University College Dublin
Ireland's Global University

ME BIOMEDICAL ENGINEERING (TWO YEARS FULL TIME)

There are currently 250 medical technology companies in Ireland, exporting €12.6 billion worth of product annually and employing 38,000 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/
This ME programme is professionally accredited by Engineers Ireland and recognised by the Washington Accord for Chartered Engineer status.

ENGINEERS IRELAND
ACCREDITED PROGRAMME

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.

WHY STUDY AT UCD?

Professional Work Experience
6-8 month Professional Work Experience internship opportunity

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 8,000 international students from over 139 countries study at UCD

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

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

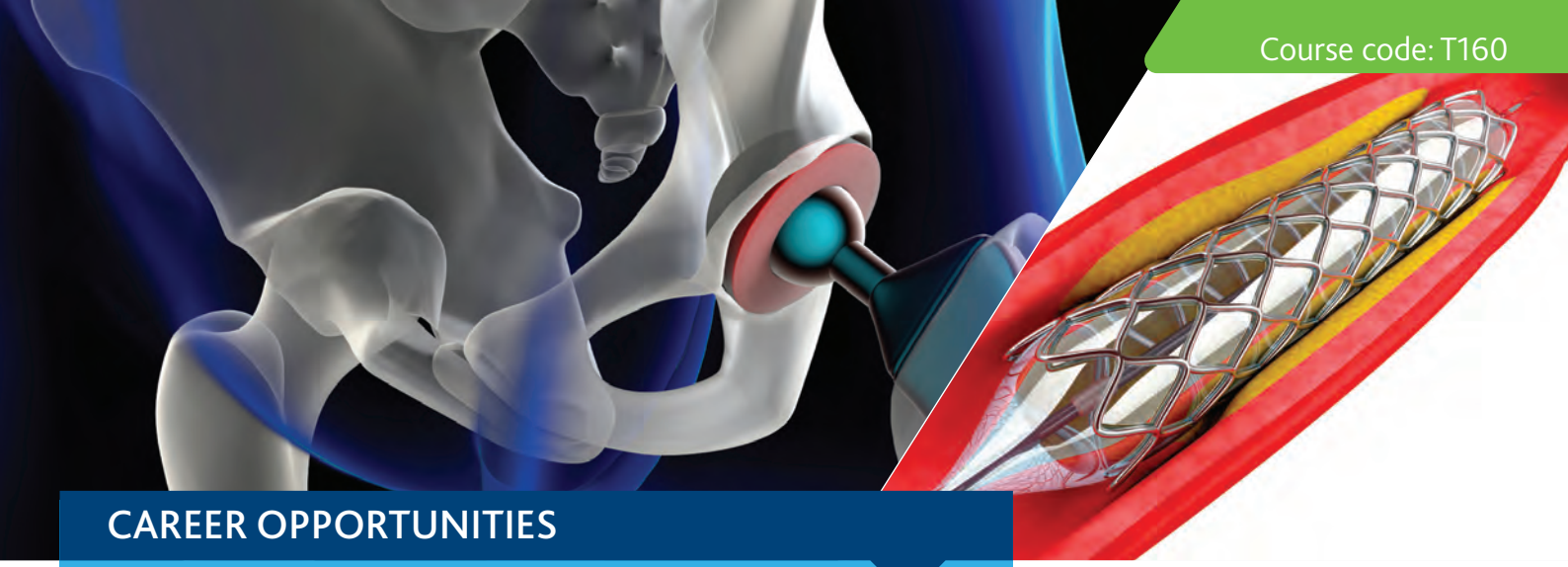
COURSE CONTENT AND STRUCTURE

120 credits	70 credits	20 credits	30 credits
taught master's	taught modules	Biomed project	professional work experience

Modules include:

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

Please see online for a full list of modules.



Course code: T160

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 predominantly manufacturing to being more complex and driven by R&D. Prospective employers include Abbott, Bio-Medical Research (BMR), Boston Scientific, De Puy, ResMed, Shimmer and Stryker.

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 bachelor's of Engineering degree with a minimum upper second class honours (NFQ level 8) or international equivalent in a relevant Mechanical, Electronic, Electrical, Mechatronic or Biomedical 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.
- 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 STUDENTS

- Option to stay in Ireland to seek employment and/or work for 2 years after graduating
- Approved by US Dept of Education for federally supported loans
- Apply for University non-EU Scholarships: www.ucd.ie/global/study-at-ucd/scholarshipsfinances/scholarships/
- Apply for College of Engineering & Architecture non-EU scholarship: www.ucd.ie/eacollege/study/noneuscholarships

RELATED MASTER'S PROGRAMMES OF INTEREST

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

FEES

Fee information is available at www.ucd.ie/fees

GRADUATE PROFILE

Dhanashree Gokhale

Health Products Regulatory Authority

After completing my BE in electronic engineering, I was keen to pursue a master's degree in biomedical engineering. I chose UCD due to the quality of research done in this field and the structure of the ME Biomedical Engineering programme. While allowing students to pick from a wide range of subjects from the schools of engineering, science and medicine the course also focuses on improving professional skills with the inclusion of the work experience internship, which was truly beneficial. UCD's emphasis on research plays a key role in ensuring that students are exposed to a high standard of learning and have experienced staff to guide them throughout the course and with options thereafter. Since completing my course, I have been working with the Health Products Regulatory Authority of Ireland as a scientific officer in the medical devices department. While the coursework at UCD including the projects undertaken as part of the ME programme contribute towards my role as a scientific officer, the network of UCD alumni and staff continue to provide support and guidance wherever and whenever needed.

CONTACT US

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