## UCL Université catholique 2013-2014

## Stabilité et conception des structures II

3.0 credits

de Louvain

60.0 h

1+2q

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Teacher(s) :	Diependael Bernard ;
Language :	Français
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 :	Written examen.
Teaching methods :	Lectures with exercices inspired by real buildings.
Content :	The following chapters will be studied : 1. The contribution of the prestressing concrete 2. Design of a prestressed beam 3. Losses and distortions 4. Free prestressed beam 5. The Vierendeel 6. Bidirectional elements : <sup>o</sup> Plates, Slabs <sup>o</sup> Cross-beams <sup>o</sup> Three dimensional structures <sup>o</sup> Three dimensional structures 7. Determinate and indeterminate arcs 8. Cables structures : <sup>o</sup> Weighted structures <sup>o</sup> Jawerth beams 9. Double curvature structures : <sup>o</sup> Positive : domes <sup>o</sup> Negative : hyperbolic paraboloids <sup>o</sup> Null : arches
Bibliography :	Syllabus.
Cycle and year of study :	> Master [120] in Architecture (Tournai)
Faculty or entity in charge:	LOCI