

Cycle view of the study programme

		B1	Or	Th	Pr	Au	Cr
Compulsory courses (B1 : 38Cr, B2 : 30Cr)							
BIOC0709-4	<i>Bioenergetics</i> - Pierre CARDOL	B1	Q1	20	-	-	3
BIOC0210-5	<i>Enzymology</i> - André MATAGNE - [10h Mon. WS]	B1	Q1	20	-	[+]	3
BIOC0720-1	<i>Structural biology</i> - Christian DAMBLON, Frédéric KERFF - [15h Mon. WS]	B1	Q1	25	-	[+]	4
BIOC0721-1	<i>Optical spectroscopy for biochemistry</i> - Christian DAMBLON, André MATAGNE	B1	Q1	15	-	-	2
GENE0001-4	<i>Genetic engineering</i> - Frédéric BOUCHÉ, Alain BRANS, Franck DEQUIEDT, Mireille DUMOULIN, Yvette HABRAKEN, Sylvie LEGRAND, Isabelle MANFROID, H. PENDEVILLE SAMAIN, Mohammed TERRAK, Marianne VOZ	B1	Q1	20	-	-	3
GENE0432-4	<i>Genetic and biochemical evolution</i> - Moreno GALLEN, Claire REMACLE	B1	Q1	30	-	-	3
GENE0003-1	<i>Genomics</i> - Marc HANIKENNE	B1	Q2	20	-	-	3
BIOL0008-1	<i>Bioinformatics</i> - Denis BAURAIN - [5h Mon. WS]	B1	Q1	20	-	[+]	3
BIOL0021-1	<i>Biology of the systems</i> - Patrick MEYER - [10h Mon. WS]	B1	Q1	10	-	[+]	2
SSTG0009-1	<i>Placement or practical integrated work (including seminars)</i> - Denis BAURAIN, Franck DEQUIEDT, Moreno GALLEN, Marc HANIKENNE, André MATAGNE, Patrick MEYER, Johan MICHAUX, Patrick MOTTE, Claire PÉRILLEUX, Claire REMACLE, Catherine SADZOT, Marc THIRY - [8w Internship]	B1	TA	-	-	[+]	12
BIOL0030-1	<i>Modeling dynamical biological systems (english language)</i> - Marilaure GRÉGOIRE, Patrick MEYER - [15h Mon. WS]	B2	Q2	15	-	[+]	3
BIOC9239-1	<i>Structural bioinformatics (english language)</i> - Frédéric KERFF	B2	Q2	25	25	-	3
SMEM0023-1	<i>Final thesis</i> - COLLÉGIALITÉ	B2	TA	-	-	-	24

Optional courses (B1 : 22Cr, B2 : 30Cr)

Choose, in accordance with the Jury, 1 option among : (B1 : 22Cr)

Biochemistry (B1 : 15Cr)

Notice : Only accessible to students who have chosen this subject before the academic year 2019-2020.

Genetics (B1 : 15Cr)

Notice : Only accessible to students who have chosen this subject before the academic year 2019-2020.

Physiology and developmental biology (B1 : 15Cr)

Notice : Only accessible to students who have chosen this subject before the academic year 2019-2020.

Microbiology and Immunology (B1 : 15Cr)

Notice : Only accessible to students who have chosen this subject before the academic year 2019-2020.

Biochemistry and microbiology (B1 : 22Cr)

Notice : Only accessible to students who have chosen this subject before the academic year 2021-2022.

BIOC0723-1	<i>Applied bioenergetics</i> - Pierre CARDOL	B1	Q2	15	-	-	2
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
CHIM0688-1	<i>Biological mass spectrometry</i> - Loïc QUINTON - [5h Mon. WS]	B1	Q2	15	-	[+]	2
BIOC0003-2	<i>Biochemistry and physiology of the micro-organisms</i>	B1	Q2	15	-	-	2

BIOL0013-1	<i>Development of microorganisms</i> - Sébastien RIGALI - [5h Mon. WS]	B1	Q2	15	-	[+]	2
MICR1713-1	<i>Extremophile microorganisms</i> - Georges FELLER, Moreno GALLEN, Annick WILMOTTE - [5h Mon. WS]	B1	Q2	10	-	[+]	2
MICR0004-1	<i>Bacterial pathogenesis</i>	B1	Q2	15	-	-	2
MICR0005-1	<i>Protistology</i> - Denis BAURAIN	B1	Q2	15	-	-	2
MICR0006-1	<i>Virology, immunology and vaccinology</i> - Catherine SADZOT	B1	Q2	25	-	-	3
CHIM0059-6	<i>Industrial Microbiology</i> - Patrick FICKERS	B1	Q2	20	-	-	2

Genetics, physiology and developmental biology (B1 : 22Cr)

Notice : Only accessible to students who have chosen this subject before the academic year 2021-2022.

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
BIOL0009-1	<i>Molecular and cellular physiology and animal signaling pathways</i> - Marc MULLER, Ingrid STRUMAN, Marc THIRY	B1	Q2	25	-	-	3
BIOL0010-1	<i>Molecular and cellular physiology and plant signaling pathways</i> - Patrick MOTTE	B1	Q2	20	-	-	3
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
BIOL0032-1	<i>Evolutionary developmental biology</i> - Bernard PEERS, Claire PÉRILLEUX	B1	Q2	15	-	-	2
BIOL0014-1	<i>Dynamic molecular imaging</i> - Patrick MOTTE	B1	Q2	20	-	-	3

BIM - specific option (B1 : 22Cr)

INFO0956-1	<i>Introduction to biological data analysis (english language)</i> - Marilaure GRÉGOIRE, Patrick MEYER - [20h Mon. WS]	B1	Q1	5	-	[+]	3
INFO0009-2	<i>Database (general organisation)</i> - Christophe DEBRUYNE - [25h Proj.]	B1	Q2	26	26	[+]	5
INFO0960-1	<i>Command-line interfaces and tools for biologists (english language)</i> - Pierre TOCQUIN	B1	Q1	10	10	-	2
BIOL0022-2	<i>Introduction to intellectual property</i> - Jérémie FAYS, Fabienne PIRON - [10h Mon. WS]	B1	Q2	10	-	[+]	2
BIOL0014-1	<i>Dynamic molecular imaging</i> - Patrick MOTTE	B1	Q2	20	-	-	3
INFO0961-1	<i>Introduction to bioinformatics and image analysis</i> - Patrick MEYER - [12h Proj.]	B1	Q2	12	16	[+]	4
INFO0959-1	<i>Bioinformatics applications: Technological survey (english language)</i> - Denis BAURAIN, Marc HANIKENNE, Patrick MEYER, Pierre TOCQUIN - [40h Proj.]	B1	Q2	-	-	[+]	3

Single focus (B2 : 30Cr)

Research Focus (B2 : 30Cr)

BIOL0029-1	<i>Practical genomics (english language)</i> - Denis BAURAIN, Marc HANIKENNE - [30h Mon. WS]	B2	Q1	10	-	[+]	4
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
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 sciences, agronomical sciences and systems medicine (english language)</i> - Tom DRUET, Frédéric FARNIR, Sébastien MASSART, Kristel VAN STEEN - [50h Mon. WS]	B2	Q2	20	-	[+]	8
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Optional free course (B1 : 2Cr)

AESS0320-1	<i>Initiation to biology didactics</i> - MarieNoëlle HINDRYCKX	B1	TA	20	20	-	2
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Refresher course within the framework of the adjusted programme for students benefiting from direct access in Block 2

With the jury's agreement, the student may follow, if necessary, revision courses for a maximum of 13 credits selected from the courses below, depending on their prior education.

BIOL0008-1	<i>Bioinformatics</i> - Denis BAURAIN - [5h Mon. WS]	B2	Q1	20	-	[+]	3
GENE0003-1	<i>Genomics</i> - Marc HANIKENNE	B2	Q2	20	-	-	3
BIOL0021-1	<i>Biology of the systems</i> - Patrick MEYER - [10h Mon. WS]	B2	Q1	10	-	[+]	2
INFO0956-1	<i>Introduction to biological data analysis (english language)</i> - Marilaure GRÉGOIRE, Patrick MEYER - [20h Mon. WS]	B2	Q1	5	-	[+]	3
INFO0960-1	<i>Command-line interfaces and tools for biologists (english language)</i> - Pierre TOCQUIN	B2	Q1	10	10	-	2

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)

STAT0750-1	<i>Multivariate statistical analysis (software R)</i> - Arnout VAN MESSEM	B0	Q2	10	10	-	3
STAT0077-1	<i>Computing analysis and processing of biological data</i> - Patrick MEYER	B0	Q1	25	-	-	2
MICR0720-1	<i>Phycology and mycology</i> - Denis BAURAIN	B0	Q1	20	10	-	3
MICR0721-1	<i>Bacteriology</i>	B0	Q1	20	10	-	3
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	-	7
BIOL0217-1	<i>Vegetal physiology</i> - <i>Theory</i> - Claire PÉRILLEUX - <i>Practice</i> - Claire PÉRILLEUX	B0	Q2	35	-	-	5
IMMU0521-1	<i>Immunology</i> - Catherine SADZOT	B0	Q2	25	10	-	3
BIOL0003-1	<i>Biology of pluricellular organisms</i> - <i>Animal</i> - Loïc MICHEL - <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> - <i>Part A</i> - Moreno GALLEN, Loïc QUINTON - <i>Part B - Thermodynamics of biological systems</i> -	B0	Q1	40	-	-	4
				10	-	-	

ALLEN							
BIOC9243-1	<i>Equilibria in biochemistry and enzyme kinetics</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
STRA0044-1	<i>Training in scientific communication</i> - Moreno GALLEN, Patrick MOTTE, Marianne VOZ - [40h Internship]	B0	Q2	-	-	[+]	3
PHIL1227-1	<i>Philosophy and bioethics</i> - <i>Éléments de philosophie des sciences</i> - Julien PIERON - <i>Bioéthique</i> - Florence CAEYMAEX, Patrick DU JARDIN	B0	Q2				2
				15	-	-	
				15	-	-	
LANG0077-8	<i>English 2 (english language)</i> - Clara BRERETON, Véronique DOPPAGNE, Ellen HARRY	B0	TA	45	-	-	4

[...] Courses from the Bachelor in Biology.