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# **CONSTRUCTION TECHNOLOGY** (CONC)

## **CONC 101 Construction Safety and Regulations3 Credits**

Construction safety and its effect on productivity and employee morale. Application of basic principles of accident prevention. Complying with the various federal, state, and local laws governing safety (OSHA), hazardous chemicals, and drugs in the work place.

#### CONC 104 Architectural/Civil Print Reading2 Credits

Reading and hand-drafting prints as used in industry, application of that information to various architectural and civil industries.

### **CONC 116 Building Materials3 Credits**

Introduction to building materials and methods commonly used in the construction industry. Includes an overview of foundation systems, concrete, steel, and wood products.

Terms Typically Offered: Fall, Spring.

Fees: Yes.

# **CONC 117 Building Materials Testing3 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/Electrical3 Credits

Introduction to basic electrical, plumbing, heating, ventilation, and air conditioning systems found in residential and commercial buildings. Basic theory and design concepts included.

Terms Typically Offered: Fall, Spring.

Fees: Yes.

#### CONC 196 Topics1-3 Credits

Course may be taken multiple times up to maximum of 15 credit hours.

# **CONC 208 Construction Equipment3 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 Surveying3 Credits**

The fundamentals of modern plane surveying techniques and basic surveying instruments. Emphasis on construction-related aspects of surveying and the development of skills in using surveying field information.

Prerequisites: MATH 107 or MATH 113.

Fees: Yes.

# **CONC 228 Estimating and Cost Control3 Credits**

The estimation process, the role of the estimator, types of estimation, CSI Divisions, bid/contract documents, change order pricing, value engineering, design build projects, and estimate compilation and cost controls.

Prerequisites: CADT 105, CONC 116, CONC 161, CONC 208 or permission of instructor

# **CONC 234 Commercial/Industrial Plans2 Credits**

Introduction to the commercial/industrial construction industry. Processes, practices, and materials typically used in commercial/industrial construction will be studied.

### **CONC 245 Project Management3 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, Permits3 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 Supervisor3 Credits

Planning the sequence, duration and relationship of activities for a construction process. Communicate the plan to contractual parties and to use the plan as reference point for examining project changes. Includes planning for safety, organization, manpower, problem solving, and site lavout.

Prerequisites: Permission of instructor.

Fees: Yes.

#### **CONC 270 Practical Applications4 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 296 Topics1-3 Credits

Course may be taken multiple times up to maximum of 15 credit hours.