UCLouvain

## lbarc1262

2018

## Construction and materials: developments

| 4 credits | 40.0 h | Q2 |
|-----------|--------|----|
|           |        |    |

| Teacher(s)                  | Roger France Jean-Francois ;   |  |  |  |  |
|-----------------------------|--|--|--|--|--|
| Language :                  | French   |  |  |  |  |
| Place of the course         | Charleroi  |  |  |  |  |
| Prerequisites               | LBARC1164  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   |  |  |  |  |
|                             | <ul> <li>be familiar with and refer to the physical and construction properties of the main materials and elements of construction.</li> <li>be familiar with and refer to a wide range of elements of construction.</li> <li>produce a budget for technical details combining the different requirements in building, insulation and waterproofing.</li> <li>make use of technical documentation involved in construction techniques.</li> <li>develop appropriate building proposals in relation to a simple architectural objective.</li> </ul> |  |  |  |  |
|                             | 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          | The evaluation is realized through a written evaluation including technical details to be done.  |  |  |  |  |
| 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.   |  |  |  |  |
| 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    | •    |  |  |