

What's Next?

Biomedical Engineering

Bachelor of Engineering (Honours)
in Biomedical Engineering

Bioengineers work on designing products and processes that improve the quality of people's lives. A Biomedical Engineer applies scientific and engineering principles to develop advanced health care technology. Opportunities arise in roles ranging from design and maintenance of equipment to developing and manufacturing new products.

Graduates can choose to pursue a career in Clinical Environments, Biomedical Device Design and Manufacturing settings, Research & Development.



Transferable Skills

Creativity, Innovation & Teamwork

Decision Making, Time Management & Organisation

Advanced numeracy skills

Problem solving & solution development

Working autonomously and as a member of a multidisciplinary team

Communication, Leadership & Supervisory skills

Spatial awareness, three-dimensional conceptual ability

Computer literacy (IT competence in CAD, DesignWorks, SolidWorks)



Degree-specific Skills

Needs assessment, technical design, performance testing

Problem solving of technical issues in biomedical engineering

Application of mathematical and engineering theory using computer based engineering tools

Research, design and development

Insights into the integration of engineering and medicine

Capacity to combine a high degree of technical knowledge with creativity

Ability to design products that are effective and practical as well as cost effective and aesthetic

Commercial awareness, in order to appreciate a product's marketability

Core Skills

Career Options



Employment opportunities are in areas such as **medical equipment and manufacturing sector, health services and research departments or institutes**. Job titles can vary depending on the exact nature of the work. In addition to Biomedical Engineer, terms such as **Clinical Engineer, Neuroscientist, Orthopaedic Engineer, Rehabilitation Engineer, Biomechanical Engineer** and **Biomaterials Engineer** can be used.

Watch out for talks by relevant employers on campus during the year; check out the Jobs page on our website and follow us on social media for regular job alerts.

<http://www.mycit.ie/careers>

Employers



Ireland is now a centre of excellence for medical devices. Of the world's top 25 medical-technologies companies, 18 operate here. Over half of the medical technology companies based in Ireland have dedicated Research & Development facilities.

Global Bio-medical Engineering companies with substantial operations in Ireland

include: Abbott, Abbot Diagnostic, Bayer, BD (Becton, Dickinson & Company), Beckman Coulter, Boston Scientific, DePuy, Guidant, Johnson & Johnson, Medtronic, Stryker, Zimmer.

Health Sector: HSE, regional hospitals and medical related facilities



Where are CIT graduates working?

Company

Boston Scientific
 Antabio SAS
 Alcon
 CUH, MUH & HSE
 Regeron
 Eurofin Lancaster Laboratories
 Boston Scientific
 Biomarin
 Regeneron
 PfiZers Ireland Pharmaceutical
 PepsiCo
 GE Healthcare

Job Role

Production Supervisor
 Laboratory Technician
 Chemistry Laboratory Analyst
 Biomedical Scientist
 Thermal Validation Engineer
 Environmental Monitoring Analyst
 Product Builder
 Biotechnician
 Microanalyst
 Environmental Analyst
 Quality Analyst
 QC Analyst



Starting Your Job Search

Job search takes focus, effort and commitment. It's essential that you create a strong online presence. You need to have a LinkedIn profile and work at building your network. If you blog or have a website, be sure to include links in LinkedIn and on your CV. LinkedIn is about where you want to go, not just about what you are doing now. An ideal starting point is to look for Alumni (former graduates of your college/course). You should also look up companies/industries you want to target. Aim to find the name of the HR Manager and employees in roles you are aiming for yourself, take a look back at their career journey. Follow people who are where you want to go! Make connections! Don't wait for jobs to be advertised, actively look for roles that interest you.

Graduate programmes are a great career starting point as extra training is provided. A Level 8 degree is the minimum for entry to most programmes. Register with GradIreland: <https://gradireland.com/user>

Professional Groups & Associations



Membership of a professional association is a useful way to meet new people in your field and will look good on your CV. Many professional bodies have jobs boards and these roles may not be advertised elsewhere. Your BEng (Honours) degree from CIT is fully accredited by Engineers Ireland (EI) for Chartered Engineer eligibility, which means graduates can apply for membership. EI is the professional body in Ireland for engineers from all disciplines. EI also runs a graduate transition programme with employers called the Future Professionals Programme for graduates in their first engineering job.

Relevant professional bodies include:

Enterprise Ireland Medical Devices Companies
 Med In Ireland: www.medinireland.ie
 Biotechnology Ireland: www.biotechnologyireland.com
 Institute of Physics and Engineering in Medicine
 Biomedical/chemical Engineering Association
 Northern Ireland Biomedical Engineering Society
 Biomedical Engineering Association of Ireland
 Irish Med Tech Association: www.irishmedtechassoc.ie



Postgraduate Study

Subject to availability of places, suitably qualified graduates may apply to Year 3 of Bachelor of Engineering (Honours) in Biomedical Engineering or the one year add-on Bachelor of Engineering (Honours) in Advanced Manufacturing Technology.

Graduates with good honours degrees may apply to undertake a research programme leading to the award of Master of Engineering or Master of Science or to a research programme leading to a PhD Degree. Financial support may be available to suitably qualified candidates from Enterprise Ireland, Industry or the CIT Postgraduate Award Scheme.

For further information, go to the 'Further Study Options' section on the Career Information page of <http://www.mycit.ie/careers>. You can also use www.qualifax.ie or www.gradireland.com/further-study to search for courses in areas of interest to you. For information on Masters' programmes through English in universities across the EU: www.mastersportal.eu



Want to go abroad?

For career opportunities in the UK see:

- www.targetjobs.co.uk
- www.gradjobs.co.uk
- www.graduate-jobs.com

Online postgrad fairs for Business, Law, Teaching and Engineering in UK are a useful way to link in with universities to discuss postgraduate options without the travel. Check out targetpostrad.com/online-fairs Jobs across the EU can be seen on the EURES website and financial supports are available for relocating to another EU country, visit: <https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en#/search>

If you wish to work in the USA, Canada or Australia, check out work visa requirements first. There are graduate work visas available to the USA, a great opportunity to gain global experience in your field. **EURAXESS** – is a web portal for finding opportunities to work in research in Europe, including Ireland, and provides access to information and support services for European and non-European researchers. It offers access to the job market, assists researchers in advancing their careers in another European countries and supports research organisations in their search for outstanding research talent. EURAXESS is supported by 40 participating countries across Europe. <https://euraxess.ec.europa.eu>

Notes


