

# MEngSc Food Engineering

One Year Full Time (September start)



## Introduction

The MEngSc in Food Engineering provides a comprehensive coverage of bioprocess and food manufacturing systems engineering. The programme will be of particular interest to graduates in Engineering, Science and related disciplines who are interested in food and bioprocess engineering, risk assessment, process development, process control, advanced manufacturing systems and associated environmental issues. On this programme you will develop new technical competencies in

food and bioprocess engineering, learn how to develop and execute a research plan, and acquire skills in the application of leading-edge technologies to the agri-food and biotechnology industries, including novel food processing technology, food process automation, risk assessment, computer vision for food quality and food safety. Excellent job prospects are available to graduates in the food, bioprocess, manufacturing and related agencies and industries.

## Course Highlight

This programme is delivered by a highly research-intensive School comprising a European Research Council Fellow and six Marie Curie Fellowships. Professors Sun and O'Donnell are in the world's top one per cent of the most cited scientists in their field. Opportunities for site visits and industry internships are provided where possible.

## Course Content and Structure

- 90 credits taught masters
- 60 credits taught modules
- 30 credits dissertation

The programme is structured in three academic semesters (12 calendar months).

**Thesis Project:** At the beginning of the year you will be appointed a Supervisor for your thesis and will agree upon a suitable Thesis title. Throughout the year you will be expected to meet with your supervisor to discuss progress

### Modules include:

- Advanced Food Process Engineering
- Bioprocess Engineering Principles
- Food Chain Integrity
- Food Refrigeration Systems
- Global Cold Chain Safety
- Life Cycle Assessment
- Quantitative Risk Assessment for Human and Animal Health
- Research and Teaching Methods
- Unit Operations in Bioprocess Engineering
- Waste to Energy Process & Technology
- Thesis

## Why study at UCD?



### Graduate education

12,800 graduate students; 17% graduate research students; structured PhDs



### Global community

9,500 international students and a 300,000 alumni network across 165 countries



### Global Profile

UCD is ranked in the top 1% of higher education institutions worldwide



### Global careers

Dedicated careers support; 2-year stayback visa to work in Ireland





## Career Opportunities

The manufacture of food and drink products is Ireland's most important indigenous industry with a turnover of €27.5 billion. Almost 50,000 people are directly employed in the food and drink sector with a further 60,000 employed indirectly in all regions of the country. The value of food and drink exports is €12 billion per annum. Excellent job prospects are available to graduates in the food, bioprocess, manufacturing and related agencies and industries in Ireland. Graduates have progressed to career opportunities in a broad range of internationally recognised companies including: ALcontrol Laboratories, APV, Coca Cola, Dairygold, Glanbia, Guinness, Kepac, and Kerry Group.

## Graduate Profile

Shreyansh Raj Morris  
Dairygold



The School of Biosystems and Food Engineering has a very dynamic teaching environment, highly cited academics and great facilities. My professors not only guided me through the course content but also helped to steer me in the right direction career wise. Doing this master's has been really helpful and provided me with the essential skills needed to work professionally in the food industry. The course is well structured and there are modules like food processing and risk assessment which helped me to build my technical skills, and modules which help you to build your soft skills. The UCD Career Development Centre also organises a number of career fairs, where you have the chance to meet industry professionals. This is how I managed to secure a place on Dairygold's graduate programme.

## Applicant Profile

- Applicants must hold a bachelor's degree with a minimum upper second class honours (NFQ level 8) or international equivalent in a relevant Engineering, Science or Technology degree.
- Applicants whose first language is not English must also demonstrate English language proficiency of IELTS 6.5 (no band less than 6.0 in each element), or equivalent.
- Students who do not meet the IELTS requirement may wish to consider taking the Pre-Sessional or Pre-Masters Pathway. Full details <https://www.ucd.ie/alc/programmes/pathways/>

### International Fees and Scholarships

Tuition fee information is available on [www.ucd.ie/fees](http://www.ucd.ie/fees). Please note that UCD offers a number of graduate scholarships for full-time, self-funding international students, holding an offer of a place on a UCD masters programme. Please see [www.ucd.ie/global/scholarships/](http://www.ucd.ie/global/scholarships/) for further information.

### Related Masters Programmes of Interest

- ME Biosystems & Food Engineering
- ME Management (Food Engineering) PT

#### CONTACT US

**Irish/EU Students** – Katie O'Neill **E:** [katie.oneill@ucd.ie](mailto:katie.oneill@ucd.ie) **T:** +353 1 7161781 **W:** [www.ucd.ie/eacollege](http://www.ucd.ie/eacollege)  
**International Students** – **E:** [eamarketing@ucd.ie/internationalenquiries@ucd.ie](mailto:eamarketing@ucd.ie/internationalenquiries@ucd.ie) **T:** +353 1 7168500  
**W:** [www.ucd.ie/global](http://www.ucd.ie/global)

#### APPLY NOW

This programme receives significant interest so please apply early online at [www.ucd.ie/apply](http://www.ucd.ie/apply)