

4.0 credits	40.0 h	1q
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Teacher(s) :	Vermer Francois ;
Language :	Français
Place of the course	Bruxelles
Inline resources:	Syllabus and selected slideshows available on the Moodle platform.
Aims :	<i>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".</i>
Evaluation methods :	Evaluation will be based on a written exam (Multiple choice, maximum duration 3 hours), organized at the end of "Q1" period. This will cover all the topics taught and seek to verify both the good assimilation of basic theoretical concepts, as well as thinking abilities and integration of various disciplinary taught acquired.
Teaching methods :	The course will be in the form of lectures, during which teachers will define and present the main theoretical concepts as well as many complementary case studies.
Content :	<p>The course will cover the following chapters :</p> <ul style="list-style-type: none"> <li>--</li> <li>Overview of the Earth by reviewing the great events of its geological history.</li> <li>--</li> <li>- Elements of crystallography and mineralogy.</li> <li>Basics in petrology, petrography, rocks identification and alteration /erosion processes leading to sediments of all size.</li> <li>--</li> <li>Introduction to the reading of geological maps.</li> <li>--</li> <li>The cycle of rocks and three major families: R. igneous, sedimentary and metamorphic Rocks.</li> <li>--</li> <li>Introduction to stratigraphy, paleontology and paleoclimatology.</li> <li>--</li> <li>Theory of plate tectonics.</li> <li>--</li> <li>Synthetic presentation of the geology of Belgium and its border areas.</li> <li>--</li> <li>Concepts of geomorphology, geology and hydrogeology dynamic.</li> <li>--</li> <li>Apparent path of the Sun from Earth's surface and energy budget on the ground.</li> <li>--</li> <li>Global environmental issues : Climate change, Air quality and Industrial pollution, Sustainable development, International environment politics, Declining biodiversity and Alternative energy, ...</li> <li>--</li> <li>Landscape reading exercices.</li> </ul>
Bibliography :	Amat, J-P., Dorize, L. & mp; Le Coeur, C., 1996, <i>Éléments de Géographie physique</i> . Bréal, Paris Bailly, A. et al., 1995, <i>Représenter la ville</i> , Economica, Collection Géo Poche, Paris Bailly, A. et Huriot, J.-M., 1999, <i>Villes et croissances</i> , Anthropos, Paris Bonnamour, J., 1993, <i>Géographie rurale, position et méthode</i> , Masson, Paris Boulvain, F., 2013, <i>Géologie générale : du minéral aux géosphères</i> , Ed. Ellipses, Paris Brabant, M., 2014, <i>Topographie opérationnelle : Mesures - Calculs - Dessins - Implantation</i> , Editions Eyrolles, Paris Brabant, M., 2003, <i>Maîtriser la Topographie : des observations aux plans</i> , Editions Eyrolles Bravard, J.P. & mp; Petit, F., 1997, <i>Les cours d'eau : dynamique du système fluvial</i> , Coll. U, A. Colin, Paris, 222 p. Coque, R., 1977, <i>Géomorphologie</i> , Coll. U, A. Colin, Paris, 430 p. Derruau, M., 1994, <i>Les formes du relief terrestre</i> , Masson, Paris, 115 p. Foucault, A., Raoult J.-F. et al., 2014, <i>Dictionnaire de géologie (8ème édition)</i> , DUNOD, Paris, 326 p. Gousset, J.-P., 2014, <i>Plans topographiques, plans d'architecte, permis de construire &amp; mp; RT</i> , Editions Eyrolles Grafmeyer, Y., 1994, <i>Sociologie urbaine</i> , Nathan, Collection Université, Paris Martin, P., 2010, <i>Géologie appliquée au BTP</i> , Editions Eyrolles, Paris Pomerol, C., Lagabrielle, Y. et al., 2011, <i>Eléments de géologie (14ème édition)</i> , DUNOD, Paris, 959 p. Ramade, F., 2012, <i>Eléments d'écologie - Ecologie appliquée : Action de l'Homme sur la biosphère (7ème édition)</i> , DUNOD, Paris, 791 p.

Faculty or entity in charge:	LOCI
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<b>Programmes / formations proposant cette unité d'enseignement (UE)</b>				
Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage
Bachelor in architecture (Bruxelles)	ARCB1BA	4	-	