

Course Title-Course Code: CE 507 TRANSPORTATION SYSTEMS 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	56	90	188	3	7.5
Language	Turkish								
Compulsory / Elective	Elective								
Prerequisites	-								
Course Contents	Development of transportation demand and supply models. Analysis of cost functions, cost estimating methods and some general cost functions. Merging supply and demand models for network equilibration. Simulation and optimization approaches for equilibrium. Evaluation of alternative transportation systems. Transportation regulation in an inefficient or in an excessive competitive environment. Cost and demand conditions of a regulated industry..								
Course Objectives	understand the role of the transportation engineer, as a principal member of a multidisciplinary team, in the solution of transportation problem acquire a basic knowledge of the principles, practice of transportation engineering and the components of the transport systems and their interactions; the relations between consumers, behavior, demand, aggregate, disaggregate predictions, system performance, vehicle cycle, cost functions, congestions, network, equilibration etc.								
Learning Outcomes and Competences	Understanding and practicing the role of professional, approaches to solve any transport problems, generating solution basket, evaluating the differences and their effects, widening the sight in problem solving and components								
Textbook and /or References	Fundamentals of Transportation Systems Analysis, Marvin, L., Manhaim, MIT Press, USA. Strategies for the Evaluation of Alternative Transportation Plans, NCHRP Report 96, 1970								
Assessment Criteria								<i>If any, mark as (X)</i>	Percent (%)
	Midterm Exams							X	30
	Quizzes								
	Homeworks							X	20
	Projects								
	Term Paper							X	10
	Laboratory Work								
	Other								
Final Exam							X	40	
Instructors	Asst.Prof. Dr. Hikmet BAYIRTEPE								