

College of Engineering

Department of Civil Engineering

جامعة
الملك سعود
King Saud University



CE 512 Construction Management

Credit and Contact hours	3/ 3 (Lectures), 0 (Tutorials), 0 (Laboratory)	
Required, or Elective	Required for a MSCE degree	
Course Description	Advanced study and analysis of construction top and upper-middle management responsibilities, on construction management, construction financing, construction safety, inspection and quality control, and disputes and claims. Stresses investigations to improve construction management efficiency and to lower construction costs.	
Prerequisites or Co-requisites	None	
Course Learning Outcomes	Students completing this course successfully will be able to	
	Course Learning Outcomes	Related Program Outcomes
	CLO1: Acquire the advanced knowledge in construction management field that are related to major real projects	K1
	CLO2: Apply the broad range of skills and knowledge acquired in the Construction Management curriculum to evaluate, and solve different challenges faced by the industry.	S1
	CLO3: Analyze and estimate construction project in term of time, cost, quality and success	S1
CLO4: Evaluate the solution of different problems faced by the real-life construction activities	C2	
Student Outcomes related to this Course	K1. Recognize advanced engineering knowledge, concepts and techniques to identify, interpret and analyze complex and real-life engineering problems.	

	<p>S1. Provide solution for complex and real-life engineering problems through critical thinking and using modern engineering tools and identify its impact on social and ethical issues.</p> <p>C2. Design novel advanced Civil Engineering systems and evaluate its performance and effectiveness for engineering practice and its impact on society.</p>	
Topics Covered	List of Topics	
	1. Introduction Project environment	CLO2
	2. Project Life Cycle and Project Charter	CLO2
	3. Identifying project activities	CLO3
	4. Project planning	CLO4
	5. Estimating cost	CLO3
	6. Estimating time	CLO3
	7. Contracting strategies	CLO1
	8. Selecting, organizing and managing the project team	CLO1
	9. Procurement and logistics	CLO4
	10. Project execution – monitoring and control	CLO3
	11. Safety – risk management – stakeholder relationships	CLO4
	12. Project close out – claims and disputes – evaluation	CLO1
Textbook(s) and Other Required Material	<ul style="list-style-type: none"> • Harris, F., & McCaffer, R. (2013). Modern construction management. John Wiley & Sons. • Dainty, A., Moore, D., & Murray, M. (2007). Communication in construction: Theory and practice. Routledge 	
Grading System	Assignments	5%
	Lecture Attendance	5%
	Project Work	30%
	Midterm Exam	20%
	Final Exam	40%
Instructors	Abdulmohsen S Almohsen.PhD, Assistant Professor, Office: 2A 51 Email: asmohsen@ksu.edu.sa https://fac.ksu.edu.sa/asmohsen/home	
Date of Review	February, 2021	