




This biannual learning unit is not being organized in 2023-2024 !

Teacher(s)	De Groote Geert ;Faux Pascaline ;Gallez Olivier ;
Language :	French > English-friendly
Place of the course	Tournai
Main themes	<ul style="list-style-type: none"> • Process of structure design: methods and tools • Exploration of the creative and innovative dimensions of structures • Integration of data on structure, construction and facilities in an architectural project
Learning outcomes	<p>At the end of this learning unit, the student is able to :</p> <p>Specific learning outcomes: Students will explore and test out the principles which link architecture to its formal, material and temporal dimension. Students will be able to</p> <ul style="list-style-type: none"> • approach certain specific methods of design. • manipulate certain tools of structural design. • develop a critical approach to available tools with a view to integrating them in architectural design. • integrate methods and tools linked to structure in the process of project design. • actively promote creativity in construction for the benefit of the project. <p>Contribution to the learning outcomes reference network:</p> <p>Build knowledge of architecture</p> <ul style="list-style-type: none"> • Be familiar with and analyse the discipline's basic references • Develop knowledge and become an active participant in the learning process <p>Make use of other subjects</p> <p>1</p> <ul style="list-style-type: none"> • Seek out other approaches, exchanges of views and ways of enhancing thinking about architecture <p>Use the technical dimension</p> <ul style="list-style-type: none"> • Be able to apply the various basic technical principles in producing a work of architecture • Acquire an instinctive understanding of structures to use in producing a creative and/or innovative work of architecture <p>Express an architectural procedure</p> <ul style="list-style-type: none"> • Identify the founding elements of a hypothesis or a proposal to express and communicate them <p>Adopt a professional attitude</p> <ul style="list-style-type: none"> • Listen to and identify the different needs and points of view of the different stakeholders to be able to bring these together in respect of the desired objectives <p>Make committed choices</p> <ul style="list-style-type: none"> • Activate and develop an ethical sense through approaches to architecture
Evaluation methods	<ul style="list-style-type: none"> • Architectural design : jury at the end of the 10 weeks (group work) • Individual notebook to be done in january
Teaching methods	<ul style="list-style-type: none"> • Lectures • Architecture workshop • Personal research
Content	<p>It is about design experimentation combined to a research of coherence between technique (structure and construction) and architecture resting on a construction material.</p> <p><i>Key-words: architecture, material, (concept of) structure, (detail of) construction, synergy.</i></p>

	<p>The aim is:</p> <ul style="list-style-type: none"> • to elaborate and concretise an architectural idea and to bring an architectural idea to a constructible state in order to define the architectural project. • to study the material in all of its dimensions and its link to its physical, economical and technical environment • to take conscience of the structural choices and the establishment of the construction modes in ordre to improve the creative development of the architectural design.
<p>Inline resources</p>	<p>slideshows and documentations are downloadable on moodle</p>
<p>Bibliography</p>	<ul style="list-style-type: none"> • Construire en bois T. Herzog, J. Nattere, R. Schweitzer, M. Volz, W. Winter, Birkhäuser, Birkhäuser, PPUR, 2012 • Construire l'architecture Andrea Deplazes, Birkhauser, • Faire Tenir : Structure et Architecture Marc Leyral, 2021 • Form and Forces: Designing Efficient, Expressive Structures Edward Allen & Waclaw Zalewsk, 2009 • Franchir le vide. A pied et à vélo Ney & Partners. Archibooks • Informal Cecil Balmond, Prestel, 2002 • Mémoire d'un ingénieur Peter Rice, Le Moniteur, Paris, 1998. • Metamorphism, Material change in architecture Akos Moravansky, Birkhäuser, Basel, 2018 • Process and pattern in architecture and design Luisa Collina, Silvana, 2016, Milano • Question d'architecture Structure Bernard Wittevrongel (dir), Projets 2016-2018, UCL LOCI 2019. • Seven bridges by Jürg Conzett Jürg Conzett, Zürich: Verlag Scheidegger & Spiess, 2013. • Structure as Space Mohsen Mostafavi, AA editions, 2006, London. • Studies in Tectonic Culture Kenneth Frampton, MIT Press, Cambridge, London, 1996. • Wood and Wood Joints Klaus Zwerger, Birkhäuser, Basel, 2000.
<p>Faculty or entity in charge</p>	<p>LOCI</p>

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Architecture (Tournai)	ARCT2M	8		
Master [120] in Architecture (Bruxelles)	ARCB2M	8		