If you've ever dropped a pin into Google maps, or found the shortest route using the public transport network, then you've engaged with Geographic Information Science (GIScience). GIScience is the study of the data structures and techniques used to capture, process and visualise geographic information.

What you will learn

As a GIS student you’ll be taught how to use data collected by satellites and drones, government-sourced data, and social media platforms to examine a wide range of social and natural processes. You’ll use modelling techniques to analyse data intensive contexts, and you’ll try to answer questions like:

- What is the relationship between urban inequality and disease?
- What are the effects of sea level rise on coastal areas? How do resources flow across a busy transportation system?
- What are the risks of exposure to air pollution?
- What are the flood and landslide risks in different areas of New Zealand?
- What would be the best location to build a new wind farm, or a hospital in the country?
- What does human movement tell us about disease transmission?
- What can we do to understand social dynamics and can we predict and map the effects of climate change?

Choosing a subject

With so many options it’s sometimes hard to choose what you want to study, but we’ve got you covered. You can study a double major with our Bachelor of Science to gain a broader base of skills and knowledge.

Complementary majors include:
- Computer Science
- Earth Science
- Environment Science
- Geography
- Marine Science
- Statistics

First and second year courses do not have prerequisites but the third year courses build upon the knowledge gained in year 1 and 2. The program can be entered at the second year level without prerequisite knowledge.