

PREFABRICATED STRUCTURES

1	Course Title:	PREFABRICATED STRUCTURES
2	Course Code:	INS6036
3	Type of Course:	Optional
4	Level of Course:	Third Cycle
5	Year of Study:	1
6	Semester:	2
7	ECTS Credits Allocated:	6.00
8	Theoretical (hour/week):	3.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Dr. Öğr. Üyesi Mehmet Ömer TİMURAĞAOĞLU
15	Course Lecturers:	Mehmet Ömer Timurağaoğlu
16	Contact information of the Course Coordinator:	omertao@uludag.edu.tr
17	Website:	
18	Objective of the Course:	Introduction of prefabricated structures, Understanding the design of prefabricated structures, Understanding the structural analysis of prefabricated industrial structures, Understanding the damages observed in prefabricated structures, repair and reinforcement techniques
19	Contribution of the Course to Professional Development:	To have detailed information about the production stages of reinforced concrete prefabricated building elements, their connection details and controls, and the design principles of a prefabricated building.
20	Learning Outcomes:	
	1	Understanding the advantages of prefabricated structures,
	2	Understanding the calculation and design of prefabricated structures
	3	Understanding the design of prefabricated element connections
	4	Understanding the repair and strengthening methods in existing prefabricated structures
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21	Course Content:	
	Course Content:	
Week	Theoretical	Practice
1	Introduction, history and advantages and disadvantages of prefabricated construction	

2	Definitions, materials and loads in prefabricated structures	
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4	Non-bearing prefabricated elements	
5	Design principles of prefabricated elements	
6	Types and formation of connections, bar element connections	
7	Experiments on connection areas	
8	Diaphragm effect, analysis of prefabricated floor systems	
9	Design principles of prefabricated elements, systems and connections	
10	Design of prefabricated industrial and residential structures	
11	Connection types of prefabricated structures in Turkey building earthquake regulation 2018	
12	Damages observed in prefabricated structures, repair and reinforcement.	
13	Manufacturing, control and tests, assembly and tolerances in prefabricated construction	
14	Application examples and general evaluation in prefabricated structures	

24	ECTS / WORK LOAD TABLE
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ÖK2	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK4	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																	
Contrib ution Level:	1 very low			2 low			3 Medium			4 High			5 Very High				