Course Title-Course Code: CE 618 OR METHODS FOR TRANSPORTATION 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**	**70**	**76**	**188**	**3**	**7.5**

Language	Turkish
Compulsory / Elective	Elective
Prerequisites	-
Course Contents	Mathematical models for travel demand forecasts, network flows equilibrium, evaluation of alternative transportation systems, user and system optimization for transportation systems and networks, transportation operation analysis including route selection, scheduling and fleet determination and operations, linear and nonlinear programming, sensitivity analysis, integer, dynamic and goal programming
Course Objectives	Teaching most useful OR methods related to Transportation Engineering subjects.
Learning Outcomes and Competences	Developing on data analysis, problem solving and evaluations and sensitivities on calculations and decision making
Textbook and /or References	Wayne L.Winston, Operation Research Application and Algorithms (2nd Edition), PWS-KENT Publishing Co, Boston.1993 Anderson, D.R., Sweeney, D.J., Williams T.A., Quantitative Methods for Business, West Publishing Co. USA.1986 Larson R.C. and Odoni A. R., Urban Operation Research,first published by Prentice-Hall, NJ, 1981 Ahuja, R.K., Magnanti, T.L., and Orlin, J.B., Network Flows: Theaıry, Algorithms and Applications, Prentice Hall, USA. 1993. Linear and Nonlinear Programming, Reaklaitis, G.V., Ravindran, A., Ragsdell, K.M., Engineering Optimization, Jıhn Wiley and Sons, 1983, USA. LINDO, Programming Package

Assessment Criteria		*If any,mark as (X)*	**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