

## First Year

Prerequisites in Structural engineering : 30 ECTS credits of courses within a minor in Structural Engineering. This program has to receive the preliminary agreement of the Jury.

### Compulsory Courses

GCIV2032-2	<i>Design and means of erection of structures and bridges - Vincent DE VILLE DE GOYET, JeanMarc FRANSSSEN</i>	20	20	-	<b>3</b>
GCIV2068-1	<i>Wood construction - N...</i>	15	15	-	<b>2</b>
GCIV0643-1	<i>Concrete and brickwork constructions - Hervé DEGÉE, Boyan MIHAYLOV - [1d FW]</i>	30	30	[+]	<b>5</b>
GCIV0644-1	<i>Steel and composite constructions - JeanFrançois DEMONCEAU, JeanPierre JASPART - [1d FW]</i>	35	35	[+]	<b>6</b>
GCIV0185-6	<i>Numerical methods in Civil and Geological Engineering - N...</i>	50	50	-	<b>8</b>
GCIV2037-1	<i>Structural Mechanics II - Hervé DEGÉE, Vincent DENOËL</i>	35	35	-	<b>6</b>

The Jury can approved to replace the above courses by courses followed in another institution in the field of structural engineering (structural mechanics, building materials, structural analysis, design of structures,...)

### Compulsory Courses

GCIV0628-1	<i>Design of sustainable constructions (english language) - JeanPierre JASPART</i>	30	30	-	<b>6</b>
GCIV0629-1	<i>Conceptual design of buildings (english language) - JeanFrançois DEMONCEAU, JeanMarc FRANSSSEN, JeanPierre JASPART</i>	30	30	-	<b>6</b>
GCIV0630-1	<i>Conceptual design of bridges (english language) - Hervé DEGÉE, Vincent DE VILLE DE GOYET</i>	30	30	-	<b>6</b>
LANG2961-1	<i>Local culture and language (english language) - Julien DUBOIS, Aline KOOLEN</i>	20	5	-	<b>2</b>
GCIV0639-1	<i>Design for renewable energy systems (english language) - Philippe RIGO</i>	25	25	-	<b>5</b>
GCIV0640-1	<i>Advanced design of concrete structures (english language) - Boyan MIHAYLOV</i>	25	25	-	<b>5</b>

### Compulsory courses

GCIV0635-1	<i>Advanced design of steel and composite structures (english language) - JeanFrançois DEMONCEAU</i>	30	30	-	<b>6</b>
GCIV0636-1	<i>Design for seismic and climate changes (english language) - JeanFrançois DEMONCEAU</i>	30	30	-	<b>6</b>
GCIV0637-1	<i>Design for fire and robustness (english language) - JeanFrançois DEMONCEAU, JeanMarc FRANSSSEN</i>	30	30	-	<b>6</b>
GCIV0638-1	<i>Business economics and entrepreneurship (english language) - N...</i>	20	5	-	<b>2</b>
GCIV0632-1	<i>Advanced design of glass structures (english language) - JeanPierre JASPART</i>	25	25	-	<b>5</b>
GCIV0634-1	<i>Rehabilitation and maintenance of structures (english language) - Luc COURARD</i>	25	25	-	<b>5</b>

## Second Year

### Compulsory Courses

ATFE0019-1	<i>Theses (english language) - COLLÉGIALITÉ</i>	-	-	-	<b>28</b>
MECA0510-1	<i>Introduction to methodology and research - COLLÉGIALITÉ</i>	-	-	-	<b>2</b>