Visiting Professor Program
Academic Year 2023/2024

TEACHING COMMITMENT: 28 hours

COURSE TITLE
Geotechnical Works

TEACHING PERIOD
1st term

SCIENTIFIC AREA
Geotechnics

LANGUAGE USED TO TEACH
English

COURSE SUMMARY
The course deals with the fundamental aspects of soil mechanics, applied to the most common geotechnical engineering works, such as surface foundations and rigid support works.

LEARNING OBJECTIVES
The skills learned during the course are a tool for the planning and interpretation of geological and geotechnical surveys to support the design of engineering works such as supporting works and surface foundations, in line with the latest legislation on the subject.

TUTORSHIP ACTIVITIES
Tutorship activities for PhD works and final works for masters students
LAB ACTIVITIES
Laboratory activity on numerical modelling with application to geological works

OTHER ACTIVITIES BESIDES THE COURSE
PHD courses devoted for numerical modelling in rock mechanics and rock engineering

ADDITIONAL COURSE

COURSE TITLE
Slope Stability

TEACHING PERIOD
1st term

SCIENTIFIC AREA
Geotechnics

LANGUAGE USED TO TEACH
English

COURSE SUMMARY
The course aims to describe main computational methods adopted in slope stability.

Limit equilibrium method will be developed for slope stability in different configurations.

LEARNING OBJECTIVES
To learn how to quantify stability condition of slopes of different natures also by using commercial codes.

TUTORSHIP ACTIVITIES
N/D

LAB ACTIVITIES
Laboratory for the use of codes for stability analysis evaluation.

OTHER ACTIVITIES BESIDES THE COURSE
N/D
VISITING PROFESSOR PROFILE
The professionalism required concerns the ability to numerically model fractured and porous media using continuous and discontinuous methods with specific reference to rock materials and rock masses.

FURTHER INFORMATION
Lessons and seminars could be held in co-presence with UNITO Professors.

CONTACT REFERENT
anna maria ferrero
anna.ferrero@unito.it