



COURSE INFORMATION FORM

Course Name	Course Code
STRUCTURE PROJECT	151418714

Semester	Number of Course Hours per Week		ECTS
	Theory	Practice	
8	3		5

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

Course Language	Course Level	Course Type
Turkish	Undergraduate	Compulsory

Prerequisite(s) if any	Having taken Structural Analysis I-II, Reinforced Concrete I-II, Earthquake Resistant Design courses
Objectives of the Course	Design of 2-3 storey buildings according to regulation criteria.
Short Course Content	Static Analysis and Design of Reinforced Concrete of a new 2-3 storey building.

	Learning Outcomes of the Course	Contributed PO(s)	Teaching Methods *	Measuring Methods **
1	Can determine the project loads of a 2-3 storey building.	1, 2, 3, 8, 11	1, 11, 14	J
2	Can make the static project of a 2-3 storey building.	1, 2, 3, 8, 11	1, 11, 14	J
3	Can make the earthquake calculation of a 2-3 storey building statically and dynamically.	1, 2, 3, 8, 11	1, 11, 14	J
4	Can make the reinforced concrete calculation and details of a 2-3 storey building.	1, 2, 3, 8, 11	1, 11, 14	J
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

Main Textbook	Lecture Notes and reinforced concrete books
Supporting References	Relevant current codes.
Necessary Course Material	A professional static-reinforced concrete analysis software

Course Schedule	
1	Finding a suitable architectural project for the course
2	Defining construction region and materials properties
3	Checking irregularities of the building and if exist solutions for the irregularity
4	Static calculations under the live and dead loads
5	Calculation of Earthquake loads (with combining of mods)
6	Calculation of Earthquake loads (with equivalent earthquake force)
7	Checking column and beam joints
8	
9	Design of beams
10	Design of columns
11	Calculation of reinforced bars
12	Design of polygon columns
13	Foundation design
14	Drawings
15	Drawings
16,17	Final Exam

Calculation of Course Workload			
Activities	Number	Time (Hour)	Total Workload (Hour)
Course Time (number of course hours per week)	14	4	56
Classroom Studying Time (review, reinforcing, prestudy,...)	14	2	28
Homework			
Quiz Exam			
Studying for Quiz Exam			
Oral exam			
Studying for Oral Exam			
Report (Preparation and presentation time included)	1	30	30
Project (Preparation and presentation time included)	1	30	30
Presentation (Preparation time included)			
Mid-Term Exam			
Studying for Mid-Term Exam			
Final Exam			
Studying for Final Exam			
Total workload			144
Total workload / 30			4,8
Course ECTS Credit			5

Evaluation	
Activity Type	%
Mid-term	
Quiz	
Project Observation	100
Bir öge seçin.	
Bir öge seçin.	
Final Exam	
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	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	4
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.	3
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.	
5	In order to investigate engineering problems; ability to set up and conduct experiments and ability to analyze and interpretation of experimental results.	
6	Ability to work effectively in inner or multi-disciplinary teams; proficiency of interdependence.	
7	Ability to communicate in written and oral forms in Turkish/English; proficiency at least one foreign language.	
8	Awareness of life-long learning; ability to reach information; follow developments in science and technology and continuous self-improvement.	3
9	Understanding of professional and ethical issues and taking responsibility	
10	Awareness of project, risk and change management; awareness of entrepreneurship, innovativeness and sustainable development.	
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)			
Prepared by	Assist.Prof.Dr. Ayten Günaydın		
Signature(s)			

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