

MSc Biotechnology



Teaching Mode: Full-time

Qualifications: MSc

*Fees: (EU) €7,130 and €1,000 Bench fee
(Non-EU) €22,573 and €1,000 Bench fee

Duration: 1 Year

Web link: www.ucc.ie/mscbty

Contact: Professor Tommie McCarthy; +353 21 420 5436
t.mccarthy@ucc.ie

The MSc in Biotechnology is a one-year course designed to provide you with the theoretical and practical skills for employment in the industries of biopharmaceuticals, biologics, biomedical research, agrochemicals and biotechnology. The course curriculum consists of six months of lectures, laboratory practical sessions, career development workshops, industry-based seminars and a six-month research project. The curriculum has been developed with input from the biotechnology and biopharmaceutical industries, to provide you with the key skills sought by employers. Irish / EU students have the choice to complete the six-month research project in the national or international biotechnology industry or university environment. Non-EU International students complete the six-month research project in a university research laboratory.

Career Opportunities

The Masters in Biotechnology is designed to provide graduates with the appropriate skills for leadership positions in the industry. Graduates of the programme have typically gained employment in the broad biotechnology area including; Biomanufacturing, Process Science, Quality Assurance, Quality Control, Microbiology, Bioanalytical Science, Regulatory Affairs and Research and Development. Graduates of the programme with a strong interest in research have secured both industry sponsored and university funded PhD positions nationally and internationally.

Entry and Eligibility

Candidates must have obtained at least a Second Class Honours Grade I degree or equivalent in a subject(s) related to that of the Masters in Biotechnology programme. Graduates with equivalent qualifications in related areas of science and technology, or with proven and relevant industrial experience can be considered for places following interview and assessment by the Director of the Masters in Biotechnology Programme.

Candidates must be approved by the Masters in Biotechnology course team and/or the Director of the Masters in Biotechnology. Candidates, for whom English is not their primary language, should possess an IELTS of 6.5 (or TOEFL equivalent) with no less than 6.0 in each individual category.

Programme Structure

Part I of the programme comprises 50 credits of taught modules. Part II comprise an in-depth work placement /internship programme and a dissertation in Biotechnology (40 credits).

What you will study

BC6001 Cell and Molecular Biology, **BT6001** Genetic Engineering, **CM6011** Modern Methods in Analytical Chemistry, **MB6003** Functional Foods for Health, **MB6004** Advanced Molecular Microbial Biotechnology, **PE6008** Bioprocess Engineering or Advanced Case Studies in Biotechnology, **PF6301** Biopharmaceuticals: Formulation Design, Secondary Processing and Regulatory Compliance, **PS6001** Plant Genetic Engineering, Research Project Module **BT6002** Work Place Skills and a Dissertation in Biotechnology.

FACTS: All students complete a six-month individual industry related research project in biotechnology. The project is carried out during work placement with an industrial partner or in a selected UCC research laboratory or an approved national or international academic laboratory.