

## **CADD 101**

### **Introduction to CADD**

3 Credits: 2 lecture hours and 2 lab hours

## Community College of Baltimore County Common Course Outline

### Description

**CADD 101 – Introduction to CADD:** introduces students to 2-dimensional drafting principles and practices and basic 3-dimensional modeling methods, utilizing Computer Aided Drafting/Design (CADD) techniques. Students learn the use of the AutoCAD software, the commands and features, the creation of digital engineering/architectural design and construction documents, file maintenance, and various output and plotting methods.

### Overall Course Objectives

Upon completion of this course, students will be able to:

1. recognize standard drafting principles in a CADD environment;
2. apply standard drafting principles in a CADD environment;
3. identify the function and purpose of CADD system components;
4. apply basic dimensioning procedures;
5. plot CADD drawings at designated scales;
6. utilize CADD as a precision drafting tool;
7. explain industry CADD practices and standards;
8. describe the design process and responsibilities of design team members;
9. develop competencies to progress to advanced CADD course work; and
10. evaluate career opportunities in CADD.

### Major Topics

- I. Introduction to drafting and CADD
- II. Interface components
- III. Cartesian coordinates, Grid snap and Object snap
- IV. Basic draw commands such as: LINE, CIRCLE, ARC, Dimensioning
- V. Basic editing commands such as: COPY, MOVE, ERASE, TRIM, Text
- VI. Intermediate editing: ARRAY, MIRROR, STRETCH, FILLET, CHAMFER
- VII. Drawing organization: LAYERS, viewports, borders
- VIII. Plotting
- IX. Isometric Designing
- X. Basic 3D Modeling
- XI. File maintenance and storage
- XII. Industry

The Common Course Outline (CCO) determines the essential nature of each course.  
For more information, see your professor's syllabus.

### XIII. Industry standards

#### **Course Requirements**

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- Eight lab assignments
- One research paper
- Midterm exam
- Final exam

Written assignments and research projects: Students are required to use appropriate academic resources in their research and cite sources according to the style selected by their professor.

Date Revised: 4/6/2021