

**Cycle view of the study programme**

B1 Or Th Pr Au Cr

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

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

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

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	20	16	[+]	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 - [16h AUTR]	B1	Q1	20	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	10	[+]	5
BIOC0730-1	<i>Development, from the cell to the organism</i> - Patrick MOTTE, Bernard PEERS, Claire PÉRILLEUX, Sébastien RIGALI, Ingrid STRUMAN, Mohammed TERRAK, Marc THIRY, Pierre TOCQUIN - [45h AUTR]	B1	Q1	60	15	[+]	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, Sébastien RIGALI, Catherine SADZOT - [25h AUTR]	B1	Q1	40	15	[+]	5
BIOC0733-1	<i>Toolbox: structural biology</i> - Christian DAMBLON, Frédéric KERFF, N..., Loïc QUINTON - [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	60	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, Ingrid STRUMAN, Mohammed TERRAK, Marylène VANDEVENNE - [35h AUTR]	B1	Q2	40	5	[+]	5
SSTG0065-1	<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, N..., Bernard PEERS, Claire PÉRILLEUX, Claire REMACLE,	B1	Q2	-	-	[+]	9

RIGALI, Catherine SADZOT, Ingrid STRUMAN, Mohammed TERRAK,  
Nicolas THELEN, Marc THIRY, Pierre TOCQUIN,  
Marylène VANDEVENNE, Marianne VOZ, Annick WILMOTTE - [6w  
Internship]

SMEM0019-1	<i>Final thesis</i> - COLLÉGIALITÉ	B2	TA	-	-	-	25
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	-	[+]	3
BIOL0034-1	<i>Scientific writing</i> - Marjorie BARDIAU, Frédéric BOUCHÉ, Pierre CARDOL, Pierre TOCQUIN - [10h AUTR]	B2	Q1	20	-	[+]	2

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

#### Research Focus (B2 : 30Cr)

BBMC0020-1	<i>Final thesis (complement)</i> - COLLÉGIALITÉ	B2	TA	-	-	-	10
In agreement with the Jury, choose a placement from among: (B2 : 20Cr)							
SSTG0044-1	<i>Research internship within an university outside ULiege or a company of the Wallonia-Brussels Federation</i> - COLLÉGIALITÉ - [3mois Internship]	B2	Q1	-	-	[+]	20
SSTG0045-1	<i>Research internship within the framework of an exchange scheme</i> - COLLÉGIALITÉ - [3mois Internship]	B2	Q1	-	-	[+]	20

#### Teaching focus (B2 : 30Cr)

AESS1217-1	<i>Special didactics in biology : course and exercises (1st part)</i> - MarieNoëlle HINDRYCKX	B2	TA	40	-	-	3
AESS1218-1	<i>Special didactics in biology : placements (1st part)</i> - <i>Observation placements</i> - MarieNoëlle HINDRYCKX - [10h Internship] - <i>Teaching placements</i> - MarieNoëlle HINDRYCKX - [20h Internship] - <i>Reflexive practical work</i> - MarieNoëlle HINDRYCKX	B2	TA			[+]	3
AESS2217-1	<i>Special didactics in biology : course and exercises (part II)</i> - MarieNoëlle HINDRYCKX - [1d FW]	B2	TA	35	-	[+]	4
AESS2218-1	<i>Special didactics in biology : placements (2nd part)</i> - <i>Teaching placements</i> - MarieNoëlle HINDRYCKX - [20h Internship] - <i>Reflexive practical work</i> - MarieNoëlle HINDRYCKX - <i>Extra-scholar teaching activities</i> - MarieNoëlle HINDRYCKX	B2	TA			[+]	5
AESS0202-1	<i>General didactics: course and exercises ; observation placements ; reflexive practices</i> - Annick FAGNANT - [10h Internship]	B2	TA	30	10	[+]	4
AESS0246-1	<i>Analysis of scholastic institutions and educational policies</i> - Annelise VOISIN	B2	Q2	15	-	-	1
AESS0248-1	<i>Elements of sociology of education</i> - JeanFrançois GUILLAUME	B2	Q2	10	-	-	1
AESS0004-1	<i>Media education</i> - Jeremy HAMERS	B2	Q1	15	-	-	1
AESS0249-1	<i>Interdisciplinary seminar</i> - Annick FAGNANT	B2	Q2	15	-	-	1
AESS0140-1	<i>Professional ethics and training to neutrality and citizenship</i> - Anne HERLA	B2	Q2	25	-	-	2
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	TA	10	15	-	3

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

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, Yvette HABRAKEN, Sylvie LEGRAND, Isabelle MANFROID, N..., 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, N..., Claire PÉRILLEUX, Claire REMACLE, Catherine SADZOT, Marc THIRY - [8w Internship]	B1	TA	-	-	[+]	12
SMEM0019-1	<i>Final thesis</i> - COLLÉGIALITÉ	B2	TA	-	-	-	25
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	-	[+]	3
BIOL0034-1	<i>Scientific writing</i> - Marjorie BARDIAU, Frédéric BOUCHÉ, Pierre CARDOL, Pierre TOCQUIN - [10h AUTR]	B2	Q1	20	-	[+]	2

#### In agreement with the Jury, choose an option among : (B1 : 1Nbr)

##### 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)

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> - Moreno GALLEN, Annick WILMOTTE - [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> - Patrick FICKERS	B1	Q2	20	-	-	2

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

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

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

##### Research Focus (B2 : 30Cr)

BBMC0020-1	<i>Final thesis (complement)</i> - COLLÉGIALITÉ	B2	TA	-	-	-	10
In agreement with the Jury, choose a placement from among: (B2 : 20Cr)							
SSTG0044-1	<i>Research internship within an university outside ULiege or a company of the Wallonia-Brussels Federation</i> - COLLÉGIALITÉ - [3mois Internship]	B2	Q1	-	-	[+]	20
SSTG0045-1	<i>Research internship within the framework of an exchange scheme</i> - COLLÉGIALITÉ - [3mois Internship]	B2	Q1	-	-	[+]	20

##### Teaching focus (B2 : 30Cr)

AESS1217-1	<i>Special didactics in biology : course and exercises (1st part)</i> - MarieNoëlle HINDRYCKX	B2	TA	40	-	-	3
AESS1218-1	<i>Special didactics in biology : placements (1st part)</i> - <i>Observation placements</i> - MarieNoëlle HINDRYCKX - [10h Internship] - <i>Teaching placements</i> - MarieNoëlle HINDRYCKX - [20h Internship] - <i>Reflexive practical work</i> - MarieNoëlle HINDRYCKX	B2	TA			[+]	3
AESS2217-1	<i>Special didactics in biology : course and exercises (part II)</i> - MarieNoëlle HINDRYCKX - [1d FW]	B2	TA	35	-	[+]	4
AESS2218-1	<i>Special didactics in biology : placements (2nd part)</i> - <i>Teaching placements</i> - MarieNoëlle HINDRYCKX - [20h]	B2	TA			[+]	5

	Internship]								
	- Reflexive practical work - MarieNoëlle HINDRYCKX	-	5	-					
	- Extra-scholar teaching activities - MarieNoëlle HINDRYCKX	-	10	-					
	<b>Corequisite :</b>								
	AESS1218-1 - Didactique spéciale en biologie : stages (partim I)								
AESS0202-1	General didactics: course and exercises ; observation placements ; reflexive practices - Annick FAGNANT - [10h Internship]	B2	TA	30	10	[+]			<b>4</b>
	<b>Corequisite :</b>								
	AESS1218-1 - Didactique spéciale en biologie : stages (partim I)								
AESS0246-1	Analysis of scholastic institutions and educational policies - Annelise VOISIN	B2	Q2	15	-	-			<b>1</b>
AESS0248-1	Elements of sociology of education - JeanFrançois GUILLAUME	B2	Q2	10	-	-			<b>1</b>
AESS0004-1	Media education - Jeremy HAMERS	B2	Q1	15	-	-			<b>1</b>
AESS0249-1	Interdisciplinary seminar - Annick FAGNANT	B2	Q2	15	-	-			<b>1</b>
AESS0140-1	Professional ethics and training to neutrality and citizenship - Anne HERLA	B2	Q2	25	-	-			<b>2</b>
AESS0143-1	Educational Psychology of adolescents and young adults - Annick FAGNANT	B2	Q1	15	-	-			<b>2</b>
AESS0339-1	Understand and manage the diversity of public schools - Ariane BAYE	B2	TA	10	15	-			<b>3</b>

#### Optional free courses (B1 : 6Cr)

AESS0320-1	Initiation to biology didactics - MarieNoëlle HINDRYCKX	B1	TA	20	20	-			<b>3</b>
SBIM0486-2	Experimental methodologies in living animals - Pierre DRION	B1	Q1	25	10	-			<b>3</b>

### Additional ECTS Master in biochemistry and molecular and cell biology

#### Compulsory courses (B0 : 60Cr)

STAT0750-1	Multivariate statistical analysis (software R) - Arnout VAN MESSEM	B0	Q2	10	10	-			<b>3</b>
STAT0077-1	Computing analysis and processing of biological data - Patrick MEYER	B0	Q1	25	-	-			<b>2</b>
MICR0720-1	Phycology and mycology - Denis BAURAIN	B0	Q1	20	10	-			<b>3</b>
MICR0721-1	Bacteriology - François BEAUFAY	B0	Q1	20	10	-			<b>3</b>
MICR1716-1	Virology - Catherine SADZOT	B0	Q2	20	-	-			<b>2</b>
BIOL0216-1	Animal physiology - JeanChristophe PLUMIER, Marc THIRY	B0	Q1	60	30	-			<b>7</b>
BIOL0217-1	Vegetal physiology	B0	Q2						<b>5</b>
	- Theory - Claire PÉRILLEUX			35	-	-			
	- Practice - Claire PÉRILLEUX			-	20	-			
IMMU0521-1	Immunology - Catherine SADZOT	B0	Q2	25	20	-			<b>3</b>
BIOL0003-1	Biology of pluricellular organisms	B0	Q1						<b>5</b>
	- Animal - Loïc MICHEL			15	15	-			
	- Plant Biology - Claire PÉRILLEUX			15	15	-			
GENE9002-1	Molecular biology of gene I - Franck DEQUIEDT	B0	Q1	30	-	-			<b>3</b>
GENE9003-1	Molecular biology of gene II - Franck DEQUIEDT	B0	Q2	30	30	-			<b>4</b>
BIOC9242-2	Biological macromolecules chemistry	B0	Q1						<b>4</b>
	- Part A - Moreno GALLEN, Loïc QUINTON			40	-	-			
	- Part B - Thermodynamics of biological systems - Moreno GALLEN			10	-	-			

BIOC9243-1	<i>Equilibria in biochemistry and enzyme kinetics</i> - André MATAGNE	B0	Q2	20	40	-	<b>5</b>
BIOL0024-1	<i>Molecular physiology of the cell</i> - Patrick MOTTE	B0	Q2	15	15	-	<b>2</b>
STRA0044-1	<i>Training in scientific communication</i> - François BEAUFAY, Moreno GALLEN, Patrick MOTTE, Marianne VOZ - [40h Internship]	B0	Q2	-	-	[+]	<b>3</b>
PHIL1227-1	<i>Philosophy and bioethics</i> - <i>Eléments de philosophie des sciences</i> - Julien PIERON - <i>Bioéthique</i> - Florence CAEYMAEX, Patrick DU JARDIN, N...	B0	Q2	15	-	-	<b>2</b>
LANG0077-8	<i>English 2 (english language)</i> - Clara BRERETON, Véronique DOPPAGNE, Ellen HARRY	B0	TA	45	-	-	<b>4</b>