

What's Next?

# Electrical Engineering

Bachelor of Engineering (Honours)  
in Electrical Engineering

Electrical Engineers are specialised in design and development of electrical systems; dealing with electricity generation, transmission and distribution; designing control systems used in cars and airplanes, and design of a range of devices, including generators, motors and transformers.

Electrical engineers may work on a range of projects and technologies, including computers and mobile phones, radars, navigation systems and robots, as well as in the design of household appliances, design of lighting and wiring for new buildings, telecommunication systems and satellite communications.



## Transferable Skills

Teamwork and Communication

Work autonomously and as a member of a multidisciplinary team

Attention to detail

Creativity

IT skills

Problem solving

Project management



## Degree-specific Skills

Analysis and problem solving

Logical and mathematical reasoning

Research and analytical skills

Ability to use techniques, skills and modern computer-based engineering tools

Awareness of high ethical standards in the practice of engineering, including the responsibilities of the engineering profession towards people and the environment

Ability to design system, component or process to meet specified needs and to contribute to the assessment of the technical performance of the design

## Core Skills

## Career Options



Graduates with electrical engineering degrees work with electricity in a range of industries. Typical employers include: **Aerospace, Automotive & Transport, Chemical, Construction, Electronics & Consumer Devices, Marine & Shipping, Materials & Metal, Oil & Gas, Pharmaceuticals, Power Generation, Telecoms, Satellite & Communications Systems, Utility Companies and the Defense Forces.**

Companies often advertise graduate jobs on the job page of a College/University Careers Service website as well as on [www.gradireland.com](http://www.gradireland.com). LinkedIn is also a great source for many graduate jobs.

Watch out for talks by relevant employers on campus during the year to get insights into the companies and the engineering roles on offer. Check out our websites jobs page and follow us on social media for regular jobs alerts <http://www.mycit.ie/careers>.

## Employers



- Analog Devices
- Airtricity
- Eirgrid
- Intel
- Electric Ireland
- Board Gais
- PM Group
- Irving Oil
- Apple
- Xelvin
- Mott MacDonald
- Kepak
- Biomarin



## Where are CIT graduates working?

Company	Job Role
MEP Engineering	Electrical Engineer
O'Shea's Electrical	Electrical Engineer
Pilz	Electrical Engineer
Jones Engineering	Electrical Engineer
H&MB Engineering	Electrical Engineer
Liebherr Container Cranes	Commissioning Engineer
Boston Scientific	Graduate Equipment Engineer
McSherry Electrical	Project Manager



## Starting Your Job Search

Target companies that interest you. Make contact by LinkedIn or email and ask about job openings. 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. You may be employed for one role or be on rotation in one or more departments in the company. Training is usually included, which develops your skills and helps you to figure out what most interests you. Companies typically recruit between October and December, so you need to be ready to apply early in your final year. <https://gradireland.com/user>

**Enterprise Ireland** has an excellent overview of the engineering sector with a list of companies/employers in the engineering sector, [www.enterprise-ireland.com/en/publications](http://www.enterprise-ireland.com/en/publications)

**Industrial Development Agency-IDA** has a list of all multi-national companies in Ireland. Many employ engineers [www.idaireland.com](http://www.idaireland.com) click on business sectors and company databases for a full profile.

## Professional Groups & Associations



**Engineers Ireland:** The BEng (honours) in Electrical 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](http://www.engineersireland.ie)  
Engineers Ireland has an Electrical division, which provides members with a professional and social network for developing their knowledge base and fostering potential business opportunities. It also has links with other professional associations and organisations, including the Conseil International des Grand Reseaux Electriques (CIGRÉ) and the Electro Technical Council of Ireland (ETCI). Visit: [www.engineersireland.ie](http://www.engineersireland.ie) to find out more.

**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. <https://www.engineersireland.ie/cpd-training/cpd-training/future-professionals-series.aspx>

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

