CONSTRUCTION TECHNOLOGY (CONC)

CONC 101 Construction Safety and Regulations 3 Credits
Introduction to OSHA standards as applied to the construction industry. Discover how employee safety is critical to successful projects, both financially and in terms of the schedule. Discussion topics include: falls, electrocution, struck-by, caught in/between, managing safety and health, PPE, fire safety, excavations, cranes, and scaffolds. Special emphasis placed on recognizing the most common safety hazards in the construction industry.

Terms Typically Offered: Fall, Spring.

CONC 104 Architectural/Civil Print Reading 2 Credits
Basic architectural design theory, principles, elements, and ordering systems. Read residential and civil drawings as used in the industry. Demonstrate architectural design and drawings skills.

Terms Typically Offered: Fall, Spring.

CONC 116 Building Materials 3 Credits
Introduction to foundation and utility systems, as well as proper construction and quality practices. Includes an emphasis on construction drawings and documents for each scope.

Terms Typically Offered: Fall, Spring.

Fees: Yes.

CONC 117 Building Materials Testing 3 Credits
Introduction to the properties and testing of materials used in today's construction projects. This includes wood products, metal, soil, aggregates, concrete, and asphalt.

Prerequisites: CONC 116 or permission of instructor.

Fees: Yes.

CONC 161 Building Mechanical/Electrical 3 Credits
Introduction to the electrical, plumbing, and HVAC systems in a building. Provides an understanding of how these systems operate and contribute to building comfort and safety. Overview of utility infrastructure and its utilization.

Terms Typically Offered: Fall, Spring.

Fees: Yes.

CONC 196 Topics 1-3 Credits
Course may be taken multiple times up to maximum of 15 credit hours.

CONC 208 Construction Equipment 3 Credits
Basic understanding of general equipment and methods employed in different sectors of the construction industry. Areas covered are factors affecting the selection of equipment, rental versus ownership of equipment, estimating earthwork quantities, figuring equipment production, equipment management, and quality control of projects.

CONC 218 Surveying 3 Credits
Theory and use of survey instruments dealing with measurements pertaining to plane surveying. Application of surveying methods in use of various layouts and scopes.

Prerequisites: MATH 107 or higher.

Terms Typically Offered: Spring.

Fees: Yes.

CONC 228 Estimating and Cost Control 3 Credits
Introduction to principles of construction cost estimates, including organization of information. Produce accurate quantity takeoffs both fundamentally and by use of takeoff softwares. Understand the organization of commercial contract documents and adaptation of CSI MasterFormat.

Terms Typically Offered: Fall, Spring.

CONC 234 Commercial/Industrial Plans 2 Credits
Introduction to the commercial/industrial construction industry. Processes, practices, and materials typically used in commercial/industrial construction will be studied.

CONC 245 Project Management 3 Credits
Principles of project planning, scheduling, estimation and management. Emphasis on the basic skills required to supervise personnel including oral communication, problem identification, problem solving and decision-making. The course will also cover how to control productivity on the project.

Prerequisites: CONC 228 or permission of instructor.

CONC 251 Construction Prep: Codes, Permits 3 Credits
Legal aspects including liens, contracts, bids, specifications, building permits and licensing, inspections and the Uniform Building Code. Introduces intra-trade coordination, remodeling and additions, construction practices, construction management and supervision.

CONC 265 Planning and Scheduling for the Construction Supervisor 3 Credits
Introduction to the concepts of construction planning and scheduling, including planning the sequence, duration, and relationship of activities for a construction process.

Terms Typically Offered: Fall, Spring.

Fees: Yes.

CONC 270 Practical Applications 4 Credits
Supplemental coursework with practical work experience related to educational program. Students will work under the immediate supervision of experienced personnel at the business location. Students will work on construction sites or projects related to their career field of interest with advice of faculty.

Prerequisites: Permission of Instructor.

CONC 295 Independent Study 1-3 Credits
Course may be taken multiple times up to maximum of 6 credit hours.

CONC 296 Topics 1-3 Credits
Course may be taken multiple times up to maximum of 15 credit hours.