

Cycle view of the study programme

B1 Or Th Pr Au Cr

Course to be intended in order to obtain de Master's degree in computer science and engineering.

Compulsory courses (B1 : 40Cr)

INFO0016-1	<i>Introduction to the theory of computation</i> (english language) - Quentin LOUVEAUX	B1	Q1	26	26	-	5
ELEN0062-1	<i>Introduction to machine learning</i> (english language) - Pierre GEURTS, Louis WEHENKEL - [40h Proj.]	B1	Q1	30	5	[+]	5
INFO0940-1	<i>Operating systems</i> (english language) - Laurent MATHY - [30h Proj.]	B1	Q2	30	6	[+]	5
PROJ0010-1	<i>Software project engineering and management</i> (english language) - Benoît DONNET, Bernard HAUZEUR, Guy LEDUC, Laurent MATHY - [280h Proj.]	B1	TA	20	-	[+]	10
PROJ0019-1	<i>End of studies project</i> (english language) - Laurent MATHY - [300h Proj.]	B1	TA	-	-	[+]	10
INFO0012-2	<i>Computation structures</i> (english language) - Pascal FONTAINE, Laurent MATHY - [40h Proj.]	B1	Q1	26	26	[+]	5

The following three courses are in addition to the above-mentioned programme. These courses may be followed as part of the Bachelor or Masters in Business Engineering programme, or be added to the third year of the Masters programme.

MATH0006-3	<i>Introduction to numerical analysis</i> (english language) - Quentin LOUVEAUX	B1	Q1	20	20	-	4
MECA0003-2	<i>Rational Mechanics</i> - Eric DELHEZ	B1	Q1	20	30	-	4
SYST0002-2	<i>Introduction to signals and systems</i> - Guillaume DRION - [15h Proj.]	B1	Q1	26	26	[+]	5

Optional courses (B1 : 30Cr)

Choose one focus from the following : (B1 : 30Cr)

Professional focus: "Computer systems security" (B1 : 30Cr)

INFO0031-1	<i>Network Engineering</i> (english language) - Benoît DONNET, Guy LEDUC - [12h Labo., 30h Proj.]	B1	Q2	30	-	[+]	5
INFO0045-3	<i>Introduction to computer security</i> (english language) - Benoît DONNET - [10h Labo., 30h Proj.]	B1	Q1	30	6	[+]	5

Choose courses totalling 20 credits out of the following : (B1 : 20Cr)

INFO0064-2	<i>Embedded systems</i> (english language) - Bernard BOIGELOT	B1	Q1	25	20	-	3
INFO2055-1	<i>Embedded systems project</i> (english language) - Bernard BOIGELOT - [60h Proj.]	B1	Q2	-	-	[+]	2
INFO2051-1	<i>Object-oriented programming on mobile devices</i> (english language) - Laurent MATHY - [90h Proj.]	B1	Q1	15	10	[+]	5
INFO0056-1	<i>Securing Networks</i> (english language) - Guy LEDUC - [12h Labo., 30h Proj.] (Even years)	B1	Q2	30	-	[+]	5
INFO0939-1	<i>High performance scientific computing</i> (english language) - Christophe GEUZAIN - [20h Proj.]	B1	Q1	30	15	[+]	5
INFO8002-1	<i>Topics in Distributed Systems</i> (english language) - Bernard BOIGELOT, Christophe DEBRUYNE, Pascal FONTAINE, Guy LEDUC, Laurent MATHY - [35h Proj.] (Odd years)	B1	Q2	30	-	[+]	5
INFO8012-1	<i>Digital Forensics</i> (english language) - Benoît DONNET, Laurent MATHY - [12h Labo., 30h Proj.] (Even years)	B1	Q2	30	-	[+]	5
INFO8011-1	<i>Network infrastructures</i> (english language) - Benoît DONNET, Guy LEDUC, Laurent MATHY - [8h Labo., 30h Proj.]	B1	Q1	30	-	[+]	5

Master of Science (MSc) in Computer Science and Engineering (double degree programme with HEC)

INFO8013-1 *Advanced Computer Security* (english language) - Benoît DONNET, Laurent MATHY - [20h Labo., 30h Proj.] (Odd years) B1 Q2 20 - [+] 5

INFO9016-1 *Advanced Databases* (english language) - Christophe DEBRUYNE - [20h Proj.] B1 Q2 24 20 [+] 5

Professional focus: "Intelligent systems" (B1 : 30Cr)

INFO8010-1 *Deep learning* (english language) - Gilles LOUPPE - [60h Proj.] B1 Q2 30 - [+] 5

SYST0022-1 *Linear Systems Design* (english language) - Guillaume DRION, Pierre SACRÉ - [15h Proj.] B1 Q2 26 26 [+] 5

Choose courses totalling 20 credits out of the following : (B1 : 20Cr)

ELEN0016-2 *Computer vision* (english language) - Marc VAN DROOGENBROECK - [50h Proj.] B1 Q1 30 10 [+] 5

INFO0948-2 *Introduction to intelligent robotics* (english language) - Pierre SACRÉ - [80h Proj.] B1 Q2 30 4 [+] 5

INFO2049-1 *Web and Text Analytics* (english language) - Ashwin ITTOO B1 Q1 30 - - 5

GBIO0002-1 *Genetics and bioinformatics* (english language) - Franck DEQUIEDT, Kristel VAN STEEN - [15h Proj.] B1 Q1 30 15 [+] 5

DROI1357-1 *European law, (big) data and artificial intelligence applications seminar* (english language) - - Suppl : Ljupcho GROZDANOVSKI B1 Q1 24 - - 5

INFO8003-1 *Optimal decision making for complex problems* (english language) - Damien ERNST - [45h Proj.] B1 Q2 25 10 [+] 5

INFO8004-1 *Advanced Machine learning* (english language) - Pierre GEURTS, Gilles LOUPPE, Louis WEHENKEL - [20h Proj.] B1 Q2 25 - [+] 5

INFO9014-1 *Knowledge representation and reasoning* (english language) - Christophe DEBRUYNE - [45h Proj.] B1 Q2 24 20 [+] 5

INFO8006-1 *Introduction to artificial intelligence* (english language) - Gilles LOUPPE - [45h Proj.] B1 Q1 25 20 [+] 5