

First Year

Optional courses

Choose courses totalling 60 ECTS from the list below. The course not followed in the 1st year must be followed in the 2nd year :

MECA0036-2	<i>Finite Element Method</i> (english language) - JeanPhilippe PONTHOT - [40h Proj.]	Q2	30	30	[+]	5
MATH0024-1	<i>Equations with partial derivatives</i> - Maarten ARNST	Q1	30	30	-	5
MATH0461-2	<i>Introduction to numerical optimization</i> (english language) - Quentin LOUVEAUX - [25h Proj.]	Q2	30	20	[+]	5
SYST0003-1	<i>Linear control systems</i> (english language) - Rodolphe SEPULCHRE - Suppl : Raphaël FONTENEAU	Q1	30	30	-	5
INFO0939-1	<i>High performance scientific computing</i> (english language) - Christophe GEUZAINÉ - [20h Proj.]	Q1	30	15	[+]	5
MATH0471-2	<i>Multiphysics computational project : development of a partial differential equation solver</i> - Romain BOMAN, Christophe GEUZAINÉ	Q2	20	30	-	5
PHYS0069-1	<i>Introduction to statistical physics</i> - Nicolas VANDEWALLE	Q2	30	30	-	5
CHIM0202-3	<i>Physical chemistry</i> - Edwin DE PAUW, Bernard LEYH	Q2	30	30	-	5
PHYS0048-1	<i>Coherent and Incoherent Optics</i> - Serge HABRAKEN	Q1	30	30	-	5
SPAT0048-4	<i>Physics of the earth's atmosphere and environment</i> - JeanClaude GÉRARD, Denis GRODENT	TA	45	15	-	5
PHYS0961-1	<i>Irreversibility, instabilities and chaos</i> - Pierre DAUBY	Q1	30	30	-	5
ELEN0074-1	<i>Sensors, microsensors and instrumentation</i> (english language) - Philippe VANDERBEMDEN	Q2	30	30	-	5
APRI0006-1	<i>Personal experimental project</i> (english language) - COLLÉGIALITÉ, Tristan GILET	TA	-	60	-	5

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

PHYS2026-1	<i>Physics 4 : Microscopic physics (part a : waves optics, part b : introduction to nuclear physics)</i> - Ngoc Duy NGUYEN	Q2	30	30	-	5
MECA0445-2	<i>Heat transfer</i> - Pierre DEWALLEF, Vincent TERRAPON - [4h Labo., 9h Proj.]	Q2	30	26	[+]	5
PHYS0211-3	<i>Quantum Mechanics</i> - John MARTIN	Q1	30	30	-	5
MECA0446-2	<i>Continuum Mechanics</i> - JeanPhilippe PONTHOT - [50h Proj.]	Q2	30	30	[+]	5
ELEN0076-1	<i>Electromagnetism</i> - Patricia ROUSSEAUX, Benoît VANDERHEYDEN	Q1	30	30	-	5

Compulsory courses

INFO0061-3	<i>Computers organization</i> - Bernard BOIGELOT	Q2	25	20	-	5
MECA0001-2	<i>Mechanics of materials</i> - JeanPierre JASPART - Suppl : Laurent DUCHENE - [2h Labo., 12h Proj.]	Q1	30	28	[+]	5
SYST0002-2	<i>Modelling and analysis of systems</i> - Rodolphe SEPULCHRE - Suppl : Erik QUAEGHEBEUR - [15h Proj.]	Q1	30	30	[+]	5
MECA0445-2	<i>Heat transfer</i> - Pierre DEWALLEF, Vincent TERRAPON - [4h Labo., 9h Proj.]	Q2	30	26	[+]	5
MECA0025-3	<i>Fluid Mechanics</i> - Eric DELHEZ - [30h Proj.]	Q2	30	30	[+]	5
MECA0446-2	<i>Continuum Mechanics</i> - JeanPhilippe PONTHOT - [50h Proj.]	Q2	30	30	[+]	5
ELEN0076-1	<i>Electromagnetism</i> - Patricia ROUSSEAUX, Benoît VANDERHEYDEN	Q1	30	30	-	5
MECA0036-2	<i>Finite Element Method</i> (english language) - JeanPhilippe PONTHOT - [40h Proj.]	Q2	30	30	[+]	5
MATH0024-1	<i>Equations with partial derivatives</i> - Maarten ARNST	Q1	30	30	-	5
MATH0461-2	<i>Introduction to numerical optimization</i> (english language) - Quentin LOUVEAUX	Q2	30	20	[+]	6

INFO0939-1	- [25h Proj.] <i>High performance scientific computing</i> (english language) - Christophe GEUZAINÉ - [20h Proj.]	Q1	30	15	[+]	5
MATH0471-2	<i>Multiphysics computational project : development of a partial differential equation solver</i> - Romain BOMAN, Christophe GEUZAINÉ	Q2	20	30	-	5
PHYS0069-1	<i>Introduction to statistical physics</i> - Nicolas VANDEWALLE	Q2	30	30	-	5
CHIM0202-3	<i>Physical chemistry</i> - Edwin DE PAUW, Bernard LEYH	Q2	30	30	-	5

Second Year

Compulsory courses

ATFE0016-1	<i>Final Work (including an introduction to research methodology)</i> - COLLÉGIALITÉ	-	-	-	-	25
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Common core courses

Choose the course that was not taken in the first year of the Master's degree among the following :

MECA0036-2	<i>Finite Element Method</i> (english language) - JeanPhilippe PONTHOT - [40h Proj.]	Q2	30	30	[+]	5
MATH0024-1	<i>Equations with partial derivatives</i> - Maarten ARNST	Q1	30	30	-	5
MATH0461-2	<i>Introduction to numerical optimization</i> (english language) - Quentin LOUVEAUX - [25h Proj.]	Q2	30	20	[+]	5
SYST0003-1	<i>Linear control systems</i> (english language) - Rodolphe SEPULCHRE - Suppl : Raphaël FONTENEAU	Q1	30	30	-	5
INFO0939-1	<i>High performance scientific computing</i> (english language) - Christophe GEUZAINÉ - [20h Proj.]	Q1	30	15	[+]	5
MATH0471-3	<i>Multiphysics computational project : development of a partial differential equation solver</i> - Romain BOMAN, Christophe GEUZAINÉ	Q2	30	30	-	5
PHYS0069-1	<i>Introduction to statistical physics</i> - Nicolas VANDEWALLE	Q2	30	30	-	5
CHIM0202-3	<i>Physical chemistry</i> - Edwin DE PAUW, Bernard LEYH	Q2	30	30	-	5
PHYS0048-1	<i>Coherent and Incoherent Optics</i> - Serge HABRAKEN	Q1	30	30	-	5
SPAT0048-4	<i>Physics of the earth's atmosphere and environment</i> - JeanClaude GÉRARD, Denis GRODENT	TA	45	15	-	5
PHYS0961-1	<i>Irreversibility, instabilities and chaos</i> - Pierre DAUBY	Q1	30	30	-	5
ELEN0074-1	<i>Sensors, microsensors and instrumentation</i> (english language) - Philippe VANDERBEMDEN	Q2	30	30	-	5
APRI0006-1	<i>Personal experimental project</i> (english language) - COLLÉGIALITÉ, Tristan GILET	TA	-	60	-	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