

**APPROVED**



<b>Awards</b>			
Higher Certificate			
<b>Programme Code:</b>	Dk_SPHAR_6	<b>Mode of Delivery:</b>	Full Time, Part Time
		<b>No. of Semesters:</b>	5
<b>NFQ Level:</b>	6		
<b>Programme Credits:</b>	120		
<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)	Specialised knowledge of a broad area. The learner is expected to have a good grounding in: <ul style="list-style-type: none"> <li>- a broadly-based scientific core</li> <li>- basic mathematics</li> <li>- elements of specialisation in a particular sub-field of science</li> </ul>
<b>PO2</b>	Knowledge - Kind	
	(a)	Some theoretical concepts and abstract thinking with significant underpinning theory. The learner is expected to have a good grounding in: <ul style="list-style-type: none"> <li>- the terminology, nomenclature, and/or classification systems appropriate to the subject area</li> <li>- the general principles of the subject area, including relevant concepts and theories</li> <li>- relevant legal, quality and regulatory frameworks</li> <li>- basic methods and scientific techniques for acquiring, processing, analysing and presenting subject-specific information</li> </ul>
<b>PO3</b>	Skill - Range	
	(a)	Demonstrate comprehensive range of specialised skills and tools. The learner will be able to: <ul style="list-style-type: none"> <li>- apply a range of broadly-based scientific laboratory skills to perform routine tasks accurately</li> <li>- select, gather and record data accurately</li> <li>- work to set targets</li> <li>- operate a range of laboratory and other relevant equipment safely</li> <li>- apply basic numerical and statistical analysis skills</li> <li>- maintain basic records of activities present scientific results to peers</li> <li>- use standard computer-based office applications</li> </ul>
<b>PO4</b>	Skill - Selectivity	
	(a)	Formulate responses to well-defined abstract problems. The learner will be able to: <ul style="list-style-type: none"> <li>- respond to problems and opportunities that are likely to be encountered by a technician, working in a structured and managed environment</li> <li>- participate in the day-to-day operations of a scientific industry, or other scientific work setting</li> <li>- assess and optimise the performance of scientific equipment</li> </ul>
<b>PO5</b>	Competence - Context	
	(a)	Act in a range of varied and specific contexts involving creative and non-routine activities: transfer and apply theoretical concepts and/or technical or creative skills to a range of contexts. The learner will be able to: <ul style="list-style-type: none"> <li>- follow documented scientific procedures and approved validation and quality assurance procedures to accurately gather, record and process technical information</li> <li>- follow documented scientific procedures to perform routine tasks in structured/managed work settings</li> <li>- behave responsible in a work setting</li> <li>- work in accordance with current health and safety regulations;</li> </ul>
<b>PO6</b>	Competence - Role	

	(a)	<p>Exercise substantial personal autonomy and often take responsibility for the work of others and/or for allocation of resources, form and function within, multiple complex and heterogeneous groups. The learner will be able to:</p> <ul style="list-style-type: none"> <li>- work individually on routine tasks</li> <li>- contribute effectively and participate in a science based team</li> <li>- participate and contribute constructively in a structured team environment across core scientific disciplines</li> <li>- be self-directed in terms of time, motivation and planning and be self-aware and be open and sensitive to others</li> <li>- accept and exercise personal responsibility</li> <li>- work under guidance within allocated responsibility;</li> </ul>
<b>PO7</b>	Competence - Learning to Learn	
	(a)	<p>Learn to evaluate own learning and identify needs within a structured learning environment; assist others in identifying learning need. The learner will be able:</p> <ul style="list-style-type: none"> <li>- demonstrate familiarity with the principles of self-directed learning</li> <li>- evince a commitment to continuing education and lifelong learning</li> </ul>
<b>PO8</b>	Competence - Insight	
	(a)	<p>Express an internalised, personal world view, reflecting engagement with others. The learner will be able to:</p> <ul style="list-style-type: none"> <li>- demonstrate an awareness of relevant social and ethical issues;</li> </ul>

## Semester Schedules

Stage 1 / Semester 1

Mandatory	
Module Code	Module Title
CHEM S7Z04	<a href="#">Fundamental Chemistry</a>
MATH S7Z01	<a href="#">Mathematics 1</a>
PHYS S7Z03	<a href="#">Physics Through PBL 1</a>

Stage 1 / Semester 2

Mandatory	
Module Code	Module Title
BIOL S8Z01	<a href="#">Biology</a> ( Part 1 of 2 )
HLSTS8Z01	<a href="#">Health and Safety and Academic Skills</a> ( Part 1 of 2 )
CHEM S7Z05	<a href="#">Chemistry</a>
MATH S7Z02	<a href="#">Mathematics 2</a>
PHYS S7Z04	<a href="#">Physics Through PBL 2</a>

Stage 2 / Semester 1

Mandatory	
Module Code	Module Title
INST S7Z02	<a href="#">Analytical Science</a>
CHEM S7003	<a href="#">Intro to Organic Chemistry</a>
PHAR S7021	<a href="#">Pharmaceutical Microbiology</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 2

Mandatory	
Module Code	Module Title
SCIAS7Z01	<a href="#">Molecular Bioscience</a> ( Part 1 of 2 )
CHEM S7012	<a href="#">Pharmaceutical Chemistry</a>
CHEM S7013	<a href="#">Pharmaceutical Processing</a>
DATA S7Z01	<a href="#">Statistics and Data Analysis</a>

Stage 3 / Semester 1

Mandatory	
Module Code	Module Title
SCIAS7Z01	<a href="#">Molecular Bioscience</a> ( Part 2 of 2 )