



INTERNATIONAL CENTRE  
OF EXCELLENCE FOR  
EDUCATION IN  
MATHEMATICS



An Australian Government Initiative

# 2004 - 2005 Maths ad(d)s

A guide for students to the job market



**Careers within the ABS**  
**Graduates**  
**Career APS -**  
**Mathematics/Statistics**

**Class:** 2004

**Summary:** An effort to provide a comprehensive guide of a career and an opportunity to learn more about the profession of a statistician.

**If you need more information on ABS careers please contact Recruitment on 0800 75 1234.**

**Selection Criteria:**

Candidates have to fulfil certain criteria related to their experience in such positions which include:

1. An knowledge in mathematics including calculus, probability, statistics, set theory.
2. Computer and statistical skills, including the ability to critically assess information.
3. Analytical and communication skills, including an ability to present information to non-mathematical audiences.
4. An ability to organise time and effectively to learn and work together.
5. An ability to use computers in statistical work.
6. An understanding of the role of the ABS.

**KONAMI AUSTRALIA**

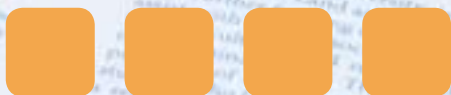
**GAME DESIGNERS, GRAPHIC ILLUSTRATORS & 3D ANIMATORS for POKER MACHINES**

**Mathematical Game Designer**

**Graphic Illustrator**

**3D Animator**

**No Fringing Benefits**  
Konami Australia Pty Ltd  
PO Box 122, Murrumbidgee NSW 2572



AMSI stands for the Australian Mathematical Sciences Institute. Most Australian universities are members of AMSI, which was founded in 2002 with member funds and a grant from the Victorian State Government.

AMSI provides the Australian mathematical and statistical sciences community with many services, including workshops, visiting lecturers, short courses and industry liaison.

AMSI has a national campaign to promote careers in the mathematical and statistical sciences. You can find out more at

[www.amsi.org.au/careers](http://www.amsi.org.au/careers)

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INTERNATIONAL CENTRE  
OF EXCELLENCE FOR  
EDUCATION IN  
MATHEMATICS



**An Australian Government Initiative**

The International Centre of Excellence for Education in Mathematics (ICE-EM) conducts a wide range of activities, which include the following:

- Annual Summer School for honours students, July Graduate School for postgraduate students and specialist workshops. ICE-EM provides travel and accommodation subsidies to attend.
- Production of printed and electronic resources for teachers, students and parents. This is carried out in collaboration with the Australian Mathematics Trust,
- Technology transfer courses. These provide industry, business and commerce with the latest mathematical developments.

ICE-EM is managed by AMSI and funded by the Australian Government through the Department of Education, Science and Training.

[www.ice-em.org.au](http://www.ice-em.org.au)

# MATHS

## AD(D)S 2004-05

The possibilities are infinite

### FIND OUT WHERE MATHS CAN TAKE YOU

**T**his booklet contains job advertisements that appeared recently in the daily press and on the Internet. These ads are our way of showing that a great number and variety of careers are available to prospective university students after graduation, if they include mathematics or statistics in their degrees.

This is our seventh assembly of ads, a completely new collection, and just a small fraction of those we have found recently.

Both traditional employers of mathematics and statistics graduates and employers in new growth areas – operations research, modelling, business and retailing – are looking for people who have training and ability in numerate disciplines because of their analytical and problem-solving skills. And there are careers represented here that combine mathematics with other interests as diverse as biology, computing, health and money!

Many of these jobs are city jobs – but others include travel or the chance to live overseas or in a regional centre or rural location.

Whether you are a pragmatist or idealist or still deciding what you want to do and be, it is still true that **maths adds** to your possibilities.

**Disclaimer:** *The views expressed in this booklet are the views of the authors. They are not necessarily the views of ICE-EM or AMSI, nor of the employers, consultants and newspapers involved in these advertisements.*

Careers in finance are available not only to commerce graduates. In fact, many employers in this sector require the advanced quantitative skills that come from the study of mathematics.

'Finance' is an umbrella term covering banking, the stock market and other forms of investment, insurance and, on the government side, regulation of these areas for the public good.

## Equity Derivatives – Quantitative Analyst

### Sydney

**The primary responsibility of this role is to provide quantitative support for the Equity Derivatives business of ABN AMRO in Australasia.**

Key activities will include developing and supporting Excel/VBA pricing models, developing structured equity derivative products for clients, identifying profitable trading opportunities, assisting other team members with the pricing of derivative products and liaising with the global quantitative team in London.

You will be an effective communicator with strong problem solving skills. You should be tertiary qualified in Mathematics, Finance or a related business field. Experience in Equity Derivatives is essential. You should have technical skills in financial mathematics and advanced knowledge of option pricing theory.

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An attractive remuneration package will be negotiated based on experience and demonstrated performance.

Please send your written application to **Human Resources, ABN AMRO Australia, GPO Box 4675, Sydney NSW 2001**, or by email to [careers@abnamro.com.au](mailto:careers@abnamro.com.au)



## Michael Page

### FINANCE

- **Company Description:** Global Investment Bank
- **Job Description:** You will work on various cross border transactions and be heavily involved in the modelling and analysis of structured debt transactions for Australian corporates. An understanding of structured debt and derivatives contracts and capital markets will be advantageous. A high degree of numeracy; including the ability to price interest rates and cross currency swaps will be required. Tertiary qualifications in Mathematics; Finance or Law will be highly regarded. This is an exceptional opportunity to work in a team exposed to complex transactions.
- **Skills Required:** Financial Analysis + Financial Modelling + FO - Structured/Project Finance
- **Salary:** \$Negotiable **Package Includes:** Superannuation
- **Job Ref No:**

**You must have the right to work in Australia to apply for this job.**

BANKING  

# Senior Quantitative Analyst

- **Prestigious Financial Markets Group**
- **\$110K Guide, Plus Performance Bonus**

This is an exceptional long term career opportunity, based in Melbourne, with one of the top 'think tanks' in Australian financial markets. Due to a recent transfer to their London office, an exceptional opportunity has been created to join this specialist team providing high-level quantitative support in dealing, risk management and capital management activities within this leading financial markets group.

Reporting to the Head of Quantitative Support, your challenge will be to carry out innovative research and analysis of pricing and risk management strategies for a broad range of domestic and international financial market instruments. Critical to your success will be your ability to provide expert quantitative advice to select investment business units. This role is wide-ranging, touching on areas including credit and market risk, pricing and valuation capabilities of new financial market instruments, with a specialist focus on interest rate derivatives.

Ideally, you must be able to demonstrate previous experience in pricing models using multifactor yield curve methods and techniques within the financial markets. It is important you have superior quantitative skills (likely to be at Doctorate or Masters level) in a discipline such as mathematics, physics, engineering or actuarial studies. You will have excellent communication and influencing skills, with the ability to think laterally and develop innovative investment solutions. You will be personally stretched and will grow in this dynamic and challenging environment.

To discuss in confidence, please call or apply  
[www.barbersonline.com.au](http://www.barbersonline.com.au) online quoting reference



Financial Recruitment - It's much more than just a numbers game.


GLOBAL RESOURCES & HUMAN CAPITAL SOLUTIONS

## Portfolio Analyst

- **Leading IT&T Group**
- **Credit Management Team**
- **Exceptional Career Opportunities**

Our client is a world leader in the delivery of telecommunications and technology solutions. Due to the implementation of a number of new initiatives, several opportunities now exist for high calibre portfolio / financial analysts to join this well respected corporation.

As portfolio analyst you will provide a number of credit management services to strategic business units with the goal of controlling their bad debt/revenue ratios. Specifically, this will incorporate:

- Data / trend analysis of key portfolios and their performance;
- Identification of process / system changes;
- Provision of support in the development of business plans;
- Use of statistical tools to quantify the impact of debtor management variables.

You will report and communicate your findings from high level statistical analysis with a view to influencing the processes, systems, strategies and business plans that underpin a national credit portfolio. Further to this you will conduct analysis on customer behaviour, their response rates and associated risks with a view to resolving issues and identifying opportunities for the Credit team.

Tertiary qualified in Finance, Accounting, Economics, Mathematics or Statistics, you will currently be a competent Portfolio / Financial Analyst with extensive experience using statistical software. You will be results oriented with an ability to demonstrate analytical thinking and creativity in problem solving. Experience gained within the credit function of a leading financial institution or a large and reputable corporate will be highly regarded.

Like to know more?

To submit your application, in strict confidence, please apply online using the appropriate link below. Alternatively, for a confidential discussion, please contact in our Melbourne office on [0395941000](tel:0395941000)

Your interest will be treated in the strictest of confidence.  
[www.hudson.com.au](http://www.hudson.com.au) APPLY ONLINE

We listen. We do.



At Genesis Energy you'll find a dynamic and supportive working environment, where you can expect to join a diverse team of committed and talented people. Our vision is 'Making a difference to New Zealand', and it's at the heart of everything that we do. If you think you can make a difference with us, we'd like to hear from you.

## Senior Risk Analyst (Market Risk)



The New Zealand energy market is both dynamic and complex, requiring robust and innovative risk management. Genesis is a key player in this market and operates a diverse portfolio of generating plant, fuels, financial instruments and energy customers. The Risk team is responsible for managing Genesis' enterprise-wide risks and risk management systems.

As the Senior Risk Analyst (Market Risk) you will be responsible for managing risks arising from market operations, including:

- Operate and maintain the trading Risk Management System (RMS) and related tools,
- Use these tools to measure Genesis' market risks for portfolio risk management, product appraisal and derivative valuation, and to identify and assess emerging market risks, and
- Provide expert market and credit risk advice to key Genesis projects.

We are seeking applicants who have a strong understanding of risk management concepts and can apply mathematics of risk to the pricing and analysis of products and portfolios in energy markets. The successful applicant will have relevant experience in either a financial trading or energy market environment.

If you are looking for a challenging opportunity in a fast paced environment, where you can really make a difference then we would like to hear from you.

**Applications close** and will be dealt with in confidence.

## ANALYST

### Elders Insurance Limited

#### Analyst

**(SCOPE + CHALLENGE) x (APTITUDE + TALENT) =**

Do you possess initiative, enthusiasm and the ability to deliver results? Would you like real scope to influence business success? Are you a perceptive, commercially astute Analyst with the capability to identify, evaluate and communicate options and solutions to Senior Management? If so, Elders Insurance offers a rare opportunity for a talented, high achiever with advanced quantitative, modelling and statistical skills to make a real impact in their business.

Working as part of a small team you'll make a significant contribution in the provision of effective and efficient technical support through the development and maintenance of complex data models, analysis, reporting and advising on areas of profitability improvement. You'll build and maintain insurance pricing and marketing models whilst developing robust portfolio monitoring and reporting systems identifying emerging risks and trends.

Through your detailed analysis and commercial savvy, you'll provide the data necessary to drive the business both on a tactical and strategic level whilst making recommendations on insurance pricing. In addition you'll support various functions within Product and Underwriting and Claims & Assessing.

Tertiary qualified in mathematics, statistics or econometrics, ideally you'll have had considerable experience in pricing and monitoring of all classes of General Insurance. Technical expertise in SAS, Crystal Reports, Crystal Analysis, Excel and ROBMS systems will be well regarded.

A highly competitive package will be offered to attract and retain the best person for this critical role.

#### Elaine Kling & Associates

#### Executive Search & Recruitment

61 Carrington Street, Adelaide SA 5000

Brief telephone enquiries to



Market Research and Data Analytics Recruitment Solutions

## Modelling & Data Mining Manager

- Financial Services
- Head up dynamic team of modellers & analysts
- Salary negotiable to \$200k

Rare opportunity to join the senior management team within one of Australia's leading financial organisations.

You will head up a team (10-15) of modellers and analysts. The purpose of the team is to undertake modeling, analytics and research for the business. This will cover areas such as Pricing, Product Optimisation, Product Development, Floor Optimisation, Capital Adequacy & Queuing Theory Management.

The responsibilities of the role will include:

- Team management & development
- project management
- managing client relationships
- leading and developing new modeling methodology and techniques
- managing and engaging external suppliers

To be successful in this role, you will have the following skills:

- at least 8 years commercial experience in the analytics/ modeling space
- at least 3 years experience managing teams
- at least degree educated (ideally post-grad) in a highly numerate degree (statistics, mathematics, econometrics, actuarial studies etc)
- previous experience of hands-on statistical modelling
- technically savvy with statistical and data/ data warehouse products
- commercial experience and understanding of areas such as pricing, product optimisation, fleet optimisation and queuing theory management
- candidates with a strong operations research background would be highly advantageous



## Market Risk Analyst

VIC - Melbourne All

Global Financial services company requires a Market Risk Analyst to join their busy team in the CBD. Reporting to the Head of Market Risk your primary responsibility will be to assist the team in quantitative analysis, utilising statistical methods and modelling. You will have a thorough understanding of market risk and the Risk Management framework. The successful candidate will be tertiary qualified with a post-graduate degree in mathematics research. You will have a background in Investment banking, or risk assessment within a Chartered Accounting environment. For consideration, please forward your current resume to



## Senior Statistician

- **Media/Advertising Industry**
- **Key Role in a Unique, Energetic Environment**
- **Circa \$80,000 Package**

Our client is an influential organisation in the advertising media industry, with an impressive record and a vibrant, professional culture. An opportunity now exists to appoint a suitably qualified statistician in a key position within the company.

The primary responsibilities of the role will include the statistical analysis of media research samples and investigative research analysis of large statistical databases. It will also include working collaboratively with statistical consultants on research design issues and supplying management with the required information.

You should have a degree in statistics, at least five years of relevant experience, a broad exposure to sampling theory and/or survey statistics in addition to modeling theory. You should also be able to practically apply algorithms to weight and aggregate data and ideally, you will have had experience with SAS and SPSS.

Please email your CV to \_\_\_\_\_ or call \_\_\_\_\_  
 quoting Ref: \_\_\_\_\_  
 on \_\_\_\_\_ for a confidential discussion.

**Trinity** 

Trinity is a division of Catalyst Recruitment Systems Ltd

## RESEARCH GRADUATE

Egan Associates, located at Manly, is a boutique, nationally respected research and consulting organisation advising major corporations and government on executive and director remuneration. We are seeking a highly computer literate graduate with an honours or post graduate degree and with an interest in commerce, **mathematics/** statistics, data analysis and research.

For further information on Egan Associates and the nature of our business, interested applicants are encouraged to visit our website at [www.eganassociates.com.au](http://www.eganassociates.com.au), or contact

To be eligible to apply for this position you must have an appropriate visa to work in Australia.

Posted Date:  
 Reference No:  
 Arrangement: Full Time  
 Location: Sydney  
 Sector: Graduate  
 Sub-Sector: Other Graduate

# Risk Analytics Manager

- Global Financial Group
- Retail Loan Products
- Market Leading Analytics Group

This global banking organisation is renowned not only for its financial performance and premium brand but for its focus on extensive data analysis to optimise business performance. To this end, a new analytics team has been formed in the risk division to provide credit and risk analysis and reporting to facilitate risk/reward decisions and drive the profitability of retail portfolios. We seek a business focussed and technically skilled individual to lead this team, based in Sydney.

Working closely with each of the product groups, your team will be accountable for providing risk/profitability related analytics to support the management of retail loan portfolios. You will proactively identify problem areas and opportunities within the portfolios with processes and policy analysis to enhance the profitability of the portfolios. You will review existing scorecards and develop new scorecards to support a range of product portfolio management policies.

Tertiary qualified in mathematics, statistics or finance, you will have experience in credit risk analysis in the retail financial services sector. You are proactive and commercially focussed and possess strong communication and influencing skills. Hands-on familiarity with statistical segmentation and modelling tools and advanced programming experience in SAS and Excel will be essential. Additional opportunities exist for Analysts to join this growing team.

To grasp this opportunity to join a global leader in financial services please forward your resume to

[hr@energex.com.au](mailto:hr@energex.com.au) the reference number below

Enquiries may be made on

Job Reference Number

Harper Executive  
Level 2, 17 High Street,  
SYDNEY NSW 2000

Email: Please click the 'Apply Now' button below.

**HARPER | EXECUTIVE**

The business sector has been steadily employing more mathematicians and statisticians as increasing amounts of commercial data become available. The jobs are rarely titled “mathematician”, but the qualifications required make it clear that’s who they want.

## LOAD FORECASTING ANALYST

### Load Forecasting Analyst

As a Load Forecasting Analyst you will be responsible for providing detailed analysis and forecasts of ENERGEX's customer load, which is critical to the operations of ENERGEX's portfolio management functions. This involves providing detailed analysis on the behaviours and drivers of different customer loads and generating short and long-term forecasts of ENERGEX contestable loads. You will also assist in the development of systems to improve both forecasting success and the communication of information. You will provide analysis of the National Electricity Market and its participants, conduct additional analytical work and participate in project work as required. Other responsibilities will include communicating forecast results as well as identifying and raising issues that may impact on portfolio profitability.

High level communication skills, with the ability to comprehend complex business requirements, as well as being able to work effectively as part of a team, will ensure your success. The successful applicant will possess tertiary qualifications in Commerce, Economics, Mathematics or a related discipline and postgraduate qualifications would be highly regarded.

If you feel you have the drive and energy to join our team, enter our web site located at [www.energex.com.au](http://www.energex.com.au)

Written applications quoting **Reference Number** should be forwarded to:

**HR Administration Clerk  
ENERGEX, GPO Box 1461  
BRISBANE Qld 4001**

Email: [hr@energex.com.au](mailto:hr@energex.com.au)  
Ap

As Seen in

 **The Courier-Mail**

## LEADER, HYDRO-CLIMATE INFORMATICS

CSIRO Mathematical and Information Sciences  
Major Career Opportunities

CSIRO Mathematical and Information Sciences delivers the benefits of smarter information use to organisations

Our research in mathematical and statistical sciences is applied in three key areas: Biotechnology and Health Informatics; Decision Making for Industrial Processes and Business Services; and Environmental Monitoring for Management. CSIRO leads significant research in each of these areas, collaborating with partners in business, government and within CSIRO and other research organisations to deliver tangible benefits to Australia. CSIRO aims to grow in influence and size through its pivotal role in National Research Flagships and partnerships with other leading innovators.

**Biotechnology and Health Informatics** focuses on using advanced statistical, data mining and imaging techniques to solve important problems in biotechnology. These include the analysis of array data in health and agriculture, advanced imaging for drug development, and the identification of determinants important for health policy and evidence based medicine.

**Decision Making for Industrial Processes and Business Services (DMIPBS)** has been successful in carrying out world-class research and applying novel mathematical, statistical, simulation and optimisation methods and models in key industry sectors.

**Environmental Monitoring for Management** develops and implements new statistical methodologies for smarter information use in environmental and natural resource management applications. To support our continued growth and development we have identified a number of key roles across various disciplines.

**Leader, Hydro-Climate Informatics**  
(Perth)

CSOF7/8 (\$92K - \$110K)

We require a talented and committed researcher/manager to lead the Hydro-Climate Informatics activity in the Division. We are seeking to appoint a statistician with a proven research capability, such as a PhD in mathematics, statistics or equivalent experience, to a leadership position in our Perth office. A scientist with a Physics background having strong skills in stochastic modelling would also be a strong candidate for this position.

**Closing date for this position will be**

For selection documentation and details on how to apply visit

[www.csiro.au/careers](http://www.csiro.au/careers)

Alternatively contact

Australian Science, Australia's Future

As seen in  
 THE AUSTRALIAN

Modelling refers to the construction of not a physical but a mathematical model that enables the prediction or forecasting of future demand or returns.

## MATHEMATICIAN / SCIENTIST / ENGINEER MINE PLANNING OPTIMISATION

Melbourne

*BHP Billiton is the world's largest diversified resources company. We have a substantial research and development program that focuses on developing and implementing innovative solutions.*

We now seek a highly motivated person, with excellent analytical and interpersonal skills, to join our high performing Mine Operations Optimisation team. This world-class group of mathematicians, scientists and engineers develop and implement leading-edge software optimisation tools that are deployed by the company's mine planners and operators to deliver optimal flexibility and value for long term, mine-to-market plans and schedules.

To be considered, you must have strong mathematical skills, preferably in operations research and mixed integer linear programming. Degree qualified in Mathematics, Science or Engineering, a PhD will be highly regarded.

Your background should testify to your technical initiative and leadership; responsible and proactive approach to safety; effective oral and written communication skills; programming competence and experience (preferably in C or C++); and your enthusiasm to work in a team. Any exposure to operations in the mining industry will be favourably viewed.

Submit your CV online at <http://jobs.bhpbilliton.com> before

BHP Billiton has an overriding commitment to safety and environmental responsibility.



bhpbilliton



## Ambit IT&T Recruitment Specialists

**Title:**

**Analyst Programmer**

**Description:**

We have an outstanding opportunity for a recent Graduate or a Junior developer with some commercial experience to join this global software company, providing key services to the energy, oil and gas, utilities, transport and health markets.

Key skills we require are:

- Tertiary qualification in Computer Science and/or Electrical Engineering. Mathematics majors are highly regarded.
- Excellent results at university.
- Exposure or knowledge of linear programming and modelling
- Able to solve complex statistical problems based upon various data
- C++ /ACCESS skills are desirable.

This is a good opportunity for those that are seeking a challenge, with room to grow. The company has offices around the world and overseas postings are available for someone wishing to travel.

Salary range - \$45- 60K range - super.

Melbourne based.

Email: Please send academic transcript as well as full resume, with summary of university projects or commercial work history. Preference will be given to those with linear programming exp.

**Who is Contact?**

**Job Reference:**

**Apply Now!**

To Apply Now, simply click on the "Apply" button below

The right IT&T talent... now

Many of the ads here have mentioned exposure to specific software. Other employers are looking for people with programming skills and higher qualifications.

## KONAMI AUSTRALIA

### GAME DESIGNERS, GRAPHIC ILLUSTRATORS & 3D ANIMATORS for POKER MACHINES

Konami Australia Pty Ltd. wishes to appoint suitably qualified Game Designers, Graphic Illustrators & 3D Animators to join our Product Development Division. Candidates for all positions must have the ability to work closely within teams of people with diverse skills and backgrounds.

Excellent communication skills and adaptability are a must.

#### Mathematical Game Designer

The ideal candidate will be able to produce innovative game ideas while maintaining error free calculations that require a strong attention to detail. Good oral and written communication skills are a necessity.

Experience in Excel, C, C++, or equivalent is essential.

#### Graphic Illustrator

With a focus on strong illustration skills, candidates will be required to conceptualise and design poker machine graphics for both video and panel artwork. Storyboarding, animation and layout skills are also advantageous.

Experience in Adobe Illustrator & Photoshop is ideal, while experience in After Effects, Director, Lightwave or equivalent is preferred.

Candidates without an extensive portfolio of work need not apply.

#### 3D Animator

The ideal candidate will have at least 2 years of commercial experience working as 3D animator with a broad range of 3D skills including conceptualisation, storyboarding, modelling, texturing and character animation. In-depth knowledge of either 3D Studio Max, Maya or Lightwave along with Photoshop is absolutely essential (Lightwave preferred). Experience with After Effects, Director, Premiere and Illustrator is also advantageous.

An extensive portfolio of work demonstrating the above skills will be required.

**For all three positions, experience and extensive knowledge of the gaming industry is preferred.**

If you are creative, a strong team player who craves a challenge and is serious about their career, then we want you!

The successful candidates will be offered excellent remuneration in accordance with qualifications and experience.

Please forward written applications in the strictest confidence to:

The Managing Director  
Konami Australia Pty Ltd  
PO Box 322, Botany NSW 1455



### GUI Expert

Our client, a research center based in Sydney, is actively looking for an experienced GUI Developer.

Skills required:

- Extensive GUI experience
- C++
- Microsoft MFC
- Degree in Mathematics, IT or any relevant discipline

You will possess excellent presentation and communication skills to interact at any level within the organisation.

Please apply online in the first instance or contact Amanda Feenstra on 02 8267 4624.

For Australian Residents Only

### Additional Information

Arrangement: Full Time  
Location: Sydney  
Sector: IT & Telecommunications

Sub-Sector: Software Development  
We are an EEO employer, where all applicants are treated with fairness and respect and have equal access to the opportunities available.



### RESEARCHER LEVEL C/D/E (2 POSITIONS) LOGIC & COMPUTATION

National ICT Australia Limited (NICTA) is seeking applicants from high performing and entrepreneurial researchers in specific programs of Information and Communications Technology (ICT) disciplines for a continuing appointment as **Senior Researcher (Level C/D/E)**.

The Logic and Computation Program is based in Canberra (<http://nicta.com.au/logic.html>). Its research interests are in mechanised reasoning, pure and applied logic, and the logical foundations of computation. We are looking to appoint two researchers to Senior Researcher, Principal Researcher or Senior Principal Researcher positions. We are seeking experienced researchers with an international reputation and proven track record to join this new and exciting research initiative and to help shape the Logic and Computation group. At least one of the appointments will be in the area of logical foundations of computation, though high-performing and entrepreneurial researchers in any area of the group's activities are encouraged to apply. Researchers at NICTA are expected to contribute to all aspects of NICTA's mission. They are expected to initiate and carry out fundamental research, engage with end users of the technology through joint projects, supervise graduate students and build links with other research groups nationally and internationally. The Logic and Computation Program expects in particular that they will be active in creating and pursuing joint projects with other NICTA programs.

For further information about the Program or the positions, contact the Program Leader.

Further information, which details the information required from all applicants, is available on the NICTA website (<http://www.nicta.com.au>). Applications should be sent to and should include a full CV, list of publications, and a vision statement of one or two pages outlining the candidate's research interests and their role in a technological society. The closing date for all applications is



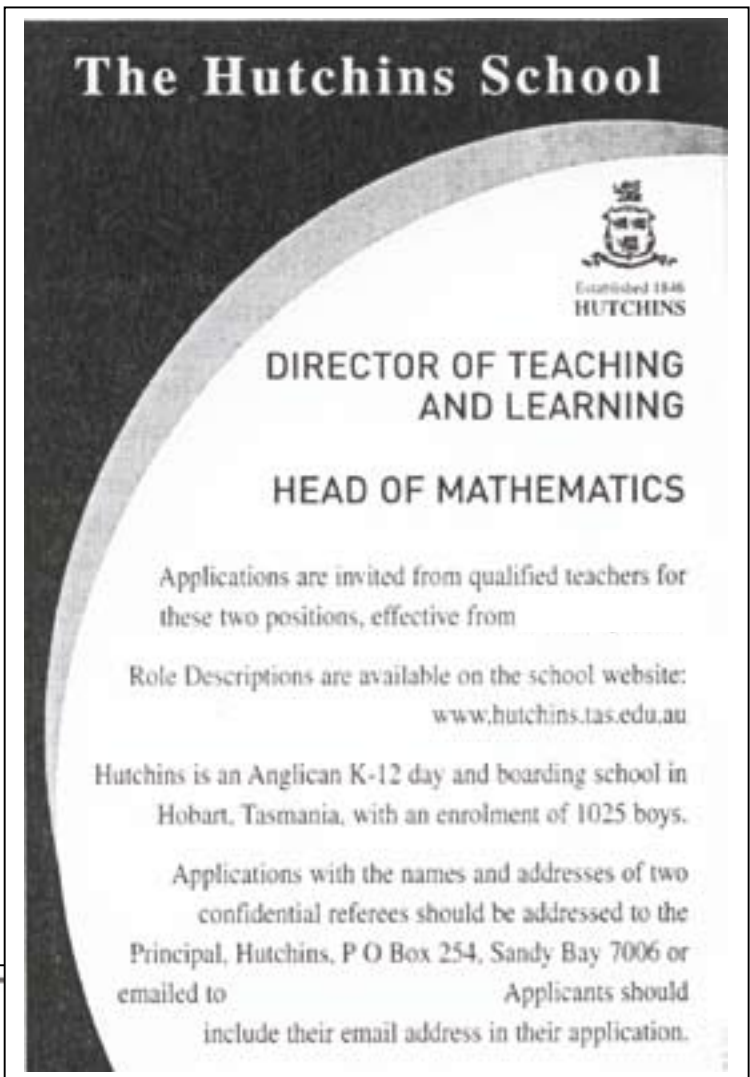
Teaching mathematics can be both a flexible and secure career, with opportunities to influence students, to work in a city or rural location, and to be involved in the wider activities of a school.

There is a range of employers and the possibility for seniority as these ads indicate. For some time, this will be an area in which demand exceeds the supply of suitably qualified graduates.


The Victorian State Government recruits and informs prospective teachers not by newspaper advertisement but by its Teaching@DE&T website:

[www.teaching.vic.gov.au](http://www.teaching.vic.gov.au)

The other state governments have their own sites.



**The Hutchins School**



Established 1848  
HUTCHINS

**DIRECTOR OF TEACHING AND LEARNING**

**HEAD OF MATHEMATICS**


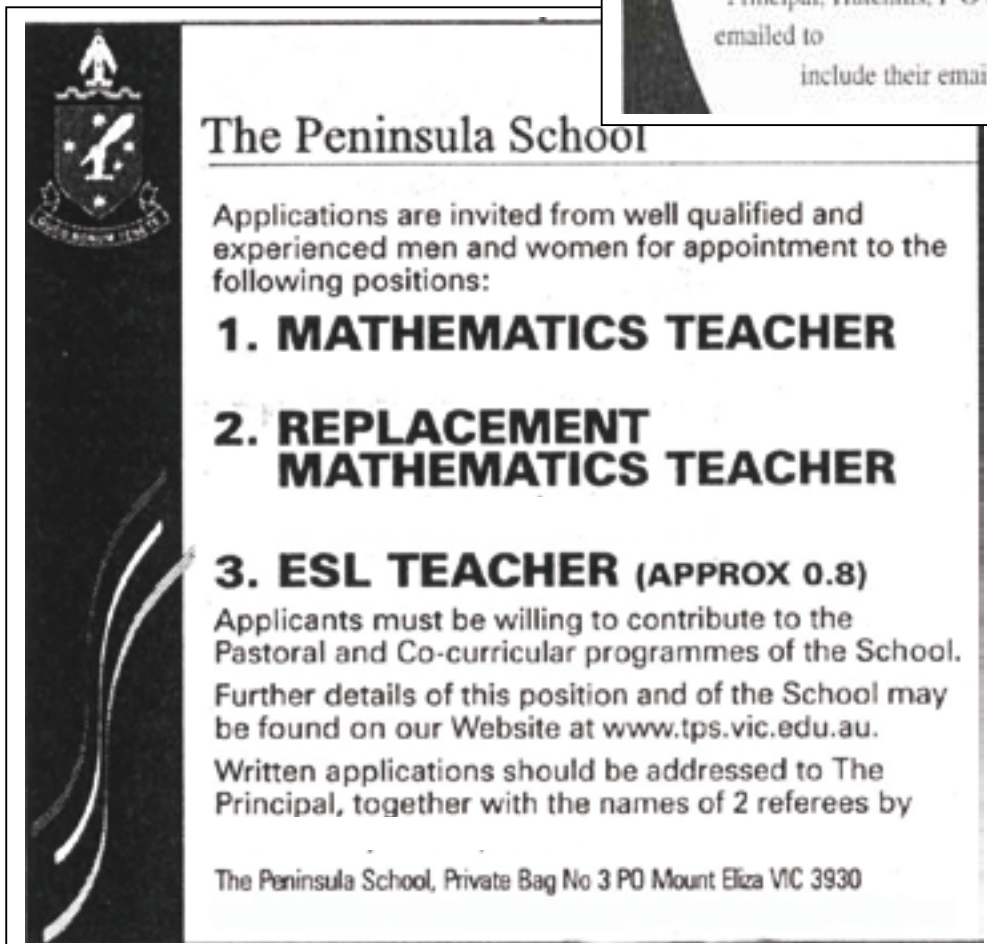
Applications are invited from qualified teachers for these two positions, effective from

Role Descriptions are available on the school website:  
[www.hutchins.tas.edu.au](http://www.hutchins.tas.edu.au)

Hutchins is an Anglican K-12 day and boarding school in Hobart, Tasmania, with an enrolment of 1025 boys.

Applications with the names and addresses of two confidential referees should be addressed to the Principal, Hutchins, P O Box 254, Sandy Bay 7006 or emailed to

Applicants should include their email address in their application.



**The Peninsula School**

Applications are invited from well qualified and experienced men and women for appointment to the following positions:

- 1. MATHEMATICS TEACHER**
- 2. REPLACEMENT MATHEMATICS TEACHER**
- 3. ESL TEACHER (APPROX 0.8)**

Applicants must be willing to contribute to the Pastoral and Co-curricular programmes of the School. Further details of this position and of the School may be found on our Website at [www.tps.vic.edu.au](http://www.tps.vic.edu.au). Written applications should be addressed to The Principal, together with the names of 2 referees by

The Peninsula School, Private Bag No 3 PO Mount Eliza VIC 3930

## METHODIST LADIES' COLLEGE

Methodist Ladies' College is one of Australia's most respected and innovative schools, with over 2,000 students from our Early Learning Centre through to Year 12. Applications are invited for the following positions.

## Head of Mathematics Years 7 - 12

This newly created College position commencing in will suit an exceptional educator and leader who will facilitate and encourage ideas for curriculum development through to implementation. You will have proven leadership and change management skills.

## Office Administrator

Please see our main ad listed under 'Administration'. For further information and application details please visit our web site at [www.mlc.vic.edu.au/about/employment.htm](http://www.mlc.vic.edu.au/about/employment.htm)



# MLC

A School of the Uniting Church in Australia

## THE HAMILTON & ALEXANDRA COLLEGE A Co-educational Day and Boarding School

Due to increased enrolments in the college seeks expressions of interest in the following positions commencing

- CHEMISTRY
- MATHEMATICS
- ENGLISH
- GENERAL PRIMARY
- PHYSICS
- GEOGRAPHY
- HISTORY

Applications with CV including 3 referees to:  
The Acting Principal, The Hamilton and Alexandra College  
PO Box 286, Hamilton 3300

Closing date: 2004



## Star of the Sea College GARDENVALE

Applications are invited for the following full-time permanent position:

## MATHEMATICS CO-ORDINATOR (POL 3)

The successful candidate will have:

- the ability to lead staff
- expertise in Mathematics Curriculum and delivery.

The position will commence in

The successful applicant will be committed to the philosophy and ethos of Catholic Education.

Applications are to be sent to:

The Principal  
Star of the Sea College  
PO Box 7001  
Gardenvale LPO, Brighton 3186

APPLICATIONS BY:



## HEAD OF MATHEMATICS

The Hamilton & Alexandra College is an ELC-12 co-educational day and boarding school, offering a broad and varied curriculum and extensive extra-curricular activity program. Established in 1872, the college is located in the stunning Western District of Victoria and has a Senior and Junior campus, as well as an International campus in China. The college has an outstanding reputation for academic excellence, nurturing of the individual, and excellent facilities, which include state-of-the-art IT access, brand new Information Centres, a new Science Centre and a long established Equestrian Centre.

An opportunity exists for an energetic and forward-thinking Mathematics professional to head a vibrant and dynamic Mathematics Department from or earlier by arrangement. This position also offers the potential for further future advancement and is accompanied by a highly competitive salary package.

Applications in writing by or via email to:  
The Acting Principal – PO Box 286, Hamilton Victoria 3300

A position description is available on our website on  
[www.hamiltoncollege.vic.edu.au](http://www.hamiltoncollege.vic.edu.au) or  
by calling the Principal's secretary on

All applicants must possess VIT or equivalent registration.

**BUSINESS ANALYST**

**GMHBA**

**Business Analyst**

GMHBA is Australia's leading regionally based health insurer, providing health care protection to thousands of individuals and families across Australia. It is an employer of choice in Geelong, and provides ongoing training/development with excellent employment conditions.

This newly created role involves the analysis of critical product, company and industry data, producing reports for senior management and the board and maintaining registers including matters arising, compliance and risk management. The ideal candidate will be tertiary qualified in either commerce, business, statistics or mathematics with at least 2 years of relevant experience, and have an understanding of business, financial and economic processes. The ability to make sound commercial decisions based on forecasts and market data, and prepare analytical and product profitability reports is essential. Well-developed communication, liaison and organisational skills are also critically important. To apply, please forward your resume and letter of application to

Marshmans H.R. Services  
www.marshmans.com.au  
39 McKillop Street, Geelong 3220

- Temporary Placements
- Permanent Placements
- Executive Recruitment
- Labour Hire
- Outplacement
- Resume Preparation
- Career Counselling
- Industrial Relations

As seen in  
Geelong **Advertiser**

You may think that mathematics is in some way cold or detached. As these ads illustrate, current and future healthcare relies crucially on analysis of numerical information.

**NSW INJURY RISK MANAGEMENT  
RESEARCH CENTRE (IRMRC) &  
DEPARTMENT OF STATISTICS  
SCHOOL OF MATHEMATICS**

**Postdoctoral Fellow/Research Fellow**

The salary level for Postdoctoral Fellow is \$53,714 - \$57,438 per year and for Research Fellow is \$60,304 - \$71,050 per year depending on qualifications and experience.

This position is jointly between the IRMRC (60%) and the School of Mathematics (40%). The NSW Injury Risk Management Research Centre (IRMRC) is an independent research centre of the University of NSW. The Centre is a collaborative initiative of NSW Health, the Roads and Traffic Authority, the Motor Accident Authority and UNSW. It undertakes leading edge epidemiological research into injury risk management. The Department of Statistics in the School of Mathematics conducts teaching programs at all levels including a vigorous Master of Statistics program. It has 14 full time academic staff who conduct research in modern statistical and biostatistical methodology and their applications. Applications are invited for appointment as Postdoctoral Fellow/Research Fellow (depending on qualifications and experience). The successful applicant will help to develop a program of research involving methodological developments and biostatistical support across a range injury epidemiology and prevention research projects. They will also teach upper level undergraduate and masters level courses in statistical methodology relevant to clinical or intervention trials, medical statistics, statistics in epidemiology, longitudinal data analysis, analysis of survey or other data collections in complex investigations.

**Essential criteria at either level:** a PhD or equivalent qualification and proof of exceptional research capacity in an area relevant to biostatistics; demonstrated capacity to design and deliver high quality course in the areas listed above; understanding of equity and diversity principles; knowledge of OHS responsibilities and commitment to attending relevant OHS training.

**Additional Essential criteria for appointment as Research Fellow:** a substantial body of published research, and a proven capacity for self-directed research; excellent statistical analysis and communication skills.

**Desirable criteria at either level:** refereed publications, history of successful grant applications and experience closely related to the analysis of epidemiological data.

This is a fixed term position for up to three years, with a possibility of renewal dependent on funding.

DEPARTMENT OF PRIMARY INDUSTRIES

**Statisticians/Biometricians**

**Two Positions - Knoxfield**

**VPS Grade 5 - Position No:**

**VPS Grade 3 - Position No:**

This may be your opportunity to join an organisation that helps you realise your potential. A challenging opportunity exists for two highly motivated people to provide collaborative and consultative biometrical expertise to scientific research projects managed by Department of Primary Industries (DPI) for staff located primarily at Knoxfield and Traralgon and occasionally at other DPI sites within Victoria.

The incumbents will have access to the latest statistical software, reference books and journals, and be part of a team of experienced biometricians.

**The successful applicants for BOTH positions must be able to demonstrate:**

- a high level of communication skills including demonstrated ability to communicate statistical ideas to a wide range of audiences;
- the ability to apply mathematical statistics to agriculture or other biological sciences;
- ability in statistical consulting and collaboration, especially in the design of experiments, with researchers from other disciplines; and
- experience in the use of statistical packages such as GenStat, R or Stata.

Applicants must hold an appropriate degree or advanced diploma in Statistics/Mathematical Statistics or an equivalent qualification.

**In addition to the above requirements, the successful applicant for the Grade 5 Senior Biometrician position must also be able to demonstrate:**

- experience or ability to supervise and mentor biometric ; and
- possession of a higher degree in statistical science and extensive postgraduate experience in biometrics/applied statistics.

Please contact \_\_\_\_\_ on \_\_\_\_\_ for a position description and \_\_\_\_\_ Acting Chief Biometrician \_\_\_\_\_ for further information. The salary range for these positions is Grade 5 - \$60,023 to \$72,023 and Grade 3 - \$42,021 to \$51,021.

**Please send applications quoting the relevant position number to:** The Recruitment Officer, DPI Knoxfield, Private Bag 15, Ferrislee Gully Delivery Centre VIC 3154, or via email at \_\_\_\_\_



Find information about DPI on the internet at [www.dpi.vic.gov.au](http://www.dpi.vic.gov.au)



**Research Engineer/Mathematician  
- Circa \$100K**

Do you have a PhD in Applied Science or Mathematics, experience in algorithm design and software development working on state of the art technology projects? We are seeking a Software Engineer/Mathematician to design and code new or enhanced software features using World leading Software Development Processes assisted by integrated Rational Tools.

Commercial experience, knowledge and understanding of Computational Geometry, Graph Theory and/or Numerical Analysis, along with excellent working knowledge of C++, sophisticated Object Oriented Techniques and integrated Rational Tools to produce high quality code that is inherently maintainable and scalable.

**CSIRO Mathematical & Information  
Sciences, Hobart TAS**

***Research Scientist/  
Senior Research Scientist***

**\$63K - \$97K + Superannuation**

The Fishery and Aquatic Ecosystem Sustainability R&D Group develops statistical modelling and analytical technologies to map, monitor and protect Australia's aquatic ecosystems and resources, as well as the fishing industries that rely upon them. This is a co-operative effort primarily involving marine scientists, freshwater ecologists and fishery managers but requiring high-end and finely targeted research contributions from statisticians.

You will join an Australia-wide team of CMIS statisticians working on environmental and living resource issues. The work primarily entails collaborative research with CSIRO Marine Research and the Australian Antarctic Division in Hobart, where you will form part of a small CMIS team. The work builds on strong existing scientific and industry links and involves research on a variety of fishery, ecosystem, marine and coastal modelling issues, using a wide range of statistical techniques.

The successful candidate will have a PhD or equivalent qualification in a relevant branch of statistics or mathematics.

**SENIOR LECTURER: APPLIED  
MATHEMATICS**

Careers at UniSA

The University of South Australia is a great place to work. Innovative and dynamic, UniSA seeks to make a difference by working in partnership with industry and its communities to create, apply and communicate knowledge which delivers economic and social benefits. UniSA's people have made it a national leader in collaborative research with industry, while innovations both in teaching and in service to its students have attracted large numbers of international students.

Senior Lecturer: Applied Mathematics

**School of Mathematics and Statistics  
Division of Information Technology, Engineering & the Environment**  
The School of Mathematics and Statistics delivers two undergraduate programs at Mawson Lakes Campus. In addition, the School provides teaching to Engineering, Health Science and Business. The School has a strong research program in several key areas of applied mathematics that include environmental modelling, optimisation, markov decision processes optimal control, financial mathematics and applied statistics, all under the umbrella of the Centre for Industrial and Applied Mathematics. The School has a number of major research projects and is involved in two Cooperative Research Centres and currently has 16 PhD students. Successful applicants will be expected to have a PhD in Mathematics with particular skills in numerical mathematics, and a record of research in one or more of the areas listed above. A demonstrable high quality record of teaching in engineering mathematics is also required. The position will be located at the Mawson Lakes Campus.

**Appointment Details:**  
Academic Level C  
Continuing  
Fraction: 1.0  
Salary Range: \$66,101 to \$76,221 per annum

**Closing Date:**  
In addition, an employer contribution to superannuation up to 17% of salary is offered.

The University provides flexible working arrangements, annual leave loading, opportunities for advancement and staff development, salary sacrificing arrangements and more.

**For further information:**  
The University encourages applicants to electronically access details of job vacancies, conditions and benefits.  
Potential candidates are strongly advised to access the full position and lodgement details via the University Positions Vacant web site:  
[www.unisa.edu.au/hrm/jobs/index.htm](http://www.unisa.edu.au/hrm/jobs/index.htm)

If you are unable to access this information electronically, please telephone the contact person as specified in each position.

The University reserves the right to invite applications or not to make an appointment.

People of Aboriginal and Torres Strait Islander cultural and linguistic background are encouraged to apply.

THE UNIVERSITY IS AN EQUAL OPPORTUNITY EMPLOYER.

The Australian Bureau of Statistics is the official agency that provides statistics on economic and social matters for use by state and federal government and by the general community. More than 3,000 staff are employed in state capitals and in Canberra.

There is a vast variety of jobs for statistics graduates in the wider work force, as these ads illustrate.



**Careers within the ABS  
Graduates  
Cadet APS -  
Mathematics/Statistics**

**Graduate Recruitment**  
Our Mission  
What we offer you  
What you offer us

**Salaries and Conditions**  
Job variety and choice  
Applying for a graduate position  
Scholarships and Cadetships

**Graduate Views**  
Training  
Living in Canberra

**Closing Date:**

Cadetships are offered to graduates who have completed three years of a degree and are undertaking a fourth year of study at honours level in Statistics.

If you need more information on ABS cadetships telephone Graduate Recruitment on 1800 675 125 toll free.

**Selection Criteria :**

All criteria have equal weight unless otherwise stated. Your response to each selection criteria should be approximately half a page.

1. A knowledge of mathematical statistical techniques, preferably including sampling.
2. Conceptual and analytical skills, including the ability to critically assess information.
3. Good interpersonal and communication skills, including an ability to explain complex ideas to non-technical audience.
4. An ability to organise tasks, work effectively in teams and meet deadlines.
5. An ability to use computers in statistical work.
6. An understanding of the role of the ABS.



**Principal  
Forest  
Biometrician**

Forestry Tasmania is a Government Business Enterprise managing 1.5 million hectares of State forest for multiple use. As custodian of Tasmania's State forests, Forestry Tasmania aims to maintain a sound statistical basis for sustainable yield management and accreditation, research design and analysis, and operational quality control.

Are you an experienced statistical analyst and modeller with a background in forestry or life sciences and the capacity to lead a biometric research program?

This five-year position is based in Hobart and leads a small biometric team within the Division of Forest Management. Your role will be to direct the Forest Management Research Program, providing biometric services relating to mathematical modelling, experimental design, statistical analysis, sampling methodology, application of statistical software, and development of advanced resource assessment procedures.

**Applicants will have:**

- A relevant degree, and preferably postgraduate qualifications in statistics, biometrics, or modelling.
- Extensive knowledge and experience in applied statistics and modelling, preferably in forestry or life sciences.
- Strong statistical software and programming skills.
- Good communication and teamwork skills.
- Excellent problem solving skills.

A remuneration package commensurate with skills and experience will be offered.



**CSIRO Marine Research, Hobart, Tasmania**



**Numerate Fisheries  
Scientist**

**\$72K - \$97K pa + Superannuation**

This position is in the Pelagic Fisheries and Ecosystems Research Group. The Group integrates ecological/biological/fishing fleet process research and mathematics/statistics/modelling research to provide scientific advice to managers of pelagic fisheries. The group comprises around 24 staff from a wide range of scientific disciplines working on pelagic fish, fisheries and ecologically related species. The appointee will work in the population dynamics team, and a key focus of the position will be the development and improvement of stock assessments of, and management strategies for, pelagic fishes (principally tunas and billfish). Management strategy evaluation, the quantification of uncertainty, and the integration of knowledge from diverse sources into population models of pelagic fish, are seen as critical elements in our strategy to improve stock assessments and management advice.

A strong background in the statistical modelling and analysis of fisheries/ecological data, and experience in population dynamics and simulation modelling are essential. An ability to work in multi-disciplinary teams is critical. With other research scientists in the Research Group, the appointee will be involved in identifying, developing and conducting research for improving the assessments and understanding of population dynamics of pelagic fish stocks. The appointee will be expected to develop collaborative links within the Research Group, across CSIRO Marine Research and with other international fisheries and oceanographic research organisations.

We are offering this position over two CSOF levels. Only one appointment will be made from the advertisement.

The position is indefinite.

For selection documentation and details on how to apply visit

**[www.csiro.au/careers](http://www.csiro.au/careers)**

Alternatively contact 1300 301 509

**Australian Science, Australia's Future**

Hays IT Personnel

**Statistical Modellers / Data Miners  
- several great positions available**

**Sydney - \$100,000**

Fantastic roles available within the marketing area of a huge financial services company.

Reporting to the Chief Statistician, this role will see you developing, maintaining and applying sophisticated analytical and predictive models. Your duties will include:

- Developing statistical models and experimental designs using available statistical modeling applications and tools;
  - Refining existing models and experimental designs;
  - Periodically reviewing and testing the outputs of models and analytical methodologies;
  - Understanding customer segment and product business plans and strategic priorities;
  - Extracting, manipulating and analysing customer and other data using sophisticated analytical and data mining tools;
  - Interpreting analysis and results to provide commercially focused advice and support to business decision makers;
  - Contributing to the scoping of business issues, definition of data and modeling requirements and project planning/coordination;
  - Contributing to the development of best practice in the design and implementation of data-based/predictive marketing and business development practices utilising customer information;
- To be considered for this position it is essential that you have:
- Highly developed abilities in data mining, statistical modelling & experimental design, operations research, database marketing and information technology;
  - At least 2 years experience in the application of statistical modelling techniques in database marketing or related fields;
  - Demonstrated analytical and statistical modelling skills with advanced skills in analytical software;
  - Experience in business analysis, preferably in a financial services environment;
  - Exposure to project management disciplines;
  - A qualification in a quantitative discipline such as statistics, mathematics, computer science or machine learning.
- Salaries up to \$100,000.

**CATHOLIC EDUCATION OFFICE  
ARCHDIOCESE OF MELBOURNE**



**KNOWLEDGE  
MANAGEMENT  
OFFICER**

Applications are invited from suitably qualified and experienced applicants with an understanding of and commitment to Catholic education for the position of Knowledge Management Officer with the Policy and Governance staff of the Catholic Education Office, based at East Melbourne. Commencement would be unless otherwise negotiated.

In addition to meeting the key selection criteria, applicants for the position would be required to have an appropriate tertiary qualification, experience in design and development of data collection instruments and experience in providing advice on statistical analysis of data.

Full particulars about this position can be obtained by accessing the Positions Vacant page on the Catholic Education Commission of Victoria website on [www.cccv.melb.catholic.edu.au](http://www.cccv.melb.catholic.edu.au)

Applications close:

**snowyhydro**  
renewable energy

**DATA MANAGER – CLOUD  
SEEDING OPERATION  
2 POSITIONS**

Snowy Hydro Limited in conjunction with the NSW Government is conducting a cloud seeding experiment in the Kosciusko Region of NSW. These experiments will run for a period of six years commencing in the

To ensure the success of the project, Snowy Hydro is seeking applications from suitably qualified personnel to manage the acquisition and control of all data associated with the experiment and analysis to meet experiment objectives.

The senior person we are seeking will have a degree in a relevant scientific discipline associated with a multifaceted project and will have a minimum of 5 years experience in data acquisition and control.

The second position will require similar qualification and a minimum of 2 years experience.

Working with a team of specialists the Data Manager will be responsible for:

- Directing the design and development of data collection
- Overseeing the collection and processing of manually or electronically recorded data
- Statistical analyses of snowfall, rainfall and environmental monitoring data

**Required Skills:**

- Proven statistical modelling skills
- Ability to incorporate data from multiple sources into a common model

**Other key competencies/factors**

High standard written and oral communication skills

Computer literacy including experience with a wide range of software including statistical and graphical packages

Knowledge of cloud seeding operations and environmental monitoring requirements and procedures

Need to work flexible hours.

Operations research is a branch of mathematics concerned with optimisation of scheduling, manufacturing, pricing and so on. It is a critical part of business and government planning.

**SENIOR SCIENCE LEADER, OPERATIONS RESEARCH**

**CSIRO**  
**CSIRO Mathematical and Information Sciences**  
**Major Career Opportunity**  
**CSIRO Mathematical and Information Sciences delivers the benefits of smarter information use to organisations**  
 Our research in mathematical and statistical sciences is applied in three key areas: Biotechnology and Health Informatics; Decision Making for Industrial Processes and Business Services; and Environmental Monitoring for Management. CSIRO leads significant research in each of these areas, collaborating with partners in business, government and within CSIRO and other research organisations to deliver tangible benefits to Australia. CSIRO aims to grow in influence and size through its pivotal role in National Research Flagships and partnerships with other leading innovators.  
**Biotechnology and Health Informatics** focuses on using advanced statistical, data mining and imaging techniques to solve important problems in biotechnology. These include the analysis of array data in health and agriculture, advanced imaging for drug development, and the identification of determinants important for health policy and evidence based medicine.  
**Decision Making for Industrial Processes and Business Services (DMIPBS)** has been successful in carrying out world-class research and applying novel mathematical, statistical, simulation and optimisation methods and models in key industry sectors.  
**Environmental Monitoring for Management** develops and implements new statistical methodologies for smarter information use in environmental and natural resource management applications.  
 To support our continued growth and development we have identified a key role, **Senior Science Leader, Operations Research, (Melbourne)**  
**CSOF7/8 (\$92K - \$110K)**

You will be a senior member of a highly successful team of operations research professionals and statisticians working on challenging industrial applications of optimisation and simulation technology. You will have a PhD and an established track record in operations research or applied mathematics, or equivalent research experience. You will have demonstrated skills in the application of combinatorial optimisation methods to significant industrial problems, including the development and implementation of efficient algorithms.  
**Closing date for the position will be**  
 For selection documentation and details on how to apply visit [www.csiro.au/careers](http://www.csiro.au/careers)



**Work at the cutting edge of science and technology**

Join DSTO. We are an organisation at the forefront of international defence research. You will work with over 2000 people, including Australia's brightest and most innovative scientists, engineers and IT specialists. Enjoy challenging work, excellent career development and travel opportunities, an excellent super scheme, and family-friendly work conditions in a high-tech, civilian campus environment.

**RESEARCH LEADER IN OPERATIONS RESEARCH**

**Executive Level 2 (S&T Level 8)**  
**\$113,006 - \$123,634**

Located in Adelaide. You will lead a team of approximately 40 scientists engaged in the multi-disciplinary application of operations analysis and evaluation across a number of broad research fields related to Military Evaluation for current and future systems. You will also provide high level advice to the Australian Defence Organisation.

The position requires:

- Extensive research achievement in Mathematics, Science, Engineering or a similar field;
- Demonstrated management, leadership and communication skills;
- A record of high level achievement in a field relevant to the position.

**APPLICATIONS**

To obtain an information pack and application details, please refer to our web site at [www.dsto.defence.gov.au](http://www.dsto.defence.gov.au) Alternatively, contact the Defence Service Centre -

DSTO is a civilian part of the Department of Defence. Australian Public Service conditions apply. Applicants should be Australian citizens or eligible and willing to apply for citizenship. Defence embraces workplace equity and diversity principles.



## HEAD, SUPPORT SYSTEMS STUDIES

Australian Government  
Department of Defence

Defence Science and Technology Organisation

Work at the cutting edge of science and technology

Join DSTO. We are an organisation at the forefront of international defence research. You will work with over 2000 people, including Australia's brightest and most innovative scientists, engineers and IT specialists. Enjoy challenging work, excellent career development and travel opportunities, an excellent super scheme, and family-friendly work conditions in a high-tech, civilian campus environment.

### HEAD, SUPPORT SYSTEMS STUDIES

Executive Level 2 (S&T Level 7) \$94,467 - \$106,312

**Located in Adelaide.** You will direct and manage teams of scientists and military personnel conducting development and evaluation studies of military systems for the Australian Army. The focus will be to conduct analytical studies within the domains of preparedness, logistics, national support and supply chain management in support of the Land Force.

The position requires:

- Considerable research achievement in Science, Mathematics, Engineering or a similar field;
- Broad experience in the application of Operations Research and Systems Analysis techniques;
- Demonstrated management, leadership and communication skills;
- Ability to provide high level advice to the Australian Defence Organisation.

### APPLICATIONS

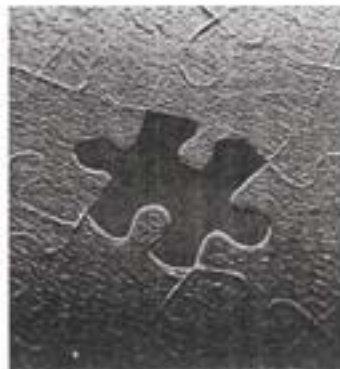
To obtain an information pack and application details, please refer to our web site at [www.dsto.defence.gov.au](http://www.dsto.defence.gov.au) Alternatively, contact the Defence Service Centre -

DSTO is a civilian part of the Department of Defence. Australian Public Service conditions apply. Applicants should be Australian citizens or eligible and willing to apply for citizenship. Defence embraces workplace equity and diversity principles.

The Department of Defence is a regular employer of mathematicians with both undergraduate and postgraduate qualifications. The work is varied and exciting.

## Are you the piece we are looking for?

If you are a problem solver and lateral thinker who strives to excel, the Defence Signals Directorate has great opportunities for you.



Looking for an interesting and challenging career? Are you motivated to achieve in a stimulating high-tech environment that provides a unique service of national importance? Do you want comprehensive training and development throughout your career including the possibility of long and short-term travel? If you have answered 'Yes' to these questions then the Defence Signals Directorate may have diverse and dynamic career opportunities for you.

The DSD is a highly professional, people oriented organisation and a key Australian intelligence agency that collects and produces foreign signals intelligence and advises the Australian Government on computer and information security.

We provide challenging and stimulating civilian careers for a large number of graduates each year. We are interested in attracting graduates with degrees that deliver skills and/or interests in one or more of the following areas:

### Intelligence Analysts

(APS Level 3-6)

Commencing salary \$39,278 plus superannuation

Arts and Science disciplines with a strong analytical component (eg environment, history, psychology, biology, linguistics etc) in the degree

Maths, statistics or physics graduates

Regional languages

### Technologists

(APS Level 3-6)

Commencing salary \$43,775 plus superannuation

Software Design, Development and Support

Communications Systems Engineering

Computer and Information Security

System and Database Administration

**How to apply:** All positions are based in Canberra and selection will be on the basis of merit. To obtain the full application details visit our website [www.dsd.gov.au](http://www.dsd.gov.au) where comprehensive information is available. If you do not have Internet access you can obtain information by calling

These numbers are 24-hour answering machines where you are able to leave forwarding details.

The Defence Signals Directorate is part of the Australian Public Service and is a Canberra based organisation. Successful applicants are required to undergo a security assessment to the highest level and will be engaged on probation. To be eligible for engagement, applicants must be Australian citizens with at least 10 years checkable background.



Australian Government  
Department of Defence  
Intelligence & Security

**RESEARCH SCIENTIST, OPERATIONS RESEARCH**

CSIRO Mathematical and Information Sciences

Major Career Opportunities

CSIRO Mathematical and Information Sciences delivers the benefits of smarter information use to organisations

Our research in mathematical and statistical sciences is applied in three key areas: Biotechnology and Health Informatics; Decision Making for Industrial Processes and Business Services; and Environmental Monitoring for Management. CSIRO leads significant research in each of these areas, collaborating with partners in business, government and within CSIRO and other research organisations to deliver tangible benefits to Australia. CSIRO aims to grow in influence and size through its pivotal role in National Research Flagships and partnerships with other leading innovators.

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**Environmental Monitoring for Management** develops and implements new statistical methodologies for smarter information use in environmental and natural resource management applications. To support our continued growth and development we have identified a number of key roles across various disciplines.

**Research Scientist, Operations Research**

(Melbourne, 2 Positions)

CSOF5 (\$66K - \$72K)

You will be a member of a highly successful team of operations research professionals and statisticians working to address critical supply chain challenges for Australian industry. You will have a PhD in operations research or applied mathematics, or equivalent research experience. You will have a strong background in optimisation together with demonstrated problem solving skills, including an ability to uncover and formulate the optimisation problems present in complex industrial scenarios.

Closing date for this position will be

For selection documentation and details on how to apply visit [www.csiro.au/careers](http://www.csiro.au/careers)

Australian Science, Australia's Future



**MRA  
Munich Re Group**

**GRADUATES**

Munich Reinsurance Company of Australasia Limited is part of the global Munich Re Group - the world's leading Reinsurer.

Expressions of interest are sought from recent graduates seeking a career in Reinsurance.

A Cadetship Programme will be offered to the successful applicant. This includes a structured, two year intensive learning programme across all functional areas of the Company. At the conclusion of the Cadetship, the appointee may be placed in appropriate role to advance their career. Ideally, applicants would have achieved exceptional results in either single or double degrees within the areas of Economics, Commerce, Business, Law, Engineering, Sciences or Mathematics.

Written applications, outlining qualifications and areas of interest, should be directed to:

**Munich Reinsurance Company  
of Australasia Limited**



**Treasury Graduate Careers**

Treasury operates at the forefront of economic analysis and policy development. We rely on the knowledge and skills of our people, and operate in a dynamic and stimulating work environment.

The diversity of Treasury's business is perhaps one of our greatest strengths. With a focus on improving the wellbeing of Australians, Treasury's work covers fiscal, monetary and labour market policy; research and analysis on national and international financial and economic issues; market policies, including the financial system, competition policy and consumer protection issues; taxation policy; corporate governance; and environment policy.

The Treasury is seeking **Graduate Policy Analysts** with strong academic standing in one or more of economics, econometrics, law, mathematics, public policy, finance, or taxation. In addition you will need to demonstrate strong skills in written and oral communication; output management; conceptual and analytical thought; judgement and leadership and have strong people skills. Treasury has a strong commitment to career development including supporting continued academic study.

Treasury values striving for excellence, diversity, teamwork, consultation and ideas sharing, treating people with respect, honesty and fairness. If you believe the Treasury offers the challenges and are interested in a career in policy advising we would like to hear from you.

Applications for Treasury's 2005 Graduate Policy Analyst intake may be submitted at [www.treasury.gov.au](http://www.treasury.gov.au). Applications close on \_\_\_\_\_.

For further information please see our website or e-mail the Graduate Coordinator at: [graduate.recruitment@treasury.gov.au](mailto:graduate.recruitment@treasury.gov.au)

Treasury supports workplace diversity and is a smoke free environment



**Australian Government  
Department of Defence**

**Challenging Graduate Careers  
with the Defence Signals Directorate**

If you are looking for an interesting and rewarding career and are ready to take on challenges that affect national security, this is your starting point.

In a constantly changing and uncertain world, Defence Signals Directorate (DSD) provides a unique service of national importance. It's no secret that we are a key Australian intelligence agency. We provide the Australian Government with timely, responsive and comprehensive information and analysis. We do this by producing and disseminating foreign signals intelligence and advising the Government on all matters pertaining to communications and computer security.

DSD offers stimulating and challenging opportunities. DSD is looking for people who have commitment and initiative, the ability to adapt and initiate changes and the capacity to quickly come to terms with new and complex concepts and issues. DSD is seeking graduates with strong academic records in a diverse range of disciplines, including:

- Software Design, Development and Support
- System and Database Administration
- Communication Systems Engineering
- Computer and Information Security
- Arts (Eg. History, Linguistics, Psychology)
- Science (Eg. Environmental, Maths, Physics, Statistics, Biology)
- Regional Languages

## Some websites that contain more job advertisements are:

- Mathematics: [www.austms.org.au/Jobs](http://www.austms.org.au/Jobs) (Australian Mathematical Society)
- Statistics: [www.statsci.org/jobs](http://www.statsci.org/jobs) (Australian Statistical Society)
- Teaching: [www.teaching.vic.gov.au](http://www.teaching.vic.gov.au) (Victorian Government Schools)



- These ads are a sample, and by no means should you think that they set the boundaries for what is possible now or in the future.
- We hope this helps you see that if you like mathematics or have some ability for it, or you are prepared to work for the goal of an interesting career, then...**maths adds**.

## Where do I get my Mathematics / Statistical Science degree?

The AMSI and ICE-EM websites have links to many other Australian mathematics and statistics web pages where you can discover the best course for you.

**[www.amsi.org.au/careers](http://www.amsi.org.au/careers)**  
**[www.ice-em.org.au/institutions](http://www.ice-em.org.au/institutions)**

Prepared for AMSI and ICE-EM by La Trobe University  
[www.latrobe.edu.au/mathstats/maths](http://www.latrobe.edu.au/mathstats/maths)

