

Hydraulic Structures

Faculty

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Program

The Hydraulic Structures program was established in 1982 and is the second graduate program in the Department. It focuses on analysis and design of structures in contact with water including dams, spillways, culverts, chutes, stilling basins and marine structures. The program contains courses and projects in structures, hydraulics and geotechnics areas. It also prepares the interested students for a PhD program.

1st Semester

Course Number	Course Name	Units
20014	ADV ENGINEERING MATHEMATICS	3
20253	HYDRAULIC STRUCT DSGN 1	3
20919	SEMINAR 1	1

2nd Semester

Course Number	Course Name	Units
20931	SEMINAR 2	1
20149	FINITE ELEMENTS	3

3rd Semester

Course Number	Course Name	Units
20900	MSC THESIS	6

4th Semester

Course Number	Course Name	Units
20900	MSC THESIS	0

Electives

Course Number	Course Name	Units
20670	ANAL DSGN CONCR DAMS	3
20430	EARTH DAMS & PROJECT	3
20261	HYDRAULIC STRUCT DSGN 2	3
20676	ADVANCED HYDRAULICS	3
20257	COASTAL ENG	3
20626	HYDRODYNAMICS	3
20628	RIVER ENG	3
20640	NUM METHOD HYD ENG	3
20642	HYD MODELS	3
20645	COMPU HYDRAULICS	3
20661	NUM ANAL SOIL AND ROCK	3
20702	ENVIRON HYDRODYN	3
20133	THEORY PLATES & SHELLS	3
20152	SOIL STRUCT INTERAC	3
20153	VIBRATION OF STRUCT	3
20165	ADV EARTHQUAKE ENG	3
20258	FLUID STRUCT INTERACTION	3
20439	ADV EARTH DAMS	3
20447	ANALYSIS & DESIGN of TUNNELS	3
20452	ADVANCED ENGINEERING GEOLOGY	3
20445	ROCK MECHANICS	3
20896	OFFSHORE STRUCTURES DESIGN	3
20892	PORT STRUCTURES DESIGN	3
20674	DIVERSION DAMS	3
20137	PRESTRESSED CONCR STRUCT	3
20410	ADVANCED SOIL MECHANIC I	3
20418	ADVANCED FOUNDATION ENGINEERING	3
20406	UNSATURATED SOIL MECHANIC	3