UCLouvain

Itarc2162

2018

## Construction materials and mechanical systems

3 credits 30.0 h Q1
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Teacher(s)	Laloux Olivier ;					
Language :	French					
Place of the course	Tournai					
Main themes	This teaching unit is designed to develop transferable and practical skills in the fields of Construction, Materia and Facilities.  In particular, it is designed to develop extensive familiarity with the documentation of technical, scientific a regulatory references and professional communication tools (specifications and graphic material).  It also aims to develop a global overview of materials and techniques involved in the process of building.					
Aims	This teaching unit particularly focuses on three axes in the profile of the holder of a Master's degree in Architecture: giving concrete expression to a technical dimension, making use of other disciplines and adopting a professional approach.  Specific learning outcomes:  By the end of this course, students will be able to					
	<ul> <li>make use of technical, scientific and regulatory documentation relating to building materials and techniques and HVAC systems.</li> <li>develop and comprehensive proposal for construction systems and facilities which is appropriate for the properties of a site and an architectural project.</li> <li>manage complex construction projects (details), using the interface of different techniques.</li> <li>produce documents conveying an architectural proposal to professionals (specifications, drawings, etc.).</li> </ul>					
	Contribution to the learning outcomes reference network:  Use the technical dimension					
	Be familiar with and interpret the main technical principles of construction Observe and assess the main construction principles that give architecture a formal, material and temporal dimension Be able to apply the various basic technical principles in producing a work of architecture Acquire an instinctive understanding of structures to use in producing a creative and/or innovative work of architecture					
	Express an architectural procedure					
	• Express ideas clearly in oral, graphic and written form					
	Adopt a professional attitude					
	<ul> <li>Organise, plan, develop and bring together the different strands of individual or collective work</li> <li>Test and observe the framework of professional practice and to architectural knowledge through independent involvement</li> </ul>					
	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".					
Evaluation methods	Written, drawing exam.     Continuous evaluation.					
Teaching methods	Lectures.     Case-studies.     Exercices.					
Inline resources	The slideshows and all of the documents are available on moodle.					
Bibliography	<ul> <li>Andrea Deplazes, Construire l'architecture, Birkhäuser, 2013, Bâle</li> <li>Alexander Reichel, Kerstin Schultz, Support I Materialise, Birkhäuser, 2013, Bâle</li> <li>Bert Bielefeld, Basics building construction, Birkhäuser, 2015, Bâle</li> </ul>					

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Faculty or entity in	LOCI
charge	

Programmes containing this learning unit (UE)							
Program title	Acronym	Credits	Prerequisite	Aims			
Master [120] in Architecture (Tournai)	ARCT2M	3		<b>Q</b>			