

# ME Mechanical Engineering

Two Years Full Time



## Introduction

The ME in Mechanical Engineering is a two-year professional engineering graduate degree. Graduates of the programme will be eligible for the title of Chartered Engineer (CEng). This programme is aimed at graduate Mechanical Engineers seeking to obtain a master's degree in Mechanical Engineering. You will gain advanced theoretical, conceptual and

practical knowledge in the application of Mechanical Engineering. Emphasis is placed on the skills required to generate new knowledge through research. This is achieved through independent and project-based learning while working with UCD academics and researchers on contemporary research projects.

## Course Highlight

This ME is professionally accredited by Engineers Ireland and recognised by the Washington Accord for Chartered Engineer status. The programme provides the opportunity for a 6-8 month industrial placement as well as an extensive research project.

## Course Content and Structure

- 120 credits Taught masters
- 65 credits Taught modules
- 25 credits Research Project
- 30 credits Work Experience

### Core Modules include:

- Computational Continuum Mechanics
- Computational Continuum
- Control Theory and/or Process Control
- Engineering Thermodynamics Fracture
- Mechanics
- Manufacturing Engineering
- Mechanics of Fluids
- Mechanics of Solids
- Online Research Skills and Techniques
- Professional Engineering Management

### Option Modules include:

- Advanced Composites and Polymers
- Advanced Metals and Materials Processing
- Advanced Vibrations
- Energy in Transport
- Energy Systems and Climate Change
- Heat Transfer
- Materials Science and Engineering
- Numerical Algorithm
- Technical Ceramics
- Quantitative Methods for Engineers

## 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



### Graduate Employability

Ranked no.1 in Ireland in QS Graduate Employability ranking



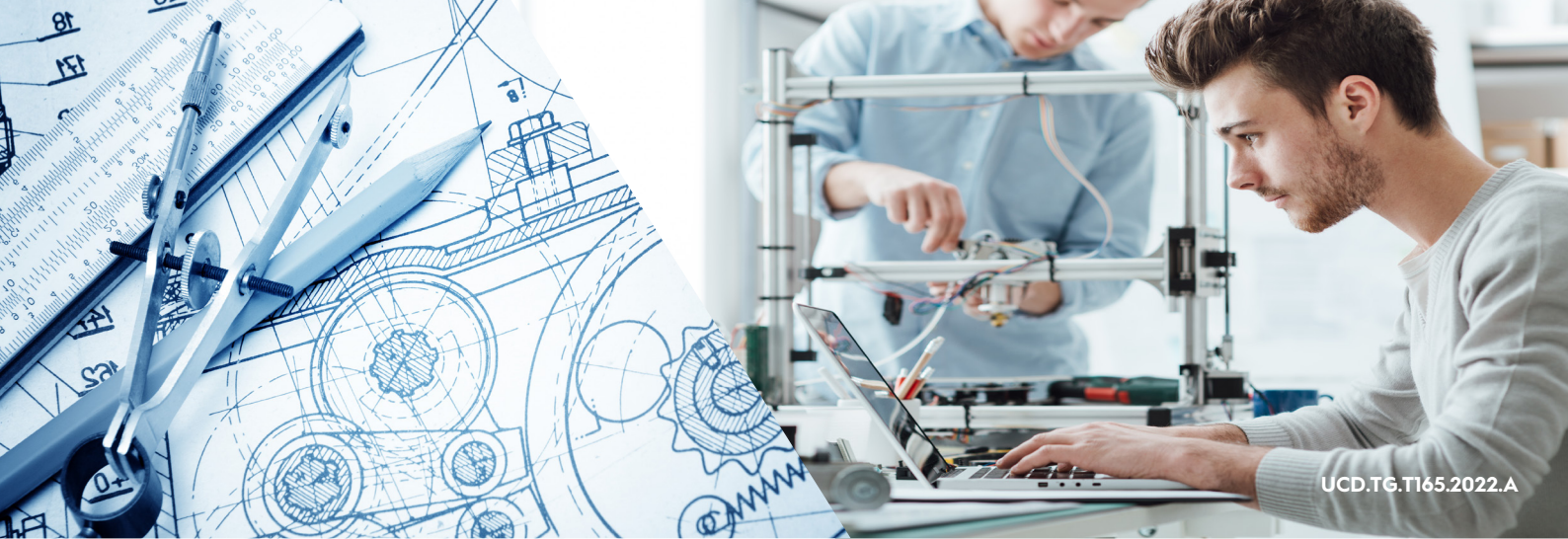
### Global careers

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



ENGINEERS  
IRELAND

ACCREDITED PROGRAMME



## Career Opportunities

In the year immediately after graduation, this programme boasts a 95% success rate for graduates seeking employment or progression to research education. Mechanical engineers are at the centre of every area of technology. Graduates from this programme will be eligible to become fully qualified professional engineers, capable of working anywhere in the world at an advanced technical level or as a professional engineering manager. In the recent past, UCD ME Mechanical Engineering graduates have progressed to careers in industries such as: aerospace industry (e.g., European Space Agency), automobile industry (e.g., Denso, Ferrari, Ford, Jaguar, Land Rover), biomedical industry (e.g., Boston Scientific, Medtronic, Stryker), oil and gas (Cameron), and materials and manufacturing (Henkel, Kingspan).

## Graduate Profile

Cathal McClean  
ORIX Aviation



In the first year of the master's I was able to spend eight months in an aircraft maintenance organisation, which gave great context to the theory learned in classroom modules. Following on from this, I was fortunate enough to do a research thesis on the topic of fracture of composites, a material used extensively in aircraft structure. UCD Mechanical Engineering is broad enough to give you the range and choice of topics to really pursue an area of interest to you. Whether you are interested in fluid dynamics, or control systems, or micro manufacturing, or 3D printing, the framework is there to pursue these areas.

## Applicant Profile

- Applicants must hold a bachelor's degree in Mechanical Engineering with a minimum upper second class honour (NFQ level 8) or international equivalent and the appropriate prior learning.

- 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. Also apply for our College scholarship [www.ucd.ie/eacollege/study/noneus/scholarships](http://www.ucd.ie/eacollege/study/noneus/scholarships)

### Related Masters Programmes of Interest

- ME Energy Systems
- ME Materials Science & Engineering
- MEngSc Materials Science & Engineering

#### CONTACT US

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**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)