

COMPUTER AIDED DRAFTING

This program of study emphasizes the skills needed in the mechanical, structural, architectural, and civil drafting fields.

Technical Certificate Option - The Technical Certificate in Computer Aided Drafting is a two semester program that contains technical and advanced technical courses.

Associate of Applied Science Degree Option - The Associate of Applied Science degree in Computer Aided Drafting Technology is a four semester program that contains technical, advanced technical and general education courses. The associate degree courses of study emphasize the skills needed in the mechanical, structural, architectural, and civil drafting fields.

Admission Criteria: Placement test and preadmission advising.

Technical Education Courses

Fall Semester			Spring Semester		
Course Title		Credits	Course Title		Credits
CAD 102	SolidWorks Part Modeling	3	CAD 152	Residential Architecture with Revit	4
CAD 107	SolidWorks Assembly Modeling	3	CAD 157	Commercial Architecture with Revit	3
CAD 112	Introduction to Mechanical Drafting	3	CAD 167	Civil Drafting with AutoCAD Civil 3D	4
CAD 117	Intermediate Mechanical Drafting	3	CAD 172	Advanced Mechanical Drafting and Sheet Metal Design	4
CAD 127	Basics of AutoCAD	3	CAD 182	Specific Industry Projects	3
MAT 101	Technical Math	3			
Semester Total		18	Semester Total		18
Total Technical Certificate Credits					36

General Education Courses.....Credits

- COM 102 Interpersonal Communications or COM 105 Public Speaking 3
- CSA 105 Introduction to Computer Applications and Concepts 3
- ENG 101 English Composition I or ENG 100 Technical Writing 3
- HUM 101 Ethics in the Workplace or PSY 101 General Psychology 3
- MAT 105 Intermediate Algebra or MAT 150 College Algebra 3

TOTAL GENERAL EDUCATION CREDITS.....15

TOTAL RELATED ELECTIVE CREDITS.....9

TOTAL AAS PROGRAM CREDITS.....60

PROGRAM OUTCOMES

- Demonstrate proficiency in preparing technical drawings based on industry standards using the latest AutoCAD, AutoCAD Civil 3D, Revit, SolidWorks and SolidWorks Workgroup Product Data Management software.
- Produce accurate engineering drawings from various sources including textbooks, hand-drawn sketches and verbal instructions.
- Demonstrate an understanding of the mechanical, architectural and civil drafting disciplines.
- Exhibit appropriate work place attitude and attendance.
- Work independently by utilizing multiple information sources such as reference books, the Internet and a personal binder of frequently used information.
- Successfully complete third-party certification exam (Certified SolidWorks Associate).
- Accurately correct drawings and 3D models per work place standards.
- Maintain a drafting portfolio for the purpose of showcasing their best work.
- Proficiently work as part of a team to meet deadlines in a professional environment.

GENERAL EDUCATION PROGRAM OUTCOMES

- Compose coherent written communication.
- Deliver coherent oral communication.
- Show proficiency in locating, analyzing, documenting, and ethically using information sources.
- Perform and interpret calculations.

- Develop logical problem solving skills and/or critical thinking skills.
- Identify appropriate strategies for gathering, analyzing, and displaying data to draw conclusions from scientific data.
- Collaborate effectively, which cultivates a respect for human diversity.
- Demonstrate technology literacy appropriate to area of study.

