

MECHANICAL (MEC)

MEC 111 Machine Processes I 5/3

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.

Prerequisite: None

Corequisite: None

MEC 112 Machine Processes II 5/3

This course covers advanced use of milling machines and lathes. Emphasis is placed on safety and compound setup of milling machines and lathes for manufacture of projects with a specified fit. Upon completion, students should be able to demonstrate proper procedures for manufacture of assembled parts.

Prerequisite: Take MEC 111;

Corequisite: None

MEC 128 CNC Machining Processes 6/4

This course covers programming, setup, and operations of CNC turning, milling, and other CNC machines. Topics include programming formats, control functions, program editing, and part production and inspection. Upon completion, students should be able to manufacture simple parts using CNC machines.

Prerequisite: None

Corequisite: None

MEC 130 Mechanisms 4/3

This course introduces the purpose and action of various mechanical devices. Topics include cams, cables, gear trains, differentials, screws, belts, pulleys, shafts, levers, lubricants, and other devices. Upon completion, students should be able to analyze, maintain, and troubleshoot the components of mechanical systems.

Prerequisite: None

Corequisite: None