

**Central Carolina Community College
Program Planning Guide**

**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

Suggested Course Schedule:	HOURS			Grade	Semester	Notes
	Class	Lab	Credit			
1st Semester (Fall)						
DFT 151 CAD I	2	3	3			
2nd Semester (Spring)						
DFT 152 CAD II	2	3	3			
DFT 154 Intro to Solid Modeling	2	3	3			
	4	6	6			
3rd Semester (Fall)						
DFT 153 CAD III	2	3	3			
OR DFT 254 Intermediate Solid Model/Rend	2	3	3			

Total Semester Hours Credit: 12

Course Descriptions:

DFT 151 CAD I 2-3-3
Local Prerequisite: DFT 111 or Instructor Approval
 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
Local Prerequisite: DFT 151
 This course introduces extended CAD applications. Emphasis is placed upon intermediate applications of CAD skills. Upon completion, students should be able to use extended CAD applications to generate and manage drawings.

DFT 153 CAD III 2-3-3
Local Prerequisite: DFT 152
 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 to Solid Modeling 2-3-3
Local Prerequisite: DFT 151
 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.

DFT 254 Intermed Solid Model/Render 2-3-3
Prerequisites: DFT 154
 This course presents a continuation of basic three-dimensional solid modeling and design software. Topics include advanced study of parametric design, creation, editing, rendering and analysis of solid model assemblies, and multiview drawing generation. Upon completion, students should be able to use parametric design techniques to create and analyze the engineering design properties of a model assembly.