

## CIVIL ENGINEERING DEPARTMENT

### MINOR PROGRAM IN GEOTECHNICS

This program is aimed at students in other fields of engineering and science wishing an introduction to the behavior of engineering soils and geotechnical applications, especially those who are likely to collaborate with geotechnical engineers in their future professional life. The program requires basic knowledge of engineering mechanics and hydraulics. The emphasis will be on the principles of soil mechanics and ground investigation which are of value in gaining an understanding of problems such as slope stability, ground water movement, ground improvement and environmental geotechnology.

#### **Prerequisite Courses**

CE	221	Engineering Mechanics 1	(3-0) 3
CE	224	Mechanics of Materials	(3-2) 4

#### **Compulsory courses**

CE	363	Soil Mechanics	(3-2) 4
CE	366	Foundation Engineering 1	(2-2) 3

#### **One of the following courses**

CE	382	Reinforced Concrete Fundamentals	(3-0) 3
CE	383	Structural Analysis	(3-0) 3
CE	423	Advanced Mechanics of Materials	(3-0) 3

#### **Three of the following courses**

CE	460	Geotechnical Investigations	(3-0) 3
CE	461	Computer Applications in Foundation Engineering	(2-2) 3
CE	462	Foundation Engineering 2	(2-2) 3
CE	463	Introduction to Soil Behavior	(3-0) 3
CE	464	Ground Improvement	(2-2) 3
CE	465	Earth Structures	(2-2) 3
CE	466	Dam Behavior and Safety	(3-0) 3
CE	467	Introduction to Soil Dynamics	(3-0) 3
CE	468	Geotechnical Design	(2-2) 3
CE	469	Shear Strength and Slope Stability in Soils	(3-0) 3