

Course Title-Course Code: CE 501 ANALYTIC METHODS IN CIVIL ENGINEERING							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	2 nd and Higher ordered ordinary differential equations and their applications in solid and structural mechanics. Systems of differential equations. Laplace transform methods. Series solutions of differential equations. Fourier transform. An introduction to partial differential equations and applications.								
Course Objectives	To help the student to gain the skill to use differential equations with an emphasis to the applications in engineering mechanics.								
Learning Outcomes and Competences	Understanding the principles of analytical methods with applications is Civil Engineering.								
Textbook and /or References	Peter V. O'Neil, Advanced Engineering Mathematics, PWS Publishing Company,1983								
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								