This introductory course in improvisation will investigate spontaneous problem solving as a means of generating movement for dance composition Students will be called upon to explore and respond to various forms of stimuli in a safe and supportive learning environment within solo and group work. Lab required. 2 credit hours. (A)

#### DANC 1241 Beginning Ballet

Instruction in the fundamental techniques and concepts associated with ballet. Lab required. 2 credit hours. (A)

NOTE: May be repeated one time for additional credit.

### DANC 1245 Beginning Modern Dance

Instruction in the fundamental techniques and concepts associated with the concert form of modern dance. May be repeated one time for additional degree credit. Lab required. 2 credit hours. (A)

NOTE: May be repeated one time for additional credit.

### DANC 1247 Beginning Jazz Dance

Instruction in the fundamental techniques and concepts associated with jazz dance. May be repeated one time for additional degree credit. Lab required. 2 credit hours. (A)

NOTE: May be repeated one time for additional credit.

### DANC 1301 Dance Composition - Choreography

This course is an examination of the principles of movement generation, phrasing, choreographic structure, and manipulation. Integration of choreographic principles will foster the growth of personal artistic style. Lab required. 3 credit hours. (A)

### DANC 1305 World Dance

A survey of dances from different cultures, their histories, and their influences on contemporary dance and society. Cultural origins, significance, motivations and techniques will be explored experientially. 3 credit hours. (A)

### DANC 2151 Sophomore Dance Performance

Instruction in of dance performance through experiential projects at the sophomore level. May be repeated one time for additional degree credit. Lab required. Prerequisite: Audition. 1 credit hour. (A)

Note: Students may take DANC 1110, DANC 1128, DANC 1151 and DANC 2151 for a combined total of no more than 18 credit hours.

### DANC 2241 Intermediate Ballet

Instruction in the intermediate techniques and concepts associated with ballet. May be repeated one time for additional degree credit. Lab required. Prerequisite: DANC 1241 or Consent of Instructor. 2 credit hours. (A)

NOTE: May be repeated one time for additional credit.

### DANC 2245 Intermediate Modern Dance

Instruction in the intermediate techniques and concepts associated with the concert form of modern dance. May be repeated one time for additional degree credit. Lab required. Prerequisite: DANC 1245 or Consent of Instructor. 2 credit hours. (A)

NOTE: May be repeated one time for additional credit.

### DANC 2247 Intermediate Jazz Dance

Instruction in the intermediate techniques and concepts associated with jazz dance. May be repeated one time for additional degree credit. Lab required. Prerequisite: DANC 1247 or Consent of Instructor. 2 credit hours. (A)

NOTE: May be repeated one time for additional credit.

### DANC 2303 Dance Appreciation

A general survey of dance forms designed to create an appreciation of the vocabulary, techniques, and purposes of the creative process. This course includes critical interpretation and evaluations of choreographic works and dance forms within cultural and historical contexts. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

### DANC 2389 Academic Cooperative

Integrates on-campus study with practical hands-on work experience in dance. In conjunction with class seminars, the student will set specific goals and objectives in the study of dance. Contact the Cooperative Work Experience Office. 3 credit hours. (A)

### DFTG 1305 Technical Drafting

Introduction to the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections, auxiliary views. Lab required. 3 credit hours. (W)

### DFTG 1309 Basic Computer-Aided Drafting

An introduction to computer-aided drafting. Emphasis is placed on setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinating systems; and plot/print to scale. Lab required. 3 credit hours. (W)

### DFTG 1317 Architectural Drafting-Residential

Architectural drafting procedures, practices, terms, and symbols. Preparation of detailed working drawings for residential structures. Emphasis on light frame construction methods. Lab required. Prerequisite: DFTG 2328. 3 credit hours. (W)

### DFTG 1333 Mechanical Drafting

Study of mechanical drawings using dimensioning and tolerances, sectioning techniques, orthographic projection, and pictorial drawings. Lab required. Prerequisite: DFTG 2319. 3 credit hours. (W)

### DFTG 1345 Parametric Modeling and Design

Parametric-based design software for 3D design and drafting. Lab required. Prerequisite: DFTG 1372. 3 credit hours. (W)

### DFTG 1371 Mechanical Drafting-Fundamentals of Sheet metal Design

The Fundamentals of Sheetmetal Design course teaches the skills required in designing sheetmetal parts and assemblies, trouble shooting and creating production drawings. All functions needed to create sheetmetal parts, drawings and assemblies are taught in this course. The lesson modules are structured to maximize hands-on interaction with the Pro/Sheetmetal module in Pro/Engineer. Lab required. Prerequisite: DFTG 1333. 3 credit hours. (W)

### DFTG 1372 SOLIDWORKS Essentials

A study of mechanical drafting and design using SOLIDWORKS mechanical design automation software to build parametric models of parts and assemblies. The course teaches how to make drawings of those parts and assemblies through the use of dimensioning and tolerancing, sectioning techniques and orthographic projection. Lab required. 3 credit hours. (W)

### DFTG 2319 Intermediate Computer-Aided Drafting

A continuation of practices and techniques used in basic computer-aided drafting including the development and use of prototype drawings, construction of pictorial drawings, extracting data and basics of 3D. Lab required. Prerequisite: DFTG 1309. 3 credit hours. (W)

### DFTG 2321 Topographical Drafting

Plotting of surveyor's field notes. Includes drawing elevations, contour lines, plan and profiles, and laying out traverses. Lab required. Prerequisite: DFTG 1309. 3 credit hours. (W)

### DFTG 2328 Architectural Drafting-Commercial

Architectural drafting procedures, practices, governing codes, terms and symbols including the preparation of detailed working drawings for a commercial building, with emphasis on commercial construction methods. Lab required. Prerequisite: DFTG 1309. Prerequisite/Concurrent enrollment: DFTG 2319. 3 credit hours. (W)

### DFTG 2350 Geometric Dimensioning and Tolerancing

Geometric dimensioning and tolerancing, according to standards, application of various geometric dimensions and tolerances to production drawings. Lab required. Prerequisite: DFTG 1309. 3 credit hours. (W)

# DFTG 2373 Advanced SOLIDWORKS Study of advanced topics in SOLIDWORKS mechanical drafting and design. The course teaches how to build assemblies, to create professional drawing, and to use various SOLIDWORKS tools to manage information to facilitate the design process. Lab required. Prerequisite: DFTG 1372. 3 credit hours. (W)

### DFTG 2381 Cooperative Education-Drafting and Design Technology / Technician, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

### DFTG 2432 Advanced Computer-Aided Drafting

Application of advanced CAD techniques. Lab required. Prerequisite / Concurrent enrollment: DFTG 1372. 4 credit hours. (W)

### DHYG 1201 Orofacial Anatomy, Histology and Embryology

The histology and embryology of oral tissues, gross anatomy of the head and neck, tooth morphology, and individual tooth identification. Lab required. Prerequisites: BIOL 2401 and BIOL 2402; both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

### DHYG 1207 General and Dental Nutrition

General nutrition and nutritional biochemistry emphasizing the effect nutrition has on oral health. Prerequisite: DHYG 1431 (or DHYG 1331) with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

### DHYG 1211 Periodontology

Normal and diseased periodontium including the structural, functional, and environmental factors. Emphasis on etiology, pathology, treatment modalities, and therapeutic and preventive periodontics. Prerequisites: DHYG 1227 and DHYG 1261; both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

### DHYG 1215 Community Dentistry

The principles and concepts of community public health and dental health education emphasizing community assessment, educational planning, implementation, and evaluation including methods and materials used in teaching dental health education in various community settings. Additionally, this course includes rotation schedule into the community (4 hours weekly). Lab required. Prerequisites: DHYG 1227, DHYG 1261 and ENGL 1301; all with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

### DHYG 1219 Dental Materials

Physical and chemical properties of dental materials including the application and manipulation of the various materials used in dentistry. Lab required. Prerequisite: DHYG 1431 with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

### DHYG 1227 Preventive Dental Hygiene Care

The role of the dental hygienist as a therapeutic oral health care provider with emphasis on concepts of disease management, health promotion, communication, and behavior modification. Lab required. Prerequisites: DHYG 1201 and DHYG 1431, both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

### DHYG 1235 Pharmacology for the Dental Hygienist

Classification of drugs and their uses, actions, interactions, side effects, contraindications with emphasis on dental applications. Prerequisite: DHYG 1431 with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

### DHYG 1239 General and Oral Pathology

Disturbances in human body development, diseases of the body, and disease prevention measures with emphasis on the oral cavity and associated structures. Lab required. Prerequisites: DHYG 1227 and DHYG 1261; both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

### DHYG 1261 Clinical I-Dental Hygienist

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisites: DHYG 1201 and DHYG 1431; both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

### DHYG 1301 Orofacial Anatomy, Histology and Embryology

The histology and embryology of oral tissues, gross anatomy of the head and neck, tooth morphology, and individual tooth identification. Lab required. Prerequisites: BIOL 2401 and BIOL 2402; both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

### DHYG 1304 Dental Radiology

Fundamentals of oral radiography, including techniques, interpretation, quality assurance, and ethics. Lab required. Corequisite: DHYG 1201, or consent of Program Director. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

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### DHYG 1311 Periodontology

Normal and diseased periodontium including the structural, functional, and environmental factors. Emphasis on etiology, pathology, treatment modalities, and therapeutic and preventive periodontics. Prerequisites: DHYG 1227 and DHYG 1261. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

#### DHYG 1319 Dental Materials

Physical and chemical properties of dental materials including the application and manipulation of the various materials used in dentistry. Lab required. Prerequisites: CHEM 1405 and DHYG 1331. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

### DHYG 1331 Preclinical Dental Hygiene

Foundational knowledge for performing clinical skills on patients with emphasis on procedures and rationale for performing dental hygiene care. Introduction to ethical principles as they apply to dental hygiene care. Lab required. Prerequisites: BIOL 2401, and BIOL 2402, and CHEM 1405. Major Requirement: AAS-Dental Hygiene. 3 credit hours. (W)

#### DHYG 1339 General and Oral Pathology

Disturbances in human body development, diseases of the body, and disease prevention measures with emphasis on the oral cavity and associated structures. Prerequisites: DHYG 1227 and DHYG 1261. Major Requirement: AAS-Dental Hygiene. 3 credit hours. (W)

### DHYG 2375 Strategies of Oral Medicine

Case presentation that emphasizes the integration of dental hygiene sciences, critical thinking and the application of evidence based research on an advanced level. Presentations by students include patient case studies and literature reviews for class discussion. Patient case studies integrate knowledge from the areas of research, pharmacology, periodontology, pathology, emergency care, ethics, nutrition, dental radiology and clinical courses that demonstrate the highest quality of care for each patient. Prerequisites: DHYG 1235, DHYG 2201, and DHYG 2361. Major Requirement: AAS-Dental Hygiene. 3 credit hours. (W)

### DHYG 1431 Preclinical Dental Hygiene

Foundational knowledge for performing clinical skills on patients with emphasis on procedures and rationale for performing dental hygiene care. Introduction to ethical principles as they apply to dental hygiene care. Lab required. Prerequisites: BIOL 2401 and BIOL 2402; both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

### DHYG 2102 Applied Community Dentistry

Application of the principles and concepts of community public health and dental health education emphasizing community assessment, educational planning, implementation, and evaluation including methods and materials used in teaching dental health education in various community settings. Lab required. Prerequisite: DHYG 1215 with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 1 credit hour. (W)

### DHYG 2153 Dental Hygiene Practice

Emphasis on the laws governing the practice of dentistry and dental hygiene, moral standards, and the ethical standards established by the dental hygiene profession. Practice settings for the dental hygienist, office operations, and preparation for employment. Prerequisite: Admitted to the Dental Hygiene Program. Major Requirement: AAS - Dental Hygiene. 1 credit hour. (W)

### DHYG 2201 Dental Hygiene Care I

Dental hygiene care for the medically or dentally compromised patient including supplemental instrumentation techniques. Prerequisites: DHYG 1227 and DHYG 1261; both with a grade of "C" or better. Corequisite: DHYG 2361, or consent of Program Director. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

### DHYG 2202 Applied Community Dentistry

Application of the principles and concepts of community public health and dental health education emphasizing community assessment, educational planning, implementation, and evaluation including methods and materials used in teaching dental health education in various community settings. Lab required. Prerequisite: DHYG 1215 with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

### DHYG 2231 Dental Hygiene Care II

A continuation of Dental Hygiene Care I. Dental hygiene care for the medically or dentally compromised patient including advanced instrumentation techniques. Lab required. Prerequisites: DHYG 2201 and DHYG 2361; both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

### DHYG 2361 Clinical II - Dental Hygienist

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Additionally, this course is a method of instruction providing detailed education, training and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation, and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Prerequisites: DHYG 1227 and DHYG 1261; both with a grade of "C" or better. Corequisite: DHYG 2201, or consent of Program Director. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

### DHYG 2363 Clinical III-Dental Hygienist

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisites: DHYG 2201 and DHYG 2361; both with a grade of "C" or better. Corequisite: DHYG 2231. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

### DMSO 1202 Basic Ultrasound Physics

Basic acoustical physics and acoustical waves in human tissue. Emphasis on ultrasound transmission in soft tissues, attenuation of sound energy, parameters affecting sound transmission, and resolution of sound beams. Lab required. 2 credit hours. (W)

#### DMSO 1210 Introduction to Sonography

An introduction to the profession of sonography and the role of the sonographer. Emphasis on medical terminology, ethical/legal aspects, written and verbal communication, and professional issues relating to registry, accreditation, professional organizations and history of the profession. 2 credit hours. (W)

### DMSO 1242 Intermediate Ultrasound Physics

Continuation of Basic Ultrasound Physics. Includes interaction of ultrasound with tissues, mechanics of ultrasound production and display, various transducer designs and construction, quality assurance, bioeffects, and image artifacts. May introduce methods of Doppler flow analysis. Lab required. 2 credit hours. (W)

### DMSO 1251 Sonographic Sectional Anatomy Sectional anatomy of the male and female body. Includes anatomical relationships of organs, vascular

Includes anatomical relationships of organs, vascular structures, and body planes and quadrants. Lab required. 2 credit hours. (W)

### DMSO 1341 Abdominopelvic Sonography

Normal anatomy and physiology of the abdominal and pelvic cavities as related to scanning techniques, transducer selection, and scanning protocols. Lab required. 3 credit hours. (W)

### DMSO 1360 Clinical I - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 3 credit hours. (W)

#### DMSO 2230 Advanced Ultrasound and

**Review** Knowledge, skills, and professional values within a legal and ethical framework addressing emerging technologies and professional development. Lab required. 2 credit hours. (W)

### DMSO 2253 Sonography of Superficial Structures

Detailed study of normal and pathological superficial structures as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Lab required. 2 credit hours. (W)

### DMSO 2254 Neurosonology

Normal and pathological intracranial structures. Lab required. 2 credit hours. (W)

### DMSO 2341 Sonography of Abdominopelvic Pathology

Pathologies and disease states of the abdomen and pelvis as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Emphasizes endocavitary sonographic anatomy and procedures including pregnancy. Lab required. 3 credit hours. (W)

### DMSO 2342 Sonography of High Risk Obstetrics

Maternal disease and fetal abnormalities. Includes scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Lab required. 3 credit hours. (W)

### DMSO 2362 Clinical II - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 3 credit hours. (W)

### DMSO 2363 Clinical III - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 3 credit hours. (W)

### DMSO 2405 Sonography of Obstetrics/ Gynecology

Detailed study of the pelvis and obstetrics/gynecology as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Lab required. 4 credit hours. (W)

### DRAM 1120 Theatre Practicum I

Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions. Additionally, practicum in theatre with emphasis on performance techniques and procedures, including a major performance role in a college production. Flexible enrollment. Prerequisite: Consent of Instructor. 1 credit hour. (A) Note: Students may take DRAM 1120 and DRAM 1121 for a combined total of no more than 9 credit hours.

### DRAM 1121 Theatre Practicum II

Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions. Additionally, practicum in theatre with emphasis on theatre techniques and procedures, including major technical responsibilities in the production of a college play. Flexible enrollment. Prerequisite: Consent of Instructor. 1 credit hour. (A) Note: Students may take DRAM 1120 and DRAM 1121 for a combined total of no more than 9 credit hours.

#### DRAM 1310 Introduction to Theater

Survey of theater including its history, dramatic works, stage techniques, production procedures, and relation to other art forms. Participation in productions may be required. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

### DRAM 1322 Stage Movement

Principles, practices, and exercises in body techniques and stage movement; emphasis on character movement and body control. Lab required. 3 credit hours. (A)

### DRAM 1330 Stagecraft I

Study and application of the methods and components of theatrical production which may include one or more of the following: theater, facilities, scenery construction and painting, properties, lighting, costume, makeup, sound, and theatrical management. Lab required. 3 credit hours. (A)

### DRAM 1341 Makeup

Design and execution of makeup for the purpose of developing believable characters. Includes discussion of basic makeup principles and practical experience of makeup application. Lab required. 3 credit hours. (A)

### DRAM 1342 Introduction to Costume

Principles and techniques of costume design and construction for theatrical productions. Lab required. 3 credit hours. (A)

### DRAM 1351 Acting I

An introduction to the fundamental principles and tools of acting as used in auditions, rehearsals, and performances. This may include ensemble performing, character and script analysis, and basic theater terminology. This exploration will emphasize the development of the actor's instrument: voice, body and imagination. Lab required. 3 credit hours. (A)

### DRAM 1352 Acting II

Exploration and further training within the basic principles and tools of acting, including an emphasis on critical analysis of oneself and others. The tools include ensemble performing, character and script analysis, and basic theater terminology. This will continue the exploration of the development of the actor's instrument: voice, body and imagination. Lab required. Prerequisite: DRAM 1351 or consent of Instructor. 3 credit hours. (A)

### DRAM 2331 Stagecraft II

Continued study and application of the methods and components of theatrical production which may include one or more of the following: theater facilities, scenery construction and painting, properties, lighting, costume, makeup, sound and theatrical management. Lab required. 3 credit hours. (A)

### DRAM 2336 Voice for the Theater

Application of the performer's use of the voice as a creative instrument of effective communication. Encourages an awareness of the need for vocal proficiency and employs techniques designed to improve the performer's speaking ability. 3 credit hours. (A)

### DRAM 2351 Acting III

Development of basic skills and techniques of acting including increased sensory awareness, ensemble performing, character analysis, and script analysis. Emphasis on the mechanics of voice, body, emotion, and analysis as tools for the actor. Lab required. 3 credit hours. (A)

### DRAM 2361 History of Theater I

Study of the history of the theater from primitive times through the Renaissance. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

### DRAM 2362 History of Theater II

Study of the history of the theater from the Renaissance through today. Prerequisite: Meet TSI requirement for INRW 0315; or equivalent. 3 credit hours. (A)

#### DRAM 2366 Introduction to Cinema

Survey and analyze cinema including history, film techniques, production procedures, selected motion pictures, and cinema's impact on and reflection of society. Additionally, this course covers the period of 1890 to 1949. Lab required. 3 credit hours. (A) Note: Students may take either DRAM 2366 or COMM 2366, but not both.

#### DRAM 2389 Academic Co-op Drama

Integrates on campus study with practical hands-on work experience in drama. In conjunction with class seminars, the student will set specific goals and objectives in the study of drama. Contact the Cooperative Work Experience Office. 3 credit hours. (A)

### DSAE 1340 Diagnostic Electrocardiography

Cardiac testing including the techniques and interpretation of patient physical assessment. Covers electrocardiography, stress testing, Holter monitoring, vital signs, and cardiovascular pharmacology. Lab required. 3 credit hours. (W)

### DSVT 1103 Introduction to Vascular Technology

Introduction to basic non-invasive vascular theories. Emphasizes image orientation, transducer handling, and identification of anatomic structures. 1 credit hour. (W)

#### ECON 1301 Introduction to Economics

A survey of microeconomic and macroeconomic principles of non-business majors. Microeconomic topics will include supply and demand, consumer behavior, price and output decisions by firms under various market structures, factor markets, market failures, international trade, and exchange rates. Macroeconomic topics will include national income, unemployment, inflation, business cycles, aggregate supply and demand, monetary and fiscal policy, and economic growth. 3 credit hours. (A)

### ECON 2301 Principles of Macroeconomics

An analysis of the economy as a whole including measurement and determination of Aggregate Demand and Aggregate Supply, national income, inflation, and unemployment. Other topics include international trade, economic growth, business cycles, and fiscal policy and monetary policy. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### ECON 2302 Principles of Microeconomics

Analysis of the behavior of individual economic agents, including consumer behavior and demand, producer behavior and supply, price and output decisions by firms under various market structures, factor markets, market failures, and international trade. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### ECON 2389 Academic Co-op Economics

Integrates on-campus study with practical hands-on work experience in economics. In conjunction with class seminars, the student will set specific goals and objectives in the study of economics. Contact the Cooperative Work Experience Office. 3 credit hours. (A)

### ECRD 1111 Electrocardiography

Fundamentals of cardiovascular anatomy and physiology. Includes basic electrocardiography procedures, interpretation of basic dysrhythmias, and appropriate treatment modalities. Prerequisite / Concurrent enrollment: DSAE 1340, or consent of Instructor. 1 credit hour. (W)

### EDUC 1300 Learning Framework

A study of the: 1) research and theory in the psychology of learning, cognition, and motivation; 2) factors that impact learning, and 3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. 3 credit hours. (A) Note: Students may only take one of the following: EDUC 1200, EDUC 1300, PSYC 1100 or PSYC 1300.

### EDUC 1301 Introduction to the Teaching Profession

An enriched, integrated pre-service course and content experience that provides active recruitment and institutional support of students interested in a teaching career, especially in high need fields. The course provides students with opportunities to participate in early field observations at all levels of P-12 schools with varied and diverse student populations and provides students with support from college and school

faculty, preferably in small cohort groups, for the purpose of introduction to and analysis of the culture of schooling and classrooms. Course content should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards; and the course must include a minimum of 16 contact hours of field experience in P-12 classrooms. Lab required. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

### EDUC 2301 Introduction to Special Populations

An enriched, integrated pre-service course and content experience that provides an overview of schooling and classrooms from the perspectives of language, gender, socioeconomic status, ethnic and academic diversity, and equity with an emphasis on factors that facilitate learning. The course provides students with opportunities to participate in early field observations of P-12 special populations and should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Must include a minimum of 16 contact hours of field experience in P-12 classrooms with special populations. Lab required. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A) **EECT** 1348 Digital Signal Processing (DSP) A study of the architecture and applications of digital signal processors (DSP) including mathematical signal processing techniques. Lab required. 3 credit hours. (W)

### EECT 1371 Voice-over-Internet Protocol (CCNA VOICE)

Voice over Internet Protocol (VoIP) adds voice to existing data and video transmission networks enriching and unifying all our communication systems over a common media. It offers many benefits: lower telephony operational costs, greater flexibility, and offers the potential for a variety of present and future enhanced applications not possible on earlier communications systems. This course provides a thorough overview of the legacy Public Switched Telephone Network (PSTN), Internet Protocol (IP), and IP Telephony (IPT), including their protocols and its integration with data and video networks. VoIP I helps individuals to prepare for the Cisco CCNA Voice and CVOICE certification. This class requires extensive hands-on labs. Lab required. 3 credit hours. (W)

### EECT 2337 Wireless Telephony Systems

Principles of wireless/cellular telephony systems to include call processing, hand-off, site analysis, antenna radiation patterns, commonly used test/maintenance equipment, and access protocol. Lab required. 3 credit hours. (W)

# EECT 2380 Cooperative Education Electrical, Electronic and Communications Engineering Technology Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

### EECT 2439 Communications Circuits

A study of communications systems with emphasis on amplitude modulation, frequency modulation, phase modulation, and digital pulse modulation. Discussion of several types of modulators, demodulators, receivers, transmitters, and transceivers. Lab required. Prerequisites: CETT 1425 and CETT 2471. 4 credit hours. (W)

### EMSP 1160 Clinical-Emergency Medical Technician (EMT Paramedic)-Basic

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Consent of Program Director. 1 credit hour. (W)

### EMSP 1161 Clinical-Emergency Medical Technician (EMT Paramedic)-Advanced I

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Consent of Program Director. 1 credit hour. (W)

### EMSP 1162 Clinical-Emergency Medical Technician (EMT Paramedic)-Advanced II

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Consent of Program Director. 1 credit hour. (W)

### EMSP 1355 Trauma Management

Knowledge and skills in the assessment and management of patients with traumatic injuries. Lab required. 3 credit hours. (W)

### EMSP 1356 Patient Assessment and Airway Management

Knowledge and skills required to perform patient assessment, airway management, and artificial ventilation. Lab required. Prerequisite: Consent of Program Director. 3 credit hours. (W)

### EMSP 1371 Introduction to Emergency Medical Technician (EMT)

Introduction to Emergency Medical Services including: history, organization and function, legal aspects, and ethics. Overview of human anatomy and physiology, patient assessment, airway control, and infection control techniques. Prerequisite: Consent of Program Director. Corequisites: EMSP 1160 and EMSP 1501. 3 credit hours. (W)

### EMSP 1438 Introduction to Advanced Practice

Fundamental elements associated with emergency medical services to include preparatory practices, pathophysiology, medication administration, and related topics. Lab required. Prerequisites: EMSP 1160 and EMSP 1371 and EMSP 1501, or EMT-Basic certification, or consent of Program Director. 4 credit hours. (W)

# EMSP 1501 Emergency Medical Technician Preparation for certification as an Emergency Medical Technician (EMT). Lab required. Prerequisite:

Consent of Program Director. Corequisite: EMSP 1160. 5 credit hours. (W)

### EMSP 2143 Assessment Based Management

A summarative experience covering comprehensive, assessment-based patient care management for the paramedic level. Additionally, it includes specific care when dealing with pediatric, adult, geriatric, and special needs patients. 1 credit hour. (W)

### EMSP 2160 Clinical-Emergency Medical (EMT Paramedic)-Advanced III

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 1 credit hour. (W)

#### EMSP 2206 Emergency Pharmacology

A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages. Lab required. 2 credit hours. (W)

### EMSP 2267 Practicum-Emergency Medical (EMT Paramedic)

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. 2 credit hours. (W)

### EMSP 2305 EMS Operations

Knowledge and skills to safely manage multi-casualty incidents and rescue situations; utilize air medical resources; identify hazardous materials and other specialized incidents. Lab required. Prerequisites: EMSP 1438, EMSP 1355 and EMSP 1356. 3 credit hours. (W)

#### EMSP 2330 Special Populations

Knowledge and skills necessary to assess and manage ill or injured patients in diverse populations to include neonatology, pediatrics, geriatrics, and other related topics. Lab required. Prerequisite: Consent of Program Director. 3 credit hours. (W)

### EMSP 2444 Cardiology

Assessment and management of patients with cardiac emergencies. Includes single and multi-lead ECG interpretation. Lab required. 4 credit hours. (W)

### EMSP 2534 Medical Emergencies

Knowledge and skills in the assessment and management of patients with medical emergencies, including medical overview, neurology, gastroenterology, immunology, pulmonology, urology, hematology, endocrinology, toxicology, and other related topics. Lab required. 5 credit hours. (W)

### ENGL 1301 Composition I

Intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus on

writing the academic essay as a vehicle for learning, communicating, and critical analysis. Lab required. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### ENGL 1302 Composition II

Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis on effective and ethical rhetorical inquiry, including primary and secondary research methods; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions. Lab required. Prerequisite: ENGL 1301. 3 credit hours. (A)

### ENGL 2307 Creative Writing I

Practical experience in the techniques of imaginative writing. May include fiction, non-fiction, poetry, screenwriting, or drama. Additionally, this course does not satisfy the college requirements for a sophomore literature course. Prerequisite: ENGL 1302. 3 credit hours. (A)

### ENGL 2311 Technical and Business Writing

Intensive study of and practice in professional settings. Focus on the types of documents necessary to make decisions and take action on the job, such as proposals, reports, instructions, policies and procedures, e-mail messages, letters, and descriptions of products and services. Practice individual and collaborative processes involved in the creation of ethical and efficient documents. Prerequisite: ENGL 1301. 3 credit hours. (A)

#### ENGL 2322 British Literature I

A survey of the development of British literature from the Anglo-Saxon period to the Eighteenth Century. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

### ENGL 2323 British Literature II

A survey of the development of British literature from the Romantic period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

### ENGL 2327 American Literature I

A survey of American literature from the period of exploration and settlement through the Civil War. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

#### ENGL 2328 American Literature II

A survey of American literature from the Civil War to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

#### ENGL 2332 World Literature I

A survey of world literature from the ancient world through the sixteenth century. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

#### ENGL 2333 World Literature II

A survey of world literature from the seventeenth century to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

### ENGL 2342 Introduction to Literature I - Short Story and Novel

Study of short stories, novels, and nonfiction. Analysis and evaluation of major writers, their techniques, and their contributions to our literary heritage. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

### ENGL 2343 Introduction to Literature II - Poetry and Drama

Study of poetry and drama and of mythology as it relates to these genres. Analysis of our classical heritage, origins of drama, development of contemporary drama and film, and elements and types of poetry. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

### ENGL 2389 Academic Co-op English

Integrates on-campus study with practical hands-on work experience in English. In conjunction with class seminars, the student will set specific goals and objectives in the study of English. Contact the Cooperative Work Experience Office. Prerequisites: Consent of Associate Dean and meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### ENGR 1201 Introduction to Engineering

An introduction to the engineering profession with emphasis on technical communication and team-based engineering design. Prerequisite: MATH 1314 or equivalent academic preparation. 2 credit hours. (A)

### ENGR 1304 Engineering Graphics

Introduction to computer-aided drafting using CAD software and sketching to generate two- and three-dimensional drawings based on the conventions of engineering graphical communication; topics include spatial relationships, multi-view projections and sectioning, dimensioning, graphical presentation of data, and fundamentals of computer graphics. Lab required. Prerequisite: MATH 1314 or equivalent academic preparation. 3 credit hours. (A)

### ENGR 2105 Electrical Circuits I Laboratory

Laboratory experiments supporting theoretical principles presented in ENGR 2305 involving DC and AC circuit theory, network theorems, time, and frequency domain circuit analysis. Introduction to principles and operation of basic laboratory equipment; laboratory report preparation. Prerequisites: MATH 2414 and PHYS 2425. Prerequisite/Concurrent enrollment: MATH 2320. Corequisite: ENGR 2305. 1 credit hour. (A)

### ENGR 2106 Introduction to Digital Systems Laboratory

Basic laboratory experiments supporting theoretical principles presented in ENGR 2306 involving design, construction, and analysis of combinational and sequential digital circuits and systems, including logic gates, adders, multiplexers, encoders, decoders, arithmetic logic units, latches, flip-flops, registers, and counters; preparation of laboratory reports. Prerequisite: MATH 1314. Corequisite: ENGR 2306. 1 credit hour. (A)

### ENGR 2301 Engineering Mechanics I

Basic theory of engineering mechanics, using calculus, involving the description of forces, moments, and couples acting on stationary engineering structures; equilibrium in two and three dimensions; free-body diagrams; friction; centroids; centers of gravity; and moments of inertia. Prerequisite: PHYS2425. Prerequisite/Concurrent enrollment: MATH2414. 3 credit hours. (A)

#### ENGR 2302 Engineering Mechanics II

Basic theory of engineering mechanics, using calculus, involving the motion of particles, rigid bodies, and systems of particles; Newton's Laws; work and energy relationships; principles of impulse and momentum; application of kinetics and kinematics to the solution of engineering problems. Prerequisite: ENGR 2301. 3 credit hours. (A)

### ENGR 2305 Electrical Circuits I

Principles of electrical circuits and systems. Basic circuit elements (resistance, inductance, mutual inductance, capacitance, independent and dependent controlled voltage, and current sources). Topology of electrical networks; Kirchhoff's laws; node and mesh analysis; DC circuit analysis; operational amplifiers; transient and sinusoidal steady-state analysis; AC circuit analysis; first-and second-order circuits; Bode plots; and use of computer simulation software to solve circuit problems. Prerequisites: MATH 2414 and PHYS 2425. Prerequisite/Concurrent enrollment: MATH 2320. Corequisite: ENGR 2105. 3 credit hours. (A)

### ENGR 2306 Introduction to Digital Systems

Introduction to theory and design of digital logic, circuits, and systems. Number systems, operations and codes; logic gates; Boolean Algebra and logic simplification; Karnaugh maps; combinational logic; functions of combinational Logic; flip-flops and related devices; counters; shift registers; sequential logic; memory and storage. Prerequisite: MATH 1314. Corequisite: ENGR 2106. 3 credit hours. (A)

#### ENGR 2308 Engineering Economics

Methods used for determining the comparative financial desirability of engineering alternatives. Provides the student with the basic tools required to analyze engineering alternatives in terms of their worth and cost, an essential element of engineering practice. The student is introduced to the concept of the time value of money and the methodology of basic engineering economy techniques. The course will address some aspects of sustainability and will provide

the student with the background to enable them to pass the Engineering Economy portion of the Fundamentals of Engineering exam. Prerequisite: MATH 2413. 3 credit hours. (A)

#### ENGR 2332 Mechanics of Materials

Stresses, deformations, stress-strain relationships, torsions, beams, shafts, columns, elastic deflections in beams, combined loading, and combined stresses. Behavior phenomena such as fracture, fatigue, and creep are introduced. Prerequisite/Concurrent enrollment: ENGR 2301. 3 credit hours. (A)

### ENGT 1401 Circuit Analysis I

Fundamental concepts of electrical science covering potential, current and power in DC circuits. Fundamental laws and relationships applied to the analysis of circuits and networks: capacitance, inductance and magnetism; single-frequency concepts; the use of computer software in design and analysis of circuits. Lab required. Prerequisite/Concurrent enrollment: MATH 2412 equivalent or higher level. 4 credit hours. (A)

### ENTC 1323 Strength of Materials

Introduces the relationship between externally applied forces and internally induced stresses and the resulting deformations in structural members. Lab required. 3 credit hours. (W)

### ENTC 2380 Cooperative Education-Engineering Technology, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

### ENVR 1401 Environmental Science I

Lecture: A survey of the forces, including humans that shape our physical and biologic environment, and how they affect life on Earth. Introduction to the science and policy of global and regional environmental issues, including pollution, climate change, and sustainability of land, water, and energy resources. Lab: Activities will cover methods used to collect and analyze environmental data. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A) Note: Students may take either ENVR 1401 or GEOL 1305 but not both.

### ENVR 1402 Environmental Science II

Continued interdisciplinary study of both natural (biology, chemistry, geology) and social (economics, politics, ethics) sciences as they apply to the environment. Focus on energy issues, global warming, ozone loss, land use, conservation and management, deforestation, biodiversity, the history of environmental law and regulation and local environmental problems. Lab required. Prerequisite: ENVR 1401. 4 credit hours. (A)

### ESLC 0305 ESL Oral Communication, Intermediate

Develops listening and speaking skills in speakers of languages other than English and prepares them to function in educational, vocational and/or personal English-speaking contexts. Additionally, emphasis on developing non-native speakers' intermediate listening and speaking skills to facilitate natural communication. Oral skills are developed through individual presentations and interactions in dyads, and in small and large groups. Aural skills are developed through classroom interaction, outside assignments, and video and audio clips designed to enhance non-native speakers' skills in understanding both formal and informal speech styles of English. Focus is given to students' spoken grammar, pronunciation, vocabulary, and exposure to U.S. culture. Lab required. Prerequisite: Meet TSI standard for ESLC 0305; or equivalent. 3 credit hours. (D)

### ESLC 0310 ESL Oral Communication, Advanced

Develops listening and speaking skills in speakers of languages other than English and prepares them to function in educational, vocational and/or personal English-speaking contexts. Additionally, emphasis on developing non-native speakers' advanced oral communication and listening competencies. Students practice natural communication regarding abstract

concepts in classroom activities by working in dyads and in small and large groups while formal speaking skills are focused upon through delivery of oral presentations. Students participate in advanced level listening activities through interaction both in and out of the classroom and the use of video and audio tapes. Focus is given to students' spoken grammar, pronunciation, vocabulary and exposure to U.S. culture. Lab required. Prerequisite: ESLC 0305, or meet TSI standard for ESLC 0310; or equivalent. 3 credit hours. (D)

## ESLC 0320 ESL Oral Communication, Pronunciation/Accent Reduction

Develops listening and speaking skills in speakers of languages other than English and prepares them to function in educational, vocational and/or personal English-speaking contexts. Additionally, emphasis on teaching aspects of spoken English, including stress and intonation, individual phonemes, and awareness of connected and reduced speech. Addresses pronunciation problems of specific language groups. Attention to productive and receptive skills is facilitated through classroom activities, student work in dyads and small and large groups, audio and video taping, and individualized feedback of Instructor. Lab required. Prerequisite: ESLC 0305 or consent of Associate Dean, or meet TSI standard for ESLC 0305 and ESLR 0305; or equivalent. 3 credit hours. (D)

### ESLG 0305 Grammar for Non-Native Speakers, Intermediate I

Focuses on Standard English grammar usage for academic purposes. Open only to non-native speakers. Additionally, instruction for non-native speakers of English in all verb tenses (to include past, present, future in simple progressive and perfective forms), passive voice and modals. Course content supports ESLW 0305 objectives for grammar usage. Lab required. Prerequisite: Meet TSI standard for ESLG 0305; or equivalent. 3 credit hours. (D)

### ESLG 0310 Grammar for Non-Native Speakers, Intermediate II

Focuses on Standard English grammar usage for academic purposes. Open only to non-native speakers. Additionally, a high-intermediate English grammar course designed for non-native speakers of English for instruction in nouns, noun clauses, gerunds, and infinitives. Course content supports ESLW 0310 objectives for grammar usage. Lab required. Prerequisite: ESLG 0305, or meet TSI standard for ESLG 0310; or equivalent. 3 credit hours. (D)

### ESLG 0315 Grammar for Non-Native Speakers, Advanced

Focuses on Standard English grammar usage for academic purposes. Open only to non-native speakers. Additionally, an advanced English grammar course designed for non-native speakers of English and focused on noun clauses, adjective clauses, adjective phrases, adverb clauses, adverbial phrases, and conditionals. Course content supports ESLW 0215 objectives for grammar usage and successful transition into English 1301. Lab required. Prerequisite: ESLG 0310, or meet TSI standard for ESLG 0315; or equivalent. 3 credit hours. (D)

#### ESLR 0215 ESL Reading and Vocabulary, Advanced

Develops English reading proficiency and vocabulary for academic, career, or personal purposes in speakers of languages other than English and prepares them to function in a multicultural, multilingual society. Additionally, instruction in advanced reading comprehension to prepare non-native students for admission to reading-restrictive classes. ESLR 0215 focuses on cultural allusions, connotation of vocabulary, augmentation of reading rate for nonnative speakers, implied main ideas, facts and opinion, inferences and conclusions, author's purpose, tone, point of view, vocabulary, and graphic aids in unabridged academic texts. Lab required. Prerequisites: ESLR 0310 and ESLW 0310, or meet TSI standard for ESLR 0215 and ESLW 0215; or equivalent. Corequisite: ESLW 0215. 2 credit hours. (D) Note: ESLR 0215, ESLR 0305, ESLR 0310, and ESLV 0310 may be taken for a combined total of no more than 9 credit hours.

#### ESLR 0305 ESL Reading and Vocabulary, Intermediate I

Develops English reading proficiency and vocabulary for academic, career, or personal purposes in speakers of languages other than English and prepares them to function in a multicultural, multilingual society. Additionally, focuses on teaching students with lower-level speaking and listening skills to identify topics, main ideas, and supporting details in simplified academic and literary texts. Lab required. Prerequisite: Meet TSI standard for ESLR 0305 and ESLW 0305; or equivalent. Corequisite: ESLW 0305. 3 credit hours. (D) Note: ESLR 0215, ESLR 0305, ESLR 0310, and ESLV 0310 may be taken for a combined total of no more than 9 credit hours.

#### ESLR 0310 ESL Reading and Vocabulary, Intermediate II

Develops English reading proficiency and vocabulary for academic, career, or personal purposes in speakers of languages other than English and prepares them to function in a multicultural, multilingual society. Additionally, focuses on teaching vernacular vocabulary and syntax in the informal register, context clues, topics, main ideas, supporting details, transitions, and organizational patterns for improving comprehension of abridged academic and literary texts. Lab required. Prerequisites: ESLR 0305 and ESLW 0305, or meet TSI standard for ESLR 0310 and ESLW 0310; or equivalent. Corequisite: ESLW 0310. 3 credit hours. (D) Note: ESLR 0215, ESLR 0305, ESLR 0310, and ESLV 0310 may be taken for a combined total of no more than 9 credit hours.

### ESLV 0310 ESL Reading and Vocabulary, Idioms

Develops English reading proficiency and vocabulary for academic, career, or personal purposes in speakers of languages other than English and prepares them to function in a multicultural, multilingual society. Additionally, instruction in idiomatic American English for second language learners. Increases familiarity with idiomatic English to facilitate comprehension and productive use of idioms in spoken and written discourse. Lab required. Prerequisites: ESLC 0305 and ESLR 0305, or consent of Associate Dean. 3 credit hours. (D) Note: ESLR 0215, ESLR 0305, ESLR 0310, and ESLV 0310 may be taken for a combined total of no more than 9 credit hours.

### ESLW 0215 Writing for Non-Native Speakers, Advanced

Focuses on strategies and techniques of writing and composition. Open only to non-native speakers. Additionally, instruction in advanced essay writing designed to prepare non-native students to enter ENGL 1301. Trains students to write academically acceptable papers in various rhetorical modes with a primary focus on argumentation. Focuses on mechanics of writing, common problems that ESL speakers encounter, research, and documentation. Lab required. Prerequisites: ESLR 0310 and ESLW 0310, or meet TSI standard for ESLR 0215 and ESLW 0215; or equivalent. Corequisite: ESLR 0215. 2 credit hours. (D)

### ESLW 0305 Writing for Non-Native Speakers, Intermediate I

Focuses on strategies and techniques of writing and composition. Open only to non-native speakers. Additionally, instruction in intermediate writing skills for non-native speakers. Focuses on sentence-level writing and paragraph development. Introduces students to pre-academic, experiential writing. Trains students to develop and organize ideas in description and process modes. Lab required. Prerequisites: Meet TSI standard for ESLR 0305 and ESLW 0305; or equivalent. Corequisite: ESLR 0305. 3 credit hours. (D)

### ESLW 0310 Writing for Non-Native Speakers, Intermediate II

Focuses on strategies and techniques of writing and composition. Open only to non-native speakers. Additionally, instruction in high-intermediate writing skills for non-native speakers. Focuses on multiparagraph essays. Introduces students to academic writing. Trains students to develop and organize ideas in a variety of rhetorical modes. Lab required. Prerequisites: ESLR 0305 and ESLW 0305, or meet TSI standard for ESLR 0310 and ESLW 0310; or equivalent. Corequisite: ESLR 0310. 3 credit hours. (D)

#### FIRS 1301 Firefighter Certification I

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification II, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Lab required. Prerequisite: Admission to the Program. 3 credit hours. (W)

#### FIRS 1313 Firefighter Certification III

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Prerequisites: FIRS 1407. 3 credit hours. (W)

#### FIRS 1319 Firefighter Certification IV

One is a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Lab required. Prerequisite: FIRS 1313. 3 credit hours. (W)

#### FIRS 1323 Firefighter Certification V

One is a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Lab required. Prerequisite: FIRS 1319. 3 credit hours. (W)

#### FIRS 1329 Firefighter Certification VI

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, V, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Lab required. Prerequisite: FIRS 1323. 3 credit hours. (W)

#### FIRS 1407 Firefighter Certification II

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Lab required. Prerequisite: FIRS 1301, or consent of Program Director. 4 credit hours. (W)

#### FIRS 1433 Firefighter Certification VII

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, V, and VI to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Lab required. Prerequisite: FIRS 1329. 4 credit hours. (W)

#### FIRT 1301 Fundamentals of Fire Protection

Orientation to the fire service, career opportunities, and related fields. This course meets Fire and Emergency Services Higher Education (FESHE) Model Curriculum core requirements. 3 credit hours. (W)

#### FIRT 1315 Hazardous Materials I

The chemical characteristics and behavior of various materials. Storage, transportation, handling hazardous emergency situations, and the most effective methods of hazard mitigation. 3 credit hours. (W)

2017-18 Collin College Catalog, (Effective Spring 2018), Ed. 5. Rev. 10-12-17 Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

### FIRT 1327 Building Construction in the Fire Service

Components of building construction that relate to life safety. Includes relationship of construction elements and building design impacting fire spread in structures. 3 credit hours. (W)

#### FIRT 1338 Fire Protection Systems

Design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers. This course meets Fire and Emergency Services Higher Education (FESHE) Model Curriculum core requirements. Prerequisite: FIRT 1301 or consent of Program Director. 3 credit hours. (W)

#### FIRT 1349 Fire Administration II

In-depth study of fire service management as pertaining to budgetary requirements, administration, organization of divisions within the fire service, and the relationships between the fire service and outside agencies. 3 credit hours. (W)

#### FIRT 1442 Fire Officer I

Meets the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire Officer I certification. 4 credit hours. (W)

#### FIRT 1443 Fire Officer II

Meets the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire Officer II certification. Prerequisites: FIRT 1442 and FIRT 2305, or consent of Program Director. 4 credit hours. (W)

#### FIRT 2305 Fire Instructor I

Preparation of fire and emergency services personnel to deliver instruction from a prepared lesson plan. Includes the use of instructional aids and evaluation instruments to meet the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire Instructor I certification. Prerequisite: Student must show proof of Basic Firefighter Certification from the Texas Commission on Fire Protection (TCFP), or consent of Program Director. 3 credit hours. (W)

#### FIRT 2307 Fire Instructor II

Development of individual lesson plans for a specific topic including learning objectives, instructional aids, and evaluation instruments. Includes techniques for supervision and coordination of activities of other instructors to meet the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire

Instructor II certification. Prerequisite: FIRT 2305 or consent of Program Director. 3 credit hours. (W)

### FIRT 2309 Firefighting Strategies and Tactics I

Analysis of the nature of fire problems and selection of initial strategies and tactics including an in-depth study of efficient and effective use of staffing and equipment to mitigate the emergency. Prerequisite: FIRT 1301 or consent of Program Director. 3 credit hours. (W)

#### FIRT 2351 Company Fire Officer

A capstone course covering fire ground operations and supervisory practices. Includes performance evaluation of incident commander, safety officer, public information officer, and shift supervisor duties. 3 credit hours. (W)

#### FLMC 1301 History of Animation Techniques

A historical perspective of two-dimensional (2-D) and three-dimensional (3-D) animation. This class teaches students traditional forms of animation including cell, stop-motion and zoetropes. Students will also learn the history and evolution of the animation art form. Students will produce original animations utilizing traditional techniques as projects. Lab required. 3 credit hours. (W)

#### FLMC 1304 Lighting for Film or Video

Fundamentals of lighting techniques for film or video production with respect to lighting tools, composition and camera motion to support dynamic storytelling. Prerequisite: ARTV 1351. Lab required. 3 credit hours. (W)

#### FLMC 1331 Video Graphics and Visual Effects I

A course in the applications of computers for video production. Design of computer graphic workstations and development of a rationale for selecting software, hardware, and peripherals. Lab required. Prerequisite: ARTC 1325. Prerequisite/ Concurrent enrollment: ARTV 1371. 3 credit hours. (W)

### FLMC 2305 Film-Style 3-D Animation Production

Techniques in 3-D animation for film-style production. Lab required. Prerequisite: ARTV 1341 or consent of Instructor. 3 credit hours. (W)

#### FLMC 2331 Video Graphics and Visual Effects II

Advanced concepts of designing vector and raster graphics, executing rendering techniques, designing and producing three dimensional (3-D) materials, and selecting hardware, software, and peripherals for video production. Lab required. Prerequisite: FLMC 1331. 3 credit hours. (W)

#### FREN 1411 Beginning French I

Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture. Lab required. 4 credit hours. (A)

#### FREN 1412 Beginning French II

Continuation of FREN 1411. Lab required. Prerequisite: FREN 1411 or consent of Associate Dean. 4 credit hours. (A)

#### FREN 2311 Intermediate French I

Continued development of the four basic language skills with increased attention to reading and writing. Instruction enhanced by slides, tapes, and other audiovisual aids. Prerequisite: FREN 1412 or consent of Associate Dean. 3 credit hours. (A)

#### FREN 2312 Intermediate French II

Continuation of FREN 2311. Prerequisite: FREN 2311 or consent of Associate Dean. 3 credit hours. (A)

### GAME 1303 Introduction to Game Design and Development

Introduction to electronic game development and game development careers. Includes examination of history and philosophy of games, the game production process, employee factors for success in the field, and current issues and practices in the game development industry. Lab required. Prerequisite: ARTV 1345 or consent of Instructor or Associate Dean. 3 credit hours. (W)

#### GAME 1304 Level Design

Introduction to the tools and concepts used to create levels for games and simulations. Incorporates level design, architecture theory, concepts of critical path and flow, balancing, play testing, and storytelling. Includes utilization of toolsets from industry titles. Lab required. Prerequisite: GAME 1303. 3 credit hours. (W)

#### GAME 1314 Character Sculpting

Creation of original characters from the drawing stage to sculpting clay status. Explores a variety of poses using clay. Lab required. Prerequisite: ARTV 1345. 3 credit hours. (W)

#### GAME 2309 Video Game Art II

A study of industry-used, game-art techniques and its applications of game art assets. Utilizes tools and advanced techniques in the creation of assets for a game engine. Lab required. Prerequisite: ARTV 2345 or consent of Instructor. 3 credit hours. (W)

### GAME 2325 3-D Animation II - Character Set-Up

Character animation for application interfaces. Prerequisite: ARTV 1341. Lab required. 3 credit hours. (W)

#### GAME 2336 Lighting, Shading, and Texture

Advanced application of lighting, shading, and texture techniques to increase system performance for digital games and simulation models. Lab required. Prerequisite: ARTV 2345 or consent of Instructor. 3 credit hours. (W)

#### GAME 2341 Game Scripting

Scripting languages with emphasis on game concepts and simulations. Lab required. Prerequisite: GAME 1303 or consent of Instructor. 3 credit hours. (W)

#### GAME 2359 Game and Simulation Group Project

Creation of a game and/or simulation project utilizing a team approach. Includes the integration of design, art, audio, programming, and quality assurance. Lab required. Prerequisite: GAME 1303. 3 credit hours. (W)

#### GAME 2386 Internship-Animation, Interactive Technology, Video Graphics and Special Effects

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisite: ARTV 1341. 3 credit hours. (W)

#### GEOG 1301 Physical Geography

This course introduces students to the processes that drive Earth's physical systems. Students will explore the relationships among these physical systems, with emphasis on weather and climate, water, ecosystems, geologic processes and landform development, and human interactions with the physical environment. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### GEOG 1302 Human Geography

This course introduces students to fundamental concepts, skills, and practices of human geography. Place, space, and scale serve as a framework for understanding patterns of human experience. Topics for discussion may include globalization, population and migration, culture, diffusion, political and economic systems, language, religion, gender, and ethnicity. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### GEOG 1303 World Regional Geography

This course is an introduction to the world's major regions seen through their defining physical, social, cultural, political, and economic features. These regions are examined in terms of their physical and human characteristics and their interactions. The course emphasizes relations among regions on issues such as trade, economic development, conflict, and the role of regions in the globalization process. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### GEOL 1305 Environmental Science - Natural Disasters

A survey of the forces, including humans, that shape our physical and biologic environment, and how they affect life on Earth. Introduction to the science and policy of global and regional environmental issues, including pollution, climate change, and sustainability of land, water, and energy resources. Prerequisite: Meet TSI standard for MATH 0310, and TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A) Note: Students may take either ENVR 1401 or GEOL 1305 but not both.

#### GEOL 1401 Earth Sciences for Non Science Majors I

Lecture: Survey of geology, meteorology, oceanography, and astronomy. Lab: Activities will cover methods used to collect and analyze data in geology, meteorology, oceanography, and astronomy. Lab required. Prerequisites: Meet TSI standard for

MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

#### GEOL 1402 Earth Sciences for Non Science Majors II

Lecture: Extension of the study of geology, astronomy, meteorology and oceanography, focusing on natural resources, hazards and climate variability. Lab: Activities will focus on methods used to collect and analyze data related to natural resources, hazards and climate variability. Lab required. Prerequisite: GEOL 1401 or GEOL 1403. 4 credit hours. (A)

#### GEOL 1403 Physical Geology

Lecture: Introduction to the study of the materials and processes that have modified and shaped the surface and interior of Earth over time. These processes are described by theories based on experimental data and geologic data gathered from field observations. Lab: Laboratory activities will cover methods used to collect and analyze earth science data. Lab required. Prerequisites: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

#### GEOL 1404 Historical Geology

Lecture: A comprehensive survey of the history of life and major events in the physical development of Earth as interpreted from rocks and fossils. Lab: Laboratory activities will introduce methods used by scientists to interpret the history of life and major events in the physical development of Earth from rocks and fossils. Lab required. Prerequisite: GEOL 1403. 4 credit hours. (A)

#### GEOL 1445 Oceanography

A study of the various aspects of the ocean, including origins of the ocean, earth's ocean, plate tectonics, ocean sediments, the chemistry of seawater, oceans and climate, currents, waves, tides, coastal features, oceanic ecosystems, protection of coastal areas, and resources of the oceans. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

#### GEOL 1447 Introduction to Meteorology

An examination of the Earth's atmosphere, global climate, and associated environmental factors. Includes lab exercises in weather tracking on Weather-Net computer system. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI collegereadiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

#### GEOL 2389 Academic Co-op Geology

Integrates on-campus study with practical hands-on work experience in geology. In conjunction with class seminars, the student will set specific goals and objectives in the study of geology. Contact the Cooperative Work Experience Office. 3 credit hours. (A)

#### GERM 1411 Beginning German I

Introduction to the basic skills of speaking, reading, writing, and listening; designed for students with little or no previous language training. Includes attention to selected aspects of German civilization. Instruction enhanced by the use of tapes, slides, and video cassettes. Lab required. 4 credit hours. (A)

#### GERM 1412 Beginning German II

Continuation of GERM 1411 with an emphasis on the reading of elementary texts. Lab required. Prerequisite: GERM 1411 or consent of Associate Dean. 4 credit hours. (A)

#### GERM 2311 Intermediate German I

Continued development of the four basic language skills with increased attention to reading and writing. Instruction enhanced by tapes, slides, and other audiovisual aids. Prerequisite: GERM 1412 or consent of Associate Dean. 3 credit hours. (A)

#### GERM 2312 Intermediate German II

Continuation of GERM 2311. Prerequisite: GERM 2311, or consent of Associate Dean. 3 credit hours. (A)

# GISC 1301 Cartography and Geography in Geographical Information Systems (GIS) and Global Positioning Systems

Introduction to the principles of cartography and geography. Emphasis on global reference systems and the use of satellites for measurements and navigation. Lab required. Prerequisite/Concurrent enrollment: GISC 1411 (or 1311). 3 credit hours. (W)

### GISC 1411 Introduction to Geographic Information Systems (GIS)

Introduction to basic concepts of vector GIS using several industry specific software programs. It also includes nomenclature of cartography and geography. Additionally, students will learn to display map data, change symbology, classify features and rasters, use dynamic labeling, join and relate tables, define projections, dissolve features, clip layers, create a

geodatabase, and build a GIS model. Lab required. 4 credit hours. (W)

#### GISC 1421 Introduction to Raster-Based Geographic Information Systems (GIS)

Instruction in GIS data sets including raster-based information such as images or photographs, acquisition of such data, and processing and merging with vector data. Prerequisite/Concurrent enrollment: GISC 1411 (or 1311). 4 credit hours. (W)

#### GISC 2231 Advanced Problems in Geographic Information Systems (GIS)

Seminar/Capstone course designed for the final semester of a degree or certificate in Geographic Information Systems (GIS). Projects will include individual and group studies of GIS applications using the skills acquired in previous courses. The student will produce a professional project and present the results to a panel consisting of peers, instructors, or practicing GIS professionals. Lab required. Prerequisites: GISC 2402 and GISC 2420. 2 credit hours. (W)

#### GISC 2281 Cooperative Education-Cartography/GIS

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisite: GISC 2420. 2 credit hours. (W)

### GISC 2335 Programming for Geographic Information Systems (GIS)

Focuses on the use of programming languages to customize and expand the capability of GIS applications. Instruction will include object-oriented and component programming. Students will also design their own Graphical User Interface (GUI). Lab required. Prerequisites: COSC 1315 and GISC 1411 (or 1311). 3 credit hours. (W)

#### GISC 2402 Geographic Information Systems (GIS) Design with Raster Analysis

Raster/remote sensing principles, technologies, and applications. Emphasizes processing raster imagery into useful information to be used in a GIS. Includes georeferencing and image classification. Student final project will be demonstrating raster and remote sensing techniques. Prerequisite: GISC 1421. 4 credit hours. (W)

### GISC 2420 Intermediate Geographic Information Systems (GIS)

This course focuses on the study of spatial data structures and the display, manipulation, and analysis of geographic information. Students will study the technical aspects involved in spatial data handling, analysis, and modeling. Instruction will include theories and procedures associated with the implementation and management of GIS projects. A variety of GIS software packages will be used in the laboratory. Lab required. Prerequisite: GISC 1411 (or 1311). 4 credit hours. (W)

#### GOVT 2107 Federal and Texas Constitutions

A study of the United States and state constitutions with special emphasis on Texas. Prerequisites: By permission only, and meet TSI college-readiness standard for Reading and Writing; or equivalent. Enrollment limited to students who have already completed a minimum of six (6) credit hours of GOVT courses but have not satisfied the statutory requirement for study of the federal and state constitutions. Ensures compliance with TEC 51.301. 1 credit hour. (A)

#### GOVT 2304 Introduction to Political Science

Introductory survey of the discipline of political science focusing on the scope and methods of the field, and the substantive topics in the discipline including the theoretical foundations of politics, political interaction, political institutions and how political systems function. Prerequisites: Consent of Associate Dean, and meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### GOVT 2305 Federal Government (Federal constitution and topics)

Origin and development of the U.S. Constitution, structure and powers of the national government including the legislative, executive, and judicial branches, federalism, political participation, the national election process, public policy, civil liberties and civil rights. Prerequisite: Meet TSI college-readiness

standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### GOVT 2306 Texas Government (Texas constitution and topics)

Origin and development of the Texas Constitution, structure and powers of the state and local government, federalism and inter-governmental relations, political participation, the election process, public policy and the political culture of Texas. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### GOVT 2311 Mexican-American Politics

This course explores the impact of Mexican-Americans on U.S. politics and political institutions and public policy. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### GOVT 2389 Academic Co-op Government

Integrates on-campus study with practical hands-on work experience in government. In conjunction with class seminars, the student will set specific goals and objectives in the study of government. Contact the Cooperative Work Experience Office. Prerequisites: Consent of Associate Dean, and meet TSI collegereadiness standard for Writing; or equivalent. 3 credit hours. (A)

#### **GRPH** 1359 Vector Graphics for Production

A study and use of vector graphics for production. 3 credit hours. (W)

#### GRPH 1380 Cooperative Education-Pre-Press/Desktop Publishing and Digital Imaging Design

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. Prerequisite: Consent of Associate Dean. 3 credit hours. (W) Front Office Management HAMG 1313 Functions of front office operations as they relate to customer service. Includes a study of front office interactions with other departments in the lodging operation. Prerequisite: HAMG 1321. 3 credit hours. (W)

#### HAMG 1321 Introduction to Hospitality Industry

An exploration of the elements and career opportunities within the multiple segments of the hospitality industry. 3 credit hours. (W)

#### HAMG 1324 Hospitality Human Resources Management

Principles and procedures of human resource management in the hospitality industry. Prerequisite: HAMG 1321. 3 credit hours. (W)
HAMG 1340 Hospitality Legal Issues
A course in legal and regulatory requirements that impact the hospitality industry. Topics include Occupational Safety and Health Administration (OSHA), labor regulations, tax laws, tip reporting, franchise regulations, and product liability laws. 3 credit hours. (W)

#### HAMG 2301 Principles of Food and Beverage Operations

An overview of food and beverage management in various hospitality environments. Emphasizes cost controls from procurement to marketing and sales. Prerequisite: HAMG 1321. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

### HAMG 2305 Hospitality Management and Leadership

An overview of management and leadership in the hospitality industry with an emphasis on management philosophy, policy formation, communications, motivation, and team building. Prerequisites: HAMG 1324, HAMG 1340, HAMG 2301, HAMG 2307 and TRVM 2301; or consent of Associate Dean. 3 credit hours. (W)

#### HAMG 2307 Hospitality Marketing and Sales

Identification of the core principles of marketing and sales and their impact on the hospitality industry. Prerequisite: HAMG 1321. 3 credit hours. (W)

### HAMG 2332 Hospitality Financial Management

Methods and applications of financial management within the hospitality industry. Primary emphasis on sales accountability, internal controls, and report analysis. Prerequisite: HAMG 1321. 3 credit hours. (W)

### HAMG 2337 Hospitality Facilities Management

Identification of hospitality building systems and facilities; to include sustainability and risk management. Prerequisite: HAMG 1321. 3 credit hours. (W)

#### HAMG 2380 Cooperative Education-Hospitality Administration / Management, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. Prerequisites: CHEF 1305, HAMG 1313, HAMG 1324, HAMG 1340, HAMG 2337, RSTO 1325 and TRVM 2301; or consent of Associate Dean. 3 credit hours. (W)

### HART 1256 EPA Recovery Certification Preparation

Certification training for HVAC refrigerant recovery, recycle, and reclaim. Instruction will provide a review of EPA guidelines for refrigerant recovery and recycling during the installation, service, and repair of all HVAC and refrigeration systems. Lab required. 2 credit hours. (W)

#### HART 1301 Basic Electricity for HVAC

Principles of electricity as required by HVAC, including proper use of test equipment, electrical circuits, and component theory and operation. Lab required. 3 credit hours. (W)

#### HART 1307 Refrigeration Principles

An introduction to the refrigeration cycle, heat transfer theory, temperature/pressure relationship, refrigerant handling, refrigeration components, and safety. Lab required. 3 credit hours. (W)

#### HART 1375 Solar Cell and Array Certification Training

Review of Solar Cell and Array concepts and principles in preparation for sitting for a certification examination administered by an outside organization or agency. The course includes National and Local Electrical Code requirements. Lab required. Prerequisites: CETT 1303 and MATH 1314 equivalent or higher level, or consent of Associate Dean. 3 credit hours. (W)

#### HART 1403 Air Conditioning Control Principles

A basic study of HVAC and refrigeration controls; troubleshooting of control components; emphasis on use of wiring diagrams to analyze high and low voltage circuits; a review of Ohm's law as applied to air conditioning controls and circuits. Lab required. Prerequisite/Concurrent enrollment: HART 1301. 4 credit hours. (W)

#### HART 1441 Residential Air Conditioning

A study of components, applications, and installation of mechanical air conditioning systems including operating conditions, troubleshooting, repair, and charging of air conditioning systems. Lab required. Prerequisite/Concurrent enrollment: HART 1307. 4 credit hours. (W)

#### HART 1445 Gas and Electric Heating

Study of the procedures and principles used in servicing heating systems including gas fired furnaces and electric heating systems. Lab required. Prerequisite/Concurrent enrollment: HART 1301. 4 credit hours. (W)

# HART 2268 Practicum (or Field Experience) - Heating, Air Conditioning and Refrigeration Technology /Technician

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Additionally, this capstone course is to be taken in the final semester of the HVAC degree. Prerequisite/Concurrent enrollment: HART 2345 or consent of Discipline Lead. 2 credit hours. (W)

#### HART 2345 Residential Air Conditioning Systems Design

Study of the properties of air and results of cooling, heating, humidifying or dehumidifying; heat gain and heat loss calculations including equipment selection and balancing the air system. Lab required. Prerequisite/Concurrent enrollment: HART 1307. 3 credit hours. (W)

#### HART 2372 Alternative Energy Perspectives, Energy Sources, Energy Storage, and Energy Distribution

The course covers principles of alternative/renewable energy technologies (e.g. Solar Electrical Energy Generation, Solar Thermal Energy Generation, Wind Energy Generation, and Geo-Thermal Energy Generation). Each alternative is placed in the proper

context of the energy equation. Traditional energy sources (e.g. coal, oil, natural gas, hydropower, nuclear) are described and contrasted so that the student sees costs and benefits of both alternative and traditional energy sources. Energy Storage and Energy Distribution is covered as it pertains to each energy technology. Lab required. Prerequisite: MATH 1314 or consent of Associate Dean. 3 credit hours. (W)

#### HART 2431 Advanced Electricity for HVAC

Advanced electrical instruction and skill building in installation and servicing of air conditioning and refrigeration equipment including detailed instruction in motors and power distribution motors, motor controls, and application of solid state devices. Lab required. Prerequisites: HART 1301 and HART 1403. 4 credit hours. (W)

#### HART 2436 Air Conditioning Troubleshooting

An advanced course in application of troubleshooting principles and use of test instruments to diagnose air conditioning and refrigeration components and system problems including conducting performance tests. Lab required. Prerequisites: HART 1301, HART 1307, HART 1403, and HART 1441. 4 credit hours. (W)

### HART 2438 Air Conditioning Installation and Startup

A study of air conditioning system installation, refrigerant piping, condensate disposal, and air cleaning equipment with emphasis on startup and performance testing. Lab required. Prerequisite/Concurrent enrollment: HART 1307. 4 credit hours. (W)

#### HART 2442 Commercial Refrigeration

Theory and practical application in the maintenance of commercial refrigeration; medium, and low temperature applications and ice machines. Lab required. Prerequisite/Concurrent enrollment: HART 1307. 4 credit hours. (W)

#### HART 2449 Heat Pumps

A study of heat pumps, heat pump control circuits, defrost controls, auxiliary heat, air flow, and other topics related to heat pump systems. Lab required. Prerequisite: HART 1403. 4 credit hours. (W)

#### HIST 1301 United States History I

A survey of the social, political, economic, cultural, and intellectual history of the United States from the pre-Columbian era to the Civil War/Reconstruction period. United States History I includes the study of pre-Columbian, colonial, revolutionary, early national,

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slavery and sectionalism, and the Civil War/Reconstruction eras. Themes that may be addressed in United States History I include: American settlement and diversity, American culture, religion, civil and human rights, technological change, economic change, immigration and migration, and creation of the federal government. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### HIST 1302 United States History II

A survey of the social, political, economic, cultural, and intellectual history of the United States from the Civil War/Reconstruction era to the present. United States History II examines industrialization, immigration, world wars, the Great Depression, Cold War and post-Cold War eras. Themes that may be addressed in United States History II include: American culture, religion, civil and human rights, technological change, economic change, immigration and migration, urbanization and suburbanization, the expansion of the federal government, and the study of U.S. foreign policy. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### HIST 2301 Texas History

A survey of the political, social, economic, cultural, and intellectual history of Texas from pre-Columbian era to the present. Themes that may be addresses in Texas History include: Spanish colonization and Spanish Texas; Mexican Texas; the Republic of Texas; statehood and secession; oil, industrialization, and urbanization; civil rights; and modern Texas. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### HIST 2311 Western Civilization I

A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from human origins to the 17th century. Themes that should be addressed in Western Civilization I include cultural legacies of Mesopotamia, Egypt, Greece, Rome, Byzantium, Islamic civilizations, and Europe through the Middle Ages, Renaissance, and Reformations. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### HIST 2312 Western Civilization II

A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from the 17th century to the modern era. Themes that should be addressed in

Western Civilization II include absolutism and constitutionalism, growth of nation states, the Enlightenment, revolutions, classical liberalism, industrialization, imperialism, global conflict, the Cold War, and globalism. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### HIST 2321 World Civilizations I

A survey of the social, political, economic, cultural, religious, and intellectual history of the world from the emergence of human cultures through the 15th century. The course examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include the emergence of early societies, the rise of civilizations, the development of political and legal systems, religion and philosophy, economic systems and trans-regional networks of exchange. The course emphasizes the development, interaction and impact of global exchange. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### HIST 2322 World Civilizations II

A survey of the social, political, economic, cultural, religious, and intellectual history of the world from the 15th century to the present. The course examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include maritime exploration and transoceanic empires, nation/state formation and industrialization, imperialism, global conflicts and resolutions, and global economic integration. The course emphasizes the development, interaction and impact of global exchange. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### HIST 2327 Mexican-American History I

This course is a survey of the political, economic, social and cultural history of Mexicans in North America from the pre-Colombian Era through 1850, with emphasis on the Mexican-American War with the United States. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### HIST 2328 Mexican-American History II

This course is a survey of the political, economic, social and cultural history of Mexicans in North America from 1850 to present, with emphasis on the Mexican-American cultural identity and the Civil Rights Movement in the United States. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### HIST 2381 African-American History

Historical, economic, social, and cultural development of minority groups with an emphasis on the experiences of peoples of African descent in the United States from the colonial era to the present. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### HIST 2389 Academic Co-op History

Integrates on-campus study with practical hands-on work experience in history. In conjunction with class seminars, the student will set specific goals and objectives in the study of history. Contact the Cooperative Work Experience Office. Prerequisite: Consent of Associate Dean. 3 credit hours. (A)

### HITT 1160 Clinical I - Health Information / Medical Records Technology

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: HITT 1301. 1 credit hour. (W)

### HITT 1301 Health Data Content and Structure

Introduction to systems and processes for collecting, maintaining, and disseminating primary and secondary health related information including content of health record, documentation requirements, registries, indices, licensing, regulatory agencies, forms, and screens used in electronic and paper medical records.

Prerequisite/Concurrent enrollment: HITT 1305. 3 credit hours. (W)

#### HITT 1303 Medical Terminology II

A continuation of the study of medical terms through work origin and structure, abbreviations and symbols, surgical and diagnostic procedures, and medical specialties. Lab required. Prerequisite: HITT 1305. 3 credit hours. (W)

#### HITT 1305 Medical Terminology I

Study of medical terms through word origin and structure. Introduction to abbreviations and symbols,

surgical and diagnostic procedures, and medical specialties. 3 credit hours. (W)

#### HITT 1311 Health Information Systems

Introduction to health IT standards, health-related data structures, software applications and enterprise architecture in health care and public health. Lab required. 3 credit hours. (W)

#### HITT 1341 Coding and Classification Systems

Fundamentals of coding rules, conventions, and guidelines using clinical classification systems. The student is recommended to complete BIOL 2404 prior to registering for this course, but not required. Lab required. Prerequisite: HITT 1305. Prerequisite / Concurrent enrollment: HITT 1301. 3 credit hours. (W)

#### HITT 1345 Health Care Delivery Systems

Examination of delivery systems including organization, financing, accreditation, licensure, and regulatory agencies. This course covers alternative health care delivery systems. Lab required. 3 credit hours. (W)

#### HITT 1353 Legal and Ethical Aspects of Health Information

Concepts of privacy, security, confidentiality, ethics, health care legislation, and regulations relating to the maintenance and use of health information.

Prerequisite: HITT 1305. 3 credit hours. (W)

#### HITT 2245 Coding Certification Exam Review

Review of coding competencies and skills in preparation for a coding certification exam. This course focuses on developing the skills of testing well on the unique course material with the objective of passing the coding credentialing exam. Therefore, the majority of the course involves review and testing. Prerequisite: Consent of Program Director. 2 credit hours. (W)

#### HITT 2249 RHIT Competency Review

Review of Health Information Technology (HIT) competencies, skills, and knowledge. Prerequisite/Concurrent enrollment: HITT 2361 or consent of Program Director. 2 credit hours. (W)

#### HITT 2328 Introduction to Public Health

A survey of how health care and public health services are organized and delivered in the U.S. Covers public policy, relevant organizations and their interrelationships, professional roles, legal and regulatory issues, and payment systems. Includes health reform initiatives in the U.S. 3 credit hours. (W)

### HITT 2339 Health Information Organization and Supervision

Principles of organization and supervision of human, financial, and physical resources. Also covers health information for electronic records. Lab required. Prerequisites: HITT 1301 and HITT 1305. 3 credit hours. (W)

#### HITT 2346 Advanced Medical Coding

Advanced concepts of ICD and CPT coding rules, conventions and guidelines in complex case studies. Investigation of government regulations and changes in health care reporting. Electronic encoder use covered and information about ICD-10. Lab required. Prerequisites: BIOL 2404, HITT 1305 and HITT 1341. 3 credit hours. (W)

### HITT 2361 Clinical II-Health Information /Medical Records Technology

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Students should take this course in their final semester. Prerequisites: HITT 1160 and consent of Program Director. 3 credit hours. (W)

### HITT 2435 Coding and Reimbursement Methodologies

Advanced coding techniques with emphasis on case studies, health records, and federal regulations regarding prospective payment systems and methods of reimbursement. The student is recommended to complete BIOL 2404 prior to registering for this course, but not required. Lab required. Prerequisite: HITT 1341. 4 credit hours. (W)

### HITT 2443 Quality Assessment and Performance Improvement

Study of quality standards and methodologies in the health information management environment. Topics include licensing, accreditation, compilation and presentation of data in statistical formats, quality management and performance improvement functions, utilization management, risk management, and medical staff data quality issues. Approaches to assessing

patient safety issues and implementation of quality management and reporting through electronic systems. Lab required. Prerequisite: HITT 1301, and meet TSI college-readiness standard for Mathematics; or equivalent. 4 credit hours. (W)

### HITT 2471 Pathophysiology and Pharmacology

Study of the pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and the physical and psychological reactions to diseases and injuries. A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages. Lab required. 4 credit hours. (W)

#### HPRS 1191 Special Topics in Health Professions and Related Sciences, General

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. 1 credit hour. (W)

#### **Topics in Health Professions**

An examination of the challenges of care coordination across the healthcare continuum and solutions for quality patient outcomes.

#### HPRS 1204 Basic Health Profession Skills

A study of the concepts that serve as the foundation for health profession courses, including client care and safety issues, basic client monitoring, and health documentation methods. Lab required. 2 credit hours. (W)

#### HPRS 1206 Essentials of Medical Terminology

A study of medical terminology, word origin, structure, and application. Lab required. 2 credit hours. (W)

#### HPRS 1271 Introduction to the Healthcare System

An overview of roles of various members of the healthcare system and their educational requirements, and issues affecting the delivery of healthcare. Additional concepts explored include the healthcare system, the continuum of care, levels of care, length of stay, healthcare providers, legal and ethical aspects of healthcare, reimbursement, healthcare policy determination and health insurance and managed care. 2 credit hours. (W)

#### HPRS 1272 Microbiology for Health Professions

An introduction to the nature of microorganisms, microbial diversity, the importance of microorganisms and acellular agents in the biosphere, and the role microorganisms have in disease. Emphasis is on medical microbiology and infectious diseases. Lab required. Prerequisites: BIOL 2401 and BIOL 2402; both with a grade of "C" or better. 2 credit hours. (W)

#### HPRS 1303 End of Life Issues

Discussion of grief, loss, and end of life issues. Prepares caregivers to function in settings where communication skills are utilized to provide psychosocial support to persons and their families. 3 credit hours. (W)

#### HPRS 1310 Introduction to Pharmacology

A study of drug classifications, actions, therapeutic uses, adverse effects, and routes of administration. Does NOT include dosage calculations. 3 credit hours. (W)

#### HPRS 1370 Central Sterile Processing II

This course explores two subsections of the IAHCSMM Certification program: A) Inventory Control-prepares the student with organizational skills needed to control, track and distribute inventory through the use of different techniques in inventory control and distribution, as well as the use of bar codes and radio frequency identification to track inventories. B) Sterile Storage and Distribution-introduces the basic procedures of packaging processes through a comparison of reusable and disposable packaging materials, basic package closure methods, and factors, which affect shelf-life and stock rotation. Lab required. 3 credit hours. (W)

#### HPRS 1470 Central Sterile Processing I

This course will teach subsections of the IAHCSMM Certification program related to: A) Introduction to Central Service-an introduction to the central service role, surgical supplies, basic and specialty surgical instruments, and packaging and sterilization. B) Infection Control and Occupational Safety-related to the principles and practice of infection control and OSHA guidelines along with common safety and hazards protocols. C) Regulations and Standardsteaches the difference between the regulations and voluntary and regulatory standards, the role and responsibilities of federal agencies that impact Central Services, and the important aspects of the regulations and standards they administer. Lab required. 4 credit hours. (W)

#### HPRS 1471 Central Sterile Processing III

An exploration of the subsections of the IAHCSMM Certification program: A) Instrument and Instrument Identification-identifying surgical instruments by name and purpose, examination of the process by which surgical instruments are manufactured and prepared for the sterilization process. B) Endoscopic Instrumentsproper care, handling and processing of endoscopic instruments. C) Decontamination-describe how reusable equipment, instruments, and supplies are cleaned and decontaminated by means of manual or mechanical cleaning processes and chemical disinfection and the proper use of Personal Protective Equipment (PPE) and Standard Precautions. D) Preparation and Handling-relates to basic principles of various packaging materials and closure methods used for sterilization preparation as they relate to the Association of Advancement of Medical Instrument (AAMI) standards. E) Sterilization-relates sterilization procedures and theory including high and low temperature sterilization, sterilization equipment, types of sterilizers, various cycles, quality assurance concepts, documentation, standards, policies and procedures. Lab required. 4 credit hours. (W)

### HPRS 1561 Clinical-Health Services/Allied Health/Health Sciences,

#### General

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. This course is an exploration of teamwork and the application of practical principles in the role of Central Sterile Processing Tech through "hands on" experience. 5 credit hours. (W)

#### HPRS 2232 Health Care Communications

Methods of communication with clients, client support groups, healthcare professionals, and external agencies. 2 credit hours. (W)

#### HPRS 2300 Pharmacology for Health Professions

A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages. Prerequisites: SRGT 1271 and SRGT 1409. Corequisites: SRGT 1441 and SRGT 1461. Major Requirement: AAS -Surgical Technology. 3 credit hours. (W)

#### HPRS 2301 Pathophysiology

Study of the pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and the physical and psychological reactions to diseases and injuries. 3 credit hours. (W)

#### HPRS 2371 The Case Management Process

Principles, concepts, process, roles, settings, and clinical practice of healthcare case managers are reviewed with a focus on standards of practice, managed care, quality of care and cost containment. Legal and ethical considerations and evidence-based practice are applied to case-based scenarios. Prerequisite: Awarded an AAS or BS in Nursing or current certification or licensure in a healthcare field or profession. 3 credit hours. (W)

### HPRS 2372 Case Management Coordination and Financial Management

The concept of coordination of care is studied within the case management continuum of care. Identification, availability, and cost of available resources of care are explored. A case management resource path is developed for a specific disease, condition or injury. Prerequisite/Concurrent enrollment: HPRS 2371. 3 credit hours. (W)

#### HPRS 2373 Case Studies in Healthcare Case Management

Case-based scenarios are used to provide student experience in healthcare case management. Students develop plans of care for cases in selected fields of clinical practice. Prerequisite: Consent of Instructor. Prerequisite/Concurrent enrollment: HPRS 2371 and HPRS 2372. 3 credit hours. (W)

#### HPRS 2374 Trends in Healthcare

An examination of the changes in healthcare from the aspect of technology, deliver, and other trends. 3 credit hours. (W)

#### HRPO 2301 Human Resources Management Behavioral and legal approaches to the management of human resources in organizations. 3 credit hours. (W)

#### HRPO 2303 Employment Practices

A study of employment issues including techniques for human resource forecasting, selection, and placement including interview techniques, pre-employment testing and other predictors. Topics include recruitment methods, the selection process, Equal Employment Opportunity (EEO), EEO recordkeeping, and Affirmative Action Plans. 3 credit hours. (W)

#### HRPO 2304 Employee Relations

An examination of policies, practices, and issues required to build strong employee relations. Topics include communications, employee conduct rules, performance appraisal methods, Title VII, Family Medical Leave Act, Fair Labor Standards Act, and Americans with Disabilities Act updates. 3 credit hours. (W)

#### HRPO 2306 Benefits and Compensation

An overview of employee compensation systems. Topics include compensation systems, direct and indirect compensation, internal and external determination of compensation, benefits administration, managing and evaluating for effectiveness, legal and regulatory issues, pay equity, job analysis affecting job compensation and competencies. 3 credit hours. (W)

#### HRPO 2307 Organizational Behavior

The analysis and application of organizational theory, group dynamics, motivation theory, leadership concepts, and the integration of interdisciplinary concepts from the behavioral sciences. Prerequisite: BMGT 1327. 3 credit hours. (W)

#### HUMA 1301 Introduction to Humanities I

This stand-alone course is an interdisciplinary survey of cultures focusing on the philosophical and aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to create. Additionally, this course provides a broad overview of cultural traditions and the variety of aesthetic and intellectual works through which they express their values and aspirations. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### HUMA 1302 Introduction to Humanities II

This stand-alone course is an interdisciplinary survey of cultures focusing on the philosophical and aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to create. Additionally, this course specifically pursues a concentrated exploration of particular cultural traditions or persistent cultural concepts or practices through critical engagement with selected aesthetic and intellectual works. Prerequisite: Meet TSI college-readiness standard for Reading and Writing, or equivalent. 3 credit hours. (A)

### IBUS 1341 Global Supply Chain Management

International purchasing or sourcing. Includes the advantages and the barriers of purchasing internationally, global sourcing, procurement technology, and purchasing processes. Emphasizes issues of contract administration, location, and evaluation of foreign suppliers, total cost approach, exchange fluctuations, customs procedures, and related topics. 3 credit hours. (W)

### IBUS 1354 International Marketing Management

Analysis of international marketing strategies using market trends, costs, forecasting, pricing, sourcing, and distribution factors. Development of an international marketing plan. 3 credit hours. (W)

#### IBUS 2332 Global Business Simulation

A simulation of a global environment. Students will engage in business practice and theory. The simulation may include researching foreign business cultures and importing and exporting products. Emphasizes participation in all business decisions related to running a simulated company. 3 credit hours. (W)

#### IBUS 2341 Intercultural Management

Cross-cultural comparisons of management and communications processes. Emphasizes cultural ethnic

geographic distinctions and antecedents that affect individual, group, and organizational behavior. May include sociocultural demographics, economics, technology, legal issues, negotiations, and processes of decision making in the international cultural environment. 3 credit hours. (W)

#### IFWA 1310 Nutrition and Menu Planning

Application of principles of nutrition in planning menus for the food service industry. This includes various types of commercial, industrial and institutional food service entities. 3 credit hours. (W)

#### IFWA 1319 Meat Identifying and Processing

A study of the identification and characteristics of wholesale and retail cuts of meat; hotel, restaurant, and institutional cuts of meat; U.S.D.A quality grades; quality control; and the Federal Meat Inspection Regulation. Lab required. Prerequisites: CHEF 1301, CHEF 1305, and CHEF 2331. 3 credit hours. (W)

#### IMED 1316 Web Design I

Instruction in web design and related graphic design issues including mark-up languages, web sites and browsers. Lab required. Prerequisite: ARTC 1325 or consent of Instructor. 3 credit hours. (W)

#### IMED 1341 Interface Design

Skill development in the interface design process including selecting interfaces that are relative to a project's content and delivery system. Emphasis on aesthetic issues such as iconography, screen composition, colors, and typography. Lab required. Prerequisite: ITSE 1311 or consent of Instructor. 3 credit hours. (W)

#### IMED 2309 Internet Commerce

An overview of the Internet as a marketing and sales tool with emphasis on developing a prototype for electronic commerce. Lab required. Prerequisite: ITSE 1311 or consent of Instructor or Associate Dean. 3 credit hours. (W)

#### IMED 2311 Portfolio Development

Preparation and enhancement of portfolio to meet professional standards, development of presentation skills, and improvement of job-seeking techniques. This is a capstone course which is to be completed during the last semester of the E-Business Development program. Lab required. 3 credit hours. (W)

#### IMED 2315 Web Design II

A study of mark-up language advanced layout techniques for creating web pages. Emphasis on identifying the target audience and producing web sites according to accessibility standards, cultural appearance, and legal issues. Lab required. Prerequisite: IMED 1316. 3 credit hours. (W)

#### IMED 2359 Interactive Web Elements

Production of projects using current web development tools that may incorporate dynamic data, web graphics, animation, video and audio streaming. Lab required. Prerequisite: IMED 2315 or consent of Instructor. 3 credit hours. (W)

#### INDS 1301 Basic Elements of Design

A study of basic design concepts with projects in shape, line, value, texture, pattern, spatial illusion, and form. Lab required. 3 credit hours. (W)

### INDS 1315 Materials, Methods and Estimating

A study of materials, methods of construction and installation, and estimating for interior design applications. Lab required. Prerequisite: INDS 1301 or consent of Associate Dean. 3 credit hours. (W) Color Theory and Applications **INDS** 1341 A study of color theory and its applications to interior design. Actual interior design will be given that will involve applying various color systems, with emphasis on Munsell. The student will learn mixing techniques to gain desired hue; value and chroma (intensities) for solving design color schemes. Color psychology and phenomena will be investigated. The students will be introduced to elements and principles of design and will learn to achieve balance, rhythm, emphases, harmony, and variety through the use of color. Additive and subtractive color mixing, and relationship of light will be examined. Lab required. 3 credit hours. (W)

#### INDS 1345 Commercial Design I

A study of design principles applied to furniture layout and space planning for commercial interiors. Lab required. Prerequisites: INDS 1371 and INDS 2313. 3 credit hours. (W)

#### INDS 1349 Fundamentals of Space Planning

The study of residential and light commercial spaces, including programming, codes, standards, space planning, drawings and presentations. Lab required. 3 credit hours. (W)

#### INDS 1351 History of Interiors I

An historical survey of design in architecture, interiors, furnishings, and decorative elements from the ancient cultures through the Italian Renaissance time period. Lab required. 3 credit hours. (W)

#### INDS 1352 History of Interiors II

A multi-cultural historical survey of design in architecture, interiors, furnishings, and decorative elements from the post-Renaissance period to present time. Lab required. 3 credit hours. (W)

#### INDS 1371 Introduction to Green Design

A general study of Green Design and sustainable environment. Explore the basic principles of Green/Sustainable Design including passive solar, alternative energy, green water technology, recycling, green building certification outline, and interior air quality in built environment. Lab required. 3 credit hours. (W)

#### INDS 1372 Computer-Aided Drafting for Interior Designers

An introduction to computer-aided drafting. Emphasis is placed on setup; general knowledge of CAD software; reading basic blueprint; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinating systems; and plot/print to scale; interior furniture layouts. Lab required. 3 credit hours. (W)

#### INDS 1373 Green Interiors

Course introduces students to Green interior design and built environment. Emphasis is placed on: analyzing Indoor Air Quality, green interior material and finishes, green cleaning materials, and providing plans and solutions for creating a healthier interior environment. Lab required. Prerequisite: INDS 1371. 3 credit hours. (W)

#### INDS 2280 Cooperative Education -Interior Design

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 2 credit hours. (W)

#### INDS 2313 Residential Design I

The study of residential spaces, including the identification of client needs, programming, standards, space planning, drawings, and presentations. Lab required. Prerequisites: DFTG 1309, INDS 1301, and INDS 1341. 3 credit hours. (W)

#### INDS 2315 Lighting for Interior Designer

Fundamentals of lighting design, including lamps, luminaries, lighting techniques, and applications for residential and commercial projects. Lab required. 3 credit hours. (W)

#### INDS 2330 Interior Design Building Systems

An overview of building materials, mechanical systems, and construction techniques as applied to interior design. Discussion of codes, project sequencing and the interpretation of detailed working drawings. Lab required. Prerequisite: INDS 1345 or consent of Associate Dean. 3 credit hours. (W)

#### INDS 2374 Sustainable Living

The course provides an introduction to sustainable thinking toward Green Built Environment. Emphasis is placed on: analyzing the Indoor Environment Quality, the effects of Indoor Air Quality on health and the well-being of the occupants. The course strives to evaluate the relationship between humans and natural resources. Lab required. Prerequisites: DFTG 1309, INDS 1371, and INDS 1373. 3 credit hours. (W)

### INDS 2380 Cooperative Education - Interior Design

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

#### INEW 2330 Comprehensive Software Project: Planning and Design

A comprehensive application of skills learned in previous courses in a simulated workplace. Covers the development, testing, and documenting of a complete software and/or hardware solution. This course may be used as a capstone course for a certificate or degree. Prerequisite: Consent of Instructor. 3 credit hours. (W)

#### INEW 2338 Advanced Java Programming

A continuation of Java programming techniques such as servlets, and advanced graphical functions. Topics cover the Java 2 Platform, Enterprise Edition (J2EE) which defines the standard for developing component-based multi-tier enterprise applications. The focus of this class will be on development of Java Servlets and Java Server Pages (JSPs). Prerequisite: COSC 1337 or ITSE 2317 or consent of Associate Dean. 3 credit hours. (W)

#### INEW 2340 Object-Oriented Design

A study of large system analysis and design concepts from the object-oriented perspective. Includes determining required objects and their interfaces. Also covers relationships between objects. Lab required. Prerequisite: COSC 1337 or COSC 1437 or consent of Associate Dean. 3 credit hours. (W)

#### INRW 0300 Introduction to Integrated Reading and Writing

Integration of critical reading and academic writing skills. Successful completion of INRW 0315 fulfills TSI requirements for reading and/or writing. Additionally, this is a combined lecture/lab, performance-based course designed to develop students' reading and academic writing skills. Emphasizing grammar, sentence structure, and paragraph development, the course introduces the student to the writing process and the essay as well as fundamental components of college reading. Lab required. Prerequisite: TSI placement in Adult Basic Education Levels 3-6 for Developmental Reading/Writing. Consult the Testing Center Director if you have questions about an assessment. 3 credit hours. (D)

#### INRW 0315 Integrated Reading/Writing II

Integration of critical reading and academic writing skills. Successful completion of this course fulfills TSI requirements for reading and/or writing. Additionally, this is a combined lecture/lab, performance-based course designed to develop students' critical reading and academic writing skills. The focus of the course will be on applying critical reading skills for organizing, analyzing, and retaining material and developing written work appropriate to the audience, purpose, situation, and length of the assignment. The course integrates preparation in basic academic reading skills with basic skills in writing a variety of academic essays. This is a course with a required lab. Lab required. Prerequisite: INRW 0405 or meet TSI standard for INRW 0315; or equivalent. If you do not meet placement

requirements, check with the instructor to request consent. 3 credit hours. (D)

#### INRW 0405 Integrated Reading/Writing I

Integration of critical reading and academic writing skills. Successful completion of INRW 0315 fulfills TSI requirements for reading and/or writing. Additionally, seeks to improve students' academic reading and writing skills through extensive integrated instruction emphasizing skills and techniques related to vocabulary, grammar, comprehension, paragraph elements, essay structure, and critical analysis that apply to both reading and writing. Students will demonstrate comprehension of varied texts through written responses, progressing from advanced paragraphs to short essays. The required lab component will target students' individual skills. Lab required. Prerequisite: INRW 0300 or meet TSI standard for INRW 0405; or equivalent. Consult the Testing Center Director if you have questions about an assessment. 4 credit hours. (D)

#### INTC 1307 Instrumentation Test Equipment

Theory and application of instrumentation test equipment. Emphasizes accuracy, limitations of instruments, and calibration techniques. Lab required. Prerequisite: CETT 1409 or consent of Instructor or Discipline Lead. 3 credit hours. (W)

#### ITAL 1411 Beginning Italian I

Introduction to the basic skills of speaking, reading, writing, and listening. Intended for students with little or no previous training in Italian. Lab required. 4 credit hours. (A)

#### ITAL 1412 Beginning Italian II

Continuation of ITAL 1411. Lab required. Prerequisite: ITAL 1411 or consent of Associate Dean. 4 credit hours. (A)

#### ITCC 1314 CCNA 1: Introduction to Networks

Formerly ITCC 1371

This course covers networking architecture, structure, and functions; introduces the principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations to provide a foundation for the curriculum. Additionally, describes the use of OSI and TCP layered models to examine the nature and roles of protocols and services at the applications, network, data link, and physical layers. Covers the principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations. Explains IPv6 Network Addresses, Design

Considerations for IPv6, Managing IOS Configuration Files, and Integrated Routing Services. Students build simple LAN topologies by applying basic principles of cabling; perform basic configurations of network devices, including routers and switches; and implementing IP addressing schemes. Use common show commands to establish baseline performance and troubleshooting. Lab required. Prerequisite/Concurrent enrollment: ITNW 1358. 3 credit hours. (W)

#### ITCC 1340 CCNA 2: Routing and Switching Essentials

Formerly ITCC 1374

Describes the architecture, components, and basic operation of routers and explains the basic principles of routing and routing protocols. It also provides an indepth understanding of how switches operate and are implemented in the LAN environment for small and large networks. Additionally, students analyze, configure, verify, and troubleshoot the primary routing protocols and OSPF. Recognize and correct common routing issues and problems. Model and analyze routing processes. This course describes the architecture, components, and operation of switches, and explains the principles of switching, VLANs and Inter-VLAN routing. The essentials of security, address translation and DHCP are also described. Use discovery protocols to map a network topology. Configure Syslog in a small to medium-sized business network. Maintain router and switch configuration and IOS files. Lab required. Prerequisite: ITCC 1314. 3 credit hours. (W)

#### ITCC 2312 CCNA 3: Scaling Networks

Formerly ITCC 2371

CCNA R&S: Scaling Networks (ScaN) covers the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches using advanced protocols. Additionally, this course helps students develop an in-depth understanding of how switches operate and are implemented in the LAN environment for small and large networks, how routers operate and are implemented in the LAN environment for small and large networks. Detailed explanations of LAN switch operations, Rapid Spanning Tree Protocol (RSTP), router operations, DHCP, Link Aggregation, EIGRP, Multi-Area OSPF, and IOS File Management and wireless network operations. Analyze, configure, verify, and troubleshoot RSTP, DHCP, Link Aggregation, EIGRP, Multi-Area OSPF and wireless networks. Lab required. Prerequisite: ITCC 1340. 3 credit hours. (W)

### ITCC 2313 CCNA 4: Connecting Networks Formerly ITCC 2372

WAN technologies and network services required by converged applications in a complex network; enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Additionally, it also describes the principles of traffic control, Borderless Networks, Virtualization, Collaboration, Tunneling, IPSec VPN, Syslog Operation, SNMP Operation and provides an overview of the services and protocols at the data link layer for wide-area access. Describes user access technologies and devices and describe how to implement and configure Point-to-Point Protocol (PPP), Point-to-Point Protocol over Ethernet (PPPoE), DSL, and Frame Relay. WAN security concepts, tunneling, and VPN basics are introduced. Discusses the special network services required by converged applications and an introduction to quality of service (QoS). Lab required. Prerequisite: ITCC 2312. 3 credit hours. (W)

#### ITCC 2341 CCNA Security

Formerly ITCC 2370

Overall security processes with particular emphasis on hands-on skills in the following areas: security policy design and management; security technologies, products, and solutions; and secure router design, installation, configuration, and maintenance; AAA and VPN implementation using routers and firewalls. Additionally, the Cisco CCNA Security curriculum is taken in preparation for the Implementing Cisco IOS Network Security (IINS) Certification Exam (640-453) leading to the Cisco CCNA Security Certification. Through in-class lecture and lab sections, expertise is developed in Protocol Sniffers/Analyzers, TCP/IP and common desktop utilities, Cisco IOS software, Cisco VPN clients, and Packet Tracer (PT). Lab required. Prerequisite: ITCC 1340 or CCENT (ICND1) Certification and consent of Associate Dean. 3 credit hours. (W)

#### ITCC 2354 CCNP R&S ROUTE

Formerly ITCC 2374

How to implement, monitor, and maintain routing services in an enterprise network. How to plan, configure, and verify the implementation of complete enterprise LAN and WAN routing solutions using a range of routing protocols in IPv4 and IPv6 environments. Configuration of secure routing solutions to support branch offices and mobile workers. Lab required. Prerequisite: ITCC 2313 or CCNA Certification and consent of Associate Dean. 3 credit hours. (W)

#### ITCC 2355 CCNP R&S SWITCH

Formerly ITCC 2375

How to implement, monitor, and maintain switching in converged enterprise campus networks. How to plan, configure, and verify the implementation of complex enterprise switching solutions. How to secure integration of VLANs, WLANs, voice and video into campus networks. Lab required. Prerequisite: ITCC 2313 or CCNA Certification and consent of Associate Dean. 3 credit hours. (W)

#### ITCC 2356 CCNP R&S TSHOOT

Formerly ITCC 2376

How to monitor and maintain complex, enterprise and switched IP networks. Skills learned include the planning and execution of regular network maintenance, as well as support and troubleshooting using technology-based processes and best practices based on systematic and industry recognized approaches. Lab required. Prerequisites: ITCC 2354 and ITCC 2355 or consent of Associate Dean. 3 credit hours. (W)

#### ITMT 1371 Configuring and Supporting Microsoft Windows 10 (70-698)

Addresses the implementation and desktop support needs of customers that are planning to deploy and support Microsoft Windows 10 in a variety of standalone and network operating system environments. Indepth, hands-on training for Information Technology (IT) professionals responsible for the planning, implementation, management, and support of Windows 10. Lab required. Prerequisite: ITNW 1358 or consent of Associate Dean. 3 credit hours. (W)

#### ITMT 1372 Installation, Storage, and Computing with Windows Server 2016

A course in Windows Server 2016 installation. Lab required. Prerequisite: ITNW 1358 or ITCC 1314. 3 credit hours. (W)

#### ITMT 1373 Networking with Windows Server 2016

A course in Windows Server 2016 networking including implementing Domain Name System (DNS), implementing DHCP, implementing IP Address Management (IPAM), implementing network connectivity and remote access solutions, implementing core and distributed network solutions, implementing an advanced network infrastructure, preparation options (MS 70-741). Lab required. Prerequisite: ITMT 1372. 3 credit hours. (W)

### ITMT 1374 Identity with Windows Server 2016

Install and configure Active Directory Domain Services (AD DS), manage and maintain AD DS, create and manage Group Policy, implement Active Directory Certificate Services (AD CS, implement identity federation and access solutions (MS 70-742). Lab required. Prerequisite: ITMT 1372. 3 credit hours. (W)

### ITMT 2304 Implementing an Advanced Server Infrastructure

This course covers managing and maintaining a server infrastructure, planning and implementing a highly available enterprise infrastructure, planning and implementing a server virtualization infrastructure, and designing and implementing identity and access solutions. Additionally, this course is a preparation for the MS 70-414 professional exam. Lab required. Prerequisite: ITMT 1372 or ITMT 2370. 3 credit hours. (W)

### ITMT 2305 Designing and Implementing a Server Infrastructure

This course covers planning and deploying a server infrastructure; designing and implementing network infrastructure services; designing and implementing network access services and Active Directory infrastructure. Additionally, this course is preparation for the MS 70-413 professional exam. Lab required. Prerequisite: ITMT 2370 or ITMT 1372. 3 credit hours. (W)

#### ITNW 1351 Fundamentals of Wireless LANs

Design, plan, implement, operate, and troubleshoot Wireless Local Area Networks (WLANs). Includes WLAN design, installation, and configuration; and WLAN security issues and vendor interoperability strategies. Lab required. 3 credit hours. (W)

#### ITNW 1358 Network+

Assists individuals in preparing for Computing Technology Industry Association (CompTIA)

Network+ certification exam and career as a network professional. Prepares individuals for a career as a Network Engineer in the Information Technology support industry. Includes the various responsibilities and tasks required for service engineer to successfully perform in a specific environment. Lab required. 3 credit hours. (W)

#### ITNW 1370 Cloud+ Computing Essentials

A study of the main cloud computing principles, concepts, and architecture from a technical and an enterprise perspective in terms of moving to and

governing the three types of cloud environments (private, public and hybrid). Lab required. Prerequisite: ITCC 1371 or ITNW 1358. 3 credit hours. (W)

### ITNW 2373 Information Storage Management (EMC)

The Information Storage Management course teaches the skills required in designing Storage Systems using Storage Networking Technologies and Virtualization concepts, Business Continuity approaches, and Storage Security and Management strategies. Lab required. Prerequisites: ITMT 1370 and ITNW 1358. 3 credit hours. (W)

#### ITNW 2375 VMware vSphere: Installation, Configuration, and Management

A study of Virtualization in computer network technology. The course covers the installation, configuration, and management of VMware vSphere, which consists of VMware vSphere ESXi and VMware vCenter Server. Lab required. Prerequisites: ITCC 1374 or ITCC 1340 and ITMT 2371or ITMT 1373, or consent of Associate Dean. 3 credit hours. (W)

#### ITNW 2376 Advanced Topics in Computer Systems Networking and Collaborative Technologies

This course assimilates leading edge skills, knowledge, and advances in technologies relevant to the local industry needs. Lab required. 3 credit hours. (W)

## ITNW 2380 Cooperative Education Computer Systems Networking and Telecommunications

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

#### ITSC 1305 Introduction to PC Operating Systems

Introduction to personal computer operating systems including installation, configuration, file management, memory and storage management, control of peripheral devices, and use of utilities. The Windows operating system will be compared to that of the Mac OS and a popular Linux distribution from the end-user perspective. Hands-on lab experience for each operating system is provided. 3 credit hours. (W)

#### ITSC 1309 Integrated Software Applications I-MS Office

Introduction to business productivity software suites using word processing, spreadsheets, databases, and/or presentation software. Prerequisite/ Concurrent Enrollment: POFT 1329. 3 credit hours. (W)

### ITSC 1316 Linux Installation and Configuration

Introduction to Linux operating system. Includes Linux installation, basic administration, utilities and commands, upgrading, networking, security, and application installation. Emphasizes hands-on setup, administration, and management of Linux. Lab required. Prerequisite: ITNW 1358 or consent of Associate Dean. 3 credit hours. (W)

#### ITSC 1342 Shell Programming - Scripting

Reading, writing, and debugging shell scripts. Development of scripts to automate frequently executed sequences of commands. Covers conditional logic, user interaction, loops, and menus to enhance the productivity and effectiveness of the user. Intended for programmers who are familiar with operating environments and reading and writing various shell scripts. Lab required. Prerequisite: ITCC 1314. 3 credit hours. (W)

#### ITSC 2339 Personal Computer Help Desk Support

Diagnosis and solution of user hardware and software related problems with on-the-job and/or simulated projects. Lab required. Prerequisites: ITNW 1358 and ITSC 1305, or consent of Instructor. 3 credit hours. (W)

#### ITSC 2380 Cooperative Education-Computer and Information Sciences, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

#### ITSE 1301 Web Design Tools - Graphics

Designing and publishing Web documents according to World Wide Web Consortium (W3C) standards. Emphasis on optimization of graphics and images and exploration of the tools available for creating and editing Web documents. Includes in-depth technical

investigation of digital imaging on the computer using image editing and/or image creation software. Manipulation, creation, and editing of digital images for a wide assortment of output. Will explore use of industry standard web editing and graphics software packages such as Adobe Photoshop and Adobe Dreamweaver. 3 credit hours. (W)

#### ITSE 1306 PHP Programming

Introduction to PHP, including the design of web-based applications, arrays, strings, regular expressions, file input/output, e-mail and database interfaces, stream and network programming, debugging, and security. Emphasizes hands-on programming skills necessary to develop secure and reliable PHP based web applications. Lab required. Prerequisites: COSC 1315 and ITSE 1311 or consent of Associate Dean. 3 credit hours. (W)

ITSE 1311 Beginning Web Programming Skills development in web programming including mark-up and scripting languages. Additionally, the course focuses on use of HTML and CSS to create web sites and includes an introduction to JavaScript. Lab required. 3 credit hours. (W)

#### ITSE 1330 Introduction to C# Programming

A study of C# syntax including data types, control structures, functions, syntax, and semantics of the language, classes, class relationships, and exception handling. Lab required. Prerequisite: COSC 1315 or COSC 1436 or ITSE 1332 or consent of Associate Dean. 3 credit hours. (W)

### ITSE 1332 Introduction to Visual Basic.NET Programming

A study of Visual Basic.NET (VB.NET) syntax including: data types, control structures, functions, syntax, and semantics of the language, classes, class relationships, and exception handling. An introduction to programming using the Visual Basic.NET language. 3 credit hours. (W)

### ITSE 1347 Programming with Visual Basic.NET

Designing and developing enterprise applications using Microsoft Visual Basic.NET in the Microsoft.NET Framework. Includes reference types, class relationships, polymorphism, operators overloading, and creating and handling exceptions. An introduction to Object Oriented Programming techniques. Prerequisite: ITSE 1332. 3 credit hours. (W)

#### ITSE 1359 Introduction to Scripting Languages - AJAX/jQuery

Introduction to scripting languages including: basic data types, control structures, regular expressions, input/output, and textual analysis. Students will learn how to design and implement programming solutions using JavaScript, Cascading Style Sheets, and XML. Course includes introduction to AJAX (Asynchronous JavaScript) and related technologies. Prerequisite: ITSE 2302 or consent of Instructor. 3 credit hours. (W)

#### ITSE 1371 iOS Programming Fundamentals (Swift)

Course covers the basics of the Swift language and the use of development tools for iOS application programming. Lab required. Prerequisite: COSC 1315 or COSC 1436 or ITSE 1332 or consent of Instructor. 3 credit hours. (W)

#### ITSE 1372 Windows Mobile Programming I

Course explores developing applications for Windows Phone-based devices. Course will provide an overview of Windows Phone development for use of current SDK, to design of applications and industry business practices. Prior programming experience in either C#, Visual Basic, or an Object-Oriented Programming language is recommended for this course. Lab required. Prerequisite: ITSE 1330 or ITSE 1332 or consent of Associate Dean. 3 credit hours. (W) Android Mobile Programming I 1373 This course introduces mobile application development for the Android platform. Students will learn how to design, develop, test, and debug mobile Android applications. Topics include the Android Software Development Kit (SDK), design principles, application structure, and current issues in programming mobile devices. Prerequisite: COSC 1337 or consent of Associate Dean. 3 credit hours. (W)

#### ITSE 1374 Mobile Web

Course explores creating mobile web sites using HTML, CSS and JavaScript. Course will also explore creation of hybrid mobile applications for one or more mobile platforms. Lab required. Prerequisite: ITSE 1311 or consent of Instructor. 3 credit hours. (W)

## ITSE 1380 Cooperative Education Computer Programming/ Programmer, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

#### ITSE 1393 Special Topics in Computer Systems Analysis

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. Lab required. 3 credit hours. (W)

#### **Business Intelligence**

An introduction to Business Intelligence analysis and reporting. The topics of study will include creating a data source, dimensional model, dimensions and measures, attribute relationships and user-defined hierarchies, calculated members, aggregations, and analysis reports using Excel. Prerequisites: ITSE 2309 and ITSW 1304 or consent of Associate Dean.

### ITSE 2302 Intermediate Web Programming

Techniques for web development. Includes server-side and client-side scripting. Additionally, students design and implement fully interactive web sites using HTML5, CSS, and JavaScript. Lab required. Prerequisite: ITSE 1311 or consent of Associate Dean. 3 credit hours. (W)

### ITSE 2304 Visual Basic.NET Database Development with ADO.NET

Visual Basic.NET applications to access data from a database. Emphasizes Object-Oriented Programming (OOP) and database programming with ADO.NET. Prerequisites: ITSE 1332 and either ITSE 2309 or ITSW 1307. 3 credit hours. (W)

#### ITSE 2309 Database Programming - SQL

Database development using database programming techniques emphasizing database structures, modeling, and database access. Prerequisite: Knowledge of a programming language and ITSW 1307 or equivalent knowledge. Lab required. 3 credit hours. (W)

#### ITSE 2310 iOS Application Programming

Course explores developing applications for iOS devices. Will include Objective-C programming, use of the iOS SDK environment, and current programming issues in the iOS environment. Additionally, course will also use Swift programming language. Lab required. Prerequisite/Concurrent enrollment: ITSE 1371 or consent of Instructor. 3 credit hours. (W)

#### ITSE 2313 Web Authoring

Instruction in designing and developing web pages that incorporate text, graphics, and other supporting elements using current technologies and authoring tools. Lab required. Prerequisite: ITSE 1311 or consent of Instructor. 3 credit hours. (W)

### ITSE 2334 Advanced Visual Basic.NET Programming with ASP.NET

Continuation of Visual Basic.NET programming using advanced features. Windows Forms, ADO.NET, XML, Data Bound Controls, DataSet, Assemblies, Attributes, Reflection, Marshalling and Remoting, Threads and Synchronization, Streams, Deployment, Generics, Partial Classes, Application Blocks, and data encryption. Emphasizes using the more advanced features of the .NET Framework Class Library and web programming with ASP.NET. Prerequisites: ITSE 1311 and ITSE 1347. 3 credit hours. (W)

### ITSE 2338 C# Database Development with ADO.NET and LINQ

C# applications to access data from a database. Emphasizes Object-Oriented Programming (OOP) and database programming with ADO.NET. Prerequisite: ITSE 1330 or consent of Associate Dean. 3 credit hours. (W)

### ITSE 2347 Advanced Database Programming

Database development using complex database programming techniques emphasizing multiple interrelated files, menu design, security implementation, and multiple access. Additionally, Advanced SQL Query Design, SQL Analytic functions, Database design, and Data Warehousing will be emphasized. Lab required. Prerequisite: ITSE 2309. 3 credit hours. (W)

### ITSE 2353 Advanced C# Programming with ASP.NET

Continuation of C# programming using advanced features of the .NET Framework Class Library. Windows Forms, ADO.NET, XML, Data Bound Controls, DataSet, Assemblies, Attributes, Reflection, Marshalling and Remoting, Threads and Synchronization, Streams, Deployment, Generics, Partial Classes, Application Blocks, and data encryption. Emphasizes using the more advanced features of the .NET Framework Class Library and web programming with ASP.NET. Prerequisite: ITSE 1330 or consent of Associate Dean. 3 credit hours. (W)

#### ITSE 2354 Advanced Oracle PL/SQL

Advanced use of Oracle SQL. Topics include hierarchical queries, set based queries, correlated subqueries, scripting, and scripting generation. Prerequisite: ITSE 2309. Lab required. 3 credit hours. (W)

ITSE 2370 Descriptive Analytics An introduction to principles and techniques in data analysis for problem solving and decision making used in business and industry. Lab required. Prerequisites: ITSE 2309, ITSW 1304, and MATH 1342. 3 credit hours. (W)

### ITSE 2372 Windows Mobile Programming II

This course continues to explore mobile application development for the Windows Phone platform. Students will design, develop, test, and debug more advanced Windows Phone applications. Course will focus on more advanced topics related to programming mobile devices. Lab required. Prerequisite: ITSE 1372 or consent of Associate Dean. 3 credit hours. (W)

#### ITSE 2380 Cooperative Education-Computer Programming/ Programmer, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

#### **ITSW** 1304 Introduction to Spreadsheets-

Instruction in the concepts, procedures, and application of electronic spreadsheets. 3 credit hours. (W)

#### **ITSW** 1307 Introduction to Database-Access Introduction to database theory and the practical applications of a database. Emphasis on database design, custom reports, file management, and application creation. 3 credit hours. (W)

#### **ITSW** Introduction to Presentation 1310 **Graphics Software**

Instruction in the utilization of presentation software to produce multimedia presentations. Graphics, text, sound, animation and/or video may be used in presentation development. Lab required. 3 credit hours. (W)

#### **ITSW** 1380 Cooperative Education-Data Processing and Data Processing Technology/Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

#### **ITSW** 2370 **SAS Programming**

Introduction to the principles and techniques of using the SAS Programming Application Language. Lab required. Prerequisite: ITSE 2309. 3 credit hours. (W)

#### **ITSW** 2380 Cooperative Education-Data Processing and Data Processing Technology/ Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. Prerequisite: ITSW 1380 or consent of Associate Dean. 3 credit hours. (W)

#### Fundamentals of Information **ITSY** 1300 Security (Security +)

An introduction to information security including vocabulary and terminology, ethics, the legal

environment, and risk management. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning, policies and controls is also discussed. Lab required. Prerequisite: ITNW 1358. 3 credit hours. (W)

#### ITSY 2300 **Operating System Security**

Safeguard computer operating systems by demonstrating server support skills and designing and implementing a security system. Identify security threats and monitor network security implementations. Use best practices to configure operating systems to industry security standards. Lab required. Prerequisite: ITMT 1371 or ITNW 1358. 3 credit hours. (W)

#### **ITSY** 2301 Firewalls and Network Security

Identify elements of firewall design, types of security threats and responses to security attacks. Use Best Practices to design, implement, and monitor a network security plan. Examine security incident postmortem reporting and ongoing network security activities. Lab required. Prerequisite: ITSY 2300 or consent of Associate Dean. 3 credit hours. (W)

#### **ITSY Security Management Practices**

In-depth coverage of security management practices, including asset evaluation and risk management; cyber law and ethics issues; policies and procedures; business recovery and business continuity planning; network security design; and developing and maintaining a security plan. Lab required. Prerequisite: ITSY 2300 or consent of Associate Dean. 3 credit hours. (W)

#### **ITSY** 2342 Incident Response and Handling

In-depth coverage of incident response and incident handling, including identifying sources of attacks and security breaches; analyzing security logs; recovering the system to normal; performing postmortem analysis; implementing and modifying security measures. Prerequisite: ITSY 2300 or consent of Associate Dean. 3 credit hours. (W)

#### **Computer System Forensics** 2343

In-depth study of system forensics including methodologies used for analysis of computer security breaches. Collect document and evaluate evidence to perform postmortem analysis of a security breach. Prerequisite: ITSY 2342 or consent of the Associate Dean. Lab required. 3 credit hours. (W)

2017-18 Collin College Catalog, (Effective Spring 2018), Ed. 5. Rev. 10-12-17 Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

#### ITSY 2572 Certified Information Systems Security Professional (CISSP) Common Body of Knowledge Domain Instruction

An in-depth study of the 10 domains which make up the Common Body of Knowledge (CBK) of information security professionals. The course is designed to instruct individuals to implement solid security practices, perform risk analysis, identify necessary countermeasures, and help the enterprise as a whole protect its facility, network, systems, and information. Prerequisites: ITSY 1300 and ITSY 2300, or equivalent experience and consent of Associate Dean. 5 credit hours. (W)

#### ITSY 2575 Certified Information Security Manager (CISM)

An in depth study of the five domains covered on the ISACA\* - CISM professional certification exam. Each domain (Information Security Governance, Information Risk Management, Information Security Program Development, Information Security Program Management, and Incident Management and Response) covers the knowledge and tasks that cybersecurity professionals are expected to know how to perform in the workplace. \*Previously known as Information Systems Audit and Control Association. Prerequisite: ITSY 1300 or ITSY 2300 or equivalent experience and consent of Associate Dean. 5 credit hours. (W)

#### JAPN 1411 Beginning Japanese I

Introduction to the basic skills of speaking, reading, writing, and listening with attention to selected aspects of Japanese culture; designed for students with little or no previous language training. Instruction is enhanced by the use of tapes, slides, and video cassettes. Lab required. 4 credit hours. (A)

#### JAPN 1412 Beginning Japanese II

A continuation of JAPN 1411. Lab required. Prerequisite: JAPN 1411 or consent of Associate Dean. 4 credit hours. (A)

#### JAPN 2311 Intermediate Japanese I

Continuing development of the four basic skills of speaking, reading, writing, and listening, emphasizing conversational and reading skills. Designed for students who have completed Beginning Japanese II. Additional Kanji structures are introduced. Also includes attention to selected aspects of Japanese culture. Lab required. Prerequisite: JAPN 1412 or consent of Associate Dean. 3 credit hours. (A)

#### JAPN 2312 Intermediate Japanese II

Continued development of four basic language skills with emphasis on conversation and reading skills. Additional Kanji and grammar structures are introduced. Includes attention to selected aspects of Japanese culture. Lab required. Prerequisite: JAPN 2311 or consent of Associate Dean. 3 credit hours. (A)

#### LGLA 1303 Legal Research

Presents legal research techniques emphasizing the paralegal's role. 3 credit hours. (W)

#### LGLA 1305 Legal Writing

Fundamentals of legal writing techniques including case and fact analysis, citation formats, and legal writing styles emphasizing the paralegal's role in legal writing. 3 credit hours. (W)

### LGLA 1307 Introduction to Law and the Legal Professions

Overview of the law and the legal professions including legal concepts, systems, and terminology; substantive areas of law and the federal and state judicial systems; ethical obligations and regulations; professional trends and issues with emphasis on the paralegal's role. 3 credit hours. (W)

#### LGLA 1323 Employment Law

Presents the fundamental concepts of employment law, including employment contracts, at-will employment, governmental regulations, and discrimination issues, emphasizing the paralegal's role in employment law. Prerequisite: LGLA 1307 or consent of department. 3 credit hours. (W)

#### LGLA 1342 Federal Civil Litigation

Fundamental concepts and procedures of federal civil litigation including pretrial, trial, and post-trial phases of litigation emphasizing the paralegal's role in the federal civil litigation process. 3 credit hours. (W)

#### LGLA 1343 Bankruptcy

Fundamental concepts of bankruptcy law and procedure are presented including individual and business liquidation and reorganization with emphasis on the paralegal's role. 3 credit hours. (W)

#### LGLA 1344 Texas Civil Litigation

Fundamental concepts and procedures of Texas civil litigation including pretrial, trial, and post-trial phases of litigation emphasizing the paralegal's role in the Texas civil litigation process. Prerequisites: LGLA

1303, LGLA 1342, and LGLA 2303, or consent of Associate Dean. 3 credit hours. (W)

#### LGLA 1351 Contracts

Presents fundamental concepts of contract law including formation, performance, and enforcement of contracts under the common law and the Uniform Commercial Code with emphasis on the paralegal's role in contract law. 3 credit hours. (W)

### LGLA 1353 Wills, Trusts, and Probate Administration

Fundamental concepts of the law of wills, trusts, and probate administration emphasizing the paralegal's role. 3 credit hours. (W)

#### LGLA 1355 Family Law

Fundamental concepts of family law including formal and informal marriages, divorce, annulment, marital property, and the parent-child relationship with emphasis on the paralegal's role in family law. 3 credit hours. (W)

#### LGLA 1380 Cooperative Education-Legal Assistant/Paralegal

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

#### LGLA 2303 Torts and Personal Injury Law

Fundamental concepts of tort and personal injury law including intentional torts, negligence, and strict liability are presented with emphasis on the paralegal's role in tort and personal injury law. 3 credit hours. (W)

#### LGLA 2307 Law Office Management

Fundamental principles and structure of management, administration, and substantive systems in the law office including law practice technology as applied to paralegals. 3 credit hours. (W)

#### LGLA 2309 Real Property

Presents fundamental concepts of real property law including the nature of real property, rights and duties of ownership, land use, voluntary and involuntary conveyances, and the recording of and searching for real estate documents emphasizing the paralegal's role in real property law. 3 credit hours. (W)

#### LGLA 2311 Business Organizations

Basic concepts of business organizations including law of agency, sole proprietorships, partnerships, corporations, and other emerging business entities with emphasis on the paralegal's role. Prerequisite: LGLA 1307 or LGLA 2333 or consent of Associate Dean. 3 credit hours. (W)

#### LGLA 2313 Criminal Law and Procedure

Fundamental concepts of criminal law and procedure from arrest to final disposition including principles of federal and state law emphasizing the role of the paralegal in the criminal justice system. 3 credit hours. (W)

#### LGLA 2323 Intellectual Property

Presents the fundamentals of intellectual property law, including creation, procurement, preparation, and filing documents related to patents, copyrights, trademarks, and the processes of intellectual property litigation. Emphasizes the paralegal's role in intellectual property law. 3 credit hours. (W)

### LGLA 2333 Advanced Legal Document Preparation

Use of office technology skills in preparation of legal documents by paralegals based on hypothetical situations drawn from various areas of law. 3 credit hours. (W)

#### LGLA 2339 Certified Paralegal Exam Review

A review of the mandatory and optional topics covered in the Certified Paralegal Examination administered by the National Association of Legal Assistants. Prerequisites: LGLA 1305 and LGLA 1342. 3 credit hours. (W)

#### LMGT 1319 Introduction to Business Logistics

A systems approach to managing activities associated with traffic, transportation, inventory management, warehousing, packaging, order processing, and materials handling. 3 credit hours. (W)

#### LMGT 1325 Warehouse and Distribution Center Management

Emphasis on physical distribution and total supply chain management. Includes warehouse operations management, hardware and software operations, bar codes, organizational effectiveness, just-in-time, and continuous replenishment. 3 credit hours. (W)

#### LMGT 2330 International Logistics Management

Identification of the principles and practices involved in international distribution systems including the multinational corporation. Attention to global strategic planning, production, supply, manpower/labor, geography, business communications, cultural, political, and legal issues affecting global distribution and firm/host relationships. 3 credit hours. (W)

### LMGT 2388 Internship: Logistics and Materials Management

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. 3 credit hours. (W)

#### MATH 0302 Pre-algebra

With an emphasis on developing critical thinking skills, a study of arithmetic operations with rational numbers, an introduction to algebraic expressions, geometric properties, and basic linear equations. Lab required. Prerequisite: Meet TSI standard for MATH 0302; or equivalent. 3 credit hours. (D)

#### MATH 0305 Beginning Algebra

With an emphasis on developing critical thinking skills, a study of algebraic vocabulary, concepts, and notation, functions, linear equations, systems of linear equations, polynomial expressions, and quadratic expressions and equations. Lab required. Prerequisite: MATH 0302, or meet TSI standard for MATH 0305; or equivalent. 3 credit hours. (D)

#### MATH 0310 Intermediate Algebra

A study of relations and functions, inequalities, algebraic expressions and equations (absolute value, polynomial, radical, rational), with a special emphasis on linear and quadratic expressions and equations. Lab required. Prerequisite: MATH 0305 or MATH 0406, or meet TSI standard for MATH 0310; or equivalent. 3 credit hours. (D)

#### MATH 0406 Introductory Algebra

With an emphasis on developing critical thinking skills, a study of arithmetic operations with rational numbers, an introduction to algebraic vocabulary, concepts, and notation, and geometric properties, functions, linear equations, systems of linear equations, polynomial expressions, and quadratic expressions and equations. Lab required. Prerequisite: Meet TSI standard for MATH 0406; or equivalent. 4 credit hours. (D)

#### MATH 1314 College Algebra

In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. Graphing calculator required. Lab required. Prerequisite: Meet TSI college-readiness standard for Mathematics; or equivalent. 3 credit hours. (A) Note: Students may take either MATH 1314 or MATH 1414 but not both.

#### MATH 1316 Plane Trigonometry

In-depth study and applications of trigonometry including definitions, identities, inverse functions, solutions of equations, graphing, and solving triangles. Additional topics such as vectors, polar coordinates and parametric equations may be included. Graphing calculator required. Prerequisite: MATH 1314 or MATH 1414; or equivalent. 3 credit hours. (A)

### MATH 1324 Mathematics for Business and Social Sciences

The application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value. Graphing calculator required. Lab required. Prerequisite: Meet TSI college-readiness standard for Mathematics; or equivalent. 3 credit hours. (A)

### MATH 1325 Calculus for Business and Social Sciences

This course is the basic study of limits and continuity, differentiation, optimization and graphing, and integration of elementary functions, with emphasis on applications in business, economics, and social sciences. This course is not a substitute for MATH 2413, Calculus I. Graphing calculator required. Lab required. Prerequisite: MATH 1314, or MATH 1324, or MATH 1414; or equivalent. 3 credit hours. (A)

### MATH 1332 Contemporary Mathematics (Quantitative Reasoning)

Intended for Non STEM (Science, Technology, Engineering, and Mathematics) majors. Topics include introductory treatments of sets and logic, financial mathematics, probability and statistics with appropriate applications. Number sense, proportional reasoning, estimation, technology, and communication should be embedded throughout the course. Additional topics

may be covered. Additionally, this course is NOT intended to prepare students for calculus, business, or engineering courses. Prerequisite: Meet TSI college-readiness standard for Mathematics; or equivalent. 3 credit hours. (A)

#### MATH 1342 Elementary Statistical Methods

Collection, analysis, presentation and interpretation of data and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Use of appropriate technology is recommended. Graphing calculator required. Lab required. Prerequisite: Meet TSI collegereadiness standard for Mathematics; or equivalent. 3 credit hours. (A)

## MATH 1350 Mathematics for Teachers I (Fundamentals of Mathematics I)

This course is intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the conceptual development of the following: sets, functions, numeration systems, number theory, and properties of the various number systems with an emphasis on problem solving and critical thinking. Prerequisite: MATH 1314 or MATH 1414; or equivalent. 3 credit hours. (A) Note: This course is intended for students pursuing the AAT degree with an emphasis on middle grades 4-8 and early childhood through grade 6.

#### MATH 1351 Mathematics for Teachers II (Fundamentals of Mathematics II)

This course is intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the concepts of geometry, measurement, probability, and statistics with an emphasis on problem solving and critical thinking. Prerequisite: MATH 1350, MATH 1314, or MATH 1414; or equivalent. 3 credit hours. (A) Note: This course is designed specifically for students who seek middle grade (4 through 8) teacher certification.

### MATH 1376 Calculus for Business and Economics II

Continuation of Math 1325. In this course, application of differential equations, functions of several variables, Lagrange Multipliers, Least Squares Modeling, multiple integrals and infinite series will be covered. Basic concepts are related to multivariable calculus. Graphing calculator required. Lab required. Prerequisite: MATH 1325. 3 credit hours. (A) Note: This course will transfer to a specific 2+2 baccalaureate program. Please check

with your advisor to learn whether the course will transfer to the four-year program of your choice. There is an additional fee for this course.

#### MATH 1414 College Algebra

In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. Graphing calculator required. Prerequisite: Meet TSI college-readiness standard for Mathematics; or equivalent. 4 credit hours. (A) Note: Students may take either MATH 1314 or MATH 1414 but not both

#### MATH 2305 Discrete Mathematics

A course designed to prepare math, computer science, and engineering majors for a background in abstraction, notation, and critical thinking for the mathematics most directly related to computer science. Topics include: logic, relations, functions, basic set theory, countability and counting arguments, proof techniques, mathematical induction, combinatorics, discrete probability, recursion, sequence and recurrence, elementary number theory, graph theory, and mathematical proof techniques. Graphing calculator required. Prerequisite: MATH 2413. 3 credit hours. (A)

#### MATH 2318 Linear Algebra

Introduces and provides models for application of the concepts of vector algebra. Topics include finite dimensional vector spaces and their geometric significance; representing and solving systems of linear equations using multiple methods, including Gaussian elimination and matrix inversion; matrices; determinants; linear transformations; quadratic forms; eigenvalues and eigenvector; and applications in science and engineering. Graphing calculator required. Prerequisite: MATH 2414. 3 credit hours. (A)

#### MATH 2320 Differential Equations

Ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, and boundary value problems; application of differential equations to real-world problems. Graphing calculator required. Lab required. Prerequisite: MATH 2414. 3 credit hours. (A)

### MATH 2373 Matrices, Vectors, and Linear Programming

Not for science majors. A study of matrices, vectors, determinants, inverses, system of linear equations, and linear programming with applications. Scientific calculator required. Prerequisite: MATH 1314 or MATH 1414; or equivalent. 3 credit hours. (A) Note: This course will transfer to a specific 2+2 baccalaureate program. Please check with your advisor to learn whether the course will transfer to the four-year program of your choice. There is an additional fee for this course.

#### MATH 2412 Pre-Calculus Math

In-depth combined study of algebra, trigonometry, and other topics for calculus readiness. Graphing calculator required. Lab required. Prerequisite: MATH 1314 or the equivalent preparation. 4 credit hours. (A)

#### MATH 2413 Calculus I

Limits and continuity; the Fundamental Theorem of Calculus; definition of the derivative of a function and techniques of differentiation; applications of the derivative to maximizing or minimizing a function; the chain rule, mean value theorem, and rate of change problems; curve sketching; definite and indefinite integration of algebraic, trigonometric, and transcendental functions, with an application to calculation of area. Graphing calculator required. Lab included. Prerequisite: MATH 2412; or equivalent. 4 credit hours. (A)

#### MATH 2414 Calculus II

Differentiation and integration of transcendental functions; parametric equations and polar coordinates; techniques of integration; sequences and series; improper integrals. Graphing calculator required. Lab included. Prerequisite: MATH 2413. 4 credit hours. (A)

#### MATH 2415 Calculus III

Advanced topics in calculus, including vectors and vector-valued functions, partial differentiation, Lagrange multipliers, multiple integrals, and Jacobians; application of the line integral, including Green's Theorem, the Divergence Theorem, and Stokes' Theorem. Graphing calculator required. Lab included. Prerequisite: MATH 2414. 4 credit hours. (A)

#### MILS 1141 Foundations of Leadership

Fundamental concepts of leadership in a profession in both classroom and outdoor laboratory environments. The study of time management skills, basic drill and ceremony, physical fitness, rappelling, leadership reaction course, first aid, making presentations and marksmanship. Concurrent enrollment in MILS 1180 leadership lab and mandatory participation in independent physical fitness training, plus optional participation in a weekend field training exercise. 1 credit hour. (A)

#### MILS 1142 Introduction to Leadership

Application of principles of leadership through participation in physically and mentally challenging exercises with upper-division ROTC students. Course focuses on communication skills, organizational ethics, and study and time management techniques. Concurrent enrollment in MILS 1180 leadership lab and mandatory participation in individual physical fitness training, plus optional participation in a weekend field training exercise. 1 credit hour. (A)

#### MILS 1180 Leadership Laboratory

Practical laboratory of applied leadership and skills. Student-planned, -organized and -conducted training, oriented toward leadership development. Laboratory topics include marksmanship, small unit tactics, multitered programs focused on individual skill levels. Uniform and equipment provided, no fee. May be repeated for credit. 1 credit hour. (A)

### MILS 2251 Individual/Team Development

Application of ethics-based leadership skills and fundamentals of ROTC's Leadership Development Program. Develop skills in oral presentations, concise writing, event planning, coordination of group efforts, advanced first aid, land navigation, and military tactics. Concurrent enrollment in MILS 1180 leadership lab and mandatory participation in individual physical fitness training, plus optional participation in a weekend field training exercise. 2 credit hours. (A)

### MILS 2252 Individual/Team Military Tactics

Introduction to individual and team aspects of military tactics in small unit operations. Includes use of radio communications, making safety assessments, movement techniques, planning for team safety/security, and pre-execution checks. Concurrent enrollment in MILS 1180 leadership lab and mandatory participation in individual physical fitness training, plus optional participation in a weekend field training exercise. 2 credit hours. (A)

#### MRKG 1301 Customer Relationship Management

General principles of customer relationship management including skills, knowledge, attitudes, and behaviors. 3 credit hours. (W)

#### MRKG 1311 Principles of Marketing

Introduction to the marketing mix functions and process. Includes identification of consumer and organizational needs and explanation of environmental issues. 3 credit hours. (W)

#### MRKG 2312 e-Commerce Marketing

Explore electronic tools utilized in marketing, focus on marketing communications in developing customer relationships. 3 credit hours. (W)

#### MRKG 2333 Principles of Selling

Overview of the selling process. Identification of the elements of the communication process between buyers and sellers. Examination of the legal and ethical issues of organizations which affect salespeople. 3 credit hours. (W)

### MRKG 2348 Marketing Research and Strategies

Practical experiences in analyzing marketing studies using data-driven decision-making processes. Includes interrelationships among marketing mix. 3 credit hours. (W)

### MRKG 2349 Advertising and Sales Promotion

Integrated marketing communications. Includes advertising principles and practices. Emphasizes multimedia of persuasive communication including buyer behavior, budgeting, and regulatory constraints. 3 credit hours. (W)

#### MRKG 2381 Cooperative Education-Marketing/Marketing Management, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

#### MUAP 1101 – 1191 Secondary Applied Music

Individual instruction in voice, instrument, composition, or conducting. Additionally, private

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instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.

1101	Violin
1105	Viola
1109	Cello
1113	Double Bass
1115	Electric Bass
1117	Flute
1121	Oboe
1125	Bassoon
1129	Clarinet
1133	Saxophone
1137	Trumpet
1141	French Horn
1145	Trombone
1149	Baritone
1153	Tuba
1157	Percussion
1158	Set
1161	Guitar
1162	Guitar
1163	String Guitar
1165	Organ
1169	Piano
1170	Piano
1177	Harp
1181	Voice
1187	Composition
1188	Electroacoustic Composition
1189	Songwriting
1190	Arranging
	1105 1109 1113 1115 1117 1121 1125 1129 1133 1137 1141 1145 1149 1153 1157 1158 1161 1162 1163 1165 1169 1170 1177 1181 1187 1188 1189

Conducting

**MUAP** 

1191

#### MUAP 2201-2291 Concentration Applied Music

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hours of MUSC, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP	2201	Violin
MUAP	2205	Viola
MUAP	2209	Cello
MUAP	2213	Double Bass
MUAP	2215	Electric Bass
MUAP	2217	Flute
MUAP	2221	Oboe
MUAP	2225	Bassoon
MUAP	2229	Clarinet
MUAP	2233	Saxophone
MUAP	2237	Trumpet
MUAP	2241	French Horn
MUAP	2245	Trombone
MUAP	2249	Baritone
MUAP	2253	Tuba
MUAP	2257	Percussion
MUAP	2258	Drum Set
MUAP	2261	Guitar
MUAP	2262	Jazz Guitar
MUAP	2263	Steel String Guitar
MUAP	2265	Organ
MUAP	2269	Piano
MUAP	2270	Jazz Piano
MUAP	2277	Harp
MUAP	2281	Voice
MUAP	2287	Composition
MUAP	2288	Electroacoustic Composition
MUAP	2289	Songwriting
MUAP	2290	Arranging

MUAP 2291 Conducting MUEN 1121 Jazz Lab Band

Examples of major instrumental ensembles may include but are not limited to concert band, marching band, collaborative piano, jazz band, and orchestra. Additionally, participation in a large band concentrating on jazz and commercial music performance styles. Consisting of 16-21 instrumentalists and one vocalist, the band performs both traditional and contemporary jazz literature. A number of performances both on and off campus are given each semester. Lab required. Prerequisite: Audition. 1 credit hour. (A) Note: Students may take MUEN 1121 and MUEN 1122 for a combined total of no more than 8 credit hours.

#### MUEN 1122 Symphonic Wind Ensemble

Examples of major instrumental ensembles may include but are not limited to concert band, marching band, collaborative piano, jazz band, and orchestra. Additionally, study and performance of traditional and contemporary symphonic wind literature. Students participate in weekly rehearsals and perform on scheduled concerts. Basic instrumental proficiency is required. Lab required. Prerequisite: Audition. 1 credit hour. (A)

Note: Students may take MUEN 1121 and MUEN 1122 for a combined total of no more than 8 credit hours.

#### MUEN 1131 New Music Ensemble

Examples of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Additionally, performs experimental, avant garde, electronic, and contemporary music for mixed media ensemble including compositions by student composers. Lab required. Prerequisite: Audition. 1 credit hour. (A) Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

#### MUEN 1132 Keyboard Ensemble

Examples of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Additionally, traditional piano literature for multiple performers and arrangements for electronic keyboard ensemble. Several performances each semester. Lab required. Prerequisite: Audition. 1 credit hour. (A) Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

#### MUEN 1133 Woodwind Ensemble

Examples of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Additionally, a small group of woodwinds performs traditional classical repertoire. Lab required. Prerequisite: Audition. 1 credit hour. (A) Note: Students may take MUEN 1131, MUEN 1132,

Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

#### MUEN 1134 Brass Ensemble

Examples of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Additionally, a small group of brass players perform traditional classical repertoire. Lab required. Prerequisite: Audition. 1 credit hour. (A)

Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

#### MUEN 1135 Expressions Combo

Examples of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Additionally, expressions Combo is a small ensemble (4-6) of musicians who serve as the rhythm selection for the Expressions Vocal Jazz ensemble. In addition to rehearsing and performing with Expressions, the combo also prepares its own arrangements and performs as an independent ensemble. Typical repertoire includes bebop, Latin, and fusion standards. This ensemble may have several performances each semester. This group may have an annual tour. Lab required. Prerequisite: Audition. 1 credit hour. (A) Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

#### MUEN 1136 Harp Ensemble

Example of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Additionally, this is a study and performance of traditional and contemporary symphonic harp ensemble literature. Students participate in weekly rehearsals and perform on scheduled concerts. Basic instrumental proficiency is required. Lab required. Prerequisite: Audition. 1 credit hour. (A)

Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

#### MUEN 1137 Guitar Ensemble

Examples of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Additionally, a small group of guitarists performs traditional classical repertoire. Lab required. Prerequisite: Audition. 1 credit hour. (A)

Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

#### MUEN 1138 Percussion Ensemble

Examples of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Additionally, a small group of percussion players performs jazz and traditional repertoire. Lab required. Prerequisite: Audition. 1 credit hour. (A)

Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

#### MUEN 1139 String Ensemble

Examples of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Additionally, a small group of string players performs traditional classical repertoire. Lab required. Prerequisite: Audition. 1 credit hour. (A)

Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8

credit hours.

#### MUEN 1140 Jazz Combo

Examples of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Additionally, participation in a small jazz ensemble concentrating on jazz and commercial music performance styles. Ensemble consists of 4-9 instrumental / vocal members. Repertoire includes instrumental and vocal music typical of small jazz groups. A number of performances both on and off campus are given each semester. Lab required. Prerequisite: Audition or consent of Instructor. 1 credit hour. (A) Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

#### MUEN 1141 Collin Chorale

Any large chorale ensemble. Additionally, this mixed choral ensemble studies and performs a wide variety of music representing the choral literature. This ensemble may have several performances each semester. This group may have an annual tour and open to all interested students. Lab required. Prerequisite: Consent of Instructor. 1 credit hour. (A) Note: Student may take MUEN 1141 and MUEN 1142 for a combined total of no more than 8 credit hours.

#### MUEN 1142 Expressions Vocal Jazz Ensemble

Any large choral ensemble. Additionally, this group works on a wide variety of jazz styles throughout the year. They also work in conjunction with a jazz combo allowing them to experience solo jazz singing. This select ensemble of 10-16 singers has several performances each semester. This group may have an annual tour. Lab required. Prerequisite: Audition. 1 credit hour. (A)

Note: Student may take MUEN 1141 and MUEN 1142 for a combined total of no more than 8 credit hours.

#### MUEN 1151 A Capella Pop Group

Examples of small vocal ensembles may include but are not limited to glee club, madrigals, opera/musical theater, commercial and folk. Additionally, this is a study and performance of accompanied and a cappella vocal music including contemporary pop and jazz repertoire for various sized groups and voice combinations. There may be several performances on and off campus each semester. Lab required. Prerequisite: Audition. 1 credit hour. (A)

Note: Student may take MUEN 1151, MUEN 1152 and MUEN 1153 for a combined total of no more than 8 credit hours.

#### MUEN 1152 Opera Theatre Ensemble

Example of small vocal ensembles may include but are not limited to glee club, madrigals, opera/musical theater, commercial, and folk. Additionally, this is a study of opera through performances of scenes and full productions. Emphasis is placed on the musical and dramatic qualities of performance, preparation of character, and aspects of language diction from the selected production. Audition required. Lab required. Prerequisite: Audition. 1 credit hour. (A) Note: Student may take MUEN 1151, MUEN 1152 and MUEN 1153 for a combined total of no more than 8 credit hours.

#### MUEN 1153 Chamber Choir

Example of small vocal ensembles may include but are not limited to glee club, madrigals, opera/musical theater, commercial, and folk. Additionally, a select audition-only choir devoted to performance of an eclectic repertory of choral literature for mixed voices (S.A.T.B.). This course will focus on the development of vocal technique, performance practices, and will culminate with several performances throughout the year both on and off campus. This group may have an annual tour. Repertoire consists of advanced collegiate music. Lab required. Prerequisite: Consent of Instructor. 1 credit hour. (A)

Note: Student may take MUEN 1151, MUEN 1152 and MUEN 1153 for a combined total of no more than 8 credit hours.

#### MUSB 1305 Survey of the Music Business

An overview of the music industry including songwriting, live performance, the record industry, music merchandising, contracts and licenses, and career opportunities. 3 credit hours. (W)

#### MUSB 1341 Concert Promotion and Venue Management

Concert promotion and venue management. Includes considerations in purchasing a club, concert promotion and advertising, talent buying, city codes, insurance, Texas Alcoholic Beverage Commission Regulation, performance rights organization licenses, personnel management and concert production and administration. Lab required. Prerequisite: MUSB 1305. 3 credit hours. (W)

#### MUSB 2301 Music Marketing

Methods of music distribution, retailing, and wholesaling. Includes identifying a target market, image building, distribution (brick and mortar vs. digital delivery), pricing, advertising, and marketing mix. 3 credit hours. (W)

#### MUSB 2345 Live Music and Talent Management

An examination of the role, scope, and activities of the talent manager including establishing the artist/manager relationship; planning the artist's career; and developing goals, strategies, and tactics with an overall view of the live music business. Lab required. Prerequisite: MUSB 1305. 3 credit hours. (W)

#### MUSB 2350 Commercial Music Project

The primary objective of this course is to apply the skills learned in other Commercial Music courses. This is a hands-on project oriented course aimed at helping students create a portfolio of their work. Artists and their music will be the focus. Each student must design and complete his/her own project with instructor approval. Lab required. Prerequisite: Consent of Associate Dean. 3 credit hours. (W)

### MUSB 2355 Legal Aspects of the Entertainment Industry

Copyright law and the various agreements used in the entertainment industry. Emphasizes contracts used by music publishers, record companies, artist managers, record producers, film and television producers, and booking agencies. Prerequisite: MUSB 1305. 3 credit hours. (W)

### MUSB 2380 Cooperative Education-Music Management

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

#### MUSC 1209 Conducting Class

Introduction to the art of conducting including regular and irregular beat patterns, subdivision, and beat pattern varieties applied to musical literature and practical experiences. Lab required. 2 credit hours. (W)

#### MUSC 1313 Commercial Music Theory I

Introduction to chord progressions, song forms, and harmonic techniques used in commercial music. Topics include modern chord notation and chord voicings. Prerequisite: MUSI 1303. 3 credit hours. (W)

#### MUSC 1321 Songwriting I

Introduction to the techniques of writing marketable songs including the writing of lyrics and melodies, setting lyrics to music, developing lyrical and musical "hooks," analyzing the marketplace, and developing a production plan for a song demo. 3 credit hours. (W)

#### MUSC 1323 Audio Electronics

Basic concepts in electricity, Ohm's Law, circuit analysis and troubleshooting. Includes soldering techniques, and equipment maintenance. Lab required. 3 credit hours. (W)

#### MUSC 1327 Audio Engineering I

The tools, personnel and standard workflow of a recording studio. Topics include fundamentals of sound and overview of tracking, editing, and mixing audio. Lab required. 3 credit hours. (W)

#### MUSC 1331 MIDI I

Exploration of Musical Instrument Digital Interface (MIDI) systems and applications. Includes the MIDI language and applications in the studio environment using software-based sequencing programs. Lab required. 3 credit hours. (W)

#### MUSC 1333 Synthesis I

An exploration of sound synthesis. Includes additive, subtractive, and modulation-based synthesizers. Lab required. 3 credit hours. (W)

#### MUSC 1405 Live Sound I

An overview of the field of live sound. Includes principles of live sound and the theory and interconnection of the components of a sound reinforcement system. Lab required. Prerequisite: MUSC 1327. 4 credit hours. (W)

#### MUSC 2313 Commercial Music Theory II

Continuation of Commercial Music Theory I. Emphasizes harmonic and melodic analysis, extended chord theory, and modal and altered scales. Prerequisite: MUSC 1313 or consent of Instructor. 3 credit hours. (W)

#### MUSC 2314 Improvisation Theory I

Chordal structures of commercial music genres. Emphasizes extemporaneous performance. 3 credit hours. (W)

### MUSC 2330 Commercial Music Arranging and Composition

Presentation of techniques for arranging and composing projects in the commercial music industry. Lab required. 3 credit hours. (W)

#### MUSC 2345 Synthesis II

Advanced sound synthesis. Includes hybrid synthesis and digital sampling. Lab required. Prerequisite: MUSC 1333. 3 credit hours. (W)

#### MUSC 2351 Audio for Video

Advanced audio techniques for video production. Includes synchronization, automated mixdown, audio post production for video, and editing techniques. Lab required. Prerequisite: ARTV 1343 or MUSC 1327. 3 credit hours. (W)

#### MUSC 2355 MIDI II

Advanced MIDI concepts and techniques. Includes synchronizing MIDI and audio and advanced sequencer operation. Prerequisite: MUSC 1331 with a grade of "C" or better; or consent of Instructor. Lab required. 3 credit hours. (W)

#### MUSC 2356 Songwriting II

Continuation in the development of techniques for writing marketable songs including the writing of lyrics and melodies, setting lyrics to music, developing lyrical and musical "hooks," analyzing the marketplace, and developing a production plan for a song demo. Prerequisite: MUSC 1321, or consent of Instructor. 3 credit hours. (W)

#### MUSC 2403 Live Sound II

Overview of stage monitor systems. Includes monitor systems set-up and operation and stage management. Also covers interactivity between sound management, performance quality, and audience experience. Lab required. Prerequisite: MUSC 1405. 4 credit hours. (W)

#### MUSC 2427 Audio Engineering II

Implementation of the recording process, including microphones, audio console, multi-track recorder, and signal processing devices. Lab required. Prerequisite: MUSC 1327 with a grade of "B" or better; or consent of Instructor. 4 credit hours. (W)

#### MUSC 2447 Audio Engineering III

Advanced techniques in recording and manipulation of audio. Includes digital audio editing, recording techniques, and signal processing. Prerequisite: MUSC 2427 with a grade of "C" or better; or consent of Instructor. Lab required. 4 credit hours. (W)

#### MUSC 2448 Audio Engineering IV

Continued enhancement of recording, mixing, arranging, and editing. Includes the role of the producer in session planning, communication, budgeting, business aspects, technical considerations, and music markets. Prerequisite: MUSC 2447 with a grade of "C" or better; or consent of Instructor. Lab required. 4 credit hours. (W)

#### MUSC 2453 Live Sound III

Advanced concepts of live sound engineering for frontof-house mix. Includes techniques required to build and maintain a live sound mix for an audience. Lab required. Prerequisite: MUSC 2403. 4 credit hours. (W)

#### MUSI 1116 Sight Singing & Ear Training I

Singing tonal music in treble and bass clefs, and aural study of elements of music, such as scales, intervals and chords, and dictation of basic rhythm, melody and diatonic harmony. Lab required. Prerequisite: MUSI 1303. 1 credit hour. (A)

#### MUSI 1117 Sight Singing & Ear Training II

Singing tonal music in various clefs, continued aural study of the elements of music, and dictation of intermediate rhythm, melody and diatonic harmony. Lab required. Prerequisite: MUSI 1116. 1 credit hour. (A)

### MUSI 1161 International Phonetic Alphabet (IPA) for Singers

A study of the International Phonetic Alphabet (IPA) and its application to singing in English, Italian, German, and French. Prerequisite: MUSI 1303. 1 credit hour. (A)

#### MUSI 1181 Piano Class I

Beginning class instruction in the fundamentals of keyboard technique. Additionally, emphasis is given on the practical application of music theory involving harmonization, transposition and related keyboard skills. Lab required. Prerequisite: MUSI 1303. 1 credit hour. (A)

Note: Student may take MUSI 1181, MUSI 1182, MUSI 2181, and MUSI 2182 for a combined total of no more than 4 credit hours.

#### MUSI 1182 Piano Class II

Advanced beginning class instruction in the fundamentals of keyboard technique. Additionally, this is a continuation of MUSI 1181. Development of two-octave minor scales, arpeggios, diatonic chord progressions, and piano repertoire. Lab required. Prerequisite: MUSI 1181. 1 credit hour. (A) Note: Student may take MUSI 1181, MUSI 1182, MUSI 2181, and MUSI 2182 for a combined total of no more than 4 credit hours.

#### MUSI 1183 Voice Class

Class instruction in the fundamentals of singing including breathing, tone production, and diction. Designed for students with little or no previous voice training. Does not apply to a music major degree. Lab required. 1 credit hour. (A)

#### MUSI 1192 Guitar Class

Class instruction in the fundamental guitar playing, including technique, music-reading, fretboard theory, melodic and harmonic realizations. Lab required. 1 credit hour. (A)

#### MUSI 1303 Fundamentals of Music

Introduction to the basic elements of music theory, including scales, intervals, keys, triads, elementary ear training, notation, meter, and rhythm. Course does not apply to a music major degree. 3 credit hours. (A)

#### MUSI 1306 Music Appreciation

Understanding music through the study of cultural periods, major composers, and musical elements, illustrated with audio recordings and live performances. Course does not apply to a music major degree. Additionally, this course conducts an overview of music history that includes the study of Western art music – the six major eras, composers, their works and musical styles. Emphasis is given to vocabulary and critical listening skills needed to develop an eclectic taste in music. Music majors must take MUSI 1307. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

#### MUSI 1307 Music Literature

A survey of the styles and forms of music as it developed from the middle ages to the present. This course will familiarize the student with cultural context, terminology, genres, and notation. Additionally, study of selected works in music literature chosen from the

six major eras of Western art music history. Includes musical styles, forms, and composers from the Medieval period to the present. Critical listening skills and technical musical terms are emphasized in this course. Required for all music majors. Prerequisite: MUSI 1303. 3 credit hours. (A)

#### MUSI 1310 American Music

A general survey of various styles of music of the Americas, including but not limited to jazz, folk, rock, and contemporary music. 3 credit hours. (A)

#### MUSI 1311 Music Theory I

The study of analysis and writing of tonal melody and diatonic harmony, including fundamental music concepts, scaled, intervals, chords, 7th chords, and early four-part writing. Analysis of small compositional forms. Optional correlated study at the keyboard. Additionally, investigation of music modes, transposition, cadences and non-harmonic tones, phrase structure, musical textures, and four-part voice leading. Prerequisite: MUSI 1303 or consent of Instructor. 3 credit hours. (A)

#### MUSI 1312 Music Theory II

The study of analysis and writing of tonal melody and diatonic harmony, including diatonic chords and seventh chords in root position and inversions, non-chord tones, and functional harmony. Introduction to more complex topics, such as modulation, may occur. Optional correlated study at the keyboard. Prerequisite: MUSI 1311. 3 credit hours. (A)

#### MUSI 2116 Sight Singing & Ear Training III

Singing more difficult tonal music in various clefs, aural study including dictation of more complex rhythm, melody, chromatic harmony, and extended tertian structures. Lab required. Prerequisite: MUSI 1117. 1 credit hour. (A)

Note: Student may take MUSI 2116 and MUSI 2117 for a combined total of no more than 4 credit hours.

#### MUSI 2117 Sight Singing & Ear Training IV

Singing advanced tonal music and introduction of modal and post-tonal melodies. Aural study including dictation of advanced rhythm, melody, and harmony. Lab required. Prerequisite: MUSI 2116. 1 credit hour. (A)

Note: Student may take MUSI 2116 and MUSI 2117 for a combined total of no more than 4 credit hours.

### MUSI 2181 Class Piano III

Intermediate class instruction of keyboard technique. Additionally, this is a continuation of MUSI 1182. Development of three-octave scales and arpeggios, accompaniment patterns, intermediate and 20<sup>th</sup> century piano repertoire, advanced sight reading skills. Lab required. Prerequisite: MUSI 1182. 1 credit hour. (A) Note: Student may take MUSI 1181, MUSI 1182, MUSI 2181, and MUSI 2182 for a combined total of no more than 4 credit hours.

#### MUSI 2182 Class Piano IV

Advanced class instruction of keyboard technique. Additionally, this is a continuation of MUSI 2181. Culmination of skills including scales and arpeggios four-octaves hands together, advanced chord progressions, repertoire, and sight reading. Prepares music majors for piano barrier exams. Lab required. Prerequisite: MUSI 2181. 1 credit hour. (A) Note: Student may take MUSI 1181, MUSI 1182, MUSI 2181, and MUSI 2182 for a combined total of no more than 4 credit hours.

### MUSI 2311 Music Theory III

Advanced harmony voice leading, score analysis and writing of more advanced tonal harmony including chromaticism and extended-tertian structures. Optional correlated study at the keyboard. Additionally, study of music theory from late Renaissance polyphony through Baroque counterpoint and continuing with the chromatic harmonies of the Classic period as found within Sonata Allegro and Rondo formal structures. Prerequisite: MUSI 1312. 3 credit hours. (A)

### MUSI 2312 Music Theory IV

Continuation of advanced chromaticism and survey of analytical and compositional procedures in post-tonal music. Optional correlated study at the keyboard. Prerequisite: MUSI 2311. 3 credit hours. (A)

### MUSI 2389 Academic Cooperative

An instructional program designed to integrate oncampus study with practical hands-on work experience. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of music. Contact the Cooperative Work Experience Office. 3 credit hours. (A)

### MUSP 1104 Applied Commercial Music: Bass Guitar

Private instruction in the bass guitar, with goals related to commercial music. Consists of one 100-minute lesson per week. Students must remain enrolled in three or more credit hours of Music courses (MUSB,

MUSC, MUSI, and MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Prerequisite: Audition and consent of Instructor. 1 credit hour. (W)

### MUSP 1105 Applied Commercial Music: Commercial Guitar

Private instruction in commercial guitar, with goals related to commercial music. Consists of one 100-minute lesson per week. Students must remain enrolled in three or more credit hours of Music courses (MUSB, MUSC, MUSI, and MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Prerequisite: Audition and consent of Instructor. 1 credit hour. (W)

### MUSP 1110 Applied Commercial Music: Piano

Private instruction in piano, with goals related to commercial music. Consists of one 100-minute lesson per week. Students must remain enrolled in three or more credit hours of Music courses (MUSB, MUSC, MUSI, and MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Prerequisite: Audition and consent of Instructor. 1 credit hour. (W)

#### MUSP 1113 Introductory Group Piano I

Fundamentals of playing various accompaniment patterns with chords. Includes reading standard notation, basic scales, and learning introductory improvisational skills. Lab required. 1 credit hours. (W)

### MUSP 1114 Introductory Group Piano II

Continuation of playing various accompaniment patterns with chords. Includes reading standard notation, scales, and learning improvisational skills. Lab required. Prerequisite: MUSP 1113 or consent of Instructor. 1 credit hour. (W)

### MUSP 1117 Applied Commercial Music: Percussion

Private instruction in percussion, with goals related to commercial music. Consists of one 100-minute lesson per week. Students must remain enrolled in three or more credit hours of Music courses (MUSB, MUSC, MUSI, and MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of

the semester. Prerequisite: Audition and consent of Instructor. 1 credit hour. (W)

### MUSP 1127 Applied Commercial Music: Voice

Private instruction in voice, with goals related to commercial music. Consists of one 100-minute lesson per week. Students must remain enrolled in three or more credit hours of Music courses (MUSB, MUSC, MUSI, and MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Prerequisite: Audition and consent of Instructor. 1 credit hour. (W)

### MUSP 1151 Small Commercial Music Ensemble: Recording

Participation in a small recording ensemble concentrating on commercial music performance styles. Prerequisite: Audition and consent of Instructor. 1 credit hour. (W)

### MUSP 1153 Small Commercial Music Ensemble: Rock

Participation in a rock ensemble concentrating on commercial music performance styles. Prerequisite: Audition and consent of Instructor. 1 credit hour. (W)

### MUSP 1202 Introductory Group Voice

Introduction to Speech Level Singing philosophy and technique with goals related to commercial voice. Emphasizes sight singing and harmony singing applicable to commercial background singing. Prerequisite: Audition and consent of Instructor. 2 credit hours. (W)

### MUSP 2230 Advanced Applied Commercial Music: Voice

Advanced private instruction in voice, with goals related to commercial music. Consists of one 150-minute lesson per week. Students must remain enrolled in three or more credit hours of music courses (MUSB, MUSC, MUSI, and MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite: Audition and consent of Instructor. 2 credit hours. (W)

### MUSP 2233 Advanced Applied Commercial Music: Bass Guitar

Advanced private instruction in bass guitar, with goals related to commercial music. Consists of one 150-minute lesson per week. Students must remain

enrolled in three or more credit hours of music courses (MUSB, MUSC, MUSI, and MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite: Audition and consent of Instructor. 2 credit hours. (W)

### MUSP 2235 Advanced Applied Commercial Music: Piano

Advanced private instruction in piano, with goals related to commercial music. Consists of one 150-minute lesson per week. Students must remain enrolled in three or more credit hours of music courses (MUSB, MUSC, MUSI, and MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite: Audition and consent of Instructor. 2 credit hours. (W)

### MUSP 2237 Advanced Applied Commercial Music: Commercial Guitar

Advanced private instruction in commercial guitar, with goals related to commercial music. Consists of one 150-minute lesson per week. Students must remain enrolled in three or more credit hours of music courses (MUSB, MUSC, MUSI, and MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite: Audition and consent of Instructor. 2 credit hours. (W)

### MUSP 2249 Advanced Applied Commercial Music: Percussion

Advanced private instruction in percussion, with goals related to commercial music. Consists of one 150-minute lesson per week. Students must remain enrolled in three or more credit hours of music courses (MUSB, MUSC, MUSI, and MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite: Audition and consent of Instructor. 2 credit hours. (W)

### NURA 1160 Clinical-Nursing Aide and Patient Care Assistant

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: NURA 1301 or consent of Program Director. 1 credit hour. (W)

#### NURA 1301 Nurse Aide for Health Care

Knowledge, skills, and abilities essential to provide basic care to residents of long-term care facilities. Topics include resident's rights, communication, safety, observation, reporting and assisting residents in maintaining basic comfort and safety. Emphasis is on effective interaction with members of the health care team, restorative services, mental health, and social service's needs. Prerequisites: HITT 1305, and HPRS 1204 or HPRS 1271; or consent of Program Director. Lab required. 3 credit hours. (W)

### PHED 1100 Beginning Weight Training

Introduction to weight training and body building; learn the basic techniques for strength development and cardiovascular conditioning. Various weight machines, free weights and aerobic machines are used to establish an individual fitness program. 1 credit hour. (A) Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

### PHED 1102 Intermediate Weight Training

Designed for the individual who has experience in basic weight training skills and wants to increase their knowledge of training techniques and conditioning. 1 credit hour. (A) Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

### PHED 1104 Beginning Jogging and Fitness

Develops cardiovascular endurance, flexibility and strength through jogging, stretching and weight training. Physical fitness assessment leads to development of an individual fitness program. 1 credit hour. (A) Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

### PHED 1106 Walking and Fitness

Improve cardiovascular fitness, muscle tone, and flexibility through a vigorous walking and conditioning

program. 1 credit hour. (A) Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

#### PHED 1111 Basketball

Develops basic skills and strategies through knowledge of the history, rules, and terminology and through participation in game situations. 1 credit hour. (A) Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

#### PHED 1112 Soccer

Develops the basic skills and strategies through knowledge of the history, rules and terminology and through participation in game situations. 1 credit hour. (A) Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

### PHED 1114 Volleyball

Individual skills and techniques, application of rules and an introduction to offensive and defensive strategies are stressed. 1 credit hour. (A) Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

#### PHED 1115 Archery

Investigates the basic techniques, rules and scoring as well as the history and terminology of archery. 1 credit hour. (A) Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

#### PHED 1116 Badminton

History, rules, basic strokes and strategies in singles and doubles play are emphasized through intra-class competition. 1 credit hour. (A) Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

### PHED 1117 Beginning Tennis

Stresses rules, scoring and fundamental techniques for beginners. Participation by skill level for singles and doubles play is made to ensure vigorous activity for cardiovascular fitness. 1 credit hour. (A) Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

#### PHED 1118 Intermediate Tennis

Develops and improves each skill level in serving, forehand and backhand drives, lobs and volleys. Performance strategies for both singles and doubles are drilled. 1 credit hour. (A) Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

### PHED 1119 Intermediate Archery

Investigates intermediate level techniques for refinement of basic archery shooting skills and participation in competitive target shooting. The class is designed to help students learn more advanced techniques in the sport of archery through hands-on application of using the bow and arrow through lecture, demonstration, and practice of archery skills. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

### PHED 1120 Beginning Racquetball

Instruction in rules and basic skills; develops the fundamental techniques of court play for beginners. Participation by skill level assures vigorous activity for cardiovascular fitness. 1 credit hour. (A) Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

### PHED 1121 Intermediate Racquetball

Drills in serving, forehand and backhand drives, kill shots, Z shots and lobs help develop strategies for singles and doubles play. 1 credit hour. (A) Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

### PHED 1123 Beginning Golf

Stresses basic skills, history, terminology and scoring of golf. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

### PHED 1125 Bowling

Teaches ball selection, stance, four-step approach, rules, and scoring procedures. Emphasis on game situations. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

#### PHED 1126 Self-Defense

Basic understanding and practical application of fundamental self-defense techniques through physical conditioning. Includes balance, focus, breath control, block and counter, avoiding attack, striking, thrusting and kicking. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

### PHED 1127 Beginning Karate

Introduction to basic techniques, formal exercises, and sparring techniques for the beginner. 1 credit hour. (A) Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

### PHED 1129 Introduction to Hatha Yoga

Practice of yogic postures, or "asana," defined as the physical positioning that coordinates breathing with moving and holding still for the purpose of both stretching and strengthening parts of the body. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

### PHED 1130 Intermediate Hatha Yoga

The refinement of the asanas (postures) covered in PHED 1129, with emphasis on breath work. Introduces more advanced asanas; emphasis on integrating yoga into daily routines at home and work. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

### PHED 1131 Beginning Swimming

Non-swimmers and beginners are taught basic swimming skills and strokes. Emphasizes personal safety skills and confidence in the water. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

#### PHED 1136 Water Aerobics

Fitness level is improved through exercises in the water. A non-impact style of exercises that utilizes water resistance for increasing muscular strength, endurance, and cardiovascular fitness. Swimming skills are not necessary. 1 credit hour. (A) Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

#### PHED 1137 Swimming Conditioning

Fitness level is improved through swimming strokes and water exercises. Different swimming programs enhance muscular strength, endurance and cardiovascular fitness. Prerequisite: Consent of Instructor. 1 credit hour. (A) Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

### PHED 1140 Beginning Aerobic Dance

Aerobic exercise and step training incorporating light weights. Includes interval training, which adds a new variation to aerobic endurance and flexibility. 1 credit hour. (A) Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

### PHED 1142 Varsity Condition I

Presentation of current scientific and technical information related to a particular activity with emphasis on developing health and skill related fitness, as well as fundamental skills. 1 credit hour. (A)

#### PHED 1144 Varsity Sports I

This course offers development of skills and personal potential for student athletes interested in improving their performance or preparing for further competition at the upper collegiate level. 1 credit hour. (A)

### PHED 1147 Beginning Aerobic Kickboxing/Karate

Cardiovascular and body conditioning are acquired through the use of karate and martial arts techniques set to music and integrating punching bags. 1 credit hour. (A) Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

#### PHED 1148 Introduction to Team Sports

Develops the basic skills and strategies through the knowledge of the history, rules, and terminology. Students will participate in game situations. Three of the following activities will be elected for instruction: Basketball, Flag Football, Soccer, Softball, or Volleyball. 1 credit hour. (A) Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

### PHED 1164 Introduction to Physical Fitness and Wellness

This course will provide an overview of the lifestyle necessary for fitness and health. Student will participate in physical activities and assess their fitness status. Students will be introduced to proper nutrition, weight management, cardiovascular health, flexibility, and strength training. Additionally, this course introduces basic concepts of fitness, nutrition, health promotion, and disease prevention. Includes the study and practices of activities and principles that promote fitness and wellness. 1 credit hour. (A)

### PHED 1301 Foundations of Kinesiology

The purpose of this course is to provide students with an introduction to human movement that includes the historical development of physical education, exercise science, and sport. This course offers the student both an introduction to the knowledge base, as well as, information on expanding career opportunities. 3 credit hours (A)

### PHED 1304 Personal / Community Health

This course provides an introduction to the fundamentals, concepts, strategies, applications, and contemporary trends related to understanding personal and/or community health issues. This course also focuses on empowering various populations with the ability to practice healthy living, promote healthy lifestyles, and enhance individual well-being. 3 credit hours (A)

#### PHED 1306 First Aid

Instruction and practice for emergency care. Designed to enable students to recognize and avoid hazards within their environment, to render intelligent assistance in case of accident or sudden illness, and to develop skills necessary for the immediate and temporary care of the victim. Successful completion of the course may enable the student to receive a certificate from a nationally recognized agency, the American Heart Association. 3 credit hours. (A)

### PHED 1336 Introduction to Sports Management

The course will introduce basic principles of administration, marketing, management, and operations in relation to the various careers in sports management. An overview of the sports industry will be introduced. 3 credit hours. (A)

### PHED 1338 Concepts of Physical Fitness

This course is designed to familiarize students with knowledge, understanding and values of health related fitness and its influence on the quality of life emphasizing the development and implementation of fitness programs. Lab required. 3 credit hours. (A)

### PHED 2142 Varsity Condition II

Presentation of current scientific and technical information related to a particular activity with emphasis on developing advanced health and skill related fitness, as well as fundamental skills. Prerequisite: PHED 1142. 1 credit hour. (A)

#### PHED 2144 Varsity Sports II

This course offers advanced development of skills and personal potential for student athletes interested in improving their performance or preparing for further competition at the upper collegiate level. Prerequisite: PHED 1144. 1 credit hour. (A)

### PHED 2356 Care and Prevention of Athletic Injuries

Prevention and care of athletic injuries with emphasis on qualities of a good athletic trainer, avoiding accidents and injuries, recognizing signs and symptoms of specific sports injuries and conditions, intermediate and long-term care of injuries, and administration procedures in athletic training. 3 credit hours. (A)

### PHIL 1301 Introduction to Philosophy

A study of major issues in philosophy and/or the work of major philosophical figures in philosophy. Topics in philosophy may include theories of reality, theories of knowledge, theories of value, and their practical

applications. Additionally, texts studied will be from ancient, medieval, and modern sources. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### PHIL 1304 Introduction to World Religions

A comparative study of world religions, including but not limited to Hinduism, Buddhism, Judaism, Christianity, and Islam. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### PHIL 2303 Introduction to Formal Logic

The purpose of the course is to introduce the student to symbolic logic, including syllogisms, propositional and predicate logic, and logical proofs in a system of rules. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### PHIL 2306 Introduction to Ethics

The systematic evaluation of classical and/or contemporary ethical theories concerning the good life, human conduct in society, morals, and standards of value. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### PHIL 2307 Introduction to Social and Political Philosophy

A study of major issues in social and political theory and/or the work of major philosophical figures in this area. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### PHIL 2321 Philosophy of Religion

A study of the major issues in the philosophy of religion such as the existence and nature of God, the relationships between faith and reason, the nature of religious language, religious experience, and the problem of evil. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### PHTC 1300 Digital Photography II

An introduction to computer and software instruction for imaging. Includes color, gray scale, image conversion, presentation, and ethics. Lab required. Prerequisite: ARTS 2348. 3 credit hours. (W)

### PHTC 1311 Fundamentals of Photography/Digital

An introduction to camera operation and image production, composition, correct exposure and proper lighting. Lab required. 3 credit hours. (W)

### PHTC 1341 Color Photography I

Examination of color theory as it applies to photography. Emphasis on color concepts and the intricacies of seeing and photographing in color. Lab required. Prerequisite: PHTC 1300 or ARTS 2349. 3 credit hours. (W)

### PHTC 1343 Expressive Photography

A study of formal, professional, and individual uses of photography by applying photographic technology to personalized needs. Emphasis on creative visual thinking and problem solving and the exploration of personal vision. Lab required. 3 credit hours. (W)

### PHTC 1345 Illustrative Photography I

Instruction in the technical aspects involved in commercial photography. Topics include lighting equipment, techniques of production photography, reproduction principles, illustrative techniques, and advertising. Lab required. Prerequisite: PHTC 1353. 3 credit hours. (W)

### PHTC 1347 Landscape Photography

Skill development in the inspection of the landscape visually and photographically utilizing various camera formats. Topics include exploration of historic, geographical, and cultural locations, and review of landscape photographers. Lab required. Prerequisite: ARTS 2348 or ARTS 2356 or PHTC 1311. 3 credit hours. (W)

### PHTC 1351 Photojournalism I

Presentation of photographic techniques used by photojournalists in newspapers, magazines, trade publications and digital media to include news, feature, sports, editorial portraits, and photo essays. Includes a study of layout design and the freelance market. Lab required. Prerequisite: ARTS 2348 or ARTS 2356 or PHTC 1311. 3 credit hours. (W)

### PHTC 1353 Portraiture I

Skill development in the photographic principles of portrait lighting, posing, and subject rapport. This is a foundation course in photographic portraiture. Assignments are designed to provide both aesthetic challenges as well as comprehensive studio technique. All students must participate in class demos and stick close to prescribed procedures on assignments in order

to maintain studio privileges. There will be a mixture of color and black and white materials used, with accent on studio time rather than darkroom or computer time. Lab required. Prerequisite: ARTS 2348 or ARTS 2356 or PHTC 1311. 3 credit hours. (W)

### PHTC 1371 Book, Design, and Presentation

Structure and creation of promotional material and one-of-a-kind material, with emphasis on composition and design elements. Lab required. 3 credit hours. (W) PHTC 2331 Architectural Photography Study of the equipment, processes, and procedures necessary for the photography of building exteriors and interiors, dusk/night and night architectural landscapes, and construction progress. Lab required. Prerequisite: ARTS 2348 or ARTS 2356 or PHTC 1311. 3 credit hours. (W)

### PHTC 2340 Photographic Studio Management

In-depth study of photography business management, pricing, market analysis, promotion, networking, job acquisition, and photographic equipment analysis. Lab required. 3 credit hours. (W)

### PHTC 2342 Fashion Photography

Skill development in fashion photography in terms of trends and techniques included in studio and location work. Emphasizes model direction and lighting control. Lab required. Prerequisite: PHTC 1353. 3 credit hours. (W)

#### PHTC 2343 Portfolio Development

A culmination experience for the evaluation of the student's photographic competencies. Includes association with a professional photographic organization, completion of portfolio, professional self-presentation, comprehensive exam, and seminars in areas of photographic interest. Prerequisite: Consent of Associate Dean. Lab required. 3 credit hours. (W)

### PHTC 2349 Digital Photography III

Advanced concepts in the use of the computer and software for photographic manipulation and output. Lab required. Prerequisite: PHTC 1300 or ARTS 2349. 3 credit hours. (W)

### PHTC 2353 Portraiture II

Advanced concepts in the study of principles of effective portraiture with specific emphasis on unique presentation and environmental and location studies. Lab required. Prerequisite: PHTC 1353. 3 credit hours. (W)

### PHTC 2371 Video Production for Photographers

This is a foundation course in professional video production for photographers, including video capture, editing, sound recording, color grading, and delivery. Lab required. Prerequisite: ARTS 2348. 3 credit hours. (W)

### PHTC 2380 Cooperative Education - Commercial Photography

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisite: Consent of Associate Dean. 3 credit hours. (W)

### PHYS 1401 College Physics I

Lecture: Fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; with emphasis on problem solving. Lab: Laboratory activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; emphasis will be on problem solving. Lab required. Prerequisites: MATH 1314, and either MATH 1316 or MATH 2412. 4 credit hours. (A)

### PHYS 1402 College Physics II

Lecture: Fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving. Lab: Laboratory activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving. Lab required. Prerequisite: PHYS 1401. 4 credit hours. (A)

#### PHYS 1403 Stars and Galaxies

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Introduction to stars and galaxies; basic tools and concepts in astronomy and physics are discussed.

Subjects studied include stellar evolution, supernovae, black holes, neutron stars, galaxies, and quasars. Laboratory exercises, night observations, planetarium and observatory visits combine to enhance lecture material. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading; or equivalent. 4 credit hours. (A)

#### PHYS 1404 Solar System

Introduction to the solar system; basic tools and concepts in astronomy and physics are discussed. Subjects studied include planets, moons, asteroids, comets, solar system formation, and solar system exploration. Laboratory exercises, night observations, planetarium and observatory visits combine to enhance lecture material. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading; or equivalent. 4 credit hours. (A)

### PHYS 1405 Conceptual Physics

This course presents concepts of classical and modern physics with application to biology and health sciences. What students should bring to this course is curiosity about how the world works. Intended for liberal arts, health science, or any majors. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading; or equivalent. 4 credit hours. (A)

### PHYS 1410 Physics of Music and Sound

This course is a study of the physics governing production, transmission and perception of sound. The focus is on the physical characteristics of sound, as well as the basic physical relationships that govern all vibrations and waves. We will also consider how sound is affected by the environment (acoustics) and how sound is physically and physiologically perceived. Laboratory exercises and classroom demonstrations combine to enhance lecture material. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading; or equivalent. 4 credit hours. (A)

### PHYS 1415 Physical Science I

Investigation of everyday phenomena of the physical world, which helps students to achieve a well-grounded understanding of selected science concepts as well as the skills that enable and encourage rational independent thinking. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI collegereadiness standard for Reading; or equivalent. 4 credit hours. (A)

### PHYS 1417 Physical Science II

Investigation of topics in physics, chemistry, geology, and meteorology in the context of a one-semester astronomy course. Topics will include: Celestial measurement of time, calendars, and seasons; geology and meteorology of the Earth, Moon, and planets; Chemistry and physics of stars and galaxies; and the interdisciplinary question of life beyond Earth. Laboratory exercises and night observations combine to enhance lecture material. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading; or equivalent. 4 credit hours. (A)

### PHYS 2389 Academic Co-op Physics

Integrates on-campus study with practical hands-on work experience in physics. In conjunction with class seminars, the student will set specific goals and objectives in the study of physics. Contact the Cooperative Work Experience Office. 3 credit hours. (A)

### PHYS 2425 University Physics I

Lecture: Fundamental principles of physics, using calculus for science, computer science, and engineering majors; the principles and applications of classical and modern mechanics, including harmonic motion and physical systems, and the laws of thermodynamics; and emphasis on problem solving. Lab: Basic laboratory experiments supporting theoretical principles presented in the lecture section involving the principles and applications of classical mechanics, including harmonic motion and physical systems; experimental design, data collection and analysis, and preparation of laboratory reports. Lab required. Prerequisite: MATH 2413 equivalent within the last five years with a grade of "C" or better. Prerequisite/Concurrent enrollment: MATH 2414 equivalent. 4 credit hours. (A)

### PHYS 2426 University Physics II

Lecture: Principles of physics for science, computer science, and engineering majors, using calculus, involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics, and modern physics. Lab: Laboratory experiments supporting theoretical principles presented in the lecture section involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics; experimental design, data collection and analysis, and preparation of laboratory reports. Lab required. Prerequisites: MATH 2414 equivalent, and PHYS 2425 within the last five years with a grade of "C" or better. 4 credit hours. (A)

### PLAB 1160 Clinical - Phlebotomy

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills. Direct supervision is provided by the clinical professional. Prerequisite: Current Healthcare Provider Cardiopulmonary Resuscitation (CPR) Certification from American Heart Association (AHA); or consent of Program Director. Corequisite: PLAB 1323, or consent of Program Director. 1 credit hours. (W)

#### PLAB 1323 Phlebotomy

Skill development in the performance of a variety of blood collection methods using proper techniques and standard precautions. Includes vacuum collection devices, syringes, capillary skin puncture, butterfly needles and blood culture, and specimen collection on adults, children, and infants. Emphasis on infection prevention, patient identification, specimen labeling, quality assurance, specimen handling, processing, accessioning, professionalism, ethics, and medical terminology. Lab required. Prerequisites: HTTT 1305, and HPRS 1204 or HPRS 1271, and Current Healthcare Provider Cardiopulmonary Resuscitation (CPR) Certification from American Heart Association (AHA); or consent of Program Director. 3 credit hours. (W)

### POFI 2301 Word Processing-MS Word

Word processing software focusing on business applications. Prerequisite/Concurrent Enrollment: POFT 1329. 3 credit hours. (W)

### POFI 2331 Desktop Publishing for the Office-MS Office

In-depth coverage of desktop publishing terminology, text editing, and use of design principles. Emphasis on layout techniques, graphics, multiple page displays, and business applications. Prerequisite: POFI 2301. 3 credit hours. (W)

### POFT 1127 Introduction to Keyboarding

Skill development in keyboarding techniques. Emphasis on the development of acceptable speed and accuracy. This course is for non-majors. 1 credit hour. (W)

### POFT 1307 Proofreading and Editing

Instruction in proofreading and editing skills necessary to assure accuracy in business documents. Lab required. 3 credit hours. (W)

### POFT 1319 Records and Information Management I

Introduction to basic records information management systems including manual and electronic filing. Lab required. 3 credit hours. (W)

### POFT 1329 Beginning Keyboarding

Skill development of keyboarding techniques. Emphasis on development of acceptable speed and accuracy levels and formatting basic documents. 3 credit hours. (W)

### POFT 1349 Administrative Office Procedures II

In-depth coverage of office procedures with emphasis on decision making, goal setting, management theories, and critical thinking. To be completed during the last semester of the Office Systems Technology degree or certificate. Prerequisites: ITSC 1309, POFI 2301, POFT 1307, POFT 1319 and POFT 2301. 3 credit hours. (W)

### POFT 1380 Cooperative Education-Administrative Assistant and Secretarial Science, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. Prerequisite: Consent of Associate Dean. 3 credit hours. (W)

### POFT 2301 Intermediate Keyboarding

A continuation of keyboarding skills emphasizing acceptable speed and accuracy levels and formatting documents. Prerequisite: POFT 1329. 3 credit hours. (W)

### POFT 2303 Speed and Accuracy Building

Review, correct, and improve keyboarding techniques for the purpose of increasing speed and improving accuracy. Lab required. Prerequisite: POFT 1329. 3 credit hours. (W)

### POFT 2312 Business Correspondence and Communication

Development of writing and presentation skills to produce effective business communications. Lab required. Prerequisite: POFT 1329. 3 credit hours. (W)

### POFT 2380 Cooperative Education-Administrative Assistant and Secretarial Science, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. Prerequisite: Consent of Associate Dean. 3 credit hours. (W) **PSGT** 1205 Neurophysiology of Sleep Review of the human central nervous system as related to sleep. Emphasis on associated wave patterns and collection and utilization of sleep histories. Major Requirement: AAS - Polysomnographic Technology. 2 credit hours. (W)

### PSGT 1215 Introduction to Polysomnography

Introduction to the history of sleep medicine and the role of the technologist in current practice settings. Lab required. Major Requirement: AAS - Polysomnographic Technology. 2 credit hours. (W)

### PSGT 1260 Certificate Clinical I-Polysomnography

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Admitted to the Certificate -Polysomnographic Technology Program. Corequisite: PSGT 1400. Major Requirement: Certificate - Polysomnographic Technology. 2 credit hours. (W)

#### PSGT 1310 Neuroanatomy and Physiology

Basic neuroanatomy and physiology. Includes neurologic history, neurologic exam, and diagnostic tools applied to the study of various neurologic disorders. Lab required. Major Requirement: AAS -Polysomnographic Technology. 3 credit hours. (W)

### PSGT 1340 Sleep Disorders

Disorders that affect sleep. Includes insomnia, circadian rhythm disorders, narcolepsy, sleep disordered breathing, REM Behavior, movement and neuromuscular disorders, medical, and psychiatric. Prerequisite: PSGT 1310. Major Requirement: AAS or Certificate - Polysomnographic Technology. 3 credit hours. (W)

### PSGT 1360 AAS Clinical I-Polysomnography

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: PSGT 1400. Major Requirement: AAS-Polysomnographic Technology. 3 credit hours. (W)

### PSGT 1400 Polysomnography I

Introduction to polysomnographic technology. Includes terminology, instrumentation, patient safety, infection control, recording and monitoring techniques, documentation, professional issues, and patient-technologist interactions. Lab required. Major Requirement: AAS or Certificate - Polysomnographic Technology. 4 credit hours. (W)

### PSGT 1573 Polysomnographic Anatomy and Physiology

Basic anatomy and physiology of the neurological, cardiovascular, and pulmonary systems in relation to the field of polysomnography. Major requirement: Certificate - Polysomnographic Technology. 5 credit hours. (W)

### PSGT 2205 Sleep Scoring and Staging

Development of skills for sleep scoring, staging, and record preparation. Lab required. Prerequisite: PSGT 1400. Major Requirement: AAS or Certificate - Polysomnographic Technology. 2 credit hours. (W)

### PSGT 2250 Infant and Pediatric Polysomnography

Sleep physiology and the normal sleep patterns of the infant and pediatric population. Includes opportunities to perform a pediatric study. Lab required. Prerequisite: PSGT 1400. Major Requirement: AAS or Certificate - Polysomnographic Technology. 2 credit hours. (W)

### PSGT 2260 Certificate Clinical II -Polysomnography

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: PSGT 1260. Major Requirement: Certificate - Polysomnographic Technology. 2 credit hours. (W)

### PSGT 2271 Pharmacology for Polysomnography

Discusses the basic principles of pharmacology and the clinical and pharmacological treatment of sleep disorders. Addresses the use of sleep medication in children, adolescents, and the elderly. Examines the administration, mode of action, and the physiological effects of pharmacological agents on sleep. Prerequisite: PSGT 1205. Major Requirement: AAS - Polysomnographic Technology. 2 credit hours. (W)

### PSGT 2272 Polysomnography Exam Preparation

Comprehensive review to optimize polysomnography credentialing exam success. Lab required. Prerequisite: Consent of Program Coordinator. Major Requirement: AAS or Certificate - Polysomnographic Technology. 2 credit hours. (W)

### PSGT 2360 AAS Clinical II -Polysomnography

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: PSGT 1360. Major Requirement: AAS Polysomnographic Technology. 3 credit hours. (W)

### PSGT 2361 AAS Clinical III -

Polysomnography

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: PSGT 2360. Major Requirement: AAS Polysomnographic Technology. 3 credit hours. (W)

### PSGT 2411 Polysomnography II

Current practices in polysomnography. Includes the use of specialized equipment used to record and monitor various physiological parameters involved with sleep testing. Emphasizes sleep disorders, theory of testing and treatment procedures, and analysis of polysomnography data. Lab required. Prerequisite: PSGT 1400. Major Requirement: AAS or Certificate - Polysomnographic Technology. 4 credit hours. (W)

### PSTR 1301 Fundamentals of Baking

Fundamentals of baking including dough, quick breads, pies, cakes, cookies, and tarts. Instruction in flours, fillings, and ingredients. Topics include baking terminology, tool and equipment use, formula conversions, functions of ingredients, and the evaluation of baked products. Professional chef

uniform and kitchen tools required. Lab required. Prerequisite: Mandatory Culinary / Pastry Arts Orientation. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

### PSTR 1305 Breads and Rolls

Concentration on fundamentals of chemically and yeast raised breads and rolls. Instruction on commercial preparation of a wide variety of products. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: CHEF 1305 with a grade of "C" or better and PSTR 1301 with a grade of "C" or better. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

### PSTR 1306 Cake Decorating I

Introduction to skills, concepts and techniques of cake decorating. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: CHEF 1305 with a grade of "C" or better and PSTR 1301 with a grade of "C" or better. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

### PSTR 1310 Pies, Tarts, Teacakes, and Cookies

Focus on preparation of American and European style pie and tart fillings and dough, cookies, teacakes, custard and batters. Instruction of finishing and presentation techniques. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: CHEF 1305 with a grade of "C" or better and PSTR 1301 with a grade of "C" or better. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

### PSTR 1312 Laminated Dough, Pate a Choux, and Donuts

Focus on preparation of laminated dough to include puff pastry, croissant, Danish and a variety of pate a choux products and donuts. Fillings and finishing techniques included. Professional chef uniform and kitchen tools required. Lab required. Prerequisite: PSTR 1310. 3 credit hours. (W) Note: Culinary lab

classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

#### PSTR 1340 Plated Desserts

Preparation and service of hot and cold desserts with a focus on individual desserts, a la minute preparations, and numerous components within one preparation. Emphasis on station organization, timing, and service coordination for restaurant dessert production. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: CHEF 1305 with a grade of "C" or better and PSTR 1301 with a grade of "C" or better. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

### PSTR 1342 Quantity Bakeshop Production

Advanced baking techniques to include volume production of a variety of breads and desserts. Lab required. Prerequisite: PSTR 1343. 3 credit hours. (W)

### PSTR 1343 Bakery Operations and Management

Introduction to management, marketing, supervision, and sanitation principles required in retail bakery operations. Emphasis on cost control, pricing, computer usage, and personnel issues. Lab required. Prerequisite: PSTR 1310. 3 credit hours. (W)

PSTR 2301 Chocolates and Confections
Production and decoration of traditional truffles,
marzipan, molded and hand-dipped chocolate,
caramels, nougats, and pate de fruit. Professional chef
uniform and kitchen tools required. Lab required.
Prerequisites: CHEF 1305 with a grade of "C" or
better and PSTR 1301 with a grade of "C" or better. 3
credit hours. (W) Note: Culinary lab classes require
extended periods of time standing in place, lifting heavy
weights (up to 60 pounds), reaching, bending, and
working around open flames and with cleaning
chemicals.

### PSTR 2307 Cake Decorating II

A course in decoration of specialized and seasonal products. Professional chef uniform and kitchen tools required. Lab required. Prerequisite: PSTR 1306 with a grade of "C" or better. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

### PSTR 2331 Advanced Pastry Shop

A study of classical desserts, French and international pastries, hot and cold desserts, ice creams and ices, chocolate work, and decorations. Emphasis on advanced techniques. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: PSTR 1305, PSTR 1306, PSTR 1310, PSTR 2301 and PSTR 2307. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

### PSTR 2380 Cooperative Education-Baking and Pastry Arts/Baker/Pastry Chef

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisites: CHEF 1305 with a grade of "C" or better, PSTR 1301 with a grade of "C" or better, and completion of 9 credit hours in the major core of PSTR. 3 credit hours. (W)

### PSYC 1100 Learning Framework

A study of the 1) research and theory in the psychology of learning, cognition, and motivation, 2) factors that impact learning, and 3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. Lab required. 1 credit hour. (A) Note: Students may only take one of the following: EDUC 1200, EDUC 1300, PSYC 1100 or PSYC 1300.

### PSYC 1300 Learning Framework

A study of the 1) research and theory in the psychology of learning, cognition, and motivation, 2) factors that impact learning, and 3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g.

learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. 3 credit hours. (A) Note: Students may only take one of the following: EDUC 1200, EDUC 1300, PSYC 1100 or PSYC 1300.

### PSYC 2301 General Psychology

General Psychology is a survey of the major psychological topics, theories and approaches to the scientific study of behavior and mental processes. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### PSYC 2306 Human Sexuality

This course will provide an overview of the broad field of human sexuality. Topics will be covered from various perspectives - biological, sociological, anthropological, etc., but will focus primarily on the psychological perspective. The goal is for each student to learn factual, scientifically-based information that will provoke thought and contribute to his/her own decision-making on sexual issues outside of the classroom. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A) Note: Students may take either PSYC 2306 or SOCI 2306 but not both.

### PSYC 2314 Life-Span Growth and Development

Life-Span Growth and Development is a study of social, emotional, cognitive and physical factors and influences of a developing human from conception to death. Prerequisites: PSYC 2301, and meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### PSYC 2315 Psychology of Adjustment

Gives students' deeper insight into their lives and those around them. Includes enhancing self-awareness, stress coping, healthy relationships and dealing with loss. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### PSYC 2316 Psychology of Personality

In-depth study of theories of personality with practical application of each. Methods of personality measurement and assessment are also included. Prerequisites: PSYC 2301, and meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### PSYC 2319 Social Psychology

Research and theory regarding social factors that influence human behavior. Focuses on attitudes, interpersonal attraction, aggression, conformity, communication, values, roles and group processes. These principles will be applied to the human experience. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours (A)

### PSYC 2389 Academic Co-op Psychology

Integrates on-campus study with practical hands-on work experience in psychology. In conjunction with class seminars, the student will set specific goals and objectives in the study of psychology. Contact the Cooperative Work Experience Office. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### RBTC 1405 Robotic Fundamentals

Formerly RBTC 1305

An introduction to flexible automation. Topics include installation, repair, maintenance, and development of flexible robotic manufacturing systems. 4 credit hours. (W)

### RBTC 2345 Robot Application, Set-up, and Testing

A course that provides the student with laboratory experience in the installation, set-up, and testing of robotic cells. Topics include maintenance. Prerequisite: RBTC 1305. Lab required. 3 credit hours. (W)

### RELE 1300 Contract Forms and Addenda

Promulgated Contract Forms, which shall include, but is not limited to, unauthorized practice of law, broker-lawyer committee, current promulgated forms, commission rules governing use of forms and case studies involving use of forms. Prerequisite: RELE 1311. 3 credit hours. (W)

### RELE 1301 Principles of Real Estate I

A beginning overview of licensing as a real estate broker or salesperson. Includes ethics of practice as a license holder, titles to and conveyance of real estate, legal descriptions, deeds, encumbrances and liens, distinctions between personal and real property, appraisal, finance and regulations, closing procedures, and real estate mathematics. Covers at least three hours of classroom instruction on federal, state, and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment. Fulfills at least 30 of 60 hours of required instruction for salesperson license. 3 credit hours. (W)

#### RELE 1303 Real Estate Appraisal

The central purposes and functions of an appraisal, social and economic determinants of value, appraisal case studies, cost, market data and income approaches to value estimates, final correlations, and reporting. 3 credit hours. (W)

#### RELE 1307 Real Estate Investments

Characteristics of real estate investments. Includes techniques of investment analysis, time-valued money, discounted and nondiscounted investment criteria, leverage, tax shelters, depreciation, and applications to property tax. 3 credit hours. (W)

### RELE 1311 Law of Contracts

Elements of a contract, offer and acceptance, statute of frauds, specific performance and remedies for breach, unauthorized practice of law, commission rules relating to use of adopted forms and owner disclosure requirements. 3 credit hours. (W)

### RELE 1315 Property Management

The role of the property manager, landlord policies, operational guidelines, leases, lease negotiations, tenant relations, maintenance, reports, habitability laws, and the Fair Housing Act. 3 credit hours. (W)

#### RELE 1319 Real Estate Finance

Monetary systems, primary and secondary money markets, sources of mortgage loans, federal government programs, loan applications, processes and procedures, closing costs, alternative financial instruments, equal credit opportunity laws affecting mortgage lending, Community Reinvestment Act, and the state housing agency. 3 credit hours. (W)

### RELE 1321 Real Estate Marketing

Real estate professionalism and ethics; characteristics of successful salespersons; time management; psychology of marketing; listing procedures; advertising; negotiation and closing financing; and the Deceptive Trade Practices-Consumer Protection Act. 3 credit hours. (W)

### RELE 1325 Real Estate Mathematics

Basic arithmetic skills. Includes mathematical logic, percentages, interest, time value of money, depreciation, amortization, proration, and estimation of closing statements. 3 credit hours. (W)

### RELE 1338 Principles of Real Estate II

A continuing overview of licensing as a broker or salesperson. Includes ethics of practice as a license holder, titles to and conveyance of real estate, legal descriptions, deeds, encumbrances and liens, distinctions between personal and real property, appraisal, finance and regulations, closing procedures, and real estate mathematics. Covers at least three hours of classroom instruction on federal, state, and local laws relating to housing, discrimination, housing credit discrimination, and community reinvestment. Fulfills at least 30 of 60 hours of required instruction for salesperson license. 3 credit hours. (W)

### RELE 1380 Cooperative Education - Real Estate

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

### RELE 2301 Law of Agency

Law of agency including principal-agent and masterservant relationships, the authority of an agent, the termination of an agent's authority, the fiduciary and other duties of an agent, employment law, deceptive trade practices, listing or buying representation procedures, and the disclosure of an agency. 3 credit hours. (W)

### RELE 2331 Real Estate Brokerage

A study of law of agency, planning and organization, operational policies and procedures, recruiting, selection and training of personnel, records and control, and real estate firm analysis and expansion criteria. 3 credit hours. (W)

### RELE 2381 Cooperative Education - Real Estate

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work

experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

### RNSG 1118 Transition to Professional Nursing Competencies

Transition to professional nursing competencies in the care of patients throughout the lifespan. Validates proficiency in psychomotor skills and clinical reasoning in the performance of nursing procedures related to the concepts of: clinical judgment, comfort, elimination, fluid and electrolytes, nutrition, gas exchange, safety, functional ability, immunity, metabolism, mobility, tissue integrity. Includes health assessment and medication administration. This course lends itself to a concept-based approach. Prerequisite: Admission to the AAS - Nursing (RN) (LVN / Paramedic / Medic Bridge) Program. Major Requirement: AAS - Nursing (RN). 1 credit hour. (W)

### RNSG 1125 Professional Nursing Concepts I

Introduction to professional nursing concepts and exemplars within the professional nursing roles: member of profession, provider of patient-centered care, patient safety advocate, and member of the health care team. Content includes clinical judgment, communication, ethical-legal, evidence-based practice, health promotion health information technology, patient-centered care, patient education, professionalism, safety, and team/collaboration. Emphasizes role development of the professional nurse. This course lends itself to a concept-based approach. Prerequisite: Admission to the AAS -Nursing (RN) Program. Corequisites: RNSG 1128, RNSG 1161, RNSG 1216 and RNSG 1430, or consent of Program Director. Major Requirement: AAS -Nursing (RN). 1 credit hour. (W)

### RNSG 1126 Professional Nursing Concepts II

Expanding professional nursing concepts and exemplars within the professional nursing roles. Applying concepts of clinical judgment, ethical-legal, evidence-based practice, patient-centered care, professionalism, safety, and team/collaboration to the exemplars presented in the Health Care Concepts II course. Introduces concepts of leadership and management. Emphasizes role development of the professional nurse. This course lends itself to a concept-based approach. Prerequisites: RNSG 1125, RNSG 1128, RNSG 1161, RNSG 1216 and RNSG 1430, all with a grade of "C" or better, or consent of Program Director. Corequisites: RNSG 1533 and

RNSG 2361, or consent of Program Director. Major Requirement: AAS - Nursing (RN). 1 credit hour. (W)

### RNSG 1128 Introduction to Health Care Concepts

An introduction to concept-based learning with emphasis on selected pathophysiological concepts with nursing applications. Concepts include acid-base balance, fluid and electrolytes, immunity, gas exchange, perfusion, metabolism, coping, and tissue integrity. This course lends itself to a concept-based approach. Prerequisite: Admission to the AAS - Nursing (RN) Program or consent of Program Director. Major Requirement: AAS - Nursing (RN). 1 credit hour. (W)

### RNSG 1137 Professional Nursing Concepts III

Application of professional nursing concepts and exemplars within the professional nursing roles. Utilizes concepts of clinical judgment, ethical-legal, evidence-based practice, patient-centered care, professionalism, safety, teamwork and collaboration. Introduces the concepts of quality improvement health information technology, and health care organizations. Incorporates concepts into role development of the professional nurse. This course lends itself to a concept-based approach. Lab required. Prerequisites: RNSG 1126, RNSG 1533 and RNSG 2361, all with a grade of "C" or better; or consent of Program Director. Corequisites: RNSG1538 and RNSG 2362, or consent of Program Director. Major Requirement: AAS - Nursing (RN). 1 credit hour. (W)

### RNSG 1161 Clinical I-Nursing-Registered Nurse Training

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Course focuses on understanding and application of the nursing process, therapeutic communication, the development of critical thinking, patient/client advocacy, and safety to give comprehensive, quality patient-centered care using evidence based outcomes to culturally and socially diverse patient/client systems and documentation of care. Development of teaching/learning plans to address patient/client health care needs. Collaborate with the interdisciplinary health care team to promote, maintain and restore optimal health status of patient/client systems. Prerequisite: Admission to the AAS - Nursing (RN) Program. Corequisites: RNSG 1125, RNSG 1128, RNSG 1216, RNSG 1430, or consent of Program

Director. Major Requirement: AAS - Nursing (RN). 1 credit hour. (A)

### RNSG 1163 Clinical - Nursing Transition from LVN / Paramedic / Medic

A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Course focuses on critical thinking and implementation of the nursing process to plan safe, comprehensive, care for patient/client systems with common physical and mental health needs; development and implementation of teaching/learning plans evidence based data to address health promotion, maintenance, and restoration. Care includes measures to reduce risks and coordinate health resources in collaboration with a multi-disciplinary health care team to improve patient/client outcomes. Requires communication/ documentation skills, patient/client advocacy, and development of clinical reasoning. Prerequisite: Admission to the AAS - Nursing (RN) (LVN / Paramedic / Medic Bridge) Program. Corequisites: RNSG 1118, RNSG 1128 and RNSG 1324. Major Requirement: AAS - Nursing (RN) (LVN / Paramedic / Medic Bridge) Program. 1 credit hour. (A)

### RNSG 1216 Professional Nursing Competencies

Development of professional nursing competencies in the care of patients throughout the lifespan. Emphasizes psychomotor skills and clinical reasoning in the performance of nursing procedures related to the concepts of: clinical judgment, comfort, elimination, fluid and electrolytes, nutrition, gas exchange, safety, functional ability, immunity, metabolism, mobility, and tissue integrity. Includes health assessment and medication administration. This course lends itself to a concept-based approach. Prerequisite: Admission to the AAS - Nursing (RN) Program. Corequisites: RNSG 1125, RNSG 1128, RNSG 1161 and RNSG 1430; or consent of Program Director. Major Requirement: AAS - Nursing (RN). 2 credit hours. (W)

### RNSG 1324 Concept-Based Transition to Professional Nursing Practice

Integration of previous health care knowledge and skills into the role development of the professional nurse as a provider of patient-centered care, patient safety advocate, member of health care team, and member of the profession. Emphasis is on clinical decision-making for patients and their families. Review of selected health care and professional nursing concepts with application through exemplars. Health care concepts include comfort, diversity, elimination, functional ability, human development, mobility, nutrition, sensory perception, sleep, coping, thermoregulation, tissue integrity, acid-base balance, clotting, cognition, fluid and electrolyte balance, gas exchange, immunity, metabolism, nutrition, grief, and perfusion. Professional nursing concepts include clinical judgment, communication, ethical-legal, evidence-based practice, health promotion, health information technology, patient-centered care, patient education, professionalism, safety, teamwork and collaboration. Introduces concept of leadership and management. This course lends itself to a conceptbased approach. Prerequisite: Admission to the AAS Nursing (RN) (LVN / Paramedic / Medic Bridge) Program, or consent of Program Director. Major Requirement: AAS - Nursing (RN) (LVN / Paramedic / Medic Bridge). 3 credit hours. (W)

### RNSG 1430 Health Care Concepts I

In-depth coverage of foundational health care concepts with application through selected exemplars. Concepts include comfort, diversity, elimination, functional ability, human development, mobility, nutrition, sensory perception, sleep, thermoregulation, grief, and tissue integrity. Emphasizes development of clinical judgment skills in the beginning nurse. This course lends itself to a concept-based approach. Lab required. Prerequisite: Admission to the AAS - Nursing (RN) Program. Corequisites: RNSG 1125, RNSG 1128, RNSG 1161 and RNSG 1216, or consent of Program Director. Major Requirement: AAS - Nursing (RN). 4 credit hours. (W)

#### RNSG 1533 Health Care Concepts II

In-depth coverage of health care concepts with application through selected exemplars. Concepts include acid-base balance, coping, clotting, cognition, fluid and electrolytes, gas exchange, immunity, metabolism, nutrition, comfort, and perfusion. Provides continuing opportunities for development of clinical judgment skills. The course lends itself to a concept-based approach. Lab required. Prerequisites: RNSG 1125, RNSG 1128, RNSG 1161, RNSG 1216

and RNSG 1430, all with a grade of "C" or better; or consent of Program Director. Corequisites: RNSG1126 and RNSG 2361, or consent of Program Director Major Requirement: AAS - Nursing (RN). 5 credit hours. (W)

#### RNSG 1538 Health Care Concepts III

In-depth coverage of health care concepts with nursing application through selected exemplars. Concepts include cellular regulation, end of life, immunity, interpersonal relationships, grief, human development, intracranial regulation, mood/affect, comfort, sexuality, mobility, and reproduction. Provides continuing opportunities for development of clinical judgment skills. This course lends itself to a concept-based approach. Lab required. Prerequisites: RNSG 1126, RNSG 1533 and RNSG 2361 all with a grade of "C" or better; or consent of Program Director. Corequisites: RNSG 1137 and RNSG 2362, or consent of Program Director. Major Requirement: AAS - Nursing (RN). 5 credit hours. (W)

### RNSG 2138 Professional Nursing Concepts IV

Integration of professional nursing concepts and exemplars within the professional nursing roles. Synthesizes concepts of clinical judgment, ethical-legal, evidence-based practice, leadership and management, patient-centered care, professionalism, teamwork, and collaboration through exemplars presented in the Health Care Concepts courses. Emphasizes concept of quality improvement and introduces health policy. Incorporates concepts into role development of the professional nurse. This course lends itself to a concept-based approach. Lab required. Prerequisites: RNSG 1137, RNSG 1538 and RNSG 2362 all with a grade of "C" or better; or consent of Program Director. Corequisites: RNSG 2363 and RNSG 2539, or consent of Program Director. Major Requirement: AAS -Nursing (RN). 1 credit hour. (W)

### RNSG 2361 Clinical II-Nursing-Registered Nurse Training

A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Course focuses on critical thinking and implementation of the nursing process to plan safe, comprehensive, care for patient/client systems with common physical and mental health needs; development and implementation of teaching/learning plans evidence based data to address health promotion, maintenance, and restoration. Care includes measures to reduce risks and

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coordinate health resources in collaboration with multidisciplinary health care team to improve patient/client outcomes. Requires communication/documentation skills, patient/client advocacy, and development of clinical reasoning. Prerequisites: RNSG 1125, RNSG 1128, RNSG 1161, RNSG 1216 and RNSG 1430, all with a grade of "C" or better; or consent of Program Director. Corequisites: RNSG 1126 and RNSG 1533, or consent of Program Director. Major Requirement: AAS - Nursing (RN). 3 credit hours. (A)

### RNSG 2362 Clinical III-Nursing-Registered Nurse Training

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Course focuses on application of critical reasoning and implementation of the nursing process to plan patient-centered care for patient/client systems with complex physiologic and psychosocial health needs/problems using evidence based interventions. Care will include measures to meet patient/client systems teaching/learning needs to promote and maintain optimal health status for the patient/client and their families. Course requires communication / documentation care given; clinical reasoning to manage and coordinate quality, comprehensive patient-centered care and access to health care resources. Prerequisites: RNSG 1126, RNSG 1533 and RNSG 2361 all with a grade of "C" or better; or consent of Program Director. Corequisites: RNSG 1137 and RNSG 1538, or consent of Program Director. Major Requirement: AAS - Nursing (RN). 3 credit hours. (A)

### RNSG 2363 Clinical IV-Nursing-Registered Nurse Training

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, clinical reasoning, and concepts. Direct supervision is provided by the clinical professional. Course focuses on transition from student nurse to the roles/competencies and responsibilities of the professional nurse utilizing the nursing process to meet the advanced and integrated health needs of the patient/client systems within hospital and community. Promotion of healthy lifestyles with consideration for preferences of culturally and socially diverse patient/client systems in collaboration with the interdisciplinary health care team to promote and maintain optimal health status. Prerequisites: RNSG 1137, RNSG 1538 and RNSG 2362, all with a grade of "C" or better; or consent of Program Director. Corequisites: RNSG 2138 and RNSG 2539, or consent

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of Program Director. Major Requirement: AAS - Nursing (RN). 3 credit hours. (A)

### RNSG 2539 Health Care Concepts IV

In-depth coverage of advanced health care concepts with nursing application through selected exemplars. Concepts include, cognition, immunity, clotting, fluid and electrolyte balance, gas exchange, metabolism, nutrition, perfusion, tissue integrity, and interpersonal relationships. Continuing development of clinical judgment with integration of all health care concepts. This course lends itself to a concept-based approach. Lab required. Prerequisites: RNSG 1137, RNSG 1538 and RNSG 2362 all with a grade of "C" or better; or consent of Program Director. Corequisites: RNSG 2138 and RNSG 2363, or consent of Program Director. Major Requirement: AAS - Nursing (RN). 5 credit hours. (W)

### RSPT 1160 Clinical I-Respiratory Care Therapist

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Consent of Program Director. Corequisite: Consent of Program Director. Major Requirement: AAS-Respiratory Care. 1 credit hour. (W)

### RSPT 1201 Introduction to Respiratory Care

An introduction to the field of respiratory care. Lab required. Prerequisite: Admission to the Respiratory Care Program. Corequisites: RSPT 1307 and RSPT 1410. Major Requirement: AAS-Respiratory Care. 2 credit hours. (W)

### RSPT 1207 Cardiopulmonary Anatomy and Physiology

Anatomy and physiology of the cardiovascular and pulmonary systems. Prerequisite: Admission to the Polysomnographic Technology Program. 2 credit hours. (W)

### RSPT 1237 Basic Dysrhythmia Interpretation

Study of electrophysiology of the heart and characteristics of cardiac dysrhythmias. 2 credit hours. (W)

### RSPT 1307 Cardiopulmonary Anatomy and Physiology

Anatomy and physiology of the cardiovascular and pulmonary systems. Lab required. Prerequisite: Admission to the Respiratory Care Program. 3 credit hours. (W)

### RSPT 1361 Clinical II-Respiratory Care Therapist

A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: RSPT 1160 with a grade of "C" or better. Major Requirement: AAS -Respiratory Care. 3 credit hours. (W)

### RSPT 1362 Clinical III-Respiratory Care Therapist

A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: RSPT 1361 with a grade of "C" or better. Major Requirement: AAS - Respiratory Care. 3 credit hours. (W)

### RSPT 1410 Respiratory Care Procedures I

Essential knowledge of the equipment and techniques used in the treatment of cardiopulmonary disease. Lab required. Prerequisite: Admission to the Respiratory Care Program. Major Requirement: AAS-Respiratory Care. 4 credit hours. (W)

### RSPT 1411 Respiratory Care Procedures II

Develops essential knowledge and skills of airway care and mechanical ventilation. Lab required. Prerequisite: RSPT 1410 with a grade of "C" or better. Major Requirement: AAS - Respiratory Care. 4 credit hours. (W)

### RSPT 2130 Respiratory Care Examination Preparation

Comprehensive review to optimize respiratory care credentialing exam success. Lab required. Prerequisites: RSPT 2255, RSPT 2353, and RSPT 2360; all with a grade of "C" or better. Corequisites: RSPT 2139, RSPT 2147, RSPT 2231, and RSPT 2361. Major Requirement: AAS - Respiratory Care. 1 credit hour. (W)

# **RSPT** 2139 Advanced Cardiac Life Support Advanced Cardiac Life Support (ACLS) with an emphasis on airway management. Designed to develop

skills for resuscitation of the adult. Includes strategies for managing and stabilizing the cardiopulmonary arrested patient. May include certification based on American Heart Association standards. Prerequisites: RSPT 2255, RSPT 2353 and RSPT 2360; all with a grade of "C" or better. Corequisites: RSPT 2130, RSPT 2147, RSPT 2231 and RSPT 2361. Major Requirement: AAS - Respiratory Care. 1 credit hour. (W)

### RSPT 2147 Specialties in Respiratory Care

Emerging and specialty practices in respiratory care. Additionally, this is an introduction to areas of interest in which the Respiratory Therapist may find application and/or employment. The depth of instruction will provide the indications, expected outcomes, hazards and methods for hyperbaric oxygen (HBO), extracorporeal membrane oxygenation (ECMO), nitric oxide (NO), sleep studies, nutritional assessment, metabolic monitoring, exercise/stress testing, and electroencephalographs. Also includes home care/rehabilitation, and fluid and electrolyte balance. Lab required. Prerequisites: RSPT 2255, RSPT 2353 and RSPT 2360; all with a grade of "C" or better. Major Requirement: AAS - Respiratory Care. 1 credit hour. (W)

### RSPT 2217 Respiratory Care Pharmacology

A study of drugs that affect cardiopulmonary systems. Emphasis on classification, route of administration, dosages/calculations, and physiological interactions. Prerequisites: RSPT 1160, RSPT 1201, RSPT 1307 and RSPT 1410; all with a grade of "C" or better. Corequisites: RSPT 1361, RSPT 1411 and RSPT 2310. Major Requirement: AAS - Respiratory Care. 2 credit hours. (W)

#### RSPT 2231 Simulations in Respiratory Care

Theory of clinical simulation examinations. Includes construction types, scoring, and mechanics of taking the computerized simulation examination. Prerequisite: RSPT 2255 with a grade of "C" or better. Major Requirement: AAS - Respiratory Care. 2 credit hours. (W)

### RSPT 2247 Specialties in Respiratory Care

Emerging and specialty practices in respiratory care. An introduction to areas of interest in which the Respiratory Therapist may find application and/or employment. The depth of instruction will provide the indications, expected outcomes, hazards and methods for hyperbaric oxygen (HBO), extracorporeal membrane oxygenation (ECMO), nitric oxide (NO), sleep studies, nutritional assessment, metabolic monitoring, exercise/stress testing, and

electroencephalograms. Also includes home care/rehabilitation, and fluid and electrolyte balance. Prerequisite: RSPT 2353. Major Requirement: AAS-Respiratory Care. 2 credit hours. (W)

### RSPT 2255 Critical Care Monitoring

Advanced monitoring techniques used to assess a patient in the critical care setting. Lab required. Prerequisites: RSPT 1362 and RSPT 2471; both with a grade of "C" or better. Corequisites: RSPT 2353 and RSPT 2360. Major Requirement: AAS - Respiratory Care. 2 credit hours. (W)

### RSPT 2310 Cardiopulmonary Disease

Etiology, pathogenesis, pathology, diagnosis, history, prognosis, manifestations, treatment, and detection of cardiopulmonary diseases. Lab required. Prerequisites: RSPT 1160, RSPT 1201, RSPT 1307 and RSPT 1410; all with a grade of "C" or better. Corequisites: RSPT 1361 and RSPT 1411. Major Requirement: AAS - Respiratory Care. 3 credit hours. (W)

### RSPT 2353 Neonatal/Pediatric Cardiopulmonary Care

A study of neonatal and pediatric cardiopulmonary care. Lab required. Prerequisites: RSPT 1362 and RSPT 2471; both with a grade of "C" or better. Corequisites: RSPT 2255 and RSPT 2360. Major Requirement: AAS - Respiratory Care. 3 credit hours. (W)

### RSPT 2360 Clinical IV-Respiratory Care Therapist

A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: RSPT 1362 with a grade of "C" or better. Major Requirement: AAS - Respiratory Care. 3 credit hours. (W)

### RSPT 2361 Clinical V-Respiratory Care Therapist

A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: RSPT 2360 with a grade of "C" or better. Major Requirement: AAS - Respiratory Care. 3 credit hours. (W)

### RSPT 2471 Respiratory Care Procedures III

Provides essential knowledge of advanced mechanical ventilation concepts, critical care assessment, quality control, and basic neonatal/pediatric assessment. Advanced mechanical ventilation concepts include: methods of weaning, advanced modes, and methods of non-invasive ventilation. Critical care assessment includes: basic ECG interpretation and chest tube drainage systems. Quality control includes: maintenance of ABG analyzers. Neonatal/Pediatric assessment includes: APGAR scoring, gestational age assessment, Silverman score, vital signs, and pediatric assessment methods. Lab required. Prerequisite: RSPT 1411 with a grade of "C" or better. Corequisite: RSPT 1362. Major Requirement: AAS - Respiratory Care. 4 credit hours. (W)

### RSTO 1304 Dining Room Service

Introduces the principles, concepts, and systems of professional table service. Topics include dining room organization, scheduling, and management of food service personnel. Lab required.

Prerequisite/Concurrent enrollment: CHEF 1314. 3 credit hours. (W) Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

### RSTO 1325 Purchasing for Hospitality Operations

Study of purchasing and inventory management of foods and other supplies to include development of purchase specifications, determination of order quantities, formal and informal price comparisons, proper receiving procedures, storage management, and issue procedures. Emphasis on product cost analysis, yields, pricing formulas, controls, and record keeping at each stage of the purchasing cycle. Lab required. Prerequisites: CHEF 1305 and HAMG 1321. 3 credit hours. (W)

### RSTO 2307 Catering

Principles, techniques, and applications for both onpremises, off-premises, and group marketing of catering operations including food preparation, holding, and transporting techniques. Lab required. Prerequisite: HAMG 2301; or consent of Associate Dean. 3 credit hours. (W)

### RTVB 1329 Scriptwriting

Writing scripts for film and electronic media. Emphasizes format and style for commercials, public service announcements, promos, news, and documentaries. Lab required. 3 credit hours. (W)

### RTVB 2330 Film and Video Editing

Digital media editing for the preparation and completion of shorts, trailers, documentaries, and features. Prerequisite: ARTV 1351. Lab required. 3 credit hours. (W)

#### RTVB 2340 Portfolio Development

Preparation and presentation of a portfolio suitable for employment in the media industry. This course is intended to be taken in the last semester. Lab required. Prerequisite: Consent of Associate Dean. 3 credit hours. (W)

### RUSS 1411 Beginning Russian I

Introduction to the basic skills of speaking, reading, writing, and listening with attention to selected aspects of Russian culture; designed for students with little or no previous language training. Instruction is enhanced by the use of tapes, slides, computer software, and video cassettes. Lab required. 4 credit hours. (A)

### RUSS 1412 Beginning Russian II

Continuation of RUSS 1411. Lab required. Prerequisite: RUSS 1411 or consent of Associate Dean. 4 credit hours. (A)

### RUSS 2311 Intermediate Russian I

Intensive review of Russian grammar followed by continued development of speaking, listening, reading and writing skills. Instruction enhanced by slides, tapes, and other audio-visual aids. Prerequisite: RUSS 1412 or consent of Associate Dean. 3 credit hours. (A)

#### RUSS 2312 Intermediate Russian II

Continuation of RUSS 2311. Instruction enhanced by slides, tapes, and other audio-visual aids. Prerequisite: RUSS 2311 or consent of Associate Dean. 3 credit hours. (A)

### SGNL 1401 Beginning American Sign Language I

Introduction to American Sign Language, Deaf culture, and to a brief history of sign and culture. Includes development of expressive and receptive sign skills, together with the learning of numbers, sign vocabulary, and the manual alphabet. Class is conducted primarily without voice. Lab required. 4 credit hours. (A)

### SGNL 1402 Beginning American Sign Language II

Study of sign vocabulary, numbers, fingerspelling and Deaf culture. Emphasizes further development of receptive skills, expressive skills, application of rudimentary syntactical and grammatical structures, and an understanding of Deaf and Hearing cultures. Class is conducted primarily without voice. Lab required. Prerequisite: SGNL 1401 or credit by exam. 4 credit hours. (A)

### SGNL 2301 Intermediate American Sign Language I

Introduction to the intermediate skills needed in the production and comprehension of American Sign Language used in everyday communication. The course gives students an overview of the history, values, and social norms of the Deaf community in the United States. This course integrates and refines expressive and receptive skills in American Sign Language, including recognition of sociolinguistic variations. Class is conducted primarily without voice. Lab required. Prerequisite: SGNL 1402 with a grade of "C" or better. 3 credit hours. (A)

### SGNL 2302 Intermediate American Sign Language II

A continuation of SGNL 2301, American Sign Language Intermediate II provides a review and application of conversational skills in American Sign Language and provides intensive practice in interpreting from signing to voice as well as from voice to signing, while increasing vocabulary. The course provides an introduction to American Sign Language literature and folklore. (The course includes grammar and vocabularies used in "real life" situations.) Lab required. Prerequisite: SGNL 2301 with a grade of "C" or better. 3 credit hours. (A)

### SLNG 1207 Intra-lingual Skills Development for Interpreters

Development of intra-lingual (English to English) skills necessary for future development of inter-lingual (English to American Sign Language [ASL]/ASL to English) skills. Focus on linguistic and cognitive skills development in areas of paraphrasing, summarizing, main idea identification, comprehension, memory, delayed repetition, multi-tasking, vocabulary, and cultural literacy. Lab required. Offered spring semester only. 2 credit hours. (W)

### SLNG 1211 Fingerspelling and Numbers

Development of expressive and receptive skills in fingerspelling and numbers. Receptive skills focus on whole word phrase recognition and fingerspelling/number comprehension in context. Expressive skills focus on the development of speed, clarity, and fluency. Lab required. Prerequisite: SGNL 1402. 2 credit hours. (W)

#### SLNG 1215 Visual/Gestural Communication

Development of skills in non-verbal communications. Emphasizes the use and understanding of facial expression, gestures, pantomime, and body language. Lab required. Offered fall semester only. 2 credit hours. (W)

### SLNG 1291 Special Topics in Sign Language Interpreter

Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. Offered summer semester only. 2 credit hours. (W) Preparation for BEI (Board of Evaluation of Interpreters) Certification Overview of BEI assessment and development of relevant ASL and interpreting skills and knowledge. Prerequisites: SLNG 2186 and SLNG 2302.

### SLNG 1311 Fingerspelling and Numbers

Development of expressive and receptive skills in fingerspelling and numbers. Receptive skills focus on whole word phrase recognition and fingerspelling/number comprehension in context. Expressive skills focus on the development of speed, clarity, and fluency. Lab required. Prerequisite/Concurrent enrollment: SGNL 1402. 3 credit hours. (W)

### SLNG 1321 Introduction to the Interpreting Profession

An overview of the field of American Sign Language (ASL)/English interpretation. Provides a historical framework for the current principles, ethics, roles, responsibilities, and standard practices of the interpreting profession. Lab required. Prerequisite / Concurrent enrollment: SGNL 2301. 3 credit hours. (W)

#### SLNG 1347 Deaf Culture

Historical and contemporary perspective of American Deaf culture using a socio-cultural model. Includes cultural identity and awareness, values, group norms, communication, language, and significant contributions made by D/deaf people to the world. 3 credit hours. (W)

#### SLNG 1350 Sign-to-Voice

Skill development in interpreting and transliterating from American Sign Language and other modes of communication to English and analysis of increasingly complex tasks utilizing simulated interpreting experiences including skills analysis and peer evaluation. Lab required. Prerequisite: SLNG 1321. Offered fall semester only. 3 credit hours. (W)

### SLNG 2186 Internship I - Sign Language Interpretation and Translation

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisites: SLNG 1350 and SLNG 2301. 1 credit hour. (W)

### SLNG 2189 ESC Internship - Sign Language Interpretation and Translation

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisite/ Concurrent enrollment: SLNG 2371. 1 credit hour. (W)

### SLNG 2266 Practicum - Sign Language

Interpretation and Translation Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisite: SLNG 2301. 2 credit hours. (W)

### SLNG 2301 Interpreting I

An overview of the interpreting process and models of interpretation. Introduces the skills necessary to achieve dynamic message equivalence in interpreting American Sign Language (ASL) to English and English to ASL. Lab required. Prerequisite: SLNG 1321. Offered fall semester only. 3 credit hours. (W)

### SLNG 2302 Interpreting II

Continued development of discourse analysis and interpreting skills for increasingly complex tasks. Utilization of consecutive and simultaneous interpreting scenarios including monologues and dialogues. Emphasizes skill development, self-analysis, and peer evaluation. Lab required. Prerequisite/Concurrent enrollment: SLNG 2301. Offered spring semester only. 3 credit hours. (W)

6 2017-18 Collin College Catalog, (Effective Spring 2018), Ed. 5. Rev. 10-12-17 Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

### SLNG 2303 Transliterating

A practice-oriented course designed to develop skills necessary for rendering spoken English to a signed English format and signed English to spoken English. Lab required. Prerequisite: SLNG 2301. Offered spring semester only. 3 credit hours. (W)

### SLNG 2311 Interpreting in Specialized Settings

Overview of interpreting/transliterating with special populations (e.g., deaf/blind, high visual, oral) and/or special settings (e.g., religious, artistic, medical, legal, mental health). Reinforce interpreting theories and techniques in relation to special population(s) and/or setting(s). Lab required. Prerequisites: SLNG 1350 and SLNG 2301. Offered spring semester only. 3 credit hours. (W)

### SLNG 2331 Interpreting III

A practice-oriented course to develop skills in the integration and application of interpreting using complex source materials. Continued exposure to simulated interpreting/transliterating experiences. Lab required. Prerequisite: SLNG 2302 or state or national interpreter certification. Offered summer semester only. 3 credit hours. (W)

### SLNG 2371 Interpreting in the Medical Setting

Methods and practice of interpreting skills (consecutive, simultaneous, and sign translation) in medical contexts, including protocols for managing sessions with patients, standards of practice for health care interpreters, roles of the health care interpreters, cultural awareness, legislation and regulations (ADA, Section 405 or Rehabilitation Act, Title VI of Civil Rights Act, HIPAA, HITECH, CLAS), legal status (voluntary, POEC, OPC) common specialties and medications (including physical and mental health), and routine medical equipment. Lab required. Prerequisite: HITT 1305. 3 credit hours. (W)

### SLNG 2387 Internship II - Sign Language Interpretation and Translation

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisites: SLNG 2302 and SLNG 2303. 3 credit hours. (W)

### SLNG 2403 Transliterating

A practice-oriented course designed to develop skills necessary for rendering spoken English to a signed English format and signed English to spoken English. Lab required. Prerequisites: ENGL 1302, SGNL 2301 and SLNG 2301. Offered spring semester only. 4 credit hours. (W)

### SMFT 1343 Semiconductor Manufacturing Technology

A study of the processes, materials, and equipment used in the manufacturing of semiconductors, including an overview of the semiconductor industry, related terminology, and standard safety practice. Lab required. 3 credit hours. (W)

### SMFT 1371 Fundamentals of Solar Cell Engineering

The chemistry, device physics, and materials science of Photovoltaic Solar Cell technology which results in the production of electricity from sunlight is covered. An overview of the process flows used to manufacture solar cells, the resulting device characteristics, the variety of solar cell structures and the solid state electronics characterization of the structures is presented. The course is taught from an engineering perspective using an appropriate level of mathematics for the engineering models presented. Lab required. Prerequisite: MATH 1314 or consent of Associate Dean. 3 credit hours. (W)

### SMFT 1373 Fundamentals of Solar Cell Manufacturing

The course covers the fundamentals of Photovoltaic Solar Cell fabrication from ingot to the final solar cell array. The basic chemistry, physics, and materials science of the fabrication process is presented. The course is taught from an engineering perspective using an appropriate level of mathematics for the engineering models presented. Lab required. Prerequisite: MATH 1314 or consent of Associate Dean. 3 credit hours. (W)

# SMFT 1375 Materials, Measurement Technology and Characterization Methods Used in Semiconductor Solar Cell Mfg

The course will include an in-depth coverage of materials measurement techniques, statistical process control/capability analysis, six sigma process characterization, and FEMA from the perspective of Photovoltaic Solar Cell materials characterization, electrical characterization and optical characterization technology and techniques. The course is taught from an engineering perspective using an appropriate level of mathematics for the engineering models presented. Lab required. Prerequisites: SMFT 1371 and SMFT 1373 or consent of Associate Dean. 3 credit hours. (W)

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### SOCI 1301 Introduction to Sociology

The scientific study of human society, including ways in which groups, social institutions, and individuals affect each other. Causes of social stability and social change are explored through the application of various theoretical perspectives, key concepts, and related research methods of sociology. Analysis of social issues in their institutional context may include topics such as social stratification, gender, race/ethnicity, and deviance. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### SOCI 1306 Social Problems

Application of sociological principles and theoretical perspectives to major social problems in contemporary society such as inequality, crime and violence, substance abuse, environmental issues, deviance, or family problems. Prerequisite: Meet TSI collegereadiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### SOCI 2301 Marriage and the Family

Sociological and theoretical analysis of the structures and functions of the family, the varied cultural patterns of the American family, and the relationships that exist among the individuals within the family, as well as the relationships that exist between the family and other institutions in society. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### SOCI 2306 Human Sexuality

This course will provide an overview of the broad field of human sexuality. Topics will be covered from various perspectives - biological, sociological, anthropological, etc., but will focus primarily on the psychological perspective. The goal is for each student to learn factual, scientifically-based information that will provoke thought and contribute to his/her decision-making on sexual issues outside of the classroom. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A) Note: Student may take either PSYC 2306 or SOCI 2306 but not both.

### SOCI 2319 Minority Studies

This course studies minority-majority group relations, addressing their historical, cultural, social, economic, and institutional development in the United States. Both sociological and social psychological levels of analysis will be employed to discuss issues including experiences of minority groups within the context of their cultural heritage and tradition, as well as that of

the dominant culture. Core concepts to be examined include (but are not limited to) social inequality, dominance / subordination, prejudice, and discrimination. Particular minority groups discussed may include those based on poverty, race / ethnicity, gender, sexual orientation, age, disability, or religion. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### SOCI 2340 Drug Use and Abuse

Study of the use and abuse of drugs in today's society. Emphasis on the physiological, psychological, and sociological factors that contribute to this behavior. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### SOCI 2389 Academic Co-op Sociology

Integrates on-campus study with practical hands-on work experience in sociology. In conjunction with class seminars, the student will set specific goals and objectives in the study of sociology. Contact the Cooperative Work Experience Office. Prerequisite: Consent of Associate Dean, and meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### SOCW 2361 Introduction to Social Work

An overview of the history, fields, skills, and values of social work practice in the United States. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### SOCW 2362 Social Welfare

This course provides an overview of contemporary social welfare including income support services, mental health services and services for children and families. It includes an examination of social welfare policy and programs. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. Prerequisite/Concurrent enrollment: SOCW 2361. 3 credit hours. (A)

### SPAN 1411 Beginning Spanish I

Basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students will acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the beginner level. Lab required. 4 credit hours. (A)

### SPAN 1412 Beginning Spanish II

Continued development of basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students will acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the high beginner to low intermediate level. Lab required. Prerequisite: SPAN 1411 or consent of Associate Dean. 4 credit hours. (A)

### SPAN 2311 Intermediate Spanish I

The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading, and writing. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. Prerequisite: SPAN 1412 or consent of Associate Dean. 3 credit hours. (A)

### SPAN 2312 Intermediate Spanish II

The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading, and writing. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. Prerequisite: SPAN 2311 or consent of Associate Dean. 3 credit hours. (A)

### SPAN 2313 Spanish for Native/Heritage Speakers I

Builds upon existing oral proficiencies of heritage speakers of Spanish. Enhances proficiencies in the home-based language by developing a full range of registers including public speaking and formal written discourse. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. Prerequisite: SPAN 1412 or consent of Associate Dean. 3 credit hours. (A)

### SPAN 2315 Spanish for Native/Heritage Speakers II

Builds upon existing oral proficiencies of heritage speakers of Spanish. Enhances proficiencies in the home-based language by developing a full range of registers including public speaking and formal written discourse. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. Prerequisite: SPAN 2313 or consent of Associate Dean. 3 credit hours. (A)

### SPCH 1311 Introduction to Speech Communication

Introduces basic human communication principles and theories embedded in a variety of contexts including interpersonal, small group, and public speaking. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

#### SPCH 1315 Public Speaking

Application of communication theory and practice to the public speaking context, with emphasis on audience analysis, speaker delivery, ethics of communication, cultural diversity, and speech organizational techniques to develop students' speaking abilities, as well as ability to effectively evaluate oral presentations. Additionally, it includes student evaluation of speakers and speeches. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### SPCH 1318 Interpersonal Communication

Application of communication theory to interpersonal relationship development, maintenance, and termination in relationship contexts including friendships, romantic partners, families, and relationships with co-workers and supervisors. Additionally, this course focuses on interpersonal contexts such as gender communication, conflict, intercultural communication, and listening. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### SPCH 1321 Business and Professional Communication

Study and application of communication within the business and professional context. Special emphasis will be given to communication competencies in presentations, dyads, teams, and technologically mediated formats. Additionally, it includes the relationship of communication to organizational conflict, management and international business; practice in conducting and participating in business interviews and presentations. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### SPCH 2335 Argumentation and Debate

This course introduces the students to various argumentation techniques. The student will learn basic research skills and methods of cataloging evidence. The student will learn to organize and present ideas in effective communication paradigms. Individual debate and team formats will be demonstrated. 3 credit hours. (A)

### SPCH 2389 Academic Co-op Speech

Integrates on-campus study with practical hands-on work experience in speech. In conjunction with class seminars, the student will set specific goals and objectives in the study of speech. Contact the Cooperative Work Experience Office. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

### SRGT 1171 Transition to Practice for the Surgical Technologist

This course provides surgical technology students with information and skills to assist in transition from the role of student to the role of a practicing surgical technologist. Information gained about high performance work teams is applied to the surgical setting. Service quality management and diversity concepts are applied to surgical settings. Lab required. Prerequisites: HPRS 2300, SRGT 1441 and SRGT 1461. Corequisites: SRGT 2130 and SRGT 2561, or consent of Program Director. Major Requirement: AAS - Surgical Technology. 1 credit hour. (W)

### SRGT 1260 Clinical-Surgical Technology I

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Admission to the Surgical Technology Program. Corequisite: SRGT 1409 or consent of the Program Director. Major Requirement: AAS-Surgical Technology. 2 credit hours. (W)

### SRGT 1271 Basic Skills of Surgical Technology

Learn the fundamentals and foundations of Surgical Technology. Apply basic skills of Surgical Technology in a mock laboratory environment in order to gain the skills needed to perform in the healthcare setting. Prerequisite: Admission to the Surgical Technology Program. Corequisite: SRGT 1409, or consent of Program Director. Major Requirement: AAS - Surgical Technology. 2 credit hours. (W)

### SRGT 1409 Fundamentals of Peri-operative Concepts and Techniques

In-depth coverage of peri-operative concepts such as aseptic principles and practices, infectious processes, wound healing, and creation and maintenance of the sterile field. Lab required. Prerequisite: Admission to the Surgical Technology Program. Corequisite: SRGT 1271, or consent of Program Director. Major Requirement: AAS - Surgical Technology. 4 credit hours. (W)

### SRGT 1441 Surgical Procedures I

Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the general, OB/GYN, genitourinary, otorhinolaryngology, and orthopedic surgical specialties incorporating instruments, equipment, and supplies required for safe patient care. Lab required. Prerequisites: SRGT 1271 and SRGT 1409. Corequisites: HPRS 2300 and SRGT 1461, or consent of Program Director. Major Requirement: AAS -Surgical Technology. 4 credit hours. (W)

### SRGT 1442 Surgical Procedures II

Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the cardiothoracic, peripheral vascular, plastic / reconstructive, ophthalmology, oral / maxillofacial, and neurological surgical specialties incorporating instruments, equipment, and supplies required for safe patient care. Lab required. Prerequisites: HPRS 2300, SRGT 1441, and SRGT 1461. Corequisites: SRGT 1171, SRGT 2130 and SRGT 2561, or consent of Program Director. Major Requirement: AAS -Surgical Technology. 4 credit hours. (W)

### SRGT 1461 Clinical - Surgical Technology I

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Additionally, the student is allowed to participate as a member of the surgical team under the supervision of the affiliate hospital staff or a clinical instructor in an aseptic environment. Case assignments will be assigned according to specific clinical rotations. Prerequisites: SRGT 1271 and SRGT 1409. Corequisites: HPRS 2300 and SRGT 1441, or consent of Program Director. Major Requirement: AAS -Surgical Technology. 4 credit hours. (W)

### SRGT 1541 Surgical Procedures I

Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the general, OB/GYN, genitourinary, otorhinolaryngology, and orthopedic surgical specialties incorporating instruments, equipment, and supplies required for safe patient care. Lab required. Prerequisites: SRGT 1260 and SRGT 1409. Corequisites: HPRS 2300 and SRGT 1561, or consent of Program Director. Major Requirement: AAS - Surgical Technology. 5 credit hours. (W)

### SRGT 1542 Surgical Procedures II

Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the cardiothoracic, peripheral vascular, plastic / reconstructive, ophthalmology, oral / maxillofacial, and neurological surgical specialties incorporating instruments, equipment, and supplies required for safe patient care. Lab required. Prerequisites: HPRS 2300, SRGT 1541, and SRGT 1561. Corequisites: SRGT 1171, SRGT 2130 and SRGT 2561, or consent of Program Director. Major Requirement: AAS - Surgical Technology. 5 credit hours. (W)

### SRGT 1561 Clinical-Surgical Technology II

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The student is allowed to participate as a member of the surgical team under the supervision of the affiliate hospital staff or a clinical instructor in an aseptic environment. Case assignments will be assigned according to specific clinical rotations. Prerequisites: SRGT 1260 and SRGT 1409. Corequisites: HPRS 2300 and SRGT 1541, or consent of Program Director. Major Requirement: AAS-Surgical Technology. 5 credit hours. (W)

#### SRGT 2130 Professional Readiness

Overview of professional readiness for employment, attaining certification, and maintaining certification status. Prerequisites: HPRS 2300, SRGT 1441 and SRGT 1461. Corequisites: SRGT 1171, SRGT 1442, and SRGT 2561, or consent of Program Director. Major Requirement: AAS -Surgical Technology. 1 credit hour. (W)

### SRGT 2561 Clinical - Surgical Technology II

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisites: HPRS 2300, SRGT 1441 and SRGT 1461. Corequisites: SRGT 1171, SRGT 1442 and SRGT 2130, or consent of Program Director. Major Requirement: AAS -Surgical Technology. 5 credit hours (W)

### TECA 1303 Families, School and Community

A study of the child, family, community, and schools, including parent education and involvement, family and community lifestyles, child abuse, and current family life issues. Course content must be aligned as applicable

with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices for children from birth through age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. The course includes a minimum of 16 hours of field experiences. Lab required. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

### TECA 1311 Educating Young Children

An introduction to the education of the young child, including developmentally appropriate practices and programs, theoretical and historical perspectives, ethical and professional responsibilities and current issues. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices for children from birth through age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations; and the course includes a minimum of 16 hours of field experiences. Lab required. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

### TECA 1318 Wellness of the Young Child

A study of the factors that impact the well-being of the young child including healthy behavior, food nutrition, fitness, and safety practices. Focus on local and national standards and legal implications of relevant policies and regulations. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices for children from birth to age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. Course includes a minimum of 16 hours of field experiences. Lab required. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

### TECA 1354 Child Growth and Development

A study of the physical, emotional, social, language, and cognitive factors impacting growth and development of children through adolescence. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

### TECM 1343 Technical Algebra and Trigonometry

Algebraic and trigonometric applications used in technical/industrial settings. Lab required. 3 credit hours. (W)

### TRVM 1323 Group Tour Operations

A study of the role of the group planner, selling to groups, and planning itineraries, including components of a tour package, tour costing, advertising and promotion, group dynamics, and tour guide qualifications. 3 credit hours. (W)

### TRVM 1327 Special Events Design

The development of a special event from the conceptual stage through completion. Emphasis on industry terminology, factors to consider when planning a special event, and contingency plans. 3 credit hours. (W)

### TRVM 2301 Introduction to Convention/ Meeting Management

Overview of the meetings and convention industry and the various aspects and skills involved in planning and managing meeting, conventions, and expositions. Emphasis on types of meetings, markets, industry suppliers, budget and program planning, site selection and contract negotiations, registration and housing, food and beverage requirements, function and meeting room setup, and audiovisual requirements. 3 credit hours. (W)

### TRVM 2333 Applied Convention/Meetings Management

Practical application of meetings and exposition skills through a case study or participation in a conference/meeting. Includes integration of meeting planning tools that compare and discriminate between key areas of program development and convention objectives. Prerequisites: TRVM 1323, TRVM 1327, TRVM 2301, TRVM 2341 and TRVM 2355. 3 credit hours. (W)

### TRVM 2341 International Convention/ Meeting Management

Apply the principles of convention/meeting management in an international setting. Compare the

differences in planning a domestic versus an international meeting; including contract negotiation, foreign currency, customs and laws, exposition, marketing, shipping, languages, cultures, and how foreign policy affects the meeting planning process. Identify resources to assist planner in development of an international meeting. Prerequisite: TRVM 2301. 3 credit hours. (W)

### TRVM 2355 Exposition and Trade Show Operations

An overview of trade shows and exhibitions operations. Prerequisite: TRVM 2301. 3 credit hours. (W)

## TRVM 2380 Cooperative Education-Tourism and Travel Services Management

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. Prerequisites: HAMG 1324, HAMG 1340, TRVM 1323, TRVM 1327, TRVM 2301, TRVM 2341 and TRVM 2355; or consent of Associate Dean. 3 credit hours. (W)

### WLDG 1401 Metalsmithing

Basic skill development in hand-forging steel, forge welding, scroll-forming, shaping, and joinery utilizing hammers, anvils, and coal and gas forges. Emphasis on techniques and processes to demonstrate versatility and skill. Lab required. Prerequisite: Consent of Discipline Lead. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

#### WLDG 1405 Art Metals

Fundamentals of producing utilitarian and ornamental items in various metals. Skills development through the techniques used in fabrication with sheet and/or stock materials including various welding and cutting processes. Lab required. Prerequisite: Consent of Discipline Lead. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

### WLDG 1408 Metal Sculpture

Techniques and methods of oxy-fuel and electric welding and cutting to produce ornamental and functional items. Skill development in material forming, welding, brazing, and finishing techniques. Includes work ethics, artistic styles, and professionalism. Lab required. Prerequisite: Consent of Discipline Lead. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

### WLDG 1413 Introduction to Blueprint Reading for Welders

A study of industrial blueprints. Emphasis placed on terminology, symbols, graphic description, and welding processes. Includes systems of measurement and industry standards. Also includes interpretation of plans and drawings used by industry to facilitate field application and production. Lab required. Prerequisite: WLDG 1428. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

### WLDG 1425 Introduction to Oxy-Fuel Welding and Cutting

An introduction to oxy-fuel welding and cutting, safety, setup and maintenance of oxy-fuel welding, and cutting equipment and supplies. Lab required. Prerequisite: Consent of Discipline Lead. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

### WLDG 1428 Introduction to Shielded Metal Arc Welding (SMAW)

An introduction to the shielded metal arc welding process. Emphasis placed on power sources, electrode selection, and various joint designs. Additionally, instruction provided in SMAW fillet welds in various positions. Lab required. Prerequiste: Consent of Discipline Lead. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

### WLDG 1434 Introduction to Gas Tungsten Arc Welding (GTAW)

Principles of gas tungsten arc welding (GTAW), including set-up, GTAW equipment. Instruction in various positions and joint designs. Lab required. Prerequisite: Consent of Discipline Lead. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

### WLDG 1435 Introduction to Pipe Welding

An introduction to welding of pipe using the shielded metal arc welding process (SMAW), including electrode selection, equipment setup, and safe shop practices. Emphasis on various welding positions and electrodes. Lab required. Prerequisite: Consent of Discipline Lead. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

### WLDG 1471 Introduction to Foundry Practices

Fundamentals of conceptualizing and producing cast items in ferrous and non-ferrous metals. Skill development through the casting process to create objects from different materials. Includes welding, brazing, pattern making, mold making, flask construction and casting of ferrous and non-ferrous metals. Lab required. Prerequisite: Consent of Discipline Lead. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

### WLDG 1530 Introduction to Gas Metal Arc Welding (GMAW)

Principles of gas metal arc welding, setup and use of Gas Metal Arc Welding (GMAW) equipment, and safe use of tools/equipment. Instruction in various joint designs. Additionally, this is an overview of terminology, safety procedures, and equipment setup. Practice in performing T-joints, lap joints, and butt joints using Flux Cored Arc Welding (FCAW) equipment. Lab required. Prerequisite: Consent of Discipline Lead. 5 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

### WLDG 2413 Intermediate Welding Using Multiple Processes

Instruction using layout tools and blueprint reading with demonstration and guided practices with some of the following welding processes: oxy-fuel gas cutting and welding, shield metal arc welding (SMAW), gas metal arc welding (GMAW), flux-cored arc welding (FCAW), gas tungsten arc welding (GTAW). Lab required. Prerequisites: WLDG 2443, WLDG 2453, and WLDG 2450 or WLDG 2451. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

### WLDG 2431 Advanced Blueprint Interpretation and Cost Analysis

A continuation of the Blueprint for Welders course. Emphasis placed on inspection, cost analysis, and estimating. Lab required. Prerequisite: WLDG 1413. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

#### WLDG 2440 Advanced Metal Sculpture

Project development in an open-studio atmosphere. Individualized instruction to encourage skill combinations and experimentation. Topics include portfolio preparation and presentation. Lab required. Prerequisites: WLDG 1401, WLDG 1405, and WLDG 1408. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching,

bending, and working around open flames and intense heat for extended periods of time.

#### WLDG 2441 Power Hammer

Skill development in pneumatic, treadle, and trip hammer techniques. Topics include forging various steel alloys and larger stock configurations, tool making, machine care, and hardware. Projects to create functional esthetic objects using power hammers. Lab required. Prerequisite: WLDG 1401. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

### WLDG 2443 Advanced Shielded Metal Arc Welding (SMAW)

Advanced topics based on accepted welding codes. Training provided with various electrodes in shielded metal arc welding processes with open V-groove joints in various positions. Lab required. Prerequisite: WLDG 1428. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

### WLDG 2447 Advanced Gas Metal Arc Welding (GMAW)

Advanced topics in Gas Metal Arc Welding (GMAW). Includes welding in various positions. Lab required. Prerequisite: WLDG 1530. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

### WLDG 2450 Orbital Tube Welding

Orbital tube welding in various industries. Special emphasis on the disciplines of orbital tube welding, including cutting, facing, and development of weld procedures. Lab required. Prerequisite: WLDG 1434. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

### WLDG 2451 Advanced Gas Tungsten Arc Welding (GTAW)

Advanced topics in GTAW welding, including welding in various positions and directions. Lab required. Prerequisite: WLDG 1434. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

### WLDG 2453 Advanced Pipe Welding

Advanced topics involving welding of pipe using the shielded metal arc welding (SMAW) process. Topics include electrode selection, equipment setup, and safe shop practices. Emphasis on weld positions 5G and 6G using various electrodes. Lab required. Prerequisite: WLDG 1435. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

### WLDG 2471 Advanced Foundry Practices

Project development in an open-studio atmosphere. Individualized instruction to encourage skill combinations and experimentation. Topics include portfolio preparation and presentation. Lab required. Prerequisite: WLDG 1471. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

### WLDG 2480 Cooperative Education - Welding Technology/Welder

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisite: Consent of Discipline Lead. 4 credit hours. (W) Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

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