

CIVIL ENGINEERING TECHNOLOGY (CE)

CE 108. Construction Methods. 3 Credit Hours.

This course covers many of the principles, materials, and methods used in light construction. Topics include building codes, construction standards and specializations, wood and wood products, concrete, masonry, glass, plastics, aluminum products, bituminous products, gypsum products, asbestos cement products, construction methods systems, foundation systems, slabs-on-ground, floor/ceiling systems, wood framed floors, wall systems, masonry walls, roof/ceiling systems, stucco, and terrazzo.

Prerequisites: Reading Proficiency

CE 115. Construction Materials and Methods. 3 Credit Hours.

This course is an introduction to the elements of building construction principles and materials. Students will learn the background and history of building materials and systems; review sustainable design, materials, and construction concepts; and review industry standards, specifications, codes and barrier-free design.

Prerequisites: Reading Proficiency

CE 116. Construction Blueprint Reading. 3 Credit Hours.

The interpretation of construction working drawings and specifications for residential and commercial building projects. Architectural, structural, and utility drawings will be covered.

Prerequisites: Reading Proficiency

CE 130. Introduction to Construction. 3 Credit Hours.

An introductory course providing an overview of the total construction process including city and regional planning, construction management, contracting, labor and management relations, the design process, estimating and bidding, scheduling and purchasing, construction, and equipment.

Prerequisites: Reading Proficiency

CE 131. Construction Estimating. 3 Credit Hours.

The total estimating and bidding process. Topics will include bid form contracts, specifications, overhead, unit costs, quantity surveys, subcontract bids, pricing, checking and alternates. Students should be able to read construction drawing prior to enrolling in this course.

Prerequisites: CE 116 and Reading Proficiency

CE 151. Introduction to Civil Engineering and Architecture. 3 Credit Hours.

This course is an introduction to many of the varied factors involved in building design and construction including building components and systems, structural design, storm water management, site design, utilities and services, cost estimation, energy efficiency, and careers in the design and construction industry. Additional lab hours required.

Prerequisites: GE 121 or EGR 147 or department approval

CE 230. Construction Materials and Testing. 3 Credit Hours.

The properties and standard tests used in construction on soils, aggregates, bituminous products, and concrete. Additional lab hours required.

Prerequisites: Concurrent with ME 243 and Reading Proficiency

CE 235. Construction Office Practice. 3 Credit Hours.

The interactive role of organizations in the construction process; the structure of alternative construction delivery systems, such as general contractor, construction manager, and design-build contractor; specification and building codes; cost control reporting systems for construction.

Prerequisites: Reading Proficiency

CE 240. Surveying I. 3 Credit Hours.

This course will explore the history and practice of surveying, the use and care of transits, levels, and tapes, as well as their more modern counterparts. Office and field methods will emphasize laboratory problems in area measurements, elevation determinations, angle collection methods, traverse calculations and topographic map compilation. Additional hours required.

Prerequisites: MTH 170 or MTH 185 and Reading Proficiency