

Cycle view of the study programme

		B1	Or	Th	Pr	Au	Cr
Compulsory courses (B1 : 45Cr, B2 : 30Cr)							
BIOC0210-5	<i>Functional properties of biological macromolecules</i> - André MATAGNE - [10h Mon. WS]	B1	Q1	20	-	[+]	3
BIOC0720-2	<i>Structure of biological macromolecules</i> - Paulette CHARLIER - [5h Mon. WS]	B1	Q1	15	-	[+]	2
BIOC0721-1	<i>Optical properties of biological macromolecules</i> - Christian DAMBLON, André MATAGNE	B1	Q1	15	-	-	2
BIOC0709-4	<i>Bioenergetics</i> - Pierre CARDOL, Fabrice FRANCK	B1	Q1	20	-	-	2
GENE0001-4	<i>Genetic engineering</i> - Jacques DOMMES	B1	Q1	20	-	-	2
BIOL0008-1	<i>Bioinformatics</i> - Denis BAURAIN	B1	Q1	25	-	-	3
BIOL0009-1	<i>Molecular and cellular animal physiology</i> - Marc THIRY	B1	Q1	15	-	-	2
BIOL0010-1	<i>Molecular and cellular plant physiology</i> - Patrick MOTTE	B1	Q1	15	-	-	2
GENE0003-1	<i>Genomics</i> - Marc HANIKENNE	B1	Q2	20	-	-	2
BIOC0003-2	<i>Biochemistry and physiology of the micro-organisms</i> - Bernard JORIS	B1	Q1	20	-	-	2
BIOL0021-1	<i>Biology of the systems</i> - Patrick MEYER - [10h Mon. WS]	B1	Q2	10	-	[+]	2
AESS0320-1	<i>Initiation to biology didactics</i> - MarieNoëlle HINDRYCKX	B1	Q2	20	20	-	2
SSTG0009-1	<i>Placement or practical integrated work (including seminars)</i> - Denis BAURAIN, COLLÉGIALITÉ - [9w Internship]	B1	TA	-	-	[+]	19
BIOL0029-1	<i>Practical genomics (english language)</i> - Denis BAURAIN, Marc HANIKENNE - [30h Mon. WS]	B2	Q2	10	-	[+]	4
BIOL0030-1	<i>Modeling dynamical biological systems (english language)</i> - Marilaure GRÉGOIRE, Patrick MEYER - [15h Mon. WS]	B2	Q2	15	-	[+]	3
BIOC0717-2	<i>Applied Bioinformatics</i> - Bernard JORIS	B2	Q1	20	-	-	2
BIOC9239-1	<i>Visualization and modeling of proteins</i> - Paulette CHARLIER, Frédéric KERFF	B2	Q1	25	25	-	4
STAT0750-1	<i>Multivariate statistical analysis (software R)</i> - Gentiane HAESBROECK	B2	Q1	10	10	-	2
SMEM0023-1	<i>Final thesis</i> - COLLÉGIALITÉ	B2	TA	-	-	-	15

Optional courses (B1 : 15Cr, B2 : 30Cr)

Choose, in accordance with the Jury, 1 option among : (B1 : 15Cr)

Biochemistry (B1 : 15Cr)

BIOC0722-1	<i>Application of spectroscopic techniques to the study of folding and stability of proteins</i> - André MATAGNE - [10h Mon. WS]	B1	Q2	20	-	[+]	3
CHIM0687-1	<i>Introduction to protein NMR</i> - Christian DAMBLON - [10h Mon. WS]	B1	Q2	10	-	[+]	3
GENE0432-4	<i>Genetic and biochemical aspects of evolution, Part A</i> - Moreno GALLEN, Claire REMACLE	B1	Q2	30	-	-	3
BIOC0723-1	<i>Complement of bioenergetics</i> - Pierre CARDOL, Fabrice FRANCK	B1	Q2	25	-	-	3
CHIM0688-1	<i>Mass spectrometry</i> - Gauthier EPPE, JeanFrançois FOCANT, Loïc QUINTON - [10h Mon. WS]	B1	Q2	15	-	[+]	3

Genetics (B1 : 15Cr)

GENE0444-1	<i>Genetic engineering of pluricellular eukaryotes</i> - Jacques DOMMES	B1	Q2	15	-	-	3
GENE0445-1	<i>Quantitative genetics</i> - Franck DEQUIEDT - [15h Mon. WS]	B1	Q2	15	-	[+]	3
GENE0441-2	<i>Organelle genetics, Part A</i> - Claire REMACLE	B1	Q2	15	-	-	2
GENE0432-5	<i>Genetic and biochemical aspects of evolution</i>	B1	Q2				5

	- Part A - Moreno GALLEN, Claire REMACLE	30	-	-		
	- Part B - Moreno GALLEN, Claire REMACLE	15	-	-		
BIOC0710-3	<i>Metabolic pathways</i> - Fabrice FRANCK	B1	Q2	15	-	2

Physiology and developmental biology (B1 : 15Cr)

BIOL0011-1	<i>Biology of animal development</i> - Bernard PEERS	B1	Q2	25	-	3
BIOL0012-1	<i>Biology of plant development</i> - Claire PÉRILLEUX	B1	Q2	25	-	3
BIOL0013-1	<i>Development of microorganisms</i> - Sébastien RIGALI	B1	Q2	15	-	2
BIOL0014-1	<i>Dynamic molecular imaging</i> - Patrick MOTTE	B1	Q2	20	-	2
BIOL0015-1	<i>Complement of molecular and cellular animal physiology</i> - Marc MULLER	B1	Q2	20	-	3
BIOC0710-3	<i>Metabolic pathways</i> - Fabrice FRANCK	B1	Q2	15	-	2

Microbiology and Immunology (B1 : 15Cr)

MICR0002-1	<i>Immunology and vaccinology</i> - Catherine SADZOT	B1	Q2	25	-	3
MICR0003-1	<i>Complement of microbiology : virology</i> - Catherine SADZOT	B1	Q2	15	-	2
MICR0004-1	<i>Complement of microbiology : bacterial pathogenicity</i> - Bernard JORIS	B1	Q2	15	-	2
MICR0005-1	<i>Complement of microbiology : Prostistology</i> - Denis BAURAIN	B1	Q2	15	-	2
BIOL0013-1	<i>Development of microorganisms</i> - Sébastien RIGALI	B1	Q2	15	-	2
MICR1713-1	<i>Extremophile microorganisms</i> - Georges FELLER, Moreno GALLEN, Annick WILMOTTE	B1	Q2	15	-	2
CHIM0059-6	<i>Industrial Microbiology</i> - Patrick FICKERS	B1	Q2	20	-	2

Single focus (B2 : 30Cr)

Research Focus (B2 : 30Cr)

INFO0953-1	<i>Scripting interfaces for biological software and databases (english language)</i> - Denis BAURAIN, Pierre TOCQUIN - [50h Mon. WS]	B2	Q1	20	-	[+] 8
INFO0954-1	<i>Advanced biological data analysis (english language)</i> - Patrick MEYER - [30h Mon. WS]	B2	Q1	10	-	[+] 5
INFO0009-2	<i>Database (general organisation)</i> - Pierre WOLPER - Suppl : Samuel HIARD - [25h Proj.]	B2	Q2	26	26	[+] 5
INFO0902-1	<i>Data structures and algorithms</i> - Pierre GEURTS - [40h Proj.]	B2	Q2	26	20	[+] 5
INFO0955-1	<i>Bioinformatics applications : Case studies in veterinary and agronomical sciences (english language)</i> - Tom DRUET, Frédéric FARNIR, Sébastien MASSART - [50h Mon. WS]	B2	Q2	20	-	[+] 7

Refresher course within the framework of the adjusted programme for students benefiting from direct access in Block 2

BIOL0008-1	<i>Bioinformatics</i> - Denis BAURAIN	B2	Q1	25	-	3
GENE0003-1	<i>Genomics</i> - Marc HANIKENNE	B2	Q2	20	-	2
BIOL0021-1	<i>Biology of the systems</i> - Patrick MEYER - [10h Mon. WS]	B2	Q2	10	-	[+] 2
INFO0956-1	<i>Introduction to biological data analysis (english language)</i> - Patrick MEYER - [20h Mon. WS]	B2	Q1	5	-	[+] 2
LANG6012-1	<i>Français : expression orale</i> - N...	B2	-	-	-	6

Additional ECTS (0-60 max) Master in bio-informatics and modelling (120 ECTS)

With the agreement of the jury and depending on their previous studies, students will follow:

- Either the Bloc 0 programme in the Masters in Biochemistry and Molecular and Cell Biology
- Or a programme worth a maximum of 60 credits, with classes chosen from the Bachelors in Biological Sciences.

Optional courses (B0 : 60Cr)

Choose courses totalling 60 ECTS amongst : (B0 : 60Cr)

STAT0076-1	<i>General statistics, Part A</i> - Catherine TIMMERMANS - Suppl : Stéphanie AERTS	B0	Q1	30	20	-	4
STAT0077-1	<i>Computing analysis and processing of biological data</i> - Patrick MEYER	B0	Q2	25	-	-	2
MICR1715-2	<i>Microbiology</i> - Part 1 : <i>Phycology and mycology</i> - Denis BAURAIN - Part 2 : <i>Bacteriology</i> - Bernard JORIS	B0	Q1	20	10	-	5
MICR1716-1	<i>Virology</i> - Catherine SADZOT	B0	Q2	20	10	-	2
BIOL0216-1	<i>Animal physiology</i> - JeanChristophe PLUMIER, Marc THIRY	B0	Q1	60	30	-	6
BIOL0217-1	<i>Vegetal physiology</i> - Claire PÉRILLEUX	B0	Q2	35	20	-	4
IMMU0521-1	<i>Immunology</i> - Catherine SADZOT	B0	Q2	25	10	-	3
BIOL0003-1	<i>Biology of pluricellular organisms</i> - <i>Animal</i> - MarieFrance VERSALI - <i>Plant Biology</i> - Claire PÉRILLEUX	B0	Q1	15	15	-	5
GENE9002-1	<i>Molecular biology of gene I</i> - Franck DEQUIEDT	B0	Q1	30	-	-	3
GENE9003-1	<i>Molecular biology of gene II</i> - Franck DEQUIEDT	B0	Q2	30	30	-	4
BIOC9242-2	<i>Biological macromolecules chemistry</i> - Part A - Moreno GALLEN, Loïc QUINTON - Part B - <i>Thermodynamics of biological systems</i> - Moreno GALLEN, Loïc QUINTON	B0	Q1	40	-	-	4
BIOC9243-1	<i>Introduction to Enzymology</i> - Moreno GALLEN, André MATAGNE	B0	Q2	20	40	-	5
BIOL0024-1	<i>Molecular physiology of the cell</i> - Patrick MOTTE	B0	Q2	15	15	-	2
STRA0038-1	<i>Seminars</i> - Moreno GALLEN - [4h Vis. Ind. Pl.]	B0	Q1	5	-	[+]	1
STRA0044-1	<i>Training in scientific communication</i> - Jacques DOMMES, Patrick MOTTE - [40h Internship]	B0	Q2	-	-	[+]	2
PHIL1106-1	<i>Philosophy and bioethics</i> - Part : <i>Philosophy</i> - Julien PIERON - Part : <i>Bioethics</i> - Florence CAEYMAEX, Jacques DOMMES, Vincent GEENEN	B0	Q2	15	-	-	2
LANG4006-1	<i>English 2 (english language)</i> - Véronique DOPPAGNE, Ellen HARRY	B0	TA	65	-	-	6

[...] Courses in the Bachelor in Biological Sciences.