

Cycle view of the study programme

		B1	Or	Th	Pr	Au	Cr
Focus compulsory courses (B2 : 30Cr)							
BIOL0033-1	<i>From the laboratory to the private sector</i> - Jérémie FAYS, Philippe HUBERT, Fabienne PIRON, Catherine SADZOT, Benoît VAN DRIESSCHE, Joëlle WIDART - [20h AUTR]	B2	Q1	20	-	[+]	2
BIOL0034-1	<i>Scientific writing</i> - Marjorie BARDIAU, Frédéric BOUCHÉ, Pierre CARDOL, Pierre TOCQUIN - [20h AUTR]	B2	Q1	16	-	[+]	2
BIOL0029-1	<i>Practical genomics</i> (english language) - Denis BAURAIN, Marc HANIKENNE - [30h Mon. WS]	B2	Q1	10	-	[+]	4
INFO0962-1	<i>Scripting interface for biological software</i> (english language) - Denis BAURAIN - [40h Mon. WS]	B2	Q1	10	-	[+]	6
INFO0963-1	<i>Design and use of biological databases</i> (english language) - Pierre TOCQUIN - [20h Mon. WS]	B2	Q1	10	-	[+]	3
INFO0954-1	<i>Advanced biological data analysis</i> (english language) - Patrick MEYER - [30h Mon. WS]	B2	Q1	10	-	[+]	5
INFO0955-1	<i>Bioinformatics applications: Case studies in veterinary sciences, agronomical sciences and systems medicine</i> (english language) - Tom DRUET, Frédéric FARNIR, Sébastien MASSART, Kristel VAN STEEN - [50h Mon. WS]	B2	Q2	20	-	[+]	8

Programme selection (B1 : 60Cr, B2 : 30Cr)

In agreement with the Jury, choose one of the two programmes according to the student's background: (B1 : 60Cr, B2 : 30Cr)

Reformed programme (B1 : 60Cr, B2 : 30Cr)

Only accessible to students starting their Masters programme in 2023-2024 or who have just gained the credits from Block 0.

BIOC0726-1	<i>Toolbox: nucleic acid analysis techniques</i> - Denis BAURAIN, Franck DEQUIEDT, Marc HANIKENNE, Patrick MEYER - [4h AUTR]	B1	Q1	24	12	[+]	3
BIOC0727-1	<i>Toolbox: imaging and experimental models</i> - Frédéric BOUCHÉ, Grégory FETTWEIS, Patrick MOTTE, N..., Sandra ORMENESE, Loïc QUINTON, Damien SLUYSMANS, Nicolas THELEN, Marc THIRY, Pierre TOCQUIN, Marianne VOZ - [14h AUTR]	B1	Q1	22	4	[+]	3
BIOC0728-1	<i>Toolbox: protein analysis techniques</i> - Christian DAMBLON, Franck DEQUIEDT, Mireille DUMOULIN, André MATAGNE, N..., Damien SLUYSMANS, Marylène VANDEVENNE - [20h AUTR]	B1	Q1	20	-	[+]	3
BIOC0729-1	<i>Adaptation, evolution and diversity</i> - Denis BAURAIN, Franck DEQUIEDT, Tom DRUET, Moreno GALLEN, Marc HANIKENNE, Alice MOUTON, N..., Claire REMACLE, Catherine SADZOT, Annick WILMOTTE - [30h AUTR]	B1	Q1	40	6	[+]	5
BIOC0730-1	<i>Development, from the cell to the organism</i> - Lydie FLASSE, Patrick MOTTE, Bernard PEERS, Claire PÉRILLEUX, Sébastien RIGALI, Ingrid STRUMAN, Mohammed TERRAK, Marc THIRY, Pierre TOCQUIN - [16h AUTR]	B1	Q1	68	18	[+]	7
BIOC0731-1	<i>Responses to the environment</i> - Frédéric BOUCHÉ, Franck DEQUIEDT, Marc HANIKENNE, N..., Claire PÉRILLEUX, Sébastien RIGALI - [20h AUTR]	B1	Q1	40	20	[+]	5
BIOC0732-1	<i>Interaction between organisms</i> - Denis BAURAIN, François BEAUFAY, Pierre CARDOL, Marielle LEBRUN, Nicolas MAGAIN, Sébastien MASSART, N..., Sébastien RIGALI, Catherine SADZOT - [16h AUTR]	B1	Q1	36	16	[+]	5
BIOC0733-1	<i>Toolbox: structural biology</i> - Christian DAMBLON, Frédéric KERFF, Loïc QUINTON, Arnaud VANDEN BROECK - [5h AUTR]	B1	Q2	20	15	[+]	3

BIOC0734-1	<i>Metabolism</i> - Pierre CARDOL, Christian DAMBLON, Stéphanie HERKENNE, Frédéric KERFF, Sylvie LEGRAND, Patrick MEYER, N..., Loïc QUINTON, Claire REMACLE - [30h AUTR]	B1	Q2	40	10	[+]	5
BIOC0735-1	<i>Biotechnologies</i> - Alain BRANS, Patrick FICKERS, Moreno GALLEN, Sylvie LEGRAND, André MATAGNE, N..., Claire REMACLE, Mohammed TERRAK, Pierre TOCQUIN, Marylène VANDEVENNE - [15h AUTR]	B1	Q2	54	45	[+]	7
BIOC0736-1	<i>Biomedical strategies</i> - François BEAUFAY, Franck DEQUIEDT, Emmanuel DI VALENTIN, Mireille DUMOULIN, Moreno GALLEN, Frédéric KERFF, André MATAGNE, Sébastien RIGALI, Catherine SADZOT, Ingrid STRUMAN, Mohammed TERRAK, Marylène VANDEVENNE - [24h AUTR]	B1	Q2	36	8	[+]	5
INFO0960-1	<i>Command-line interfaces and tools for biologists</i> (english language) - Pierre TOCQUIN	B1	Q2	10	10	-	2
SSTG0068-1	<i>Laboratory internship</i> - Denis BAURAIN, François BEAUFAY, Frédéric BOUCHÉ, Alain BRANS, Pierre CARDOL, Franck DEQUIEDT, Emmanuel DI VALENTIN, Mireille DUMOULIN, Grégory FETTWEIS, Moreno GALLEN, Marc HANIKENNE, Stéphanie HERKENNE, Frédéric KERFF, Marielle LEBRUN, Sylvie LEGRAND, André MATAGNE, Patrick MEYER, Johan MICHAUX, Patrick MOTTE, Bernard PEERS, Claire PÉRILLEUX, Claire REMACLE, Sébastien RIGALI, Catherine SADZOT, Ingrid STRUMAN, Mohammed TERRAK, Nicolas THELEN, Marc THIRY, Pierre TOCQUIN, Marylène VANDEVENNE, Marianne VOZ, Annick WILMOTTE - [5w Internship]	B1	Q2	-	-	[+]	7
BIOL0030-1	<i>Modeling dynamical biological systems</i> (english language) - Marilaure GRÉGOIRE, Patrick MEYER - [15h Mon. WS]	B2	Q1	15	-	[+]	3
BIOC9239-1	<i>Structural bioinformatics</i> (english language) - Frédéric KERFF	B2	Q1	20	15	-	3
SMEM0023-1	<i>Final thesis</i> - COLLÉGIALITÉ	B2	TA	-	-	-	24

Old programme (B1 : 60Cr, B2 : 30Cr)

Only open to students enrolled for the master's programme before the 2023-2024 academic year.

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, Sylvie LEGRAND, Isabelle MANFROID, N..., Hélène 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, N..., Claire PÉRILLEUX, Claire REMACLE, Catherine SADZOT, Marc THIRY - [8w Internship]	B1	TA	-	-	[+]	12

BIOL0030-1	<i>Modeling dynamical biological systems</i> (english language) - Marilaure GRÉGOIRE, Patrick MEYER - [15h Mon. WS]	B2	Q1	15	-	[+]	3
BIOC9239-1	<i>Structural bioinformatics</i> (english language) - Frédéric KERFF	B2	Q1	20	15	-	3
SMEM0023-1	<i>Final thesis</i> - COLLÉGIALITÉ	B2	TA	-	-	-	24

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)

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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> - JeanDenis DOCQUIER	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> - [5h Mon. WS]	B1	Q2	10	-	[+]	2
MICR0004-1	<i>Bacterial pathogenesis</i> - N...	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>	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> - N..., 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	Q2	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 bioautomatics and image analysis</i> - Patrick MEYER - [12h Proj.]	B1	Q2	12	16	[+]	4
INFO0959-1	<i>Bioinformatics applications: Technological survey (english language)</i> - [40h Proj.]	B1	Q2	-	-	[+]	3

Optional free courses (B1 : 7Cr)

AESS0320-1	<i>Initiation to biology didactics</i> - MarieNoëlle HINDRYCKX	B1	Q2	20	20	-	3
INFO0961-1	<i>Introduction to bioautomatics and image analysis</i> - Patrick MEYER - [12h Proj.]	B1	Q2	12	16	[+]	4

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 8 credits selected from the courses below, depending on their prior education.

BIOC0726-1	<i>Toolbox: nucleic acid analysis techniques</i> - Denis BAURAIN, Franck DEQUIEDT, Marc HANIKENNE, Patrick MEYER - [4h AUTR]	B2	Q1	24	12	[+]	3
OCEA0224-1	<i>Statistical analysis of oceanographic data</i> - Marilaure GRÉGOIRE, Patrick MEYER	B2	Q1	15	15	-	3
INFO0960-1	<i>Command-line interfaces and tools for biologists (english language)</i> - Pierre TOCQUIN	B2	Q2	10	10	-	2

Bridging courses (0-60 credits) Master in bio-informatics and modelling (120 credits)

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> - François BEAUFAY, N...	B0	Q1	20	10	-	3
MICR1716-1	<i>Virology</i> - Catherine SADZOT	B0	Q2	20	-	-	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
				-	20	-	
IMMU0521-1	<i>Immunology</i> - Catherine SADZOT	B0	Q2	25	20	-	3
BIOL0868-1	<i>Biology of multicellular animal organisms</i> - Loïc MICHEL	B0	Q1	15	15	-	3
BIOL0869-1	<i>Biology of multicellular plant organisms</i> - Claire PÉRILLEUX	B0	Q1	15	15	-	3
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 - [1d Internship]	B0	Q2	30	30	[+]	6
BIOC9242-2	<i>Biological macromolecules chemistry</i> - <i>Part A</i> - Moreno GALLEN, Loïc QUINTON - <i>Part B</i> - <i>Thermodynamics of biological systems</i> - Moreno GALLEN, Loïc QUINTON	B0	Q1	40	-	-	4
				10	-	-	
BIOC9243-1	<i>Equilibria in biochemistry and enzyme kinetics</i> - André MATAGNE	B0	Q2	20	40	-	5
BIOL0024-1	<i>Molecular physiology of the cell</i> - Patrick MOTTE	B0	Q2	15	15	-	2
PHIL1227-1	<i>Philosophy and bioethics</i> - <i>Eléments de philosophie des sciences</i> - Pieter THYSSEN - <i>Bioéthique</i> - Florence CAEYMAEX, Patrick DU JARDIN, JeanStéphane GATOT, Julien HANSON, Laurent NGUYEN, Marc VANDENHEEDE	B0	Q2	15	-	-	2
				15	-	-	
LANG0077-8	<i>English 2 (english language)</i> - Clara BRERETON, Véronique DOPPAGNE, Ellen HARRY	B0	Q1	24	-	-	2
AESS0320-1	<i>Initiation to biology didactics</i> - MarieNoëlle HINDRYCKX	B0	Q2	20	20	-	2

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