Block view of the study programme

		Or	Th	Pr	Au	Cr
Block 1						
Compulsory courses						
BIOC0709-4	*Bioenergetics* - Pierre CARDOL, Fabrice FRANCK	Q1	20	-	-	**3**
BIOC0210-5	*Enzymology* - André MATAGNE - [10h Mon. WS]	Q1	20	-	[+]	**3**
BIOC0720-1	*Structural biology* - Paulette CHARLIER, Christian DAMBLON - [15h Mon. WS]	Q1	25	-	[+]	**4**
BIOC0721-1	*Optical spectroscopy for biochemistry* - Christian DAMBLON, André MATAGNE	Q1	15	-	-	**2**
GENE0001-4	*Genetic engineering* - Jacques DOMMES	Q1	20	-	-	**3**
GENE0432-4	*Genetic and biochemical evolution* - Moreno GALLENI, Claire REMACLE	Q1	30	-	-	**3**
GENE0003-1	*Genomics* - Marc HANIKENNE	Q1	20	-	-	**3**
BIOL0008-1	*Bioinformatics* - Denis BAURAIN - [5h Mon. WS]	Q1	20	-	[+]	**3**
BIOL0021-1	*Biology of the systems* - Patrick MEYER - [10h Mon. WS]	Q1	10	-	[+]	**2**
SSTG0009-1	*Placement or practical integrated work (including seminars)* - Denis BAURAIN, Paulette CHARLIER, Franck DEQUIEDT, JeanDenis DOCQUIER, Jacques DOMMES, Moreno GALLENI, André MATAGNE, Patrick MEYER, Johan MICHAUX, Patrick MOTTE, Claire PÉRILLEUX, Claire REMACLE, Catherine SADZOT, Marc THIRY - [8w Internship]	TA	-	-	[+]	**12**
Optional courses						
Choose, in accordance with the Jury, 1 option among :						
Biochemistry						
	Notice : Only accessible to students who have chosen this subject before the academic year 2019-2020.					
Genetics						
	Notice : Only accessible to students who have chosen this subject before the academic year 2019-2020.					
Physiology and developmenal biology						
	Notice : Only accessible to students who have chosen this subject before the academic year 2019-2020.					
Microbiology and Immunology						
	Notice : Only accessible to students who have chosen this subject before the academic year 2019-2020.					
Biochemistry and microbiology						
BIOC0723-1	*Applied bioenergetics* - Pierre CARDOL, Fabrice FRANCK	Q2	15	-	-	**2**
BIOC0722-1	*Application of spectroscopic techniques to the study of folding and stability of proteins* - André MATAGNE - [10h Mon. WS]	Q2	20	-	[+]	**3**
CHIM0688-1	*Biological mass spectrometry* - Loïc QUINTON - [5h Mon. WS]	Q2	15	-	[+]	**2**
BIOC0003-2	*Biochemistry and physiology of the micro-organisms* - JeanDenis DOCQUIER	Q2	15	-	-	**2**
BIOL0013-1	*Development of microorganisms* - Sébastien RIGALI	Q2	15	-	-	**2**
MICR1713-1	*Extremophile microorganisms* - Georges FELLER, Moreno GALLENI, Annick WILMOTTE - [5h Mon. WS]	Q2	10	-	[+]	**2**
MICR0004-1	*Bacterial pathogenesis* - JeanDenis DOCQUIER	Q2	15	-	-	**2**
MICR0005-1	*Prostistology* - Denis BAURAIN	Q2	15	-	-	**2**

MICR0006-1	*Virology, immunology and vaccinology* - Catherine SADZOT	Q2	25	-	-	**3**
CHIM0059-6	*Industrial Microbiology* - Patrick FICKERS	Q2	20	-	-	**2**
Genetics, physiology and developmental biology						
GENE0445-1	*Quantitative genetics* - Franck DEQUIEDT - [15h Mon. WS]	Q2	15	-	[+]	**3**
GENE0441-2	*Organelle genetics, Part A* - Claire REMACLE	Q2	15	-	-	**2**
BIOL0009-1	*Molecular and cellular physiology and animal signaling pathways* - Marc MULLER, Marc THIRY	Q2	25	-	-	**3**
BIOL0010-1	*Molecular and cellular physiology and plant signaling pathways* - Patrick MOTTE	Q2	20	-	-	**3**
BIOL0011-1	*Biology of animal development* - Bernard PEERS	Q2	25	-	-	**3**
BIOL0012-1	*Biology of plant development* - Claire PÉRILLEUX	Q2	25	-	-	**3**
BIOL0032-1	*Evolutionary developmental biology* - Bernard PEERS, Claire PÉRILLEUX	Q2	15	-	-	**2**
BIOL0014-1	*Dynamic molecular imaging* - Patrick MOTTE	Q2	20	-	-	**3**
Optional free course						
AESS0320-1	*Initiation to biology didactics* - MarieNoëlle HINDRYCKX	Q2	20	20	-	**2**
Block 2						
Compulsory courses						
BIOL0029-1	*Practical genomics* (english language) - Denis BAURAIN, Marc HANIKENNE - [30h Mon. WS]	Q1	10	-	[+]	**4**
BIOL0030-1	*Modeling dynamical biological systems* (english language) - Marilaure GRÉGOIRE, Patrick MEYER - [15h Mon. WS]	Q2	15	-	[+]	**3**
BIOC9239-1	*Visualization and modeling of proteins* - Paulette CHARLIER, Frédéric KERFF	Q1	25	25	-	**4**
INFO0959-1	*Bioinformatics applications: Technological survey* (english language) - Denis BAURAIN, Marc HANIKENNE, Patrick MEYER, Pierre TOCQUIN - [80h Proj.]	Q1	-	-	[+]	**4**
SMEM0023-1	*Final thesis* - COLLÉGIALITÉ	TA	-	-	-	**15**
Optional courses						
Single focus						
Research Focus						
INFO0953-1	*Scripting interfaces for biological software and databases* (english language) - Denis BAURAIN, Pierre TOCQUIN - [50h Mon. WS]	Q1	20	-	[+]	**8**
INFO0954-1	*Advanced biological data analysis* (english language) - Patrick MEYER - [30h Mon. WS]	Q2	10	-	[+]	**5**
INFO0009-2	*Database (general organisation)* - Samuel HIARD - [25h Proj.]	Q2	26	26	[+]	**5**
INFO0902-1	*Data structures and algorithms* - Pierre GEURTS - [40h Proj.]	Q2	26	20	[+]	**5**
INFO0955-1	*Bioinformatics applications: Case studies in veterinary sciences, agronomical sciences and systems medicine* (english language) - Tom DRUET, Frédéric FARNIR, Sébastien MASSART, Sébastien MASSART, Kristel VAN STEEN - [50h Mon. WS]	Q2	20	-	[+]	**7**
Bloc d'aménagement du programme de l'année						

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

Choose courses totalling 60 ECTS amongst :

STAT0808-1	*Inferential statistics* - Amir ABOUBACAR	Q1	20	20	-	**3**
STAT0077-1	*Computing analysis and processing of biological data* - Patrick MEYER	Q1	25	-	-	**2**
MICR0720-1	*Phycology and mycology* - Denis BAURAIN	Q1	20	10	-	**3**
MICR0721-1	*Bacteriology* - JeanDenis DOCQUIER	Q1	20	10	-	**3**
MICR1716-1	*Virology* - Catherine SADZOT	Q2	20	10	-	**2**
BIOL0216-1	*Animal physiology* - JeanChristophe PLUMIER, Marc THIRY	Q1	60	30	-	**7**
BIOL0217-1	*Vegetal physiology* - Claire PÉRILLEUX	Q2	35	20	-	**5**
IMMU0521-1	*Immunology* - Catherine SADZOT	Q2	25	10	-	**3**
BIOL0003-1	*Biology of pluricellular organisms* - *Animal* - MarieFrance VERSALI - *Plant Biology* - Claire PÉRILLEUX	Q1	 15 15	 15 15	 - -	**5**
GENE9002-1	*Molecular biology of gene I* - Franck DEQUIEDT	Q1	30	-	-	**3**
GENE9003-1	*Molecular biology of gene II* - Franck DEQUIEDT	Q2	30	30	-	**4**
BIOC9242-2	*Biological macromolecules chemistry* - *Part A* - Moreno GALLENI, Loïc QUINTON - *Part B - Thermodynamics of biological systems* - Moreno GALLENI, Loïc QUINTON	Q1	 40 10	 - -	 - -	**4**
BIOC9243-1	*Equilibria in biochemistry and enzime kinetics* - Moreno GALLENI, André MATAGNE	Q2	20	40	-	**5**
BIOL0024-1	*Molecular physiology of the cell* - Patrick MOTTE	Q2	15	15	-	**2**
STRA0044-1	*Training in scientific communication* - Jacques DOMMES, Patrick MOTTE - [40h Internship]	Q2	-	-	[+]	**3**
PHIL1227-1	*Philosophy and bioethics* - *Eléments de philosophie des sciences* - Julien PIERON - *Bioéthique* - Florence CAEYMAEX, Jacques DOMMES, Vincent GEENEN	Q2	 15 15	 - -	 - -	**2**
LANG0077-8	*English 2* (english language) - Clara BRERETON, Véronique DOPPAGNE, Ellen HARRY	TA	45	-	-	**4**

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

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

With the Jury¿s agreement, where necessary the student will follow refresher courses for a maximum of 15 credits selected from the classes below, depending on their prior education.

BIOL0008-1	*Bioinformatics* - Denis BAURAIN - [5h Mon. WS]	Q1	20	-	[+]	**3**
GENE0003-1	*Genomics* - Marc HANIKENNE	Q1	20	-	-	**3**
BIOL0021-1	*Biology of the systems* - Patrick MEYER - [10h Mon. WS]	Q1	10	-	[+]	**2**
INFO0956-1	*Introduction to biological data analysis* (english language) - Patrick MEYER - [20h Mon. WS]	Q1	5	-	[+]	**2**
LANG6012-1	*French: oral expression* - N...	Q2	-	-	-	**5**