UCLouvain

## lbarc1164 2023

## Construction and materials : generalities

4.00 credits

30.0 h + 15.0 h

Q2

Teacher(s)	Amand Arnd ;				
Language :	French				
Place of the course	Bruxelles Saint-Gilles				
Main themes	In Brussels, the teaching is cumulative and progressive, from the shell to the finishing details, while at Tournai construction and materials are taught in a global way; in this way, students can form logical groupings.				
	This teaching unit describes in parallel and in a general way the main materials, elements and implementation systems used in the construction field. It introduces generally accepted rules of building, linked to the nature of the materials used.				
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.				
	This teaching unit focuses particularly on one dimension of the profile of a Bachelor level graduate in Architecture: developing a technical dimension.				
	Specific learning outcomes:				
	By the end of the course, students will be able to				
	<ul> <li>have an active knowledge of technical terminology and apply the graphic conventions involved in construction techniques.</li> <li>be familiar with and refer to the physical and construction properties of materials and elements of construction.</li> </ul>				
	<ul> <li>• understand and refer to a range of implementation systems.</li> <li>• understand the physical properties of materials so as to get to grips with the construction systems where they are used.</li> </ul>				
	Contribution to the learning outcomes reference framework:				
	Use the technical dimension				
	<ul> <li>Be familiar with and describe the main technical principles of building</li> <li>Observe and assess the main construction principles of a building</li> <li>Be able to apply the various basic technical principles in a producing a work of architecture</li> </ul>				
	Express an architectural procedure				
	• Express ideas clearly in oral, graphic and written form				
Evaluation methods	The evaluation is realized through a written evaluation including technical construction details according to the design conventions taught. Individual work is also to be put back at the end of the four-month period.				
Teaching methods	Theorical cursus based on PowerPoint presentations and notes taken during the lecture (sketches, graphics, illustrations, technical details drawings,) and with the view of materials samples from the samples library. The theoretical course is taught via Microsoft Teams during the Covid-19 crisis period. Students are given practical sessions in small groups in order to be able to practice constructive details.				
Bibliography	NIT du CSTC et documentation technique				
Faculty or entity in	LOCI				
charge					

Programmes containing this learning unit (UE)						
Program title	Acronym	Credits	Prerequisite	Learning outcomes		
Bachelor in Architecture (Bruxelles)	ARCB1BA	4		٩		