

Course Title-Course Code: CE 579 HYDROPOWER							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	42	104	188	3	7.5
Language	Turkish								
Compulsory / Elective	Elective								
Prerequisites	-								
Course Contents	Introduction, potential of electrical energy production and its value in economy, general principles of hydro-electrical energy and related definitions. Planning of hydro-electrical energy projects, dams, hydro-electric energy production dams and additional structures for energy production. Hydraulic power houses, turbines and related structures, change in operational program of turbines and their problems								
Course Objectives	To give the basic concepts of hydropower energy and hydropower plant design as civil engineer								
Learning Outcomes and Competences	The main hydropower energy concepts, methodologies and information are provided to assess the design hydropower energy plant								
Textbook and /or References	1) Yıldız K.,1992, Hidroelektrik Santraller Hesap Esasları ve Projelendirilmesi, DS.İ Matbaası, Ankara. 2) Balman, V., Güven, Ş.,1972, Su Kuvvetleri Mühendisliğine Giriş, Ankara Basım ve Ciltevi, Ankara. 3) Başeşme, H.,1980, Hidroelektrik Santraller ve Hidroelektrik Santral Tesisleri, TEK Eğitim Dairesi Yayınları, Ankara. 4) Desmukh M. M.,1978,"Water Power Engineering", Sharma Printers, New Delhi								
Assessment Criteria								<i>If any, mark as (X)</i>	Percent (%)
	Midterm Exams							X	30
	Quizzes								-
	Homeworks								
	Projects								-
	Term Paper							X	10
	Laboratory Work								-
	Other								-
	Final Exam							X	60
Instructors	Prof. Dr. İbrahim GÜRER								