

Cycle view of the study programme

B1 Or Th Pr Au Cr

Compulsory courses (B1 : 8Cr, B2 : 18Cr)

MATH0483-2	<i>History of mathematics</i> - JeanPierre SCHNEIDERS - [20h Mon. WS]	B1	Q2	20	-	[+]	4
MATH0112-1	<i>Preparation for the final thesis</i> - COLLÉGIALITÉ	B1	Q2	-	-	-	4
SMEM0012-1	<i>Final thesis</i> - COLLÉGIALITÉ	B2	TA	-	-	-	18

Optional courses (B1 : 52Cr, B2 : 42Cr)

In agreement with the jury, chose courses that haven't already been taken for a total of 64 credits from the two lists below and, possibly, from the curriculum of the University of Liège or another institution: (B1 : 52Cr, B2 : 12Cr)

Mathematics

[...] Maximum 36 credits from the courses of Mathematics (B1)

[...] A maximum of 12 credits from among the courses not chosen from the 'Mathematics' list (B2)

Other disciplines

[...] Maximum 16 credits from courses of other disciplines (B1)

[...] A maximum of 12 credits from among the courses not chosen from the 'Other subjects' list (B2)

Other courses

[...] a maximum of 8 credits in the curriculum of the University of Liège or another institution (B1)

[...] A maximum of 12 credits in the curriculum of the University of Liège or another institution (B2)

Choose one focus from the following : (B2 : 1Nbr)

Research Focus (B2 : 30Cr)

MATH0466-1	<i>Seminars</i> - COLLÉGIALITÉ - [75h SEM]	B2	TA	-	-	[+]	12
SMEM0037-1	<i>Final thesis complement</i> - COLLÉGIALITÉ	B2	TA	-	-	-	8

Choose, in accordance with the Jury, 1 course among : (B2 : 1Nbr)

MATH0467-1	<i>Functional Analysis II</i> - Françoise BASTIN - [20h Mon. WS] Prerequisite : MATH0463-1 - Analyse fonctionnelle I	B2	Q2	30	10	[+]	10
MATH0468-1	<i>Algebraic Analysis</i> - JeanPierre SCHNEIDERS - [20h Mon. WS] Corequisite : MATH0465-1 - Topologie algébrique MATH0463-1 - Analyse fonctionnelle I MATH0220-2 - Fonctions de variables complexes	B2	Q2	30	10	[+]	10
MATH0061-1	<i>Complement of studies in the theory of measurement</i> - Samuel NICOLAY - [20h Mon. WS] Prerequisite : MATH0209-3 - Théorie de la mesure	B2	Q2	30	10	[+]	10
MATH0078-1	<i>Research problems in discrete mathematics</i> - Emilie CHARLIER, Julien LEROY, Michel RIGO - [20h Mon. WS]	B2	TA	30	10	[+]	10

Teaching focus (B2 : 30Cr)

AESS0246-1	<i>Analysis of scholastic institutions and key-players, educational policies</i> - Dominique LAFONTAINE - Suppl : MarieThérèse DELHOUNE	B2	Q1	15	-	-	1
AESS0248-1	<i>Elements of sociology of education</i> - JeanFrançois GUILLAUME	B2	Q2	10	-	-	1
AESS0140-1	<i>Professional ethics and training to neutrality and citizenship</i> - Anne HERLA	B2	Q2	25	-	-	2

AESS0202-1	<i>General didactics: course and exercises ; observation placements ; reflexive practices</i> - Annick FAGNANT - [10h Internship]	B2	TA	30	10	[+]	4
AESS0004-1	<i>Media education</i> - Jérémy HAMERS	B2	Q1	15	-	-	1
AESS0249-1	<i>Interdisciplinary seminar</i> - Annick FAGNANT	B2	Q1	15	-	-	1
AESS0143-1	<i>Educational Psychology of adolescents and young adults</i> - Annick FAGNANT	B2	Q1	15	-	-	2
AESS0339-1	<i>Understand and manage the diversity of public schools</i> - Ariane BAYE	B2	Q2	10	15	-	3
AESS1214-1	<i>Special didactics in mathematics : course and exercises (1st part)</i> - Pierre MATHONET, Michel RIGO	B2	TA	40	-	-	3
AESS1215-1	<i>Special didactics in mathematics : placements (1st part)</i> - <i>Observation placements</i> - Pierre MATHONET, Michel RIGO - [10h Internship] - <i>Teaching placements</i> - Pierre MATHONET, Michel RIGO - [20h Internship] - <i>Reflexive practical work</i> - Pierre MATHONET, Michel RIGO	B2	TA			[+] [+] -	3
AESS2214-1	<i>Special didactics in mathematics : course and exercises (2nd part)</i> - Pierre MATHONET, Michel RIGO	B2	TA	35	-	-	4
AESS2215-1	<i>Special didactics in mathematics : placements (2nd part)</i> - <i>Teaching placements</i> - Pierre MATHONET, Michel RIGO - [20h Internship] - <i>Reflexive practical work</i> - Pierre MATHONET, Michel RIGO - <i>Extra-scholar teaching activities</i> - Pierre MATHONET, Michel RIGO	B2	TA			[+] - 5 - - 10 -	5

Professional focus in finance and management (B2 : 30Cr)

In agreement with the Jury, choose six courses not already followed, among : (B2 : 6Nbr)

GEST0832-4	<i>Financial Markets</i> - Danielle SOUGNÉ	B2	Q2	40	15	-	5
FINA0053-1	<i>Investments and Portfolio Management</i> (english language) - Georges HÜBNER Prerequisite : GEST0832-4 - Marchés financiers	B2	Q2	30	-	-	5
MQGE0001-6	<i>Operations Research</i> (english language) - Yves CRAMA	B2	Q1	45	-	-	5
LOGI0010-1	<i>Supply Chain Management</i> (english language) - Yasemin ARDA Corequisite : MQGE0001-6 - Operations Research	B2	Q2	45	-	-	5
MQGE0002-3	<i>Computational Optimization</i> (english language) - Yves CRAMA Corequisite : MQGE0001-6 - Operations Research	B2	Q2	30	-	-	5
MQGE0007-1	<i>Financial Mathematics and Stochastic Calculus</i> (english language) - Louis ESCH Prerequisite : GEST0832-4 - Marchés financiers	B2	Q2	30	-	-	5
LOGI0012-1	<i>Logistics and Transportation</i> (english language) - Sabine LIMBOURG	B2	Q2	30	-	-	5
LOGI0013-1	<i>Operation Planning</i> (english language) - Yasemin ARDA Prerequisite : LOGI0010-1 - Supply Chain Management	B2	Q2	30	-	-	5
FINA0052-1	<i>Financial Derivatives</i> (english language) - Julien HAMBUECKERS Prerequisite :	B2	Q2	30	-	-	5

	GEST0832-4 - Marchés financiers								
FINA0064-1	<i>Financial Risk Modeling</i> (english language) - Fabien BONIVER, Marie LAMBERT	B2	Q1	30	-	-	-	-	5
	Corequisite : FINA0053-1 - Investments and Portfolio Management MQGE0007-1 - Financial Mathematics and Stochastic Calculus								
FINA0051-1	<i>Banking and Insurance</i> (english language) - Fabien BONIVER, Georges HÜBNER	B2	Q2	30	-	-	-	-	5
	Prerequisite : GEST0832-4 - Marchés financiers								

Professional focus in computer (B2 : 30Cr)

INFO0009-2	<i>Database (general organisation)</i> - Pierre WOLPER - Suppl : Samuel HIARD - [25h Proj.]	B2	Q2	26	26	[+]			6
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In agreement with the jury, chose four courses that haven't already been chosen from among: (B2 : 4Nbr)

Notice : The three courses below must be followed first.

INFO0902-1	<i>Data structures and algorithms</i> - Pierre GEURTS - [40h Proj.]	B2	Q2	26	20	[+]			6
INFO0054-1	<i>Functional programming</i> - Pascal GRIBOMONT - [15h Proj.]	B2	Q2	28	24	[+]			6
INFO0062-1	<i>Object-oriented programming</i> (english language) - Bernard BOIGELOT - [20h Proj.]	B2	Q2	25	20	[+]			6

In agreement with the jury, if courses INFO0902-1, INFO0054-1 and/or INFO0062-1 have already been taken, choose one to four courses from the list below:

ELEN0040-1	<i>Digital Electronics</i> - JeanMichel REDOUTÉ	B2	Q2	26	26	-			6
INFO0085-1	<i>Compilers</i> (english language) - - Suppl : Julien BRUSTEN - [75h Proj.]	B2	Q2	25	-	[+]			6
INFO0027-2	<i>Programming techniques</i> (english language) - Laurent MATHY - [70h Proj.]	B2	Q2	24	24	[+]			6
MATH0462-1	<i>Discrete optimization</i> (english language) - Quentin LOUVEAUX - [25h Proj.]	B2	Q1	30	20	[+]			6
SYST0002-2	<i>Introduction to signals and systems</i> - Guillaume DRION - [15h Proj.]	B2	Q1	26	26	[+]			6
INFO0049-1	<i>Knowledge representation</i> (english language) - Pascal GRIBOMONT - [50h Proj.]	B2	Q2	28	24	[+]			6

[...] or, for a maximum of six credits, in the course programme of the University of Liège:

Professional focus in Statistics (B2 : 30Cr)

STAT0727-2	<i>Non-parametric statistics</i> - Gentiane HAESBROECK - [20h Mon. WS] (Even years)	B2	Q1	30	10	[+]			8
MATH0079-1	<i>Stochastic process</i> - Céline ESSER, Yvik SWAN - [20h Proj.] (Even years)	B2	Q1	20	10	[+]			6
ELEN0062-1	<i>Introduction to machine learning</i> (english language) - Pierre GEURTS, Louis WEHENKEL - [40h Proj.]	B2	Q1	30	5	[+]			8

In agreement with the Jury, choose two courses not already followed, among : (B2 : 2Nbr)

STAT0080-1	<i>Statistics and probability seminars</i> - Gentiane HAESBROECK, Yvik SWAN	B2	TA	-	-	-			4
STAT0081-1	<i>Final thesis complement in statistics</i> - COLLÉGIALITÉ	B2	TA	-	-	-			4
STAT0078-1	<i>Practice of statistical consultancy</i> - Catherine TIMMERMANS - [20h Mon. WS] (Odd years)	B2	Q1	20	-	[+]			4
	Corequisite :								

Study programmes 2018-2019

Faculty of Sciences

Master in mathematics (120 ECTS)

STAT0201-3 - Statistique multivariée

STAT0079-1 *SAS certification* (english language) - Michael SCHYNS - [25h Mon. WS] B2 Q2 15 - [+] 4

Mathematics

Courses taught during even years

STAT0725-2 *Bayesian statistics* - Philippe LAMBERT - [20h Mon. WS] (Even years) - Q2 30 10 [+] 8

STAT0723-2 *Linear models* - Catherine TIMMERMANS - [20h Mon. WS] (Even years) - Q2 30 10 [+] 8

INFO0213-2 *Automata and formal languages* - Julien LEROY (Even years) - Q1 30 20 - 8

MATH0075-1 *Discrete mathematics* - Emilie CHARLIER, Michel RIGO (Even years) - Q2 30 20 - 8

MATH0076-1 *Discrete mathematics project* - Emilie CHARLIER, Julien LEROY, Michel RIGO (Even years) - TA - - - 4

Corequisite :
INFO0213-2 - Automates et langages formels
MATH0075-1 - Mathématiques discrètes

MATH0465-1 *Algebraic Topology* - JeanPierre SCHNEIDERS - [20h Mon. WS] (Even years) - Q1 30 10 [+] 8

MATH0463-1 *Functional Analysis I* - JeanPierre SCHNEIDERS - [20h Mon. WS] (Even years) - Q2 30 10 [+] 8

MATH0250-1 *Galois theory* - Emilie CHARLIER (Even years) - Q2 20 20 - 4

Courses taught during odd years

STAT0201-3 *Multivariate statistics* - Gentiane HAESBROECK - [20h Mon. WS] (Odd years) - Q1 30 10 [+] 8

MATH2022-2 *Large sample analysis : theory and practice, General course* (english language) - N..., Yvik SWAN - [10h Proj.] (Odd years) - Q2 24 12 [+] 8

STAT0078-1 *Practice of statistical consultancy* - Catherine TIMMERMANS - [20h Mon. WS] (Odd years) - Q1 20 - [+] 4

Corequisite :
STAT0201-3 - Statistique multivariée

INFO0212-2 *Algorithmics and computability* - Emilie CHARLIER (Odd years) - Q1 30 20 - 8

MATH0470-1 *Combinatorics on words* (english language) (Odd years) - Q2 30 20 - 8

MATH0077-1 *Project on combinations* (Odd years) - TA - - - 4

Corequisite :
INFO0212-2 - Algorithmique et calculabilité
MATH0470-1 - Combinatorics on words

MATH0489-1 *Lie algebra* - Pierre MATHONET - [20h Mon. WS] (Odd years) - Q2 30 10 [+] 8

MATH0209-3 *Measure Theory* - Samuel NICOLAY - [20h Mon. WS] (Odd years) - Q1 30 10 [+] 8

Courses organized each year

MATH0464-1 *Differential geometry II* - Pierre LECOMTE - [20h Mon. WS] - Q1 30 10 [+] 8

MATH0074-1 *Theory of distributions* - Françoise BASTIN - Q2 25 15 - 4

MATH0017-3 *Mathematical Logic and Set Theory* - Georges HANSOUL, Julien LEROY - [20h Mon. WS] - Q1 30 10 [+] 8

STAT0079-1 *SAS certification* (english language) - Michael SCHYNS - [25h Mon. WS] - Q2 15 - [+] 4

MATH0220-2 *Functions of complex variables* - JeanPierre SCHNEIDERS - [20h Mon. WS] - Q1 30 10 [+] 8

Corequisite :
MATH0074-1 - Théorie des distributions

Study programmes 2018-2019

Faculty of Sciences

Master in mathematics (120 ECTS)

Other disciplines

INFO0902-1	<i>Data structures and algorithms</i> - Pierre GEURTS - [40h Proj.]	-	Q2	26	20	[+]	6
INFO0054-1	<i>Functional programming</i> - Pascal GRIBOMONT - [15h Proj.]	-	Q2	28	24	[+]	6
ASTR0204-2	<i>Astrophysics and geophysics</i> - MarcAntoine DUPRET	-	Q1	30	30	-	8
PHYS3033-1	<i>Quantum physics I</i> - Thierry BASTIN	-	Q1	35	25	-	8
PHYS0212-2	<i>Statistical physics</i> - Nicolas VANDEWALLE	-	Q2	30	30	-	8
SPAT0012-1	<i>General relativity, Part 1: Introduction</i> - Yves DE ROP	-	Q1	20	-	-	2
SPAT0012-2	<i>General relativity, Part 2: Mathematics methods</i> - Yves DE ROP	-	Q1	20	-	-	3
	Corequisite : SPAT0012-1 - Relativité générale						
SPAT0012-3	<i>General relativity, Part 3: supplement</i> - Yves DE ROP	-	Q2	20	-	-	3
	Corequisite : SPAT0012-2 - Relativité générale						
SPAT0044-1	<i>Stellar structure and evolution I</i> (english language) - MarcAntoine DUPRET	-	Q1	20	20	-	4
SPAT0045-1	<i>Stellar structure and evolution II</i> (english language) - MarcAntoine DUPRET	-	Q2	20	20	-	4
MECA0203-3	<i>Continuum Mechanics</i> - Pierre DAUBY - [20h Mon. WS]	-	Q1	30	10	[+]	8
PHYS3034-1	<i>Quantum physics II</i> - Thierry BASTIN	-	Q2	20	10	-	4
PHYS0205-2	<i>Complement of physical statistics</i> - Nicolas VANDEWALLE - [20h Mon. WS]	-	Q2	30	10	[+]	8
LANG0082-1	<i>English 3</i> (english language) - Clara BRERETON, Véronique DOPPAGNE, Ellen HARRY, ISLV	-	Q1	45	-	-	4

Additional ECTS (max 60) Master in mathematics (120 ECTS)

Optional courses (B0 : 60Cr)

The update course, worth a maximum of 60 credits, will be determined based on students' prior training. (B0 : 60Cr)

[...] At most 60 credits of courses from "Bachelier en sciences mathématiques"