

Data and Analytics Summer Internships

At Stats NZ we are pushing boundaries. We provide the information that helps key decision-makers make better, more informed decisions for a stronger New Zealand. If you're into exploring, analysing, wrangling, collaborating and innovating with data, then an internship with Stats NZ could be for you.

As a Data and Analytics Intern you will complete a 12 week research internship with Stats NZ, working on a project in Data, Analytics or Statistics. You will have the opportunity to:

- Develop skills in a real work environment by practically applying the skills from your related university course. Be challenged with important, real-world work. You'll have the chance to work on a fascinating research question by using data and analytics to support decision making.
- Gain invaluable experience working in a government agency; be exposed to the machinery of government and learn about some of the exciting work and projects that exist within analytics across six social sector agencies.
- Build your career network; be part of a data and analytics network of interns, develop key relationships across different government agencies.
- Participate in development and learning opportunities offered throughout your intern programme.
- Say connected with potential employment opportunities for when you are looking to gain employment.

You will be required to complete all project deliverables specific to your project, present your project findings to the internship network and take part in the internship networking and learning sessions across the different government agencies.

You will report to your project manager who will provide weekly 1:1 support meetings and coaching.

Key deliverables/accountabilities

You will be expected to:	You will achieve this by:
Deliver a specific technical project	<ul style="list-style-type: none"> • Each project has project specific deliverables and accountabilities that will be shared at project offer stage.
Use project management and planning tools to ensure delivery	<ul style="list-style-type: none"> • Contribute to or project manage internship project. • Develop and maintain planning documentation throughout project • Ensure key milestones are met and project is completed within timeframe to acceptable quality standard.

Design and undertake analysis of data and statistics to derive insights from a range of core statistical releases and datasets for a variety of audiences	<ul style="list-style-type: none"> • Design and undertake a research project to analyse data and statistics using qualitative and quantitative methods to identify emerging trends, changes, unexpected results. • Prepare reports on work completed that is easy to understand and meet Stats NZ professional standards.
Contribute to the compilation of statistical information and data	<ul style="list-style-type: none"> • Compile statistical information and data, and develop the ability to critique and question it, with assistance • Relate data and information to conceptual frameworks and real world events.
Apply analytical and conceptual thinking	<ul style="list-style-type: none"> • Determine problems within the scope of the conceptual framework • Determine the appropriate set of statistical tools and methodologies to measure problems • Analyse data and draw appropriate interpretations • Use interpretations to draw conclusions within the scope of the conceptual framework and real world events • Identify possible process issues and areas for improvement • Analyse and interpret key messages and trends to create innovative solutions or options.
Apply cost-benefit thinking	<ul style="list-style-type: none"> • Describe desired outcomes and identify possible options to meet them • Discuss relative costs, benefits, and risks of each option before proceeding
Build connections and work collaboratively	<ul style="list-style-type: none"> • Work collaboratively within the team and across the organisation to achieve a successful outcome for your project • Work closely with senior staff for guidance, support, and development
Communicate effectively	<ul style="list-style-type: none"> • Communicate complex ideas and information to your audience in plain English • Communicate clearly and concisely in all written and oral communications • Share information and knowledge with others in a proactive, timely way that fits the purpose • Seek peer review of written work.

Person specification

Behavioural competencies

Competency	Desired behaviours
Inquisitive	<ul style="list-style-type: none"> • Explore and learn without prompting.
Driven	<ul style="list-style-type: none"> • Be willing and able to take responsibility for data quality. • Have good attention to detail and accuracy. • Be conscientious.

	<ul style="list-style-type: none"> • Proactive and self-managing: able to carry out project duties and meet timeframes without direct supervision.
Agile	<ul style="list-style-type: none"> • Willing to find compromises, change plans or approaches. • Able to move between systems, conceptual and intuitive thinking as the situation demands.
Resilient	<ul style="list-style-type: none"> • Remain steady in a crisis. • Have the perseverance to continue trying, even after facing resistance or failure.
Engaging	<ul style="list-style-type: none"> • Have the confidence to engage with a wide range of people. • Be straightforward, honest and trustworthy. • Be able to engage with customers and suppliers and to identify their true needs (beyond problems presented); managing expectations. • Articulate your ideas clearly and collaboratively.

Education, experience and technical competencies

- Able to present a good tertiary academic record, preferably with a degree in mathematics, statistics, economics, accountancy, computer or data science, geography, demography, or other social sciences. We also encourage you to apply if you have a degree in another discipline with a significant research component, and/or relevant work experience.
- Working towards a post-graduate qualification is an advantage.
- Be able to demonstrate experience in research that had a significant component of data and analytics

You are applying to the internship programme and will be offered a specific project based on your matching skill set, competencies and interests. We are looking for a range of technical skills* including:

- Evidence of experience using statistical packages or programming software.
- Familiarity with a broad range of advanced quantitative and qualitative analytic techniques.
- Coding and Software development – ability to write code to extract, manipulate and interpret data.
- Skilled users of analytical tools (e.g. R, SAS, Python, Javascript, Pentaho, Sequel, Geospatial).
- Ability to organise data sets to build insights and identify trends.
- Awareness of good data management practices, including the safe management of data to protect confidentiality, privacy and security of data.
- Write succinct reports explaining trends and insights.
- Confidence with public policy issues – having the understanding and awareness to identify cause and effect and ‘humanize’ data.

*You don't need to have all skills listed above for all projects so please clearly explain the technical skills you do have in your application.