

## Program Planning Guide

### Mechanical Engineering Technology, Engineering Graphics Certificate (C40320EG)

Program Length: 3 semesters

Career Pathway Options: Associate in Applied Science in Mechanical Engineering Technology; Certificate in Mechanical Engineering Technology

Program Site(s): Lee Main Campus - Day Program

Suggested Course Schedule:	HOURS			Notes
	Class	Lab	Credit	
<b>1st Semester (Fall)</b>				
DFT 154	Intro to Solid Modeling	2	3	3
<b>2nd Semester (Spring)</b>				
DDF 211	Design Process I	1	6	4 Local DFT 153 or DFT 154
DFT 254	Intermed Solid Model/Render	2	3	3 DFT 154 prereq
		2	9	7
<b>3rd Semester (Spring)</b>				
DFT 153	CAD III	2	3	3 DFT 254 prereq

Total Semester Hours Credit Required for Graduation: 13

#### Course Descriptions:

##### DFT 154 Introduction to 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.

##### DFT 254 Intermediate 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.

##### DDF 211 Design Process I

1-6-4

Local Prerequisite: DFT-153 or DFT 154

This course emphasizes design processes for finished products. Topics include data collection from manuals and handbooks, efficient use of materials, design sketching, specifications, and vendor selection. Upon completion, students should be able to research and plan the design process for a finished product.

##### DFT-153 CAD III

2-3-3

Local Prerequisite: DFT 254

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.