

Course Outline
CADD 226
Architectural Computer-Aided Design Applications
3 semester hours

The Community College of Baltimore County

Description

Architectural Computer-Aided Design Applications

Continues topics studied in CADD 202 and extends to three-dimensional design studies and preparation of presentation drawings; discusses creation of new designs by modeling existing database drawings and “part-libraries” using the same software package used in CADD 202. *3 credits; 2 lecture hours and 3 laboratory hours per week. Prerequisites: CADD 202 or equivalent experience. Offered fall semester only.*

Overall Course Objectives

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

1. Develop a 3D model of an architectural edifice.
2. Create a set of working drawings from a 3D model.
3. Perform stair calculations.
4. Determine proper joint sizes using a typical span data chart.
5. Apply the appropriate principles to design a typical fireplace.
6. Draw a typical exterior elevation.
7. Identify and explain the three types of electrical circuits used in residential structures.
8. Describe the design process and responsibilities of design team members.
9. Identify the elements contained in a residential water supply system.
10. Describe how a typical dome is constructed.
11. Create a presentation drawing using a 3D rendered CAD model.

Major Topics

1. Review of Architectural Desktop[®] Features
2. 3D Concepts
3. Design Process
4. Stairs
5. Fireplaces
6. Drawing Elevations
7. Drawing Electrical Plans
8. Drawing Plumbing Plans
9. Nontraditional Structures

10. Rendering and Presentation Drawings
11. Architectural Dimensioning

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
4. Final project

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.