

BSC (HONS) BIOTECHNOLOGY

Programme Requirements

Code	Title	Credits
Year 1		
Students take 60 credits as follows:		
<i>Core Modules</i>		
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:		
<i>Core Modules</i>		
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
<i>Elective Modules</i>		
Students take modules to the value of 5 credits from the following:		
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		
Students take 60 credits as follows:		
<i>Core Modules</i>		
BC3001	Structural and Experimental Biochemistry	5
BC3006	Molecular Biology	5
BC3010	Bioinformatics	5
BC3021	Cell Signalling in Health and Disease	5
BT3001	Literature Project in Biotechnology	5
MB3005	The role and ecology of microbes in the environment	5
MB3006	Genetic Engineering and Molecular Biotechnology	5
MB3008	Immunology: Host Response to Pathogens.	5
MB3914	Food and Industrial Microbiology II	5
MB3021	Medical Microbiology	5
PE2005	Introduction to Biochemical Engineering	5
PT3001	Introduction to Pharmacology	5
Year 4		
Students take 60 credits as follows:		
<i>Core Modules</i>		
BC4002	Protein Science	5
BC4017	Principles and Applications of Biotechnology	5
BT4001	Work Placement	10
BT4002	Research Project	10
BT4003	Case studies in Biotechnology	5
BT4004	Microbial Biotechnology	5
BT4005	Biopharmaceutical and Medical Devices Microbiology	5
MB4013	Food Biotechnology	5
PE4028	Bioprocess Engineering	10
Total Credits		240

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*.