



THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA

CREATE CHANGE

CAREERS IN TECHNOLOGY

THE UNIVERSITY OF QUEENSLAND



Never before have technological changes been faster or more fundamental.

The digital age is creating countless new and exciting opportunities for people to help shape the future using technology. From creating virtual realities to artificially intelligent machines that analyse health and environmental data, technology is at the core of a sustainable future.

At UQ, we are focused on providing you with the skills and capabilities to ensure you are prepared not just for your first job, but a lifetime of success. Whether you're interested in becoming a digital designer, creating innovative tools or a data scientist spotting trends across the health or legal industries, discover how your talents and passions can turn into an exciting and dynamic career in technology.

SKILLS YOU NEED



Communication



Organisation



Analytical Abilities



Creativity



Project Management



Problem Solving



Resourcefulness



Curiosity



Collaboration

FOCUS AREAS

CYBER SECURITY

Learn the fundamental processes and practices to protect computing systems – be it smartphones, engine control units of your car, computers or servers – from attack, damage or unauthorised access.

DATA SCIENCE

Discover comprehensive and fundamental techniques for end-to-end processing that transforms data into information, and become one of the new breed of data science professionals.

MACHINE LEARNING

This is a massive growth area as society looks for automated and continuous improvements on ways to enhance business and our lives through the use of computing systems and data.

PROGRAMMING LANGUAGES

You will study the craft and science of programming, which will enable the construction of effective programming languages as well as correct and reliable software.

SCIENTIFIC COMPUTING

Solve complex mathematical problems in scientific fields like biology, chemistry, and medicine. These methods are important for many different types of scientific research and work done by companies in the public and private sectors.

SOFTWARE DESIGN

Follow a career in the creation and management of software applications, with courses focused on areas such as programming, software development, project management, human-computer interaction, algorithms, and more.

SOFTWARE INFORMATION SYSTEMS

Develop the skills to design and build the information systems that are used everywhere in our modern life: in retail, banking, health care, transport, education, entertainment, science and engineering.

USER EXPERIENCE DESIGN

New technologies only succeed if they work for people. Ensure the design of software, websites, or technologies meets their intended use – from commercial software to personal fitness apps to games, and everything in between.



ENDLESS POSSIBILITIES

A Computer degree is a great solution for people who want a well paid, flexible, global, working from anywhere career.



There are
800,000
available IT jobs today in Australia



IT jobs are some of the
**highest
paid jobs**
in industry



IT is a
**global
market**
and you can work from anywhere



You get to choose where
you work or build your
**own
workplace**





I like...

Content and Design

- Being creative
- Testing the limits
- Connecting people and technology
- Thinking outside the box
- Crafting elegant experiences
- Graphic design
- Problem solving
- Working with people
- Mastering the details
- Making hard things easy
- Figuring out what people really need
- Giving power to people

Technology Services

- Problem solving
- Discovering how computers work
- Connecting people and data
- Making systems efficient, reliable and secure
- Hardware and software
- Programming
- Security and hacking
- Managing projects
- Exploring different operating systems
- Automating tasks to make life easier

Business Services

- Working with people
- Problem solving
- Planning and thinking ahead
- Managing projects
- Making technology scalable, reliable and secure
- Analysing data to find insights and business solutions
- Understanding consumer behaviour
- Figuring out what people really need

Product Development

- Combining technology with everyday objects to make tasks easier
- Problem solving
- Being innovative
- Thinking outside the box
- Hardware and software
- Logical thinking
- Artificial Intelligence
- Designing and building something nobody has made before
- The craft and science of programming
- Mastering technology
- Soldering and programming
- Making, building, hacking, tinkering



My degree options

Bachelor of Information Technology

User Experience Design

Bachelor of Design

Information Environments

Bachelor of Computer Science

Cyber Security or Scientific Computing

Bachelor of Computer Science / Master of Cyber Security

Bachelor of Information Technology

Software Design or Software Information Systems

Bachelor of Engineering (Honours)

Software

Bachelor of Computer Science

Data Science

Bachelor of Computer Science / Master of Data Science

Bachelor of Information Technology

Software Information Systems

Bachelor of Engineering (Honours)

Electrical or Mechatronics or Software

Bachelor of Computer Science

Data Science or Machine Learning or Programming Languages

Bachelor of Computer Science / Master of Data Science

Bachelor of Information Technology

Software Design



My speciality



I could be a...

Creative Content and Communications

- Graphic Designer
- Digital Marketer
- Digital Strategist

- Design Manager
- Digital Media Manager
- Product Designer

- User Experience (UX) Designer
- User Interface (UI) Designer

Product Design Web and Mobile Design Wearable Technology, VR and AR

- Web Designer/ Developer
- App Developer
- E-Commerce Specialist

- User Interface (UI) Designer
- Front-End Developer
- Game Developer

- User Experience (UX) Designer
- Project Manager
- Interaction Designer

Systems and Networks

- Cloud Specialist
- Systems Administrator
- IT Consultant
- Software Engineer

- Systems Performance and Resilience Engineer
- Systems Designer
- Game Developer

- Site Reliability Engineer
- Network Engineer
- Applications Developer

IT Security and Forensics

- Digital Forensics Investigator
- Ethical Hacker
- Cyber Security

- Systems Administrator
- Specialist
- Application Security Specialist

- Security Architect
- Security Analyst
- Certificate Authority Consultant

Data Management and Analysis

- Security + Privacy Engineer
- Business Analyst

- Data Scientist
- Digital Analyst
- Senior Data Engineer

- Market Analyst
- Big Data Architect

Business Information Systems

- Data Migration Specialist
- Social Media Data Strategist

- Information Architect
- Database Administrator (DBA)

- IT Support Officer
- Cloud Architect
- Chatbot Developer

Hardware

- Electrical Engineer
- Product Design Engineer
- Automation Engineer

- Hardware Systems Design Engineer
- AI Programmer
- Robotics Engineer

- Machine Learning Engineer

Software

- DevOps Engineer
- Software Engineer
- Games Developer
- Software Architect

- Programmer
- Full Stack Developer
- Software + System Test Engineer

- Natural Language Processing (NLP) Engineer
- Machine Learning Engineer

...and so much more!

CAREERS THAT CREATE CHANGE



Abbey Van De Vorst

Bachelor of Computer Science (Programming Languages)

Backend Software Engineer, Canva, Brisbane

"I've always liked making things, and I loved computer science in high school, so when I found that engineering wasn't for me in the first semester of uni, I made the switch.

After completing my computer science degree at UQ, I applied for every job I could find, and I never expected to get an interview, let alone a job offer!

The fast-paced environment appealed to me and Canva's ethical values aligned with my own, so accepting a role as a backend software engineer was an easy decision. I wanted to do something that I was passionate about and where the day-to-day work excited and challenged me.

I'm constantly having to think outside the box to solve problems, and that takes a lot of creativity."



Madeleine Kingsley

Bachelor of Information Technology

UX/UI Designer, Virgin, Brisbane

"For me it was not clear cut as to what I wanted to do at university after high school. I knew I was creative, and having dabbled in software like Photoshop, I showed a light interest in design. So, when I saw a degree that offered web and graphic design subjects, I decided to take a leap and undertake a degree in Information Technology.

I feel that I am lucky that I selected a degree based on my interest in design as it turned out to be a degree I truly loved, which endless opportunities and career paths."



Tom Nugent

Bachelor of Engineering (Honours) (Mechatronic) /
Bachelor of Science (Computer Science)

Backend Software Engineer, Canva, Sydney

"After studying a coding subject in my first year, I started to consider software engineering (which had never occurred to me). After each new coding course, I was hooked, and decided to pursue programming. I eventually decided on Computer Science and Mechatronic Engineering to have the most flexibility, with a focus on software.

If I had to name my favourite memories, they would definitely be the events hosted by clubs and societies and being a part of the team that organised them. The community of club executives was one of the tightest I've been in since school."



Nathan Dench

Bachelor of Information Technology (Software Design)

Co-founder and Software Engineer, ProcurePro, Brisbane

“The best knowledge I gained from studying a Bachelor of Information Technology at UQ has been how to effectively learn new things. It’s easy to get overwhelmed when presented with something you know very little about, but by being guided through the process, it’s now much easier to pick up new and exciting concepts. I still use the base knowledge I learned through the first and second year programming courses every day.

My favourite part of my job is the satisfaction of finding a pain point that affects someone’s day-to-day life and creating a solution that make their life easier.”



Mallika Mukherji

Bachelor of Computer Science (Machine Learning)

“I ultimately chose UQ due to its location in Brisbane and its superior reputation. I also knew that UQ had partnerships with industry-leading Australian companies and international organisations. This combined with the unique opportunity to major in Machine Learning at an undergraduate level convinced me to enrol at UQ.”

For more information

Visit study.uq.edu.au
or scan the QR code



Bachelor of Computer Science

Duration

3 years full-time

Entry requirements

Qld Year 12 (or equivalent) English, and Mathematical Methods

Accreditation

Australian Computer Society

Bachelor of Computer Science / Master of Cyber Security

Duration

4 years full-time

Entry requirements

Qld Year 12 (or equivalent) English, and Mathematical Methods

Accreditation

Australian Computer Society

Bachelor of Computer Science / Master of Data Science

Duration

4 years full-time

Entry requirements

Qld Year 12 (or equivalent) English, and Mathematical Methods

Accreditation

Australian Computer Society

Bachelor of Design

Duration

3 years full-time

Entry requirements

Qld Year 12 (or equivalent) English

Bachelor of Engineering (Honours)

Duration

4 years full-time

Entry requirements

Qld Year 12 (or equivalent) English, Mathematical Methods, and one of Chemistry or Physics

Accreditation

Engineers Australia

Bachelor of Information Technology

Duration

3 years full-time

Entry requirements

Qld Year 12 (or equivalent) English, and Mathematical Methods

Accreditation

Australian Computer Society



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Disclaimer

The information in this Guide is accurate as at July 2023. However, the University has many programs and courses, and refreshes and updates its programs and course offerings from time to time and without notice. It is your responsibility to visit study.uq.edu.au for up-to-date information.

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