



ENGINEERING & MANUFACTURING

Northern Ireland is home to a vibrant and innovative advanced engineering and manufacturing sector that is steeped in history and supported by world-leading research hubs like the Northern Ireland Advanced Composites & Engineering Centre (NIACE), the Electronics, Communications & Information Technology Centre (ECIT), and the Northern Ireland Technology Centre (NITC).

The engineering and manufacturing sectors are constantly developing. With a high demand for skilled workers, the sector offers above-average salaries and can provide many great career opportunities and long-term prospects.

Many technical roles in the sector are primarily hands-on, with a wide range of office-based and behind-the-scenes roles that are needed to support growing businesses. This means there is

a wide range of opportunities for individuals with different skill sets and talents.

Recognised as a global leader in engineering and manufacturing, the province is home to many globally recognised employers in specialisms such as aerospace, automotive, materials handling, electronics, food production, medical equipment, and consumer products such as household goods and clothing.





KEY FACTS

- The sector accounts for **11%** of employment in Northern Ireland.

- Just nine companies in the UK have the **SC21 Gold Award**, five of which are based in NI.

- **40%** of the world's mobile crushing and screening equipment is made in Northern Ireland.

- In 2019, the food and drinks manufacturing industry employed over **440,000** people in the UK.



WHY ENGINEERING & MANUFACTURING?

Opportunities in this sector are plentiful, with skilled workers in high demand. The sector is innovative, fast-paced, and forward-thinking, making it an exciting sector to work in and be a part of.

There are great long-term prospects and good levels of job security in the sector. Individuals with qualifications and experience can work for global companies, may travel during their career working for companies all over the world, and can develop highly transferrable skills that can enable you to work in a wide range of sectors and roles.

Lots of roles in the sector are hands-on and practical, making it a great choice for individuals who like to get stuck in and don't want to work in an office environment. There are also many office-based and supporting roles in the sector, which means there really is something for everyone.





WHAT ARE THE OPPORTUNITIES?

The Engineering & Manufacturing sector is super diverse. There are different types of companies and employers in the sector, which means the opportunities available are vast.

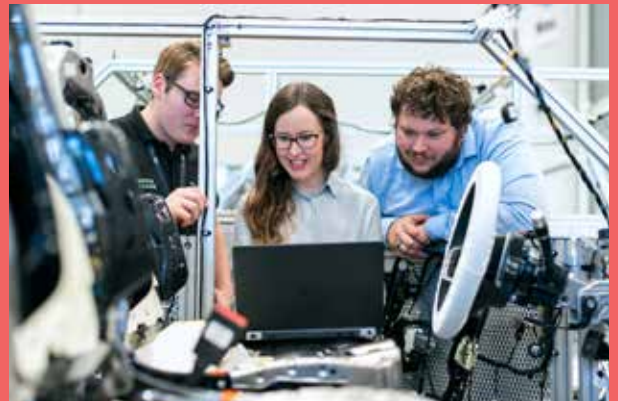
Aerospace

Aerospace is a rapidly growing and international industry, with a strong heritage in NI. Aerospace companies may be involved in the design and construction of complete aircraft, or in the design and manufacture of component parts, such as aircraft seats, table trays, armrests, and more. There are over 120 companies in Northern Ireland involved in aerospace engineering and manufacturing, which are all mostly within a one-hour drive of each other.



Automotive

Companies in Northern Ireland make a range of composite, plastic, and metal components for car and sports car manufacturers around the world. We are the world-leading region for the supply of tyre pressure monitoring systems, have leading capabilities in the manufacture of complex aluminium castings, and produce composite vehicle bodies for leading sports car brands.



Electronics

Northern Ireland has a diverse range of large and internationally recognised electronics manufacturing companies, as well as smaller companies involved in the design and manufacture of niche electronics solutions.

Commercial and Consumer Goods

There are many manufacturers in the province involved in the design and production of a wide range of commercial and consumer goods, including clothing and textiles, packaging, consumer products, furniture, commercial equipment, and more.





WHAT ARE THE OPPORTUNITIES?

Food & Drinks Production

The manufacturing of food and drinks is a vital part of the Engineering & Manufacturing sector, covering everything from the production of raw ingredients and animal feed to the production of meat products, dairy products, ready meals, and pre-prepared meals, as well as soft drinks and alcoholic beverages. Food and drinks production in NI is a thriving industry, valued at £5.4 billion per year and exporting to over 70 countries worldwide.



Materials Handling

NI companies that manufacture materials handling machinery and equipment are world-class. These machines are used for mining and construction, as well as recycling handling, and agri-machinery, and they're made right here in Northern Ireland and transported to customers all around the world.



Because the sector is so diverse, there is a wide range of job roles available, including:

- CAD Design Engineer
- Product Designer
- Procurement Manager
- Project Manager
- Mechanical Engineer
- Electrical Engineer
- Production Operative
- Machine Operative
- Fitter
- Welder
- Maintenance Engineer
- Marketing Manager
- HR Manager
- Financial Controller
- Business Development Executive
- Sales Engineer
- R&D Engineer

...and more!



SALARY EXPECTATIONS

Salaries within this sector many vary based on the responsibilities of each role, as well as the qualifications and level of experience required for each job. The average starting salary for a graduate-level engineering job is approx. **£27,000**.

Here are some **average salaries** for job roles within the sector:

Electrical Engineer
Average salary
£34,492 per year

Mechanical Engineer
Average salary
£33,448 per year

Welder
Average salary
£22,800 per year

CAD Design Engineer
Average salary
£28,912 per year

Maintenance Engineer
Average salary
£37,381 per year

Production Operator
Average salary
£19,800 per year

HR Manager
Average salary
£36,246 per year

Health & Safety Manager
Average salary
£39,883 per year

Marketing Manager
Average salary
£35,571 per year



For further information, click the links highlighted in **blue**



WHAT QUALIFICATIONS DO I NEED?

Some roles within the Engineering & Manufacturing sector may require more specific qualifications or training courses than others. However, most entry routes will involve either an Apprenticeship in a relevant area or a degree in a relevant subject for graduate-level roles.

If there is a specific type of engineering or manufacturing you would like to work in, you should research the entry qualifications required, or even reach out and contact companies that you think you might like to work for, to find out more about the different jobs they offer and the type of qualifications you would need to obtain to work in those roles.

For most engineering Apprenticeship pathways, you will need at least five GCSEs at Grade C or above, including English and Maths, and usually at least one Science-related subject.

For Higher Level Apprenticeships or degree programmes, you will need the required grades at A Level for entry into the relevant course.

For some roles, such as a Health & Safety Manager or Officer, there are professional qualifications that can be completed through awarding bodies such as IOSH or NEBOSH.



WHAT SKILLS ARE USEFUL?

Beyond the qualifications needed to pursue a career in the Engineering & Manufacturing sector, there are a range of employability skills and personal attributes that are useful to have.

These include:

- Creative & innovative thinking
- Critical thinking & problem solving
- Commercial awareness
- Teamwork
- Project management
- Attention to detail
- Technical skills
- Procedural
- Manual dexterity (for hands-on roles)
- Digital skills





WHERE CAN I GO TO FIND OUT MORE?

Manufacturing NI

Manufacturing NI is a member organisation that represents hundreds of engineering and manufacturing companies in Northern Ireland, helping these companies by representing their interests to policymakers and regulators to challenge and encourage change in areas that impact on the cost of doing business.

GEMX

GEMX is an industry-led collaborative network of engineering and manufacturing companies, as well as educational institutions, based in the North West region of Northern Ireland. It aims to encourage and inspire young people to get involved and pursue a career in engineering and manufacturing.

Sentinus

Sentinus is an educational charity that works with schools and colleges throughout Northern Ireland to deliver a range of programmes to over 50,000 young people per year, promoting STEM subjects and careers (science, technology, engineering, and mathematics).

MEGA

MEGA stands for Manufacturing & Engineering Growth & Advancement. Based in Mid Ulster, it was created to try and address the skills shortage in the engineering and manufacturing sectors by informing young people about the sector and supporting them in finding employment and training opportunities in the sector.

ADS Group

ADS Group is a trade organisation that represents and supports UK businesses in aerospace, defence, space, and security. With a division focused on supporting companies in these sectors in Northern Ireland, its members include companies such as Collins Aerospace, Thales, and IPC Mouldings.

Makers Alliance

The Makers Alliance is an industry-led body that works alongside schools and universities, as well as organisations such as Manufacturing NI, to support the development and meet the needs of the engineering and manufacturing sector.



For further information, click the links highlighted in **blue**



For further information, click the Company Logos



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