

Biomedical Science

BSc

College of Science,
Engineering and Food
Science



University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

JOINT PROGRAMME WITH CIT

Introduction

Biomedical Science is a continually changing profession and involves study of the diverse areas of medical science including biochemistry, microbiology, cellular pathology, haematology and transfusion science. It provides training in cutting-edge technologies to facilitate investigation of disease and medical research and prepares the student for a career in laboratory medicine.

Why Study

Biomedical Science is the term for the investigations carried out by biomedical scientists on samples of tissue and body fluids, to diagnose disease and monitor the treatment of patients. Biomedical Scientists work in partnership with doctors and other healthcare professionals. The aim of the Biomedical Science course is to educate students in biomedical sciences, including the state-of-the-art technologies used in hospitals and research laboratories. It also includes education and training in areas such as haematology and transfusion science, clinical biochemistry, medical microbiology and cellular pathology.

Work Placement

Clinical work placement is completed as part of the postgraduate Diploma in Clinical Laboratory Placement.

Careers

Graduates who have completed the BSc in Biomedical Science, followed by the postgraduate Diploma in Clinical Laboratory Placement, can work as medical laboratory scientists. Graduates can also work in related areas such as:

- the health-care industry
- biopharmaceutical industry
- research scientists.

Further Study

Graduates can apply for entry to a wide range of postgraduate programmes including:

- MSc Molecular Cell Biology
- MSc Biotechnology
- MRes
- PhD Science
- Medicine.

CR320

DURATION 4 Years

APPROX. INTAKE 30

MINIMUM POINTS 2016 545

LEAVING CERTIFICATE ENTRY

REQUIREMENTS H5 in two subjects, and O6/H7 in four other subjects from Irish or English, Maths, one laboratory science subject (Biology, Chemistry, Physics, Physics with Chemistry or Agricultural Science) and three other subjects recognised for entry purposes.

ADDITIONAL REQUIREMENT H4 must be obtained in either Physics, Chemistry, Biology or Physics-with-Chemistry

COURSE PAGE ONLINE www.ucc.ie/en/cr320

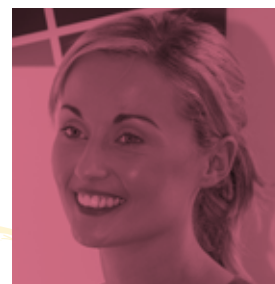
CONTACT INFORMATION

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www.ucc.ie/en/biomed



CAROLINE VAUGHAN

GRADUATE

“Although I’m not directly involved with patients, much of their treatment is based on information I supply to the nurses and doctors. The quicker we can diagnose patients, the quicker they are treated, which is very satisfying. It is fascinating to look down the microscope at diseases such as leukaemia, malaria and anaemia.”



KEY FACTS

- The degree is offered jointly by UCC and CIT
- To work as a Biomedical Scientist in a hospital laboratory, you must hold a BSc Honours degree in Biomedical Science and the postgraduate Diploma in Clinical Laboratory Placement
- The degree, in conjunction with clinical placement, is accredited by both the Academy of Clinical Science and Laboratory Medicine and the Institute of Biomedical Science, allowing you to work as a Biomedical Scientist in hospital laboratories in Ireland, the UK and elsewhere

Year 1 Modules

CORE (ALL ARE 5 CREDIT MODULES, EXCEPT FOR LAST MODULE): BM1001 & BM1002

Introduction to Biomedical Science I & II; **BM1003** Introduction to Cell Biology for Biomedical Scientists; **BM1004** Creativity, Innovation & Teamwork; **BM1007** Introduction to Health Science; **BM1008** Introduction to Human Biology; **BM1009 & BM1010** Biological Chemistry 1 & 2; **MA1001 & MA1002** Calculus for Science Part 1 & 2; **PY1008** Physics for Biomedical, Environmental, Food and Nutritional Sciences (10 credits)

Year 2 Modules

Introductory Molecular Biology; Analytical Chemistry; Analytical Science and Instrumentation; Introduction to Clinical Biochemistry; Haematology and Transfusion Science I; Mammalian Cell and Tissue Structure; Biomolecules; Principles of Metabolic Pathways; Fundamental of Microbiology; Principles of Microbiology; Introductory Physiology I

Year 3 Modules

CORE: Pharmacology; Molecular Biology; Diagnostic Microbiology; Haematology and Transfusion Science; Research Methods for Biomedical Scientists; Medical Microbiology; Immunology: Host Response to Pathogens; Transmission and Epidemiology of Infectious Diseases; Structural Biochemistry; Advanced Metabolism; Cell Signalling; Cellular Pathology

Year 4 Modules

Transfusion Science; Clinical Biochemistry and Endocrinology; Quality Management Systems for Biomedical Scientists; Statistics in Biomedical Science; DNA Diagnostics and Medical Genetics; Haematology; Bioinformatics for Biomedical Science; Virology; Cellular Pathology; Research Project

