

**APPROVED**



<b>Awards</b>					
Ordinary Bachelor Degree					
<b>Programme Code:</b>	DK_SAPBI_7	<b>Mode of Delivery:</b>	Full Time	<b>No. of Semesters:</b>	6
<b>NFQ Level:</b>	7				
<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)	Have a good level of knowledge of: - a broadly based scientific core; - mathematics; - theory and understanding in a particular sub-field of science.
<b>PO2</b>	Knowledge - Kind	
	(a)	Have a good level of knowledge in: - the terminology, nomenclature and/or classification systems appropriate to the subject area; - subject specific theories, concepts and principles; - methods for acquiring, processing, interpreting and presenting subject-specific information; - the identification, definition and resolution of routine problems; - relevant legal, quality and regulatory frameworks; - current issues of concern to society and an appreciation of the ethical issues involved.
	(b)	Have a good level of knowledge in some aspect of the defining elements of the subject area as a result of individual study or research.
<b>PO3</b>	Skill - Range	
	(a)	Apply knowledge and understanding to address familiar problems in a scientific work setting.
	(b)	Employ data analysing, synthesising and summarising skills in a scientific work setting.
	(c)	Source, interpret and apply appropriate and referenced literature from a specific scientific area.
	(d)	Work independently within defined time boundaries.
	(e)	Operate a broad range of laboratory and other relevant equipment safely.
	(f)	Apply numerical and statistical analysis skills.
	(g)	Maintain detailed records of activities.
	(h)	Communicate Scientific information in a variety of forms to specialist audiences.
<b>PO4</b>	Skill - Selectivity	
	(a)	Identify and implement solutions to problems relating to scientific processes in a logical manner.

	(b)	Appreciate the views of others.
	(c)	Participate fully in the day-to-day operations of a scientific industry, or other scientific work setting.
	(d)	Make decisions in relation to a controlled environment.
	(e)	Test simple hypotheses.
	(f)	Appreciate the limits of knowledge in a scientific area.
<b>PO5</b>	Competence - Context	
	(a)	Analyse and generate data, diagnose and trouble-shoot technical problems and contribute to their resolution in a range of structured settings.
	(b)	Use scientific skills to accurately perform tasks.
	(c)	Behave professionally in a range of structured work settings.
<b>PO6</b>	Competence - Role	
	(a)	Take direction, accept criticism and use feed-back to enhance own performance.
	(b)	Participate in a structured team environment across a range of scientific disciplines.
	(c)	Be self-directed in terms of time, motivation and planning and be self-aware and be open and sensitive to others.
	(d)	Work with significant autonomy within allocated responsibility.
	(e)	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)	Demonstrate an ability for autonomous, independent learning, identify gaps in personal knowledge, understanding and skills and identify appropriate means of gaining these attributes.
	(b)	Evince a commitment to continuing education and lifelong learning and take appropriate action to remain aware of industrial, regulatory and societal change, which will impact on chosen specialisation.
<b>PO8</b>	Competence - Insight	
	(a)	Discuss relevant scientific issues in a social, cultural and economic context and promote science and technology to the general public.
	(b)	Demonstrate and awareness of current issues of concern to society and an appreciate of the ethical issues involved.

## Semester Schedules

### Stage 1 / Semester 1

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

Stage 1 / Semester 2

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

Stage 2 / Semester 1

Mandatory	
Module Code	Module Title
INST S7Z02	<a href="#">Analytical Science</a>
BIOL S7009	<a href="#">Fundamental Microbiology</a>
CHEM S7003	<a href="#">Intro to Organic Chemistry</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
PROJ S7Z01	<a href="#">Project</a>
QUAL S7010	<a href="#">GMP and Regulatory Affairs</a>
MCBL S7001	<a href="#">Applied Microbiology</a>
BITC S7011	<a href="#">Biotechnology</a> ( Part 1 of 2 )

Elective	
Module Code	Module Title
ENVR S7009	<a href="#">Aquatic Science</a>
PHAR S7Z01	<a href="#">Immunology</a>



Stage 3 / Semester 2

Mandatory	
Module Code	Module Title
QUAL S7Z01	<a href="#">Quality Management</a>
INST S7Z03	<a href="#">Advanced Analytical Science</a>
BITC S7011	<a href="#">Biotechnology</a> ( Part 2 of 2 )

Elective	
Module Code	Module Title
CHEMS7011	<a href="#">Environmental Chemistry and Biogeochemistry</a>
ENVR S7011	<a href="#">Wildlife and Habitat Ecology</a>
BITC S7005	<a href="#">Biotherapeutics</a>