

One-year master program (60 ECTS)

Compulsory courses

INFO0004-1	<i>Programming Language Internals</i> - Justus PIATER - Suppl : Guy LEDUC	30	30	-	6
INFO0031-1	<i>Computer Network Architectures and Multimedia</i> - Guy LEDUC	30	30	-	6
INFO0051-1	<i>Artificial Intelligence Logics</i> - Pascal GRIBOMONT	30	30	-	6
INFO0063-1	<i>Object-Oriented Software Engineering</i> - Bernard BOIGELOT	30	30	-	6
INFO0016-1	<i>Introduction to the Theory of Computation</i> (english) - Pierre WOLPER	30	30	-	6
ATFE0003-1	<i>Final work</i> - COLLÉGIALITÉ	-	-	-	18

Optional courses

[...] With the agreement of the Jury, students choose 12 credits from the list of courses from the 1st year of Masters in Computing Sciences 2 years (120 credits).

Programme for students who have passed the preparatory year for the Masters in Computer Science

Compulsory courses

INFO0004-1	<i>Programming Language Internals</i> - Justus PIATER - Suppl : Guy LEDUC	30	30	-	6
INFO0031-1	<i>Computer Network Architectures and Multimedia</i> - Guy LEDUC	30	30	-	6
INFO0051-1	<i>Artificial Intelligence Logics</i> - Pascal GRIBOMONT	30	30	-	6
INFO0063-1	<i>Object-Oriented Software Engineering</i> - Bernard BOIGELOT	30	30	-	6
INFO0016-1	<i>Introduction to the Theory of Computation</i> (english) - Pierre WOLPER	30	30	-	6
INFO0902-1	<i>Data Structures and Algorithms</i> - Justus PIATER - Suppl : Bernard BOIGELOT	30	30	-	6
INFO0039-3	<i>Object-Oriented Programming Project</i> - Pierre WOLPER	-	60	-	6
ATFE0003-1	<i>Final work</i> - COLLÉGIALITÉ	-	-	-	18

Two-Year Master Program (120 ECTS)

First Year

Compulsory courses

INFO0004-1	<i>Programming Language Internals</i> - Justus PIATER - Suppl : Guy LEDUC	30	30	-	6
INFO0031-1	<i>Computer Network Architectures and Multimedia</i> - Guy LEDUC	30	30	-	6
INFO0051-1	<i>Artificial Intelligence Logics</i> - Pascal GRIBOMONT	30	30	-	6
INFO0063-1	<i>Object-Oriented Software Engineering</i> - Bernard BOIGELOT	30	30	-	6
INFO0016-1	<i>Introduction to the Theory of Computation</i> (english) - Pierre WOLPER	30	30	-	6

Optional courses

Students choose 30 credits from the list of option courses below :

INFO0065-1	<i>Seminar on Intrusion Systems</i> - Marc DACIER	10	50	-	6
INFO0049-1	<i>Knowledge Representation</i> - Pascal GRIBOMONT	30	30	-	6
INFO0056-1	<i>Managing and Securing Computer Networks</i> - Guy LEDUC	30	30	-	6
INFO0013-1	(pas organisé en 2008-2009) <i>Computer vision</i> (english) - Justus PIATER	30	30	-	6
ELEN0016-1	<i>Digital Image Processing</i> - Marc VAN DROOGENBROECK	30	30	-	6
INFO0026-3	<i>Computer Graphics</i> - Eric BÉCHET	30	30	-	6
INFO0045-2	<i>Cryptography and Computer Security</i> - Tri-An BANH	30	30	-	6
INFO0036-1	<i>Advanced Algorithmics</i> - Pierre-Arno DE MARNEFFE	30	30	-	6
ASTG0021-1	<i>Internship</i> - COLLÉGIALITÉ	-	-	-	12

Second year

Compulsory courses

ATFE0002-1	<i>Final Work (including an introduction to methodology and research)</i> - N...	-	-	-	24
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Optional courses

[...] Choose 6 credits in the University's programme of courses; this choice must have the approval of the cycle's Jury president

Choose one of the following focus :

Research Focus

Compulsory courses

MATH0461-1	<i>Intorduction to optimization</i> - Quentin LOUVEAUX	30	30	-	6
INFO0064-1	<i>Embedded Systems</i> - Bernard BOIGELOT	30	30	-	6
ELEN0062-1	<i>Applied Inductive Learning</i> - Pierre GEURTS, Louis WEHENKEL	30	30	-	6

Optional courses

Choose courses totalling 12 ECTS from the following :

ELEN0070-1	<i>Signal Processing</i> - Jacques VERLY	30	30	-	6
GBIO0009-1	<i>Bio-informatics</i> - Kristel VAN STEEN	30	30	-	6
INFO0014-1	<i>Computer Systems Performance Evaluation</i> - Tri-An BANH	30	30	-	6
INFO0036-1	<i>Advanced Algorithmics</i> - Pierre-Arno DE MARNEFFE	30	30	-	6
INFO0045-2	<i>Cryptography and Computer Security</i> - Tri-An BANH	30	30	-	6
INFO0050-1	<i>Expert Systems</i> - Pascal GRIBOMONT	30	30	-	6
INFO0060-1	<i>Concurrent System Verification and Temporal Logic</i> - Bernard BOIGELOT, Pascal GRIBOMONT, Pierre WOLPER	30	30	-	6
INFO0939-1	<i>High-performance scientific calculation / High performance scientific computing</i> (english) - Christophe GEUZAINÉ	30	30	-	6
MATH0017-4	<i>Mathematical Logic and Set Theory</i> - Georges HANSOUL	30	30	-	6
MATH0024-1	<i>Further Study of Digital Analysis (Equations with Partial Derivatives)</i> - Jean-André ESSERS	30	30	-	6
MATH0042-1	<i>Stochastic Systems Modeling</i> - Tri-An BANH	30	30	-	6
MATH0234-3	<i>Boolean Topology and Boolean Algebra</i> - Georges HANSOUL	30	30	-	6
MATH0245-3	<i>Discrete structures (Compléments)</i> - Michel RIGO	30	30	-	6
MATH0462-1	<i>Discrete optimization</i> - Quentin LOUVEAUX	30	30	-	6

Professional Focus

Compulsory courses

GEST3000-1	<i>First steps in an enterprise</i> - Robert NONDONFAZ, Bernard SURLEMONT	0,5	-	-	2
GEST3001-1	<i>Organization analysis</i> - Annie CORNET	-	-	-	3
GEST3002-1	<i>Human Resources Management</i> - Jocelyne ROBERT	16	-	-	3
GEST3003-1	<i>Competitive Strategy in the Marketplace</i> (english) - Michael GHILISSEN	16	-	-	3
GEST3004-1	<i>Marketing (operations and management)</i> (english) - Michael GHILISSEN	16	-	-	3
GEST3005-1	<i>Accountancy and Finance</i> - Jacques BERWART	24	-	-	4
GEST3006-1	<i>Production (Supply chain management)</i> (english) - Yasemin ARDA	45	-	-	3
GSTG3001-1	<i>Internship</i> - COLLÉGIALITÉ	-	-	-	6

Optional courses

Choose one of the following courses :

GEST3010-1	<i>Production 2 (Supply Chain Management 2nd part)</i> (english) - Robert NONDONFAZ	-	-	-	3
GEST3011-1	<i>ICT in the service of the company</i> - Alain DUBOIS	30	-	-	3
GEST3012-1	<i>Financial and actuarial modelling tools</i> - Louis ESCH	16	-	-	3

Adjusted programme for students who passed the preparatory year for the Masters in Computer Science

First Year

Compulsory courses

INFO0004-1	<i>Programming Language Internals</i> - Justus PIATER - Suppl : Guy LEDUC	30	30	-	6
INFO0031-1	<i>Computer Network Architectures and Multimedia</i> - Guy LEDUC	30	30	-	6
INFO0051-1	<i>Artificial Intelligence Logics</i> - Pascal GRIBOMONT	30	30	-	6
INFO0063-1	<i>Object-Oriented Software Engineering</i> - Bernard BOIGELOT	30	30	-	6
INFO0016-1	<i>Introduction to the Theory of Computation</i> (english) - Pierre WOLPER	30	30	-	6
INFO0902-1	<i>Data Structures and Algorithms</i> - Justus PIATER - Suppl : Bernard BOIGELOT	30	30	-	6
INFO0039-3	<i>Object-Oriented Programming Project</i> - Pierre WOLPER	-	60	-	6

Optional courses

[...] Students choose 18 credits from the optional courses list of the first year in the two year Computer Sciences Masters.

Second year

The programme is identical to that of the 2nd year in the Masters in Computer Sciences in two years.