

ESOGU CIVIL ENGINEERING DEPARTMENT



COURSE INFORMATION FORM

Course Name	Course Code
COMPUTER AIDED DRAWING	151412211

Someston	Number of Cours	se Hours per Week	ECTS
Semester	Theory	Practice	ECIS
2	2	0	4

Course Category (Credit)					
Basic Sciences	Engineering Sciences	Design	General Education	Social	
	2	2			

Course Language	Course Level	Course Type
Turkish	Undergraduate	Compulsory

Prerequisite(s) if any	
Objectives of the Course	To be able to make civil engineering drawings and plans with computer
Short Course Content	Basic concepts of computer aided drawing, coordinate logic. Two and three dimensional drawing with Sketchup. Three-dimensional drawing of a building whose project is given. Building Surveying and three dimensional drawing of an existing building. Two dimensional drawing with AutoCAD. Preparation of construction plans of a building with AutoCAD.

	Learning Outcomes of the Course	Contributed PO(s)	Teaching Methods *	Measuring Methods **
1	To be able to make basic drawings with Sketchup	1,2,3,4,5,7,8,9	1,6,11	A,D
2	Three-dimensional drawing of a planned building with Sketchup	1,2,3,4,5,6,7,8,9	1,6,10,11	A,D,J
3	Taking measurements of an existing building and drawing its survey in three dimensions with Sketchup	1,2,3,4,5,6,7,8,9	1,6,10,11,12	A,D,J
4	To be able to make basic drawings with AutoCAD	1,2,3,4,5,6,7,8,9,11	1,6,11	A,D
5	Drawing a two-dimensional plan of a given structure with AutoCAD	1,2,3,4,5,6,7,8,9,11	1,6,10,11	A,D,J
6	Preparation of Column Plan, Beam Plan and Foundation Plan of a building with AutoCAD	1,2,3,4,5,6,7,8,9,11	1,6,10,11	A,D,J
7				
8				

^{*}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	Bilgiç, Ş., Sketchup All resources related to Sketchup and AutoCAD	
Supporting References	All resources related to Sketchup and AutoCAD	
Necessary Course Material	Laptop, Datashow (data projection devices), fixed or movable white screen, blackboard for written applications.	

	Course Schedule
1	Sketchup introduction
2	Sketchup basic commands
3	Sketchup basic commands
4	Three-dimensional drawing with Sketchup
5	Survey drawing with Sketchup
6	Technical drawing with Sketchup
7	Three-dimensional drawing with Sketchup
8	Mid-Term Exam
9	AutoCAD introduction
10	AutoCAD basic commands
11	AutoCAD basic commands
12	Construction plans with AutoCAD
13	Construction plans with AutoCAD
14	Construction plans with AutoCAD
15	Construction plans with AutoCAD
16,17	Final Exam

Calculation of Course Workload				
Activities	Number	Time (Hour)	Total Workload (Hour)	
Course Time (number of course hours per week)	14	2	28	
Classroom Studying Time (review, reinforcing, prestudy,)	14	2	28	
Homework	8	4	32	
Quiz Exam				
Studying for Quiz Exam				
Oral exam				
Studying for Oral Exam				
Report (Preparation and presentation time included)				
Project (Preparation and presentation time included)				
Presentation (Preparation time included)				
Mid-Term Exam	1	1	1	
Studying for Mid-Term Exam	1	15	15	
Final Exam	1	1	1	
Studying for Final Exam	1	15	15	
		otal workload workload / 30	120	
		ECTS Credit	4	

Evaluation				
Activity Type	%			
Mid-term	30			
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		
1	Adequate knowledge in mathematics, science and basic engineering subjects; ability to apply theoretical and applied knowledge in these areas to modelling and solving engineering problems	5		
2	Ability to identify, define, formulate and solve complex engineering problems in civil engineering and related fields by selecting and applying appropriate analysis and modelling	4		
3	Ability to design a complex system, device or product under realistic constraints and conditions by applying modern design methods in accordance with a specified objective	5		
4	Ability to develop, select and use modern techniques and tools required for Civil Engineering applications and to utilise information technologies effectively	5		
5	Ability to design experiments, conduct experiments, collect data, analyse and interpret results for the investigation of Civil Engineering problems	4		
6	Ability to work in disciplinary and interdisciplinary teams	5		
7	Effective oral and written communication skills in Turkish and the ability to use/develop knowledge of foreign languages	3		
8	Awareness of the necessity of lifelong learning; the ability to access information, to follow developments in science and technology and to constantly renew oneself	5		
9	Awareness of professional and ethical responsibility	5		
10	Knowledge of business life practices such as project management, risk management and change management; awareness of entrepreneurship, innovation and sustainable development.	3		
11	Knowledge about the effects of engineering applications on health, environment and safety in universal and social dimensions; awareness of national and international legal regulations and	5		

	LECTUTER(S)					
Prepared by	Prof. Dr Murat KARACASU	Assist.Prof. Dr. Şafak BİLGİÇ	Assist.Prof. Dr. Çağdaş KARA	Dr Kadir Berkhan AKALIN		
Signature(s)						

Date:06.06.2024