



What can I do with my Maths, Statistics or Operations Research degree?

While some jobs demand a specific degree subject, many vacancies advertised ask for graduates from any degree subject. The process of studying for a degree and the wider university experience equip graduates with skills (such as analysis, problem solving and team work) that are useful for any career. The ability to recognise, offer and use these 'transferable' skills means that many graduates end up in careers not related to their degrees.

Skills a maths, statistics or operations research degree develops include: numeracy, analysis and problem solving; research methods, data handling and interpretation, survey design, group and team work, computer literacy, time management, communication of ideas through written reports and oral presentations. You will also have knowledge of the key concepts of your subject.

Graduates in mathematics, statistics and operations research are employed in the following areas¹:

Government Departments

Statistics New Zealand	Ministry of Social Development
NZ Defence	ACC
Metservice	Ministry of Health
Ministry of Economic Development	Ministry of Education

Crown Research Institutes (CRIs) and other research organisations

National Institute of Water and Atmospheric Research	Universities and Polytechnics
Consultancies	Research and Development companies

Industry and Business

Banks	Insurance
Software developers	Investment Companies

Other

Schools	Electricity Provider
Postal Service	

What jobs have maths, stats and operations research graduates gained?

The following are some relevant job titles.¹ These are actual jobs students have undertaken after graduating.

Job title	Employer type	Job title	Employer type
Demographic Analyst	Statistics NZ	Data Analyst	Market Research
Data Analyst	University	Survey Statistician	Statistics NZ
Mathematical Statistician	Statistics NZ	Research Officer	University
Scheduler	Bank	Social Statistics Analyst	Statistics NZ
Operations Research / Business Support	City Council	Mathematician	Research and Development Company
Risk Analyst	Power Generation Company	Analyst	Ministry of Social Development
Assistant Head of Maths	Secondary School	Senior Demographic Model Analyst	Ministry of Education
Lecturer	Polytechnic	Business Analyst	ACC
Manager	Forestry Industry	Analyst / Programmer	Statistics NZ

¹ Job information is sourced from <http://www.jobs4grads.net>, Victoria University of Wellington's *Career View* publications, and the New Zealand Vice-Chancellors' Committee University Graduate Destinations. *Survey of graduates six months after completing their studies in the year...* <http://www.nzvcc.ac.nz/> [Accessed 31 March 2006]. 2003 and 2001 data used.

Books, Web-sites etc

The following titles are held in either the Careers Information Centre (CIC) and/or the University Library (AU).

Lambert, Julie & De Cotis, Ruth. (1999). *Great jobs for maths majors*. Lincolnwood, IL: VGM Career Horizons. (CIC : AU)

Gradlink. (2005). *Graduate opportunities in Australia and New Zealand 2005*. Melbourne: Hobsons Guides. (CIC)

Sterrett, Andrew (ed). (2002). *101 careers in mathematics*. (2nd ed.). Washington, DC: Mathematical Association of America. (AU)

Burnett, Rebecca E. (2002). *Careers for number crunchers & other quantitative types*. (2nd ed.). Chicago: VGM Career Books. (AU EResource)

+Plus. (1997-). Cambridge (UK): University of Cambridge. Retrieved 31 March 2006 from <http://plus.maths.org/interview.html>. Internet magazine contains ideas for jobs for mathematics graduates.

Career View: mathematics and statistics. (2002). Wellington: Victoria University of Wellington. Retrieved 31 March 2006, from http://www.vuw.ac.nz/st_services/careers/publications/career_view/math&stats.pdf

What can I do with my degree? (no date). Wellington: Victoria University of Wellington. Retrieved 31 March 2006, from http://www.vuw.ac.nz/st_services/careers/degree_options.html

The University of Auckland Careers Centre website <http://www.auckland.ac.nz/careers> outlines how the Careers Centre can help you. They provide free workshops and seminars, advisory services, employer presentations, job and internship opportunities, careers fairs and alumni contacts. The Careers Information Centre also has material for researching and planning careers and finding out how to apply for jobs. You may also register on <http://www.jobs4grads.net>, the University's employment vacancy website.

Job Outlines

The following resources will help you find out what you would do in jobs of interest to you.

KiwiCareers <http://www.kiwicareers.govt.nz/> is a website containing New Zealand job, industry and training information, and links to relevant websites. See "Jobs"

Labour Market <http://www.labourmarket.co.nz/> is a New Zealand website of occupational and other information.

My Future <http://www.myfuture.edu.au/> is the careers information service of the Australian central and federal governments.

Prospects UK <http://www.prospects.ac.uk/> is the careers information service for UK graduates. From the home page, navigate to "Jobs and Work", then "Explore types of Jobs": Another page on this site: "Options with your subject" is also useful. Navigate to "Mathematics" or "Statistics".

Professional Associations

The following are selected relevant NZ and international organizations and their web addresses.

The New Zealand Mathematical Society <http://www.math.waikato.ac.nz/NZMS/NZMS.html>

National Association of Maori Mathematicians, Scientists and Technologists <http://www.nammsat.org.nz/>

The Australian Mathematical Society <http://www.austms.org.au/>

American Mathematical Society <http://www.ams.org/employment/>

Association for Women in Mathematics website (Canada) <http://math.usask.ca/document/netinfo/careers.html>

New Zealand Statistical Association <http://nzsa.rsnz.org>

Statistical Society of Australia <http://www.statsoc.org.au/>

Operations Research Society of New Zealand <http://www.orsnz.org.nz/>

Australian Society for Operations Research <http://www.asor.ms.unimelb.edu.au/>

Canadian Operational Research Society <http://www.cors.ca/>

Institute for Operations Research and the Management Sciences. American Operational Research Society: <http://www.informs.org>

General Careers Resources

To research further, visit the Careers Information Centre, Room 001, The Clock Tower, Monday - Friday between 8.30am - 5pm.

For a selection of recommended general careers titles, see "Selected Careers Information Sources", available in hard copy from the Careers Centre or on the website at

<http://www.auckland.ac.nz/uoa/for/currentstudents/careerplanning/finding/resources.cfm>

The University of Auckland Careers Centre, Room 001, The Clock Tower, 22 Princes St, Private Bag 92 019, Auckland. Phone: (09) 373 7599 ext 88727. Email: careers@auckland.ac.nz, Website: <http://www.auckland.ac.nz/careers>