MSc Brewing Science

Prepare yourself for a senior role in the brewing industry with this pioneering part-time distance-learning programme

nottingham.ac.uk/pgstudy/biosciences

Expert research-led teaching

Workplace-based research project

Intensive residential courses

Advanced training for brewing industry professionals
Overview
This pioneering programme has been developed specifically for individuals working in the brewing industry, providing a key pathway for continuing professional development. It is designed for part-time distance learning so you can acquire and practice skills in your work environment. The course will advance your understanding of the scientific principles of the brewing process. It also develops and demonstrates a cross-process multidisciplinary approach to optimising brewery unit operations and improving beer quality. The programme ends with an innovative problem-solving brewing project, allowing you to practice the skills you have acquired.

Content
The course is studied on a part-time basis to fit around your work commitments. It consists of 120 credits of taught modules (see below), followed by a brewing research project (60 credits) in which you will use skills and knowledge to devise and undertake a piece of relevant research, usually workplace-based.

For those in full-time employment, we recommend that the course is studied over three years at the rate of 40 credits per year. However, the course is flexible and can be completed in two to four years according to your preference and circumstances.

Structure
Our brewing science programmes are delivered through a combination of interactive e-learning and intensive advanced residential courses.

Interactive e-learning (75%)
Most of the course materials are delivered by distance learning, designed to be studied part-time and to fit around your work. Learning materials include video lectures, interactive animations, virtual laboratories and electronic resource links, in addition to more conventional text and image pages.

Intensive residential courses (25%)
You will spend one week per semester (twice per year) on an intensive residential course held at the University.

This provides the opportunity to develop theories and practice through traditional face-to-face teaching techniques such as lectures, seminars, workshops, problem-based laboratory practicals, industrial visits and tutorials.

Modules
The first 70 credits follow a logical process through the brewery. These modules concentrate on the technology of the modern brewing process and the underlying scientific principles required to control the conversion of raw materials into beer in pack:
- Raw Materials for Brewing (20 credits)
- Brewhouse Processes (10 credits)
- Brewery Yeast Management (10 credits)
- Fermentation and Yeast Handling (10 credits)
- Beer Maturation and Filtration (10 credits)
- Packaging of Beer (10 credits)

A further 50 credits of taught modules build cross-disciplinary knowledge of quality factors and develop problem-solving skills across the brewing process:
- Beer Flavour Development and Sensory Analysis (20 credits)
- Brewing Microbiology (10 credits)
- Brewery Waste Management and Environmental Issues (10 credits)
- Beer Analysis and Quality Management (10 credits)

The course is taught and supervised by staff from the School of Biosciences with expertise in brewing and related sciences, together with invited contributions from specialist brewing practitioners; all are internationally renowned leaders in their fields.

Entry requirements
You will normally be expected to hold an honours degree (or international equivalent) at 2:2 level or above in a biological, chemistry, biochemical engineering or other relevant science. Relevant workplace experience may also be accepted. Applicants whose first language is not English must also achieve:
- IELTS 6.0 (with no less than 5.5 in any element)
- TOEFL iBT 79 (with no less than 17 in writing and listening, 18 in reading and 20 in speaking)

Test results should be no more than two years old.

Find out more
+44(0)115 951 6610
brewing.science@nottingham.ac.uk
nottingham.ac.uk/brewingscience

Funding your studies
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.
nottingham.ac.uk/pgstudy/funding

Apply now
+44 (0)115 951 5559
nottingham.ac.uk/pgstudy/apply
nottingham.ac.uk/contact