

# CONSTRUCTION MANAGEMENT (CMGT)

---

## **CMGT 121 Building Information Modeling for Construction**

**4 Units** (Degree Applicable, CSU)

Lecture: 54 Lab: 54

Building Information Modeling (BIM) principles for construction management, and understanding coordination of building elements, building engineering systems, infrastructure systems, clash detection, construction cost estimating and scheduling. Field trips may be required.

## **CMGT 130 Construction Planning and Management**

**3 Units** (Degree Applicable, CSU)

Lecture: 45 Lab: 27

Project construction principles: preconstruction services, estimating and bidding, construction scheduling concepts, and a virtual construction environment of the preconstruction phase. Field trips may be required.

## **CMGT 140 Construction Controls**

**3 Units** (Degree Applicable, CSU)

Lecture: 45 Lab: 27

Construction business principles: budget and cost forecasting and scheduling, regulations and legal requirements for construction, and how to manage the closeout process the construction phase. Field trips may be required.

## **CMGT 150 Construction Operations**

**3 Units** (Degree Applicable, CSU)

Lecture: 45 Lab: 27

Project construction principles: detail scheduling and forecasting, means and methods for construction, and how to use Building Information Modeling (BIM) and virtual coordination during the construction phase. Field trips may be required.

## **CMGT 160 Construction Management Work Experience**

**1-2 Units** (Degree Applicable)

Prerequisite: CMGT 121 and CMGT 130 and CMGT 140 and CMGT 150

This course is designed to provide actual on-the-job experience in in the construction management profession at an approved work site which is related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. This course is available to students achieving a minimum of 12 units in construction management. Students who repeat this course will improve skills through further instruction and practice.