



**ESOGU CIVIL ENGINEERING DEPARTMENT**



**COURSE INFORMATION FORM**

Course Name	Course Code
ENGINEERING RESEARCH II	151418719

Semester	Number of Course Hours per Week		ECTS
	Theory	Practice	
8	1	4	5

Course Category (Credit)				
Basic Sciences	Engineering Sciences	Design	General Education	Social
	2	3		

Course Language	Course Level	Course Type
Turkish	Undergraduate	Elective

<b>Prerequisite(s) if any</b>	
<b>Objectives of the Course</b>	Ability to produce solutions to Civil Engineering problems, design and implement projects.
<b>Short Course Content</b>	Providing general information about Civil Engineering projects, analyzing Civil Engineering problems, researching solution methods and implementing and monitoring the solution.

Learning Outcomes of the Course	Contributed PO(s)	Teaching Methods *	Measuring Methods **
1 Learn to analyze Civil Engineering problems, research solution methods, and implement and control the solution.	2,3,5,8,9,11	1,6,8,11,14,15	D,J,K
2 Can project selection and preparation.	2,3,5,8,9,11	1,6,8,11,14,15	D,J,K
3			
4			
5			
6			
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:Individual 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

<b>Main Textbook</b>	Lecture note
<b>Supporting References</b>	Current codes
<b>Necessary Course Material</b>	

<b>Course Schedule</b>	
<b>1</b>	General definitions,
<b>2</b>	Determination of project data
<b>3</b>	Project selection
<b>4</b>	Source search
<b>5</b>	Selection of project standards
<b>6</b>	Project preparation
<b>7</b>	Preliminary project
<b>8</b>	Mid-Term Exam
<b>9</b>	Project work
<b>10</b>	Project work
<b>11</b>	Project work
<b>12</b>	Project work
<b>13</b>	Project work
<b>14</b>	Project work
<b>15</b>	Evaluation of results and report writing
<b>16,17</b>	Final Exam

<b>Calculation of Course Workload</b>			
<b>Activities</b>	<b>Number</b>	<b>Time (Hour)</b>	<b>Total Workload (Hour)</b>
Course Time (number of course hours per week)	14	5	70
Classroom Studying Time (review, reinforcing, prestudy,...)	14	5	70
Homework			
Quiz Exam			
Studying for Quiz Exam			
Oral exam			
Studying for Oral Exam			
Report (Preparation and presentation time included)			
Project (Preparation and presentation time included)	1	15	15
Presentation (Preparation time included)			
Mid-Term Exam			
Studying for Mid-Term Exam			
Final Exam			
Studying for Final Exam			
<b>Total workload</b>			<b>155</b>
<b>Total workload / 30</b>			<b>5,17</b>
<b>Course ECTS Credit</b>			<b>5</b>

Evaluation	
Activity Type	%
Mid-term	
Quiz	
Project Observation	100
Bir öge seçin.	
Bir öge seçin.	
<b>Final Exam</b>	
<b>Total</b>	<b>100</b>

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	Sufficient knowledge of engineering subjects related with mathematics, science and own branch; an ability to apply theoretical and practical knowledge on solving and modeling of engineering	2
2	Ability to determine, define, formulate and solve complex engineering problems; for that purpose an ability to select and use convenient analytical and experimental methods.	5
3	Ability to design a complex system, a component and/or an engineering process under real life constrains or conditions, defined by environmental, economical and political problems; for that	5
4	Ability to develop, select and use modern methods and tools required for engineering applications; ability to effective use of information technologies.	2
5	In order to investigate engineering problems; ability to set up and conduct experiments and ability to analyze and interpretation of experimental results.	5
6	Ability to work effectively in inner or multi-disciplinary teams; proficiency of interdependence.	2
7	Ability to communicate in written and oral forms in Turkish/English; proficiency at least one foreign language.	3
8	Awareness of life-long learning; ability to reach information; follow developments in science and technology and continuous self-improvement.	5
9	Understanding of professional and ethical issues and taking responsibility	5
10	Awareness of project, risk and change management; awareness of entrepreneurship, innovativeness and sustainable development.	3
11	Knowledge of actual problems and effects of engineering applications on health, environment and security in global and social scale; an awareness of juridical results of engineering solutions.	4

LECTUTER(S)				
<b>Prepared by</b>	All academic staff			
<b>Signature(s)</b>				

Date:06.06.2024