UCLouvain

Itarc1262

2023

## Construction and materials: developments

4.00 credits	30.0 h + 15.0 h	Q2

Teacher(s)	Gobbo Emilie ;				
Language :	French				
Place of the course	Tournai				
Prerequisites	The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.				
Main themes	In Brussels, the teaching is cumulative and progressive, from the shell to the finishing details, while in Tournai construction and materials are taught in a global way; in this way, students can form logical groupings.  This teaching unit describes the construction methods and assembly of complex walls which must respond to multiple requirements (structural, constructional, thermal, functional etc.). It links different technical disciplines and shows a range of different response to specific situations in architecture.				
Learning outcomes	At the end of this learning unit, the student is able to :				
	The objective of this teaching unit is to generate the necessary skills to bring architectural objectives into line with how to translate them into material terms.  Specific learning outcomes:  By the end of the course, students will be able to  • be familiar with and refer to the physical and construction properties of the main materials and elements of construction.  • be familiar with and refer to a wide range of elements of construction.  • produce a budget for technical details combining the different requirements in building, insulation and waterproofing.  • make use of technical documentation involved in construction techniques.  • develop appropriate building proposals in relation to a simple architectural objective.  Contribution to the learning outcomes reference framework:  Use the technical dimension  • Be familiar with and describe the main technical principles of building  • Observe and assess the main construction principles in a producing a work of architecture  Express an architectural procedure  • Express ideas clearly in oral, graphic and written form				
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> <li>- Alexander Reichel, Kerstin Schultz, Open/Close, Birkhäuser, 2010</li> </ul>				
Faculty or entity in charge	LOCI				

Programmes containing this learning unit (UE)						
Program title	Acronym	Credits	Prerequisite	Learning outcomes		
Bachelor in Architecture (Tournai)	ARCT1BA	4	LTARC1164	•		