

PROTECT US FROM GLOBAL WARMING



SCIENCE & ENVIRONMENT

From Astrophysics and Chemistry to Biology and Zoology, Mathematics is a fundamental tool used in science to understand how and why the world works.

Data analysis, mathematical modelling and evidence-based decision making play an important role in research. Scratch beneath the surface and you'll find science and maths working together to help understand our planet, oceans and wildlife, discover new galaxies and advance new technologies.

With rising global temperatures, food security concerns and changing global ecosystem dynamics, climate change is a real and urgent priority! The green economy is worth \$6 trillion worldwide and is the fastest growing market globally, with 850,000 more people needed in the sector by 2030.

TOP JOBS

- ECOLOGIST
- ENVIRONMENTAL SCIENTIST
- METEOROLOGIST
- CLIMATE SCIENTIST
- ASTRONOMER





DESIGN NEW TECH TO SEE THE UNFORESEEN

TECHNOLOGY

Digitalisation, automation, optimisation, now is the time to join the technological revolution that is transforming nearly every sector. The machines haven't quite taken over yet, but our world is radically changing and you can be a part of it.

As major corporations seek to harness data and drive new technologies to change how we live and work, the demand for mathematics and statistics graduates will only soar.

Robotics in medicine and surgery, drones for parcel delivery, artificial intelligence, driverless cars and virtual reality travel all sound futuristic, but may be closer than you think!

TOP JOBS

- APP DEVELOPER
- GAME DEVELOPER
- SOFTWARE ENGINEER
- COMPUTER SCIENTIST
- PROGRAMMER



SHAPE THE FUTURE OF OUR ATHLETES



SPORT & RECREATION

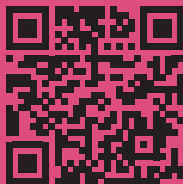
Sport is a numbers game. From optimising performance to game strategy, doing the maths to get that big win is always front and centre.

Watch a football game and the statistics will come thick and fast. Goals scored, kicks, patterns of play and even betting odds. Behind the scenes a team of analysts are mining this information for a golden ticket to triumph. Helping the players stay ahead with the next best move.

Wearables in the form of clothing, technology to analyse body performance data and even high-tech footwear have been a hot topic as the sporting industry continues to grow.

TOP JOBS

- SPORTS STATISTICIAN
- FOOTBALL ANALYST
- SPORTS SCIENTIST
- PRODUCT ENGINEER
- TEXTILE DESIGNER



HELP STARTUPS TAKE OFF



BUSINESS & MARKETING

The ability to make effective decisions in business has never been more important. Data insights and predictions are essential to protect that all important bottom line.

A major global growth industry, analysing and measuring the marketing spend of large corporations is a must. Return on investment (ROI) is essential, with analysis on media spend, sales data and increasingly, web and social media engagement key to highlighting the effectiveness of marketing campaigns.

For startups, business forecasting, budgeting and modelling are pivotal to early success. Many of the biggest corporations of our time would not have existed without the help of mathematics, statistics and data analytics.

TOP JOBS

- BUSINESS ANALYST
- MARKETING ANALYST
- DATA SCIENTIST
- QUANTITATIVE ANALYST
- OPTIMISATION SPECIALIST



ANALYSE DATA IN THE SMALLEST DNA SAMPLE



BIOSTATISTICS & BIOINFORMATICS

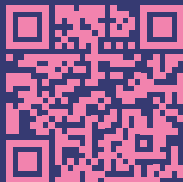
The human body is a complex and mysterious machine. Every one of our cells contain the blueprint for life, encoded within the DNA molecules of the genome. The challenge is to decode this detailed information to provide new insights into how we can best manage, diagnose and treat disease.

One of the ways we do this is by using mathematical and statistical tools. Known as bioinformatics, this research uses genetic code to understand our bodies and tackle global health challenges such as cancer, heart disease and infectious diseases like malaria and influenza.

With rapidly advancing technology and the rise of precision healthcare, demand for graduates with these skills is soaring.

TOP JOBS

BIOSTATISTICIAN
BIOINFORMATICIAN
SCIENTIST
DATA ANALYST
RESEARCHER



TEACH NEW MINDS WITH CYBER SCHOOL LEARNING



EDUCATION

Remember that teacher who inspired and encouraged you to be your very best? You could do that for a new generation of Australians.

Education offers a real opportunity to make a difference to people's lives. Who knows, one of your students might be the mathematical leader, scientist or engineer who changes the world. Online learning is an emerging market and now allows more students the access and flexibility to courses around the world.

You don't have to work in the classroom either. As well as teaching in primary or secondary schools, teachers work in universities and provide the expertise needed for curriculum development, education management and even government policy. Education offers a secure and flexible career that you can take all around the world.

TOP JOBS

TEACHER
LECTURER
PRINCIPAL
CURRICULUM LEADER
EDUCATION CONSULTANT



BUILD THE CITIES OF THE FUTURE



ENGINEERING & RESOURCES

Innovative problem solvers, engineers use mathematical and statistical tools to help shape our world for the future.

From roads, buildings and waterways to transport infrastructure, civil engineers are in critical demand to design cities to cope with global population expansion and increased migration to urban areas. This requires high-level analytical thinking and problem solving, skills developed through long-term maths study.

As the shift to using renewable energy gains ground, environmental engineers will be required to create solutions for billions of people globally, and maths will be the key tool needed to solve some of our biggest challenges yet.

TOP JOBS

- ENGINEER
- PROCESS ANALYST
- ENVIRONMENTAL ENGINEER
- WATER SPECIALIST
- SUPPLY ANALYST



CODE AGAINST CYBER ATTACKS



SECURITY & DEFENCE

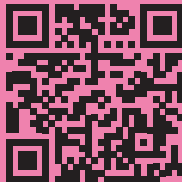
These days it is difficult to imagine a world without emails, online banking, social media and the convenience of click and collect. Our lives are increasingly lived and managed online.

We pay a price for convenience and efficiency though, with high volumes of personal data stored and mined. This information is valuable leaving us vulnerable to cybercrime, systemic failure and data corruption.

Almost 60 per cent of Australian businesses experienced security breaches in 2016 and that number is set to increase as cyber attacks grow in scale and sophistication. Graduates skilled in mathematics and statistics are top of recruitment wish lists as companies seek to keep ahead and build capability.

TOP JOBS

FORENSICS ANALYST
FRAUD ANALYST
CRIMINOLOGIST
NETWORK DESIGNER
CRYPTOGRAPHER
SECURITY ENGINEER



ORGANISE BIG DATA CHAOS



DATA SCIENCE

We are surrounded by data every day—from social media and online shopping to healthcare, climate science and business decisions. Data science is all about making sense of this information, using mathematics and statistics to uncover patterns, solve problems and help shape the future.

From predicting disease outbreaks to improving transport systems and developing smarter technologies, data scientists are helping organisations make better decisions in real time. As the amount of data in the world continues to grow rapidly, so does the need for people who can understand and work with it.

If you enjoy problem solving and want to make a real impact, studying maths can open the door to exciting careers in data science. These roles combine mathematics, technology & creativity to tackle some of the world's biggest challenges and create innovative solutions for the future.

TOP JOBS

- DATA SCIENTIST
- DATA ANALYST
- MACHINE LEARNING ENGINEER
- AI SPECIALIST
- BUSINESS INTELLIGENCE ANALYST

