

MACHINE TOOL (MACH)

MACH-105 MACHINE TOOL BASICS

0.17 credit hours, 0.27 contact hours (0.27 Lab Hours Per Week)

The manufacturing worker must effectively and efficiently use the Machinery's Handbook to reference technical information. This module will provide the student information necessary for the development of these skills and abilities as they apply to using the Machinery's Handbook. *.17 credit hours/.27 billed contact hours*

MACH-110 MACHINE TOOL SAFETY

0.17 credit hours, 0.27 contact hours (0.27 Lab Hours Per Week)

The manufacturing worker understands that safety is the most important concern, primarily in regards to proper dress, housekeeping, safe machine operation, managing chips, and making machine adjustments. This module will provide the student with information necessary for the development of this knowledge as it applies to the machining industry. *.17 credits/.27 billed contact hours*

Fee: \$90.00

MACH-115 BLUEPRINT READING

1.16 credit hours, 1.87 contact hours (1.87 Lab Hours Per Week)

The manufacturing worker must effectively and efficiently interpret engineering drawings. This module will provide the student with information necessary to develop these skills and abilities as they apply to reading blueprints and understanding GD & T symbols and feature control frames on blueprints. *.1.16 credit hours/1.87 contact hours*

MACH-120 FUNDAMENTAL SKILLS

1.98 credit hours, 3.2 contact hours (3.20 Lab Hours Per Week)

The manufacturing worker must effectively and efficiently perform fundamental machining technology skill operations. These modules will provide the student with information necessary for the development of these skills and abilities. *.1.98 credit hours/3.2 billed contact hours*

MACH-125 PRECISION MEASUREMENT

2.75 credit hours, 4.33 contact hours (4.33 Lab Hours Per Week)

The manufacturing worker must effectively and efficiently use measurement devices and apply precision measurement processes and practices. These modules will provide the student with information necessary for the development of these skills and abilities as they apply to using the various measurement devices. *.2.75 credit hours/4.33 billed contact hours*

MACH-130 DRILL PRESS AND BAND SAW

2.51 credit hours, 4 contact hours (4 Lab Hours Per Week)

Modules will provide the student with the information necessary for the development of these skills and abilities as they apply to determining proper speeds and feeds in operating the drill press and band saw. *.2.51 credit hours/4 billed contact hours*

Fee: \$125.00

MACH-135 TURNING ON LATHE

4.61 credit hours, 7.33 contact hours (7.33 Lab Hours Per Week)

Modules will provide the student with information necessary for the development of skills and abilities as they apply to the set-up, operation and maintenance of manual lathes to manufacture parts that meet specifications. *.4.61 credit hours/7.33 billed contact hours*

Fee: \$70.00

MACH-140 ELECTRONIC DISCHARGE MACHINING

0.79 credit hours, 1.27 contact hours (1.27 Lab Hours Per Week)

Modules will provide the student with information necessary for the development of skills and abilities as they apply to the principles of electronic discharge machining. *.79 credit hours/1.27 billed contact hours*

Fee: \$70.00

MACH-145 VERTICAL/HORIZONTAL MILLING

5.84 credit hours, 9.33 contact hours (9.33 Lab Hours Per Week)

Modules will provide the student with information necessary for the development of these skills and abilities as they apply to the set-up and operation of manual milling machines to manufacture parts that meet specifications. *.5.84 credit hours/9.33 billed contact hours*

Fee: \$195.00

MACH-150 SURFACE GRINDING

2.75 credit hours, 4.4 contact hours (4.40 Lab Hours Per Week)

Modules will provide the student with information necessary for the development of the skills and abilities necessary when using a surface grinder and associated fixtures to manufacture parts that meet specifications. *.2.75 credit hours/4.4 billed contact hours*

Fee: \$105.00

MACH-155 CYLINDRICAL GRINDING

1.50 credit hours, 2.4 contact hours (2.40 Lab Hours Per Week)

Modules will provide the student with information necessary for the development of the skills and abilities to effectively and efficiently set-up and operate cylindrical grinding machines to manufacture parts that meet specifications. *.1.5 credit hours/2.4 billed contact hours*

Fee: \$70.00

MACH-160 TOOL AND CUTTER GRINDING

3 credit hours, 4.8 contact hours (4.80 Lab Hours Per Week)

Modules will provide the student with information necessary for the development of skills and abilities to effectively and efficiently set-up and operate cutter grinding machines to sharpen and/or manufacture cutting tools that meet specifications. *.3 credit hours/4.8 billed contact hours*

Fee: \$80.00

MACH-165 CNC PROGRAMMING AND MACHINING

6.25 credit hours, 10 contact hours (10 Lab Hours Per Week)

Modules will provide the student with information necessary for the development of skills and abilities necessary to effectively and efficiently program, set-up and operate computer numerically controlled (CNC) machine tools to manufacture components that meet customer and print specifications. *.6.25 credit hours/10 billed contact hours*

Fee: \$90.00

MACH-170 MACHINE TOOL PROJECTS

5.58 credit hours, 8.93 contact hours (8.93 Lab Hours Per Week)

Modules will provide the student with information and hands-on training necessary to effectively and efficiently set-up and operate machines to produce precision gages, fixtures, tooling and other associated devices. *.5.58 credit hours/8.93 billed contact hours*

Fee: \$90.00

MACH-175 MASTERCAM

4.50 credit hours, 7.2 contact hours (7.20 Lab Hours Per Week)

Modules will provide information necessary to effectively and efficiently work with CAD/CAM software. *.4.5 credit hours/7.2 billed contact hours*

Fee: \$110.00

MACH-180 PLASMA CUTTER

1.84 credit hours, 2.93 contact hours (2.93 Lab Hours Per Week)

Modules will provide students with the understanding and skills necessary as they relate to plasma and oxy-fuel metal cutting processes including CNC plasma oxy fuel cutting. CNC plasma machine components, CNC plasma controls and advanced CNC plasma. *1.84 credit hours/2.93 billed contact hours*

Fee: \$90.00