UNIVERSITY of STIRLING

APPLIED BIOLOGICAL SCIENCES

BSc (Hons)

ARE YOU STIRLING?

WHY STUDY APPLIED BIOLOGICAL SCIENCES?

Scotland is internationally recognised in the life sciences arena. It is a thriving sector, which requires highly skilled graduates. The Scottish Life Sciences employers' community has recognised a need for work ready science graduates. This new innovative undergraduate degree, developed in consultation with employers, will produce work-ready graduates for the life science industry.

Forth Valley College and the University of Stirling have developed a four-year, fully integrated degree course in Applied Biological Sciences. This innovative course is the first of its kind in Scotland to focus on meeting the identified skills shortages within the industry by allowing participants to acquire the practical and research skills required by employers.

LIFE SCIENCES CONTRIBUTE OVER

£3.2 BILLION

TO THE SCOTTISH ECONOMY EVERY YEAR

Scottish Enterprise 2016

REASONS TO CHOOSE THIS COURSE

1 AN INTEGRATED DEGREE PROGRAMME

The University of Stirling has partnered with the College of Forth Valley to offer the best of both teaching approaches: practical skills in small classes and research-led teaching.

2 OPPORTUNITY TO GAIN WORK EXPERIENCE

A 3rd-year Industrial placement will allow ABS students to improve their chances of employment after graduation.

3 DIVERSITY OF RESEARCH TEAMS

ABS students will benefit from the diversity of research backgrounds (from environmental microbiology to cancer research), strengthening their academic knowledge.

COURSE DETAILS

A shared learning approach between a College and University is one of the key attributes of this degree. Academics from both institutes will work together, alongside employers, to deliver the most up-to-date and industry relevant curriculum.

All undergraduates of this course will have dual student status and be enrolled within both institutions. Students will have full access to all of the University of Stirling and Forth Valley College online and onsite facilities from Year 1 onwards.

FORTH VALLEY COLLEGE

Forth Valley College's STEM provision is amongst the strongest and most comprehensive to be found at any college across the UK. The College has a strong strategic commitment to STEM and close links with industry in order to deliver the skills required by employers through innovative provision.

In the first two years of the degree, the focus is on the acquisition of fundamental biological laboratory skills and an understanding of the science that underpins them.

Much of this teaching will be undertaken in small classes at Forth Valley College with others at the University of Stirling including a module in statistics, focused practical laboratory sessions and opportunities to undertake project work in Year 2.

UNIVERSITY OF STIRLING

In Year 3 of study, all modules are taken at the University of Stirling. These modules focus largely on the cellular and molecular aspects of biological sciences including immunology and microbiology.

In addition, an industrial placement module will give students valuable insight into how the biosciences industries work, and will give them hands- on experience in the workplace.

The final year of the degree focuses on proteomic/genomic aspects of biological sciences, experimental design, together with an extended research dissertation undertaken in academics' laboratories and a number of elective modules. Research-led teaching is the key to deep learning and understanding. This approach, together with industrial placements, enables students to apply the skills that they develop to 21st Century biosciences careers.

"My experience of the Industrial Placement Module was overwhelmingly positive. I now have a much better understanding of what it's like to work in the science industry. I have gained many new practical and personal skills and have a clearer idea of what career path I may want to follow."

Dominic Quinn,
BSc (Hons) Applied Biological Sciences, Year 3 student.

"The Scottish life sciences sector is calling out for highly skilled graduates with hands-on experience. An integrated degree will provide the practical and research skills required to produce 'work ready' graduates."

David Wotherspoon,
Diageo

CAREER OPPORTUNITIES

This course has been developed with employers. The emphasis will be on understanding and practicing modern biological techniques with a view to generating 'employment ready' graduates. The development and awareness of good health and safety behaviours, and good manufacturing and laboratory practices, are embedded throughout this degree.

APPLIED BIOLOGICAL SCIENCES 8C93

stir.ac.uk/e0

ENTRY REQUIREMENTS

FOUR-YEAR HONOURS

SQA Highers:
BBB
GCE A-levels:
BB
IB Diploma:
28
Essential subjects:
To include one of Biology or Chemistry.

Preference will be given to candidates with a strong science background

Access courses:
Access courses and other UK/EU and international qualifications are also welcomed.
Essential subjects:
As listed above or equivalent.

General entrance requirements apply.

National 5 (B), Intermediate 2 (C), GCSE (C) or equivalent required.

Please note that selection will be made via successful interview.

PART TIME AND STUDY ABROAD OPTIONS AVAILABLE

TYPICAL TIMETABLE

Year 1	Year 2	Year 3	Year 4
Applied Sciences: Graded Unit 1	DNA Molecular Techniques	Microbiology	Honours Dissertation
Laboratory Skills for Science Industries	Microbiological Techniques	Animal Physiology	Proteomics
Fundamental Chemistry: Theory and Laboratory Skills	Immunological Techniques	Enzymes and their Applications	Molecular Evolution & Phylogenetics
Statistics for Science 1	Protein Structure and Function	Animal Cell Biology	Phylogenetics
Human Body Structure and Function	Applied Biological Sciences: Graded Unit 2	Applied Immunology	Molecular techniques (1 and 2)
Biochemistry: Theory and Laboratory Skills	Mathematics for Science	Industrial Placement	Cell Birth/Life/Death
Fundamental Chemistry: An Introduction	Animal Biology		Genetic Engineering for the Future
Microbiology: Theory and Laboratory Skills	Plant Biology		
DNA and Genetics	Quality and Health & Safety Systems in Science Industries		
Biotechnology: an introduction	Animal and Plant Cell Culture: An Introduction		
	Cellular Signalling		

COMPULSORY MODULES

All modules are compulsory

CONTACT

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05/17