DESIGN OF DUCTILE STEEL STRUCTURES									
1	Course Title:	DESIGN	OF DUCTILE STEEL STRUCTURES						
2	Course Code:	INS6039							
3	Type of Course:	Optional							
4	Level of Course:	Third Cy	cle						
5	Year of Study:	2							
6	Semester:	3							
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 f	ace						
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:	The aim of the course is to teach the fundamental concepts related to the ductile design of steel structures.							
19	Contribution of the Course to Professional Development:	This course provides to define the concept of ductile design, plastic analysis methods, ductile design of steel structural systems, capacity design method.							
20	Learning Outcomes:								
		1	To be able to define the concept of ductile design						
		2	To learn plastic analysis methods.						
		3	To learn the ductile design of steel structural systems						
		4	To lear capacity design method						
		5							
		6							
		7							
		8							
		9							
		10							
21	Course Content:								
	Course Content:								
Week	Theoretical		Practice						
1	Structural steel								
2	Plastic behavior at the cross-section								
3	comprehend the ductile design conce								
4	upper bound lower bound and unique theorems in plastic analysis	eness							
5	Plastic analysis methods								
6	Plastic analysis methods								

7	Plast	tic ar	nalysis	s meth	nods												
8	statio	static pushover analysis															
9	Desi	Design of ductile moment-resisting frames															
10	Desi	sign of ductile moment-resisting frames															
11	Desi	sign of ductile braced frames						Τ									
12	Desi	esign of ductile braced frames															
13	capa	capacity design concept						Τ									
14	4 Beam-column connections																
22	Textbooks, References and/or Other Materials:							St T H A st	Bruneau, M., Uang, C-M.,Whittaker,A. ,"Ductile design of steel structures" McGraw-Hill T.C. Çevre ve Şehircilik Bakanlığı, Çelik Yapıların Tasarım Hesap ve Yapım Esalaslarına Dair Yönetmelik, 2018. American Institute of Steel Construction, Specification for structural steel buildings AISC 360-16, Chicago, 2016								
								Le	William T. Segui, Steel Design, 6th Ed., Cengage Learning, 2017 Jack C. McCormac, Stephen F. Csernak, Structural Steel Design Fifth Edition, Prentice Hall, 2012.								
23	Asse	esme	ent														
TERM L	LEARNING ACTIVITIES NUMBE					W	WEIGHT										
Midterr	Midterm Exam 1						4	40.00									
							Number Duration (hour) Total Wo					Vorle					
Activites							Load (h										
Tbtadretical 2						1	100400			3.00	3.00			42.00			
Practicals/Labs							0			0.00	0.00			0.00			
Self study and preperation								0			0.00	0.00			0.00		
Homeworks								0			0.00	0.00					
<b>萨哈</b> 哈	Popel cts							1	100.00			0.00	0.00				
	ield Studies								0			0.00				0.00	
Midterr									1			70.00	70.00			70.00	
Others									0			0.00				0.00	
Final E	Exams								1			70.00	70.00			70.00	
Total V	al Work Load												252.00				
Total w	al work load/ 30 hr											6.07					
ECTS	Credit	t of tl	he Co	urse												6.00	
25	25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS																
	F	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ	8 PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16
ÖK1		4	4	4	4	5	0		0	0	0	0	0	0	0	0	0
ÖK2		4	5	4	5	4	0		0	0	0	0	0	0	0	0	0
ÖK3		5	4	4	4	5	0		0	0	0	0	0	0	0	0	0
ÖK4	5	5	4	4	5	5	0	0	0	0	0	0	0	0	0	0	0
	LO: Learning Objectives PQ: Program Qualifications																

Contrib ution	1 very low	2 low	3 Medium	4 High	5 Very High
Level:					