

Collin College - Continuing Education

COURSE SYLLABUS

COURSE INFORMATION

Course Number: CADD 6250

Course Title: AutoCAD Advanced

Course Description: This course is designed for students with basic to intermediate level CAD software experience who want to take their skill to the next level. Drawing exercises are used extensively to demonstrate use of advanced drawing tools and to provide the student with topic-specific drawings for hands-on experience. Topics include: 2D and 3D drawing, perspective and axonometric views, rendering, natural and artificial lighting, dynamic blocks, layouts and viewports, title blocks, plot styles, layout grids, and fixing problematic drawing files.

Suggested Course Prerequisite(s): Completed AutoCAD Fundamentals course or other recent basic to intermediate level AutoCAD experience. Familiarity with Windows 10-based programs.

Course Resources:

Mastering AutoCAD 2021 and AutoCAD LT 2021
George Omura with Brian C. Benton
Publisher: Sybex/Wiley, ISBN: 978-1119715351

Student Learning Outcomes:

Demonstrate advanced use of AutoCAD functionality. Learn to complete moderately challenging drawing tasks and use of advanced 2D and 3D drawing tools.

Certification Notes:

Next course recommendation: Revit Architecture Essentials, Revit Architecture Advanced

Lesson Plan – by week or session:

Session 1:

- o Customizing the ribbon
- o Making custom toolbars and custom hotkeys
- o Manipulating layers and layer states
- o Using the Layer State Manager
- o Creating Layouts and Viewports
- o Locking and unlocking viewports
- o Activating and deactivating viewports
- o Creating non-rectangular viewports
- o Activating and deactivating viewports
- o Selecting a plot scale
- o Using plot styles
- o Printing from model and paper space
- o Printing to PDF

Session 2:

- o 3D drawing and modeling
- o Extrusions, sweeps, primitive shapes
- o Perspective and axonometric views
- o Artificial light and sunlight
- o Using the View Cube and steering wheel
- o Rendering views

Session 3:

- o Layer states and Layer State Manager
- o Split screen with viewports and tiled windows
- o Creating title blocks
- o Creating dynamic blocks
- o Creating blocks with attributes
- o Using the Enhanced Attribute Editor
- o Using layout grids to compose sheets
- o Using Purge and Audit tools

o Correcting corrupted or problematic CAD files

Course Sessions:

Listed are guidelines to indicate all topics that will be covered during your course. Do not plan your personal calendar based on these sessions. Your instructor will give you a calendar for your class that will indicate specific topics, assignments, and days.

Method of Evaluation:

Unless otherwise stated, course completion is evaluated on the basis of attendance. Students must be in attendance 90% of the class time in order to be considered a successful completer of the course.

Students must be in attendance 90% of each course in a certificate series for successful completion and to earn a certificate as specified.

Students must complete all courses (core and no. of elective courses needed) to complete a certificate series within two years from start date of the first course taken.

Refund Policy:

Please refer to www.collin.edu/ce/inforegistrat.html for our refund policy. No refunds after the start time of the first class.

Americans with Disabilities Act:

Collin College will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal opportunity. It is the student's responsibility to contact the ACCESS office, SCC-D140 or 972.881.5898 (V/TTD: 972.881.5950) to arrange for appropriate accommodations. See the current Collin Student Handbook for additional information.