Common Course Outline

CAMM 151
INDUSTRIAL METRICS
3 Semester Hours

The Community College of Baltimore County

Description

Industrial Metrics
Covers use of the Metric system including basic measurements and related calculations for determining lengths, tolerances, and thread classifications. Reading Metric prints, 3rd angle projections, and applications using ISO standards are included.
Prerequisite: CAMM 111

Overall Course Objectives

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

1. Use common Metric Measurement units to measure lengths.
2. Demonstrate the use of Metric measurements and calculations to accurately Determine area, volume, and weights.
3. Convert measurements from Metric to U.S. Standard units.
4. Convert measurements from U.S. Standard to Metric units
5. Read measurements taken with Metric Rules, Vernier calipers and micrometers.
6. Describe the difference between U.S. Standard and Metric prints.

Major Topics

I. Measurements
   - A. Metric Scales
   - B. Metric Vernier Calipers
   - C. Metric Micrometers
   - D. Metric Tape measures
   - E. Metric Dial Indicators

I. Conversions
   - A. Decimals to Millimeters
   - B. Millimeters to Decimals
   - C. Fahrenheit to Celsius
   - D. Gallons to Liters

I. Print Reading and ISO Standards
   - A. Metric tolerances

B. 3rd angle projection
C. Metric Threads

Course Requirements

Grading: The faculty member will determine grading procedures, and a student can expect a minimum of eight grades from at least four of the following categories:

1. Quizzes
2. Lab projects
3. Written paper
4. Homework assignments
5. Midterm exam
6. Class participation
7. Comprehensive final.