UCLouvain

larct2161

2026

Techniques: Construction and Networks

5.00 credits	40.0 h + 15.0 h	Q1

Teacher(s)	De Groote Geert ;Faux Pascaline ;
Language :	French
Place of the course	Tournai
Main themes	This course examines the impact of construction and specialized techniques on architectural projects. It aims to develop a comprehensive and integrative understanding of how environmental and comfort considerations influence the technical and constructive design of buildings. The course also familiarizes students with technical, scientific, and regulatory documentation, as well as professional communication tools.
Learning outcomes	**At the end of this learning unit, the student is able to :** **Specific Learning Outcomes** By the end of this course, students will be able to: • Develop a comprehensive proposal for construction systems that align with the site's characteristics, the architectural project, and environmental considerations, • Design the integration of technical networks within an architectural project, • Use technical, scientific, and regulatory documentation on materials, construction techniques, and specialized systems, • Explain the principles and illustrate the components of electrical networks, • Describe, pre-dimension, and represent networks and equipment related to water management, in all its forms, within a building and on a site, • Define and represent passive and active fire safety strategies, including related equipment, • Design complex construction nodes that manage the interface between various technical systems, • Evaluate the sustainability impacts of design and material choices, • Prepare documentation to effectively communicate an architect's proposal to industry professionals. **General Learning Outcomes** In line with the program's learning outcomes (LOs), this course contributes to the development and acquisition of the following LOs: • LO1.4 Compose the material elements of a construction or development with artistry. • LO1.6 Integrate Sustainable Development requirements into the design process, at multiple scales. • LO2.4 Inventively illustrate construction logics. • LO3.2 Understand and apply the construction and technical processes related to architecture. • LO3.3 Understand and integrate scientific and technical knowledge to realize an architectural project. • LO3.4 Understand and assess the environmental, social, and economic consequences of construction and technical choices. • LO5.2 Communicate attentively, inclusively, and effectively with the various stakeholders of the architectural project. • LO5.4 Advocate for and act in favor of exemplary architecture in light of Sustainable Development requirements.
Faculty or entity in charge	LOCI

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Architecture (Tournai)	ARCT2M	5		