UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Geoinformatics is the science of managing, interpreting and visualising massive amounts of geographic data. A powerful tool, it combines computing technologies with geographic information to help us make better decisions for people and the places where we live.

"If you enjoyed math and science at school, it's certainly one of the best options available in terms of job prospects – demand for software engineers and computer scientists is constantly increasing"

– Joey (Joseph) Scar graduated with a BSc(Hons) in 2010 and PhD in 2014.

Why geoinformatics?

Thanks to smart phones, GIS, satellites and sensors there's more geographic data being created than ever before. With geoinformatics you can transform all of this seemingly unrelated, random data into something useful.

Geoinformatics is used to integrate information, visualise scenarios, present ideas, solve complex problems and identify effective solutions. It can help us create healthier cities, enhance public services, improve water supply, monitor wildlife and more.

Where do I start?

If you're interested in a career in geoinformatics then a Bachelor of Science (BSc) degree in geography and computer science is a great place to start.

Geography focuses on finding innovative solutions to problems facing global society, including climate change, poverty, sustainability, health and inequality. Computer Science is about designing systems that are fast, usable, reliable, secure and scalable. By combining these sciences you'll gain multidisciplinary skills and learn how to convert large quantities of geographic data into valuable, actionable information that can make a positive impact on society and our environment.

BSc in Geography and computer science – what you need to know

A BSc in Geography and Computer Science is a three-year degree that will prepare you well for a career in geoinformatics.

Here are some courses you can study in the first year of your degree:

- Global Environmental Change (GEOG106)
- Human Geography: People, Process, Place (GEOG110)
- Introduction to Computer Programming (COSC121)
- Introduction to Computer Science (COSC122)
- Mathematics 1A (MATH102)
- Physical Geography: Earth, Ocean, Atmosphere (GEOG109)
- Science, Society and Me (SCIE101)
- Statistics (STAT101)

Explore more course options at **www.canterbury.ac.nz/science/**

Transferable skills: Analytical skills, computing skills, interpretation of data, problem-solving skills, interdisciplinary knowledge.

Postgraduate study options: Bachelor of Science with Honours, Postgraduate Diploma in Science, Master of Science, Master of Applied Data Science, Master of Geospatial Science and Technology Doctor of Philosophy.

Career options: Algorithm engineer, data analyst, GIS analyst, GIS specialist, research scientist.

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