AMCO2172 Soil Mechanics

[30h+22.5h exercises] 5 credits

This course is taught in the 1st semester

Teacher(s): Jacques De Jaeger, Jean-François Thimus
Language: French
Level: Second cycle

Aims

To provide to future architects and civil engineers fundamentals of soil physics and of soil mechanical behavior

Main themes

Soil physics, classification and behavior

Content and teaching methods

- Definitions, chemical and physical properties, grain size analysis, phase relations, consistency indices and Atterberg limits, classification
- Effective stress concept, effect of water at rest and of water seepage, permeability
- Mechanical characteristics, stress-strain relation, shear strength
- Water seepage through soils : fundamentals, Laplace equation, boundary conditions, flow net determination, , drainage, geotextiles

Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Pedagogy : lectures, elementary exercises
Examination : written (exercise), oral (theory)

Other credits in programs

GC21	Première année du programme conduisant au grade d'ingénieur civil des constructions	(5 credits)	Mandatory
INFO23	Troisième année du programme conduisant au grade d'ingénieur civil informaticien	(5 credits)	