



**Mechanical Engineering Technology  
 Credential: Certificate in Computer Aided  
 Drafting C4032001**

The rapidly developing age of high technology has brought about a need for people in the fields of architecture, land surveying, manufacturing, drafting, maintenance, engineering and design to update their computer graphics skills.

This certificate is intended for persons with some drafting experience who wish to attend class at night. (Enrollment is by approval of advisor.)

Program Length: 2 semesters  
 Career Pathway Options: Associate in Applied Science in Mechanical Engineering Technology (Higher entrance standards required); Diploma in Mechanical Engineering Technology; Certificate in Computer Aided Drafting, Certificate in Computer Aided Manufacturing  
 Program Sites: Lee Campus - Evening Program

Course Requirements for Computer Aided Drafting Certificate

A. Required Major Core Courses (9 SHC)		C-L-SHC
DFT 151	CAD I	2-3-3
DFT 152	CAD II	2-3-3
DFT 154	Introduction to Solid Modeling	2-3-3
	Or	
MEC 161	Manufacturing Processes I	3-0-3
B. Other Major Hours Required for Graduation (3 SHC)		
DFT 153	CAD III	2-3-3

Total Semester Hours Credit required for graduation: 12

Semester Curriculum for Computer Aided Drafting Certificate

1st Semester (Fall)		C-L-SHC
DFT 151	CAD I	2-3-3
DFT 153	CAD III	<u>2-3-3</u>
		4-6-6
2nd Semester (Spring)		
DFT 152	CAD II	2-3-3
DFT 154	Introduction to Solid Modeling	2-3-3
	Or	
MEC 161	Manufacturing Processes I	<u>3-0-3</u>
		4-6-6

Total Semester Hours Credit: 12

**COURSE DESCRIPTIONS**

**DFT 151 CAD I** 2-3-3  
 This course introduces CAD software as a drawing tool. Topics include drawing, editing, file management, and plotting. Upon completion, students should be able to produce and plot a CAD drawing.

**DFT 152 CAD II** 2-3-3  
 This course is a continuation of DFT 151. Topics include advanced two-dimensional, three-dimensional, and solid modeling and extended CAD applications. Upon completion, students should be able to generate and manage CAD drawings and models to produce engineering documents.

**DFT 153 CAD III** 2-3-3  
 This course introduces advanced CAD applications. Emphasis is placed upon advanced applications of CAD skills. Upon completion, students should be able to use advanced CAD applications to generate and manage data.

**DFT 154 Introduction Solid Modeling** 2-3-3  
 This course is an introduction to basic three-dimensional solid modeling and design software. Topics include basic design, creation, editing, rendering and analysis of solid models and creation of multi-view drawings. Upon completion, students should be able to use design techniques to create, edit, render and generate a multi-view drawing.

**MEC 161 Manufacturing Processes I** 3-0-3  
 This course provides the fundamental principles of value-added processing of materials into usable forms for the customer. Topics include material properties and traditional and non-traditional manufacturing processes. Upon completion, students should be able to specify appropriate manufacturing processing for common engineering materials.