

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

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|------------|--|----|----|---|---|
| ELEC0431-1 | <i>Electromagnetic energy conversion</i> (english language) - Christophe GEUZAINÉ | 30 | 30 | - | 5 |
| ELEC0053-2 | <i>Electric circuits</i> - Patricia ROUSSEAU | 30 | 30 | - | 5 |
| MECA0445-1 | <i>Heat transfer</i> - Pierre DEWALLEF, Vincent TERRAPON | 30 | 30 | - | 5 |
| MECA0012-5 | <i>Solid mechanics</i> - Laurent DUCHENE | 30 | 30 | - | 5 |
| MECA0002-1 | <i>Applied Thermodynamics and Introduction to Heat Engines</i> - Olivier LÉONARD | 30 | 30 | - | 5 |
| ELEC0052-1 | <i>Analysis and Design of Electrical Measuring Systems</i> - Philippe VANDERBEMDEN | 30 | 30 | - | 5 |

Compulsory courses

| | | | | | |
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| MECA0037-1 | <i>Thermic and co-generation power stations</i> - Pierre DEWALLEF | 30 | 30 | - | 5 |
| MECA0046-1 | <i>Heat exchangers</i> | | | | 5 |
| | - <i>Heat exchangers networks and rational use of energy</i> - MarieNoëlle DUMONT | 15 | 15 | - | |
| | - <i>Fundamental and constructive aspects</i> - Vincent LEMORT, | 15 | 15 | - | |
| | Philippe NGENDAKUMANA | | | | |
| MECA0450-2 | <i>Renewable energies</i> - Pierre DEWALLEF | 15 | 15 | - | 3 |
| CHIM0080-2 | <i>Energy carriers and sustainable development</i> - Angélique LÉONARD | 20 | 10 | - | 3 |
| CHIM0071-3 | <i>Reduction of pollutants from combustion</i> - Angélique LÉONARD | 30 | - | - | 3 |
| MECA0006-1 | <i>Production systems of cold and heat</i> - Vincent LEMORT | 30 | 30 | - | 5 |
| MECA0045-1 | <i>Thermofluid Quantity Measurement</i> - Philippe NGENDAKUMANA | 30 | 30 | - | 3 |
| MECA0041-1 | <i>Internal Combustion Engines</i> - Philippe NGENDAKUMANA - [1,5d FW] | 30 | 30 | [+] | 5 |
| APRI0003-1 | <i>Integrated project on energetics</i> - COLLÉGIALITÉ - [5d FW] | - | 60 | [+] | 5 |
| MECA0462-2 | <i>Materials selection</i> (english language) - Jacqueline LECOMTEBECKERS, | 30 | 30 | [+] | 5 |
| | Davide RUFFONI - [1d FW] | | | | |
| ELEC0014-3 | <i>Electric Energy Transmission and Distribution</i> - JeanLouis LILIEN - [2,5d FW] | 30 | 15 | [+] | 4 |
| ELEC0029-2 | <i>Analysis and operation of electric energy systems</i> - Thierry VAN CUTSEM | 30 | 30 | - | 4 |
| MECA0467-1 | <i>Turbomachines</i> - Olivier LÉONARD | 30 | 30 | - | 5 |
| SYST0003-1 | <i>Linear control systems</i> (english language) - Eric BULLINGER | 30 | 30 | - | 5 |

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.

Second Year

Compulsory courses

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| ATFE2003-1 | <i>Final work (including an internship or a placement in a research centre under the supervision of the teacher responsible for the final work and including an introduction to research methodology)</i> - COLLÉGIALITÉ | - | - | - | 25 |
|------------|--|---|---|---|----|

Optional courses

Choose one of the following courses :

- [...] the courses of the University of Liège
- [...] the list below.

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|------------|---|----|---|---|---|
| LANG1957-1 | <i>Dutch for Engineering Students</i> (dutch language) - Claudine COLIN | 60 | - | - | 5 |
|------------|---|----|---|---|---|

LANG1958-1 *German for Engineering Students* (german language) - Françoise CARL 60 - - 5
In any case, this course must have the approval of the cycle's Jury President.

Compulsory courses

| | | | | | |
|------------|---|----|----|-----|---|
| GEST3001-1 | <i>People management and organisation</i> - Jocelyne ROBERT | 24 | 24 | - | 4 |
| GEST3002-1 | <i>Human Resources</i> - Jocelyne ROBERT | 24 | - | - | 2 |
| GEST3003-1 | <i>Competitive strategy in the marketplace</i> (english language) - Michael GHILISSEN | 16 | 16 | - | 3 |
| GEST3004-1 | <i>Marketing (operations and management)</i> (english language) - Michael GHILISSEN | 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 | 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 | 16 | 16 | - | 3 |
| GEST3011-2 | <i>ICT for Business</i> - Alain DUBOIS | 16 | 16 | - | 3 |
| GEST3012-1 | <i>Financial and actuarial modelling</i> - Louis ESCH | 16 | 16 | - | 3 |