

## First Year

### Compulsory courses

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

### 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	-	<b>6</b>
INFO0049-1	<i>Knowledge Representation</i> - Pascal GRIBOMONT	30	30	-	<b>6</b>
INFO0056-1	<i>Managing and Securing Computer Networks</i> - Guy LEDUC	30	30	-	<b>6</b>
INFO0013-1	<i>Computer vision</i> (english) - Justus PIATER	30	30	-	<b>6</b>
ELEN0016-1	<i>Digital Image Processing</i> - Marc VAN DROOGENBROECK	30	30	-	<b>6</b>
INFO0026-3	<i>Computer Graphics</i> - Eric BÉCHET	30	30	-	<b>6</b>
INFO0045-2	<i>Cryptography and Computer Security</i> - N... - Suppl : Tri-An BANH, Renaud DUMONT	30	30	-	<b>6</b>
ASTG0021-1	<i>Internship</i> - COLLÉGIALITÉ	-	-	-	<b>12</b>

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INFO0051-1	<i>Artificial Intelligence Logics</i> - Pascal GRIBOMONT	30	30	-	<b>6</b>
INFO0063-1	<i>Object-Oriented Software Engineering</i> - Bernard BOIGELOT	30	30	-	<b>6</b>
INFO0016-1	<i>Introduction to the Theory of Computation</i> (english) - Pierre WOLPER	30	30	-	<b>6</b>
MATH0006-2	<i>Introduction to numerical analysis</i> - Quentin LOUVEAUX	25	15	-	<b>4</b>
INFO0039-2	<i>Object-Oriented Programming Project</i> - Pierre WOLPER	-	90	-	<b>8</b>

### 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

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

MATH0461-1	<i>Introduction to numerical optimization</i> (english) - Quentin LOUVEAUX	30	30	-	<b>6</b>
INFO0064-1	<i>Embedded Systems</i> - Bernard BOIGELOT	30	30	-	<b>6</b>
ELEN0062-1	<i>Applied Inductive Learning</i> - Pierre GEURTS, Louis WEHENKEL	30	30	-	<b>6</b>

### Optional courses

Choose courses totalling 12 ECTS from the following :

ELEN0070-1	<i>Signal Processing</i> - Jacques VERLY	30	30	-	<b>6</b>
GBIO0009-1	<i>Bio-informatics</i> - Kristel VAN STEEN	30	30	-	<b>6</b>
INFO0013-1	<i>Computer vision</i> (english) - Justus PIATER	30	30	-	<b>6</b>
INFO2036-1	<i>Analysis and design of algorithms</i> - N...	30	30	-	<b>6</b>
INFO0050-1	<i>Constrained programming</i> - Pascal GRIBOMONT	30	30	-	<b>6</b>

INFO0060-1	<i>Concurrent System Verification and Temporal Logic</i> - Bernard BOIGELOT, Pascal GRIBOMONT, Pierre WOLPER	30	30	-	<b>6</b>
INFO0939-1	<i>High performance scientific computing</i> (english) - Christophe GEUZAINÉ	30	30	-	<b>6</b>
MATH0017-4	<i>Mathematical Logic and Set Theory</i> - Georges HANSOUL	30	30	-	<b>6</b>
MATH0024-1	<i>Further Study of Digital Analysis (Equations with Partial Derivatives)</i> - Jean-André ESSERS	30	30	-	<b>6</b>
MATH0234-3	<i>Boolean Topology and Boolean Algebra</i> - Georges HANSOUL	30	30	-	<b>6</b>
MATH0245-3	<i>Discrete structures (Compléments)</i> - Michel RIGO	30	30	-	<b>6</b>
MATH0462-1	<i>Discrete optimization</i> - Quentin LOUVEAUX	30	30	-	<b>6</b>

**Compulsory courses**

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

Choose one course among the following (6 credits) :

List of optional courses not taken in the first year of the master's degree.					<b>6</b>
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