

IM 483 STEEL STRUCTURES		CIVIL ENGINEERING	
Semester	Credit Structure		
	Lecture	Recitation	Laboratory
7	3	0	0
Language	English		
Compulsory / Elective	Compulsory		
Prerequisites	None		
Catalog Description	Introduction. Historical development of steel, general concepts. Rivets, Bolts, Welding. Element of steel structure. Tension members. Compression members. Combined bending and compression. Truss systems. Bending members		
Course Objectives	Introduction to analysis and problem solving related to steel structures projects.		
Course Outcomes	Gaining the skill of handling and solving the problems related to steel structures projects.		
Textbook and /or References	Deren, H.,“Steel Structures”, İ.T.Ü Civil Eng. Department, 1995,401 p.(in Turkish) Odabaşı, Y. “Timber and Steel Structure Members”, Beta Basım Yayım Dağıtım A. Ş., Cağaloğlu, İstanbul, 1997, 479 p. Akkaş, N. and Yılmaz, Ç., “Steel Structures”, class notes,1974, 52 p. B. Bresler, T.y. Lin“Design of Steel Structures,John Wiley & Sons.Inc		
Assessment Criteria		Quantity	Percentage
	Midterm Exams	2	45
	Quizzes		
	Homeworks		
	Projects	1	5
	Term Paper		
	Laboratory Work		
	Other		
	Final Exam	1	50
Course Category by Content (%)	Mathematics and Basic Sciences	40	
	Engineering Science	40	
	Engineering Design	20	
	Social Sciences		
Instructors	Yrd. Doç. Dr. Meral Begimgil, Yrd. Doç. Dr. Yusuf Demirel		

COURSE PLAN	
Week	Topics
1	Historical development of steel
2	Steel properties and general concepts
3	Rivet, bolt
4	Rivet, bolt
5	Midterm Exam 1
6	Welding
7	Welding
8	Element of steel structure, Tension members
9	Compression members
10	Combined bending and compression
11	Combined bending and compression
12	Truss systems
13	Midterm Exam 2
14	Truss systems and bending members

RELATIONSHIP BETWEEN THE COURSE AND DEPARTMENT CURRICULUM				
	Program Outcomes	1	2	3
1	An ability to apply knowledge of mathematics, science, and engineering			X
2	An ability to design and conduct experiments, as well as to analyze and interpret data		X	
3	An ability to design a system, component, or process to meet desired needs		X	
4	An ability to function on multi-disciplinary teams		X	
5	An ability to identify, formulate, and solve engineering problems			X
6	An understanding of professional and ethical responsibility			X
7	An ability for effective written and oral communication in Turkish and English		X	
8	The broad education necessary to understand the impact of engineering solutions in a global and societal context		X	
9	A recognition of the need for, and ability to engage in life-long learning			X
10	A knowledge of contemporary issues			X
11	An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice			X
Contribution of the course : 1:None 2:Partially 3:Completely				