

Access conditions to the Master (http://www.ulg.ac.be/cms/c_46031/master-en-biochimie-et-biologie-moleculaire-et-cellulaire)

Two-Year Master Program (120 ECTS)

First Year

Compulsory courses

BIOC0210-4	<i>Functional properties of biological macromolecules</i> - Edwin DE PAUW, André MATAGNE - [15h Mon. WS]	30	20	[+]	5
CHIM9218-1	<i>Biospectroscopy and nuclear magnetic resonance applied to biology</i> - Christian DAMBLON - [15h Mon. WS]	20	-	[+]	3
BIOC9233-1	<i>Structure and Dynamic of biological macromolecules</i> - Paulette CHARLIER, André MATAGNE - [20h Mon. WS]	20	20	[+]	4
BIOC0709-3	<i>Bioenergetics</i> - Pierre CARDOL, Fabrice FRANCK	30	20	-	3
BIOL0803-2	<i>Molecular and cellular physiology</i> - Patrick MOTTE, Marc MULLER, Marc THIRY	40	20	-	5
BIOC0710-2	<i>Metabolic pathways</i> - Fabrice FRANCK	15	20	-	2
GENE0001-3	<i>Genetic engineering</i> - Jacques DOMMES, Jacques DOMMES	30	20	-	4
BIOL0804-2	<i>Developmental Biology</i> - Bernard PEERS, Claire PÉRILLEUX	25	20	-	3
GENE0432-3	<i>Genetic and biochemical aspects of evolution</i> - Denis BAURAIN, Moreno GALLEN, Claire REMACLE	25	20	-	3
BIOC0003-2	<i>Biochemistry and physiology of the micro-organisms</i> - Bernard JORIS	20	20	-	2
MICR0207-2	<i>Further Immunology</i> - Catherine SADZOT	15	20	-	2
CHIM0059-4	<i>Industrial Microbiology</i> - Philippe THONART	15	20	-	2
BIOL0845-1	<i>Introduction to bioinformatics</i> - Denis BAURAIN	15	20	-	2
SSTG0009-1	<i>Placement or practical integrated work (including seminars)</i> - COLLÉGIALITÉ, Patrick MOTTE - [10w Internship]	-	-	[+]	20

Optional free course

AESS0254-1	<i>Introduction to biology didactics</i> - Marie-Noëlle HINDRYCKX	20	-	-	2
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Second year

Compulsory course

SMEM0019-1	<i>Final thesis</i> - COLLÉGIALITÉ	-	-	-	25
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Optional courses

Choose 1 course, with the approval of the Board of Studies, amongst :

BBMC0001-1	<i>Inter-academy thematic week</i> - COLLÉGIALITÉ - [1w SEM]	-	-	[+]	5
BBMC0001-2	<i>Inter-academy thematic week</i> - COLLÉGIALITÉ - [1w SEM]	-	-	[+]	5
BBMC0001-3	<i>Inter-academy thematic week</i> - COLLÉGIALITÉ - [1w SEM]	-	-	[+]	5
BBMC0001-4	<i>Inter-academy thematic week</i> - COLLÉGIALITÉ - [1w SEM]	-	-	[+]	5
BIOC0715-1	<i>Proteins structure and function</i> - Paulette CHARLIER, Mireille DUMOULIN	25	25	-	5
BIOC0716-1	<i>Antibiotic resistance</i> - Moreno GALLEN	25	25	-	5
BOTA0403-1	<i>Signal transduction pathways in plants</i> - Jacques DOMMES, Patrick MOTTE, Claire PÉRILLEUX	25	25	-	5
GENE0440-1	<i>Genetics and evolution</i> - Denis BAURAIN, Fabrice FRANCK, Claire REMACLE	25	25	-	5
MICR0713-1	<i>Extremophile microorganisms</i> - Georges FELLER, Moreno GALLEN, Annick WILMOTTE	25	25	-	5
BIOL0805-1	<i>Complements of developmental biology</i> - Marc MULLER, Bernard PEERS, Marianne VOZ	25	25	-	5
BIOL0806-1	<i>Cell Biology and visualization methods</i> - Patrick MOTTE, Marc THIRY	25	25	-	5
MICR0716-1	<i>Immunology - Virology</i> - Jacques PIETTE, Catherine SADZOT	25	25	-	5
MICR0715-1	<i>Applied Bacteriology</i> - Philippe THONART	25	25	-	5
INFO0090-1	<i>Analysis of data from the broadband technology</i> - Denis BAURAIN	25	25	-	5

Notice : The courses 'Protein Structures and Functions', 'Antibiotic Resistance', 'Signalling paths in plants', 'Extremophile Micro-organisms' 'Complementary themes

on the biology of development', 'Cell biology and visualisation methods' and 'Immunology-Virology' and "Analysis of data from the broadband technology" are offered in the framework of the inter-academy thematic week (mobility week).

Choose one of the following focus :

Research Focus

Compulsory courses

GENE0208-2	<i>Genomics and bioinformatics</i> - Michel GEORGES, Bernard JORIS	25	-	-	3
SSTG0010-1	<i>Additional placements and practical work</i> - COLLÉGIALITÉ - [6w Internship]	-	-	[+]	8
BBMC0020-1	<i>Final thesis (complement)</i> - COLLÉGIALITÉ	-	-	-	4

Optional courses

Choose 3 course different to the option courses chosen in the 2 year, amongst :

BBMC0001-1	<i>Inter-academy thematic week</i> - COLLÉGIALITÉ - [1w SEM]	-	-	[+]	5
BBMC0001-2	<i>Inter-academy thematic week</i> - COLLÉGIALITÉ - [1w SEM]	-	-	[+]	5
BBMC0001-3	<i>Inter-academy thematic week</i> - COLLÉGIALITÉ - [1w SEM]	-	-	[+]	5
BBMC0001-4	<i>Inter-academy thematic week</i> - COLLÉGIALITÉ - [1w SEM]	-	-	[+]	5
BIOC0715-1	<i>Proteins structure and function</i> - Paulette CHARLIER, Mireille DUMOULIN	25	25	-	5
BIOC0716-1	<i>Antibiotic resistance</i> - Moreno GALLEN	25	25	-	5
BOTA0403-1	<i>Signal transduction pathways in plants</i> - Jacques DOMMES, Patrick MOTTE, Claire PÉRILLEUX	25	25	-	5
GENE0440-1	<i>Genetics and evolution</i> - Denis BAURAIN, Fabrice FRANCK, Claire REMACLE	25	25	-	5
MICR0713-1	<i>Extremophile microorganisms</i> - Georges FELLER, Moreno GALLEN, Annick WILMOTTE	25	25	-	5
BIOL0805-1	<i>Complements of developmental biology</i> - Marc MULLER, Bernard PEERS, Marianne VOZ	25	25	-	5
BIOL0806-1	<i>Cell Biology and visualization methods</i> - Patrick MOTTE, Marc THIRY	25	25	-	5
MICR0716-1	<i>Immunology - Virology</i> - Jacques PIETTE, Catherine SADZOT	25	25	-	5
MICR0715-1	<i>Applied Bacteriology</i> - Philippe THONART	25	25	-	5
INFO0090-1	<i>Analysis of data from the broadband technology</i> - Denis BAURAIN	25	25	-	5

Notice : The courses 'Protein Structures and Functions', 'Antibiotic Resistance', 'Signalling paths in plants', 'Extremophile Micro-organisms', 'Complementary themes on the biology of development', 'Cell biology and visualisation methods' and 'Immunology-Virology' and "Analysis of data from the broadband technology" are offered in the framework of the inter-academy thematic week (mobility week).

Teaching focus

Compulsory courses

AESS0246-1	<i>Analysis of scolastic institutions and key-players, educational policies</i> - Jacqueline BECKERS	15	-	-	1
AESS0247-1	<i>Views on cultural diversity</i> - Jérôme JAMIN	10	-	-	1
AESS0248-1	<i>Elements of sociology of education</i> - Jean-François GUILLAUME	10	-	-	1
AESS0140-1	<i>Professional ethics and training to neutrality and citizenship</i> - Anne HERLA	25	-	-	2
AESS0202-1	<i>General didactics: course and exercises ; observation placements ; reflexive practices</i> - Annick FAGNANT - [10h Internship]	30	10	[+]	4
AESS0004-1	<i>Media education</i> - Geneviève VAN CAUWENBERGE	15	-	-	1
AESS0249-1	<i>Interdisciplinary seminar</i> - Annick FAGNANT	15	-	-	1
AESS0143-1	<i>Educational Psychology of adolescents and young adults</i> - Annick FAGNANT	15	-	-	2
AESS0142-1	<i>Seminar on prevention and management of difficult school situations</i> - Jocelyne ROBERT	15	-	-	2
AESS0217-1	<i>Special didactics in biology (part I)</i>				6
	- Course and exercises - Marie-Noëlle HINDRYCKX	40	-	-	
	- Training courses : teaching observation - Marie-Noëlle HINDRYCKX - [10h Internship]	-	-	[+]	
	- Training courses : teaching - Marie-Noëlle HINDRYCKX - [20h Internship]	-	-	[+]	
	- Reflexive practical work - Marie-Noëlle HINDRYCKX	-	5	-	

AESS0235-1	<i>Special didactics in biology (part II)</i>				9
	- <i>Course and exercices</i> - Marie-Noëlle HINDRYCKX	35	-	-	
	- <i>Teaching placements</i> - Marie-Noëlle HINDRYCKX - [20h Internship]	-	-	[+]	
	- <i>Reflexive practical work</i> - Marie-Noëlle HINDRYCKX	-	5	-	
	- <i>School practical outside lectures</i> - Marie-Noëlle HINDRYCKX	-	10	-	

Professional Focus in Industrial Biochemistry

Compulsory courses

Industrial Biochemistry

BIOC0219-3	<i>Industrial biochemistry including biochemical engineering</i> - Michel CRINE, Frank DELVIGNE	24	-	-	2
CHIM0633-1	<i>Industrial physical chemistry</i> - Christine JÉRÔME	24	-	-	2
CHIM0634-1	<i>Bioindustries</i> - Antoine CLINQUART, Philippe THONART	24	-	-	2
Economy					
GEST3001-1	<i>People management and organisation</i> - Jocelyne ROBERT	24	24	-	2
GEST3005-2	<i>Accountancy and Finance</i> - Jacques BERWART	24	24	-	2
DROI2110-2	<i>Intellectual property, Patents</i> - Bernard VANBRABANT	24	-	-	2
SSTG0021-1	<i>Practical work, including internship</i> - COLLÉGIALITÉ - [8w Internship]	-	-	[+]	11
BIOC0717-1	<i>Applied Bioinformatics</i> - Michel GEORGES, Bernard JORIS	36	-	-	3
BREV0002-1	<i>Quality and security of products, including procedures of certification and accreditation</i> - Georges DAUBE	24	-	-	2
STRA0015-1	<i>Seminars led by industrialists</i> - Philippe THONART	24	-	-	2

Professional focus in bioinformatics and modelling

Compulsory courses

INFO0091-1	<i>Introduction to an online command interface</i> - N...	25	30	-	5
INFO0092-1	<i>Introduction to programming</i> - N...	30	30	-	10
INFO0093-1	<i>Introduction to the use of databases</i> - N...	25	30	-	5
INFO0094-1	<i>Introduction to algorithms in bioinformatics</i> - N...	25	30	-	5
INFO0095-1	<i>Software suites for bioinformatics</i> - N...	25	30	-	5