

4.0 credits	20.0 h + 30.0 h	2q
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Teacher(s) :	Faux Pascaline ;
Language :	Français
Place of the course	Tournai
Aims :	<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>
Evaluation methods :	Written exam theory and exercices
Teaching methods :	Theory: lessons in auditorium
Content :	Theory: study of real or simulated cases to contextualize theory and its applications -- Funicular structure: cable -- Vectorial structure: frame -- Flexional structure: beams Exercices: applying mathematical formulas -- Decomposition of forces -- Reactions: graphic (Varignon) and analytical resolution -- Mesh: graphic (Cremona) and analytical (Ritter) research for internal stresses -- Isostatic beams: graphic (integration) and analytical (describing the moment) research for internal stresses -- Center of gravity -- Moment of inertia
Bibliography :	Allen E., Zalewski W., Form and Forces, Designing efficient, expressive structures, Boston, Wiley, 2010 Muttoni A., L'art des structures, Lausanne, PPUR, 2004 Studer M-A. & Frey Fr., Introduction à l'analyse des structures, Lausanne, PPUR, 1997 lyse des structures, Lausanne, PPUR, 1997
Faculty or entity in charge:	LOCI

Programmes / formations proposant cette unité d'enseignement (UE)				
Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage
Bachelor in Architecture (Tournai)	ARCT1BA	4	-	