

**Common Course Outline**  
**CADD 226**  
**Architectural Computer-Aided Design Applications**  
**3 Credits**

**The Community College of Baltimore County**

**Description**

**CADD 226 - 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 and 2 laboratory hours

**Prerequisite:** CADD 202 or equivalent experience.

**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; and
11. create a presentation drawing using a 3D rendered CAD model.

**Major Topics**

- I. Review of Architectural Desktop© Features
- II. 3D Concepts
- III. Design Process
- IV. Stairs
- V. Fireplaces
- VI. Drawing Elevations
- VII. Drawing Electrical Plans
- VIII. Drawing Plumbing Plans
- IX. Nontraditional Structures
- X. Rendering and Presentation Drawings
- XI. Architectural Dimensioning

**Course Requirements**

Grading procedures will be determined by the individual faculty member and 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. Offered fall semester only.

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