Motor Objectives and Outcomes

Drafting/CAD

Objectives:

- Define the components required in the design of an electric motor.
- Identify the necessary fasteners and thread information as applied to the project.
- Examine the functionality of 2D and 3D CAD software.
- Research the necessary information used in engineering drawings.

Outcomes:

Upon completion of this project, the student will be able to:

- Identify the components required in the design of an electric motor.
- Specify correctly the fasteners and thread requirements of the project.
- Create 2D drawings or 3D models of all necessary parts.
- Create a working drawing necessary for manufacture of a machined part.
- Create an assembly drawing necessary to assemble the electric motor.
Machine Tool

Objectives:

The student will:

- Examine the information available on engineering drawings.
- Identify commonly used components used in fixturing parts.
- Determine the necessary fixture used to manufacture project parts.
- Define necessary information in operation of a modeling machine center.
- Become familiar with assembly procedures used in manufacturing.

Outcomes:

Upon completion of this project, the student will be able to:

- Read and interpret an engineering drawing.
- Fixture the blank material on a modeling machining center.
- Manufacture, using faceted information, a scale model of the required components.
- Assemble, according to the print, the project device.