Computer Systems

Program Options:
- 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 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 ever-changing 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 Humanities / Fine Arts 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 1

Second Semester
- COSC 1315 Introduction to Computer Programming 2
- ITSC 2339 Personal Computer Help Desk Support
- ITSC 2380 Cooperative Education – Computer and Information Sciences, General (Capstone) 3
- 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

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.
AAS – Computer Systems
Information System 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
ITSW 1310 Introduction to Presentation Graphics Software
GEN ED Mathematics course

Second Semester
COSC 1315 Introduction to Computer Programming
ITSE 1311 Beginning Web Programming
ITSW 1304 Introduction to Spreadsheets – Excel
GEN ED Humanities / Fine Arts course
GEN ED Speech course

SECOND YEAR
First Semester
BMGT 1307 Team Building
ENGL 2311 Technical and Business Writing
IMED 2309 Internet Commerce
ITNW 1358 Network+
ITSW 1307 Introduction to Database – Access

Second Semester
ITSC 2380 Cooperative Education – Computer and Information Sciences, General (Capstone)
ITSE 2309 Database Programming – SQL
ITAL 1300 Fundamentals of Information Security (Security+)
BUSINESS ELECTIVE
TECHNICAL ELECTIVE

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, ITIT, 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 YEAR
First Semester
COSC 1315 Introduction to Computer Programming
ECON 1301 Introduction to Economics
(See Social / Behavioral Sciences Options)
ITSW 1304 Introduction to Spreadsheets – Excel
ITSW 1307 Introduction to Database – Access
MATH 1324 Mathematics for Business and Social Sciences
(See Mathematics options)

Second Semester
COSC 1337 Programming Fundamentals II (Java)
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
ITSE 2354 Advanced Oracle PL/SQL

Second Semester
ITSC 2380 Cooperative Education – Computer and Information Sciences, General (Capstone)
ITSE 2347 Advanced Database Programming
ITSY 1300 Fundamentals of Information Security (Security+)
GEN ED Humanities / Fine Arts course

1. May substitute COSC-1436
2. May substitute COSC-1437
3. May substitute INEW-2330

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.
### OSA – Computer Applications
9 credit hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITSW 1304</td>
<td>Introduction to Spreadsheets – Excel</td>
</tr>
<tr>
<td>ITSW 1307</td>
<td>Introduction to Database – Access</td>
</tr>
<tr>
<td>ITSW 1310</td>
<td>Introduction to Presentation Graphics Software</td>
</tr>
</tbody>
</table>

*Note: Some of the courses in these award programs may require prerequisites. Please check the course descriptions.*

### OSA – Help Desk Support
12 credit hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPMT 1305</td>
<td>IT Essentials I: PC Hardware and Software</td>
</tr>
<tr>
<td>ITNW 1358</td>
<td>Network+</td>
</tr>
<tr>
<td>ITSC 1305</td>
<td>Introduction to PC Operating Systems</td>
</tr>
<tr>
<td>ITSC 2339</td>
<td>Personal Computer Help Desk Support</td>
</tr>
</tbody>
</table>

*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
- 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

#### Second Semester
- ITSC 2339 Personal Computer Help Desk Support
- ITSC 2380 Cooperative Education – Computer and Information Sciences, General (Capstone)
- ITSY 1300 Fundamentals of Information Security (Security+)
- MRKG 1301 Customer Relationship Management

1. May substitute INEW-2330
2. May substitute BMGT-1344 or BUSI-1301
3. May substitute INEW-2330

### Certificate Level 2 – Information System
30 credit hours

*Students must be TSI complete.*

#### Summer Semester
- BCIS 1305 Business Computer Applications
- COSC 1315 Introduction to Computer Programming

#### First Semester
- IMED 2309 Internet Commerce
- ITNW 1358 Network+
- ITSW 1304 Introduction to Spreadsheets – Excel
- ITSW 1310 Introduction to Presentation Graphics Software

#### Second Semester
- BMGT 1307 Team Building
- ITSC 2380 Cooperative Education – Computer and Information Sciences, General (Capstone)
- 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
- ITNW 1358 Network+
- ITSE 2309 Database Programming – SQL
- ITSW 2370 SAS Programming
- MATH 1342 Elementary Statistical Methods

---

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.
Second Semester

ITSE 2347  Advanced Database Programming (Capstone)
ITSE 2354  Advanced Oracle PL/SQL
ITSY 1300  Fundamentals of Information Security (Security+)

1. May substitute COSC-1436