

Course Title-Course Code: CE 566 LIMIT ANALYSIS					Name of the Programme:CIVIL ENGINEERING				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.	Field Study	H W	Other	Total	Credit	ECTS Credit
1-2	42	0	0	0	84	62	188	3	7.5
Language	Turkish								
Compulsory / Elective	Elective								
Prerequisites	-								
Course Contents	Basic hypotheses, simple cases of collapse, upper bounds, lower bounds and uniqueness theorems, introduction to design, limit analysis of frames, multi-bay and multi-storey buildings, displacements in beams and frames, stability consideration, notes on ultimate load analysis of reinforced concrete structures, yield line analysis of plates.								
Course Objectives	Calculate the failure mode and failure load of the structural system								
Learning Outcomes and Competences	Improving the knowledge of structural behaviour at the limit stage								
Textbook and /or References	Tanvir Wasti, Limit Analiz, METU								
Assessment Criteria								<i>If any, mark as (X)</i>	Percent (%)
	Midterm Exams							X	30
	Quizzes								
	Homeworks							X	10
	Projects								
	Term Paper							X	10
	Laboratory Work								
	Other								
Final Exam							X	50	
Instructors	Prof Dr Sinan ALTIN								
Week	Subject								
1	Basic hypotheses, Simple cases of collapse, Upper bounds, Lower bounds and uniqueness theorems, Introduction to design, Limit analysis of frames, Limit analysis of frames, I.Midterm Multi-bay and multi-storey buildings,								
2									
3									
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10	Displacements in beams and frames,
11	Stability consideration,
12	II.Midterm
13	Notes on ultimate load analysis of reinforced concrete structures,
14	Yield line analysis of plates.