

Course Outline
CADD 241
CAD Engineering Drawing II
3 Credits

The Community College of Baltimore County

Description

CADD 241 - CAD Engineering Drawing II explores advanced vocabulary, construction techniques, standards, conventions and visualization techniques needed to create and read engineering drawings; includes theories of various types of pictorial, auxiliary and developmental drawings.

3 Credits: 2 lecture and 2 laboratory hours

Prerequisites: CADD 101 and CADD 103.

Overall Course Objectives

Upon completion of this course students will be able to:

1. create the six standard views of an object;
2. transfer height, width or depth dimensions between views;
3. draw a projected normal, inclined and oblique surfaces in all views;
4. define and label parts of a screw thread;
5. identify various fasteners and describe their use;
6. create an auxiliary view from any orthographic projection;
7. revolve an object to show the true length and true size of lines and planes;
8. dimension and detail an architectural drawing;
9. create civil site drawings; and
10. discuss how drawings may be handled in a “paperless” office.

Major Topics

- I. Orthographic Projection
- II. Dimensioning
- III. Sectional Views
- IV. Manufacturing Processes
- V. Fasteners, Threads and Bolts
- VI. Architectural detailing
- VII. Auxiliary Views
- VIII. Revolutions
- IX. Intersections and Developments
- X. Civil Site Drawings
- XI. Principles of Land Development
- XII. Reproduction and Drawing Control
- XIII. Assembly and Detail Drawing
- XIV. Tolerancing

Course Requirements

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

Grading/Exams

- Portfolio including a minimum of three graded exercises
- A minimum of three tests
- One comprehensive midterm and final examination (Two examinations)

Written Assignments: Students are required to use appropriate academic resources

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 2 laboratory hours per week.