Contents

Welcome .......................................................................................................................................................................................................... 1
Welcome to Australia’s university of enterprise .................................................................................................................................................. 2-3
Computer and Information Technology .................................................................................................................................. 4-7
Bachelor of Business (Management of Information Technology) .............................................................................. 8
Bachelor of Information Technology ............................................................................................................................................ 9
Bachelor of Information Technology (Games and Entertainment Design) ........................................................................... 10
Bachelor of Information Technology (Mobile Application Development) ................................................................................. 12
Bachelor of Information Technology (Networking and CyberSecurity) ...................................................................... 14
Bachelor of Information Technology (Software Development) .......................................................................................... 16
Bachelor of Information Technology (Systems Administration) ................................................................................... 17
Bachelor of Information Technology (Honours) .................................................................................................................... 18
Bachelor of Software Engineering (Honours) ....................................................................................................................... 19
Entry requirements ............................................................................................................................................................................... 20
Glossary ........................................................................................................................................................................................................... 21
2014 Events

> Open Day 2014
City West Campus: Sunday 17 August, North Terrace, Adelaide
visit unisa.edu.au/openday

> Program Information Sessions 2014
Switch On: Mawson Lakes, Thursday 21 August, Mawson Lakes Campus
Register at unisa.edu.au/switchon

For more information and to register, visit unisa.edu.au/info sessions

Welcome

The University of South Australia is a young institution with an agile, innovative approach to educating tomorrow’s professionals and solving today’s challenges. As a university of enterprise, our efforts are focused on providing economic and social benefits to the nation and the world.

Formed in 1991 but built on more than 150 years of creating and applying knowledge, the University has quickly established a global reputation for the quality and creativity of its graduates and the innovative, outcomes-focused relevance of its research.

Our reputation for excellence continues to grow. The University of South Australia is Australia’s youngest university to be ranked in Times Higher Education’s top 50 of world universities under 50 years old. We’re also ranked in the top 3 per cent of the world’s highest performing institutions in the QS university rankings, one of only three Australian universities under the age of 25 to feature in that world’s best list. The University’s research was also rated at world-standard, or above in the second Excellence in Research Australia (ERA) assessment.

With almost 34,000 students in 2013, we are South Australia’s biggest university. We offer more than 400 degree programs in business, education, arts, social sciences, health sciences, information technology, engineering and the environment. Programs are designed with strong professional emphasis and in partnership with industry, and our graduate employment rates are above the national average.

At the University of South Australia, you will discover a vibrant on-campus culture and join an active and diverse student population. This blend enriches the intellectual and social life of our academic community, providing both an enhanced student experience as well as the ideal teaching and learning environment for cultivating tomorrow’s leaders and innovators.

I hope that you will consider joining us and I look forward to seeing you on campus soon.

Professor David G. Lloyd
Vice Chancellor and President
Welcome to Australia’s university of enterprise

Enterprise education incorporates the latest research, work placements, experiential learning and industry links. Our graduates are tomorrow’s leaders and innovators.

New learning centre
The Jeffrey Smart Building is our brand new learning and information hub on Hindley Street. Delivering state-of-the-art teaching and learning facilities and support, this building will transform the west end of the city and enhance the community with a vibrant student population.

The IDEAS university
Our spirit of enterprise begins with nurturing ideas. From concept, to development and into reality we are behind bringing ideas to life through new industry partnerships and engaged research.

Examples include:

- **Global IT partnership** — teaming with Global IT giant Hewlett Packard, in a first for any Australian university, to open a new HP Innovation and Collaboration Centre.
- **Hills Limited innovation partnership** — a new partnership with the State Government and Flinders University set to put South Australia at the forefront of innovative product design and technology expertise for a wide range of industries.
- **Sci|C|Ed** — plans to launch Australia’s newest interactive public science space and inspiring young people to study Science, Technology, Engineering and Mathematics (STEM).
- **Honorary Doctorates** — awarding an Honorary Doctorate to Major General Charles Bolden Jr, administrator of the National Aeronautics and Space Administration (NASA) and inspirational champion for education equity and access. We have also acknowledged winemaker and business leader Wolf Blass AM and leading feminist, editor and publisher Anne Summers.
The CONNECTED university

Our connections stretch across the world, through our city and into our student community.

- **Our world** — a worldwide network of 177,000 alumni supported by formal networks in Hong Kong, Singapore, Malaysia, Taiwan and the United Kingdom.
- **Our community** — helping to build stronger local communities through the support of local community and industry groups. We also sponsor many of Adelaide’s cultural highlights including: the Tour Down Under, WOMAD, the Festival of Arts, the Australian HPV Super Series and Head of the River.
- **Our students** — we remain connected to the needs of our students through the University of South Australia Students’ Association (USASA) and support their journey from start to finish with a warm welcome at orientation, modern facilities, and opportunities to create lasting memories and build lifelong friendships.

The university of enterprise
unisa.edu.au/profile

The SOLUTIONS university

Harnessing our spirit of creativity as well as the excellence of our research we seek out innovative solutions to the challenges of the future.

Our capacity to deliver innovative and effective solutions is enhanced by:

- **Excellent research performance** — quality research that is ranked world-class or above in the 2012 Excellence in Research Australia results. We are also amongst the world’s top three per cent in the QS World University Rankings.
- **Flagship research institutes and centres** — seven research institutes and 17 supported research centres, all supplying fundamental advances in knowledge to address the changing needs of our world.
- **Cutting-edge research facilities** — purpose-built laboratories including industry-standard cleanrooms for cell therapy research and more.

We are also boosting our capability to provide solutions to existing and emerging health issues through a presence in the southern hemisphere’s largest health and biomedical research precinct with the:

- **School of Population Health** — co-location of an entire school in the South Australian Health and Medical Research Institute (SAHMRI) to undertake research into the health and wellbeing challenges within growing populations.
- **Centre for Cancer Biology** — a new alliance with the Centre for Cancer Biology which will lead vital new research into leukaemia.

Keep up-to-date with our latest news at unisa.edu.au/news

91% of our graduates going on to full-time work are employed in a professional occupation within four months of completing their degree

Graduate Destinations Survey

TOP 50 worldwide

2013 Times Higher Education (THE) 100 Under 50
2013 QS University Rankings Top 50 under 50

86% of our research at or above world-class

The Australian Research Council’s 2012 Excellence in Research for Australia (ERA)
Computer and Information Technology

Computer and information technology at the University of South Australia explores new digital frontiers that stimulate innovation across many global industries. Our future-focused programs are taught by high-calibre industry and research experts.

Study computer and information technology at the University of South Australia - a hub of technology and innovation and a vibrant nexus for economic, social and environmental development.

From our world-class teaching facilities at the City East and Mawson Lakes campuses we engage in leading-edge teaching, research training and fundamental applied research.

Spanning future-focused disciplines including IT, environmental science, engineering, urban planning and more, we produce skilled professionals who can use the latest technologies intelligently to create sustainable solutions for our fast changing world.

Pathways into information technology

1. **Year 12**
   - Completion of Year 12 with required ATAR

2. **STAT TEST**
   - Year 12 students and 18 years of age or older, or
   - Mature age

3. **FOUNDATION STUDIES**
   - Year 12 students and 18 years of age or older, or
   - Mature age

4. **EQUIVALENT TO YEAR 12**
   - Do not meet requirements for entry into a bachelor degree

5. **TAFE**
   - Diploma or advanced diploma in a related field

**Bachelor of Information Technology**

**Bachelor of Software Engineering (Hons)**

**Bachelor of Information Technology (Hons)**

Find out more online...

For more information on computer and information technology at the University of South Australia including entry pathways, student case studies and more visit:

- [unisa.edu.au/IT](http://unisa.edu.au/IT)
World-leading teaching and research environment

We are a world-leader in teaching and research, boasting standards of academic excellence in engineering and technology that have been ranked amongst the top 100 universities in the world, the top six in Australia and the only university in South Australia in the 2013-14 Times Higher Education World University Rankings.

These results follow recognition from Excellence in Research Australia for our global vision and outstanding dedication to industry research with the achievement of a world-class or above rating for more than 86 per cent of the university’s assessed research. This includes a ranking of 3 for Information and Computing Sciences – a performance at world standard.

Information Technology

IT is now in every facet of life, work, family sport and leisure. The new ways to use computer technology mean that different roles in this exciting profession are emerging every year. PricewaterhouseCoopers research shows the IT sector has the capacity to create 540,000 new jobs by 2033. IT demands creative and curious people, those who like to push boundaries and want to make a difference in society. Those who gain great satisfaction in making the business of government and industry more efficient also find fulfilling roles as technical professionals or as systems designers. IT graduates also have great opportunities to start their own businesses and become tomorrow’s great entrepreneurs and innovators.

Our programs are designed to reflect employers’ expectations of graduates. UniSA is dedicated to creating and establishing tomorrow’s IT leaders through a comprehensive choice of industry-relevant degree programs which combine real-world experience with the expertise to succeed. We offer a wide range of programs from bachelor degree to doctorate level and through our future-focused range of diverse programs, you will learn to create, innovate and develop solutions to a wide range of complex problems by thinking ‘outside the square’.

Want to know more? We can come to your school. Please phone 08 8302 3582.
Our IT programs are:
World Top 100, Top 6 in Australia
- 2013-14 Times Higher Education World University Rankings for Engineering and Technology
Partnership with Hewlett-Packard to expand workforce by more than 200 industry partners.
Bachelor of Business (Management of Information Technology)

Key features

› Train using the latest industry tools and work practices.
› Access modern facilities including the IT Innovation Studio and IT Development Studio.
› Gain real-world experience through projects and placements with our industry partners, including Fujitsu Australia, SA Water, Uniting Care Wesley Adelaide and many more.
› A common first year across the University of South Australia’s IT programs makes it easy to switch to another IT specialisation without any loss of courses completed.

Overview

Information systems are critical to any modern organisation. This program will enable you to develop and implement strategic information systems and business processes that align with organisational needs and priorities. You will learn how to plan and develop strategic IT solutions for business problems, and how to implement and manage information systems.

You will also develop skills in accounting, economics and general business while gaining a comprehensive understanding of how to apply IT systems to address contemporary business needs. You will have access to UniSA’s Innovation Studio and IT Development Studio; these facilities will prepare you for a career in IT by combining real-life experience with the knowledge to succeed.

What will I study?

You will complete core business courses in economics, management, marketing, accounting, statistics and law to develop an awareness of business processes and functions. In addition, you will develop an understanding of the basics of IT, analysis, design and project management and undertake practice-based learning to develop essential organisational and communication skills.

The final year will enable you to explore the latest organisational IT issues and complete an industry-based project. You will cover IT strategy and management, business intelligence, and information security management.

Who will employ me?

Upon graduating, you will have a solid grounding in IT management, crucial to the successful implementation of information systems strategy in any organisation. You may find employment in business and government as analysts, business consultants, information systems officers/managers, project officers/managers, or web design consultants.

Professional accreditation

This program has been accredited by the Australian Computer Society (ACS) and graduates may be eligible for Professional Membership.

Honours

An Honours degree (LHCP) is available as an additional year of study for those with outstanding academic results.

Program schedule

FIRST YEAR

First Semester (SP 1, 2 or 3)
- Management Principles
- Problem Solving and Programming
- Information Technology Fundamentals
- Design Thinking

Second Semester (SP 4, 5 or 6)
- Systems Analysis
- Database Fundamentals
- Marketing Principles: Trading and Exchange
- IT Project Management

SECOND YEAR

First Semester (SP 1, 2 or 3)
- Web Development
- Introduction to e-Business
- Accounting for Business
- Network Fundamentals

Second Semester (SP 4, 5 or 6)
- Systems Design
- Quantitative Methods for Business
- Principles of Economics
- Elective

THIRD YEAR

First Semester (SP 1, 2 or 3)
- Foundations of Business Law
- Information Security Management
- Enterprise Systems
- IT Stakeholder Engagement

Second Semester (SP 4, 5 or 6)
- Information Technology Strategy and Management
- Business Intelligence and Enterprise Management
- ICT Project

Key

T: SATAC code
P: Program code
C: ATAR (Feb 2014 cut-off)
AW: UniSA preferred score (guaranteed entry)
C: TAFE minimum entry
E: Prerequisites
A: Assumed knowledge

International students

CRICOS code: 024194J
Program fees: $27,000 per annum
Bachelor of Information Technology

Key features

› Train using the latest industry tools and work practices.
› Access modern facilities including the IT Innovation Studio and IT Development Studio.
› Gain real-world experience through projects and placements with our industry partners, including Fujitsu Australia, SA Water, Uniting Care Wesley Adelaide and many more.
› A common first year across the University of South Australia’s IT programs makes it easy to switch to another IT specialisation without any loss of courses completed.

Overview

This program builds upon UniSA’s flagship programs as an ‘all round’ degree that enables graduates to move into rewarding careers as IT professionals. The Bachelor of Information Technology provides you with the passport to a career in computing, software development and the information services industries.

You will be exposed to real world applications and the latest research developments and technologies through industry placements, internships and research projects with industry partners, providing you with greater employment prospects after graduation. In this program you get the choice to select either two minors within the IT school or one IT minor as well as another minor in a different discipline within the University. This allows you to diversify your skill set and enhance your employability in areas such as business, healthcare or education.

You will also have access to UniSA’s IT Innovation Studio and IT Development Studio. These facilities will prepare you for a career in IT by combining real-life experience with the knowledge to succeed.

What will I study?

In first year, you will study core concepts in IT establishing a solid foundation for more advanced coursework in subsequent years. The common first year also provides the flexibility for you to transfer into another IT program without any loss of courses completed.

In the final two years, you will study core topics in software development and web engineering, participate in an industry-based project, and choose two of the following minors, or a minor from another discipline area:

› Business systems
› Data analytics
› Games
› Mobile applications
› Multimedia
› Networking
› Security
› Software development

Who will employ me?

The immediate prospects for employment are excellent for graduates of this program, particularly in the emerging defence, mining, and multimedia (entertainment) sectors. There is a national shortage of skills in IT and well-trained people are in high demand.

Career opportunities also exist interstate and overseas as IT graduate qualifications are transferable unlike other specialised professions. IT graduates can expect starting salaries in excess of other professions and may secure employment at respected, high-profile companies and public sector organisations.

After completing this program you are likely to be employed in positions such as but not limited to: Technical Development Manager, Data Modeller, Web Developer, Testing Manager, Database Administrator, Sales Consultant, Account Manager, PC Support and Programmer.

Professional accreditation

This program is professionally accredited by the Australian Computer Society.

Honours

An Honours degree (LHCP) is available as an additional year of study for those with outstanding academic results.

Program schedule

FIRST YEAR
First Semester (SP 1, 2 or 3)
Network Fundamentals
Problem Solving and Programming
Information Technology Fundamentals
Design Thinking

SECOND YEAR
First Semester (SP 1, 2 or 3)
Elective
Minor Course
Minor Course

SECOND SEMESTER (SP 4, 5 or 6)
Systems Analysis
Database Fundamentals
Minor Course
Minor Course

THIRD YEAR
First Semester (SP 1, 2 or 3)
Minor Course
Minor Course
Minor Course

Second Semester (SP 4, 5 or 6)
Minor Course
Minor Course
ICT Project

International students

CRICOS code: n/a
Program fees: A$25,500 per annum

Key features

› Train using the latest industry tools and work practices.
› Access modern facilities including the IT Innovation Studio and IT Development Studio.
› Gain real-world experience through projects and placements with our industry partners, including Fujitsu Australia, SA Water, Uniting Care Wesley Adelaide and many more.
› A common first year across the University of South Australia’s IT programs makes it easy to switch to another IT specialisation without any loss of courses completed.

Overview

This program builds upon UniSA’s flagship programs as an ‘all round’ degree that enables graduates to move into rewarding careers as IT professionals. The Bachelor of Information Technology provides you with the passport to a career in computing, software development and the information services industries.

You will be exposed to real world applications and the latest research developments and technologies through industry placements, internships and research projects with industry partners, providing you with greater employment prospects after graduation. In this program you get the choice to select either two minors within the IT school or one IT minor as well as another minor in a different discipline within the University. This allows you to diversify your skill set and enhance your employability in areas such as business, healthcare or education.

You will also have access to UniSA’s IT Innovation Studio and IT Development Studio. These facilities will prepare you for a career in IT by combining real-life experience with the knowledge to succeed.

What will I study?

In first year, you will study core concepts in IT establishing a solid foundation for more advanced coursework in subsequent years. The common first year also provides the flexibility for you to transfer into another IT program without any loss of courses completed.

In the final two years, you will study core topics in software development and web engineering, participate in an industry-based project, and choose two of the following minors, or a minor from another discipline area:

› Business systems
› Data analytics
› Games
› Mobile applications
› Multimedia
› Networking
› Security
› Software development

Who will employ me?

The immediate prospects for employment are excellent for graduates of this program, particularly in the emerging defence, mining, and multimedia (entertainment) sectors. There is a national shortage of skills in IT and well-trained people are in high demand.

Career opportunities also exist interstate and overseas as IT graduate qualifications are transferable unlike other specialised professions. IT graduates can expect starting salaries in excess of other professions and may secure employment at respected, high-profile companies and public sector organisations.

After completing this program you are likely to be employed in positions such as but not limited to: Technical Development Manager, Data Modeller, Web Developer, Testing Manager, Database Administrator, Sales Consultant, Account Manager, PC Support and Programmer.

Professional accreditation

This program is professionally accredited by the Australian Computer Society.

Honours

An Honours degree (LHCP) is available as an additional year of study for those with outstanding academic results.
Bachelor of
Information Technology (Games and Entertainment Design)

What will I study?
You will study common first year courses in IT, establishing a solid foundation for more advanced coursework in subsequent years. In the final two years you will focus on graphics programming courses, including application development principles, computer graphics and mobile development. You will also undertake a course in film and television production as well as a major project that will consolidate the skills acquired throughout your studies.

Who will employ me?
Employment prospects continue to grow for graduates with a flexible approach to working in the evolving entertainment and games design sector. As a graduate of this program your skills will prove transferable across a variety of multimedia platforms. You may start in a small organisation and is seeking to expand its portfolio, or you may find an opportunity in a major Hollywood studio developing the tools that support computer graphics in movies, games and other multimedia.

A number of forward-thinking organisations are using games as a means of providing instruction or training to employees in new or significantly redeveloped applications. New uses of games and entertainment applications, beyond the more obvious recreational uses are emerging, and it is expected that the range of opportunities will grow over time for creative and expansive-thinking graduates who are prepared to push boundaries.

After completing this program you are likely to be employed in positions such as but not limited to: Multimedia Specialist, Web Developer, Graphics Designer, Programmer, IT Specialist, Animator or Game Designer.

Professional accreditation
This program is professionally accredited by the Australian Computer Society.

Honours
An Honours degree (LHCP) is available as an additional year of study for those with outstanding academic results.

Program schedule

FIRST YEAR
First Semester (SP 1, 2 or 3)
- Network Fundamentals
- Problem Solving and Programming
- Design Thinking
- Information Technology Fundamentals

Second Semester (SP 4, 5 or 6)
- Systems Analysis
- Database Fundamentals
- Programming Fundamentals
- IT Project Management

SECOND YEAR
First Semester (SP 1, 2 or 3)
- Interface Design Interaction and Experience
- Web Development
- Data Structures and Algorithms
- Agile Development with .NET

Second Semester (SP 4, 5 or 6)
- Systems Design
- Tools for Software Development
- Game Asset Creation
- Software Development with C++

THIRD YEAR
First Semester (SP 1, 2 or 3)
- Computer Game Design Concepts
- Small Business for Professionals
- Mobile Game Development
- Game Engines and Graphics

Second Semester (SP 4, 5 or 6)
- Elective
- Artificial Intelligence
- ICT Project
UniSA the only game in town for IT studies

Michael Ulpen
Bachelor of Information Technology (Games and Entertainment Design)

‘UniSA has given me the opportunity to work on game development projects in a team and has constantly supported me in my role as Indie Games Room Coordinator and Founder of The South Australian Game Maker’s Association. Were it not for the friends I’ve made among the students and faculty, I would not be a game developer, let alone the figurehead of two of South Australia’s most important game development organisations.’
Bachelor of Information Technology (Mobile Application Development)

Key features
› Train using the latest industry tools and work practices.
› Access modern facilities including the Innovation Studio and IT Development Studio.
› Gain real-world experience through projects and placements with our industry partners, including Fujitsu Australia, SA Water, Uniting Care Wesley Adelaide and many more.
› A common first year across the University of South Australia’s IT programs makes it easy to switch to another IT specialisation without any loss of courses completed.

Overview
The Internet is mobile and the future of mobile is applications (apps). Smartphones, tablets and wireless technology all play an important role in our interaction with entertainment, social networks, e-commerce and information sourcing and sharing. Now part of our everyday lives, mobile app downloads are set to exceed 100 billion this year, according to new data from Gartner (IT) creating a surge of demand for mobile application specialists, a demand that is currently outstripping supply.

This program will help you become a mobile app innovator, providing you with the technical knowledge and the specialised software skills to develop and design your own mobile apps across various modern platforms in this rapidly changing IT environment.

What will I study?
In first year, you will study core concepts in IT, establishing a solid foundation for more advanced coursework in subsequent years. The common first year also provides the flexibility for you to transfer into another IT program without any loss of courses completed.

In the final two years, you will focus on mobile application development in areas including software development in languages such as C++, and .NET, concurrent programming for modern microprocessors, and be exposed to industry-level software development tools.

Who will employ me?
As a graduate of this program, you may find career opportunities in roles such as an Android/iOS Apps developer, iOS web developer, web programmer, software applications programmer, mobile developer, mobile applications architect, mobile deployment officers and mobile applications programmer.

Professional accreditation
This program is designed to meet the requirements for professional accreditation and graduate membership of the Australian Computer Society. Such accreditation is provisional until the program produces its first graduates.

Honours
An Honours degree (LHCP) is available as an additional year of study for those with outstanding academic results.

Program schedule
FIRST YEAR
First Semester (SP 1, 2 or 3)
Network Fundamentals
Problem Solving and Programming
Information Technology Fundamentals
Design Thinking
Second Semester (SP 4, 5 or 6)
Systems Analysis
Database Fundamentals
Programming Fundamentals
IT Project Management

SECOND YEAR
First Semester (SP 1, 2 or 3)
Interface Design, Interaction and Experience
Web Development
Data Structures and Algorithms
Agile Development with .NET
Second Semester (SP 4, 5 or 6)
Systems Design
Tools for Software Development
Software Development with C++
Elective

THIRD YEAR
First Year (SP 1, 2 or 3)
Small Business for Professionals
Concurrent Programming
Mobile Game Development
Information Security Management
Second Year (SP 4, 5 or 6)
Mobile Application Enterprise Development
Mobile Enterprise Workshop
ICT Project

International students
CRICOS code: TBA
Program fees: A$27,000 per annum

Program fees:
A$27,000 per annum

ML Mawson Lakes Campus
Full time program duration in years
PT Part-time study available
EX External study available
PX Partial External study available
P Alternative entry pathways available
Bachelor of

Information Technology (Networking and Cybersecurity)

You will also acquire the skills to support a network roll-out and the maintenance of infrastructure, while gaining an understanding of networking topologies and networking devices such as routers and firewalls. In particular, the networking courses prepare you for industry certification examinations in CISCO, CCNA and CCNP where you will be in a position to not only graduate with a degree, but with this highly regarded industry certification, which will increase your employment prospects. This program has a hands-on approach where you will gain experience in UniSA’s dedicated security and networking labs and also be involved in an industry-based project in your final year.

Who will employ me?

Employment opportunities are abundant for graduates with strong networking skills and solid technical and business backgrounds. This is a result of increasing interest in network intensive applications, such as e-commerce which are accelerating the development of computer networks and distributed systems. In our interconnected world, there will always be demand for graduates with networking and security skills as organisations continue to exploit the internet to develop opportunities to connect globally in the safest and most secure ways possible. This will only increase through the Australian government’s investment in a national broadband scheme. Upon completion of this program you may find employment in both small or large specialist IT services and solution providers in South Australia, interstate or overseas. After completing this program you are likely to be employed in positions such as, but not limited to: Network Analyst, Customer Service Manager, Customer Relationship Manager, Telecoms Engineer, Capacity Planner, Security Specialist, Systems Administrator, Network Manager, PC Support, Sourcing Specialist or Network Designer.

Professional accreditation

This program is professionally accredited by the Australian Computer Society.

Honours

An Honours degree (LHCP) is available as an additional year of study for those with outstanding academic results.
IT solutions a day’s work for UniSA graduate

Jordan Trasente

IT Advisor - KPMG

Testing IT controls, conducting network assessments and providing advice to users are all part of a day’s work for Jordan Trasente. The Bachelor of Information Technology (Networking and Security) graduate now uses the skills and knowledge gained through his program to keep up in the ever-evolving field of IT as an advisor for KPMG.

Jordan was attracted to UniSA by “some of the best equipment available to students” and as the sole provider of a program containing practical experience. ‘Being taught how something works in a lecture, then being able to see it in action really adds value and enhances the understanding,’ Jordan says of the program’s combination of content and practical components.

‘Developing a new client management system for an IT shop as his final-year project also solidified Jordan’s skills and knowledge. “This project gave me such a good understanding of the software development lifecycle that I can easily apply to some of the problems my clients are facing.”’
Bachelor of
Information Technology (Software Development)

Key features
› Train using the latest industry tools and work practices.
› Access modern facilities including the Innovation Studio and IT Development Studio.
› Gain real-world experience through projects and placements with our industry partners, including Fujitsu Australia, SA Water, Uniting Care Wesley Adelaide and many more.
› A common first year across the University of South Australia’s IT programs makes it easy to switch to another IT specialisation without any loss of courses completed.

Overview
If you’re interested in software development and programming in a variety of languages, then you will find the Bachelor of Information Technology (Software Development) both challenging and rewarding. A key focus is learning how large software systems are designed and created. You will be exposed to real world applications, the latest research developments and technologies through placements, internships and research projects with industry partners, providing greater employment prospects after graduation.

As a student of this program, you will also have access to UniSA’s IT Innovation Studio and IT Development Studio. These facilities will prepare you for a career in IT by combining real-life experience with the knowledge to succeed.

What will I study?
You will study core concepts in IT to establish a solid foundation for more advanced coursework in subsequent years. The common first year also provides the flexibility for you to transfer into another IT program without any loss of courses completed.

Building on these concepts, you will study core topics leading to a major where you will gain a solid grounding in the design, implementation and testing of small and large software systems. In the final year, you will complete a project that puts into practice many of the skills you have acquired.

Who will employ me?
Employment prospects continue to grow for graduates with a flexible approach to working in the evolving software development sector. Globally many organisations are developing or redeveloping applications to drive value from their IT systems in public and private sectors.

Typically, many organisations acquire software frameworks which are adapted to suit their operations. This requires using different tools and techniques to exploit these frameworks so that the applications fit the nature of the business and its processes. Predominantly, this type of work is undertaken within organisations as the software needs to be aligned to the business and its end users.

Opportunities for employment as qualified IT graduates are available worldwide. Some graduates have even started up their own businesses due to the transferrable nature of software development and programming skills.

As a graduate, you can expect great starting salaries and may secure employment at respected, high-profile companies. After completing this program you are likely to be employed in positions such as but not limited to: Software Architect, Software Developer, Testing Manager, Release Manager, Sales Consultant, Quality Manager, Trainer, Application Architecture, Strategic Planner, Software Engineer, Programmer.

Professional accreditation
This program is professionally accredited by the Australian Computer Society.

Honours
An Honours degree (LHCP) is available as an additional year of study for those with outstanding academic results.

Program schedule

FIRST YEAR
First Semester (SP 1, 2 or 3)
Network Fundamentals
Problem Solving and Programming
Information Technology Fundamentals
Design Thinking
Second Semester (SP 4, 5 or 6)
Systems Analysis
Database Fundamentals
Programming Fundamentals
IT Project Management

SECOND YEAR
First Semester (SP 1, 2 or 3)
Interface Design, Interaction and Experience
Web Development
Data Structures and Algorithms
Discrete Mathematics
Second Semester (SP 4, 5 or 6)
Tools for Software Development
Software Development with C++
Database for the Enterprise

THIRD YEAR
First Semester (SP 1, 2 or 3)
Elective
Agile Development with .NET
Concurrent Programming
Cloud Programming
Second Semester (SP 4, 5 or 6)
Artificial Intelligence
Mobile Application Enterprise Development
ICT Project
Bachelor of

Information Technology (Systems Administration)

Overview
There are few university programs that specifically lead to a role as a Systems Administrator. This program will offer you a pathway into this savvy profession as well as similar roles within the IT industry. Whether you are already working in IT or are looking for a new career, this program is tailor made to deliver the necessary skills required to maintain and operate computer systems and networks. This program is a balanced mix of computing fundamentals, networking skills, management principles, and specific system administration courses. All of these skills are put to the test in either a major project or industry placement in your final year. Combine this with the opportunity to undertake industry certifications such as CISCO while in the program and you will graduate with all the skills needed to be successful in a modern system administrator role.

You will also have access to UniSA’s IT Innovation Studio and IT Development Studio; these facilities will prepare you for a career in IT by combining real-life experience with the knowledge to succeed.

What will I study?
You will study core concepts in IT to establish a solid foundation for more advanced coursework in subsequent years. The common first year also provides the flexibility for you to transfer into another IT program without any loss of courses completed.

Who will employ me?
Computing systems are a vital resource to modern businesses. The industry demands highly-trained professional staff to maintain and manage these systems. Small, medium and large enterprise organisations have a team of system administrators which work to effectively manage the computer systems and advise senior management on future technology procurements and IT related strategies.

In today’s interconnected world, many system administrators have the luxury of working off-site in any location with an internet connection. You will be industry ready with current knowledge and skills in systems administration.

Systems administrators play a key role in the provision of IT support and maintenance. Depending on your area of interest, you may undertake positions in areas such as: IT support, information security, network sustainability, procurement, systems management as well as a vast range of careers associated with systems administration. You will develop lifelong learning practices which will have you prepared for a career in system administration or employment in a wide variety of positions in the IT industry.

Professional accreditation
This program is professionally accredited by the Australian Computer Society.

Honours
An Honours degree (LHCP) is available as an additional year of study for those with outstanding academic results.
Bachelor of

Information Technology (Honours)

Key features

› This program is supported by a strong cooperative research environment including the Advanced Computing Research Centre.
› Learn from research experts.
› Focus your IT studies based on your interests.

Overview

If you have achieved outstanding academic results from a relevant information technology bachelor degree, you may be eligible to undertake this Honours program. The program prepares you for postgraduate and PhD studies or industrial employment in the field of computing, information technology or information systems. It provides you with advanced coursework topics and a major project in computer and information science, information systems and equivalent disciplines.

What will I study?

This Honours program consists of several core courses in IT research, as well as advanced computer and information topics run by leading researchers. The program will provide you with the skills and knowledge to conduct effective research projects through a yearlong project which will utilise your multi-disciplinary undergraduate skills in computer graphics, business intelligence, software, networking, information and security.

At the end of the program you will be in a position to either go into industry as a highly sought-after IT specialist with research experience or continue further study at the PhD level.

Who will employ me?

As a graduate of this program, you will be suited to a range of leadership and research roles within the IT sector. Depending on your selected area of specialisation, you may find a position as a Project Manager, Research Assistant, Programmer, Software Designer, or Network Architect. Alternatively, you may decide to continue your studies at a Postgraduate and PhD level.

Professional accreditation

This program has been accredited by the Australian Computer Society (ACS). Graduates may be eligible to apply for Professional Membership.

Program schedule

FIRST YEAR
First Semester (SP 1, 2 or 3)
CIS Research Methods
Elective
CIS Honours Minor Thesis 1
Second Semester (SP 4, 5 or 6)
Elective
Elective
CIS Honours Minor Thesis 2

Key

ML Mawson Lakes Campus
1 Full time program duration in years
PT Part-time study available
EX External study available
PX Partial External study available
P Alternative entry pathways available
Bachelor of 

Software Engineering (Honours)

Key features
› Train using the latest industry tools and work practices.
› Access modern facilities including the Innovation Studio and IT Development Studio.
› Gain real-world experience through projects and placements with our industry partners, including Fujitsu Australia, SA Water, Uniting Care Wesley Adelaide and many more.
› A common first year across the University of South Australia’s IT programs makes it easy to switch to another IT specialisation without any loss of courses completed.

Overview
Software engineering is more than just programming. Developing large, complex systems on time and within budget requires up-to-date software engineering knowledge and familiarity with current software engineering practices used throughout the world.

This program provides a broad understanding of computing and IT theory and practice, along with the specialist knowledge and skills required of a software engineer. This program shares a common first year with most other IT programs giving students the flexibility to transfer.

You will have access to UniSA’s IT Innovation Studio and IT Development Studio; these facilities will prepare you for a career in IT by combining real-life experience with the knowledge to succeed.

What will I study?
You will cover core courses in computer science, software engineering and web technologies, as well as specialist courses in areas such as computer science, systems development, database and knowledge management, health informatics, networking and security.

During your final year, you will complete a year-long, industry-based project that presents a solution to a real world IT problem. This will enable you to gain direct experience in solving an IT problem using software engineering principles and project management skills.

Who will employ me?
The growth of large systems and their complexity means that the demand for software engineers is currently very high. Locally, the number of projects demanding competent software engineers is expected to increase in the defence sector. Internationally, qualified software engineers are sought in the financial services, health and manufacturing industries.

The types of jobs you can expect upon completion of your degree include; Software Architect, Software Developer, Testing Manager, Release Manager, Sales Consultant, Quality Manager, Trainer, Application Architecture, Strategic Planner, Software Engineer, Programmer and Team Leader.

Professional accreditation
This program is professionally accredited by the Australian Computer Society.

Program schedule

FIRST YEAR
First Semester (SP 1, 2 or 3)
Networking Fundamentals
Problem Solving and Programming
Information Technology Fundamentals
Design Thinking

Second Semester (SP 4, 5 or 6)
Systems Analysis
Database Fundamentals
Programming Fundamentals
IT Project Management

SECOND YEAR
First Semester (SP 1, 2 or 3)
Interface Design, Interaction and Experience
Web Development
Data Structures and Algorithms
Discrete Mathematics

Second Semester (SP 4, 5 or 6)
Systems Design
Tools for Software Development
Database for the Enterprise
Software Development with C++

THIRD YEAR
First Semester (SP 1, 2 or 3)
Agile Development with .NET
Concurrent Programming
Cloud Programming
Elective

Second Semester (SP 4, 5 or 6)
Artificial Intelligence
Computer Science Topics for Software Engineers
Mobile Application Enterprise Development
Systems Architecture

FOURTH YEAR
First Semester (SP 1, 2 or 3)
Software Engineering Minor 1
Research Methods
ICT Specialist Major Project 1 (Honours)

Second Semester (SP 4, 5 or 6)
Software Engineering Minor 2
Software Engineering Minor 3
ICT Specialist Major Project 2 (Honours)

Key features
- Train using the latest industry tools and work practices.
- Access modern facilities including the Innovation Studio and IT Development Studio.
- Gain real-world experience through projects and placements with our industry partners, including Fujitsu Australia, SA Water, Uniting Care Wesley Adelaide and many more.
- A common first year across the University of South Australia’s IT programs makes it easy to switch to another IT specialisation without any loss of courses completed.
Entry requirements

For undergraduate bachelor degrees and associate degrees

Applicants are required to have completed the South Australian Certificate of Education (SACE) with:

- 200 subject credits (in total);
- a grade C* or higher in the Personal Learning Plan, 20 credits of literacy, 10 credits of numeracy and the Research Project at Stage 2;
- a grade C- or higher in an additional 60 credits at Stage 2;
- a competitive ATAR; and
- the fulfilment of the program’s prerequisite requirements (where applicable).

* For Stage 2 subjects a grade of C- or higher is required

Applicants may also be eligible for entry if they have completed the program’s prerequisite requirements and have one of the following:

- Completed an interstate or overseas qualification considered by the University as equivalent to SACE.
- Completed the international Baccalaureate Diploma with a minimum score of 24 points.

Pathways

Entering your chosen program straight from high school is not the only pathway into UniSA. Applicants may also be eligible for entry through one of the following pathways:

Tertiary Transfer – completion or partial completion of a higher education program from a recognised higher education institution.

Special Entry – completion of the Special Tertiary Admissions Test (STAT). A personal competencies statement or employment experience may also be considered.

TAFE/Registered Training Organisations (RTO) – Applicants may be eligible for entry with the completion of an award from TAFE or another Registered Training Organisation at AQF Certificate IV or above. Guaranteed entry into a program is also available to applicants who have completed a qualification that meets the TAFE Preferred requirement listed in each program’s snapshot.

Open Universities Australia – completion of at least four Open Universities Australia (OUA) courses at the appropriate level.

Foundation Studies – completion of a recognised foundation studies program including the University’s Foundation Studies program.

Before applying

All applicants should check and ensure that they meet all entry and prerequisite requirements before applying. For some programs, applicants may also be required to attend an interview or present a portfolio.

For more information on entry requirements, visit unisa.edu.au/future

Participation and access

UniSA offers various programs and services to assist rural and/or socio-economically disadvantaged students, Indigenous Australians and people with a disability. For more information, contact (08) 8302 2376 or email study@unisa.edu.au

UniSA Bonus Points

For students commencing university study in 2015

UniSA Advantage is a bonus points scheme that encourages participation in education as well as rewards achievement in selected Year 12 subjects that better prepare students for university study. The scheme includes two strands – Achievement and Aspire.

Achievement bonus points will automatically be awarded if students score a C- or better in Year 12 Tertiary Admissions Subjects (TAS) relevant to their intended UniSA program.

Aspire bonus points are awarded automatically to students who attend a school recognised by UniSA as under-represented at university. Students from rural and remote areas are also eligible for automatic bonus points while those students on School Card (or state equivalent), Youth Allowance and/or Health Care Card or Low Income Health Care Card who do not attend a recognised school, can apply for bonus points by downloading an application form.

For more information or to download the Aspire Application Form, visit unisa.edu.au/bonuspoints

For students commencing university study in 2016 and onwards

The three South Australian universities are replacing all existing equity and subject bonus schemes with two new bonus schemes. The new schemes will come in to operation for students studying Year 12 in 2015 who apply for entry for in 2016.

The two new schemes are the SA Universities Equity Scheme and the SA Language, Literacy and Mathematics Bonus Point Scheme.

The SA Universities Equity Scheme will provide bonuses in two ways: bonuses for all students in specified schools and bonuses for individuals experiencing disadvantage.

The SA Language, Literacy and Mathematics Bonus Point Scheme encourages students to strengthen their preparation for university studies by undertaking a language other than English, or specified English and Mathematics subjects.

Need some help? For further information, visit unisa.edu.au/bonuspoints or you can also contact Future Student Enquiries by phone (08) 8302 2376 or email study@unisa.edu.au

Student contributions

To find out more about how you can defer your HECS-HELP student contribution or to see if you are entitled to a Commonwealth Government supported place at the University of South Australia, please visit unisa.edu.au/fees. The contribution that applies depends on which courses you choose to study and the contribution band in which those courses are classified (see table below). The amount of your student contribution also depends on the unit value of your courses of study.

How to apply to the University of South Australia

Go to satac.edu.au

As per the Australian Government guidelines, the student contribution amounts for 2014 are:

<table>
<thead>
<tr>
<th>Band</th>
<th>Fields of study</th>
<th>Student contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Band 1</td>
<td>Humanities, behavioural science, social studies, education, clinical psychology, foreign languages, visual and performing arts, nursing.</td>
<td>$0 – $6,044</td>
</tr>
<tr>
<td>Band 2</td>
<td>Mathematics, statistics, computing, built environment, other health, allied health, science, engineering, surveying, agriculture.</td>
<td>$0 – $8,613</td>
</tr>
<tr>
<td>Band 3</td>
<td>Law, accounting, administration, economics, commerce, dentistry, medicine, veterinary science.</td>
<td>$0 – $10,085</td>
</tr>
</tbody>
</table>

Note: These amounts are for 1 EFTSL (36 units) in 2014. The student contribution amounts for 2015 will be advised by the Federal Government in October 2014, and these will be available to view via unisa.edu.au/future/fees at that time.
**WHAT WILL YOU STUDY?**

**Associate degree**
An award for completing a two-year (or part-time equivalent) tertiary program.

**Bachelor degree**
A program of three or more years duration (or part-time equivalent). Bachelor degree programs provide the relevant qualifications for many professions.

**Diploma**
Unisa offers a range of two-year diploma programs. Diplomas offered through Unisa College provide entry into the second year of a corresponding bachelor program in allied health, arts, business or science and technology. More information on the diplomas offered by Unisa College is available at unisa.edu.au/college. The Division of Education, Arts and Social Sciences, offers a one-year Diploma in Languages which allows students to study a language concurrently with their bachelor degree program.

**Foundation Studies**
A free, one year program with no qualifications required for entry. This program assists students to develop the skills required for successful university-level study. Upon successful completion, students can apply for entry into a degree at the University of South Australia or to enter the second year of a Unisa College diploma program.

**Graduate Certificate**
An award for completing a postgraduate program of at least six months in duration (or part-time equivalent).

**Graduate Diploma**
An award for completing a postgraduate program of at least one year in duration (or part-time equivalent).

**Honours**
An additional year of study in a bachelor degree during which students specialise in a chosen area of study. In some cases, Honours study can actually be done as part of the degree.

**Master degree**
An award for completing a postgraduate program of at least two years (or part-time equivalent).

**PhD**
Doctor of Philosophy (PhD) programs normally extend over three years (or part-time equivalent) and involve significant research work.

**HOW DOES YOUR PROGRAM WORK?**

**Course**
A component of study within a program (previously known as a ‘subject’).

**Major**
A set of related courses which comprises 36 units of study within a bachelor degree.

**Minor**
A set of related courses which comprises up to 18 units of study within a bachelor degree.

**Program**
Award in which you are enrolled, eg Bachelor of Arts.

**Sub-major**
A set of related courses which comprises between 19 and 35 units of study within a bachelor degree.

**Unit**
A value assigned to a course which measures the amount of work involved in that course. Full-time students normally undertake 36 units of study per year (18 units per semester).

**GENERAL**

**Assumed knowledge**
Some programs require knowledge of certain SACE Stage 2 subjects.

**ATAR (Australian Tertiary Admission Rank)**
A ranking of all students who have completed SACE in a particular year. The minimum ATAR required for the previous year is often a guide to how well you will need to perform to gain entry into a particular program. ATARS can vary from year to year and should be used as a guide only.

**CRICOS code**
Code identifying that a University of South Australia program has been registered on the Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS).

**Direct entry**
Programs for which applications are not processed through SATAC but are made direct to the University of South Australia.

**Division**
The University of South Australia is split into four academic divisions – Business School; Education, Arts and Social Sciences; Health Sciences; and Information Technology, Engineering and the Environment – each offering a range of specialised programs.

**Free electives**
A course chosen from any on offer outside your study area, provided that individual course prerequisites are met. Free elective courses are designed to broaden your knowledge and skills beyond your professional field of study.

**Prerequisites**
SACE Stage 2 (Year 12) subjects, or equivalent qualifications required for admission into the program.

**SACE**
The South Australian Certificate of Education or a recognised equivalent qualification.

**SATAC Guide**
A publication that lists every program offered by South Australian higher education institutions. The SATAC Guide provides information about the selection process, includes instructions on how to apply and is available online at satac.edu.au and from newsagents Australia-wide.

**Special Entry (STAT)**
Special Tertiary Admissions Test (STAT) is an alternative entry for people who do not have any other qualifications for admission to university.

**UniSA Advantage**
UniSA Advantage is a two-tiered points scheme that awards Year 12 students with Achievement and Aspire bonus points. Eligible students will be awarded up to a total number of 9 points when they apply through SATAC. Bonus points are added to the student’s aggregate and a new UniSA ATAR is calculated. Visit unisa.edu.au/bonuspoints for more information.

**UniSA Preferred**
If your adjusted ATAR score (inclusive of bonus points) is equal to, or greater than, the published UniSA Preferred score, if you meet the relevant program prerequisites and list the program as your first preference, you are guaranteed a place in your selected program. Visit unisa.edu.au/preferred for more information.

**Glossary**

> **WHAT WILL YOU STUDY?**

**Associate degree**
An award for completing a two-year (or part-time equivalent) tertiary program.

**Bachelor degree**
A program of three or more years duration (or part-time equivalent). Bachelor degree programs provide the relevant qualifications for many professions.

**Diploma**
Unisa offers a range of two-year diploma programs. Diplomas offered through Unisa College provide entry into the second year of a corresponding bachelor program in allied health, arts, business or science and technology. More information on the diplomas offered by Unisa College is available at unisa.edu.au/college. The Division of Education, Arts and Social Sciences, offers a one-year Diploma in Languages which allows students to study a language concurrently with their bachelor degree program.

**Foundation Studies**
A free, one year program with no qualifications required for entry. This program assists students to develop the skills required for successful university-level study. Upon successful completion, students can apply for entry into a degree at the University of South Australia or to enter the second year of a Unisa College diploma program.

**Graduate Certificate**
An award for completing a postgraduate program of at least six months in duration (or part-time equivalent).

**Graduate Diploma**
An award for completing a postgraduate program of at least one year in duration (or part-time equivalent).

**Honours**
An additional year of study in a bachelor degree during which students specialise in a chosen area of study. In some cases, Honours study can actually be done as part of the degree.

**Master degree**
An award for completing a postgraduate program of at least two years (or part-time equivalent).

**PhD**
Doctor of Philosophy (PhD) programs normally extend over three years (or part-time equivalent) and involve significant research work.
Keep informed and stay in touch

At UniSA we've got all the tools to help you shape your career direction. Sign up to receive updates direct to your inbox. All tailored to your career interests. You’ll be the first to receive:

> Invitations to career events and information sessions
> Exclusive work experience opportunities, such as visiting our graduates in their workplace
> An insight into life on campus from students and teachers
> The latest breaking careers and industry news

Sign up now at [unisa.edu.au/mycareer](http://unisa.edu.au/mycareer)

---

**In this brochure**

> Bachelor of Business (Management of Information Technology)
> Bachelor of Information Technology
> Bachelor of Information Technology (Games and Entertainment Design)
> Bachelor of Information Technology (Mobile Applications)
> Bachelor of Information Technology (Networking and Cyber Security)
> Bachelor of Information Technology (Software Development)
> Bachelor of Information Technology (Systems Administration)
> Bachelor of Software Engineering (Honours)

---

**Complete series of brochures**

Aboriginal Studies, Australian Studies and Australian History
Accounting, Finance, Economics and Property
Art, Architecture and Design
Aviation
Communication, International Studies and Languages
Computer and Information Technology
Construction Management and Economics
Courses at Whyalla and Mount Gambier
Education
Engineering
Environmental and Geospatial Sciences
Health and Medical Sciences
Law
Management and Human Resource Management
Marketing
Psychology, Social Work and Human Services
Science and Mathematics
Tourism, Sport and Events
Urban and Regional Planning
UniSA College