



Institiúid Teicneolaíochta Chorcaí
Cork Institute of Technology

APPROVED

Awards

BSc (Hons)

Programme Code: CR_SPHBI_8

Mode of Delivery: Full Time

No. of Semesters: 8

NFQ Level: 8

Embedded Award: No

Programme Credits: 240

programmeReviewDate: September 2022

Department: BIOLOGICAL SCIENCES - CORK

Programme Outcomes

Upon successful completion of this programme the graduate will be able to demonstrate... :

PO1	Knowledge - Breadth
(a)	A comprehensive knowledge of the theory, concepts and methods related to biotechnology with particular relevance to the area of bio-pharmaceutical sciences.
PO2	Knowledge - Kind
(a)	The ability to acquire and evaluate current theory in the field of biotechnology through research, critical thinking and problem solving.
PO3	Skill - Range
(a)	The ability to conduct specialised research in the field of Pharmaceutical Biotechnology and present a clear conclusion in written and oral forms.
PO4	Skill - Selectivity
(a)	The ability to manage, evaluate complex biotechnology problems and to exercise appropriate judgement in such situations
PO5	Competence - Context
(a)	The ability to use advanced research, analytical and problem solving skills in a professional and accountable manner in a wide range of contexts within the area of biotechnology.
PO6	Competence - Role
(a)	The ability to work ethically and professionally as an individual or as a member of a multidisciplinary team with the capacity for leadership and innovation.
PO7	Competence - Learning to Learn
(a)	The ability to evaluate, articulate and defend learning needs at the professional and personal levels in the workplace.
PO8	Competence - Insight
(a)	The ability to evaluate, articulate and defend the need for high ethical standards in professional practice

Semester Schedules

Stage 1 / Semester 1

Mandatory	
Module Code	Module Title
CMOD6001	Creativity Innovation&Teamwork
CHEM6011	Biological Chemistry 1
BIOL6003	Laboratory Operations
BIOL6007	Biomolecules and Cells
MATH6056	Maths for Biological Sciences
PHOL6006	Human Anatomy and Physiology

Stage 1 / Semester 2

Mandatory	
Module Code	Module Title
CHEM6009	Biological Chemistry 2
STAT6013	Biostatistics and Probability
BIOM6001	Microbes, Enzymes & Energy
BIOT6001	Introduction to Biotechnology
PHYS6044	Heat and Light

Elective	
Module Code	Module Title
FOOD6001	Science of Food and Health
FREE6001	Free Choice Module

Stage 2 / Semester 1

Mandatory	
Module Code	Module Title
BIOL6024	Structural Biochemistry
BIOT6002	Immunoanalysis
BIOM6006	Microbial Diversity
BIOT6012	Mammalian Biotechnology
BIOL6026	Introduction to Pharmacology
Elective	
Module Code	Module Title
BIOT6008	Environmental Biotechnology
FREE6001	Free Choice Module

Stage 2 / Semester 2

Mandatory	
Module Code	Module Title
BIOM6007	Bacteriology
BIOL6017	Metabolic Biochemistry
BIOT7013	Upstream Bioprocessing
BIOT7002	Bioanalytical Techniques
BIOT6005	Introduction to Quality System
Elective	
Module Code	Module Title
BIOT6011	Computational Biology
FREE6001	Free Choice Module

Stage 3 / Semester 1

Mandatory	
Module Code	Module Title
BIOT7011	Pharma Analytics
GENE7002	Molecular Biology
BIOL7001	Applied Enzymology
BIOM7001	Analytical Microbiology
BIOT7014	Downstream Bioprocessing
Elective	
Module Code	Module Title
MANU7007	Validation Science
FREE6001	Free Choice Module

Stage 3 / Semester 2

Mandatory	
Module Code	Module Title
PLAC7001	Biosciences Placement
BIOT7007	Molecular Diagnostics
BIOT7004	BioPharma Quality Management
BIOT7001	Applied Biotechnology

Stage 4 / Semester 1

Mandatory	
Module Code	Module Title
BIOT8011	Biosciences Literature Review
BIOT8001	Molecular Biotechnology
BIOT8004	Ad Bioanalytical Techniques
BIOM8002	Antimicrobial Strategies
BIOL8023	Cell Systems Biology
Elective	
Module Code	Module Title
BIOT8012	Biotechnology Management
BIOT8013	Bioreactor Operations
FREE6001	Free Choice Module

Stage 4 / Semester 2

Mandatory	
Module Code	Module Title
BIOT8018	Biosciences Project
BIOL8009	Biochemical Pharmacology
BIOT8014	Protein Informatics
BIOT8002	Pharma Regulation & Compliance
BIOT8005	BioPharmaceutical Science