

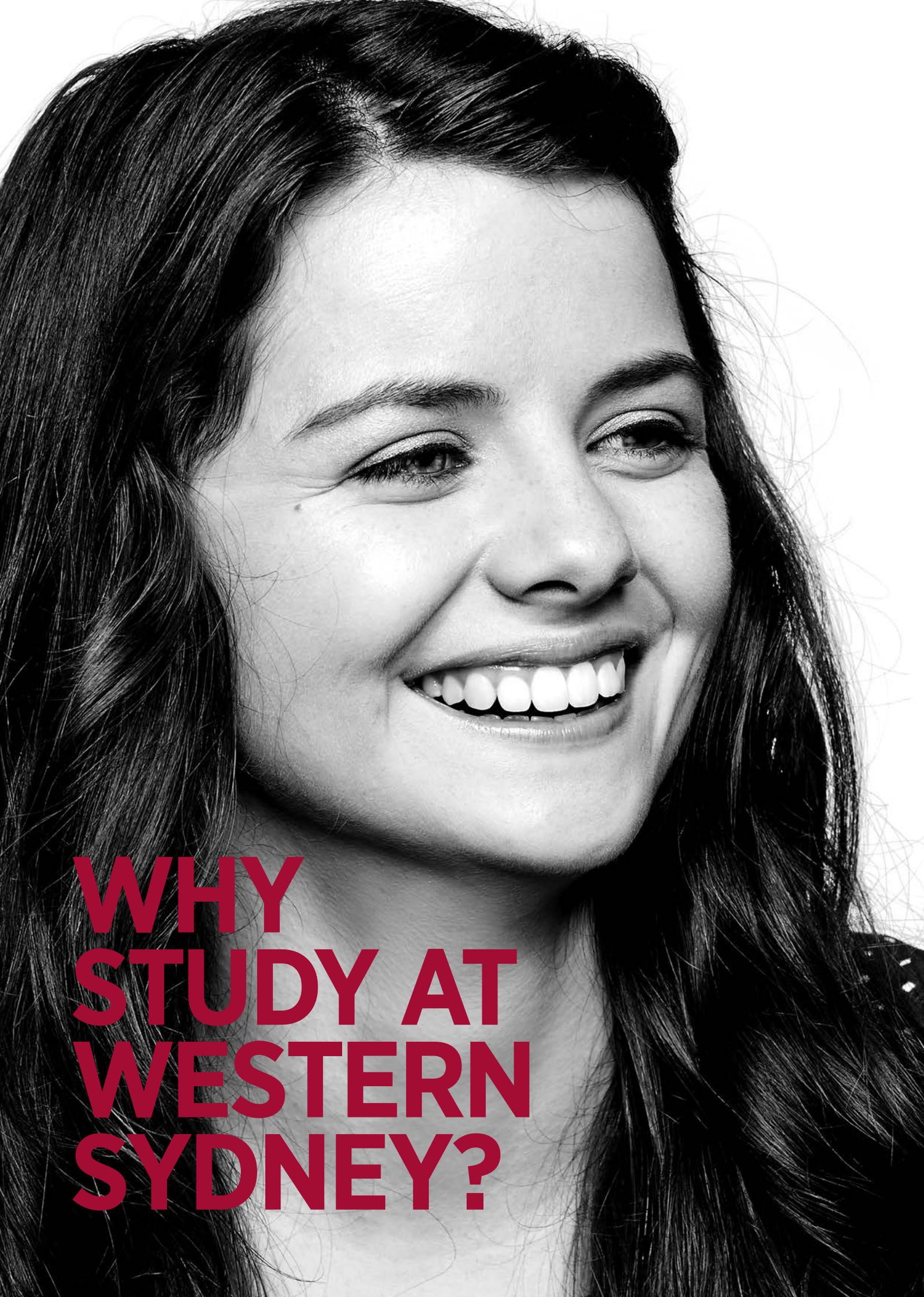
**WESTERN SYDNEY**  
UNIVERSITY



SCHOOL OF COMPUTING,  
ENGINEERING AND  
MATHEMATICS



**International Undergraduate  
Course Guide**



**WHY  
STUDY AT  
WESTERN  
SYDNEY?**

## → RE-ENGINEERING ENGINEERING

Be innovative. Think creatively in our brand new, state of the art, green facilities. Our Engineering degree will give you real world experiences.

## → PREPARE FOR A DYNAMIC, EXCITING AND CHALLENGING CAREER

With a degree in Computing, Engineering, Data Science or in the areas of Construction Management and Industrial Design, you will be able to pursue a career in the fields of design, construction and management, hardware and software development, computer forensics and systems security, e-business and internet technologies, structural design, systems architecture, project management, consumer and industrial product design, environmental engineering, power engineering, telecommunications, computer-aid engineering, machinery design and development, robotics and mechatronics, and artificial intelligence. You can also pursue a role as a building surveyor, site manager or property developer. Our robotics assembly systems are unique in Australian universities and one of the most advanced of its kind in the world.

## → INTRODUCING ARCHITECTURE

Capitalise on the change and growth taking place in the Greater Western Sydney region by undertaking our new and innovative Bachelor of Architectural Design is Australia's newest architecture degree program.

This degree directly relates architectural design problems to urban transformation of contemporary cities, preparing architects for global employment by giving them the technological and intellectual skills to create sustainable, resilient, and well designed environments. The Bachelor of Architectural Design focuses on a studio based education that fosters creative thinking, hands-on making, collaboration, and interdisciplinary integration.

## → INDUSTRY-LEADING FACILITIES

MakerSpace is a facility open to students, teachers, industry and members of the public, where ideas can be brought to life.

→ **3D Printing Hub:** Offering 3D Printing Services in both Photopolymer and Fused Deposition Machines, we are able to offer consultation and advice on a printing project. We offer consultation with academic staff on request and have expert technical assistance on hand during the MakerSpace opening times.

→ **Fab Lab:** Incorporating the Solar Car and other fabrication projects, the Fab Lab has access to woodworking and metal workshops, laser cutting, CNC routers and other fabrication equipment.

→ **Robotics:** If you have ever wanted to build or program a robot, then we have the perfect classes and programs for you. Currently, we offer one-off workshops using the LEGO® EV3 Mindstorm Robots. We also house a robotic assembly and you can meet Baxter, our human-interactive production robot.

→ **Interactive Programming and Virtual Reality:** You can experience virtual reality with Liquid Galaxy, Google Cardboard and Oculus Rift.

## → CUTTING EDGE RESEARCH

The School of Computing, Engineering and Mathematics (SCEM) integrates the core disciplines that drive research and development in technology, technological creativity and innovative entrepreneurship. This is reflected in the School's research profile, which incorporates a range of leading research concentrations and strengths in these disciplines. The expertise and scholarship in SCEM markedly position the School in terms of inter- and cross-discipline interaction.



**TOP 2%**  
OF UNIVERSITIES  
WORLDWIDE\*



**#1 UNI**  
IN SYDNEY FOR EMPLOYER  
SATISFACTION\*\*



**5 STARS**  
FOR INNOVATION AND  
TEACHING^

\*Times Higher Education Rankings 2018

\*\*Employer Satisfaction Survey 2018 (85.6% satisfaction rating)

^QS Top Universities: QS Stars University Ratings 2018

# Bachelor of Engineering Advanced (Honours)

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
Bachelor of Engineering Advanced (Honours)	063560B	3690	March/July	Parramatta	4F
	063560B	3690	March/July	Penrith	4F

**Key:** B = Bachelor of; F = Full-time.

The Bachelor of Engineering Advanced (Honours) is designed for high-achieving students to undertake advanced engineering topics and gain substantial research experience.

During the course, you will have the opportunity to work closely with an academic mentor to develop high-level research skills. The Bachelor of Engineering Advanced (Honours) follows the structure of the Bachelor of Engineering (Honours), with extension activities and alternative assessments designed to stimulate and realise your full academic potential.

## INDUSTRIAL EXPERIENCE

You will complete 12 weeks of industrial experience, which is required at the end of the third year of studies. The Engineering Summer Placement program, available through our Cooperative Programs, offers high-achieving students the opportunity for paid placements.

## PROFESSIONAL RECOGNITION

This course has Full Accreditation at the level of Professional Engineer at Penrith campus and Provisional Accreditation at the level of Professional Engineer at Parramatta South and Sydney City Campuses. Graduates of this program are eligible to apply for full membership of Engineers Australia. They are eligible to apply for Chartered Professional Engineering registration upon successful completion of required engineering practice period specified by Engineers Australia.

## KEY PROGRAMS/MAJOR STUDIES

The key programs of the Bachelor of Engineering Advanced (Honours) are Civil, Construction, Electrical, Mechanical and Robotics and Mechatronics. For more information on each of these key programs and the units you may study, please see the descriptions starting on page 14.

## CORE UNITS

To graduate with a Bachelor of Engineering Advanced (Honours), you will be required to complete a total of 320 credit points at minimum (including thesis), as well as practical industrial experience. Units include: Mathematics for Engineers; Engineering Physics; Fundamentals of Mechanics; Engineering Computing; Electrical Fundamentals; Introduction to Engineering Practice; and Engineering Materials. For detailed information about the course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

## CAREER OPPORTUNITIES

As an Engineering graduate, you can look forward to career opportunities in:

- water, roads and buildings
- robotics and mechatronics
- manufacturing and utilities
- machinery design and development
- commercial, medical and industrial product design
- product management, project management and consultancy
- industrial, commercial or residential development.



# Bachelor of Engineering (Honours)

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Engineering (Honours) (Civil, Construction, Electrical, Mechanical, Robotics and Mechatronics)	089429B	3740	March/July	Parramatta	4F
	089429B	3740	March/July	Penrith	4F
	089429B	3740	March/June/ October	Sydney City*	4F

**Key:** B = Bachelor of; F = Full-time.

\* Key Programs offered at Sydney City campus are: Civil, Mechanical and Electrical.

The future presents significant challenges for managing the environment, infrastructure and technological developments.

Effective solutions to these challenges will require innovative engineering, applied science and design strategies. At Western Sydney University, we prepare our students to take on those challenges and succeed.

The Bachelor of Engineering (Honours) degree covers all major engineering domains, and you can experience many facets of engineering before deciding your area of specialisation at the end of your first year.

## CORE UNITS AND ELECTIVES

To graduate with a Bachelor of Engineering (Honours), you will be required to complete 32 units for a minimum of 320 credit points, as well as practical industrial experience. For more information on the Engineering key programs, please see the descriptions starting on page 14.

The core common first year units include Mathematics for Engineers, Engineering Physics, Fundamentals of Mechanics, Engineering Computing, Electrical Fundamentals, Introduction to Engineering Practice, and Engineering Materials. You will have the opportunity to complete multiple specialist electives, depending on the key program you select. For detailed information about the course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

## INDUSTRIAL EXPERIENCE

You will complete 12 weeks of industrial experience, which is required after the end of the third year. The Engineering Summer Placement program, available through our Cooperative Programs, offers our high-achieving students the opportunity for paid placements.

## PROFESSIONAL RECOGNITION

This course has Full Accreditation at the level of Professional Engineer at Penrith campus and Provisional Accreditation at the level of Professional Engineer at Parramatta South and Sydney City Campuses. Graduates of this program are eligible to apply for full membership of Engineers Australia. They are eligible to apply for Chartered Professional Engineering registration upon successful completion of required engineering practice period specified by Engineers Australia.

# Bachelor of Engineering (Honours) Key Programs

After a common first year in the Bachelor of Engineering (Honours), you can specialise in one of the following key programs.

## CIVIL

The Civil program covers the fields of structural design, construction management and water engineering, together with environmental and geotechnical engineering.

Core and elective units for this key program may include: Soil Engineering; Fluid Mechanics; Infrastructure Engineering; Environmental Engineering; and Foundation Engineering.

Career opportunities include: designing, constructing and managing roads, transportation, airports, water supply, sewerage systems and large buildings.

## CONSTRUCTION

Construction provides the skills necessary for performing at a professional level in construction management and structural design. It includes core units in all branches of construction and structural engineering. Core and elective units for this key program may include: Construction Technologies; Project Management; Construction Planning; Soil Engineering; Quantity Surveying and Structural Engineering.

Career opportunities include: working in the fields of construction, structural design and project management. You may work in the private or public sector on projects covering roads, bridges, airports, and residential and commercial buildings.

## ELECTRICAL

The Electrical program covers electronic components, computers, power generation and distribution systems, and communications and control. Core and elective units for this key program may include: Engineering Electromagnetics; Energy Systems; Communication Systems; Digital Systems; Electronics; Power and Machines; Signals and Systems.

Career opportunities include: working in communications, electromagnetics, power and energy systems, public utilities, telecommunications, manufacturing, electrical systems and renewable energy systems.

## MECHANICAL

This program is concerned with the design of mechanical systems for a wide range of applications, including manufacturing, transportation and energy conversion. The course delivers fundamental engineering principles, as well as an intensive hands-on laboratory program to provide the skills necessary for the design of machines, ensuring their functionality, safety and reliability. Core and elective units for this key program may include: Kinematics and Kinetics of Machines; Fluid Mechanics; Automated Manufacturing; Dynamics of Mechanical Design; and Computer Aided Engineering.

Career opportunities include: working in all sectors of industry that involve the development and use of machineries, such as the mining industry, biomedical applications, building services, energy generation and conversion, manufacturing, transportation and aerospace. You may focus on design and development, process control and management, or service and maintenance.

## ROBOTICS AND MECHATRONICS

This program is concerned with automation and the design and construction of intelligent mechanical systems. The course includes an intensive hands-on laboratory program and provides the skills necessary for the design of smart machines of all types, such as auto cruise control, pilotless spacecraft, automated factories and medical telerobotics. You will have access to our robotic assembly system, one of the most advanced of its type and unique as a mechatronic engineering educational facility. Core and elective units for this key program may include: Circuit Theory; Power and Machines; Mobile Robotics; Mechatronic Design; Instrumentation and Measurement; and Sustainable Design: Materials Technology.

Career opportunities include: designing, developing and controlling automated machinery, designing smart mechanical equipment and systems, and marketing and management in fields such as manufacturing, packaging, materials handling, aerospace and mining. Examples include, designing manufacturing solutions, processes and equipment, or developing robotic devices to solve important health issues in the areas of diagnosis of body malfunction and the improvement of body movements.



## Jay Manley

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ENGINEERING PROJECT MANAGER,  
TESLA MOTORS  
GRADUATED: BACHELOR OF ENGINEERING  
(ROBOTICS AND MECHATRONICS)

In 2012, as an undergraduate student in Engineering (Robotics and Mechatronics), Jay Manley led the University's inaugural solar car team in the prestigious World Solar Car Challenge. Starting with just \$500 and the support of two fellow students, Jay grew the team to more than 20 students with a budget of \$300,000 by the time race day came around. That same determination to succeed has taken Jay from Western Sydney to Silicon Valley for a dream job as an Engineering Project Manager for Tesla Motors. Under the leadership of its CEO, Elon Musk, the innovative electric car manufacturer has earned a reputation for its disruptive technologies in the renewable energy industry in the same way Steve Jobs did with the computer industry.

Before joining Tesla, Jay worked as a Project Support Officer in the School of Computing Engineering and Mathematics at Western Sydney University, where he said that leading the University's solar car team provided him with an international network of contacts.

"Working on the solar car team gave me the skills and confidence to chase a career in the world's most competitive market for engineers. I'm grateful for the support and encouragement that the University provided. In putting their faith in me as a student to initiate a challenging project that came with enormous risk, but also the potential to be a great learning opportunity, they made my resume more attractive for the role at Tesla Motors," Jay said.

Watch Jay Manley's story at [westernsydney.edu.au/unlimited](http://westernsydney.edu.au/unlimited)





## SOLAR CAR PROJECT

Western Sydney University's Solar Car Project is a student led team that strives to push the boundaries of innovation and precision engineering with a social and sustainable responsibility to the community.

Integrated within the university, we put theory into practice, to expand the horizons of electric vehicles and the students involved in the project. Starting as a final year student project in 2011, the project grew to a team of 24 students and alumni from all over the University. They designed and constructed the 2013 entry named Solace, which competed against the best in the Bridgestone World Solar Challenge. By 2015, the team had grown again and benefiting from their knowledge, innovated on their design to construct their second car – Unlimited. They again competed against world-class teams from Universities such as Cambridge and Stanford in the 2015 Bridgestone World Solar Challenge. A bi-ennial race, the World Solar Challenge is all about energy

management and the adventure of racing a car that you design and build, across the driest and most remote part of the country.

In 2017, Western Sydney crossed the finish line sixth in the world, and first of the Australian challenger teams.

Industrial and engineering design fused with the STEM disciplines are the key to the creativity, innovation and start-up entrepreneurship required to bring a project such as this from idea to implementation. Designing, coordinating and building the most efficient road vehicles on the planet allows our alumni to put themselves in the driver's seat for their future, immersing them in an extremely challenging position of managing design, while navigating through their studies. Our alumni are already in high demand, as involvement in a project of this calibre during university places our graduates a cut above the rest.

[westernsydney.edu.au/solarcar](http://westernsydney.edu.au/solarcar)

### WHAT IS THE MOST IMPORTANT THING YOU HAVE LEARNED DURING THIS EXPERIENCE?

"I am still as passionate and driven as I was on day one. My aim is to accelerate the world's transition to electric mobility and sustainable energy, and I am constantly working towards it. On a personal level, this project has given me the direction and networks I need to realize my life goals, all the while engaging me in a university experience that is no doubt competitive with the best in the world, just as we were with our car in 2013 and 2015.

A project such as this really requires self-driven, passionate individuals, however, if you are not one of these people, this project will sculpt one out of you. Our lab and my team is my home away from home, cementing in my memories what an amazing experience the trials and tribulations of getting my degree has been."

**Aj Verma**  
Project Manager, Solar Car Project

# Bachelor of Engineering Science

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Engineering Science	074195E	3691	March/July	Parramatta	3F
	074195E	3691	March/July	Penrith	3F
	074195E	3691	March/June/ October	Sydney City*	3F

**Key:** B = Bachelor of; F = Full-time.

\* Majors offered at the Sydney City campus are: Civil, Mechanical, Electrical. This course may be fast-tracked to two years at this campus.

The Bachelor of Engineering Science is a three-year professional course that will train you to become an Engineering Technologist.

The specialist knowledge of engineering technologists is a key element in the practice of engineering. The engineering technologist's focused learning and practical skills are highly utilised in industry and make a significant contribution to Australian engineering success and prosperity.

The Western Sydney region has experienced strong growth and the engineering industry requires engineering technologists in a range of specialisations to support industry.

The Bachelor of Engineering Science degree covers all major engineering domains, and you can experience many facets of engineering before deciding your area of specialisation at the end of your first year.

The Bachelor of Engineering Science is offered as an entry program to the Bachelor of Engineering (Honours) programs. It is also offered as a three-year exit program for the Bachelor of Engineering (Honours).

## PRACTICAL EXPERIENCE

A session of practical experience is required as part of the degree.

## CORE UNITS AND ELECTIVES

To graduate with a Bachelor of Engineering Science, you will be required to complete 24 units for a minimum of 240 credit points, as well as practical industrial experience. The key programs in the Bachelor of Engineering Science are Civil, Construction, Electrical, Mechanical, and Robotics and Mechatronics.

For more information on these key programs please see the descriptions starting on page 14.

The core common first year units may include Mathematics for Engineers, Engineering Physics, Fundamentals of Mechanics, Engineering Computing, Electrical Fundamentals, Introduction to Engineering Practice, and Engineering Materials. You will have the opportunity to complete up to two electives, depending on the key program you select.

For detailed information about the course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

## FURTHER STUDIES

The Bachelor of Engineering Science course is similar to the first three years of the Bachelor of Engineering (Honours) course. Our students may apply to transfer from Bachelor of Engineering Science to Bachelor of Engineering (Honours) during their course of study.

## CAREER OPPORTUNITIES

Engineering technologists make an important contribution to the engineering profession. Our Bachelor of Engineering Science graduates can:

- use their strong knowledge base to carry out specific and complex engineering tasks
- analyse and modify new and existing engineering technologies and apply them in the testing and implementation of engineering projects
- focus on interactions within engineering systems
- identify and solve complex, specialised engineering problems by applying innovative practices and procedures.



# Bachelor of Computer Science (Advanced)

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Computer Science (Advanced)	061245G	3634	March	Parramatta	3F
	061245G	3634	March	Penrith	3F

**Key:** B = Bachelor of; F = Full-time.

Any computer science degree can teach you general programming and technical systems skills, but few give you a competitive edge for your career. Our Computer Science (Advanced) program is an elite degree aimed at transforming today's brightest computing minds into tomorrow's computing leaders. Throughout the degree, you will be mentored and guided by leading computing academics and you will develop superior knowledge and confidence so you can maximise your career opportunities. The course is designed especially for people with a strong interest and aptitude for computer science who are seeking a career involving research and development at the cutting edge of technology. It is a challenging program that includes advanced coursework, extension activities and research training. A mentoring program links you with experienced academic staff and research groups within the University, allowing you to take part in the University's research activities.

## PROFESSIONAL RECOGNITION

The Bachelor of Computer Science (Advanced) is currently accredited with the Australian Computer Society at Professional Level. This will enable you, following graduation, to join the society at full Professional Level. As a member of the Australian Computer Society, you are also eligible to join the Association of Computing Machinery (ACM), which is one of the world's oldest and most prestigious professional bodies for the computing and information technology industry.

## CORE UNITS AND ELECTIVES

Major studies cover networked systems, systems programming and cyber security. You will participate in industry and research-based extension activities. These activities have been designed with the goal of exposing students early in their degree and integrating them into a culture of academic enquiry, problem solving, knowledge generation and scholarship, and an awareness of the challenges and current issues confronting the industry. You can also choose electives from areas such as artificial intelligence, computer graphics, computer organisation and architecture, database design, distributed systems, information security, operating systems, and network management and security. For detailed information about the course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

## CAREER OPPORTUNITIES

Our Bachelor of Computer Science (Advanced) degree is highly practical and developed in close consultation with the industry. Depending on the units completed, you may be able to program real-time, fault-tolerant, mission-critical software systems and simulated environments, including gaming and entertainment software. You will graduate career-ready and look forward to opportunities in:

- computer security
- systems programming
- systems administration
- network support and management
- network and systems security support
- real-time programming
- systems engineering
- distributed software development
- communications and distributed systems support
- research and development in computer science.

# Bachelor of Computer Science

Western Sydney University offers specialist Computer Science degrees to equip you with the skills you need to be career-ready. This is a three-year degree with distinct majors which allow you to specialise in different applications of computer science and computer systems.

## PROFESSIONAL RECOGNITION

The Bachelor of Computer Science is currently accredited with the Australian Computer Society at Professional Level.

This will enable you, following graduation, to join the society at full Professional Level. As a member of the Australian Computer Society, you are also eligible to join the Association of Computing Machinery (ACM), which is one of the world's oldest and most prestigious professional bodies for the computing and information technology industry.

## CORE UNITS AND ELECTIVES

To graduate with a Bachelor of Computer Science, you will be required to complete 24 units. Within this degree, you can choose one of the following majors:

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Computer Science (Networked Systems, Systems Programming, Cyber Security, Artificial Intelligence)	041105G	3506	March/July	Parramatta	3F
B Computer Science (Networked Systems, Systems Programming, Cyber Security, Artificial Intelligence)	041105G	3506	March/July	Penrith	3F

**Key:** B = Bachelor of; F = Full-time.

## NETWORKED SYSTEMS

Recent advances in computer and telecommunications networked systems have increased the importance of network technologies in the discipline of computer science. This major gives you a thorough technical understanding of modern networked computer systems, how they work and the principles that govern them.

Based on this solid foundation, you have the opportunity to learn the practical skills required to design, develop and integrate the networked computer systems needed by today's large organisations.

This major covers a wide range of topics, including computer communication network concepts and protocols, multimedia systems, internet standards and technologies, network security, wireless and mobile computing, and distributed systems. Core and elective units for this major may include: Principles for Professional Communication; Computer Networking; Computer Networks and Internet; Network Security; Networked System Design; and Systems and Network Management.

## SYSTEMS PROGRAMMING

If you want to develop advanced programming skills, this is the major for you. It will give you strong systems programming and systems administration skills, focusing on programming at the level of the underlying operating system.

This major emphasises the development of highly efficient and reliable code that can provide support services for higher-level application programs, as well as the development of programs suitable for systems administration and management. Practical work utilises C/C++ (the industry standard language for systems programming), as well as both the Unix and Windows environments.

Core and elective units for this major may include: Programming Fundamentals; Database Design and Development; Systems Programming; Internet Programming; and Distributed Systems and Programming. For detailed information about the course structure and units, visit

[westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

## ARTIFICIAL INTELLIGENCE

Advanced development of Artificial Intelligence (AI) and Robotics has resulted in increased AI applications in many industries as well as our everyday life. This major aims to introduce students to the foundations of AI as well as its modern practical applications. The major delivers solid knowledge, skills, techniques and practical applications in robotic programming, problem solving, expert systems, logic reasoning, knowledge representation, data visualization, data mining and machine learning. The objective of this major is to equip the students with AI capabilities that are in high demand in many aspects of modern industries and modern living.

## CYBER SECURITY

The Cyber Security major aims to develop graduates with sound skills in the discipline of information systems security. Today, the widespread use of networked systems means protecting these systems from various attacks is more important than ever. Cyber Security is an essential aspect of today's information systems. This major covers fundamental information security knowledge and security protocols from basic cryptography algorithms to their applications in computer systems and networked systems. Students will learn fundamental security concepts, practical implementation of the security application programs as well as ethical hacking techniques to protect cyber security.

## CAREER OPPORTUNITIES

Career possibilities include work in:

- computer security
- systems programming
- systems administration
- network support and management
- network and systems security support
- real-time programming
- systems engineering
- distributed software development
- communications and distributed systems support
- research and development in computer science.

# Bachelor of Information Systems (Advanced)

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Information Systems (Advanced)	079493K	3688	March/July	Parramatta	3F

**Key:** B = Bachelor of; F = Full-time.

The Bachelor of Information Systems (Advanced) is a three-year degree accredited by the Australian Computer Society.

The Bachelor of Information Systems (Advanced) focuses on computing and information technology in the context of business. In addition to the general content in the Bachelor of Information Systems (Advanced), this course utilises advanced activities, extension projects, research training and hands-on work on real business projects.

During this program, you will have a mentor who will support and guide you throughout the degree. This course will also link you with experienced academic staff and industry partners who will provide you with continuous training and supervision. In addition, you will be invited to join research groups, which will allow you to take part in large research projects.

## PRACTICAL EXPERIENCE

You will be required to undertake a real-life project in your final semester of study, typically for a local business or organisation.

## PROFESSIONAL RECOGNITION

The Bachelor of Information Systems (Advanced) is accredited with the Australian Computer Society at Professional Level. This will enable you, following graduation, to join the society at full Professional Level. As a member of the Australian Computer Society, you are also eligible to join the Association of Computing Machinery (ACM), which is one of the world's oldest and most prestigious professional bodies for the computing and information technology industry.

To graduate with a Bachelor of Information Systems (Advanced) you must maintain a Grade Point Average (GPA) above five. Those who do not will be transferred to the Bachelor of Information Systems.

Students who apply for the Bachelor of Information Systems (Advanced) but do not meet initial entry requirements may be offered a place in the Bachelor of Information Systems. Students who complete the first year of the Bachelor of Information Systems with a GPA above five may be invited to join the Advanced program.

## CORE UNITS AND ELECTIVES

The majors in the Bachelor of Information Systems (Advanced) are: Mathematics; Mobile Computing; Networking; Health Informatics; Big Data; and Entertainment Computing.

There is a range of sub-majors or minor studies you may undertake in this degree. They are Social Media Analytics; Mobile Applications Development and Mobile Computing; Systems Administration; Systems Security; Networking; Health Information Applications; Health Information Management; Entertainment Computing; Web Applications Development; and Statistics and Mathematics.

Furthermore, you may also extend your studies by choosing, as elective units, sub-majors or a major from other disciplines such as health, science, business, marketing, management, accounting or design, as well as other specialised areas of computing and information technology (subject to timetabling constraints).

For detailed information about the course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

## CAREER OPPORTUNITIES

As a graduate of the Bachelor of Information Systems (Advanced) degree, career opportunities may include:

- business analyst
- information systems manager
- project manager
- mobile applications developer
- games developer
- network developer
- software quality analyst
- systems developer
- database administrator
- systems architect
- analyst programmer
- systems integrator
- web systems designer/developer.

With experience, you may become the Chief Information Officer (CIO) of an organisation.

# Bachelor of Information Systems

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Information Systems	079492M	3687	March/July	Parramatta	3F
	079492M	3687	March/June/ October	Sydney City*	3F

**Key:** B = Bachelor of; F = Full-time.

**Note:** \* This course may be fast-tracked to two years at this campus. The majors offered at Sydney City campus are Big Data, Mobile Computing and Networking.

Information Systems are becoming integral to modern culture and are a primary engine behind much of the world's economic and social change. In essence, they represent the knowledge and skills that are required to be a part of the competitive business environment.

Today, to implement technology, practising professionals need to not only have knowledge and skills in information and communications technology, but they also need to understand the context in which computer technology can best be selected, applied and implemented.

Within this program you will learn how to plan, develop and integrate applications and information systems into a global business environment. Furthermore, within this course you will carry out a real-life project where you will need to demonstrate you can design and develop an information system solution that can solve a real community/business-based problem.

## PROFESSIONAL RECOGNITION

The Bachelor of Information Systems is accredited with the Australian Computer Society at Professional Level. This will enable you, following graduation, to join the society at full Professional Level. As a member of the Australian Computer Society, you are also eligible to join the Association of Computing Machinery (ACM), which is one of the world's oldest and most prestigious professional bodies for the computing and information technology industry.

## CORE UNITS AND ELECTIVES

To graduate with a Bachelor of Information Systems, you are required to complete 24 units. The core units you may study within this degree include Programming Fundamentals, Principles of Professional Communication, Systems Analysis and Design, Information Systems in Context, Computer Networking, Database Design and Development, Mobile Applications Development, Human Computer Interaction, Computer Security, Information Systems Deployment and Management, Technologies For Mobile Applications, Emerging Trends in Information Systems, Social Computing and Professional Development, Professional Experience and Statistics for Business.

You will have eight electives (out of 24 units) and you may broaden your studies based on your interests and ambitions by choosing units, sub-majors or a major from Information and Communications, Computing or other disciplines. There is a range of sub-majors or minor studies you may undertake in this degree. They are Big Data, Entertainment Computing, Health Informatics, Mathematics, Mobile Computing, Networking, Social Media Analytics, Statistics, Systems Administration, Systems Security, Web Application Development (for Computing Students).

Furthermore, you may also extend your studies by choosing elective units, sub-majors or a major from other disciplines such as health, science, business, marketing, management, accounting or design, as well as other specialised areas of computing and information technology (subject to timetabling constraints).

For detailed information about the course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

## CAREER OPPORTUNITIES

As an Information Systems graduate, you can look forward to roles such as:

- business analyst
- information systems manager
- project manager
- mobile applications developer
- games developer
- network developer
- software quality analyst
- systems developer
- database administrator
- systems architect
- analyst programmer
- systems integrator
- web systems designer/developer.

With experience, you may become the Chief Information Officer (CIO) of an organisation.

# Bachelor of Information and Communications Technology (Advanced)

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Information and Communications Technology (Advanced)	077827J	3684	March/July	Campbelltown	3F
	077827J	3684	March/July	Parramatta	3F
	077827J	3684	March/July	Penrith	3F

**Key:** B = Bachelor of; F = Full-time.

The Bachelor of Information and Communications Technology (Advanced) is a three-year course accredited by the Australian Computer Society. It provides a solid foundation in Networks; Databases; Systems Analysis and Design; Programming; Web Technologies; Project Management; Professional Communications and Operating Systems; and associated Computer Security.

The degree also covers the necessary mathematical and statistical skills as needed by an ICT practitioner. A mentoring program will link you with experienced academic staff and research groups within the University. You must maintain a grade-point average (GPA) of above five to remain in this program. Students falling below this threshold will be advised to transfer to the Bachelor of Information and Communications Technology.

Students who do not meet the entry standards of the Advanced course but who are offered a place in the Bachelor of Information and Communications Technology may be invited to transfer to the Advanced program after first year if they achieve a GPA of five or above, subject to resource limitation.

By completing this degree you will understand how to:

- investigate – the ability to draw on a solid technological and software core of Information and Communications Technology (ICT) knowledge and practice in analysing and developing applications
- integrate – the ability to amalgamate the knowledge and skills in developing new applications and new application areas
- innovate – the required skills and knowledge base to keep up to date with the rapid development in technology and practice across ICT, as an extension of current understandings and the ability to find innovative ICT solutions and move the ICT field forward.

## PROFESSIONAL RECOGNITION

The Bachelor of Information and Communications Technology (Advanced) is accredited by the Australian Computer Society (ACS). This program allows you to develop skills in application development, program design, systems analysis and design, networks, web design, and the implementation of technology.

## MAJORS AND SUB-MAJORS

The majors and sub-majors available include Entertainment Computing; Health Informatics; Mathematics; Mobile Computing; Networking; Astro-informatics; IT Support; Social Media Analytics; Statistics and Cyber Security. For detailed information about the course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

## CAREER OPPORTUNITIES

As a graduate of the Bachelor of Information and Communications Technology (Advanced) degree you may find career opportunities as a:

- computer network professional (ANZSCO 2631)
- database and systems administrator and ICT security (ANZSCO 2621)
- ICT business and systems analyst (ANZSCO 2611)
- ICT manager (ANZSCO 1351)
- ICT support (ANZSCO 2632 & 3131)
- software and application programmer (ANZSCO 2613)
- web developer (ANZSCO 2612).

Use a web search engine to find out more information about the ANZSCO career codes above.

Research and development opportunities also exist in many areas of advanced Information and Communications Technology.



# Bachelor of Information and Communications Technology

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Information and Communications Technology	064013K	3639	March/July	Campbelltown	3F
	064013K	3639	March/July	Parramatta	3F
	064013K	3639	March/July	Penrith	3F
	064013K	3639	March/June/October	Sydney City*	3F

**Key:** B = Bachelor of; F = Full-time.

**Note:** \* Majors offered at this campus are: Mobile Computing, Networking. The degree may be fast-tracked to two years at the Sydney City campus.

The Bachelor of Information and Communications Technology (ICT) is a professional three-year course that will provide you with solid skills and a knowledge base in ICT. As well as the ability to apply practical solutions across the ICT arena, it will also allow you to develop skills in systems analysis and design, application development, program design, networks, web development and the implementation of technology.

As a graduate of the Bachelor of ICT, you will be able to:

- investigate – draw on a solid technological and software core of ICT knowledge and practice to analyse and develop current applications
- integrate – amalgamate knowledge and skills to develop new applications and new application areas
- innovate – keep up to date with the rapid development in technology and practice across ICT, and find innovative solutions that move the field forward.

## ADVANCED STANDING

TAFE graduates who have completed their qualifications may be granted exemptions/credits depending on their completed subjects and grades.

## PROFESSIONAL RECOGNITION

The Australian Computer Society (ACS) recognises graduates of this course at the Professional Level. This will enable you, following graduation, to join the society at full Professional Level. As a member of the Australian Computer Society, you are also eligible to join the Association of Computing Machinery (ACM), which is one of the world's oldest and most prestigious professional bodies for the computing and information technology industry.

## CORE UNITS AND ELECTIVES

To graduate with a Bachelor of Information and Communications Technology degree, you will be required to complete 24 units.

The core units you may study in your first year include Computer Networking, Principles of Professional Communication, Database Design and Development, Programming Fundamentals, Systems Analysis and Design, and Statistical Decision-Making.

You will have eight electives that you can choose from any units at Western Sydney University, including non-computing units. The following majors are available to all students enrolling at Campbelltown, Parramatta and Penrith campuses, Cyber Security, Entertainment Computing, Health Informatics, Mathematics, Mobile Computing and Networking. For detailed information about the course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

## CAREER OPPORTUNITIES

As an ICT graduate, you can look forward to career opportunities, such as:

- computer network professional (ANZSCO 2631)
- database and systems administrators and ICT security (ANZSCO 2621)
- ICT business and systems analyst (ANZSCO 2611)
- ICT manager (ANZSCO 1351)
- ICT support (ANZSCO 2632 & 3131)
- software and application programmer (ANZSCO 2613)
- web developer (ANZSCO 2612).

Use a web search engine to find out more information about the ANZSCO career codes above.

# Bachelor of Information and Communications Technology (Health Information Management)

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Information and Communications Technology (Health Information Management)	088187A	3711	March	Campbelltown	3F
	088187A	3711	March	Parramatta	3F
	088187A	3711	March	Penrith	3F

**Key:** B = Bachelor of; F = Full-time.

The increasing use of electronic health records requires the accurate and efficient capture, maintenance, security and reporting of health information. The Bachelor of Information Communications Technology (Health Information Management) course will provide you with the knowledge and skills required to build software systems and undertake roles relating to the classification, coding and management of health information within a healthcare setting. The course also offers direct industry experience via a 20 day work placement.

## CORE UNITS AND ELECTIVES

Qualification for this award requires the successful completion of 240 credit points.

Specific content areas addressed include Health Informatics, Systems Analysis and Design, Medical Terminology, Database Design and Development, Healthcare Data Environments, Clinical Classification and Coding, Programming, Web Development, Computer Networking, Health Service Management, Activity Based Funding and Data Quality and Healthcare Software and Systems.

## PROFESSIONAL RECOGNITION

The Bachelor of Information and Communications Technology (Health Information Management) is accredited with the Australian Computer Society (ACS) at Professional level. Accreditation by the Health Information Management Association of Australia (HIMAA) is pending. Successful certification will see graduates eligible for professional accreditation status with both bodies.

## ADVANCED STANDING

Recognition of prior learning may be considered for applicants with Certificate III or Certificate IV in conjunction with relevant industry experience.

Applicants may be regarded as eligible for admission if they have completed the NSW HSC and attained the required ATAR (Australian Tertiary Admission Rank), or have completed other equivalent qualifications such as a recognised Diploma or Advanced Diploma.

## CAREER OPPORTUNITIES

This course offers you the opportunity to seek employment in health information management and/or clinical coding, recognised as workforce skills shortage areas.

Examples include:

- clinical coders
- systems administrators
- systems analysts and designers
- database administrators
- developers/programmers for healthcare management systems
- healthcare data administrators and managers.

# Bachelor of Entrepreneurship (Games Design and Simulation)

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Entrepreneurship (Games Design and Simulation)	096607G	3746	March/July	Parramatta	3F
	096607G	3746	March/July	Penrith	3F

**Key:** B = Bachelor of; F = Full-time.

The Bachelor of Entrepreneurship (Games Design and Simulation) is an innovative approach to training the next generation of high impact entrepreneurs by providing the knowledge and developing the practical skills that make them successful.

The program will develop the mindset, risk tolerance, creativity, passion, big thinking, team formation and leadership capabilities – the key distinct characteristics of high-impact entrepreneurs.

In an entrepreneurial ecosystem, you will learn the knowledge and techniques for opportunity discovery, impact analysis, customer analysis, strategic team-building and leadership, the psychology and ethics of the start-up, funding modelling and financial analysis, growth and exit strategies.

The Games Design and Simulation specialisation converts the passion for playing games into deep knowledge of the science and art of problem solving through development and application of games and simulations.

This area of study includes gamification, games design, game-based learning, and psychology of gaming, serious games, games entrepreneurship, as well as broader modelling and simulation.

Upon completion our graduates will develop an entrepreneurial mindset and will know how to apply this mindset to address a diverse range of problems through game and simulation-based solutions.

## CORE UNITS AND ELECTIVES

Qualification for this award requires the successful completion of 240 credit points made up as follows:

→ 120 credit points core units

80 credit points of specialist units from one of the following majors:

→ Game Programming

→ Game Design.

40 credit points of specialist units from either electives or one of the following sub-majors:

→ Advanced Game Programming

→ Advanced Game Design.

These majors are restricted to the Bachelor of Entrepreneurship (Games Design and Simulation) and are not available to other Western Sydney University courses.

For more information about the course structure and units, visit

[westernsydney.edu.au/courses](https://westernsydney.edu.au/courses)

## PRACTICAL EXPERIENCE

The program incorporates practical experience in every semester of study, placing students in entrepreneurial environments (incubators, technology parks, innovation centres) and enabling them through all the stages from creative ideation through the sustainable development of the idea into a lean start-up.

## PROFESSIONAL RECOGNITION

Currently seeking accreditation with Australia Computer Society.

## CAREER OPPORTUNITIES

Examples include games and simulation company creator, games and simulation designer and developer, gamification expert, mobile applications developer and project manager.



# Bachelor of Entrepreneurship

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Entrepreneurship	Pending <sup>#</sup>	3747	March/July	Parramatta	3F
	Pending <sup>#</sup>	3747	March/July	Penrith	3F

**Key:** B = Bachelor of; F = Full-time. <sup>#</sup>Courses pending CRICOS codes are not open for application.

The Bachelor of Entrepreneurship is not a stand-alone degree, but is designed to be undertaken in combination with any Western Sydney bachelor degree.

The degree is an innovative approach to training the next generation of high impact entrepreneurs by providing knowledge and developing practical skills. The course aims to guide you through all phases of their entrepreneurship journey: from forming a team to helping with pitching ideas to potential investors and developing strategies for obtaining funding.

You will not be limited to learning a particular profession, but will also engage in the process of building a start-up company.

The key emphasis of this course is on developing the mindset, risk tolerance, creativity, passion, big thinking, team formation and leadership capabilities – key characteristics of high impact entrepreneurs.

Practical experience is incorporated into every semester of study, such as incubators, technology parks, and innovation centres and enabling a student through all the stages from creative ideas through the sustainable development of the idea into a lean start-up.

You will have the ability to complete the Bachelor of Entrepreneurship as either intertwined with your primary degree and studied concurrently, or as a final year block of units at the end of your primary degree.

## CORE UNITS AND ELECTIVES

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequence and 160 credit points of Advanced Standing. At least 80 credit points must be completed while enrolled in the Bachelor of Entrepreneurship.

For detailed information about the course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

## CAREER OPPORTUNITIES

Upon completion graduates will demonstrate an entrepreneurial mind set and will know how to apply this to address a diverse range of problems through game and simulation-based solutions. This will create many and varied career opportunities, depending on your interests and primary degree.

# Bachelor of Architectural Design

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Architectural Design	097540C	3753	July	Parramatta	3F

**Key:** B = Bachelor of; F = Full-time.

Capitalise on the change and growth taking place in the Greater Western Sydney region by undertaking our new and innovative Bachelor of Architectural Design.

This degree directly relates architectural design problems to urban transformation of contemporary cities, preparing architects for global employment by giving them the technological and intellectual skills to create sustainable, resilient, and well designed environments.

The Bachelor of Architectural Design focuses on a studio based education that fosters creative thinking, hands-on making, collaboration, and interdisciplinary integration.

You will be provided with a combination of the skills and knowledge required by contemporary architects, including studies in spatial design, graphic communication, history and theory of architecture, digital design and fabrication, construction technology, and professional studies..

## PROFESSIONAL RECOGNITION

The degree is designed to meet all the requirements of the Architects Accreditation Council of Australia and in conjunction with the proposed Master of Architecture (Urban Transformation) program.

The professional pathway to registration in architecture in Australia requires a minimum five year sequence including a three year Bachelors, a two year Master of Architecture and a nominal two year (3,300 hours) professional practice internship under the supervision of a registered practising architect of which 1,650 hours can be during their study years.

Successful completion of the Bachelor of Architectural Design will enable you to apply for entry into the Master of Architecture (Urban Transformation) program at Western Sydney University and may be eligible to apply to other accredited architecture program providers dependant on entry requirements.

## CORE UNITS AND ELECTIVES

To graduate with a Bachelor of Architectural Design, you will be required to complete a total of 240 credit points as per the recommended sequence below.

You must complete:

- Eight 10 credit points core units
- Six 20 credit points core studio units
- Four elective units

For detailed information about the course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

## CAREER OPPORTUNITIES

As a graduate of architectural design, you can look forward to career opportunities in:

- Architecture
- Urban Design
- Urban Planning
- Interior Architecture

# Bachelor of Design and Technology

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Design and Technology	041034F	3729	March/July	Parramatta	3F

**Key:** B = Bachelor of; F = Full-time.

Our Design and Technology degree delivers a sound knowledge of design from both a theoretical and a practical standpoint. This can lead to multiple career outcomes, including product design, packaging, rapid prototyping, 3D modelling, exhibition design and secondary school teaching (with additional qualifications).

The course provides you with a comprehensive knowledge of all design areas, but also offers the flexibility to specialise. It combines the University's own state-of-the-art technologies and processes with an extensive network of external industry-based resources.

## PRACTICAL EXPERIENCE

Throughout the course, you will have the opportunity to participate in practical work experience projects and to network within the industry. During, or at the end of, your third year of study, the practical component of the course culminates in a 10-week session of industry experience, giving you priceless real-life experience in developing new products within a company or organisational environment.

## PROFESSIONAL RECOGNITION

Our graduates are eligible for membership of the Design Institute of Australia (DIA).

## CORE UNITS AND ELECTIVES

To graduate with a Bachelor of Design and Technology, you are required to complete 24 units, as well as practical industry experience. You are required to complete a sub-major and this can be in the area of design management, industrial graphics or sustainable design.

The program provides an array of three majors (Visualisation and Graphics, Design Management and Entrepreneurship, and Design-Led Innovation and Management) and five sub-majors (Visualisation, Human-Computer Interaction, Industrial Manufacturing, Design Management, Responsible Design and Sustainability). The course pathway is transformative by practice on progressive priorities of product, process, people and place. In first year, it introduces students to the basic skills of making products, design thinking and literacy, physical and digital methods, professional standards, and essential foundation knowledge of science and mathematics for industrial design. In second year, the program takes students deeper into the profession by working on design process through design management, visualisation, human-computer interaction and sustainable design. In third year, the program brings students to consolidate competencies and expertise by focusing on people, place and socio-cultural context as critical components of the design problem. Students are expected to complete an incremental process of industrial experience by this year. They are also required to undertake a sub-major from different streams within the program to complete the course.

For detailed information about the course structure and units, visit

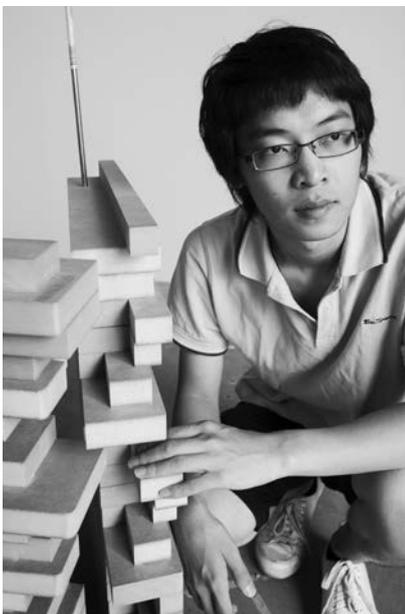
[westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

## FURTHER STUDIES

If you are interested in becoming an industrial designer, you are able to apply to transfer to the Bachelor of Industrial Design and complete a fourth year of study. Alternatively, if you are interested in becoming a secondary teacher, you can apply to study the Master of Teaching (Secondary) on completion of the Bachelor of Design and Technology degree. Please refer to the Teaching and Education Area of Study brochure for further details.

## CAREER OPPORTUNITIES

As a graduate of our Design and Technology program, you will enjoy a range of career options. Graduates typically work in creating and producing designs for consumer, medical and industrial products, and in making models and prototypes of these designs for mass or specialist production.



# Bachelor of Industrial Design

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Industrial Design	041035E	3730	March/July	Parramatta	4F

**Key:** B = Bachelor of; F = Full-time.

Industrial design is a vital part of modern-day living. Every day of our lives, we encounter products designed and manufactured with the intention of making our lives easier. It is industrial designers, incorporating a lateral and cross-disciplinary approach to problem solving, who create the most useful products.

The primary focus of our Industrial Design program is ensuring that our graduates are completely industry-ready, able to think strategically and provide innovative design solutions in a commercial context. The course promotes an awareness of the place of design in society and its effect on people, the environment and the economy, and provides students with the ability to work independently or collaboratively.

## INDUSTRIAL EXPERIENCE

You will be required to undertake 10 weeks of industry placement, which encourages professional development and often leads to projects for the final year of the program and, in some instances, direct employment upon graduation.

## PROFESSIONAL RECOGNITION

Our graduates are eligible for professional membership of the Design Institute of Australia – the professional body representing designers in Australia.

## CORE UNITS AND ELECTIVES

To graduate with a Bachelor of Industrial Design degree, you will be required to complete 24 units, as well as a major project. The final year of the degree is dedicated to the management of the major design project. The year-long design project culminates in Widevision, a unique exhibition and showcase of students' projects and skills.

The program provides an array of three majors (Visualisation and Graphics, Design Management and Entrepreneurship, and Design-Led Innovation and Management) and five sub-majors (Visualisation, Human-Computer Interaction, Industrial Manufacturing, Design Management, Responsible Design and Sustainability). The course pathway is transformative by practice on progressive priorities of product, process, people and place. Students are required to undertake a major and sub-major from different streams to complete the course. The course culminates in a final year industrial design project intending to develop visionary work leading to industry placement, Masters or PhD research.

For detailed information about the course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

## FURTHER STUDIES

If you are interested in becoming a secondary teacher, you can apply to study the Master of Teaching (Secondary) on completion of the Bachelor of Industrial Design degree.

## CAREER OPPORTUNITIES

As a graduate of the Industrial Design program, career opportunities may include becoming an in-house or consultant industrial designer in areas such as:

- product management
- environmental planning
- systems design
- exhibition design and marketing management.

Work includes the development of new products and systems, as well as the updating and improvement of existing products and systems.

# Bachelor of Industrial Design (Honours)

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Industrial Design (Honours)	041035E	3731	March/July	Parramatta	4F

**Key:** B = Bachelor of; F = Full-time.

The Bachelor of Industrial Design (Honours) program prepares students for the profession with a new culture of learning supported by user/student-centered approach, competency learning, design studio-project based learning, applied design research and innovation. With a shorter time span between thinking and making, our new graduates in industrial design create and innovate by value adding, better experiences and interaction, products, businesses and systems. They are thinker-makers and design entrepreneurs, self-starters and all-rounders that can figure out and problem-solve ambiguity, work independently or in collaboration with others in new product development teams, user experience and interaction, product service systems, production and manufacturing.

## PROFESSIONAL RECOGNITION

Graduates are eligible for membership of the Design Institute of Australia (DIA).

## CORE UNITS AND ELECTIVES

The program provides an array of three majors (Visualisation and Graphics, Design Management and Entrepreneurship, and Design-Led Innovation and Management) and five sub-majors (Visualisation, Human-Computer Interaction, Industrial Manufacturing, Design Management, Responsible Design and Sustainability). The course pathway is transformative by practice on progressive priorities of product, process, people and place. Students are required to undertake a major and sub-major from different streams to complete the course. The course culminates in a final year industrial design project intending to develop visionary work leading to industry placement, Masters or PhD research.

For detailed information about the course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

## CAREER OPPORTUNITIES

Common occupations for industrial designers are in technological innovation (i.e. electronic, construction and building, medical and scientific), durable and fast moving consumer goods (i.e. commercial and domestic appliances, white goods, food, tools, packaging), entertainment and games (i.e. games development, model making, film and animation), online and e-learning solutions (i.e. web design, e-commerce, flexible learning), user-centered design (i.e. user experience, graphic user interface, natural user interface, tangible interaction, human computer interaction, human machine interaction, visualization and simulation), and traditional product and manufacturing (i.e. CAD/CAM, Rapid Prototyping, tooling).

# Bachelor of Construction Management

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Construction Management	049425D	2607	March	Parramatta	4F
	049425D	2607	March	Penrith	4F

**Key:** B = Bachelor of; F = Full-time.

With a Bachelor of Construction Management degree, you will be in a position to direct the delivery process for high-quality building projects.

The program encourages work experience while studying in order to achieve a mix of theoretical, practical and hands-on knowledge, which is greatly valued in the construction industry.

In addition to receiving high-calibre academic guidance, your study will include practical experiments in building technology, including acoustics, heat flow through a building, corrosion of materials, concrete testing, and much more.

## PRACTICAL EXPERIENCE

You will be required to undertake a total of 1,200 hours of approved practical experience during the course. There are a number of opportunities during the course for obtaining a cadetship in the building industry in areas including building surveying, construction economics and construction management.

## CORE UNITS AND ELECTIVES

To graduate with a Bachelor of Construction Management degree, you are required to complete 32 units, as well as practical industry experience. Major studies cover construction technology, management, law and economics.

The core units you may study in the first year of the Bachelor of Construction Management are Building 1 and 2; Graphic Communication and Design; Construction Communication, Construction Work Safety, Accounting Information for Managers, Enterprise Law and Enterprise Management.

There are six electives and you may consider units from other courses offered by the University. You may like to complete units that relate to construction economics, for example: Construction Information Systems; Quality and Value Management; Estimating or Quantity Surveying.

For detailed information about the course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

## FURTHER STUDIES

This course has an embedded Honours stream available to high-achieving students. Information about the embedded Honours option will be provided to you as you progress through your Bachelor degree.

## CAREER OPPORTUNITIES

As a Western Sydney University Construction Management graduate, you can look forward to career opportunities such as:

- site manager
- building surveyor
- estimator
- facilities manager
- building economist or consultant
- design and construction manager
- project manager
- contracts administrator.

## ADVANCED STANDING

Applicants who have completed TAFE Diploma of Building Construction, Diploma of Building Design, Diploma of Building Surveying may be eligible for advanced standing. Other relevant TAFE qualifications will be considered on merit. Students who are employed in the industry on a part-time basis may negotiate a reduced study load per annum.

# Bachelor of Construction Technology

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Construction Technology	085663B	3692	March	Penrith	3F

**Key:** B = Bachelor of; F = Full-time.

Closely related to the Bachelor of Construction Management, the Bachelor of Construction Technology degree is suitable for those who are interested in delivering high-quality building projects. There is a strong emphasis on general construction and the legal and economic context of the market.

The course emphasises applied and practical knowledge of the building sciences that are relevant to general construction. These include: passive solar design through a building, corrosion of materials, concrete testing, and much more.

### PRACTICAL EXPERIENCE

Our lecturers and tutors will actively encourage you to independently gain work experience during your studies in order to enhance practical skills and future employment prospects.

### ADVANCED STANDING

Applicants who have completed TAFE Diploma of Building and Construction, Diploma of Building Design, or Diploma of Building Surveying may be eligible for advanced standing. Other relevant TAFE qualifications will be considered on merit. Students who are employed in the industry on a part-time basis may negotiate a reduced study load per annum.

### CORE UNITS AND ELECTIVES

To graduate with a Bachelor of Construction Technology degree, you are required to complete 24 units. Major studies cover housing construction, housing design, property development and investment, project management and urban planning.

The core units you may study in this degree include: Graphic Communications and Design; Enterprise Law; Construction Communication, Construction Work Safety, Accounting Information for Managers, Enterprise Law and Leadership; Construction Technology (Civil and Substructure); Building Measurement; Material Science in Construction; Estimating; Development Control; and Project Management.

You will complete three electives and you may consider units from other courses offered by the University. You may choose units that relate to building, which includes: Construction Information Systems; Construction Technology 3 (Concrete Construction); Quality and Value Management; Quantity Surveying; and Construction Technology 4 (Steel Construction).

For detailed information about the course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

### CAREER OPPORTUNITIES

The current shortage of building industry professionals means that graduates of the Construction Technology program can choose from a wide variety of careers, including:

- property developer
- housing project manager
- site supervisor
- estimator.



# Bachelor of Building Design Management

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Building Design Management	088711G	3727	March	Parramatta	4F
	088711G	3727	March	Penrith	4F

**Key:** B = Bachelor of; F = Full-time.

Building Design Management involves the synthesis of technical knowledge with an understanding of building occupant needs, site context and aesthetics. This degree enables you to develop expertise in designing integrated, practical, spatial, technical and environmentally sustainable building projects.

The Bachelor of Building Design Management course provides you with the knowledge and skills required to undertake lead roles in the 'Design and Construct' stream of building procurement, as well as becoming team members in the design of large and complex building development projects.

Our construction graduates are known within the industry to be highly motivated and commercially adept. With the additional skill set in building design, they will be well placed to lead adaptive and more sustainable construction project solutions.

## INDUSTRIAL EXPERIENCE

You will be required to undertake 1,200 hours of industry related employment prior to graduation.

## CORE UNITS AND ELECTIVES

This four-year degree is made up of 18 Construction Management units; a specialist law unit; a business unit; four Building Design units; plus two Building Design Project units in the final year.

The program also contains four electives.

Units you may study include: Building, Graphic Communication and Design; Construction Work Safety; Environmental Building Design; Built Heritage; Construction Technology; Design Brief Formulation; Building Design Process; and Construction Economics.

You can also choose electives in areas such as material science in construction, building regulation studies, construction planning, and building law.

For detailed information about the course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

## CAREER OPPORTUNITIES

As a graduate of the Building Design Management program, career opportunities may exist in design teams for building and construction companies, architecture (with further study), building design or design management.

# Bachelor of Science (Mathematical Science)

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Science (Mathematical Science)	041154J	3679	March	Campbelltown	3F
	041154J	3679	March	Parramatta	3F

**Assumed knowledge:** HSC Mathematics (not General Mathematics).

**Key:** B = Bachelor of; F = Full-time.

A Bachelor of Science (Mathematical Science) provides you with a strong background in key analytical techniques that have contemporary applications such as the treatment and interpretation of data and the modelling of real-world problems such as global warming.

This program allows you to specialise in mathematics, statistics or a combination of both. The skills developed will provide you with a wide range of career options in commercial and government institutions, which require highly-skilled problem-solvers.

## MAJOR STUDIES

There are several majors and sub-majors offered in science that can add diversity and/or focus to your degree. There is also a range of sub-majors from other disciplines, such as the arts, business, humanities and social sciences to choose from, although these may require cross-campus study and are subject to availability and timetabling.

## FURTHER STUDIES

Postgraduate research programs are available to high-achieving students. Information and details on how to apply will be provided to you as you progress through your Bachelor degree, or you can find out more at [westernsydney.edu.au/research](http://westernsydney.edu.au/research)

If you are interested in pursuing a career in teaching, you can consecutively study both the Bachelor of Science (Pathway to Teaching Primary/Secondary) and Master of Teaching (Secondary) over 4.5-5 years. See the Teaching and Education Area of Study brochure for more details.

## PROFESSIONAL RECOGNITION

Graduates may be eligible for membership of the Australian Mathematical Society and the Statistical Society of Australia, depending on the units studied.

## CAREER OPPORTUNITIES

There is a broad range of opportunities for graduates in Mathematical Science, including roles in finance, information security, mining, meteorology, health and genetics. Graduates are also well placed to pursue careers as:

- mathematicians
- statisticians
- operational research analysts
- quantitative/financial analysts
- financial consultants
- business analysts
- market analysts
- investment analysts
- risk analysts
- sales and production forecasting officers
- production systems planning officers.

With further postgraduate study, you can also become a research scientist working across a diverse range of areas.

# Bachelor of Engineering (Honours)/ Bachelor of Business

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Engineering (Honours)/B Business	089217C	3728	March/July	Bankstown	5F
	089217C	3728	March/July	Campbelltown	5F
	089217C	3728	March/July	Parramatta	5F
	089217C	3728	March/July	Penrith	5F

**Key:** B = Bachelor of; F = Full-time.

The Bachelor of Engineering (Honours)/ Bachelor of Business combined degree allows you to undertake multi-skilling and offers diverse career paths providing high marketability in multiple engineering and business areas.

The Engineering degree provides you with professional skills in each of the five key areas of engineering study. The five engineering key programs are Civil, Construction, Electrical, Mechanical, and Robotics & Mechatronics.

Depending on the Business Major selected, employment possibilities are available in conventional engineering industries and also in areas including Applied Finance, Economics, Management, or Marketing. Graduates will be equipped to work as engineers, with a good understanding of business principles and practices.

## Accreditation

Bachelor of Engineering (Honours): This course has Full Accreditation at the level of Professional Engineer at Penrith campus and Provisional Accreditation at the level of Professional Engineer at Parramatta South campus. Graduates of this program are eligible to apply for full membership of Engineers Australia. They are eligible to apply for Chartered Professional Engineering registration upon successful completion of required engineering practice period specified by Engineers Australia.

## Bachelor of Business

Where the full recommended unit sequence of the major is satisfactorily completed:

- Human Resource Management – Accredited with the Australian Human Resources Institute (AHRI)
- Applied Finance – Satisfies the educational requirements for membership of the Financial Services Institute of Australasia (Finsia)
- Marketing – Satisfies the educational requirements for recognition as a Certified Practising Marketer and eligibility for membership of the Australian Marketing Institute (AMI).

## CORE UNITS AND ELECTIVES

Qualification for this award requires the successful completion of 400 credit points as prescribed in the course structure.

For detailed information about the course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

## CAREER OPPORTUNITIES

After graduating from the Bachelor of Engineering (Honours)/Bachelor of Business program, you will be qualified for a variety of careers in the engineering and business fields, including engineer, business manager, marketer, human resources manager, policy officer, government roles and public service careers and more.

# Bachelor of Information and Communications Technology/ Bachelor of Arts

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Information and Communications Technology/B Arts	068787J	3654	March/July	Parramatta	4F

**Key:** B = Bachelor of; F = Full-time.

The Information and Communications Technology and Arts combined degree program is designed in recognition of the globalising nature of the information technology industry. In addition to providing a strong technical background in IT, the course also provides you with the necessary knowledge in majors in the Bachelor of Arts (BA): International Relations and Asian Studies; Cultural and Social Analysis; English; History and Political Thought; Philosophy; Chinese; Japanese, Arabic and Indonesian.

In the IT area, the program allows you to develop skills in application development, program design, systems analysis and design, networks, web-design, and the implementation of technology.

### Accreditation

The Bachelor of Information and Communications Technology is currently accredited with the Australian Computer Society (ACS) at Professional level.

### CORE UNITS AND ELECTIVES

Qualification for a double degree in law requires the successful completion of 320 credit points including the units listed in the recommended sequences for the relevant double degree programs.

For detailed information about the course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

### CAREER OPPORTUNITIES

After graduating from the Bachelor of Information and Communications Technology/ Bachelor of Arts program, you will be qualified for a variety of careers in the IT and arts fields, including computer programming, database design and development, writing, editing, languages, policy, government roles and public service careers and more.



# Bachelor of Information and Communications Technology/ Bachelor of Business

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Information and Communications Technology/B Business	089213G	3737	March/July	Bankstown	4F
	089213G	3737	March/July	Campbelltown	4F
	089213G	3737	March/July	Parramatta	4F

**Key:** B = Bachelor of; F = Full-time.

This combined degree targets the wide application of Information Technology in Business. It provides you with a strong technical background in both IT and Business. It also allows you to develop skills in application development, program design, systems analysis & design, networks, web-design, and the implementation of technology.

This degree combines Information Technology with one of eight Majors

- Applied Finance
- Economics
- Hospitality Management
- Human Resource Management
- International Business
- Management
- Marketing
- Sport Management

### Accreditation

On completion of this course our graduates are eligible for professional membership of the Australian Computer Society. The Applied Finance Major satisfies the educational requirements for membership of the Financial Services Institute of Australasia (Finsia). The Human Resource Management Major is accredited with the Australian Human Resources Institute (AHRI). The International Business Major satisfies the educational requirements for membership of the Australian Institute of Export. The Marketing Major satisfies the educational requirements for recognition as a Certified Practising Marketer and eligibility for membership of the Australian Marketing Institute (AMI).

### CORE UNITS AND ELECTIVES

Qualification for this award requires the successful completion of 320 credit points as per the recommended sequence.

### Bachelor of Information and Communications Technology component

You must complete 160 credit points of prescribed Bachelor of Information and Communications Technology units.

### Business component

- Core units (compulsory 40 credit points)
- Enterprise Law
- Financing Enterprises
- Enterprise Innovation and Markets
- Enterprise Leadership
- Professional units (choose 40 credit points)

The professional units provide a focus on careers. You will be required to complete one unit from each of the four key focus areas: numeracy, career planning, innovation, and enterprise engagement, a total of 40 credit points. You are also advised to choose units that will support careers in one of three areas: Money (for majors in Applied Finance, Economics), Markets (for majors in Hospitality Management, International Business, Marketing, and Sport Management), Management (for majors in Human Resource Management, and Management). The professional units that are recommended for each of the Bachelor of Business testamur majors are specified in the majors.

For detailed information about the course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

### CAREER OPPORTUNITIES

After graduating from the Bachelor of Information and Communications Technology / Bachelor of Business program, you will be qualified for a variety of careers in the IT and business fields, including computer programmer, business manager, marketer, human resources manager, database designer and developer, policy officer, government roles and public service careers and more.

# Bachelor of Information and Communications Technology/ Bachelor of Business (Accounting)

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Information and Communications Technology/B Business (Accounting)	089212G	3738	March/July	Campbelltown	4F
	089212G	3738	March/July	Parramatta	4F

**Key:** B = Bachelor of; F = Full-time.

This combined degree program targets the wide application of Information Technology in Business and Commerce in Accounting. It provides you with a strong technical background in IT and Business and Commerce in Accounting. It also allows you to develop skills in application development, program design, systems analysis & design, networks, web-design, and the implementation of technology. This degree combines information technology with knowledge required by professional Accountants.

### Accreditation

The Bachelor of Information and Communications Technology is accredited with the Australian Computer Society (ACS) at Professional level. The Bachelor of Business (Accounting) is accredited with and satisfies the pre-admission educational requirements for membership of CPA Australia (CPA), Chartered Accountants Australia and New Zealand (CAANZ) and the Institute of Public Accountants (IPA). Completion of this degree will allow students to claim a number of exemptions from the Chartered Institute of Management Accountants (CIMA) in obtaining the CIMA Professional Qualification.

### CORE UNITS AND ELECTIVES

Qualification for this award requires the successful completion of 320 credit points as per the recommended sequence.

#### Business component

- Core units (compulsory 40 credit points)
- Enterprise Law
- Financing Enterprises
- Enterprise Innovation and Markets
- Enterprise Leadership
- Professional units (choose 40 credit points)

The professional units provide a focus on careers. Students are required to complete one unit from each of the four key focus areas: numeracy and analytics, career planning, innovation, and enterprise engagement, a total of 40 credit points. The professional core units that are recommended for the Bachelor of Business (Accounting) major are specified in the major.

Bachelor of Business Accounting Major – choose 80 credit points from the Accounting major.

### Accounting

Accreditation units

Students should note that in order to achieve accreditation with the CPA Australia, Chartered Accountants Australia and New Zealand (CAANZ) and the Institute of Public Accountants (IPA) they will need to complete the following additional four units (40 credit points) over and above the 320 credit points of this course.

- Law of Business Organisations
- Taxation Law
- Corporate Financial Management
- Contemporary Management Accounting

For detailed information about the course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

### CAREER OPPORTUNITIES

After graduating from the Bachelor of Information and Communications Technology/ Bachelor of Business Accounting program, you will be qualified for a variety of careers in the IT and business fields, including computer programmer, accountant, business manager, database designer and developer, policy officer, government roles and public service careers and more.

# Bachelor of Construction Management Studies/ Bachelor of Laws

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Construction Management Studies/B Laws	08473M	2769	March/July	Campbelltown	5F
	08473M	2769	March/July	Parramatta	5F

**Key:** B = Bachelor of; F = Full-time.

This combined degree offers multi-skilling and highly marketable career paths in construction management and law. It equips you with professional legal skills and knowledge which are required by the Legal Profession Admission Board (LPAB) for admission to legal practice, to solve non-legal problems and undertake specialised study in topical local and international law.

You will also develop attributes essential to Construction and Project Managers, Building and Quantity Supervisors, Estimators, and Building Researchers which lead to professional accreditation. Topics covered include: construction law, technology, economics and resource management. You will be required to undertake 1,200 hours of approved construction management-related practicum. Honours study programs are available.

## ACCREDITATION

Graduates from this program are eligible to apply to the Legal Profession Admission Board for admission to legal practice in NSW after undertaking prescribed practical legal training. Graduates from this program will be eligible for associate membership of the Australian Institute of Building. Graduates may apply to upgrade to corporate membership with the Australian Institute of Building after achieving three years relevant experience following completion of this double degree.

## CORE UNITS AND ELECTIVES

Qualification for a double degree in law requires the successful completion of 400 credit points comprising all units listed in the recommended study sequence.

It may be possible to vary the sequence of units so that students study a greater concentration of either law or construction management studies each semester, to minimise travel between campuses and to overcome timetabling problems.

For more detailed information about course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

## CAREER OPPORTUNITIES

After graduating from the Bachelor of Construction Management Studies/Bachelor of Laws program, you will be qualified for a variety of careers in the construction and legal fields, including lawyer, construction manager, solicitor, barrister, and more.

# Bachelor of Information Systems/ Bachelor of Laws

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Information Systems/ B Laws	095800C	2800	March/July	Campbelltown	5F
	095800C	2800	March/July	Parramatta	5F

**Key:** B = Bachelor of; F = Full-time.

This combined course enables multi-skilling into two diverse career paths- information systems and law, providing our graduates with increased marketability to multiple areas of expertise. The Bachelor of Laws equips you with the professional legal skills and knowledge which are required by the Legal Profession Admission Board for admission to legal practice in New South Wales and to solve legal and non-legal problems.

You can undertake specialised study in topical local and international law. The Bachelor of Information Systems integrates the applications of computing and information systems in the context of a global business environment. You will collaborate with an organisation in its industry based setting, on a project to solve a real community-based problem. The project involves the design, development, deployment and further management of the information system.

### ACCREDITATION

Graduates from this program are eligible to apply to the Legal Profession Admission Board for admission to legal practice in NSW after undertaking prescribed practical legal training. The Bachelor of Information Systems is accredited with the Australian Computer Society (ACS) at Professional Level.

### CORE UNITS AND ELECTIVES

Qualification for the double Bachelor's degree in Information Systems/Law requires the successful completion of 400 credit points consisting of the units listed in the recommended sequence.

- 160 credit points of specified Laws core units
- 80 credit points of units chosen from the pool of Bachelor of Laws Alternate Units
- 160 credit points of specified Information Systems units

It may be possible to vary the sequence of units so that you study a greater concentration of either law or information systems study each semester, to minimise travel between campuses and to overcome timetabling problems.

For more detailed information about course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

### CAREER OPPORTUNITIES

After graduating from the Bachelor of Information Systems/Bachelor of Laws program, you will be qualified for a variety of careers in the information technology and legal fields, including information systems, programming, networking, solicitor, barrister, and more.



# Bachelor of Information Systems (Advanced)/ Bachelor of Business

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Information Systems (Advanced)/B Business	093319G	3745	March/July	Campbelltown	4F
	093319G	3745	March/July	Parramatta	4F

**Key:** B = Bachelor of; F = Full-time.

The Bachelor of Information Systems Advanced/Bachelor of Business combined degree provides you with the knowledge and understanding of two very closely related fields. The advantage of this degree is that it will help open doors to entrepreneurship, start-up companies and new innovations that will require business knowledge and cutting edge information systems and technology skills.

As an Advanced student you will also have industry mentors and membership of The Academy. The business component of the combined degree will allow you to gain knowledge in one of three core Business areas: Money, Markets or Management. The Money area encompasses majors in Applied Finance and Economics, while Markets centre around majors in Hospitality, Sport Management, International Business and Marketing. Finally the Management area includes majors in Human Resources and Management.

Four business core units introduce you to fundamental aspects of law in a commercial context, management, the basics of financing and accounting needs of an organisation, and an introduction to markets and marketing.

A number of professional core units compliment and build on previous knowledge and skills in the areas of numeracy, creativity, innovation, entrepreneurship, leadership and further enhance your employability by offering internship or client-based problem solving units.

A choice from 8 business majors will add to the in-depth knowledge and equip you with the skills to pursue a career in a chosen area of interest. Your knowledge is augmented with study in the Information Systems domain including, but not limited to, system analysis and design, information systems, programing, database design and development, networking, system deployment and management, web and mobile development and social computing.

In pursuing this combination of study, you will learn how to assume corporate roles in global enterprises as well as gain skills needed to start a business. This will equip you with the tools to become future entrepreneurs, to innovate, engage in new business developments, implement new business models and propose technology enhanced start-ups.

## ACCREDITATION

The Bachelor of Information Systems Advanced is accredited by the Australian Computing Society at the Professional level. For the Business component: the Applied Finance Major satisfies the educational requirements for membership of the Financial Services Institute of Australasia (Finsia). The Human Resource Management Major- the School of Business will seek to have the Bachelor of Business (Human Resource Management) accredited with the Australian Human Resources Institute (AHRI). The International Business Major satisfies the educational requirements for membership of the Australian Institute of Export. The Marketing Major satisfies the educational requirements for recognition as a Certified Practising Marketer and eligibility for membership of the Australian Marketing Institute (AMI).

## CORE UNITS AND ELECTIVES

Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequence.

### Bachelor of Information Systems Advanced requirements

You must complete 160 credit points of prescribed Bachelor of Information Systems Advanced units.

### Bachelor of Business requirements

You must complete 160 credit points of Bachelor of Business (BBus) units and are required to select and complete a major.

You are required to complete  
 → Core units (40 credit points)  
 → Professional units (40 credit points)  
 → Major units (80 credit point from one primary Business major))

For more detailed information about course structure and units, visit [westernsydney.edu.au/courses](http://westernsydney.edu.au/courses)

## CAREER OPPORTUNITIES

After graduating from the Bachelor of Information Systems (Advanced)/Bachelor of Business program, you will be qualified for a variety of careers in the information technology and legal fields, including information systems, programming, networking, business manager, human resources manager, IT manager and more.

# Bachelor of Information Systems/ Bachelor of Business

COURSE	CRICOS CODE	COURSE CODE	INTAKE	LOCATION	DURATION
B Information Systems/ B Business	093318G	3744	March/July	Campbelltown	4F
	093318G	3744	March/July	Parramatta	4F

**Key:** B = Bachelor of; F = Full-time.

The Bachelor of Information Systems Advanced/Bachelor of Business provides you with the knowledge and understanding of two very closely related fields.

The advantage of this degree is that it will help open doors to entrepreneurship, start-up companies and new innovations that will require business knowledge and cutting edge information systems and technology skills.

The business component of the combined degree will allow you to gain knowledge in one of three core Business areas: Money, Markets or Management. The Money area encompasses majors in Applied Finance and Economics, while Markets centre around majors in Hospitality, Sport Management, International Business and Marketing. Finally the Management area includes majors in Human Resources and Management.

Four business core units introduce you to fundamental aspects of law in a commercial context, management, the basics of financing and accounting needs of an organisation, and an introduction to markets and marketing.

A number of professional core units compliment and build on previous knowledge and skills in the areas of numeracy, creativity, innovation, entrepreneurship, leadership and further enhance your employability by offering internship or client-based problem solving units.

A choice from 8 business majors will add to the in-depth knowledge and equip you with the skills to pursue a career in a chosen area of interest. Your knowledge is augmented with study in the Information Systems domain including, but not limited to, system analysis and design, information systems, programming, database design and development, networking, system deployment and management, web and mobile development and social computing.

In pursuing this combination of study, you will learn how to assume corporate roles in global enterprises as well as gain skills needed to start a business. This combined degree will equip you with the tools to become future entrepreneurs, to innovate, engage in new business developments, implement new business models and propose technology enhanced start-ups.

## CORE UNITS AND ELECTIVES

Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequence.

### Bachelor of Information Systems requirements

You must complete 160 credit points of prescribed Bachelor of Information Systems units.

### Bachelor of Business requirements

You must complete 160 credit points of Bachelor of Business (BBus) units and are required to select and complete a major.

You are required to complete

- Four core units (40 credit points)
- Three professional units (30 credit points)
- Eight major units (80 credit points)
- One elective (10 credit points)

## CAREER OPPORTUNITIES

After graduating from the Bachelor of Information Systems/Bachelor of Business program, you will be qualified for a variety of careers in the information technology and legal fields, including information systems, programming, networking, business manager, human resources manager, IT manager and more.

# HOW TO APPLY



## 1. COURSE SELECTION

Check the entry requirements, campus, start dates, tuition fees and other costs.

[westernsydney.edu.au/international/apply](https://westernsydney.edu.au/international/apply)

[westernsydney.edu.au/find\\_a\\_course](https://westernsydney.edu.au/find_a_course)

[westernsydney.edu.au/fees](https://westernsydney.edu.au/fees)



## 2. APPLY ONLINE

Upload all your supporting documents to the online International Application System. You will be given a unique student ID and login to check the progress of your application.

[student-westernsydney.studylink.com](https://student-westernsydney.studylink.com)

[westernsydney.edu.au/applyonline](https://westernsydney.edu.au/applyonline) (research applicants only)



## 3. APPLICATION ASSESSMENT

International Admissions Officers will assess your eligibility for admission to your preferred course and issue an offer online if you are eligible.



## 6. STUDENT VISA

The University will issue your electronic Confirmation of Enrolment (eCOE). Use your eCOE to apply for your student visa.

[westernsydney.edu.au/studentvisa](https://westernsydney.edu.au/studentvisa)



## 5. ACCEPT YOUR OFFER

Sign the Acceptance Form and return it with your tuition fee payment to the University as instructed in your offer letter. Carefully read the refund terms.

[westernsydney.edu.au/internationalaccept](https://westernsydney.edu.au/internationalaccept)

[westernsydney.edu.au/internationalrefund](https://westernsydney.edu.au/internationalrefund)



## 4. OFFER OF ADMISSION

Login to read your offer, the conditions (if any that you must satisfy) and all the important information about studying at the University.

[westernsydney.edu.au/internationaloffer](https://westernsydney.edu.au/internationaloffer)



## 7. ACCOMMODATION AND AIRPORT PICK-UP

Arrange your accommodation and book your airport pick-up (if required)

[westernsydney.edu.au/airportpickup](https://westernsydney.edu.au/airportpickup)



## 8. ENROLMENT AND CLASS TIMETABLE

You can enrol in the University from your home country before you travel to Australia. Create your class timetable after you enrol.

[westernsydney.edu.au/enrol](https://westernsydney.edu.au/enrol)

[westernsydney.edu.au/tutorialregistration](https://westernsydney.edu.au/tutorialregistration)



## 9. ORIENTATION

You must attend Orientation to get important information and advice to support your successful transition to study at University.

[westernsydney.edu.au/international/orientation](https://westernsydney.edu.au/international/orientation)

[westernsydney.edu.au/starting](https://westernsydney.edu.au/starting)

### FINANCIAL REQUIREMENTS

International students are required to have genuine access to sufficient funds while studying in Australia. Funds should be sufficient to contribute to the cost of travel, tuition, school costs for any dependants and living costs.

[westernsydney.edu.au/international/fees](https://westernsydney.edu.au/international/fees)

### FURTHER INFORMATION

For further details about courses, including course structure, unit descriptions, work placement requirements (if applicable), visit [handbook.westernsydney.edu.au](https://handbook.westernsydney.edu.au)

For information about studying at Western Sydney University, including assessment methods, course progression and attendance requirements, accommodation options, working and living in Australia, visit [westernsydney.edu.au/studyandlife](https://westernsydney.edu.au/studyandlife)

### DISCLAIMER

Western Sydney University reserves the right to withdraw or vary courses listed within this publication. In the event that the course or courses are to be changed, or in the event of cancellation, applicants will be advised to the address specified on their application.

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