



ESOGU ELECTRICAL-ELECTRONICS ENGINEERING DEPARTMENT COURSE INFORMATION FORM

Course Title	Course Code
THE BUILDING PROCESS	151224568

Semester in Program	Number of Course Hours per Week		ECTS Credit
	Theory	Practice	
3	3	0	3

Course ECTS Credit Distribution				
Basic Sciences	Engineering Sciences	Design	General Education	Social
			3	

Language of Instruction	Course Level	Course Type
English	Undergraduate	Elective

Prerequisite	None
Objectives of the Course	This course introduces non-civil engineering students to the real-world process of constructing a building—from site selection and design to permits, construction phases, and final occupancy approval. Without delving into structural calculations or technical design, students gain a comprehensive overview of how buildings come to life. Ideal for future engineers interested in entrepreneurship, project management, or simply understanding how infrastructure gets built.
Brief Course Content	The buildings process through planning, permissions, procurement, project management, and modern construction trends. Decision-making, regulatory procedures, materials, and the coordination required among professionals.

Learning Outcomes of the Course		Contributed POs	Teaching Methods *	Assessment Methods **
1	Identifying and explaining the sequential stages in a typical building construction project	8,10a,11,12	1,2	A
2	Understanding the roles of various stakeholders (owner, architect, engineer, municipality, contractor).	8,10a,11,12	1,2	A
3	Recognizing the importance of site selection, zoning, and local regulations.	8,10a,11,12	1,2	A
4	Appreciating new materials and technologies shaping the modern construction industry	8,10a,11,12	1,2	A
5	Reading and interpreting basic site plans and permits	8,10a,11,12	1,2	A
6	Communicating effectively with construction professionals in a multidisciplinary setting.	8,10a,11,12	1,2	A
*Teaching Methods 1:Lecture, 2:Discussion, 3:Experiment, 4:Simulation, 5:Question-Answer, 6:Tutorial, 7:Observation, 8:Case Study, 9:Technical Visit, 10:Problem Solving, 11:Individual Work, 12:Team/Group Work, 13:Brain Storm, 14:Project Design / Management, 15:Report Preparation and/or Presentation				
**Assessment 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	<i>Fundamentals of Building Construction: Materials and Methods</i> by Edward Allen and Joseph Iano, Wiley, 2021
Supplementary Resources	<i>European Building Construction Illustrated</i> , Francis D. K. Ching, Mark Mulville, Publisher: Wiley, 2014
Necessary Course Material	None

Course Weekly Schedule	
1	Course Overview & Introduction to Building Construction Process
2	Site Selection, Land Use, Zoning, and Environmental Impact
3	Concept Design, Stakeholders (Architect, Engineer, Client, etc.)
4	Municipality Regulations & Permits: Navigating Bureaucracy
5	Legal Framework: Titles, Deeds, and Construction Law Basics
6	Budgeting and Financing a Building Project
7	Selecting Contractors: Tenders, Bidding, and Contracts
8	Mid-Term Exams
9	Materials Old and New: Bricks, Steel, Timber, Glass, and Composites
10	Modern Construction Materials: Insulation, Green Tech, and Smart Materials
11	Construction Phases: Excavation, Foundation, Superstructure, Roofing
12	Interior Works: Electrical, HVAC, Plumbing (interfacing with other engineers)
13	Final Steps: Finishing, Landscaping, Safety, Inspection
14	Occupancy Permit: Final Approvals and Building Handover
15	Conclusion and Reflections
16,17	Final Exams

Calculation of Course Workload			
Activities	Count	Time (Hour)	Total Workload (Hour)
Weekly classroom time	14	3	42
Weekly study time (review, reinforcing, preparation)	14	2	28
Homework			
Taking a quiz			
Studying for a quiz			
Oral exam			
Studying for an oral exam			
Report writing (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	9	9
Final Exam	1	1	1
Studying for Final Exam	1	9	9
Total workload			90
Total workload / 30			3
Course ECTS Credit			3

Assessment	
Activity Type	%
Mid-term	50
Final Exam	50
Total	100

COURSE CONTRIBUTION TO THE PROGRAM OUTCOMES (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low)		
NO	PROGRAM OUTCOMES	Contribution
1	a. Sufficient knowledge of mathematics	
	b. Sufficient knowledge of basic sciences	
	c. Sufficient basic engineering and Electrical-Electronics engineering knowledge	
	d. Skill of applying all these knowledge and experience to complicated Electrical-Electronics engineering problems	
2	Skill of identifying, defining, formulating, and solving complex problems in Electrical-Electronics engineering and related areas by selecting and applying appropriate analysis and modeling methods, while considering the relevant UN Sustainable Development Goals.	
3	Skill of designing a complicated process, system, equipment or product by applying modern design methods under realistic constraints and conditions.	
4	To analyze and solve the complicated engineering problems: a. skill of developing, selecting and applying the required techniques and devices	
	b. skill of using information technologies effectively	
5	To study the complicated on the complicated Electrical-Electronics engineering problems and research subjects: a. skill of experimental design	
	b. skill of performing the experiments, collecting the data and analyzing and interpreting the results	
6	a. Skill of performing individual studies	
	b. Skill of performing intra and interdisciplinary and multidisciplinary teamwork and studies	
7	a. Skill of effective oral and written communication in Turkish and English	
	b. Skill of improving and using foreign language knowledge	
	c. Skill of effective reporting, understanding the reports and preparing the design and production reports	
	d. Skill of effective presentation and giving and getting clear and understandable instructions.	
8	Awareness of the necessity of life-long learning and skill of accessing to information and following the improvements in contemporary science and technology	3
9	a. Awareness of necessity of behaving in accordance with the ethical principles and awareness of the importance of having professional ethical responsibilities	
	b. Knowledge about legal regulations and standards of engineering	
10	a. Knowledge about project management, risk management and change management	3
	b. Awareness of the significance of entrepreneurship and innovation	
	c. Knowledge about sustainable development	
11	Knowledge of the effects of engineering applications on health, environment, economy, sustainability, and safety on global and societal dimensions within the scope of the UN Sustainable Development Goals; awareness of national and international legal regulations and standards, as well as the legal consequences of engineering solutions.	3
12	Knowledge about modern problems in local and universal scale	3

INSTRUCTORS				
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Date: 19.08.2026