

The Engineering Graphics Technology Program offers associate of science degrees and certificates. This program prepares you for employment as a design drafter.

Prerequisites may be waived or challenged for previous educational, occupational, or related experience. The curricula are designed to develop communication, leadership, and critical thinking skills. The classroom setting will provide experience in the team approach to problem solving. You will use CAD (Computer-Aided Design) to form the foundation for drafting standards, conventions, layouts, designs, and details of working drawings and models. Specifications, handbooks, and technical data applicable to engineering graphics are emphasized. Lab fees are assessed. Consult with an Engineering Graphics Technology faculty advisor with any questions you have at 303.914.6572. Students must earn a C or better in all courses to graduate.

General Education Course Requirements for Engineering Graphics Technology AAS Degrees:

| Required Courses | Credits |
|---|-----------|
| CIS 118 Introduction to PC Applications: MS Office | 3 |
| ENG 131 Technical Writing | 3 |
| MAT 107 Career Math | 3 |
| Choose one Social and Behavioral Science course: (ANT, ECO, GEO, GIS, HIS, POS, PSY, SOC) | 3 |
| Choose one COM course from the following: COM 115 Public Speaking or COM 125 Interpersonal Communication | 3 |
| Total Credits | 15 |

Degrees: Associate of Applied Science

Architectural
Mechanical
Civil

Certificates:

Architectural
Mechanical
Civil
SolidWorks

AAS Degree

Architectural

The Architectural AAS degree prepares you for a career in a construction or architectural firm. Electives allow you to select a preferred path in this field. It might be helpful to remember that one credit is equal to 20 hours of class time.

| Required Courses | Credits |
|--|-----------|
| AEC 121 Construction Materials And Systems | 3 |
| AEC 218 Sustainable Building Systems | 3 |
| AEC xxx Elective | 3 |
| CAD 101 Computer Aided Drafting I | 3 |
| CAD 102 Computer Aided Drafting II | 3 |
| EGT 230 Drafting and Design I: Arch | 6 |
| EGT 231 Drafting and Design II: Arch | 6 |
| CAD 224 Revit | 3 |
| CAD 227 Revit Advanced | 3 |
| CAD 289 Capstone (Fourth Semester Class) | 6 |
| CON 230 Blueprint Reading | 4 |
| MGD 111 Adobe Photoshop I | 3 |
| Required Architectural Credits | 46 |
| General Education Courses (See AAS Degree Requirements page 24) | 15 |
| Total Credits | 61 |

AAS Degree

Mechanical

The Mechanical AAS degree prepares you for a career with many options to choose from, such as mechanical design, piping, electrical, mining, or welding. Course electives allow you to select a preferred path in this field.

| Required Courses | Credits |
|--|-----------|
| CAD 101 Computer Aided Drafting I | 3 |
| CAD 102 Computer Aided Drafting II | 3 |
| EGT 231 Drafting and Design II: Mech | 6 |
| CAD 256 SolidWorks Basic | 6 |
| CAD 257 SolidWorks Intermediate | 6 |
| CAD 258 SolidWorks Advanced | 6 |
| CAD 289 Capstone (Fourth Semester Class) Mech | 6 |
| CAD 285 Independent Study Mech | 6 |
| PHY 105 Conceptual Physics | 4 |
| Required Mechanical Credits | 46 |
| General Education Courses (See AAS Degree Requirements page 24) | 15 |
| Total Credits | 61 |

AAS Degree

Civil

| Required Courses | Credits |
|--|-----------|
| CAD 101 Computer Aided Drafting I | 3 |
| CAD 102 Computer Aided Drafting II | 3 |
| EGT 230 Drafting and Design I: Civil | 6 |
| EGT 231 Drafting and Design II: Civil | 6 |
| CAD 233 Civil 3D | 3 |
| CAD 285 Independent Study | 6 |
| CAD 289 Capstone (Fourth Semester Class) | 6 |
| COM 105 Career Communications | 3 |
| GIS 101 Intro to Geographic Information Systems | 3 |
| GIS 210 Intermediate GIS | 3 |
| PHY 105 Conceptual Physics | 4 |
| Required Civil Credits | 46 |
| General Education Courses (See AAS Degree Requirements page 24) | 15 |
| Total Credits | 61 |

Certificate

Architectural

| Required Courses | Credits |
|---|-----------|
| AEC 121 Construction Materials and Systems | 4 |
| CAD 101 Computer Aided Drafting I | 3 |
| CAD 102 Computer Aided Drafting II | 3 |
| CAD 224 Revit | 3 |
| EGT 230 Drafting and Design I: Arch | 6 |
| EGT 231 Drafting and Design II: Arch | 6 |
| And, one of the following electives: | |
| CAD 227 Revit Advanced | 3 |
| AEC 218 Sustainable Building Systems | 3 |
| AEC Elective | 3 |
| Total Credits | 28 |

Certificate

Mechanical

| Required Courses | Credits |
|--------------------------------------|-----------|
| CAD 101 Computer Aided Drafting I | 3 |
| CAD 102 Computer Aided Drafting II | 3 |
| EGT 231 Drafting and Design II: Mech | 6 |
| Total Credits | 12 |

Certificate

Civil

| Required Courses | Credits |
|---|-----------|
| CAD 101 Computer Aided Drafting I | 3 |
| CAD 233 Civil 3D | 3 |
| GIS 101 Intro to Geographic Information | 3 |
| GIS 210 Intermediate GIS | 3 |
| EGT 231 Drafting and Design II: Civil | 6 |
| Total Credits | 18 |

Certificate

SolidWorks

| Required Courses | Credits |
|---------------------------------|-----------|
| CAD 256 SolidWorks Basics | 6 |
| CAD 257 SolidWorks Intermediate | 6 |
| CAD 258 SolidWorks Advanced | 6 |
| Total Credits | 18 |