

CONSTRUCTION MANAGEMENT ENGINEERING TECHNOLOGY (CMET)

CMET 140 Introduction to Construction Management (1 Credits)

An overview of construction industry, project delivery methods, project participants and their roles, industry, organizations and contract documents. The course also requires students to make presentations in class with the objective to enhance public speaking and presentation skills. The course will also have guest speakers from industry to give students a good understanding of current status of industry and how to prepare for a career in construction.

CMET 162 Materials of Construction (3 Credits)

A comprehensive study of construction materials, their characteristics, advantages, and limitations. Emphasis will be placed upon how these materials are used in various building systems, with emphasis on costs and durability.

CMET 260 Building Codes and Specifications (3 Credits)

Emphasis on regional and national building codes, history of building regulations, zoning and its influence on construction and business, including specifications and acceptance on costs and durability.

CMET 262 Methods of Building Construction I (3 Credits)

A comprehensive study where emphasis is placed on the design, planning and methods of the 16 CSI divisions. Local and national building codes and techniques are emphasized.

CMET 262L Construction Methods Lab (1 Credits)

An introduction to construction methods and their applications. This hands-on course has four components: construction safety, concrete/masonry, carpentry and woodworking. Students will learn to use math, blueprints, building specifications, optical leveling, equipment, hand tools, portable and stationary power tools in a sequence of learning activities designed for students to be able to do and understand the work of the construction laborers and subcontractors they will manage at the site.

CMET 263 Fundamentals of Surveying (3 Credits)

Principles and practices of using basic surveying instruments, error analysis, and note keeping.

CMET 263L Fundamentals of Surveying Lab (1 Credits)

This course is designed to teach the basic fundamentals of surveying with in-depth hands-on experience using land-surveying equipment. It is designed to prepare students to work as a member of surveying field party, including the position of instrument man. It teaches basic fieldwork and the office procedures required in the construction industry.

CMET 264 Intermediate Surveying (3 Credits)

Practice of obtaining horizontal, vertical, and angular measurements; azimuths and bearing; traverse surveys and computations; triangulation of ordinary precision; stadia; land area calculation, and construction surveys. (Meets 4 hrs. per week.)

Prerequisites: Take BCT-263.

CMET 265 Architectural Details (3 Credits)

A comprehensive study of building components for light residential construction. Covers all aspects of residential planning and design. The basic planning principles and procedures are presented in detail. Electrical and mechanical systems will be covered to include the efficient use of energy in architecture design.

Prerequisites: Take TMD-150.

CMET 266 Architectural Drafting (3 Credits)

Study of building construction drawings for residential building and light commercial construction.

CMET 363 Methods of Building Construction II (3 Credits)

Comprehensive study of building construction techniques in the construction industry. Emphasis on residential and commercial type structures. Field trips are included.

Prerequisites: Take BCT-262.

CMET 364 Steel Structures (3 Credits)

Theory and practice in the design and fabrication of structural steel in conformance with current codes and practices.

Prerequisites: Take TMD-345. Take TMD-345.

CMET 370 Cost Estimates and Quality Control I (3 Credits)

Surveys methods of taking quantities from plans, preparation of unit price and lump sum estimates for structural units, including material, expediting, job supervision, site selection, and progress charts and graphs, as well as blueprint reading techniques.

Prerequisites: Take BCT-266.

CMET 376 Soil Mechanics (3 Credits)

Study of the engineering properties of soil and how those properties affect behavior, such as the movement of water through soil, including ground water contamination, stresses in a soil mass, volume change, shear strength, subsurface investigations and lateral earth pressure.

CMET 462 Problem Analysis and Planning (3 Credits)

Consideration given to individual problem solving and analysis in specialized construction areas.

CMET 464 Organization/Superv of Construction (3 Credits)

Study of construction methods and organization; layout and planning; material requisitioning and progress scheduling, including basic training in estimating quantities of materials from plans and specifications, approximate cost data, fixed and operating cost in major construction works.

Prerequisites: Take BCT-462.

CMET 466 Construction Management Capstone (3 Credits)

Comprehensive study of construction documents for group project, including preparation of working drawings, specifications, scheduling and cost estimates for project.

Prerequisites: Take CMET-462. Take CMET-464.