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## First Year

### Compulsory courses

#### General Education

CHIM0015-3	<i>Analytical chemistry II, physical methods</i> - Gauthier EPPE	Q1	30	60	-	<b>6</b>
ELEC0431-2	<i>Electromagnetic energy conversion</i> (english language) - Christophe GEUZAINÉ - [15h Labo.]	Q2	30	15	[+]	<b>5</b>
CHIM0080-2	<i>Energy carriers and sustainable development</i> - Angélique LÉONARD	Q2	20	10	-	<b>3</b>

#### Training in processes

CHIM0081-3	<i>Industrial Chemistry Processes, structure of chemical industry</i> - Angélique LÉONARD - [1d FW]	Q1	30	-	[+]	<b>3</b>
CHIM0695-2	<i>Introduction to modeling of chemical systems</i> - Georges HEYEN - Suppl : MarieNoëlle DUMONT, Grégoire LÉONARD	Q1	20	45	-	<b>5</b>
CHIM0696-1	<i>Static modeling and dynamics of large chemical systems</i> - N... - Suppl : Claude DODET, MarieNoëlle DUMONT, Georges HEYEN, Grégoire LÉONARD	Q2	30	30	-	<b>5</b>
CHIM0694-3	<i>Industrial chemistry processes design</i> - Angélique LÉONARD, N... - Suppl : MarieNoëlle DUMONT, Grégoire LÉONARD	TA	10	60	-	<b>5</b>

#### Chemical engineering training

CHIM0697-1	<i>Heterogeneous catalysis</i> (english language) - Nathalie JOB	Q2	15	30	-	<b>3</b>
CHIM9277-1	<i>Chemical Reactor Engineering II</i> - Dominique TOYE	Q1	20	30	-	<b>4</b>
CHIM0083-2	<i>Chemical engineering (unit physical operations and non-specific aspects of equipment)</i> - N... - Suppl : Michel CRINE		45	45	-	<b>8</b>

#### Training in materials

CHIM0698-1	<i>Physical chemistry of interfaces</i> - Cédric GOMMES	Q1	15	15	-	<b>3</b>
CHIM0675-1	<i>Macromolecular chemistry</i> - AnneSophie DUWEZ	Q1	20	20	-	<b>3</b>
CHIM0676-1	<i>Polymerization processes</i> - Klaus KECK		20	-	-	<b>2</b>
CHIM0666-2	<i>Inorganic materials : manufacturing procedures and propriety</i> - Stéphanie LAMBERT - [2d FW]	Q2	30	30	[+]	<b>5</b>

Notice : Students who have, in their BAC studies, have already taken one or more compulsory courses in this Master's programme are obliged to replace them by other courses on the Faculty's programme; this choice must be approved by the President of the cycle's Jury.

### 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

CHIM0605-2	<i>Chemistry and inorganic materials</i> - Bénédicte VERTRUYEN	Q2	30	-	-	<b>3</b>
CHIM0604-2	<i>Chemistry and organic materials</i> - Lionel DELAUDE	Q2	30	30	-	<b>5</b>
CHIM0012-5	<i>Chemical kinetics</i> - Nathalie JOB - [15h Proj.]	Q2	20	15	[+]	<b>2</b>
CHIM0022-2	<i>Transport phenomena</i> (english language) - Andreas PFENNIG	Q2	30	30	-	<b>5</b>
PHYS0904-4	<i>Physics of materials</i> - Jacqueline LECOMTEBECKERS - [1d FW]	Q2	30	30	[+]	<b>5</b>
CHIM0606-2	<i>Analytical Chemistry</i> - Gauthier EPPE	Q1	30	15	-	<b>4</b>
CHIM0009-3	<i>Applied chemical thermodynamics</i> - Nathalie JOB - [10h Proj.]	Q1	20	15	[+]	<b>3</b>
CHIM0023-3	<i>Chemical Engineering (Reactor Study), étude des réacteurs I</i> - Dominique TOYE	Q1	20	15	-	<b>3</b>

### Compulsory courses

MATH0066-1	<i>Complement of mathematics</i> - Patricia TOSSINGS	Q2	30	30	-	<b>4</b>
MECA0001-2	<i>Mechanics of materials</i> - JeanPierre JASPART - Suppl : Laurent DUCHENE - [2h Labo., 12h Proj.]	Q1	30	28	[+]	<b>5</b>
DROI0724-1	<i>Law and engineering</i> - Christine BIQUET, Jacques CLESSE, Pascale LECOCQ,	Q1	30	-	-	<b>3</b>

Bernard VANBRABANT - Suppl : Daisy CHICHOYAN, Déborah GOL,  
Cécile VERCHEVAL

MECA0011-1	<i>Fluid Mechanics : Basics</i> - Michel PIROTTON	Q2	30	30	-	5
PHYS0904-4	<i>Physics of materials</i> - Jacqueline LECOMTEBECKERS - [1d FW]	Q2	30	30	[+]	5
CHIM0012-5	<i>Chemical kinetics</i> - Nathalie JOB - [15h Proj.]	Q2	20	15	[+]	3
CHIM0022-2	<i>Transport phenomena</i> (english language) - Andreas PFENNIG	Q2	30	30	-	5
CHIM0009-3	<i>Applied chemical thermodynamics</i> - Nathalie JOB - [10h Proj.]	Q1	20	15	[+]	5
CHIM0023-3	<i>Chemical Engineering (Reactor Study), étude des réacteurs I</i> - Dominique TOYE	Q1	20	15	-	3
CHIM0697-1	<i>Heterogeneous catalysis</i> (english language) - Nathalie JOB	Q2	15	30	-	3
CHIM0698-1	<i>Physical chemistry of interfaces</i> - Cédric GOMMES	Q1	15	15	-	3
CHIM0080-2	<i>Energy carriers and sustainable development</i> - Angélique LÉONARD	Q2	20	10	-	3
CHIM0081-4	<i>Industrial Chemistry Processes, structure of chemical industry</i> - Angélique LÉONARD	Q1	30	-	-	3
CHIM0695-2	<i>Introduction to modeling of chemical systems</i> - Georges HEYEN - Suppl : MarieNoëlle DUMONT, Grégoire LÉONARD	Q1	20	45	-	5
CHIM0676-1	<i>Polymerization processes</i> - Klaus KECK		20	-	-	2
CHIM0666-2	<i>Inorganic materials : manufacturing procedures and propriety</i> - Stéphanie LAMBERT - [2d FW]	Q2	30	30	[+]	5

## Second Year

### Compulsory courses

ATFE0004-1	<i>Final Work (including an introduction to research methodology)</i> - COLLÉGIALITÉ	TA	-	-	-	25
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*Notice* : In any case, this course must have the approval of the cycle's Jury President.

### Optional courses

Un cours à choisir parmi

[...] the courses of the University  
[...] la liste restreinte ci-dessous :

LANG1957-1	<i>Dutch for Engeneering Students</i> (dutch language) - Claudine COLIN	TA	60	-	-	5
LANG1958-1	<i>German for Engineering Students</i> (german language) - Françoise CARL	TA	60	-	-	5
GEST3162-1	<i>Introduction to company management</i> (english language) - Michael GHILISSEN, François PICHAULT, Thierry PIRONET, Didier VAN CAILLIE	Q2	25	25	-	5

*Notice* : The specialisation in management will be taught for the last time in 2014-2015.

### Compulsory courses

GEST3001-1	<i>People management and organisation</i> - Jocelyne ROBERT	Q1	24	24	-	4
GEST3002-1	<i>Human Resources</i> - Jocelyne ROBERT	Q1	24	-	-	2
GEST3003-1	<i>Competitive strategy in the marketplace</i> (english language) - Michael GHILISSEN	Q1	16	16	-	3
GEST3004-1	<i>Marketing (operations and management)</i> (english language) - Michael GHILISSEN	Q1	16	16	-	3
GEST3005-2	<i>Accountancy and Finance</i> - Jacques BERWART		24	24	-	4
GEST3006-1	<i>Operations and supply chain management I</i> (english language) - Yasemin ARDA	Q1	16	16	-	3
GSTG3001-1	<i>Business plan</i> - COLLÉGIALITÉ		-	30	-	4
GSTG3002-1	<i>Functional analysis of a company</i> - COLLÉGIALITÉ - [30h Internship]		-	-	[+]	4

### Optional courses

Choose one of the following courses :

GEST3010-1	<i>Operations and supply chain management II</i> - Sabine LIMBOURG	Q1	16	16	-	3
GEST3011-2	<i>ICT for Business</i> - Alain DUBOIS	Q1	16	16	-	3
GEST3012-1	<i>Financial and actuarial modelling</i> - Louis ESCH	Q1	16	16	-	3