



COURSE INFORMATION FORM

Course Name	Course Code
TIMBER STRUCTURES	151417667

Semester	Number of Course Hours per Week		ECTS
	Theory	Practice	
7	3	0	3

Course Category (Credit)				
Basic Sciences	Engineering Sciences	Design	General Education	Social
	1	2		

Course Language	Course Level	Course Type
Turkish	Undergraduate	Elective

Prerequisite(s) if any	-
Objectives of the Course	Ability to select, design and develop a structure with desired qualities. Ability to identify, formulate and solve problems in the related discipline. Understanding professional and ethical responsibility. Ability to understand the national and global impact of engineering solutions. Ability to understand and apply the importance of lifelong learning.
Short Course Content	To create the opportunity for Civil Engineering students to numerically realize, see and examine the existing engineering and knowledge they have gained before starting their professional life on certain application projects. In this context, to provide the most important and most frequently used regulations and design principles with application projects and computer program support. To be able to conduct certain professional specific researches independently and comprehensively.

Learning Outcomes of the Course	Contributed PO(s)	Teaching Methods *	Measuring Methods **
1 Develops knowledge to be used in engineering designs.	1, 2	1, 5, 10	A, K
2 Learns the internal structure and material properties of wood.	1, 2	1, 5, 10	A, K
3 Determines the mechanical properties of wood material and learns the sizing method.	1, 2	1, 5, 10	A, K
4 Can make dimensioning by selecting material and/or section.	1, 2	1, 5, 10	A, K
5 Learns the details about joints.	1, 2	1, 5, 10	A, K
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	ERŞEN N. (2000), “ Ahşap Yapılar Problem ve Çözümleri”, İstanbul, Birsen Yayınevi.
Supporting References	ODABAŞI, Y., (1992), “Ahşap ve Çelik Yapı Elemanları” , İstanbul, Beta Basım Yayım Dağıtım A.Ş. Erol, H., Şengel, H.S. ve Özçelikörs, Y., Mukavemet I-II sunu ders notları.
Necessary Course Material	Calculator, protractor, compass, set square, pencil, eraser

Course Schedule	
1	Internal structure of timber material
2	Advantages and disadvantages of timber
3	Classification of timber
4	Mechanical properties of timber
5	Dimensioning methods of timber structural elements
6	Dimensioning methods of timber structural elements
7	Dimensioning methods of timber structural elements
8	Mid-Term Exam
9	Jointing tools
10	Jointing tools nailed joints
11	Jointing tools bolted joints
12	Design of timber building structural systems under earthquake effect
13	Design of timber building structural systems under earthquake effect
14	Design of timber building structural systems under earthquake effect
15	Design of timber building structural systems under earthquake effect
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	1	14
Homework	0	0	0
Quiz Exam	0	0	0
Studying for Quiz Exam	0	0	0
Oral exam	0	0	0
Studying for Oral Exam	0	0	0
Report (Preparation and presentation time included)	0	0	0
Project (Preparation and presentation time included)	0	0	0
Presentation (Preparation time included)	0	0	0
Mid-Term Exam	1	1.5	1.5
Studying for Mid-Term Exam	1	10	10
Final Exam	1	1.5	1.5
Studying for Final Exam	1	20	20
Total workload			89
Total workload / 30			2.97
Course ECTS Credit			3

Evaluation	
Activity Type	%
Mid-term	40
Quiz	
Homework	
Bir öge seçin.	
Bir öge seçin.	
Final Exam	60
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	Strong background in mathematics, science, and fundamental engineering principles; ability to apply theoretical and practical knowledge from these fields to model and solve engineering problems	4
2	Expertise in identifying, defining, and formulating complex engineering problems in civil engineering and related fields. Ability to select and apply appropriate analysis and modeling methods to solve these problems	4
3	Ability to design complex systems, devices, or products under realistic constraints and conditions. Proficiency in using modern design methods to meet specific objectives	
4	Competence in developing, selecting, and using modern techniques and tools for civil engineering applications. Effective utilization of information technologies to support engineering tasks	
5	Expertise in designing experiments, conducting tests, collecting data, analyzing results, and interpreting findings for civil engineering problem investigations	
6	Ability to work effectively in both intradisciplinary and interdisciplinary teams	
7	Effective Turkish oral and written communication skills and proficiency in using and developing foreign language skills	
8	Commitment to lifelong learning. Ability to access information, stay up-to-date with advances in science and technology, and continuously self-improve	
9	Strong sense of professional and ethical responsibility	
10	Knowledge of project management, risk management, and change management practices; awareness of entrepreneurship, innovation, and sustainable development principles	
11	Understanding of the global and societal impacts of engineering applications on health, the environment, and safety; awareness of national and international legal regulations, standards, and the legal implications of engineering solutions	
12		

LECTURER(S)				
Prepared by	Assis. Prof. Dr. Hasan Selim ŞENGEL			
Signature(s)				

Date: 06.06.2024