



1. Title: **Drafting Technology: Computer Aided Design and Drafting (CADD)**

2. Summary of Goals—Learning Outcomes:

This is a four-semester program which will prepare the student for an entry-level job in Technical or Mechanical drafting and 3D Design. First year training concentrates on basic drafting and computer practice, which provide experiences in applying technical skills to practical problems. Acquired skills include precision dimensioning, basic working drawings, and computer-aided drafting. During the second year the training concentrates on 3D modeling and design including assemblies and parts management. Courses are designed and offered to provide completion within two years.

Upon completion of the courses for a Drafting Technology: Computer Aided Design Drafting (CADD) major students will learn the following:

- Free hand sketching, interpreting blueprints, drawing layout, multi-view projection and dimensioning.
- Correct letter styles for drafting, geometric construction, basic dimensioning, threads & fasteners, isometric drawing and single auxiliary projection.
- Precision dimensioning, threads & fasteners, working drawings and assemblies, isometric drawing, single and secondary auxiliary projection, and basic descriptive geometry.
- Students will use the most current Computer Aided Drafting (CAD) software and computer lab projects to develop solid models, assemblies and drawings and to solve mechanical design problems.

3. Course Listing:

Required Courses:

Drafting G101, Basic Computer Aided Design Drafting	4.0 units
Drafting G105, Basic Engineering Drafting I, Computer Aided Drafting	3.0 units
Drafting G110, Basic Engineering Drafting II, Computer Aided Drafting	3.0 units
Drafting G170, Advanced 3D Mechanical Design	3.0 units
Drafting G090, CAD Drafting Laboratory (One unit course, taken 3 times)	3.0 units
Math G010, Elementary Algebra	4.0 units

Required Subtotal:	20 units
Completion of GE Requirements:	21-41 units
Additional Electives (as needed to reach 60)	
Degree Total	<u>60 units</u>