



University College Dublin
Ireland's Global University



ME Biomedical Engineering (Two Years Full Time)

There are currently 250 medical technology companies in Ireland, exporting €7.2b worth of product annually and employing 25,000 people – the highest number of people working in the industry in any country in Europe, per head of population. Biomedical Engineering involves the application of engineering principles to healthcare and medicine. It is an interdisciplinary field, requiring knowledge of both living systems and engineering.

When studying on this programme, you will work with staff and researchers at UCD who have extensive experience in ground-breaking biomedical engineering research. You will also develop a knowledge of how the medical device industry is regulated and how new products are introduced to the market, drawing from experience within UCD which includes pioneering companies. For more information visit www.ucd.ie/biomedicalengineering/

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

Professional work placements provided

The ME Biomedical Engineering at UCD offers a 6-8 month work placement, exposure to world leading researchers and superlative employment opportunities.

Course Content and Structure

120 credits
taught masters

60 credits
taught modules

30 credits
professional work experience

30 credits
research project

Modules include:

- Cell Culture & Tissue Engineering
- Biomedical Signals and Images
- Neural Engineering
- Medical Sciences for Biomedical Engineers
- Medical Device Design
- Nanomaterials
- Biomaterials
- Biomechanics
- Rehabilitation Engineering
- Bioinstrumentation
- Neuromuscular and Membrane Biology
- An Introduction to Physiology: Human Cells and Tissues
- Physiology of the Cardiovascular System

Please see online for a full list of modules.



Career Opportunities

The Irish Medtech Sector is robust and career opportunities upon graduation from this programme are exemplary. Exports of medical devices and diagnostics products now represent 8% of Ireland's total merchandise exports and growth prospects for the industry globally remain good. Many of the world's top medical technology companies have invested significantly in Ireland and a number of exciting, research-based, indigenous companies are emerging and competing internationally.



The Irish government has identified the medical technology sector as one of the key drivers of industrial growth for the future and provides a wide range of supports to encourage and foster this growth. The medical technology industry in Ireland is changing from being prominently manufacturing to being more complex and driven by R&D. Prospective employers include Boston Scientific, ResMed, Shimmer, Bio-Medical Research (BMR), Abbott, Stryker and De Puy.



Facilities and Resources

Modules are taught by faculty engaged in cutting edge research, working with national and international networks of industrial and clinical collaborators. Students have the opportunity to work with research teams and collaborators, with access to lab facilities across UCD School of Electrical and Electronic Engineering, UCD School of Mechanical & Materials Engineering, UCD School of Chemical and Bioprocessing Engineering and the UCD School of Medicine and Medical Science.

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 a relevant Engineering programme.
- 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.

Graduate Profile

Ciaran Hendry, Boston Scientific

I completed my ME Biomedical Engineering in UCD as it allowed me the opportunity to have control on what I wanted to learn. Throughout the entirety of the course there were options that allowed me to improve my technical, interpersonal and communication skills. This degree also allowed me to work on projects and coursework that I found incredibly interesting and it ensured I had job prospects when I graduated. In 2012, I began the Boston Scientific graduate programme and I am now employed as a Quality Engineer. UCD provided me with the intellectual discipline and knowledge to become a leader in this industry. I would highly recommend UCD for your postgraduate studies.

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

- MSc Biotechnology
- ME Electronic and Computer Engineering
- ME Mechanical Engineering
- MSc Connected Health

Fees

Fee information is available www.ucd.ie/fees

Contact Us

EU Students – Katie O'Neill E: eamarketing@ucd.ie T: +353 1 716 1781 W: www.ucd.ie/eacollege

International Students – E: rebecca.patterson@ucd.ie/internationaladmissions@ucd.ie T: +353 1 716 8500 W: www.ucd.ie/international