

SUBJECTS AND COURSES

COURSE DESCRIPTIONS - CONSTRUCTION MGMT TECH (CMT)

CMT 101 Construction Materials/Methods

PREREQUISITE: As required by program. The purpose of this course is to introduce the student to the materials, methods, and equipment used in building construction. Emphasis will be placed on the construction process and how the various materials and equipment relate to the different stages of the process. Upon completion of this course the student will understand the total building process, know the various materials used in each stage of construction, understand the techniques and methods used with different materials, and specify materials with essential characteristics. **3 Credit Hours**

CMT 114 10-Hr OSHA Construction Safety

PREREQUISITE: As required by program. The purpose of this course is to introduce the student to OSHA and the regulations present within the construction industry. Upon completion of this course the student will be able to identify the primary safety rules established by OSHA, know reporting procedures, as well as, being able to use the OSHA manual. Emphasis will be placed on the importance of safety, OSHA, safety programs, and safety procedures. Students completing this course will receive their ten hour OSHA certification. **1 Credit Hour**

CMT 156 Contracting & Construction Law

The purpose of this course is to introduce the student to law practices pertinent to the construction industry. Emphasis will be placed on law as it relates to the contractor. Upon completion of this course the student will understand articles of incorporation, building contracts, contracts for the purchase of labor and materials, construction loans, the various types of construction agreements, permits, plans and specifications, warranties, and insurance. **NaN Credit Hours**

CMT 170 HVAC Systems

The purpose of this course is to introduce the student to major mechanical systems used in buildings. Emphasis will be placed on heating, cooling, and ventilation equipment. Upon completion of this course the student will be knowledgeable of the basic principles of heating, cooling, ventilation, and related hardware and will understand design considerations that impact the selection of equipment. **3 Credit Hours**

CMT 175 Electrical & Plumbing Systems

PREREQUISITE: As required by program. The purpose of this course is to introduce the student to the plumbing, electrical, and lighting systems used in buildings. Emphasis will be on design considerations based on plumbing and electrical codes. Upon completion of this course the student will understand the basic principles and hardware requirements in designing plumbing, electrical and lighting systems. **3 Credit Hours**

CMT 205 Construction Management

PREREQUISITE: As required by program. The purpose of this course is to introduce the student to the principles and practices used in managing the various aspects of the construction process. Emphasis will be placed on pertinent business procedures. Upon completion of this course the student will know how to organize, bid, purchase, account for, plan, and schedule a construction job. **3 Credit Hours**

CMT 206 Construction Estimating

PREREQUISITE: As required by program. The purpose of this course is to introduce the student to the principles and practices used in estimating construction costs. Emphasis will be on a methodical approach to estimating each cost element of a construction project. Upon completion of this course the student will know the methods and procedures used in estimating, making quantity surveys from working drawings, developing unit costs, developing subcontractor costs, and will be able to identify the major considerations involved in the total pricing of a construction project. **3 Credit Hours**

CMT 208 Project Planning & Scheduling

PREREQUISITE: As required by program. The purpose of this course is to introduce the student to the tools and techniques used to plan, schedule and control a construction project. Students will learn how to prepare Gantt Charts and schedules using the Critical Path Method, Precedence Networks, PERT, GERT and the Linear Scheduling Method. Special emphasis will be placed on using scheduling software. Upon completion, the student will be able to prepare project schedules using various scheduling tools and technology, allocate and level resources, maintain and update a project schedule, and resolve construction delay claims. **4 Credit Hours**

CMT 220 Sustainable Project Delivery

PREREQUISITE: As required by program. The purpose of this course is to introduce the student to green project delivery from the contractor's point of view. This course will focus on the green building process and the potential impact of green construction on building projects and on the contractor's business. Students will know how to evaluate green requirements, document a green project and evaluate risk associated with green project delivery. Upon completion, the student will be able to bid, contract and subcontract green projects, facilitate green procurement, manage green construction and perform green project commissioning and closeout. **3 Credit Hours**