POSTGRAD COURSE GUIDE

UPSKILL IN TECH + DATA

INFORMATION TECHNOLOGY + DATA ANALYTICS + BUSINESS PROCESS MANAGEMENT

SUPPORTED BY

QUT

Bahareh Shahrestanaki
QUT Master of Data Analytics student

Boost your career prospects

Future proof your career in Australia's booming IT industry and pursue a postgraduate degree at QUT.

The demand for IT professionals is growing 2.5 times faster than the overall job market, with data analytics being one of the top five most in-demand skills.

QUT provides practical, hands-on learning that prepares postgraduate students for big challenges in the industry, with research support and one-on-one guidance from experts.

Join other successful graduates and enrol now at QUT. Don't miss out on this opportunity to become a valuable asset in the fast-paced and exciting world of IT.

qut.edu.au/postgrad-it

the university
for the real world

QUT

TECH BEYOND THE TECHNICAL

Postgraduate studies in IT will help you keep up with constant advancements in the field and create opportunities to extend your learning and broaden your career options…

"OUR TEACHING PREPARES GRADUATES NOT JUST FOR THEIR FIRST JOB, BUT ALSO FOR THEIR SECOND AND THIRD JOBS AS THEY PROGRESS IN THEIR CAREERS"

When you think about information technology (IT) now versus 15 years ago, it's a completely different landscape. Forget being in a dark basement where no one talks to you! Today, it's much more about working in a team and communicating, both of which are emphasised as part of postgraduate IT studies at QUT.

Technology today is an enabler, and it's everywhere. Uber isn't a car company, right? It's a software company. We're connecting and enabling new types of interactions in transport, health and retail with technology innovations. And, with short degrees such as graduate certificates and diplomas available, you can gain IT skills at any stage of your learning journey or career pathway.

While many high school students see the importance and value of technology in society, they still don't necessarily choose technology. One of the things we've noticed in some of our postgraduate spaces is that as people get into the workforce, they realise that the barriers they thought they'd encounter in IT don't really exist. We're seeing a much more balanced group of people, in terms of gender at least, coming back to these degrees. That's really exciting.

At QUT, you'll develop skills and knowledge in a breadth of areas. Our students gain an understanding of the principals of topics such as cybersecurity,

enterprise systems and business analysis, as opposed to just learning software.

Our teaching prepares graduates not just for their first job, but also for their second and third jobs as they progress in their careers.

Whether you're just starting to consider your options or you're ready to jump into further study, this guide is the perfect place to start. It's full of information about the courses available at QUT and interesting stories of people who have completed them. You'll discover what you can expect from the courses, what you'll learn and how you can use that knowledge to advance your career.

I hope this guide inspires you to take your career to the next level.

Professor Peta Wyeth
May 2023

PHD IN COMPUTER SCIENCE + HEAD OF SCHOOL OF COMPUTER SCIENCE + ACTING DEAN OF SCIENCE

QUT / SHUTTERSTOCK

SECURING YOUR FUTURE

A postgraduate qualification in IT will increase your earning potential, skill specialisations and industry relevance.

Postgrad study can help you deepen your knowledge in an area, find new interests or even start on a whole new career path. A postgrad can mean a higher job qualification, salary and skill level. The information technology (IT) industry is constantly advancing, but a postgrad in IT will help keep your credentials ahead of the game.

EXPERT FOCUS

With a bachelor degree or professional work experience in hand, pursuing postgrad study at QUT means you'll have access to industry experts and courses that allow you to utilise your learning in real time. With a focus on project-based units, you'll apply tech knowledge combined with theory to develop concepts, software applications and tech-specific solutions throughout your postgrad study at QUT.

AUSSIE TECH SECTOR

Australia's tech sector contributes about $167 billion to its economy. Areas such as disruptive tech, cyber security, digital health, education and mining technology offer exciting roles at global companies as well as our own government agencies. Guess who those companies and government sectors are looking to employ? Highly-skilled workers with a deep knowledge of IT. A postgrad at QUT will give you that edge.

EARNING POTENTIAL WITH A POSTGRAD

Three years out of uni, postgraduate coursework grads, working full time, have the potential to earn over $20,000 more per year than someone with a bachelor degree who has worked for the same period.
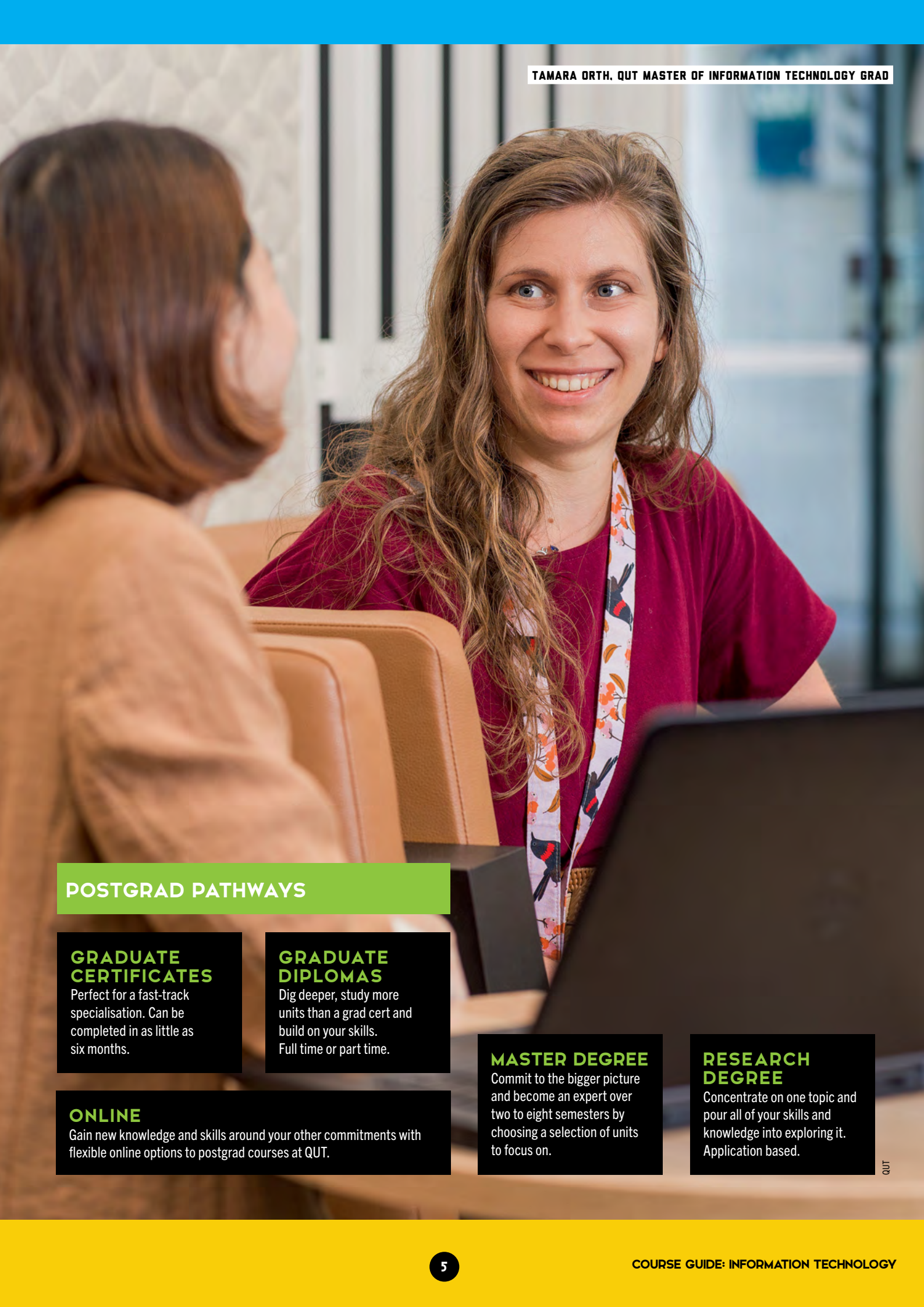
> "IT'S ALLOWED ME TO REMAIN RELEVANT AND AHEAD OF THE CURVE WITH MY SKILLS, THINKING AND SENSE OF CURIOSITY"

TONI DE PALO, STUDENT, MASTER OF DATA ANALYTICS, QUT

IN **2021 — 2022**, THE FORECAST INCOME OF **DATA SCIENCE** PROFESSIONALS WITH POSTGRAD QUALIFICATIONS WAS **$130,176!**

*DELOITTE, THE FUTURE OF WORK

POSTGRAD PATHWAYS

GRADUATE CERTIFICATES
Perfect for a fast-track specialisation. Can be completed in as little as six months.

GRADUATE DIPLOMAS
Dig deeper, study more units than a grad cert and build on your skills. Full time or part time.

MASTER DEGREE
Commit to the bigger picture and become an expert over two to eight semesters by choosing a selection of units to focus on.

RESEARCH DEGREE
Concentrate on one topic and pour all of your skills and knowledge into exploring it. Application based.

ONLINE
Gain new knowledge and skills around your other commitments with flexible online options to postgrad courses at QUT.

QUT

OPEN YOURSELF UP TO NEW OPPORTUNITIES

If you're looking to take your career to the next level, look no further. A Master of Data Analytics will supercharge your job options.

Data is being gathered in unprecedented numbers. It's everywhere: from shopping habits to social trends and what you listen to, read and watch… companies are gathering stats on their customers and audiences by the second. It's a currency and a commodity which is pretty handy in building success and knowledge.

Data is becoming the main driver for so many industries when it comes to making business decisions, so there are plenty of skills required to analyse it.

Keeping up with new ways to collect information means keeping up-to-date with the latest courses and study options available. Beyond a Bachelor of Data Science, QUT has postgrad opportunities that will help catapult your data know-how to the next level with the help and guidance of academics and researchers who are world leaders in data.

DATA CHAT

We spoke to **Toni De Palo** about how studying a Master of Data Analytics at QUT has given her career an edge

What are you enjoying about studying the Master of Data Analytics?
Toni: As I work my way through it, I'm finding that I'm gaining relevant skills and developing a way of thinking that's useful in any role.

How has postgrad helped your career?
Toni: It has helped me to remain relevant and ahead of the curve with my skills, thinking and sense of curiosity.

Tell us about your current job!
Toni: I work for a Federal government department where we have an enormous amount of data that needs to be analysed and transformed into a story. Through visualisation techniques I'm able to provide a basis for sound decision making.

How important are data skills to IT careers?
Toni: I believe data literacy is important for everyone. The need to be able to use, analyse and understand data is rapidly growing.

Top tips for postgrad students?
Toni: Be curious and approach it as an adventure. Use the time to build your networks, leverage the expertise of others and find what works for you. Also, ask loads of questions along the way!

MASTER OF DATA ANALYTICS, QUT (ONGOING) + SESSIONAL ACADEMIC, QUT + ACTING DIRECTOR – PORTFOLIO VALUE MANAGEMENT, ATO

QUT

UP THE LADDER

Your job prospects with a Bachelor of Data Science are great, but the roles you could apply for with a Master of Data Analytics from QUT can expand your career to meet your expanding knowledge.

BACHELOR OF DATA SCIENCE

- Analytics consultant
- Data strategist
- Systems analyst

MASTER OF DATA ANALYTICS

- Data analytics specialist
- Data systems developer
- Data-driven decision-maker

MASTER OF MANY

Sally Zhu is working on having not one, but two Master degrees and they're both from QUT

Career paths don't come much more diverse than Sally's. After working in retail and tourism, her interest in data led her down a different path and she's been on a continuous, data-driven learning journey ever since.

"I'm genuinely curious about how data science and analytics shape decision making," Sally says.

As a statistical forecast analyst with the Woolworths Group, Sally's role requires her to "improve the accuracy of sales forecasting so that the right amount of stock is delivered to the right store at the right time".

"I'M GENUINELY CURIOUS ABOUT HOW DATA SCIENCE AND ANALYTICS SHAPE DECISION MAKING"

Sally is currently studying her second Master degree at QUT: a Master of Data Analytics. She's grateful for QUT's supportive teaching team, especially when it comes to her main challenge: coding. "I had zero coding experience but the course itself is structured so that students are introduced to new concepts gradually. The supportive environment made me feel comfortable and I was able to learn how to code, and strategies to do so."

Sally credits formative learning experiences such as this for making her want to stick with postgraduate study.

"I feel lucky and grateful that I have had these positive experiences at QUT that motivated me to further pursue the data analytics/data science fields."

PRICING ANALYST, WESFARMERS INDUSTRIAL AND SAFETY + STATISTICAL FORECAST ANALYST, WOOLWORTHS GROUP + MASTER OF DATA ANALYTICS (STATISTICAL DATA SCIENCE), QUT

TICKING THE RIGHT BOXES

At QUT, a Master of Data Analytics is usually a two year, full-time program, but you can smash it out in one year (with conditions). Regardless of timelines, entry into this program requires a recognised bachelor degree in IT or mathematics, and minimum grade point averages need to be met. Planning your study is essential, but so rewarding.

In addition, entry into the one-year course requires you to have one of the following qualifications from QUT:

- **GRADUATE CERTIFICATE IN BUSINESS ANALYSIS**
- **GRADUATE CERTIFICATE IN CYBER SECURITY AND NETWORKS**
- **GRADUATE CERTIFICATE IN DATA ANALYTICS**

KEEP AHEAD OF THE GAME

QUT's postgraduate IT courses will help keep you up-to-date with the rapidly evolving tech world, and set you up for career success.

Information technology (IT) is in-demand but always changing. According to the Tech Council of Australia, one in 16 working Australians are employed in the tech sector, so it makes sense to stay up-to-date with the industry. It's fast-paced and evolving constantly, which means there's always more to learn. One way to keep ahead of the IT game is a postgrad course at QUT. Step back into real-world learning to expand your expertise, update your knowledge and future-proof your career.

A postgrad at QUT means learning through workshops, guided problem-solving demonstrations, practical computer-based activities and a focus on design and underlying IT processes. Interested? Read on…

YOUR FUTURE IN IT

Background: Business or Finance
Future: Business Intelligence Analyst

If you have a Graduate Certificate in Business Analysis and a background in business or finance, you could consider becoming a business intelligence analyst. This career involves analysing complex data sets to identify trends, patterns and insights that can be used to inform business decisions.

Background: Engineering or Mathematics
Future: Software Developer

With a Graduate Certificate in Computer Science and a background in engineering or mathematics, you would be well-placed for a career in software development. This career involves designing, developing, and testing software applications and systems.

Background: Law or Business
Future: Cybersecurity Consultant

If you have a background in law or business, and a Graduate Certificate in Cyber Security and Networks or a Master of Information Technology, you could consider a career in cyber security. This career involves analysing and evaluating the security of computer systems and networks and advising clients on how to improve their security posture.

EXPAND YOUR DIGI DIALECT

The QUT Grad Cert will introduce you to new and innovative IT tools and skills with access to programs like…

✔ **Visual studio**
✔ **Tableau**
✔ **Microsoft Azure**
✔ **Lucidchart**
✔ **Signavio**
✔ **HTML**
✔ **Cascading Style Sheets (CSS)**
✔ **Python**
✔ **Oracle**
✔ **Jupyter Notebook**
✔ **Anaconda**

SHUTTERSTOCK

JOB SECURITY

Adding a Master of IT to his computer science undergrad made **Samridh** twice as employable in cyber security

**SAMRIDH GIRISH
IT SECURITY ANALYST**

Did you always know you wanted to work in tech?
Samridh: I was always good at providing tech help to my family, which led me to study a Bachelor in Computer Science Engineering. However, while I was working in IT I learnt about opportunities in cyber security and enrolled in a master degree at QUT with a specialisation in networks and cyber security.

Such a great career move! How was your postgraduate experience?
Doing my Master at QUT was a much more hands-on learning experience than my Bachelor degree, and it really helped me to learn each concept clearly! I use all of those concepts widely in my current job and so can say with confidence that QUT's slogan 'the university for the real world' is very apt.

How did you land your current gig as a cyber security analyst?
With my previous experience working in IT support and system admin roles in India, I landed my first IT support analyst role at Smartabase. Seeing the passion that I had for cyber security, they gave me the opportunity to learn the job hands on!

What do you do day-to-day?
At my company Teamworks, I'm responsible for management and maintenance of the organisation's IT networks, systems, applications and access controls for multiple offices in different time zones.

At the moment I'm researching various security technologies that can be incorporated to improve our security posture and am working on getting new security compliance certifications for the company.

Is there anything you learnt during your Master degree that you use on the job a lot?
At university I was exposed to various frameworks – like NIST and ISO – that are widely used by many different organisations. This has really helped me recently while working on the security compliance certifications.

SAMRIDH'S STUDY TIPS

1 LEARN THE FUNDAMENTALS BY TAKING ADVANTAGE OF ONLINE RESOURCES

2 FIND A SPECIALISATION WITHIN CYBER SECURITY

3 ENROL IN A DEGREE OR DIPLOMA

4 GET PRACTICAL EXPERIENCE

5 HUNT DOWN A MENTOR

6 BUILD A STRONG NETWORK

MASTER OF IT, QUT + IT SECURITY ANALYST, SMARTABASE + IT SECURITY ANALYST, TEAMWORKS

BACK IN BUSINESS

A postgraduate qualification in Business Process Management can fast-track you into a leadership role.

Business strategy and management of developments across industries is an in-demand and developing career area. According to Fortune Business Insights the global Business Process Management (BPM) market is expected to be worth almost $40 billion by 2028.

The ability to reimagine end-to-end processes that enable businesses to reach their customers, be more efficient and have a clear strategic plan is a gamechanger in any market. From inventing new software programs, to initiatives that support employees in solution-driven outcomes, a business process analyst is the person who has the answers and a Graduate Certificate in Business Process Management from QUT will help you find them. The second step? A postgrad degree…

CAREER PROSPECTS

The Master of Business Process Management at QUT will prepare you for senior roles leading, developing and guiding organisations to set up for success specifically across the business and IT industries.

✔ **BENEFITS ANALYST**

✔ **CHANGE MANAGER**

✔ **BUSINESS PROCESS / CONTINUITY MANAGER**

✔ **CORPORATE STRATEGIST AND DEVELOPMENT ADVISOR**

✔ **SENIOR BUSINESS ANALYST**

✔ **ENTERPRISE ARCHITECT**

It could also take you towards further study and research fields in the form of a Master of Philosophy, a professional doctorate or a PhD.

QUT PATHWAYS

Post-BPM qualifications, there are a variety of courses to consider, depending on your interest and ultimate industry focus. Enhance your skill set and combine your tech knowledge with any of these QUT postgrads…

- Graduate Certificate in **Business Analysis**
  6 months

- Graduate Certificate in **Communication for Technology**
  6 months

- Graduate Certificate in **Data Analytics**
  6 months

- Graduate Diploma in **Information Technology**
  1 year

- Master of **Business Process Management**
  1.5 years

STAY UP-TO-DATE

Rebecca Wilson is a change management and process improvement consultant who thrives on making things better for businesses and the people who work for them. Rebecca updates her qualifications every 10 years to ensure she's across the latest methodologies and tech available. Here's why she chose QUT for her postgrad study…

Location: "The location in the city is just so handy. I loved having the gardens right there for when you need to decompress between sessions."

Flexibility: "I liked being able to watch pre-recorded lectures in the evenings when I was working full time."

Resources: "There are a bunch of consulting tools that are able to be used in real-world heat maps to help communicate complex equations in easily digestible, visual ways."

Support: "My change management professor was incredibly inspirational and I loved how practical the assignments were."

AIMING HIGH

Claire Meyer is a QUT graduate and current student who enjoys working with a variety of people and seeing the tangible benefits of her role as a project manager/business analyst. Working in the fast-paced IT and financial services industries, she wanted to brush up on her coding skills, so Claire enrolled in a Graduate Certificate in Business Process Management at QUT to get the learning and experience she needed. Once that was completed, she was ready to take on the Master of Business (Management) course.

CLAIRE MEYER
BUSINESS ANALYST

"I HAVE APPRECIATED HAVING THE FLEXIBILITY TO DO SOME SUBJECTS IN PERSON AND SOME SUBJECTS ONLINE TO SUIT MY WORK & FAMILY SCHEDULE"

What inspired you towards a BPM career?
Claire: I like processes, planning and seeing the bigger picture of how things fit together.

Why did you decide to study a postgrad?
Claire: It's always important to keep learning, and staying on top of the many new ways of thinking and doing things.

What made you choose this course?
Claire: The Master of Business (Management) will help me take my STEM background to the management level.

How will postgrad help your career?
Claire: The Grad Cert in BPM drastically improved my ability and confidence in process mapping, providing quality work to stakeholders within my company. With my Master's degree, I'm learning key elements that are worthwhile in my current role and for my career path ahead as a leader in STEM.

What made you choose QUT?
Claire: I was interested in the real-world experiences that QUT delivers. Also, I have appreciated having the flexibility to do some subjects in person and some subjects online to suit my work and family schedule.

PROJECT MANAGER / BUSINESS ANALYST, BRIGHTER SUPER + GRADUATE CERTIFICATE IN BUSINESS PROCESS MANAGEMENT, QUT + MASTER OF BUSINESS (MANAGEMENT), QUT

"QUT IS ONE OF THE FEW PIONEER UNIVERSITIES THAT OFFERS A MASTER OF BUSINESS PROCESS MANAGEMENT ACROSS AUSTRALIA"

A NEW DIRECTION

Mitchell Au-Yeung says building bots is a career highlight, thanks to his QUT postgrad

It was an aversion to looking at numbers all day that led Mitchell to switch careers and move away from accounting. "I'd decided I didn't want to be crunching numbers for the rest of my life in a cubicle," he says.

Mitchell first came across the concept of robotic process automation (RPA) on LinkedIn, which is also where he discovered QUT's Master of Business Process Management (BPM). Thanks to his master's degree, he was able to build on his undergrad and enhance his skills so he could transition to a career that better suited him.

"QUT is one of the few pioneer universities that offers a Master of Business Process Management across Australia," Mitchell says. "My professor, Moe Thandar Wynn, was always so enthusiastic and passionate when talking about BPM. It was just an eye-opener listening to and learning from her during my time at QUT." — *Pippa Duffy*

MASTER OF BUSINESS PROCESS MANAGEMENT, QUT + BUSINESS ANALYST, JOII + BUSINESS PROCESS ANALYST, SUNCORP GROUP

REDUCE YOUR POSTGRAD FEES BY MORE THAN 60%.

New Commonwealth supported places make postgrad qualifications even better value for money

There's never been a better time to lock in your postgraduate IT study than now, with new Commonwealth supported places on offer. This government-provided subsidy is not a loan, so there's no need to pay it back, and it can significantly reduce the cost of study.

In the past, these places haven't always extended to postgraduate courses, so this is a great reason to get moving on your goal to do further study.

WHO'S ELIGIBLE?

To get the subsidy you must be an Australian or New Zealand citizen, not have used up your seven years of full-time subsidised study under the Student Learning Entitlement rules, and meet certain completion rate requirements for previous study.

You can find full eligibility criteria here: **www.studyassist.gov.au/ help-loans/commonwealth-supported -places-csps**

ALICE NGUYEN MASTER OF IT (DATA SCIENCE) GRADUATE

QUT

HOW TO APPLY QUT.EDU.AU/CSP-POSTGRAD-IT-DATA

WHICH QUT IT COURSES ARE COVERED?

✔ **IN14** Graduate Certificate in Business Analysis

✔ **IN15** Graduate Certificate in Computer Science

✔ **IN16** Graduate Certificate in Cyber Security and Networks

✔ **IN18** Graduate Certificate in Information Technology

✔ **IN19** Graduate Diploma in Information Technology

✔ **IN20** Master of Information Technology

✔ **IN23** Master of Business Process Management

✔ **IN25** Graduate Certificate in Business Process Management

✔ **IN26** Graduate Certificate in Data Analytics

✔ **IN27** Master of Data Analytics

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CAREERS WITH STEM