

Course Title-Course Code: CE 576 STATİSTİCAL ANALYSIS IN COASTAL 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	56	90	188	3	7.5
Language	Turkish								
Compulsory / Elective	Optional								
Prerequisites	-								
Course Contents	Description of Random Sea Waves, Wave Data: Observation and Measurements, Wave Modelling and Wave Prediction, Wave Climate Statistics, Engineering Applications, Wave Transformations, Wave Forces, Wave Spectrum, Spectral Techniques, Autocorrelation, Fourier Analysis and Transformations, Markov Chains, Design of Sea Structures.								
Course Objectives	Providing the civil and coastal engineers with the procedures and methods necessary to derive design wave characteristics required for coastal and civil engineering practice.								
Learning Outcomes and Competences	Application ability of statistical analysis used in coastal engineering design								
Textbook and /or References	<p>Goda, Yoshimi "Random Seas and Design of Maritime Structures", University of Tokyo Press, Tokyo, Japan,1985.</p> <p>Word Meteorological Organization, "A Guide to Wave Analysis and Forecasting", WMO Report No. 702, Geneva, Switzerland, 1988.</p> <p>Newland, D.E., "An Introduction to Random Vibrations and Spectral Analysis", Longman Scientific and Technical, London, 1984.</p>								
Assessment Criteria								<i>If any, mark as (X)</i>	Percent (%)
	<i>Midterm Exams</i>							X	20-20
	Quizzes								-
	Homeworks							X	5
	Projects								-
	Term Paper							X	5
	Laboratory Work								-
	Other								-
	Final Exam							X	50
Instructors	Associate Prof. Dr. Can E. BALAS								