

Course Outline
CADD 215
Survey of CADD Specialties
3 semester hours

The Community College of Baltimore County

Description

Survey of CADD Specialties

Discusses drafting and design as applied in civil, structural, architectural, electrical and electronics areas; emphasizes typical representations in each area, and the recognition and interpretation of commonly used symbols.

Prerequisites: CADD 114, or permission of Program Coordinator

Overall Course Objectives

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

1. Understand standard surveying equipment and methods.
2. Given a construction level and tripod, set up the level, take and record elevation measurements; determine elevations of selected points based on given bench mark.
3. Given a legal description for a property parcel, lay out the plot plan.
4. Identify common types of maps and their purposes and interpret standard topographical map symbols
5. Describe the components and major applications of a Geographic Information System
6. Given field data for topography, lay out a contour map.
7. Locate and identify building components from a set of plans and interpret standard symbols and notes from plans.
8. Locate and identify utility systems (electric, water, waste water) from plans.
9. Be able to apply and interpret architectural dimensioning systems and conventions.
10. Perform typical facilities calculations for area, volume, weight
11. Demonstrate a conceptual understanding of tensile and compressive forces in simple structural members.
12. Describe the properties of steel, wood and concrete and identify appropriate and inappropriate uses of each as structural components.
13. Identify structural steel by shape and nomenclature.
14. Perform a material takeoff and calculate the weight of given structural members.
15. Using standard references, select appropriate joist, beam and columns for given situations.
16. Describe the components of concrete and factors affecting the strength of concrete.
17. Interpret concrete and reinforced concrete drawings.
18. Perform drafting tasks by CADD techniques.

Major Topics

1. Surveying
2. Civil construction
3. Building construction
4. Architectural plans
5. Structural design
6. Electronics

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 2 lecture and 3 laboratory hours per week.

Revised 09/18/00

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Banner Short Course Description

A survey of drafting and design as applied in civil, structural, architectural, electrical and electronics areas. Drawings will be produced using CADD techniques and AutoCAD software. Prerequisites: CADD 114, or permission of Program Coordinator

Full Catalog Description

A survey of drafting and design as applied in civil, structural, architectural, electrical and electronics areas. Emphasis will be on producing typical representations in each area, and the recognition and interpretation of commonly used symbols. Drawings will be produced using CADD techniques and AutoCAD software. Prerequisites: CADD 114, or permission of Program Coordinator