


3 credits

30.0 h

Q2

Teacher(s)	De Vos Francis ;
Language :	French
Place of the course	Bruxelles Saint-Gilles
Main themes	<p>This teaching unit provides more advanced study of the architectural design of structures, through structural detail. It is therefore part of a reflective process which complements the study of structures as a whole.</p> <ul style="list-style-type: none"> <li>• Support systems for structures, both linear (beams, arches etc.) and surface (slabs, casing, membranes etc.)</li> <li>• Linear support of slabs and casing on walls</li> <li>• Occasional support on walls</li> <li>• Occasional support of slabs on columns : full slabs on columns, mushroom slabs</li> <li>• Linear and occasional support of casing and folded structures</li> <li>• Influence of geometry of edges and the nature of supports on the behaviour of linear and surface structures</li> <li>• Assembly of structural elements</li> <li>• These topics are dealt with by using examples, different angles of analysis, modelling and design of supports, edges and assembly of structures.</li> </ul>
Aims	<p><b>Specific learning outcomes:</b> By the end of this course, students will be able to</p> <ul style="list-style-type: none"> <li>• analyse the behaviour of a linear or surface structure, according to its geometry, its support mechanism and its edge conditions.</li> <li>• analyse the behaviour of a structure according to its methods of assembly.</li> <li>• analyse the distribution of load in a support structure according to the support mechanisms for a supported structure</li> <li>• analyse a support, as a function of a material, to understand how it works, its geometry and the load carried.</li> <li>• analyse an assembly, as a function of a material, to understand how it works, its geometry and the load carried.</li> <li>• design a compound load bearing system.</li> </ul> <p>1</p> <p><b>Contribution to the learning outcomes reference network:</b> With regard to the Learning Outcomes Reference Framework of the Master's degree in Architecture, this teaching contributes to the development, acquisition and assessment of the following learning outcomes:</p> <p><b>Make use of other subjects</b></p> <ul style="list-style-type: none"> <li>• Make strategic use of other subjects to put into question the design and implementation of an architectural project</li> </ul> <p><b>Use the technical dimension</b></p> <ul style="list-style-type: none"> <li>• Observe and assess the main construction principles that give architecture a formal, material and temporal dimension</li> <li>• Be able to apply the various basic technical principles in producing a work of architecture</li> </ul> <p>-----</p> <p><i>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".</i></p>
Faculty or entity in charge	LOCI

<b>Programmes containing this learning unit (UE)</b>				
Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Architecture (Bruxelles)	ARCB2M	3		
Master [120] in Architecture (Tournai)	ARCT2M	3		