

First Year

Compulsory courses

Mechanical design and production

MECA0444-1	<i>Mechanical design</i> - JeanFrançois DEBONGNIE	Q1	30	30	-	5
APRI0005-3	<i>Integrated mechanical project</i> - Maarten ARNST, Eric BÉCHET, JeanLuc BOZET, Olivier BRULS, JeanFrançois DEBONGNIE, Pierre DUYSINX, Tristan GILET, Jean STUTO - [5d FW]	TA	50	130	[+]	15

Notice : If the president of the cycle's panel agrees, in particular regarding the technical content, the master's integrated project can be part of an interdisciplinary project (e.g. project engineer, Eurobot, Eco-Shell Marathon, etc.). It is possible to have done the project between the third year of the bachelor's degree and the second year of the master's.

MECA0474-1	<i>Mechanical Computer-Aided-Design</i> (english language) - Eric BÉCHET	TA	30	30	-	5
MECA0462-2	<i>Materials selection</i> (english language) - Jacqueline LECOMTEBECKERS, Davide RUFFONI - [1d FW]	Q1	30	30	[+]	5

Optional courses

Mecatronic

Choose at least 10 ECTS from the following courses :

MECA0504-1	<i>Industrial automation</i> - Olivier BRULS, Pierre DUYSINX	Q2	30	30	-	5
ELEN0074-1	<i>Sensors, microsensors and instrumentation</i> (english language) - Philippe VANDERBEMDEN	Q2	30	30	-	5
MECA0009-2	<i>Introduction to microtechnology</i> (english language) - Tristan GILET - [12h Labo., 18h Proj.]	Q2	14	16	[+]	5
SYST0003-1	<i>Linear control systems</i> (english language) - Rodolphe SEPULCHRE - Suppl : Raphaël FONTENEAU	Q1	30	30	-	5

Computational mechanics

Choose at least 10 ECTS from the following courses :

MECA0029-1	<i>Theory of vibration</i> (english language) - JeanClaude GOLINVAL	Q1	30	30	-	5
MECA0031-2	<i>Kinematics and dynamics of mechanisms</i> (english language) - Olivier BRULS	Q2	30	30	-	5
MECA0023-1	<i>Advanced solid mechanics</i> (english language) - JeanPhilippe PONTHOT	Q1	30	30	-	5
MECA0010-1	<i>Stochastic modelling</i> (english language) - Maarten ARNST	Q2	30	30	-	5

Optional courses

[...] Des cours à choisir (10 crédits) dans les cours à option du 1er ou du 2e master de ce master ; ce choix doit recevoir l'approbation du Président de Jury de cycle.

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

MECA0036-2	<i>Finite Element Method</i> (english language) - JeanPhilippe PONTHOT - [40h Proj.]	Q2	30	30	[+]	5
MECA0155-2	<i>Dynamics of Mechanical Systems</i> - JeanClaude GOLINVAL - [5h Labo., 10h Proj.]	Q1	30	30	[+]	5
MECA0012-6	<i>Solid mechanics</i> - Laurent DUCHENE - [15h Proj.]	Q2	30	30	[+]	5
MECA0018-2	<i>Industrial Forming Processes</i> - JeanFrançois DEBONGNIE - [15h Labo., 0,5d FW, 11h Proj.]	Q2	30	-	[+]	5

MECA0002-1	<i>Applied Thermodynamics and Introduction to Heat Engines</i> - Olivier LÉONARD	Q1	30	30	-	5
MECA0445-2	<i>Heat transfer</i> - Pierre DEWALLEF, Vincent TERRAPON - [4h Labo., 9h Proj.]	Q2	30	26	[+]	5

Second Year

Compulsory courses

ATFE0013-1	<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
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Optional courses

Choose one of the following courses :

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

LANG1957-1	<i>Dutch for Engeneering Students (dutch language)</i> - Claudine COLIN	TA	60	-	-	5
LANG1958-1	<i>German for Engineering Students (german language)</i> - Françoise CARL	TA	60	-	-	5

Notice : In any case, this course must have the approval of the cycle's Jury President.

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 (english language)</i> - Michael GHILISSEN	Q1	16	16	-	3
GEST3004-1	<i>Marketing (operations and management) (english language)</i> - 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 (english language)</i> - 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