What's Next?

# Structural Engineering

Bachelor of Engineering (Honours) in Structural Engineering

A qualification in engineering is highly regarded and valued by many employers. You have relevant, transferable skills to bring to a wide range of professional fields. Graduates can generally work across a range of sectors particularly in construction, infrastructure development, consultancy and planning. Opportunities are also available globally.

Further study is usually required to become a chartered engineer or to specialise in one particular sector of civil engineering.

## Core Skills

**Transferable Skills**

- Analyse and interpret data
- Problem solving
- Logical and mathematical reasoning
- Work Autonomously
- Work in a Team
- Research
- Communications
- Ethics & Professionalism.

**Degree-specific Skills**

- Modelling and analytical techniques and skills
- Computer-based engineering tools
- Design a system, component or process to meet specified needs
- Work in multi-disciplinary settings to give authoritative technical advice
- Take responsibility for important tasks in structural engineering
- Ability to apply knowledge of science, ICT, design, business and engineering practice to the analysis and solution of complex problems.

## Career Options

Graduate engineers can work in cross-disciplinary environments. Typical employers in the private and public sector include: **construction, transport, infrastructure, water & waste water management, storage and distribution of electricity, gas and water, research & development, insurance companies, banks,** etc.

Typical roles assigned to civil and structural engineers fall into two types: **consulting engineers** and **contracting engineers**. Within these two wide divisions you can be: **designer**, **manager** (managing the construction of the structure), **surveyor, environmental consultant, planner, researcher,** etc.

Watch out for talks by relevant employers on campus during the year to get insights into companies and the engineering roles on offer, Check our website's Jobs page and follow us on social media for regular job alerts: **http://www.mycit.ie/careers.**

## Employers

**Large building and engineering contractors,**
such as: Sisk, Bam, McNamara Construction, Bowen Construction, PJ Hegarty etc.,
as well as smaller local contractors.

**Engineering consultancy practices,**
such as: PM Group, Fehilly Timoney & Company, RPS Consulting Engineers, Malachy Walsh, Arup etc.

**Public sector:**
Government Departments, Agencies & Local Authorities

**Transport:**
Airports and railway companies

**Utilities:**
Water/electricity/gas and other utility-related infrastructure and supply companies.

# Where are CIT graduates working?

| Company | Job Role |
|---|---|
| John Sisk | Civil Engineer |
| Arup | Design Engineer |
| Will Rudd Davidson | Graduate Civil/Structural Engineer |
| GSK | Engineer |
| Irish Water | Engineer |
| DMA Construction | Engineer |

# Starting Your Job Search

Target companies that interest you. Make contact by email or LinkedIn and ask about job openings. Enterprise Ireland's website has an excellent commercial overview of the Engineering sector with a list of companies/employers in all areas of engineering: www.enterprise-ireland.com/en/publications
The IDA (Industrial Development Agency) has a list of all the multi-national companies in Ireland, many employ engineers, see: www.idaireland.com (click on business sectors and company databases for a full profile.)

# Professional Groups & Associations

**Engineers Ireland:**
The BEng (honours) in structural engineering is fully accredited by Engineers Ireland for membership eligibility. Further learning (Level 9) is required to become a Chartered Engineer, see: www.engineersireland.ie

**Future Professionals Programme:** Engineers Ireland runs this programme for graduates in their first job. The graduate transition programme is run with a number of employers.

**Association for Consultancy and Engineering (ACEI)** is the voice of the Consulting Engineering profession in Ireland. It represents consulting engineering practices, www.acei.ie

**Institution of Structural Engineers** is the world's leading professional body for qualifications and standards in structural engineering. https://www.istructe.org/

# Postgraduate Study

You may wish to gain more specialised knowledge or achieve a specific technical, vocational or professional qualification via further study. 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**

The SUSI grant is available when you are progressing your education to level 9.

# Going Abroad

For career opportunities in engineering in the UK see www.targetjobs.co.uk
TARGET Engineering publication and TARGET JOBS magazines are available from the Careers and Counselling Service or download from website.

For career opportunities in engineering in the UK, including graduate programmes, see www.targetjobs.co.uk

To search for engineering jobs in other EU countries, visit the EURES website, the European jobs network. You can filter to search by job type and country. Roles are available with only English, for example in The Netherlands, and you don't need the local language.

Notes

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