

This course is ideal for UK and international graduates who wish to gain knowledge of the emerging field of biotechnology, and acquire the skills necessary for entering employment in the growing biotechnology industries such as food production, biomedicine and pharmaceuticals. You will receive strong training in many issues at the forefront of biotechnology integrating bioscience, biochemistry and biomedical science. Appropriately for this growing area, entrepreneurial skills and entrepreneurship are also developed in this programme, providing a unique approach to biotechnology.

Grishma Kanchan Shashi

Coming to the UK as a student has opened up a whole new world, full of unique opportunities, memorable moments and life-changing experiences for me. The great thing about this university is its wide range of different cultures. The facilities available were excellent. Fantastic libraries, great laboratories and excellent facilities provided on- and off-campus! Absolutely enjoyed my time at the university.

The course provides a vast range of subjects from drug design and green biotechnology to skills in entrepreneurship giving us an edge over other life science graduates.

Moreover, the staff was extremely friendly and approachable which was very important and useful for me as an international student and no matter what stage of study I was at, I always found someone on hand to provide me with help, guidance and advice.

Come with an open mind and enjoy every bit of the course as each lesson comes with something new to learn and you will be amazed at the endless exciting prospects the course has in store for you.



The programme is taught by specialists in biotechnology, bioscience, pharmaceuticals, and analytical and organic chemistry.

Full details of module content are given on the School website. The key modules are:

- **Recent Advances in Biotechnology** The importance of biotechnology in industry, applications of DNA technology, biomanufacturing processes, and ethics of biotechnology.
- **Enterprise and the Entrepreneur** Develops an understanding of the nature of entrepreneurs and entrepreneurial behaviour and the context in which they operate.
- **Separation Science** Theory coupled with practical experience of principles and applications for separation and characterisation of biomolecules and pharmaceuticals, principles of chromatographic and electrophoretic separations, and quality assurance issues.
- **Identification of Important Natural Products** looks at bioactive natural products as pharmaceuticals, toxins and lead compounds, the isolation of bioactive materials from nature, and the characterisation of newly-discovered natural products.
- **Biosensors and Analytical Techniques** explains the current approaches to biosensor technology and the advantages and limitations of analytical techniques used in biotechnology.

- **Structural Bioinformatics, Proteomics and Microarrays** examines modern aspects of proteomics and microarray technology and the principles of bioinformatics, providing the chance to demonstrate the appropriateness of bioinformatic solutions in analysing common problems in pharmaceutical and biotechnology fields.

- **Green Biotechnology** looks at agricultural and plant biotechnology, and the latest developments in biofuel technology.

The supervised research project, which forms the subject of the dissertation, can be undertaken in industrial as well as in state-of-art University laboratories.

Career Opportunities

This programme is particularly suited to those who wish to pursue a career in biotechnological or pharmaceutical industries. You will acquire the skills necessary for employment in the growing biotechnology industries, such as food production, biomedicine and pharmaceuticals.

Fees See page 27.

Duration One year full-time, two to three years part-time (part-time fee payable for two years only).

Entry requirements Applicants should possess at least a UK lower second class honours degree (2.2) or equivalent in bioscience, chemistry, biochemistry, pharmacy or medicine.