

**University College Dublin** Ireland's Global University



# **ME Mechanical Engineering**

# (Two Years Full Time)

The ME in Mechanical Engineering is a twoyear 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 masters 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.

# **Internationally recognised degree**

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 month industrial placement as well as an extensive research project.

# Why study at UCD?



### Tradition

Established 1854, with 160 years of teaching & research excellence



### Global profile

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



### Global community

Over 6.000 international students from over 120 countries study at UCD



### Global careers

Degrees with high employability: dedicated careers support; 1 year stay-back visa (for non-EU students)



#### Safety

Modern parkland campus with 24 hour security, minutes from Dublin city centre

# **Course Content and Structure**

120 credits taught masters

#### Core modules include:

- Online Research Skills and Techniques
- Engineering Thermodynamics III
  Mechanics of Fluids II, Mechanics of Fluids III
- Manufacturing Engineering II

- Fracture Mechanics Mechanics of Solids II, Mechanics of Solids III
- Professional Engineering Management
- Instrumentation and Control

#### Optional modules include:

- Technical Ceramics
- Kinetics and Thermodynamics of Materials

- Materials Science and Engineering
  Advanced Metals and Materials Processing
- Advanced Composites and Polymer Engineering





# **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. Ferrari, Jaguar Land Rover, Ford, Denso), biomedical industry (e.g. Medtronic, Boston Scientific, Stryker), oil and gas (Cameron) and materials and manufacturing (Henkel, Kingspan).

## **Apply Now**

This programme receives significant interest so please apply early online at www.ucd.ie/apply

## **Entry Requirements**

- A 4-year bachelors degree with a minimum upper second class honours (NFQ level 8) or international equivalence in Mechanical Engineering or 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.

### **International Students**

- Stay in Ireland after graduating for 12 months to seek employment
- Approved by US Dept. of Education for federally supported loans
- Apply for Non-EU Scholarships: www.ucd.ie/international/scholarships

# Related Masters Programmes of Interest

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

#### Fees

Fee information is available www.ucd.ie/fees



# **Graduate Profile**

## Gareth Boyle, PhD Student

I chose to do the ME in Mechanical Engineering at UCD because the programme offers a six month work placement on top of a wide variety of advanced academic modules and a final year project. This challenging programme significantly enhanced my engineering knowledge, provided me with the tools needed to take on more applied engineering tasks and gave me an opportunity to work with some of the biggest transport, aerospace, automobile and biomedical companies in Ireland and the UK.

Following the ME, I worked as a Research Engineer in the School of Mechanical Engineering's Adhesion Group on various projects involving composite materials testing and computational fluid dynamics before starting a Biomechanical Engineering PhD at UCD. This is a testament to the broadness of the ME Mechanical programme, as there is a diverse range of mechanical engineering fields to which you can apply what you learn during the ME, making you an attractive candidate for many advanced engineering roles.