Cycle view of the study programme

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

Compulsory courses (B1 : 40Cr)

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

			Bl	Or	Th	Pr	Au	Cr
INFO0031-1	*Network Engineering* (english language) - Benoît DONNET, Guy LEDUC - [12h Labo., 30h Proj.]		B1	Q2	30	-	[+]	**5**
INFO0045-3	*Introduction to computer security* (english language) - Benoît DONNET - [10h Labo., 30h Proj.]		B1	Q1	30	6	[+]	**5**

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

Computer Science foundation courses
The following courses (INFO8006-1, INFO0010-4) are prerequisite to some compulsory courses of the master program. They must be taken as a priority, unless they were already passed as part of another programme, or unless the corresponding knowledge and skills have been acquired previously.

			Bl	Or	Th	Pr	Au	Cr
INFO8006-1	*Introduction to artificial intelligence* (english language) - Gilles LOUPPE - [45h Proj.]		B1	Q1	25	20	[+]	**5**
	Notice : Prerequisite of ELEN0062-1							
INFO0010-4	*Introduction to computer networking* (english language) - Guy LEDUC - [12h Labo., 40h Proj.]		B1	Q1	32	2	[+]	**5**
	Notice : Prerequisite of PROJ0010-1							
INFO0064-2	*Embedded systems* (english language) - Bernard BOIGELOT		B1	Q1	25	20	-	**3**
INFO2055-1	*Embedded systems project* (english language) - Bernard BOIGELOT - [60h Proj.]		B1	Q2	-	-	[+]	**2**
INFO2051-1	*Object-oriented programming on mobile devices* (english language) - Laurent MATHY - [90h Proj.]		B1	Q1	15	10	[+]	**5**
INFO0056-1	*Securing Networks* (english language) - Guy LEDUC - [12h Labo., 30h Proj.] (Even years)		B1	Q2	30	-	[+]	**5**
INFO0939-1	*High performance scientific computing* (english language) - Christophe GEUZAINE - [20h Proj.]		B1	Q1	30	15	[+]	**5**
INFO8002-1	*Topics in Distributed Systems* (english language) - Bernard BOIGELOT, Christophe DEBRUYNE, Pascal FONTAINE, Guy LEDUC, Laurent MATHY - [35h Proj.] (Odd years)		B1	Q2	30	-	[+]	**5**
INFO8012-1	*Digital Forensics* (english language) - Benoît DONNET,		B1	Q2	30	-	[+]	**5**

Laurent MATHY - [12h Labo., 30h Proj.] (Even years)

INFO8011-1	*Network infrastructures* (english language) - Benoît DONNET, Guy LEDUC, Laurent MATHY - [8h Labo., 30h Proj.]	B1	Q1	30	-	[+]	**5**
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**

Choose courses totalling 25 ECTS from the following : (B1 : 25Cr)

Computer Science foundation courses
The following courses (INFO8006-1, INFO0010-4) are prerequisite to some compulsory courses of the master program. They must be taken as a priority, unless they were already passed as part of another programme, or unless the corresponding knowledge and skills have been acquired previously.

INFO8006-1	*Introduction to artificial intelligence* (english language) - Gilles LOUPPE - [45h Proj.] *Notice* : Prerequisite of ELEN0062-1	B1	Q1	25	20	[+]	**5**
INFO0010-4	*Introduction to computer networking* (english language) - Guy LEDUC - [12h Labo., 40h Proj.] *Notice* : Prerequisite of PROJ0010-1	B1	Q1	32	2	[+]	**5**
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**