

Course Title-Course Code: CE 521 THEORY OF ELASTICITY							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	0	146	188	3	7.5
Language	Turkish								
Compulsory / Elective	Elective								
Prerequisites	-								
Course Contents	Vectors, matrices and tensors. Kinematics of a nonlinear elastic continuum. Finite deformation. Stress tensors and motion. Constitutive relations. Two dimensional elasticity problems. Torsion of prismatic members.								
Course Objectives	To apply the basic principles of mechanics in solids and in an elastic continuum.								
Learning Outcomes and Competences	To understand the stress and strain relations in nonlinear elastic bodies.								
Textbook and /or References	Stephen Timoshenko, Theory of Elasticity, McGraw-Hill Erdoğan Şuhubi, Sürekli Ortamlar Mekaniği, İTÜ, 1994								
Assessment Criteria								<i>If any, mark as (X)</i>	Percent (%)
	Midterm Exams							X	40
	Quizzes								
	Homeworks								
	Projects								
	Term Paper								
	Laboratory Work								
	Other								
	Final Exam							X	60
Instructors	Prof. Dr. Tekin GÜLTOP								