

LAUCE2032

2013-2014

DESIGN OF PRESTRESSED CONCRETE STRUCTURES

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Teacher(s):	Cap Jean-François ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	Study of prestressed concrete and its application for the civil works
Aims :	The course introduces to the design of prestressed and post-tensioned concrete structural elements. 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".
Content :	- Features and performance of prestressed concrete - Mechanical properties of prestressing steel. - Description of ducts, sheats, anchorages, couplers and prestressing devices. - Layout of cables. - Analysis and design of prestressed beams subjected to flexure, axial force, shear and torsion. - Hyperstaticity effects. - Losses in cable tension. - Design of anchorage zones of pos-tensionned members.
Other infos :	Prerequisite : Auce 1103
Cycle and year of study:	> Master [120] in Architecture and Engineering > Master [120] in Civil Engineering
Faculty or entity in charge:	GC