

Course Outline
CADD 114
Intermediate CADD, Engineer Drawing
4 semester hours

The Community College of Baltimore County

Description

Intermediate CADD, Engineer Drawing

Continues application of CAD techniques to drafting problems initiated in CADD 101; covers application of CAD functions to complex features, multi-part assemblies, development of design appreciation, multi-discipline drawings, pictorials, and introduction to solid modeling. Requires a minimum of four hours CAD system outside of scheduled classes. Uses AutoCAD software on microcomputers.

Prerequisites: CADD 101, or permission of Program Coordinator

Overall Course Objectives

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

1. Plan and develop drawings, including selection of appropriate plotted scales, drawing layout and paper size.
2. Plan and develop dimensions for specific situations.
3. Plan and develop a first auxiliary view of a plane surface.
4. Plan and develop isometric pictorials.
5. Plan and develop assembly and detail drawings.
6. Plan and develop cross-sectional views.
7. Define, create and utilize BLOCKs and ATTRIBUTES.
8. Plan for and implement means to improve drawing efficiency.
9. Copy existing drawings using digitizing procedures.
10. Describe and utilize features which enhance drawing accuracy.
11. Develop drawings utilizing architectural units.
12. Identify and describe the characteristics of common: plotting equipment; CAD software; display devices.
13. Perform volume and weight calculations utilizing CAD and/or manual techniques.
14. Define in own words how CAD is an integral component of Computer Aided Engineering (CAE) and Computer Aided Manufacturing (CAM).
15. Develop and utilize DIMSTYLES appropriate for a given requirement.
16. Understand and employ PAPER SPACE and related commands.
17. Develop skills to self-check drawings for: completeness, accuracy, consistency and conformance with drafting conventions.
18. Draw objects through use of solid modeling techniques.

19. Develop a student selected project supported by drawings, written descriptions, and an oral presentation.

Major Topics

1. Drawing planning and execution
2. Management and application of dimensions
3. Plottin to multiple scales
4. Pictorials
5. Application of CADD drawing files to manufacturing applications
6. Solid modeling
7. Term projects

Course Requirements

Grading/Exams: Grading procedures will be determined by the individual faculty member but 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 3 lecture and 3 laboratory hours per week.

Revised 09/18/00

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Banner Short Course Description

Applies CADD techniques to advanced drafting problems. Covers CADD system organization & function, dimensions, plotting to scale, pictorials, introduction to solid modeling.

Full Catalog Description

A continuation of application of CADD techniques to drafting problems initiated in CADD 101. Intended for students who have completed an introductory course in CADD or have substantial practical drafting experience. Covers application of CADD functions to complex features, multi-part assemblies, development of design appreciation, multi-discipline drawings, pictorials, and introduction to solid modeling. Requires a minimum of four hours CADD system outside of scheduled classes. Uses AutoCAD software on microcomputers. Prerequisites: CADD 101, or permission of Program Coordinator