



University of  
Nottingham

UK | CHINA | MALAYSIA

# School of Biosciences Postgraduate Taught Courses

[nottingham.ac.uk/pgstudy/biosciences](http://nottingham.ac.uk/pgstudy/biosciences)



Extensive  
industry links



Professional  
skills training



Expert  
research-engaged  
teaching



Innovative learning  
environment



# Find your future at Nottingham

## Overview

Join an inspirational school which is delivering teaching and research in fundamental and applied aspects of the biosciences. We're working towards improving a range of fields including, agricultural production, food safety, human and animal nutrition and health, bioprocessing and biopharma production, and environmental sustainability. As a masters student you will benefit from our extensive research as it means we can offer a variety of modules taught by academics who are shaping the future of biosciences.

We have expertise in areas ranging from the fundamental molecular processes of plant, microbes and animal biology, through all aspects of the food chain. This includes the impact these have on consumer choice, animal and human nutrition, health and reproduction and the underlying biotechnological processes.

A major focus is towards the explanation of the fundamental molecular-genetic and cellular interactions that can be used to deliver improvements in agriculture, health and well-being, food security and biotechnological sectors.

## World-class facilities

The school is located at the Sutton Bonington campus that offers excellent study facilities, a 24-hour learning resource centre, and state-of-the-art teaching and research facilities. It benefits from the presence of the University Farm and Dairy Centre and there are purpose-built plant, food sciences and bio-energy buildings as well as many other specialised research laboratories. For more information about the campus: [nottingham.ac.uk/sblife](http://nottingham.ac.uk/sblife)

## Teaching and research excellence

Our students are taught by world-class specialists, many of whom are expert advisers to national and international bodies. We consistently achieve high ratings in independent assessments of teaching and research:

- Ranked the no.1 research environment in the UK (for agriculture, veterinary and food science) according to the Research Excellence Framework 2014
- Ranked 1st in the UK for Agriculture, Forestry and Food in The Guardian University Guide 2018
- We achieved a Gold Teaching Excellence Framework award (2017) for the quality of teaching and learning for our students

## Advanced Dietetic Practice MSc | PGDip | PGCert

Dietetic practitioners who aspire to advance their knowledge, skills and competencies must develop the ability to evaluate current practice critically, both from the wider professional picture and their individual point of view. These programmes offer a sound foundation for professional development, and are designed to suit your personal and professional situation. Examples of module content include: Nutrition Support, Obesity Management, Paediatric Nutrition, and Gastroenterology.

## Agrifood MSc | PGDip | PGCert

These courses are all part-time and aimed at those working anywhere in the Agrifood industry, providing an opportunity to gain a thorough knowledge of Agrifood science and technology, while developing skills of analysing technical problems and work-based problem solving. Course modules are available in the main subject areas of animals, crops, food and nutrition, business and transferable skills.

## Animal Nutrition MSc | PGDip

These vocational courses offer the unique opportunity to integrate an in-depth scientific knowledge of animal nutrition with the acquisition of business skills and a detailed operational understanding of the international animal feed industry. Examples of module content include: Fundamentals of Nutrition, Non-ruminant Nutrition, Agri-Business and Case Studies, Companion and Zoo Animal Nutrition, and Research Techniques in Animal Nutrition.

## Applied Biomolecular Technology (ABT) MSc

This course will train you to analyse the natural and artificially engineered large bio-molecules of importance to the pharmaceutical, food/nutrition, healthcare, biomedical and other important industries. This will include training in "patent preferred" biochemical, biophysical and molecular biology technologies, including gene cloning and protein engineering. The research project module includes an industry placement option which provides the exciting opportunity to discover first hand the needs of modern industry.

## Applied Biopharmaceutical Biotechnology and Entrepreneurship (ABBE) MSc

Run in conjunction with the University's Business School, this course provides students with the scientific research skills and the basic business knowledge needed to convert scientific discoveries into inventions and commercial products. You will learn how to translate these into a business plan for start-up technologies or innovative processes within biotechnology industries. You'll also develop practical skills in finance, marketing and management, which, together with an industry placement option will equip you for career opportunities in the global biotechnology market.

## Biotechnology MSc

Develop your career in health, medicine, food, environment and energy sectors. The overarching theme of this course is an understanding of the cellular mechanisms, manipulations of biological systems and production processes. You will be introduced to the latest molecular techniques with cutting edge research relating to plants, microbes and animals. The industry placement option as part of the research project module contributes to the emphasis on career development and industrial trends in biotechnology.

## Brewing Science MSc | PGDip

These courses have been developed for individuals working in the brewing industry, providing a key pathway for continuing professional development. Advance your understanding of the scientific principles of the brewing process and develop and demonstrate a cross-process multi-disciplinary approach to optimising brewery unit operations and improving beer quality. Courses are delivered via blended learning: distance e-learning through term time, coupled with a one week residential course held at the University at the end of each semester.

## Brewing Science and Practice MSc

This one-year full-time masters course prepares graduate level scientists or engineers for a career in brewing, or its allied industries. The programme develops technically competent and creative brewers by providing substantial hands-on experience of practical brewing, using our state-of-the-art pilot facilities. Practical brewing skills are supported with technical knowledge to ensure that graduates understand the scientific principles that underpin the brewing process and are able to innovate, problem solve, and conduct scientifically robust experiments.

## Clinical Nutrition MSc | PGDip

These courses are aimed at health and social care professionals seeking to develop nutrition as a new specialism within their clinical practice. Example modules include: Gastroenterology, Obesity, Diabetes, Paediatric Nutrition and Understanding Changing Behaviour.

## Crop Improvement MSc | PGDip

These courses examine crop improvement through advances in crop genetics and breeding techniques, resource use efficiency and agronomy. It focuses on the understanding of plant to crop systems, with an emphasis on research training. Example modules include: Genetic Improvement of Crop Plants, Advanced Molecular Methods in Biotechnology, Resource Capture by Crops and Integrated Disease Management.

## Food Production Management MSc | PGDip

These courses are designed to equip students with knowledge of the special factors associated with food processing and food quality assurance, as well as the management skills required to contribute to the industry in both the developed and developing worlds. Example modules include: Core Skills and Technologies of Food Manufacture, Supply Chain Management, Food Flavour, and Global Food Industry. Students have the opportunity to do an industrial placement as part of the research project module.

## Nutritional Sciences MSc

This course offers an in-depth education in human nutrition covering the underlying principles and evidence base, defining concepts, theories and methods, and the current knowledge and development of the subject, within a research-led environment. This course is accredited by the Association for Nutrition. Successful graduates can apply directly for entry to the UK Register of Nutritionists as Associate members and use the ANutr qualification.

## Sensory Science PGCert

This course provides a sound theoretical background to underpin best practice when designing, collecting, analysing and interpreting data within the multidisciplinary field of sensory and consumer science.





## Advance your career

During your time at the School of Biosciences you will train to become a professional scientist, specialising in your particular subject area. We have extensive links with companies and institutions working in the field of biosciences nationally and internationally, helping ensure our courses are relevant to industry. In addition to your academic knowledge, you will develop a range of key competencies and employability skills, supported by our comprehensive Careers and Employability Service to help achieve your career goals. Previous graduates have progressed into roles working for global companies such as GlaxoSmithKline, Nestlé and Cargill. Find out more: [nottingham.ac.uk/careers](http://nottingham.ac.uk/careers)

## Our research themes

- Integrative Systems Biology
- Plant and Crop Science
- Reproduction
- Infection and Immunity
- Industrial Biotechnology and Brewing
- Agriculture
- Environmental Science
- Food Science, Nutrition and Animal Science

## Research in action

Our research has helped surgeries become safer for dentists and patients alike. In collaboration with local industry, our researchers have developed a safe new cleansing agent to remove and prevent regrowth of biofilm in dental unit (the dentist's chair) water. Bacteria can grow in the tubing in dental units, which has the potential to cause infection in patients and dental professionals using the units. Our dental unit biofilm remover has proven efficacy against this bacteria and inhibits its re-growth enabling a system to maintain water quality. This new find has been recognised by the award of the Medilink East Midlands Export Achievement Award. Find out more: [nottingham.ac.uk/biosciences/research](http://nottingham.ac.uk/biosciences/research)



This flyer has been drafted in advance of the academic year to which it applies. Every effort has been made to ensure that the information contained in this flyer is accurate at the time of publishing, but changes (for example to course content) are likely to occur given the interval between publication and commencement of the course. It is therefore very important to check our website for any updates before you apply for the course by following [nottingham.ac.uk/pgstudy](http://nottingham.ac.uk/pgstudy). Where there is a difference between the contents of this flyer and our website, the contents of the website take precedence.

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## Fund it

When looking at how to fund your postgraduate studies, it's worth taking the time to research your options, as funding is available from a variety of sources.

Find out more at [nottingham.ac.uk/pgstudy/funding](http://nottingham.ac.uk/pgstudy/funding)

Discover more

- +44 (0)115 951 5559
- [nottingham.ac.uk/contact](http://nottingham.ac.uk/contact)
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