

## 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 adapted programme for these students must first gain be approved by the Jury.

### Compulsory prerequisites

MECA0036-1	<i>Finite Element Method</i> - Jean-Philippe PONTHOT	30	30	-	5
MECA0155-1	<i>Dynamics of Mechanical Systems</i> - Jean-Claude GOLINVAL	30	30	-	5
MECA0012-5	<i>Mechanics of materials</i> (english) - Serge CESCOTTO	30	30	-	5
MECA0002-1	<i>Applied Thermodynamics and Introduction to Heat Engines</i> - Olivier LÉONARD	30	30	-	5
MECA0445-1	<i>Transfers of heat and matter</i> - Michel HOGGE	30	30	-	5
PHYS2026-1	<i>Physics 4 : Microscopic physics (partime a : waves optics, partime b : introduction to nuclear physics)</i> - Laurent DREESEN	30	30	-	5

### Compulsory courses

AERO0001-1	<i>Aerodynamics, 30h Th, 30h Exc</i> - Jean-André ESSERS	30	30	-	5
MECA0474-1	<i>CAD in mechanical engineering</i> - Eric BÉCHET	30	30	-	5
MECA0031-2	<i>Kinematics and Dynamics of Mechanisms</i> - Olivier BRULS	30	30	-	5
MECA0023-1	<i>Inelastic behavior of solids</i> - Jean-Philippe PONTHOT	30	30	-	5
MECA0025-1	<i>Fluid Mechanics</i> - Eric DELHEZ	30	30	-	5
AERO0023-1	<i>Aircraft design</i> - Ludovic NOELS	30	30	-	5
AERO0003-1	<i>Flight mechanics and airplane performance</i> - Grigorios DIMITRIADIS	30	30	-	5
AERO0025-1	<i>Creation of satellite</i> - Gaëtan KERSCHEN	30	30	-	5
APRI0004-1	<i>Unified project in aerospace</i> - Ludovic NOELS - [5d FW]	-	60	[+]	5
AERO0014-1	<i>Aeronautic and Space Propulsion</i> - Olivier LÉONARD	30	30	-	5
MECA0462-1	<i>MECA0462: materials selection</i> - Jacqueline LECOMTE#BECKERS	30	30	-	5
MECA0029-1	<i>Mechanical Vibrations</i> - Jean-Claude GOLINVAL	30	30	-	5

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

### Compulsory courses

MECA0001-1	<i>Solid mechanics</i> (english) - Serge CESCOTTO	30	30	-	5
SYST0002-1	<i>Linear systems</i> - Rodolphe SEPULCHRE	30	30	-	5
MECA0012-5	<i>Mechanics of materials</i> (english) - Serge CESCOTTO	30	30	-	5
MECA0445-1	<i>Transfers of heat and matter</i> - Michel HOGGE	30	30	-	5
MECA0155-1	<i>Dynamics of Mechanical Systems</i> - Jean-Claude GOLINVAL	30	30	-	5
MECA0036-1	<i>Finite Element Method</i> - Jean-Philippe PONTHOT	30	30	-	5
MECA0474-1	<i>CAD in mechanical engineering</i> - Eric BÉCHET	30	30	-	5
MECA0031-2	<i>Kinematics and Dynamics of Mechanisms</i> - Olivier BRULS	30	30	-	5
MECA0025-1	<i>Fluid Mechanics</i> - Eric DELHEZ	30	30	-	5
AERO0003-1	<i>Flight mechanics and airplane performance</i> - Grigorios DIMITRIADIS	30	30	-	5
APRI0004-1	<i>Unified project in aerospace</i> - Ludovic NOELS - [5d FW]	-	60	[+]	5
MECA0462-1	<i>MECA0462: materials selection</i> - Jacqueline LECOMTE#BECKERS	30	30	-	5
MECA0029-1	<i>Mechanical Vibrations</i> - Jean-Claude GOLINVAL	30	30	-	5
AERO0023-1	<i>Aircraft design</i> - Ludovic NOELS	30	30	-	5
AERO0025-1	<i>Creation of satellite</i> - Gaëtan KERSCHEN	30	30	-	5

## Second Year

### Compulsory courses

ATFE0005-1	<i>Final work</i> - COLLÉGIALITÉ	-	-	-	<b>20</b>
MECA0027-1	<i>Structure Optimization</i> - Claude FLEURY	30	30	-	<b>5</b>
[...]	A course to be chosen from the university's programme of courses (with the agreement of the cycle's President of the Jury)				

#### Compulsory courses

GEST3000-2	<i>First steps in an enterprise</i> - COLLÉGIALITÉ	24	-	-	<b>2</b>
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> - Michael GHILISSEN	16	16	-	<b>3</b>
GEST3004-1	<i>Marketing (operations and management)</i> - 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> - Yasemin ARDA	16	16	-	<b>3</b>
GSTG3001-1	<i>Business plan</i> - COLLÉGIALITÉ - [30h Internship]	-	-	[+]	<b>3</b>
GSTG3002-1	<i>Company diagnostic</i> - COLLÉGIALITÉ - [30h Internship]	-	-	[+]	<b>3</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 in the service of the company</i> - Maud BAY	16	16	-	<b>3</b>
GEST3012-1	<i>Financial and actuarial modelling</i> - Louis ESCH	16	16	-	<b>3</b>