ltarc2168

2019

In view of the health context linked to the spread of the coronavirus, the methods of organisation and evaluation of the learning units could be adapted in different situations; these possible new methods have been - or will be - communicated by the teachers to the students.

3 credits	30.0 h	Q2

Teacher(s)	Sgambi Luca ;
Language :	French
Place of the course	Tournai
Aims	*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".*
Evaluation methods	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** The student must produce a sheet in A1 format summarizing the analyses performed on the selected exercise. The sheet will be exposed to the teacher with a brief oral examination.
Teaching methods	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** The theoretical part is provided in ex-cathedra lessons, the practical part is based on individual exercises. This part takes place using the free ADINA900 program which is provided during the course and for which there are tutorials written by the teacher. The student can use other software, in the free version, if they have suited to study the selected exercise (SAP2000, Straus7, ABAQUS). For the definition of geometry, the course is also open to the use of modeling methods that include the use of AUTOCAD or RHINOCEROS - GRASSHOPPER (and possible plugins). In this case, the teacher will ask the student for a certain degree of autonomy in the use of these programs.
Content	The tools available to architects to facilitate design activity has been considerably modernized in recent years. The Digital Age has brought the possibility of abandoning the "drawing table" in favor of Computer-Aided Design software, but also the possibility for architects to use design tools that were, until a few years ago, the prerogative of structural engineers (parametric design, FEM analysis, non-linear calculation, etc.). This course is conceived as an introduction to the problem of structural modeling in order to highlight the opportunities present in the use of structural modeling software in the architectural field but also to highlight the risks associated with the misuse of these software programs themselves.
Inline resources	To support the course, the teacher provides tutorials that can cover all the topics discussed. All tutorials are available by MOODLE.
Faculty or entity in charge	LOCI

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