

## First Year

### Students studying for the Bachelors in Civil Engineering who have not chosen the appropriate option :

- \* must take all the so-called "prerequisite" courses hereafter, if they were not taken during the 1st cycle. These courses must be taken during the 1st year of the masters and some 1st-year compulsory courses must be rolled over to the 2nd year.
- \* must subsequently reduce the number of courses they choose to take in the 2nd year of the masters. If all the "prerequisite" courses must be taken, it will be impossible for them to choose which courses they take.
- \* cannot choose the professional "management" focus.

The program adapted by these students has to receive the preliminary agreement of the Jury.

### Compulsory prerequisites

GCIV0097-1	<i>Steel and concrete constructions</i> - JeanPierre JASPART, Boyan MIHAYLOV - Suppl : François KAISER	35	35	-	<b>6</b>
GCIV0603-2	<i>Geotechnics and infrastructure</i> - Robert CHARLIER, JeanPol RADU - [1d FW]	30	30	[+]	<b>5</b>
GCIV0604-2	<i>Hydraulics</i> - Michel PIROTON	20	20	-	<b>4</b>
GCIV0184-5	<i>Building Materials</i> - Luc COURARD - [1d FW]	30	30	[+]	<b>5</b>
MECA0012-5	<i>Solid mechanics</i> - Laurent DUCHENE	30	30	-	<b>5</b>
GCIV0624-2	<i>Structural mechanics</i> - JeanMarc FRANSSSEN	30	30	-	<b>5</b>

### Compulsory courses

GCIV0201-2	<i>Choice and maximisation of construction materials</i> - Luc COURARD - [1d FW]	30	30	[+]	<b>5</b>
GCIV2032-1	<i>Design and means of erection of structures and bridges</i> - Vincent DE VILLE DE GOYET, JeanMarc FRANSSSEN	30	30	-	<b>5</b>
GCIV2033-2	<i>Steel, concrete, timber and composite steel-concrete construction</i> - JeanFrançois DEMONCEAU, JeanMarc FRANSSSEN, JeanPierre JASPART, Boyan MIHAYLOV, N... - Suppl : François KAISER - [2d FW]	60	60	[+]	<b>10</b>
GEOL0001-1	<i>Geology and Geology for Engineers</i> - Alain DASSARGUES - [2d FW]	35	25	[+]	<b>5</b>
GCIV2034-1	<i>Free surface flow</i> - Michel PIROTON	30	30	-	<b>5</b>
GCIV2035-1	<i>Environmental hydrodynamics</i> - Benjamin DEWALS	30	30	-	<b>5</b>
GCIV2036-2	<i>Soil and rock mechanics</i> - Frédéric COLLIN - [1d FW]	25	25	[+]	<b>4</b>
GCIV2037-1	<i>Structural Mechanics II</i> - Hervé DEGÉE, Vincent DENOËL	35	35	-	<b>6</b>
GCIV0185-2	<i>Numerical methods in Civil and Geological Engineering</i> - <i>Linear methods</i> - Laurent DUCHENE, Michel PIROTON - <i>Linear and non-linear methods</i> - Frédéric COLLIN, Vincent DE VILLE DE GOYET	30	30	-	<b>10</b>
GCIV0009-1	<i>Hydraulic constructions</i> - Sébastien ERPICUM, Philippe RIGO	30	30	-	<b>5</b>

Notice : Students who, in their Bachelor studies, have already taken the compulsory course GEOL0001-1 *Geology and Engineering Geology* from this Master's programme are forced to replace it by a course chosen from :

- \* GEOL0023-4 *Engineering geology (integrated project)*- 10h+30h+2 j.T.t - 5 ECTS - NGUYEN F.
- \* ARCH00003-4 *Method of construction of buildings I*- 30h+30h+ 2,5jT.t - 5 ECTS - N. Suppl. : Mauro BACCARINI

## Second Year

### Compulsory courses

GCIV2065-1	<i>Hydraulic engineering II</i> - Benjamin DEWALS, Philippe RIGO - [3d FW]	30	30	[+]	<b>5</b>
GCIV2066-1	<i>Technical Economic Planning and Analysis</i> - Mario COOLS	15	15	-	<b>3</b>
GCIV2039-2	<i>Seminar</i> - COLLÉGIALITÉ - [2d FW]	20	-	[+]	<b>2</b>
ATFE0010-1	<i>Final Work (including an introduction to methodology and research)</i> - COLLÉGIALITÉ	-	-	-	<b>20</b>

Final year trip: visits to works of art (optional).

### Compulsory courses

GEST3001-1	<i>People management and organisation</i> - Jocelyne ROBERT	24	24	-	<b>4</b>
GEST3002-1	<i>Human Resources</i> - Jocelyne ROBERT	24	-	-	<b>2</b>

GEST3003-1	<i>Competitive strategy in the marketplace</i> (english language) - Michael GHILISSEN	16	16	-	<b>3</b>
GEST3004-1	<i>Marketing (operations and management)</i> (english language) - Michael GHILISSEN	16	16	-	<b>3</b>
GEST3005-2	<i>Accountancy and Finance</i> - Jacques BERWART	24	24	-	<b>4</b>
GEST3006-1	<i>Operations and supply chain management I</i> (english language) - Yasemin ARDA	16	16	-	<b>3</b>
GSTG3001-1	<i>Business plan</i> - COLLÉGIALITÉ	-	30	-	<b>4</b>
GSTG3002-1	<i>Functional analysis of a company</i> - COLLÉGIALITÉ - [30h Internship]	-	-	[+]	<b>4</b>

#### Optional courses

Choose one of the following courses :

GEST3010-1	<i>Operations and supply chain management II</i> - Sabine LIMBOURG	16	16	-	<b>3</b>
GEST3011-2	<i>ICT for Business</i> - Alain DUBOIS	16	16	-	<b>3</b>
GEST3012-1	<i>Financial and actuarial modelling</i> - Louis ESCH	16	16	-	<b>3</b>