



RESEARCH & INNOVATION

The research and innovation sector covers a wide range of subject matters and job roles, which are primarily focused on discovering new and improved ways of doing things, advancing technology, and making scientific breakthroughs.

Research and innovation helps us to implement new concepts and processes into society, improving efficiency and effectiveness, and enables workers to unleash their creative and inventive natures to develop new ideas, design new systems and products, and work with emerging technologies.

Research and innovation are crucial for the advancement of society, for solving our most complex problems, and for supporting a strong economy. Individuals who work in the sector contribute to benefitting our society and potentially the wider world, making it a very influential industry to work in.





KEY FACTS

- The number of people working in research and innovation is steadily increasing at an average rate of **2.62% per year**.

- In 2019, **966 companies** engaged in research and development activities in NI.

- 1 in 12 people employed in Northern Ireland work in the scientific sectors.

- Jobs in this sector pay approximately £8,000 per year above the Northern Ireland average annual wage.



WHAT ARE THE OPPORTUNITIES?

There are a wide range of varied roles and types of careers in the research and innovation sector. Many of the job roles will require further and higher education, such as a degree.

Opportunities available in the sector include:

- | | |
|----------------------|--------------------------------------|
| ■ Data Scientist | ■ Machine Learning Engineer |
| ■ Data Analyst | ■ Futurist |
| ■ Statistician | ■ Software Engineer |
| ■ Research Associate | ■ Artificial Intelligence Specialist |
| ■ Climate Scientist | ■ Conservationist |
| ■ Hydrogen Engineer | |

...and more!



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



SALARY EXPECTATIONS

Salaries may vary based on the job role, your experience level, the entry qualifications required, and the type of specialist field you work in.

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

Statistician
Average salary
£46,076 per year

Data Scientist
Average salary
£41,301 per year

Data Analyst
Average salary
£33,866 per year

Research Associate
Average salary
£32,406 per year

Machine Learning Engineer
Average salary
£58,912 per year

Data Architect
Average salary
£40,276 per year

Research Manager
Average salary
£43,112 per year



WHAT QUALIFICATIONS DO I NEED?

Many jobs within the research and innovation sector require a degree in a relevant or specialised subject area. There are many roles for which a Masters degree or Doctorate (PhD) will also be desirable.



If you know a subject area or field of study you want to be a specialist in, you can check the entry requirements for relevant qualifications and choose your GCSE and A Level subjects based on what you want to study in the future.

If you aren't sure what subject area or field of study you want to work in yet, you can choose GCSE and A Level subjects that are more generalised, which will help to keep your options open for the future.



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



WHAT SKILLS ARE USEFUL?

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

These include:

- Attention to details
- Analytical thinking
- Logical thinking
- Critical thinker and problem solver
- Flexible and adaptable
- Collaborative
- Communication skills
- Creative and innovative



RESEARCH & INNOVATION EMPLOYERS



For further information, click the Company Logos