

UE Geomechanics



ECTS
3 credits



Component
UFR PhITEM
(physique,
ingénierie, terre,
environnement,
mécanique)



Semester
Automne

- > **Teaching language(s):** French, English
- > **Open to exchange students:** Yes
- > **Code d'export Apogée:** PAX7SRAD

Presentation

Description

The geomechanics course applies the principles of continuum mechanics to concrete problems of the Solid Earth.

The module is articulated by a back-and-forth between:

- a complete course presenting the basics of geomechanics, which allows a refresher for students who have never studied continuum mechanics,
- numerous application examples from real studies, both geotechnical and geodynamic. The large exercise base allows students who already have the basics of mechanics to practice reading data and applying the geomechanical approach in a more applied way than in their previous course.

Thus, at the end of the module, students should have a solid foundation in

- mechanics of continuous media
- the use and measurement of elastic properties of materials

- the use of failure criteria to gauge the mechanical stability of a structure: friction and fracturing phenomena.

Evaluation:

A mid-term CC counting for 50% of the grade

A final exam accounting for 50% of the grade

Course parts

UE Geomechanics -CMTD

Lectures (CM) & Teaching Unit (UE)

24h

Useful info

Campus

➤ Grenoble - University campus