





## What skills can graduates gain?

Through studying a degree in Data Science, graduates develop a valuable set of skills and competencies that can include:

- An understanding of mathematics, statistics, computer science, and business intelligence techniques
- Algorithm design and programming
- Database software knowledge
- Numerical confidence
- Problem solving
- Technology literacy
- Analytical and critical thinking
- Willingness to learn
- Time-management, planning and organisation
- Oral and written Communication.

## What do employers look for?

Many employers look for generic skills such as communication, client/customer-focus, bicultural competence, cultural awareness, teamwork and initiative.

With technology, globalisation, and other drivers changing society, skills such as resilience, problem solving, and adaptability are important.

Skills that are likely to grow in importance include analytical and creative thinking, systems thinking and technological literacy.\*

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## How can these skills be developed?

- Some skills are gained through studying
- Extra-curricular activities can help, such as getting involved in clubs, mentoring, cultural groups, part-time work or volunteering
- Be open to professional and personal development opportunities, whether it is undertaking work experience, overseas exchange, skills seminar, or joining an industry group.

## Where have graduates been employed?

Data Science graduates are employed in a range of industries. Graduates have gone on to work in:

- Technology companies
- Consulting and research firms
- Public administration, safety and support services
- Agriculture, forestry and fishing
- Construction and infrastructure
- Healthcare and education
- Manufacturing, retail, transport and warehousing
- Not-for-profit sector
- Government and public bodies e.g. regional councils, Ministry of Health, New Zealand Police, Department of Internal Affairs, Ministry of Business, Innovation and Employment, Ministry of Education, Ministry of Justice, Stats NZ.

Many employment opportunities exist with organisations that run large computer-with

## What jobs and activities might graduates do?

Graduates with this degree are employed in a range of jobs — see some examples below.

### Data scientist

- Analyse complex data to propose business solutions
- Use advanced technology and statistical tools

### Database administrator, data coordinator

- Use specialist software to organise and maintain a secure database

### Data analyst, data specialist

- Translate numbers and data to solve problems
- Produce accessible graphs, charts, tables and reports

### Data engineer

- Design, build and maintain infrastructure required for data storage, processing, and retrieval
- Solve complex data engineering problems

### Data visualisation analyst

- Produce graphic representations of data for use by data experts and organisation leaders

### Business analyst, data reporting analyst

- Analyse data, processes and systems
- Provide insight to assist with strategic and operational decisions
- Liaise with different business functions

### System analyst

- Analyse systems, identify requirements, and propose solutions for improving system functionality and performance

### Product manager

- Analyse user feedback to inform design
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