

Common Course Outline
IMTC 248
MACHINE SHOP IV
3 Semester Hours

The Community College of Baltimore County

Description

Machine Shop IV

Covers four basic shop machine tools: lathe, milling machine, shaper and surface grinder; introduces how to operate these machines effectively and safely.

Prerequisite: IMTC 228

Overall Course Objectives.

Upon completion of this course the student will be able to:

- A. Work safely in a shop environment using O.S.H.A safety guidelines.
- B. Develop step by step repair methods on broken equipment.
- C. Obtain surface ground and polished finishes on machined parts.
- D. Machine long shafts with no more than .005 run-out.
- E. Produce a blueprint which is an accurate description of a product to be built.
- F. Work within a greater degree of accuracy, machine parts to within + or - .005 of an inch accuracy.

Major Topics

- I. Lathe Project
 - A. Safety procedures
 - B. Operation procedure
 - C. Application

- II. Grinding
 - A. Safety procedures
 - B. Machine Description
 - C. Operation of Machine
 - D. Application

- III. Milling Machine
 - A. Safety procedures
 - B. Machine Description
 - C. Operation of Machine
 - D. Application

- IV. Shaper
 - A. Safety procedures
 - B. Machine Description
 - C. Operation of Machine
 - D. Application

Course Requirements

Exams 75%

Quizzes 25%

(Subject to revision by the instructor)

Other Course Information