



## AUCE1172 Soil mechanics

[25h+22.5h exercises] 4 credits

This course is not taught in 2005-2006

This course is taught in the 1st semester

Language: French

Level: First 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)