Mechanical Engineering

BSc (Engineering Science) (NFQ Level 8) leading to ME (NFQ Level 9) or BE (Hons) (NFQ Level 8)

Engineering NUS1

Length of Course 3 Years [BSc] [Hons] +2 Years [ME] or 4 Years [BE]

Guideline Entry Requirements

IB- International Baccalaureate Diploma* IB Total 34

Subject Requirements

Maths: 5 at Higher Level Lab Science: 4 at Higher Level

Cambridge A Level [+ GCSE O Level]

ABBB/AAA/AAB+CASLevel

Subject Requirements

Maths: A Level Grade C Lab Science: A Level Grade D

Other Examinations

See www.ucd.ie/international

International Foundation Year

Yes. See www.ucdisc.com

Internship Opportunity

*please note IB requirements are under review at the time of printing. See www.ucd.ie/international/ib

Other courses of interest

Engineering	→182
Biomedical Engineering	→184
Agricultural Systems Technology	→162

www.ucd.ie/international/

study-at-ucd-global



Condensation shock associated with local supersonic flow

and now, thanks to UCD, I am living my dream! My mechanical engineering degree at UCD was a fantastic springboard for a career and varied selection of classes. I especially designing carbon fibre parts as a senior composite designer for Force India F1 Team.

Sósanna Ní Dhubháin Graduate

Why is this course for me?

Mechanical engineers help to improve our world. We face unprecedented challenges, from understanding climate change, to managing global mobility, to finding sustainable growth pathways for the burgeoning population in the developing world. Mechanical Engineering in UCD provides you with the education, skills and knowledge you'll need to understand the challenges, and help to develop the new solutions we need. Working in areas ranging from energy to aerospace, biomedicine or manufacturing, mechanical engineers are changing our world for the better. They create new solutions, integrate disparate technologies, increase energy efficiency, reduce our consumption of natural resources and minimise our impact on the local and global environment. If you want to help forge a path to a brighter future, Mechanical Engineering at UCD is the place for you.

What will I study?

Engineering students follow a common first year. Modules include: Chemistry • Creativity in Design • Electrical/Electronic Engineering • Energy Engineering • Engineering Computing • Mathematics • Mechanics • Physics

Second to Fifth Year

Sample modules for Mechanical Engineering students include: Mechanical Engineering Design • Mechanics of Fluids • Materials Science & Engineering • Heat Transfer • Electrical & Electronic Circuits • Manufacturing Engineering • Mechanics of Solids • Professional Engineering • Engineering Thermodynamics • Applied Dynamics • Biomechanics • Measurement & Instrumentation • Control Theory. A student's week includes attending lectures and tutorials, as well as participating in

laboratory-based workshops and undertaking independent study.

A combination of end-of-semester written examinations and continuous assessment is used. In your final year, you'll also submit a report of your research project.

Career & Graduate Study Opportunities

Opportunities are extraordinarily diverse, making graduates highly resilient to changing economic circumstances. Recent graduates are currently employed in: Energy, Biomedical, Aeronautical, Automotive and Manufacturing Sectors • IT companies • Management and Project Management.

Graduates can pursue taught or research Master's degrees in Mechanical Engineering, Materials Science and Engineering, Energy Systems Engineering, Engineering with Business or Biomedical Engineering in UCD or elsewhere. Those with a strong interest in research also have the opportunity to pursue a PhD.

International Study Opportunities

Students are encouraged to spend one or more semesters abroad, attending a Mechanical Engineering degree of equivalent standard. To date, students have studied in:

- University of California, Berkeley, USA
- Georgia Institute of Technology, USA
- EPFL, Lausanne, Switzerland
- Australia, France and New Zealand.

Professional Work Experience

Professional Work Experience (PWE) is incorporated in the ME programme. Six-to eight-month internships (the majority of which are paid) have included the following employers: AbbVie, Accenture, Boston Scientific, Fingleton White, Glen Dimplex, Henkel, Hilti, Jacobs Engineering, Jaguar Land Rover, and Nypro.



