BSC (HONS) BIOCHEMISTRY

Programme Requirements

Code	Title	Credits
Year 1		
Students take **60** credits as follows:		
Core Modules		
BC1001	Introduction to Biochemistry and the Biological Basis of Disease	5
BL1002	Cells, Biomolecules, Genetics and Evolution	5
BL1004	Physiology and Structure of Plants and Animals	5
CM1200	Fundamentals of Modern Chemistry Part 1	10
CM1201	Fundamentals of Modern Chemistry Part 2a	10
MA1001	Calculus for Science Part 1	5
MA1002	Calculus for Science Part 2	5
MB1003	Microbiology in Society	5
PY1010	Physics for Biological and Chemical Sciences	10
Year 2		
Students take **60** credits as follows - all listed core modules (**55** credits) and **5** credits of elective modules:		
Core Modules		
Biochemistry		
BC2001	Biomolecules	5
BC2002	Principles of Metabolic Pathways	5
Biotechnology		
BT2001	Introduction to Biotechnology	5
Molecular Biology		
ML2001	Introductory Molecular Biology	5
Microbiology		
MB2005	Fundamentals of Microbiology	5
MB2006	Principles of Microbiology	5
Neuroscience		
AN2003	Principles of Human Structure	5
AN2020	Introduction to Neuroscience, the Brain and Behaviour	5
Physiology		
PL2021	Introductory Physiology I	5
PL2022	Introductory Physiology II	5
Statistics		
ST2001	Introduction to Biostatistics	5
Elective Modules		
Students take modules to the value of **5** credits from the following:		5
Semester 1		
Chemistry		
CM2001	Main Group and Transition Element Chemistry	
CM2002	Intermediate Stereochemistry, Reactivity and Mechanisms in Organic Chemistry	
CM2003	Energetics and Kinetics	
Plant Science		
PS2001	Introduction to Plant Biotechnology	
Zoology		
ZY2000	Vertebrate Diversity	
Semester 2		
Ecology		
AE2001	Fundamentals of Ecology	
Year 3 - for students who entered Third Year Biochemistry in 2025/26		
Students take **60** credits as follows – all listed core modules (**50** credits) and **10** credits of elective modules:		
Core Modules		
BC3001	Structural and Experimental Biochemistry	5
BC3002	Advanced Metabolism in Health, Disease and Cancer [2]	5
BC3003	Introduction to Cell Biology and Biomembranes	5
BC3004	Cell Signalling	5
BC3005	Biochemical and Cellular Immunology	5
BC3006	Molecular Biology	5
BC3007	Principles of Medical Genetics	5
BC3008	Biochemistry of the Central Nervous System	5
BC3010	Bioinformatics	5
BC3012	Literature Project	5
Students take modules to the value of **10** credits from the following:		10
MB3001	Medical Microbiology (5)	
MB3012	Transmission and Epidemiology of Infectious Diseases (5)	
MB3022	Virology (5)	
PE4010	BioPharmaceutical Engineering (5)	
PL3005	Cell and Epithelial Physiology (5)	
PT3001	Introduction to Pharmacology (5)	
PT3002	Introduction to Toxicology (5)	
PT3005	Chemotherapy and Pharmacology of Inflammation (5)	
Optional Module		
BC4021	Work Placement (5) [1]	
Year 4 - for students who entered Fourth Year Biochemistry in or prior to 2025/26		
Students take **60** credits as follows:		
Core Modules		
BC4001	Advanced Cell Biology	5
BC4002	Protein Science	5
BC4009	Cancer Biology	5
BC4010	Biochemical Analysis and Research Method	5
BC4011	Cell and Molecular Basis of Neurodegenerative disease	5
BC4012	Research Project	15
BC4016	Advanced Metabolism in Health, Disease and Cancer [3]	5
BC4017	Principles and Applications of Biotechnology	5
BC4022	Immunobiology of Health and Disease	5
GN4001	Developmental Genetics	5
Total Credits		**240**

[1] Students electing to take this optional module must secure a work placement relevant to the discipline, to be undertaken in June-August (minimum four weeks) subject to the approval of the School of Biochemistry and Cell Biology. BC4021 Work Placement is not included for progression to subsequent year and is not counted toward the final

degree award. The result obtained in BC4021 Work Placement will be recorded on the student's transcript.

[2] Students who completed Third Year Biochemistry in 2024/25 took BC3009 instead of BC3002.

[3] Students who commence Fourth Year Biochemistry in 2026/27 will take BC4015 instead of BC4016.

Examinations

Full details and regulations governing Examinations for each programme will be contained in the *Marks and Standards Book* and for each module in the *Book of Modules*.