

COURSE CATALOG

Course Code: CE 379				Course Name: Construction Management and Site Techniques			
Semester	T + P + L	Credits	ECTS	Language of Instruction	Course Type	Instruction Methods	Prerequisite(s)
6-7-8	3 + 0 + 0	3	6	English	Elective	Lecture	-
Course Objectives			Worksite organization. Administrative, technical, financial, social functions and powers. Site layout and facilities. Prefabrication facilities. Roads, building, dams, bridges and construction sites, Scheduling. Bar and circuit diagrams, critical path method (CPM). Introduction to building businesses.				
Topics Covered			The Construction Industry. Project Participants. Organizing and Leading the Construction Project. Project Delivery Methods. Project Chronology. Construction Services During Design. Bidding and Procurement. Construction and Closeout. Estimating Project Costs. Project Planning and Scheduling. Controlling Project Cost, Time, and Quality. Job Site Administration. Construction Law. Construction Safety and Health. Administrative and financial regulations, procurement procedures. Contracting and services, cost-benefit analysis, financial planning, quantity surveying.				
Learning Outcomes of the Course			<p>After the completion of this course, students should be able to:</p> <p>1- have the knowledge and techniques that will facilitate the management of construction projects [3,7,8]</p> <p>2 - apply appropriate practices and regulations in the work environment, including health and safety practices [9,12,14]</p> <p>3- understand the financial aspects of construction projects [12,13,16]</p> <p><i>[Note that the numbers in between the brackets address the bullet numbers in the program outcomes list.]</i></p>				
ISCED Category of the Course			52 Engineering				
Textbook			<p>1- B. Atkin, J.Borgbrant, Performance Improvement in Construction Management, Taylor & Francis, 2009.</p> <p>2- Frederick Gould , and Nancy Joyce, Construction Project Management, 3/E, Pearson.</p>				
Recommended Sources			<p>1- Stephens W. Nunnally , Construction Methods and Management, 8/E, Pearson</p> <p>2- J.G. Smith, Construction Management, CRC Press, 2009.</p> <p>3- G. Shen, P Brandon, A. Baldwin, Collaborative Construction Information Management, Taylor & Francis, 2009.</p> <p>4- A. Pancarci, M.E. Öcal, Yapı İşletmesi ve Maloluş Hesapları, Birsen Yayınevi, 2009.</p>				

WEEKLY SCHEDULE

Week	Theoretical Topic	Applied / Laboratory Topics
1	The Construction Industry. Project Participants.	
2	Organizing and Leading the Construction Project. Project Delivery Methods.	
3	Project Chronology. Construction Services During Design.	
4	Bidding and Procurement.	
5	Construction and Closeout.	
6	Estimating Project Costs.	
7	Project Planning and Scheduling.	
8	Controlling Project Cost, Time, and Quality.	
9	Job Site Administration.	
10	Construction Law.	
11	Construction Safety and Health.	
12	Administrative and financial regulations, procurement procedures.	
13	Contracting and services, cost-benefit analysis, financial planning, quantity surveying.	
14	Applications and relevant organizations.	

COURSE ASSESSMENT POLICY

	Activities	Number	Contribution (%)
Studies throughout the term	Quizes	-	-
	Term Homework/ Project	3	20
	Reports	-	-
	Graduation Thesis/ Project	-	-
	Seminar	-	-
	Homeworks	-	-
	Presentations	-	-
	Midterm Exams	2	40
	Project		
	Laboratory		
	Other (field work)	1	-
FINAL EXAM		1	40
Total			100

CONTRIBUTION OF THE COURSE TO CIVIL ENGINEERING PROGRAM OUTCOMES

	Program Outcomes	1	2	3
1	The ability to apply knowledge of mathematics, science, and engineering		x	
2	The ability to identify, formulate, and solve engineering problems			x
3	The ability to design a system or component to meet desired needs with realistic constraints such as economic, environmental, social, ethical, health and safety, manufacturability and sustainability			X
4	The ability to analyze and interpret data			X
5	The ability to design and conduct experiments and apply experimental results to improve processes			X
6	The ability to convey technical material through oral presentations and written papers/reports			X
7	The ability to function within multidisciplinary teams		X	
8	The understanding of professional and ethical responsibilities	X		
9	The understanding of the impact of engineering on society	X		
10	The understanding of the necessity to engage in life-long learning	X		
11	The understanding of management and leadership principles and techniques		X	
12	The appreciation of the role of research in civil engineering problems	X		
13	A knowledge of contemporary issues in civil engineering		X	
14	The ability to use modern engineering techniques, skills, and tools		X	
15	The ability to understand and explain basic concepts in management, business, and leadership		X	
16	A commitment to quality, punctuality and continuous improvement		X	

Contribution Level: 1 low, 2 medium, 3 high

ECTS-WORKLOAD TABLE

ACTIVITIES	Number	Duration (Hour)	Workload(Hour)
Lecture Time	14	3	42
Final Exam (Including Prepatation Time)	1	10	10
Quizes			
Term Homework / Project	-	-	-
Reports			
Graduation Thesis/Project	-	-	-
Seminar			
Study Time Outside the Class	14	2	28
Homeworks	2	14	28
Presentations	-	-	-
Midterm Exams (Including Prepatation Time)	2	9	18
Project	4	6	24
Laboratory			
Total Workload			150

ECTS Credits of the Course (Total Workload / 25)			6
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Last update on 22.01.2014	Coordinator / PREPARED BY Devrim AKCA & Esin İNAN	APPROVED BY Esin İnan
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