

## Engineering Drafting

**Award Type:** Certificate of Accomplishment

The certificate in engineering drafting is intended to prepare students for employment (or to transfer to a university) with a strong background in the mechanical areas of drawing, while also becoming a skilled operator of a CADD system.

**The graduate of the Certificate of Accomplishment in Engineering Drafting will:**

- Develop graphic communication skills including orthographic projection; detail and assembly drawings; auxiliaries; sections; dimensioning; and surface development.
- Be able to use computer-aided drafting and design CADD software to create, modify, delete, transfer, and plot graphic files used to produce complete engineering drawings.
- Develop familiarity with principles and application of engineering drawing, including, freehand sketching, pictorial drawings, engineering lettering, dimensioning, sections, auxiliary, surface finish, standard and geometric tolerancing, threads, and fasteners.
- Develop the ability to use engineering handbooks, ordinances, codes and incorporate such regulations with engineering design and production decisions.
- Develop the ability to read engineering drawings and specifications.
- Develop the ability to understand the intent of the engineers by interpreting the relationship of the two-dimensional drawings with respect to the actual objects or projects.

## Program Requirements

**A total of 15 units is required for the certificate.**

**Required core courses (12 units):**

Course Number	Course Title	Units
ET 100	Computer Aided Drafting and Design	3.0
ET 140	Engineering Drawing	3.0
ET 145	Advanced Engineering Drawing	3.0
ET 117	Print Reading and Interpretation	3.0

**Plus a minimum of 3 units selected from the following:**

Course Number	Course Title	Units
ARCH 111	Architectural Graphics & Design I	3.0
ARCH 121	Architectural Drawing 1	4.0
ARCH 122	Architectural Drawing 2	4.0
ET 189	Independent Projects in Engineering Technology	1.0 - 3.0 units
ET 370	SkillsUSA	3.0