

APPROVED



<b>Awards</b>					
Ordinary Bachelor Degree					
<b>Programme Code:</b>	659	<b>Mode of Delivery:</b>	Full Time	<b>No. of Semesters:</b>	6
<b>NFQ Level:</b>	8				
<b>Programme Credits:</b>	180				
<b>Programme Short Title:</b>	B.Sc. Env Bio				
<b>Language of Instruction:</b>	English				
<b>Department:</b>	Applied Sciences				

## Programme Outcomes

On successful completion of this programme the learner should be able to :

<b>PO1</b>	Knowledge - Breadth	
	(a)	A good level of knowledge of a broadly-based scientific core and mathematics
	(b)	A good level of knowledge of theory and understanding in a the sub-field of Environmental Bioscience
<b>PO2</b>	Knowledge - Kind	
	(a)	A good level of knowledge in the terminology, nomenclature and/or classification systems appropriate to the subject area
	(b)	A good level of knowledge of specific theories, concepts and principles
	(c)	A good level of knowledge of methods for acquiring, processing, interpreting and presenting subject-specific information
	(d)	A good level of knowledge of the identification, definition and resolution of routine problems
	(e)	A good level of knowledge of the relevant legal, quality and regulatory frameworks
	(f)	A good level of knowledge of the current issues of concern to society and an appreciation of the ethical issues involved
	(g)	A good level of knowledge of some aspects of the defining elements of the subject area as a result of individual study or research
<b>PO3</b>	Skill - Range	
	(a)	Ability to apply knowledge and understanding to address familiar problems in a scientific work setting
	(b)	Ability to employ data analysing, synthesising and summarising skills in a scientific work setting
	(c)	Ability to source, interpret and apply appropriate and reference literature from a specific scientific area
	(d)	Ability to work independently within defined time boundaries
	(e)	Ability to operate a broad range of laboratory and other relevant equipment safely
	(f)	Ability to apply numerical and statistical analysis skills
	(g)	Ability to maintain detailed records of activities and communicate scientific information in a variety of forms to specialist audiences
<b>PO4</b>	Skill - Selectivity	

	(a)	Ability to identify and implement solutions to problems relating to scientific processes in a logical manner
	(b)	Appreciation of the views of others
	(c)	Ability to participate fully in the day-to-day operations of a scientific industry or other scientific work setting
	(d)	Ability to make decisions in relation to a controlled environment
	(e)	Ability to test simple hypotheses
	(f)	Ability to appreciate limits of knowledge in a scientific area
<b>PO5</b>	Competence - Context	
	(a)	Ability to analyse and generate data, diagnose and trouble-shoot technical problems and contribute to their resolution in a range of structured work settings.
	(b)	Ability to use scientific skills to accurately perform tasks
	(c)	Ability to behave professional in a range of structured settings
<b>PO6</b>	Competence - Role	
	(a)	Ability to take direction, accept criticism and use feedback to enhance own performance
	(b)	Ability to participate in a structured team environment across a range of scientific disciplines
	(c)	Ability to be self-directed in terms of time, motivation and planning and be self-aware and be open and sensitive to others
	(d)	Ability to work with significant autonomy within allocated responsibility
	(e)	Ability to work individually on complex tasks, exercise independent technical judgement, develop a personal work plan and accept responsibility for own work.
<b>PO7</b>	Competence - Learning to Learn	
	(a)	Ability for autonomous independent learning
	(b)	Ability to identify gaps in personal knowledge, understanding and skills and identify appropriate means of gaining these attributes
	(c)	Ability to evince a commitment to continuing education and lifelong learning
	(d)	Ability to take appropriate action to remain aware of industrial, regulatory and societal change, which will impact on chosen specialisation

<b>PO8</b>	Competence - Insight	
	(a)	Ability to discuss relevant scientific issues in a social, cultural and economic context
	(b)	Ability to promote science and technology to the general public
	(c)	Awareness of current issues of concern to society and an appreciation of the ethical issues involved

## Semester Schedules

### Stage 1 / Semester 1

Mandatory	
Module Code	Module Title
MATH S7Z01	<a href="#">Mathematics 1</a>
PHYS S7Z03	<a href="#">Physics Through PBL 1</a>
CHEM S7Z04	<a href="#">Fundamental Chemistry</a>
BIOL S8Z01	<a href="#">Biology</a> ( Part 1 of 2 )
HLSTS8Z01	<a href="#">Health and Safety and Academic Skills</a> ( Part 1 of 2 )

Stage 1 / Semester 2

Mandatory	
Module Code	Module Title
CHEM S7Z05	<a href="#">Chemistry</a>
MATH S7Z02	<a href="#">Mathematics 2</a>
PHYS S7Z04	<a href="#">Physics Through PBL 2</a>
BIOL S8Z01	<a href="#">Biology</a> ( Part 2 of 2 )
HLSTS8Z01	<a href="#">Health and Safety and Academic Skills</a> ( Part 2 of 2 )

Stage 2 / Semester 1

Mandatory	
Module Code	Module Title
BIOL S7009	<a href="#">Fundamental Microbiology</a>
CHEM S7003	<a href="#">Intro to Organic Chemistry</a>
INST S7Z02	<a href="#">Analytical Science</a>
SCIAS7Z01	<a href="#">Molecular Bioscience</a> ( Part 1 of 2 )

Stage 2 / Semester 2

Mandatory	
Module Code	Module Title
SCIAS7003	<a href="#">Microbial Pathogenesis and Control</a>
DATA S7Z01	<a href="#">Statistics and Data Analysis</a>
ENVR S7008	<a href="#">Applied ecology</a>
SCIAS7Z01	<a href="#">Molecular Bioscience</a> ( Part 2 of 2 )



Stage 3 / Semester 1

Mandatory	
Module Code	Module Title
MCBL S7001	<a href="#">Applied Microbiology</a>
53595	<a href="#">Environmental Communication and Critique</a>
53567	<a href="#">Plant Science</a>
ENVR S8016	<a href="#">Aquatic Sciences</a>
BITC S7011	<a href="#">Biotechnology</a> ( Part 1 of 2 )

Stage 3 / Semester 2

Mandatory	
Module Code	Module Title
QUAL S7Z01	<a href="#">Quality Management</a>
53606	<a href="#">Environmental Chemistry</a>
53597	<a href="#">Habitat and Wildlife Ecology</a>
BITC S7011	<a href="#">Biotechnology</a> ( Part 2 of 2 )