

IDENTIFICATION

Course code : E3BE6ST1
ECTS : 2

DURATION

Lectures : 5
Tutorial classes : 11
Labs : 12
Total : 28

Project :
Personnal work :

ASSESSMENT

1 continuous assessment - 3 practical work sessions

TEACHING MATERIALS

course materials

LANGUAGE

English

CONTACT

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UE : UE6.1-STRUC

COURSE : Geotechnical Engineering

SCOPE OF THE COURSE

OBJECTIVES

students are able to design a foundation system and calculate it, interpret a soil study, know about retaining systems and their calculation methods, and interpret soil tests.

COMPETENCE AND SKILLS

Design a foundation based on geotechnical tests

PROGRAM

- Introduction to geology • Physical characteristics of soils • Stresses in soil - Terzaghi's law • Hydraulic behavior of soils • Soil settlement and consolidation • Shear strength of soils • Soil investigation, in-situ tests • Limit equilibrium theory - Application to active/passive earth pressure • Stability of retaining structures • Shallow and deep foundations

BIBLIOGRAPHY

Geotechnical Engineering Applied to Construction Projects

REQUIREMENTS

Mathematics; Isostatic structures.