

COLLEGE OF ENGINEERING MACHINE SHOP TRAINING PLAN

OUR PURPOSE:

To provide a facility equipped with tools and machinery, and a competent staff to introduce and train engineering students in the operation, methods and techniques of a basic machine shop. Our goal is to produce engineers with a solid understanding of how it's made and enough knowledge to develop ideas and follow through with finished products. The machine shop also provides custom machining, CNC and manual, for university project's only. Work order forms can be picked up in machine shop office or <http://www.fit.edu/machine/>.

MACHINE SHOP CERTIFICATION I TRAINING: EGN1100

Freshman training known as "Certification I" or an introduction to the machine shop, can be arranged between mechanical and aerospace professors or others that desire to include this shop training as part of their curriculum. Upon completion, this training gives students limited access to the machine shop to complete class projects assigned by their professor only. Generally this training includes viewing a safety video, signing a liability release and shop rules agreements as well as an introduction to the shop facilities, tools and equipment. Each student will be signed off after use of common hand power tools, band saws, miter saws and sanders. Basic layout methods and measuring instruments are covered. A written skill test will be given on the last day of class. In addition, Certification I training is required prior to the machine shop Certification II training. The course can be accomplished in 4 to 5 hours.

MACHINE SHOP CERTIFICATION II TRAINING: EGN2100

"Certification II" is the term used to describe the training required for students needing further use of the machine shop to work on required university projects. This training goes beyond Certification I training with concentration on safely operating the vertical milling machine and lathe. Also included in this training is equipment such as chop saws, grinders and other tools not covered in Certification I training. Students that may require welding skills are invited to view on-line sites such as "<http://www.weldingtipsandtricks.com/>" or other sites to pick up basic welding information. As part of Certification II training, the completion of a project will be required and graded. Students will also be required to pass a written skill test. The course can be accomplished in 5 to 6 hours.

SPECIALIZED TRAINING, LIMITED USE:

Occasionally circumstances can require a student, staff, or faculty member to be trained independently on a particular machine to accomplish a designated task. This training must be coordinated and approved by the machine shop director. This approval is for a limited time and specific project. Shop rules and liability release documents must be signed with a statement attached stating the limitations of the specialized training.