

Course Outline
CADD 103
CAD Engineering Drawing I
3 semester hours

The Community College of Baltimore County

Description

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 hours and 3 laboratory hours per week. Prerequisites: CADD 101 or permission of program coordinator.*

Overall Course Objectives

Upon completion of this course the student 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.
10. Explain the use of working drawings in the design process.

Major Topics

1. Introduction to drafting and CADD
2. General industry standards regarding types of drawings, sheet sizes, and scales
3. Geometric construction terms and techniques
4. Introduction to sketching and shape description
5. Manufacturing and construction processes
6. Construction of multiview projections
7. Dimensioning and standards
8. Sectional views
9. Plotting
10. Construction of primary, secondary, and auxiliary views

Course Requirements

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

1. Graded exercises
2. Periodic tests
3. Comprehensive final examination

Other Course Information

This course is a core course in the CADD curricula.
This course is taught in a computerized environment.
There are 2 lecture and 3 laboratory hours per week.