

Program Planning Guide

Mechanical Engineering Technology Certificate (C40320)

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	
1st Semester (Fall)				
DFT 154	Intro to Solid Modeling	2	3	3
2nd Semesters (Spring)				
DFT 151	CAD I	2	3	3
DDF 211	Design Process I	1	6	4
		3	9	7
3rd semester (Fall)				
DFT 152	CAD II	2	3	3
MEC 111	Machine Processes I	1	4	3
		3	7	10

Total Semester Hours Credit Required for Graduation: 16

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.

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 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

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.

MEC 111 Machine Processes I

1-4-3

This course introduces shop safety, hand tools, machine processes, measuring instruments, and the operation of machine shop equipment. Topics include use and care of tools, safety, measuring tools, and the basic setup and operation of common machine tools. Upon completion, students should be able to manufacture simple parts to specified tolerance.