

Teacher(s)	Bodart Magali ;Van Moeseke Geoffrey ;
Language :	French
Place of the course	Bruxelles Saint-Gilles
Main themes	<p>This unit deals with all the aspects linked to architectural procedures and technologies designed to maintain the distribution of flow within the building. In particular, it deals with:</p> <ul style="list-style-type: none"> <li>• flows linked to the needs of water supply : distribution, discharge, treatment of drinking water, sewage and rainwater</li> <li>• flows linked to active fire protection</li> <li>• flows linked to the needs of electricity (supply and electric safety)</li> <li>• flows linked to the mobility of goods and people, including people with reduced mobility</li> <li>• architectural integration of the cavities where these flows are situated.</li> </ul> <p>This teaching unit provides students with the necessary technical and conceptual foundations to size and integrate what is needed for these flows into an architectural project. In contrast to the Building Equipment and Convenience unit, based on the scale of the space, the Building Equipment and Flow unit deals with the integration of techniques with regard to buildings and the link between the building and the infrastructure.</p>
Learning outcomes	<p><b>At the end of this learning unit, the student is able to :</b></p> <p>This unit places particular emphasis on two sides of the profile of a Master's graduate in Architecture: implementation of a technical dimension and making use of other disciplines.</p> <p><b>Specific learning outcomes:</b></p> <p>By the end of this course, students are able to</p> <ul style="list-style-type: none"> <li>• describe the principles and elements of high and low tension electric networks : production systems (fossil or renewable) in transport, transformation, management (home and building automation) and protection.</li> <li>• calculate the size (current, tension, power) in electrical circuits as direct current.</li> <li>• describe and pre-size the networks and equipment involved in the distribution of drinking water and the discharge and/or treatment of rainwater and sewage with regard to the scale of the building and the local authority.</li> <li>• describe the strategies for active fire protection and the equipment needed for this.</li> <li>• describe and pre-size the equipment needed for the mobility of goods and people within a building, including people with reduced mobility.</li> <li>• analyse the integration of flows and cavities in an architectural project.</li> </ul> <p><sup>1</sup></p> <p><b>Contribution to the learning outcomes reference network:</b></p> <p><b>Make use of other subjects</b></p> <ul style="list-style-type: none"> <li>• Seek out other approaches, exchanges of views and ways of enhancing thinking about architecture</li> <li>• Interpret and synthesise the knowledge of other subjects</li> <li>• Make strategic use of other subjects to put into question the design and implementation of an architectural project</li> <li>• Bring all this back to the original discipline</li> </ul> <p><b>Use the technical dimension</b></p> <ul style="list-style-type: none"> <li>• Be familiar with and interpret the main technical principles of construction</li> <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> <li>• Acquire an instinctive understanding of structures to use in producing a creative and/or innovative work of architecture</li> </ul>
Bibliography	Syllabus et PowerPoint présentés au cours
Faculty or entity in charge	LOCI

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Architecture (Bruxelles)	ARCB2M	4		