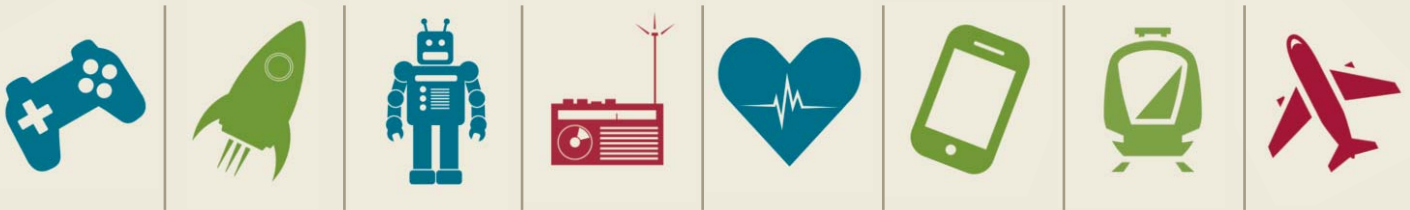


ENGINEERING YOUR FUTURE

PARENT AND TEACHER GUIDE

ENGINEERS TAKE IDEAS AND TURN THEM INTO REALITY, USING SCIENCE, MATHS AND IMAGINATION. ENGINEERS ARE MASTERS OF PROBLEM-SOLVING AND CREATIVE DESIGN. AS A CAREER, ENGINEERING OFFERS A CHANCE TO MAKE A DIFFERENCE TO PEOPLE'S LIVES, WHILE YOU ENJOY A DYNAMIC AND VARIED WORKING LIFE.



Right now, engineers around the world are working on innovative projects from solar energy to synthetic organs, driverless cars to virtual reality headsets.

An engineering qualification offers a chance to do interesting work with interesting people, enhance people's lives, and explore almost unlimited career opportunities.

ENGINEERS ARE...

- Naturally curious about how things work
- Love solving problems
- Enjoy making, breaking or designing things
- Like the idea of working as part of a team
- Competent* in mathematics

* While not necessarily excelling at mathematics, most engineers are comfortable with the subject. Many engineering courses offer extra maths support to students in First Year. Higher Level maths is **not** a requirement for every engineering course.

HOW DO ENGINEERS MAKE A DIFFERENCE?



"Engineering gives me the ability to design the future. It allows me to help shape future technologies, from advanced forms of energy to cutting edge medical products - all to improve daily life around the globe."

*Colin Keogh,
mechanical & energy engineer*



"Engineering gives you the tools to problem-solve and allows you to work in any area, from producing a simple water filter in the African desert to building a rocket to send people to Mars".

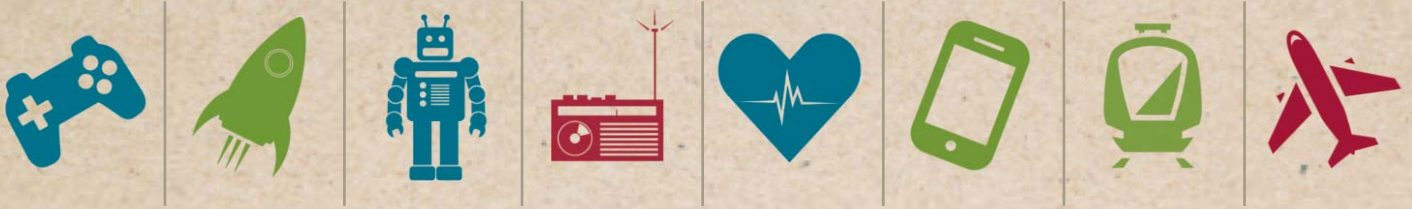
*Elaine Doyle,
manufacturing engineer*



"I know when I go into work in the morning that I am helping someone's life. People are using our products all over the world."

*Claire Lillis,
mechanical design engineer*





ARE ENGINEERS IN DEMAND?

YOU'LL FIND ENGINEERS IN ALMOST ALL INDUSTRIES, FROM AVIATION, AGRICULTURE AND SPACE TO HEALTHCARE, MANUFACTURING AND SOFTWARE – AND EVERYWHERE IN BETWEEN.

Engineers are in demand in many sectors right now, especially the software and IT industry, the medical devices sector and the pharmaceutical industry, and the energy and environmental sectors.

RIGHT NOW IN IRELAND:

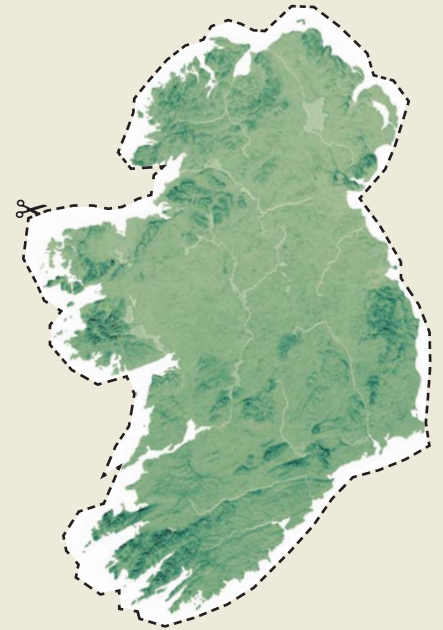
- 105,000+ people work in the technology sector
- 250 medical technology companies employ 25,000 people
- 160 games companies employ 3,300 people

IRELAND IS HOME TO:

- nine of the top 10 software companies
- nine of the top 10 global pharmaceutical corporations
- 12 of the top 20 global internet firms
- seven of the top 10 industrial automation companies

- 80% of the global production of stents (medical devices for heart patients) takes place in Ireland
- Ireland is the largest exporter of software in the world; 60% of software sold in Europe originates in Ireland

- Ireland is the second largest exporter of medical products in Europe
- There are 205 wind farms on the island of Ireland. By 2020 Ireland plans to be one of the largest producers of wind energy in Europe
- 50% of ventilators in hospitals worldwide are made in Ireland



WHAT DO ENGINEERS EARN?

In a recent salary survey by Engineers Ireland, graduate engineers reported earning €28,000 per year. Engineers with three to five years' experience reported earnings of €38,000 per year.

DID YOU KNOW?

While there are currently more male students choosing engineering, girls perform as well as boys academically. There is an equal amount of male and female Chartered Engineers among the members of Engineers Ireland.

WHAT ELSE CAN YOU DO WITH AN ENGINEERING DEGREE?

Engineering gives the flexibility to explore many different career paths. Engineering students gain a valuable set of skills that serve as a strong career foundation. Engineers have a problem-solving mindset; a flexible, creative approach to work; and they work well in teams. These skills are valued by all employers and serve every role well, from technician to chief executive officer (CEO). In a US survey of the top 500 companies on the stock market, 33% of CEOs had an engineering degree.

GOT AN ENGINEERING COURSE IN MIND?

Accreditation functions like a 'quality mark'. Graduation from an accredited course...

- enhances your employability
- assures international employers of the quality of your qualification
- smooths out the process of attaining a registered title (e.g. Chartered Engineer, Associate Engineer, Engineering Technician)



CHECK YOUR CHOSEN COURSE IS ACCREDITED BEFORE APPLYING
 – VISIT engineersireland.ie/services

