

APPROVED

Bachelor of Science in Analytical and Pharmaceutical Chemistry
Faculty of Engineering & Science

Award Class					
Awards					
BSc					
Programme Code	CR_SCHEM_7	Mode of Delivery	Full Time, ACCS	No. of Semesters	6
NFQ Level	7	Embedded Award	No	Programme Credits	180
Next Review Date					
Review Type				Date	
Programmatic Review				01/09/2023	
Department	PHYSICAL SCIENCES				

Programme Outcomes

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

#	PO Domains	Programme Learning Outcome
PO1	Knowledge - Breadth	A knowledge of specific areas of chemistry and related areas relevant to work in the BioPharmaChem industry
PO2	Knowledge - Kind	The ability to apply principles and methodologies of general, analytical, and BioPharma chemistry in both routine and problem resolution contexts
PO3	Skill - Range	The ability to apply a broad range of practical laboratory techniques, and to formulate detailed records and reports
PO4	Skill - Selectivity	The ability to select and use instrumental and non-instrumental methods of analysis in sectors such as manufacturing, environmental
PO5	Competence - Context	The ability to identify, collect, and use data in the diagnosis and resolution of technical problems using modern statistical methods
PO6	Competence - Role	The ability to actively contribute to industry teams in a professional manner while exercising responsibility and judgement in a regulatory operating environment
PO7	Competence - Learning to Learn	The ability to identify and address ongoing learning needs, both within the workplace and using further education programmes
PO8	Competence - Insight	An awareness of the significance of a range of regulatory standards, and methodologies for their implementation

Semester Schedules

Year 1 / Semester 1

Mandatory				
<i>Code</i>	<i>Title</i>	<i>Module Coordinator</i>	<i>Version</i>	<i>Credits</i>
BIOL6007	Biomolecules and Cells	Brigid Lucey	3	5
CHEM6002	Chemical Principles	Donagh OMahony	4	5
CMOD6001	Creativity Innovation&Teamwork	MARESE BERMINGHAM	3	5
PHYS6011	Introduction to Physics	Donagh OMahony	4	5
OCCH6002	Laboratory Practices	Donagh OMahony	3	5
MATH6060	Maths for Physical Sciences	David Goulding	1	5

Year 1 / Semester 2

Mandatory				
<i>Code</i>	<i>Title</i>	<i>Module Coordinator</i>	<i>Version</i>	<i>Credits</i>
ENVI6002	Environmental Instrumentation	Donagh OMahony	3	5
PHYS6051	Astronomy & Instrumentation	Donagh OMahony	1	5
CHEO6001	Organic Chemistry Fundamental	Donagh OMahony	4	5
CHEM6013	Physical Chemistry Principles	Donagh OMahony	1	5
MATH6019	Technological Maths 2 & Maple	David Goulding	2	5

Elective				
<i>Code</i>	<i>Title</i>	<i>Module Coordinator</i>	<i>Version</i>	<i>Credits</i>
FREE6001	Free Choice Module	PAUL GALLAGHER	3	5
BIOT6001	Introduction to Biotechnology	Brigid Lucey	3	5

Year 2 / Semester 1

Year 2 Semester 1 Elective Regulation

A previously completed elective module may not subsequently be selected from the list of electives of another semester

Mandatory				
<i>Code</i>	<i>Title</i>	<i>Module Coordinator</i>	<i>Version</i>	<i>Credits</i>
CHEA6001	Analytical Chemistry	Donagh OMahony	3	5
BIOM6005	Fundamentals of Microbiology	Brigid Lucey	2	5
CHEM6006	Inorganic Chemistry	Donagh OMahony	3	5
STAT6014	Intro Stats for Phys. Sc.	David Goulding	1	5
CHEO6005	Organic Chemistry	Donagh OMahony	2	5
Elective				
<i>Code</i>	<i>Title</i>	<i>Module Coordinator</i>	<i>Version</i>	<i>Credits</i>
FREE6001	Free Choice Module	PAUL GALLAGHER	3	5
PHYS6038	Water Quality Instrumentation	Donagh OMahony	3	5

Year 2 / Semester 2

Year 2 Semester 2 Elective Regulation

A previously completed elective module may not subsequently be selected from the list of electives of another semester

Mandatory				
<i>Code</i>	<i>Title</i>	<i>Module Coordinator</i>	<i>Version</i>	<i>Credits</i>
CHEA6002	Analytical Chemical Techniques	Donagh OMahony	3	5
CHEM6005	Industrial Chemistry	Donagh OMahony	3	5
STAT7009	Inferential Statistics	David Goulding	1	5
CHEO6006	Pharmaceutical Chemistry	Donagh OMahony	2	5
CHEM6007	Physical Chemistry	Donagh OMahony	3	5
Elective				
<i>Code</i>	<i>Title</i>	<i>Module Coordinator</i>	<i>Version</i>	<i>Credits</i>
FREE6001	Free Choice Module	PAUL GALLAGHER	3	5
CHEM6008	Quality & Validation	Donagh OMahony	3	5

Year 3 / Semester 1

Mandatory				
<i>Code</i>	<i>Title</i>	<i>Module Coordinator</i>	<i>Version</i>	<i>Credits</i>
CHEA7004	Analytical Practice & Protocol	Donagh OMahony	3	5
CHEM7001	Experimental Chemistry	Donagh OMahony	3	5
CHEM7004	Inorganic and Physical Chem	Donagh OMahony	4	5
CHEM7006	QA for Chemists	Donagh OMahony	3	5
CHEO7003	Topics in Organic Chemistry	Donagh OMahony	3	5
Elective				
<i>Code</i>	<i>Title</i>	<i>Module Coordinator</i>	<i>Version</i>	<i>Credits</i>
BIOM7001	Analytical Microbiology	Brigid Lucey	4	5
BIOT7006	Biopharmaceutical Upstream	Michael J. O Mahony	3	5
FREE6001	Free Choice Module	PAUL GALLAGHER	3	5

Year 3 / Semester 2

Mandatory				
<i>Code</i>	<i>Title</i>	<i>Module Coordinator</i>	<i>Version</i>	<i>Credits</i>
CHEO7004	BioPharmaChem Applications	Donagh OMahony	2	5
CHEA7003	Environmental Analysis	Donagh OMahony	3	5
PLAC7005	Industrial Placement	Donagh OMahony	3	15
CHEM7005	Topics in Inorg/Phys Chemistry	Donagh OMahony	3	5

