



MASTER COURSE OUTLINE

Prepared By: Bill Autry

Date: June 2014

COURSE TITLE

Machining – Skill Enhancement

GENERAL COURSE INFORMATION

Dept.: IST

Course Num: 184

(Formerly:)

CIP Code: 47.0303

Intent Code: 21

Program Code: 768

Credits: 4

Total Contact Hrs Per Qtr.: 77

Lecture Hrs: 11

Lab Hrs: 66

Other Hrs:

Distribution Designation:

COURSE DESCRIPTION (as it will appear in the catalog)

The course provides extra “hands on” time and instruction to supplement the students machining skill level using fundamental machining processes on lathes, vertical milling machines and other machine shop equipment.

PREREQUISITES

IST 182 or Instructor Permission

TEXTBOOK GUIDELINES

Appropriate textbook as determined by faculty (Example: *Machining Fundamentals*, by John R. Walker)

COURSE LEARNING OUTCOMES

Upon successful completion of the course, students should be able to demonstrate the following knowledge or skills.

- 1) Observe appropriate safety rules as pertaining to general machine shop practices.
- 2) Use reference guides such as the “Machinist Handbook” to calculate various machining functions.
- 3) Use precision tools using accepted practices
- 4) Demonstrate basic skills to safely operate an Engine Lathe, the Vertical Milling machine, and various other shop tools.
- 5) Development of advanced machining skills.

INSTITUTIONAL OUTCOMES

COURSE CONTENT OUTLINE

Measure & Inspect parts with precision measuring tools

Perform layouts

Perform proper lathe procedures

Perform Vertical Milling operations

Perform broaching functions

Perform various machining operations using advanced techniques

DEPARTMENTAL GUIDELINES *(optional)*

DIVISION CHAIR APPROVAL

DATE