

Turkish

ESOGU CIVIL ENGINEERING DEPARTMENT



Elective

COURSE INFORMATION FORM

Course Name					Course Code		
CONSTRUCTION MANAGEMENT APPLICATIONS				151418711			
Semester	Number of	f Cours	e Hours per Week		ECTS		
Semester	Theory		Practice	ECIS			
8	3		0	6			
Course Category (Credit)							
Basic Sciences	Engineerii Sciences	0	Design	General Education		Social	
	6						
Course Language			Course Level		Course Type		

Undergraduate

Prerequisite(s) if any	
Objectives of the Course	To develop the ability of construction, management, legislation, software and management applications, to introduce construction machines, their efficiency, usage, types and locations, to develop work programs, planning, drawing, method, modification, renewal and amateur computer program production skills, to develop research, examination, compilation, evaluation, evaluation, interpretation, judgment development features and abilities on professional issues,
Short Course Content	Preparation of site lists for construction works, determination of unit price numbers and names of construction productions to be made according to the site lists, calculation of quantities of construction productions with unit price numbers manually or with the help of computer programs, creation of work programs for construction productions with planning techniques such as CPM, PERT, determination of construction periods, determination of monthly work programs, preparation of approximate cost, preparation of progress payments according to contract information and planning procedures, preparation of final accounts at the end of the work

	Learning Outcomes of the Course		Contributed PO(s)	Teaching Methods *	Measuring Methods **
	To be able to realize and examine the existing	Р	O1, PO2, PO4,		
1	engineering and knowledge gained on civil engineering	Р	O5, PO6, PO9,	1,5,6	A,D
	numerically on certain application projects		PO10		
	To be able to use software related to construction	Р	O1, PO2, PO4,		
2	engineering and management legislation applications,	Р	O5, PO6, PO9,	1,5,6	A,D
			PO10		
	To contribute to their ability to conduct independent and	Р	O1, PO2, PO4,		
3	comprehensive research on the approximate cost of	Р	O5, PO6, PO9,	1,5,6	А
	construction		PO10		
	To be able to prepare work programs, to make quantity	Р	O1, PO2, PO4,		
4	calculations	Р	O5, PO6, PO9,	1,5,6,15	A,D
			PO10		
	To be able to calculate the approximate cost of the	P	O1, PO2, PO4,		
5	building,	Р	O5, PO6, PO9,	1,5,6,15	A,D
			PO10		
	To be able to prepare progress payments	Р	O1, PO2, PO4,		
6		Р	O5, PO6, PO9,	1,5,6,15	A,D
			PO10		

^{*}Teaching Methods 1:Expression, 2:Discussion, 3:Experiment, 4:Simulation, 5:Question-Answer, 6:Tutorial, 7:Observation, 8:Case Study, 9:Technical Visit, 10:Trouble/Problem Solving, 11:Induvidual Work, 12:Team/Group Work, 13:Brain Storm, 14:Project Design / Management, 15:Report Preparation and/or Presentation

^{**}Measuring Methods A:Exam, B:Quiz, C:Oral Exam, D:Homework, E:Report, F:Article Examination, G:Presentation, I:Experimental Skill, J:Project Observation, K:Class Attendance; L:Jury Exam

Main Textbook	Since the course is very comprehensive, there is no specific textbook, but all books on Construction Management, Construction Management and Project Management, books on construction cost
Supporting References	Rıfat AKBIYIKLI, İnşaat Yönetimi Metraj ve Maliyet Hesapları, Birsen Yayınevi, 3. Baskı, 803 syf.
Necessary Course Material	All kinds of tools and equipment that help to prepare professional and technical accounts, projects, charts, tables, etc. by using computers and additional equipment, ready-made package computer program software.

	Course Schedule
1	Building Approximate Cost Calculation Methods, Principles
2	General Information about Project Introduction, Student Data, Site List, Manufacturing List, Unit Prices, Quantities
3	Quantities of Construction Works, Review and Control of Student Project Quantities
4	Quantities of Construction Works, Review and Control of Student Project Quantities
5	Quantities of Construction Works, Review and Control of Student Project Quantities
6	Quantities of Construction Works, Review and Control of Student Project Quantities
7	Quantities of Construction Works, Review and Control of Student Project Quantities
8	Mid-Term Exam
9	Quantities of Construction Works, Review and Control of Student Project Quantities
10	Quantities of Construction Works, Review and Control of Student Project Quantities
11	Unit Price Analysis, Creating Unit Prices, Determining Transportation Unit Prices
12	General Principles in Building Approximate Cost Calculations
13	Preparation of Work Program Using Software (MS Project or Primavera)
14	Approximate Cost and Progress Payment Calculations Using Software
15	Project Submission Guidelines and Final Evaluations
16,17	Final Exam

Calculation of Course Workload				
Activities	Number	Time (Hour)	Total Workload (Hour)	
Course Time (number of course hours per week)	14	3	42	
Classroom Studying Time (review, reinforcing, prestudy,)	14	3	42	
Homework	7	3	21	
Quiz Exam	1	0	0	
Studying for Quiz Exam	1	0	0	
Oral exam	1	0	0	
Studying for Oral Exam	1	0	0	
Report (Preparation and presentation time included)	7	2	14	
Project (Preparation and presentation time included)	1	5	5	
Presentation (Preparation time included)	1	0	0	
Mid-Term Exam	1	5	5	
Studying for Mid-Term Exam	1	20	20	
Final Exam	1	5	5	
Studying for Final Exam	1	20	20	
	T	Total workload Total workload / 30 Course ECTS Credit		
	Total			
	Course			

Evaluation			
Activity Type	%		
Mid-term	30		
Quiz			
Homework	20		
Bir öğe seçin.			
Bir öğe seçin.			
Final Exam	50		
	Total 100		

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO) (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low) NO **PROGRAM OUTCOME** Contribution PO-1: Adequate knowledge of mathematics, science and basic engineering; Ability to apply 1 5 theoretical and applied knowledge in these fields to model and solve engineering problems PO-2: Skills in identifying, defining, formulating, and solving complex engineering problems 5 2 in civil engineering and related fields by selecting and applying appropriate analysis and PO-3: The ability to design a complex system, device or product in line with a determined goal, 3 3 under realistic constraints and conditions, by applying modern design methods. PO-4: Ability to develop, select and use modern techniques and tools required for Civil 4 4 Engineering applications and to effectively benefit from information technologies. PO-5: Ability to design experiments, conduct experiments, collect data, analyze and interpret 5 4 results for the study of Civil Engineering problems. PO-6: Ability to do interdisciplinary and interdisciplinary team work 6 5 PO-7: Ability to communicate effectively in Turkish verbally and in writing and the ability to 7 3 use/improve foreign language knowledge. PO-8: Awareness of the necessity of lifelong learning; the ability to access information, follow 8 4 developments in science and technology and constantly renew oneself PO-9: Awareness of professional and ethical responsibility 0 5 PO-10: Knowledge of project management and business practices such as risk management and 5 10 change management; awareness about entrepreneurship, innovation and sustainable PO-11: Information about the effects of engineering practices on health, environment and 11 4 safety at universal and societal dimensions; Awareness of national and international legal

LECTUTER(S)					
Prepared by	Assist. Prof. Dr. Osman AYTEKİN	Assist. Prof. Dr. Hakan KUŞAN	Assist. Prof. Dr. Gülçağ ALBAYRAK		
Signature(s)					

Date:06.06.2024