

Common Course Outline
CADD 103
CAD Engineering Drawing I
3 Credits

The Community College of Baltimore County

Description

CADD 103 - CAD Engineering Drawing teaches vocabulary, construction techniques, standards, conventions, and visualization techniques to create and read engineering drawings with computer-aided design (CAD) software; includes technical sketching and interpreting various types of engineering drawing.

3 Credits: 2 lecture and 2 laboratory hours

Prerequisite: CADD 101 or permission of program coordinator.

Overall Course Objectives

Upon completion of this course students will be able to:

1. recognize and apply standard drafting principles in a CADD environment;
2. properly use engineering drawing terminology;
3. identify different styles of drawings including mechanical, architectural, and civil;
4. apply basic dimensioning procedures;
5. construct and plot multiview drawings at designated scales;
6. describe drafting equipment, media, and reproduction methods;
7. dimension drawings according to ANSI standards;
8. describe manufacturing and construction processes;
9. create isometric and oblique pictorial drawings; and
10. explain the use of working drawings in the design process.

Major Topics

- I. Introduction to drafting and CADD
- II. General industry standards regarding types of drawings, sheet sizes, and scales
- III. Geometric construction terms and techniques
- IV. Introduction to sketching and shape description
- V. Manufacturing and construction processes
- VI. Construction of multiview projections
- VII. Dimensioning and standards
- VIII. Sectional views
- IX. Plotting
- X. Construction of primary, secondary, and auxiliary views

Course Requirements

Grading procedures will be determined by the individual faculty member and will include the following:

Grading/Exams:

- A minimum of six graded exercises
- A comprehensive portfolio
- One comprehensive midterm and final examination (Two examinations)

Other Course Information

This course is a core course in the CADD curricula. This course is taught in a computerized environment.