INFORMATION & COMMUNICATION TECHNOLOGY

UOW COURSES IN
BUSINESS INFORMATION SYSTEMS / COMPUTER SCIENCE AND SOFTWARE ENGINEERING / INFORMATION TECHNOLOGY
WE'RE GOING PLACES
UOW is one of the best modern universities in Australia. We connect over 30,000 students from more than 130 nations to learn and discover. We’re young, we’re smart and we work hard enough to be ranked in the top 2% of universities in the world. Join us and see how far you can go.

YOU'RE IN CONTROL
Take control of your life like never before at UOW. Choose your degree. Choose a major. Choose elective subjects, and make exactly the study program you want.

THE TIME OF YOUR LIFE
Study where the brightest people take the time to learn your name. You’ll be more than a number at UOW, and be taught by world famous educators and researchers. Outside of class, you’ll be part of a campus culture defined by fun and friendship.

OUR GRADS GET JOBS
UOW graduates have the skills employers want. We’ve been rated in the top 100 in the world by employers for nearly a decade. You’ll learn how to learn, how to turn theory into practice, and how people with different skills work together.

BE SOMEONE YOU’re PROUD OF
Challenge yourself and come out on top at UOW. Tackle big ideas in your degree, push yourself and travel the world on international exchange. Bring your learning to life with a UOWx program such as mentoring local students.

STUDY AT ONE OF THE WORLD’S BEST UNIVERSITIES

FIVE REASONS TO STUDY ICT AT UOW

If you are fascinated by the possibilities that technology can create and want to work in a thriving industry with boundless opportunities, your future could be in Information and Communication Technology (ICT).

Here are some more reasons why you should consider UOW for your ICT degree.

1. EXCELLENT JOB PROSPECTS
Information and Communication Technology underpins everything we do in today’s digital world. Every industry, from manufacturing to finance; to healthcare, agriculture and transport, is transforming and creating demand for ICT talent. A degree from UOW will provide you with the skills needed to meet these demands and you will graduate as a robust, well-rounded and highly-skilled ICT professional.

2. COMPUTING FOR HUMANITY OR #TECHFORGOOD
As an ICT graduate you have great potential to shape the world and use your tech skills for good.
By studying at UOW you will be exposed to and can get involved in groundbreaking projects such as PetraJakarta and the Sustainable Building Research Centre. If you are entrepreneurially minded, our strong connections with iAccelerate can help you put your ideas into action.

3. FUTURE-PROOF YOUR CAREER
We place a strong emphasis on industry links to ensure our programs remain agile and relevant. In a fast paced and rapidly changing industry you can rest assured that your degree from UOW is future-proof.
Our School of Computing and Information Technology works closely with industry to ensure that programs are relevant and that graduates are well positioned to be leaders in their respective fields. Many of our students have secured employment well before graduation. They earn high starting salaries and are in strong demand.

4. HANDS ON LEARNING
Our degrees offer practical learning through our work experience programs and laboratory experience, so you graduate with the appropriate skills and knowledge to make you industry ready. The final year team project gives you an opportunity to showcase your work at the annual Trade Show.

5. VIBRANT COMMUNITY
Studying IT at UOW offers you a world-class learning environment even between classes. By joining the Wollongong IT Society you will become part of a vibrant and engaged community. Socialise, work together on exciting projects, and gain exposure to industry - from small startups to tech giants.

5-STAR RATING FOR GETTING A FULL-TIME JOB
TOP 2% OF UNIVERSITIES IN THE WORLD
TOP 50 UNIVERSITIES UNDER 50 YEARS OLD
TOP 100 FOR GLOBAL GRADUATES

* 1. Excellent job prospects
* 2. Computing for humanity or #TechForGood
* 3. Future-proof your career
* 4. Hands on learning
* 5. Vibrant community


ICT
Production Engineer, Facebook, California, USA
Bachelor of Computer Science (Mobile Computing) 2014

SAM DUNSTER
Bachelor of Computer Science (Mobile Computing) 2014
Production Engineer, Facebook, California, USA

WHAT YOU WILL STUDY
Core subjects in the Bachelor of Computer Science teach you to understand the structure of data and the role it plays in delivering solutions to complex problems. The degree includes a core of programming and problem-solving subjects as well as electives in databases, programming languages, artificial intelligence, computer and cyber security, computer graphics, operating systems, real-time software, software engineering, internet technology, and so on.

In third year you’ll develop your own application as part of a student team, developing solutions to real-world problems.

You will specialise by choosing one or more of the following majors. You can add flexibility to your qualification by adding a second major, enrolling in a double degree or taking subjects from other disciplines.

MAJORS

DIGITAL SYSTEMS SECURITY
go.uow.edu.au/bcompsci-digsyssec
Information and cyber security is becoming increasingly important for everyday life: we want technology to protect our digital information such as IDs, assets and data security, and to secure email and online privacy for individuals, homes, families and offices.

Employees with skills in information and cyber security are in strong demand across all sectors: from banking to finance, insurance, retail, government and defence, all fields where there is sensitive data and information that is at risk of being hacked and breached via the internet.

ENTERPRISE SYSTEMS DEVELOPMENT
go.uow.edu.au/bcompsci-entsysdev
Enterprise systems development is critical for developing better computer technology for more effective business solutions. Enterprise systems development focuses on the creation of software systems that use large scale, mixed-platform, distributed computing facilities required by large commercial and government organisations.

MOBILE COMPUTING
go.uow.edu.au/bcompsci
Mobile computing is part of the fabric of everyday life: from banking to shopping, to providing health care. Mobile computing focuses on the development models, technologies and techniques that deliver mobile content and services. It addresses four key areas within this rapidly changing arena: design for usability principles, distributed systems, internet technology, and mobile application programming. The challenge for a mobile computing developer is to create elegant, technically excellent solutions that meet the needs of many users and are transferable across many platforms and devices such as mobile phone, tablets and wearable computers.

MULTIMEDIA AND GAME DEVELOPMENT
go.uow.edu.au/bcompsci-mgdev
Games technology experts have both traditional computer science skills as well as creative skills, including visualisation, interaction and communication techniques.

Games technology experts work in the entertainment industry developing interactive computer games as well as in the broader fields of multimedia and digital media. Areas of employment include games design, games programming, software design and development, multimedia applications development and web systems development.

SOFTWARE ENGINEERING
go.uow.edu.au/bcompsci-softeng
Software engineering incorporates all the aspects of software production from the business strategy to the design and coding, testing, quality and management of large-scale, complex software systems. Software engineering is about multi-person development of multi-version software that is large and complex, such as the Windows, Linux and Android operating systems, office software, and flight control systems.

CAREERS
Computer science graduates are in high demand with exceptional career choices in a wide range of sectors. Positions are varied and include: software engineer, project engineer, software consultant, systems architect, senior designer, multimedia designer, systems administrator, games developer, development and test manager.

Computer scientists and software engineers are everywhere, making an impact in business big and small, finance, telecommunications, games and simulations, government, data management, security and surveillance, broadcast, the NBN, water and environmental management and much more.
A Bachelor of Information Technology degree will provide you with the skills to make a company more productive and efficient through the use of IT and to establish an online presence with e-commerce capabilities. Information technology underpins almost every sector of modern business and leisure.

WHAT YOU WILL STUDY
The Bachelor of Information Technology provides foundation knowledge of organisational areas in IT, including:

- Database management
- Programming
- Information systems analysis and design
- Communications and networks

In your final year you will develop your own application as part of an annual student team project, developing solutions to real-world problems provided by our industry partners.

PROFESSIONAL EXPERIENCE
You will undertake an eight-week work placement during the degree.

“Growing up I was continuously fiddling with computers (and only sometimes putting them back together). Really, I was just learning how it all works.

During my degree I was lucky enough to be awarded a Westpac Corporate Scholarship, which included a 10-week paid internship. This led to a full-time job as an IT Asset Analyst before I even graduated. Now I make changes to our process, policy and systems that affect over 35,000 people.

UDW helped me develop the programming and analytical skills critical to my day-to-day work. But I gained so much more. At UDW I learned how to approach a problem and I gained skills that can be carried into any field.”

RORY CHATTERTON
Bachelor of Information Technology (Dean’s Scholar)/eBusiness
Bachelor of Creative Arts (Theatre) (2015)
**BACHELOR OF BUSINESS INFORMATION SYSTEMS**

Business information specialists can analyse business problems and find possible IT solutions for them. This could mean running an efficiency audit on a company’s information systems, analysing the effectiveness of a file management system or developing a sales and invoicing software.

Business information analysts are involved in the analysis, design, implementation, maintenance and enhancement of computer based information systems critical to the successful operation of modern organisations. They require a sound understanding of the business requirements to develop information systems and solutions to meet identified business needs and must deal with users at all levels within an organisation.

**WHAT YOU WILL STUDY**

Your studies will be anchored in systems analysis, design, and implementation of computer programs. In addition to strong interpersonal skills, you will develop a solid understanding of the organisational, social, and data management aspects of business, which will allow you to work effectively in any organisation. You will learn to assess the needs of end-users and effectively communicate these to designers and programmers.

In your final year you will develop your own application as part of an annual student team project, developing solutions to real-world problems provided by our industry partners.

**PROFESSIONAL EXPERIENCE**

You will undertake an eight-week work placement during the degree.

**CAREERS**

This course is specifically designed to prepare you for a career as a systems analyst or as an information systems specialist in a business, government, or a non-profit environment. Careers are varied and include building and managing global networks, or managing a systems development project worth millions of dollars.

**WOMEN IN ICT**

Women account for fewer than one in five domestic students enrolled in Information and Communications Technology (ICT) degrees in Australian institutions and make up similarly a low proportion of the ICT workforce.

According to the Australian Government Department of Employment, occupation projections—five years to November 2019—for ICT professionals will increase by 16.1%*, and with employers committed to increasing the number of females in the technology industry, now is a great time for women to consider a career in ICT.

Second year UOW Bachelor of Information Technology student Monique Felix said diversity in the technology sector was important and women brought different perspectives that shaped and influenced the disciplines.

“Women can bring a different perspective that shapes and influence the disciplines – they have a greater understanding of what woman want and what appeals to other women and that can be very important.”

“My biggest role model is Anita Borg, an American computer scientist. She strove to have women equally represented and in 1987 she founded the Institute of Women and Technology which is still running today. I have known for a few years what I have wanted to do after high school. I’ve always been interested in IT and did it as an elective throughout my high school education and it became one of my favourite subjects.

Having diversity in the Tech world is so important - women can bring a different perspective that shapes and influence the disciplines – they have a greater understanding of what woman want and what appeals to other women and that can be very important.”

MONIQUE FELIX
Bachelor of Information Technology (Network Design and Management, e-Business)

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**“My advice to girls wanting to study information technology is to not be afraid and not to let others deter you.”** she said. “The industry isn’t the way it used to be and more women are getting involved. It’s an ever changing industry and each day there is always something new and interesting.”

UOW is committed to supporting and encouraging females to study ICT through special initiatives such as the Women in Engineering and Information Sciences Scholarship, and by providing a support network for women interested in engineering and IT.

We work closely with ICT Illawarra, iAccelerate and the Wollongong IT Society to help make UOW a welcoming and inspiring place for women in information technology.
OTHER DEGREES 
YOU MAY LIKE

This booklet is just a sample of the degrees on offer at UOW. Here are a few more from different study areas that may interest you.

**Bachelor of Mathematics**

The Bachelor of Mathematics degree teaches highly transferable skills in problem solving, data analysis, probability and variability, mathematical modelling, logistics and logic. The degree is flexible, so you can take up to one third of your subjects from other disciplines to expand your career options.

[go.uow.edu.au/bmath](go.uow.edu.au/bmath)

**Bachelor of Engineering**

Engineers design and create solutions to improve everyday life, from the large scale to the nano-level. You will study a common first year to learn about the different engineering fields before majoring in Civil, Computer, Electrical, Environmental or Materials Engineering. UOW’s engineering programs are accredited by Engineers Australia and relevant world engineering bodies through the Washington Accord.

[go.uow.edu.au/bengineer](go.uow.edu.au/bengineer)

**Bachelor of Business**

The Bachelor of Business is a flexible degree offering a broad education across all key aspects of the business environment. In addition to studying the essential core disciplines of accounting, economics, finance, management and marketing, you can tailor your studies according to your interests by choosing electives from a particular Business discipline, or you can combine Business electives with subjects from other disciplines.

[go.uow.edu.au/bbus](go.uow.edu.au/bbus)

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**SCHOLARSHIPS**

The program of scholarships and prizes has been built by working with a range of commercial and community partners. Together we help our most academically gifted students achieve their potential.

Our scholarships include Work Integrated Learning Scholarships (WIL) many of which are treated as recruitment exercises. If you excel in both the practical and the academic components of your scholarship, you may be granted priority in the organisation’s graduate recruitment program.

<table>
<thead>
<tr>
<th>SCHOLARSHIP</th>
<th>VALUE</th>
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<tr>
<td>Vice-Chancellor’s Academic Excellence Scholarship</td>
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<tr>
<td>Engineering and Information Sciences Academic Achievement Scholarship</td>
<td>$3,000 for first year</td>
<td>1</td>
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<tr>
<td>Engineering and Information Sciences Academic Excellence Scholarship</td>
<td>$3,000 p.a. for 2 years</td>
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<td>Tibra Capital Corporate Scholarship</td>
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<td>Tibra Capital Work Integrated Learning Scholarships</td>
<td>$15,000 for 2nd or 3rd year students</td>
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<td>$4,000 p.a. for duration of degree</td>
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<td>$50,000 for 3rd year student</td>
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<tr>
<td>Mindtree Promising Minds Scholarship</td>
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<tr>
<td>Westpac Bicentennial Foundation Young Technologists Scholarship</td>
<td>$5,000 p.a. up to 5 years</td>
<td>varies</td>
</tr>
<tr>
<td>Women in Engineering and Information Sciences Scholarship</td>
<td>$3,000 for 1st year</td>
<td>1</td>
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**DEAN’S SCHOLARS**

Dean’s Scholar degrees are designed to provide an enriched education experience, and to encourage high achievers to continue on to studies in Honours and research.

As a Dean’s Scholar you receive the following special privileges:
- $500.00 per annum study grant (maximum $1500)
- Extended library access
- Participation in research earlier than normal through Scholar research projects
- Opportunity to apply for competitive summer research scholarships
SEE US FOR YOURSELF
This book is just a part of who we are and what we do. Come and meet us face to face, and we’ll show you why UOW is the place for you.

2015 UOW OPEN DAY Saturday 15 August
FREE CAMPUS TOURS Every Friday, 10am and 3pm

GET IN BRIGHT AND EARLY
Would you like to secure your place at UOW before you sit your HSC exams? Our Early Admission program can help you get there. uow.edu.au/future/early-admission

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