

Course Title-Course Code: CE 597 TRAFFIC ENGINEERING 2					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	Volume, speed and travel time studies. Measurement techniques of fundamental traffic stream characteristics. Statistical distributions, traffic stream models. Capacity of rural highways, freeways, signalled intersections. Traffic management techniques. Introduction to microscopic traffic flow theory. Traffic flow models. Introduction to principles of intersection and signalization. Signal timing design. Capacity and level of service analysis of urban streets and intersections.								
Course Objectives	Provision of basic principles of microscopic traffic flow theory and traffic flow models. Introduction to signalization and signal timing design. Introduction of highway capacity methodologies for analysis of urban streets and intersections.								
Learning Outcomes and Competences	Understanding of the principles of macroscopic traffic flow theory. Acquisition of knowledge and skills to design signalized intersections and to perform capacity and level of service analyses of urban streets and intersections .								
Textbook and /or References	Garber, N.J. and Hoel, L.A., "Traffic and Highway Engineering, 2 nd Ed.", PWS Brooks and Cole Publishing, Pacific Grove, CA, 1999. Roess, R.P., McShane, W.R., and Prassas, E.P., "Traffic Engineering, 2 nd Ed.", Prentice Hall, Upper Saddle River, New Jersey, 1998. Pline, J.L.(ed), "Traffic Engineering Handbook", 4 th Ed.,Prent.Hall, NewEnglewood Cliffs, NJ, 1992. May, A.D., "Traffic Flow Fundamentals", Prentice Hall, Englewood Cliffs, New Jersey. "Highway Capacity Manual 2000", Transportation Research Board, National Research Council, Washington DC, 2000. Özdirim, M., "Trafik Mühendisliği Cilt 1-2, Bayındırlık ve İskan Bakanlığı, KGM,1994.								
Assessment Criteria								<i>If any, mark as (X)</i>	Percent (%)
	Midterm Exams							X	30
	Quizzes								
	Homeworks							X	30
	Projects								
	Term Paper								
	Laboratory Work								
	Other								
	Final Exam							X	40
Instructors	Asst. Prof. Dr. Cemal AYVALIK								

