

CMCE 1221 Construction Management I

Equivalent to old course: CMCE 1220

Course Description:

A thorough overview of the construction process from the planning phase to successful completion. Topics include formal and informal communication formats, the design and construction process, types of contracts, responsibilities of project participants, contract documents, schedules, payments, building codes, and safety. Formal and informal communication are addressed through a series of spoken and written assignments culminating in a written report. Project safety is addressed in a required 10-hour OSHA certification training course. Upon successful completion, the student earns a certification card from OSHA.

Prerequisites: CMCE 1110, CMCE1114, CUNY Reading and Writing Proficiency
3 Class hours, 3 credits

Textbook: Construction Project Management, F. E. Gould, 4th edition. Pearson 2013.

Certification: OSHA 10

Program Criteria

ABET, Inc. is the nationally recognized accrediting body for engineering technology programs. The CMCE department has adopted the most current ABET Program Criteria. Graduates of baccalaureate degree programs typically specify project methods and materials, perform cost estimates and analyses, and manage construction activities. The CMCE curriculum provides instruction in the following areas:

- Utilization of techniques that are appropriate to administer and evaluate construction contracts, documents, and codes (Criterion a);
- Production and utilization of documents related to design, construction, and operations (Criterion e);
- Performance of economic analyses and cost estimates related to design, construction, and maintenance of systems associated with construction engineering; (Criterion f);
- Application of appropriate principles of construction management, law, and ethics (Criterion h);

Student Outcomes

The CMCE department has adopted the most current ABET student outcomes criteria. Student performance in this course will be assessed based on the following learned capabilities:

- An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline (Criterion 1);
- An ability to apply written, oral, and graphical communication in broadly defined technical and non-technical environments; and an ability to identify and use appropriate technical literature (Criterion 3);

Academic Integrity Policy

Students and all others who work with information, ideas, texts, images, music, inventions, and

other intellectual property owe their audience and sources accuracy and honesty in using, crediting, and citing sources. As a community of intellectual and professional workers, the College recognizes its responsibility for providing instruction in information literacy and academic integrity, offering models of good practice, and responding vigilantly and appropriately to infractions of academic integrity.

Accordingly, academic dishonesty is prohibited in The City University of New York and at New York City College of Technology and is punishable by penalties, including failing grades, suspension, or expulsion.]

Course Outline			
Week	Topic	Reading Assignment	HW
1	<ul style="list-style-type: none"> • Introduction to CM I • Communicating Through Project Email 	<ul style="list-style-type: none"> • Read Ch1 	HW01
2	<ul style="list-style-type: none"> • The Construction Industry & Project Delivery 	<ul style="list-style-type: none"> • Read Ch2-3, 12 	HW02
3	<ul style="list-style-type: none"> • Construction Services During Design, Construction, & On Site 	<ul style="list-style-type: none"> • Read Ch5, 10 	HW03
4	<ul style="list-style-type: none"> • Project Chronology & Scheduling 	<ul style="list-style-type: none"> • Read Ch7 	2/27
5	<ul style="list-style-type: none"> • Estimates, Bids, Requests for Proposals 		
6	<ul style="list-style-type: none"> • Award & Contracts 		
7	MIDTERM EXAM		
8	<ul style="list-style-type: none"> • Billing & Progress Payments (or OSHA) 		HW04
9	<ul style="list-style-type: none"> • Safety & Responsible Management 		HW05
10	<ul style="list-style-type: none"> • Insurance & EMT, Bonds 	<ul style="list-style-type: none"> • Read Ch14 	4/23
11	<ul style="list-style-type: none"> • Final Exam Review 		Term Project
12	<ul style="list-style-type: none"> • OSHA 10 		
13	<ul style="list-style-type: none"> • OSHA 10 		
14	<ul style="list-style-type: none"> • OSHA 10 		
15	FINAL EXAM		