

Course Outline
CADD 101
Introduction to CADD
3 semester hours

The Community College of Baltimore County

Description

Introduction to CADD

Introduces basic two-dimensional drafting principles, practices utilizing Computer-Aided Drafting/Design (CADD) techniques, and covers CADD software structure and features; discusses creation of CADD drawings using standard techniques, and uses AutoCAD© software on microcomputers.

Prerequisites: None

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. Develop working knowledge and skills to effectively and efficiently create drawings using AutoCAD.
3. Identify and explain 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.
8. Describe the design process and responsibilities of design team members.
9. Proceed to advanced CADD course work.
10. Understand career opportunities in CADD.

Major Topics

1. Introduction to drafting and CADD
2. Basic draw commands such as: LINE, CIRCLE, ARC
3. Menus, coordinates, grid, snap
4. Basic editing commands: COPY, MOVE, ERASE, TRIM
5. Drawing organization: LAYERS, borders
6. File maintenance and storage
7. Text
8. Intermediate editing: ARRAY, MIRROR, STRETCH, FILLET, CHAMFER
9. Plotting
10. 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. Class participation

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.

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GENERAL COURSE OUTLINE
JANUARY 2000

Course Number: CADD XX1

Course Title: Introduction to Computer-Aided Drafting and Design (CADD), CADD XX1

Credits: 3

I. Course Description:

Individual Proposing Course:

A. Duration of Course: 15 weeks

B. Hours per Week:

1. Lecture: 2
2. Laboratory: 3

C. Laboratory Fee: None

D. Prerequisites: None

E. Catalog Description: Introduction to basic two-dimensional drafting principles and practices utilizing Computer Aided Drafting/Design (CADD) techniques. Covers: CADD software structure and features, creation of CADD drawings using standard techniques, file maintenance, output and plotting. Uses AutoCAD software on microcomputers.

F. Maximum Class Size: 20

II. General Course Objectives:

1. Recognize and apply standard drafting principles in a CADD environment.
2. Develop working knowledge and skills to effectively and efficiently create drawings using AutoCAD.
3. Identify and explain the function and purpose of CADD system components.
4. Develop an understanding of basic dimensioning procedures.
5. Plot CADD drawings at designated scales.
6. Develop appreciation of CADD as a precision drafting tool.

III. Other Aims of Course:

1. Provide an introduction to industry CADD practices.
2. Develop an appreciation of the design process and responsibilities of design team members.
3. Provide the basis for advanced CADD course work.
4. Provide information on career opportunities in CADD.

IV. Methods of Instruction:

1. Lecture
2. Supervised CADD laboratory exercises
3. Homework assignments

V. Methods of Evaluation:

1. Graded homework
2. Periodic tests
3. Comprehensive final examination
4. Class participation

VI. Content Outline:

11. Introduction to drafting and CADD
12. Basic draw commands: LINE, CIRCLE, ARC
13. Menus, coordinates, grid, snap
14. Basic editing commands: COPY, MOVE, ERADE, TRIM
15. Drawing organization: LAYERS, borders
16. File maintenance and storage
17. Text
18. Intermediate editing: ARRAY, MIRROR, STRETCH, FILLET, CHAMFER
19. Plotting
20. Dimensioning

VII. Resources:

1. CADD laboratory with appropriate hardware and software.
2. Models and examples of industrial products and plans.
3. Textbook and supplemental workbook.