

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	B1	TA	-	-	-	10
INFO0010-4	<i>Introduction to computer networking</i> (english language) - Guy LEDUC - [12h Labo., 40h Proj.]	B1	Q1	35	2	[+]	5

The three courses below can be taken during the bachelor's degree or master's degree in business engineering, or added to the third year of the master's programme.

MATH0002-4	<i>Mathematical analysis 1</i> - Eric DELHEZ	B1	Q1	22	22	-	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>Large-scale data systems</i> (english language) - Gilles LOUPPE - [45h Proj.]	B1	Q1	25	10	[+]	5
INFO8012-1	<i>Digital Forensics</i> (english language) - [12h Labo., 30h Proj.] (Even years)	B1	Q2	30	-	[+]	5
INFO8011-1	<i>Network infrastructures</i> (english language) - Benoît DONNET, Guy LEDUC, Laurent MATHY - [12h Labo., 30h Proj.] (Odd years)	B1	Q1	30	-	[+]	5
INFO8013-1	<i>Advanced Computer Security</i> (english language) - Benoît DONNET, Laurent MATHY - [20h Labo., 30h Proj.] (Odd years)	B1	Q2	20	-	[+]	5

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

INFO8010-1	<i>Deep learning</i> (english language) - Gilles LOUPPE - [55h Proj.]	B1	Q2	25	10	[+]	5
SYST0003-1	<i>Linear control systems</i> (english language) - <i>Theory</i> - Guillaume DRION - <i>Control system design in time domain and frequency domain</i> - Guillaume DRION - [6h Labo.]	B1	Q1	26	6	-	5
				-	20	[+]	

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

ELEN0016-2	<i>Computer vision</i> (english language) - Marc VAN DROOGENBROECK - [50h Proj.]	B1	Q1	30	10	[+]	5
INFO0948-2	<i>Introduction to intelligent robotics</i> (english language) - Pierre SACRÉ - [80h Proj.]	B1	Q2	30	4	[+]	5
INFO2049-1	<i>Web and Text Analytics</i> (english language) - Ashwin ITTOO	B1	Q1	30	-	-	5
GBIO0002-1	<i>Genetics and bioinformatics</i> (english language) - Franck DEQUIEDT, Kristel VAN STEEN - [15h Proj.]	B1	Q1	30	15	[+]	5
DROI1357-1	<i>European law, (big) data and artificial intelligence applications seminar</i> (english language) - - Suppl : Ljupcho GROZDANOVSKI	B1	Q1	24	-	-	5
INFO8003-1	<i>Optimal decision making for complex problems</i> (english language) - Damien ERNST - [45h Proj.]	B1	Q2	25	10	[+]	5
INFO8004-1	<i>Advanced Machine learning</i> (english language) - Pierre GEURTS, Gilles LOUPPE, Louis WEHENKEL - [45h Proj.]	B1	Q2	25	-	[+]	5
INFO9014-1	<i>Knowledge representation and reasoning</i> (english language) - Christophe DEBRUYNE	B1	Q2	24	20	-	5
INFO8006-1	<i>Introduction to artificial intelligence</i> (english language) - Gilles LOUPPE - [45h Proj.]	B1	Q1	25	20	[+]	5