INDUSTRIAL STEEL STRUCTURES

1	Course Title:	INDUSTRIAL STEEL STRUCTURES	
2	Course Code:	INS5044	
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:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. HAKAN TACETTİN TÜRKER	
15	Course Lecturers:	Hakan T Türker	
16	Contact information of the Course Coordinator:	hakantturker@uludag.edu.tr	
17	Website:		
18	Objective of the Course:	To teach the special steel constructions and the connections of industrial steel structures.	
19	Contribution of the Course to Professional Development:	This course provides to learn the design of special steel structure constructions belonging to industrial steel structures, the design of joints used in industrial steel structures, and stability analysis in industrial steel structures.	
20	Learning Outcomes:		
		1	able to design special constructions of industrial steel structures.
		2	able to design connections used in industrial steel structures.
		3	able to check stability of industrial steel structures.
		4	
		5	
		6	
		7	
		8	
		9	
		10	
21	Course Content:		

Course Content:

Week	Theoretical	Practice
1	Moment resisting beam-to-column connections of steel frames: Welded connections without plate.	
2	Applications	
3	Moment resisting beam-to-column connections: Welded connections with horizantal plate	

4	Applications	
5	Steel Industrial Structures: General information and static system.	
6	Steel Industrial Structures: General information and static system.	
7	Structural component used in Industrial buildings, industrial structures for special purposes.	
8	Additional roof components used in Industrial buildings; Cranes: Related codes	
9	Crane rails and beams- fundemantals of static system and construction.	
10	Steel frames: General information, static system and calculation methods, stability checks.	
11	Steel frames: General information, static system and calculation methods, stability checks.	
12	Construction and calculation methods of R beams (applications)	
13	Construction and calculation methods of Castellated beams	
14	Construction and calculation methods of Castellated beams	

22	Textbooks, References and/or Other Materials	T.C. Çevre ve Şehircilik Bakanlığı, Çelik Yapıların Tasarım ... Learning, 2017 Jack C. McCormac, Stephen F. Csernak, Structural Steel
23	Assesment	

Midterm Exam	1	40.00
Home work-project	0	0.00
Total	2	100.00
Success Grade		
Total	100.00	
Measurement and Evaluation Techniques Used in the Course	Exam	

24	**ECTS / WORK LOAD TABLE**

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self-study and preperation	0	0.00	0.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	70.00	70.00
Others	0	0.00	0.00
Final Exams	1	70.00	70.00
Total Work Load			252.00
Total work load/ 30 hr			6.07
ECTS Credit of the Course			6.00

25	**CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS**															
	PQ1	**PQ2**	**PQ3**	**PQ4**	**PQ5**	**PQ6**	**PQ7**	**PQ8**	**PQ9**	**PQ10**	**PQ11**	**PQ12**	**PQ13**	**PQ14**	**PQ15**	**PQ16**
ÖK1	3	4	5	4	3	0	0	0	0	0	0	0	0	0	0	0
ÖK2	3	4	5	4	3	0	0	0	0	0	0	0	0	0	0	0

ÖK3	3	5	4	4	3	0	0	0	0	0	0	0	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications					
Contribution Level:	**1 very low**	**2 low**	**3 Medium**	**4 High**	**5 Very High**