UCLouvain

lbarc1262

2020

Construction and materials : developments

Due to the COVID-19 crisis, the information below is subject to change, in particular that concerning the teaching mode (presential, distance or in a comodal or hybrid format).

4 credits	30.0 h + 15.0 h	Q2

Teacher(s)	Roger France Jean-Francois ;
Language :	French
Place of the course	Charleroi
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.
Aims	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. 1 • 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 of a building • Be able to apply the various basic technical principles in a producing a work of architecture **Express an architectural procedure** • Express ideas clearly in oral, graphic and written form - - - - *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	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** 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	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** 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 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 charge	LOCI

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Bachelor in Architecture (Bruxelles)	ARCB1BA	4	LBARC1164	