

First Year

Compulsory courses

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|------------|---|----|----|---|----------|
| INFO0045-2 | <i>Cryptography and Computer Security</i> - Xavier BOYEN | 30 | 30 | - | 6 |
| INFO0031-1 | <i>Computer network architectures and multimedia</i> (english language) - 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 language) - Pierre WOLPER | 30 | 30 | - | 6 |

Optional courses

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

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|------------|---|----|----|---|-----------|
| 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> (english language) - Guy LEDUC | 30 | 30 | - | 6 |
| INFO0013-1 | (pas organisé en 2010-2011) <i>Computer vision</i> (english language) | 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 |
| INFO0004-1 | <i>Object-oriented programming project</i> - N... - Suppl : Guy LEDUC | 10 | 30 | - | 3 |
| ELEN0061-2 | <i>Introduction to Stochastic Processes</i> - Louis WEHENKEL | 15 | 15 | - | 3 |
| INFO0027-2 | <i>Programming techniques</i> - Xavier BOYEN | 30 | 30 | - | 6 |
| ASTG0021-1 | <i>Internship</i> - COLLÉGIALITÉ | - | - | - | 12 |

Compulsory courses

| | | | | | |
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| INFO0045-2 | <i>Cryptography and Computer Security</i> - Xavier BOYEN | 30 | 30 | - | 6 |
| INFO0031-1 | <i>Computer network architectures and multimedia</i> (english language) - 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 language) - Pierre WOLPER | 30 | 30 | - | 6 |
| MATH0006-2 | <i>Introduction to numerical analysis</i> - Quentin LOUVEAUX | 25 | 15 | - | 4 |
| INFO0039-2 | <i>Object-Oriented Programming Project, I</i> - Pierre WOLPER | - | 90 | - | 8 |

Optional courses

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

Second Year

Compulsory courses

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|------------|--|---|---|---|-----------|
| ATFE0002-1 | <i>Final Work (including an introduction to methodology and research)</i> - COLLÉGIALITÉ | - | - | - | 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

Compulsory courses

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| MATH0461-1 | <i>Introduction to numerical optimization</i> (english language) - 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 :

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|------------|--|----|----|---|----------|
| ELEN0070-1 | <i>Signal Processing</i> - Jacques VERLY | 30 | 30 | - | 6 |
| GBIO0009-1 | <i>Bioinformatics</i> (english language) - Kristel VAN STEEN | 30 | 30 | - | 6 |
| INFO2036-1 | <i>Design and analysis of algorithms</i> (english language) | 30 | 30 | - | 6 |
| INFO0050-1 | <i>Constrained programming</i> - Pascal GRIBOMONT | 30 | 30 | - | 6 |

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| 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 computing</i> (english language) - 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 |
| 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 |
| INFO0027-1 | <i>Programming techniques</i> - Xavier BOYEN | 30 | 50 | - | 6 |
| INFO2044-1 | <i>Mathematical cryptography</i> - Xavier BOYEN | 30 | 30 | - | 6 |
| INFO2046-1 | <i>Computational Geometry</i> - Eric BÉCHET | 30 | 30 | - | 6 |

Compulsory courses

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

Choose one course among the following (6 credits) :

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| List of optional courses not taken in the first year of the master's degree. | | | | | 6 |
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