Soil mechanics



2013-2014

5.0 credits

30.0 h + 30.0 h

1q

Teacher(s) :	Verástegui Flores Ramiro Daniel ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	Soil physics, classification and behavior
Aims :	To provide to future architects and civil engineers fundamentals of soil physics and of soil mechanical behavior The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".
Content :	<ul> <li>Definitions, chemical and physical properties, grain size analysis, phase relations, consistency indices and Atterberg limits, classification</li> <li>Effective stress concept, effect of water at rest and of water seepage, permeability</li> <li>Mechanical characteristics, stress-strain relation, shear strength</li> <li>Water seepage through soils : fundamentals, Laplace equation, boundary conditions, flow net determination, , drainage, geotextiles</li> </ul>
Other infos :	Pedagogy : lectures, elementary exercises Examination : written (exercise), oral (theory)
Cycle and year of study :	<ul> <li>&gt; Bachelor in Engineering</li> <li>&gt; Bachelor in Engineering : Architecture</li> </ul>
Faculty or entity in charge:	GC