

## Block view of the study programme

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### Block 1

#### Compulsory Courses

INFO0085-1	<i>Compilers</i> (english language) - Pascal FONTAINE - [75h Proj.] <b>Corequisite :</b> INFO0016-1 - Introduction to the theory of computation	Q2	25	-	[+]	<b>5</b>
ELEN0062-1	<i>Introduction to machine learning</i> (english language) - Pierre GEURTS, Louis WEHENKEL - [40h Proj.]	Q1	30	5	[+]	<b>5</b>
ELEN0060-2	<i>Information and coding theory</i> (english language) - Louis WEHENKEL - [30h Proj.]	Q2	30	15	[+]	<b>5</b>
INFO0016-1	<i>Introduction to the theory of computation</i> (english language) - Quentin LOUVEAUX	Q1	26	26	-	<b>5</b>
INFO0045-3	<i>Introduction to computer security</i> (english language) - Benoît DONNET - [10h Labo., 30h Proj.]	Q1	30	6	[+]	<b>5</b>
ATFE0003-1	<i>Master thesis</i> (english language) - COLLÉGIALITÉ, Laurent MATHY - [750h Proj.]	TA	-	-	[+]	<b>25</b>

#### Optional courses

[...] With the agreement of the jury, students choose 10 credits (with the exception of an internship or personal project) in the programme of the Master 120 of Science in Computer science

### Bloc d'aménagement du programme de l'année

## **Additonal ECTS Master in computer science (60 ECTS) (aimed at bachelors in computer science from non university higher education institution)**

The following courses must be taken in addition to the programme of the "Master 60 for bachelors in computer science". Among these courses, those belonging to the "bloc 0" are prerequisites of the "Master 60" programme and must necessarily be taken during the first year of the master.

#### Compulsory Courses

MATH0500-1	<i>Introduction to numerical algorithmic</i> - Quentin LOUVEAUX - [6h Labo., 45h Proj.]	Q1	24	14	[+]	<b>5</b>
INFO0902-1	<i>Data structures and algorithms</i> - Pierre GEURTS - [40h Proj.]	Q2	26	20	[+]	<b>5</b>
INFO9012-1	<i>Parallel Programming</i> (english language) - Pascal FONTAINE	Q2	25	25	-	<b>5</b>
INFO0010-4	<i>Introduction to computer networking</i> (english language) - Guy LEDUC - [12h Labo., 40h Proj.]	Q1	32	2	[+]	<b>5</b>
INFO0012-2	<i>Computation structures</i> (english language) - Pascal FONTAINE, Laurent MATHY - [40h Proj.]	Q1	26	26	[+]	<b>5</b>
INFO0940-1	<i>Operating systems</i> (english language) - Laurent MATHY - [30h Proj.]	Q2	30	6	[+]	<b>5</b>
INFO0062-1	<i>Object-oriented programming</i> (english language) - Bernard BOIGELOT - [20h Proj.]	Q2	25	20	[+]	<b>5</b>
INFO0054-1	<i>Functional programming</i> - Christophe DEBRUYNE - [20h Proj.]	Q1	24	24	[+]	<b>5</b>
MATH2019-1	<i>Mathematics for computing 1</i> - Emilie CHARLIER	Q1	26	26	-	<b>5</b>
INFO0027-3	<i>Programming techniques, Software patterns</i> (english language) - Laurent MATHY - [30h Proj.]	Q2	10	10	[+]	<b>2</b>
MATH0495-1	<i>Elements for calculating probabilities</i> - Laurent LOOSVELDT - [5h Proj.]	Q1	26	26	[+]	<b>5</b>
INFO8006-1	<i>Introduction to artificial intelligence</i> (english language) - Gilles LOUPPE -	Q1	25	20	[+]	<b>5</b>

Study programmes 2023-2024  
Faculty of Applied Sciences  
Master of Science (MSc) in Computer Science (Registrations are closed)

[45h Proj.]

**Optional courses**

Students who pass the entrance test will replace LANG6011-1 by the higher level course LANG0988 "Advanced for ICT studies"

LANG6011-1	<i>Remedial English for Computer Science</i> (english language) - Adnan VESSEUR	Q2	3	27	-	<b>3</b>
LANG0988-1	<i>Advanced English for ICT studies</i> (english language) - Adnan VESSEUR	Q1	5	25	-	<b>3</b>