



# Foundation Studies in Life Sciences

The principal aim of the programme is to enable students to linguistically and academically negotiate the transition from school to university and be prepared for the demands of an undergraduate degree programme in an appropriate Life Sciences discipline. The programme syllabus is designed around the acquisition of core academic skills and literacy development that underpins successful higher education: academic, research, IT, critical thinking and the promotion of self-awareness.

## In Semester one you will study:

- Interactive Learning Skills & Communication
- Information and Communication Technology Skills
- Chemistry 1
- Biology 1

## In Semester two you will study:

- Chemistry 2
- Biology 2
- Research Methods, Critical Thinking and Expression
- Mathematics for Science and Computing

## Module overview

### Biology 1

Biology 1 covers fundamental principles around the philosophy of science, macromolecules, cell biology and enzyme activity

### Biology 2

Biology 2 covers fundamental principles around homeostasis, systems physiology, genetics, evolution, biodiversity and molecular biology.

### Chemistry 1

The Chemistry 1 module attempts to deliver a fundamental basis to the study of the discipline in preparation for University level studies.

### Chemistry 2

The Chemistry 2 module builds on the underpinning knowledge of Chemistry 1 to deliver a fundamental basis to the study of the discipline in preparation for University level studies.

### ICT Skills

This ICT Skills module attempts to deliver an accurate snapshot of the state of ICT as it exists currently, as well as to equip the student with a useful set of skills in the use of common productivity software and Internet based applications.

### Interactive Learning Skills and Communication

This module has been designed to help students develop their academic literacy and communication skills in preparation for undergraduate study and to understand the institutional culture, practices, norms and expectations of UK higher education in an international academic context and community; to enable students to develop basic academic research and communication skills and; to raise students' English language levels to the required entry point for undergraduate entry.

### Research Methods, Critical Thinking and Expression

This module has been designed to prepare students with an underpinning knowledge and skills in research methods, critical thinking and expression. Specifically, the module will give students the basic tools to conduct research using either qualitative or quantitative methodologies. It will also enhance comprehension and interpretation of the mechanics of argumentation; the ability to effectively evaluate the rationale of argument and evidence to support claims; assess the credibility of sources made in claims; and formulate and deliver both verbally and in writing well-structured and critically reasoned arguments and opinions

### Mathematics for Science and Computing

This module has been designed to be delivered in conjunction with the standard Stage 1 UG programmes in engineering, mathematics, science and related disciplines to provide the basis to further study of advanced mathematics.