Civil / Structural / Electrical / Electronic / Mechanical / Mechatronic / Advanced Manufacturing / Surveying / Construction Management / Project Management
Solve it, build it.

Your unstoppable career starts here.

$24.5B

A global leader in renewable technology, South Australia’s large-scale renewable energy projects have attracted an investment of $24.5 billion in one year alone.

The Australian Government has invested $200 billion to modernise the nation’s defence capability and workforce, in both traditional and multi-disciplinary roles.


Employment in the construction industry is predicted to grow by 10%, reflecting solid infrastructure investment.

Turn ideas into action. Inspire the next wave of engineering innovation and help shape our built environment. Learn to create smarter solutions by exploring diverse areas of engineering such as robotics, contemporary manufacturing systems, renewable energy sources, infrastructure, automation, electronics, surveying and more. You can also build strong foundations by studying construction management, delivering projects that transform cities and landscapes.

unisa.edu.au/study
The best defence

The defence industry in Australia is big business, with the Federal Government committing over $200 billion to modernise the nation’s defence capability. Investing in a growing workforce is also a key focus, with Australian workers needed in traditional roles along with intelligence, surveillance, cybersecurity and electronic warfare, project management and more.

South Australia’s defence footprint will also receive a boost, with a partnership between UniSA and Saab Australia set to deliver job-ready graduates for future defence projects.

The Saab Australia – UniSA Defence Technologies Institute, co-located at Saab’s headquarters in Mawson Lakes, will train students in the latest technological advancements to help deliver smart solutions.

UniSA and Saab will co-create teaching materials, covering in-demand areas such as augmented reality, autonomous systems, cybersecurity and complex systems engineering. Students will have the opportunity to work on real projects and complete fully-immersed internships, gaining the experience needed for major projects such as the Future Submarines and Future Frigates programs.

CONSTRUCTING THE FUTURE

Did you know that timber products lock carbon away from the atmosphere and contribute in a positive way to reducing Australia’s Green House Gas emissions? UniSA has partnered with industry to conduct timber product testing at its Materials Testing Laboratory at Mawson Lakes Campus. The $2.2 million-dollar project will be dedicated to better understanding the characteristics of structural softwood grades to ensure that future timber products supplied to the market, for things like major construction projects, are fit for purpose, comply with national standards and regulations and are more environmentally friendly.

Study project management

Graduate with the skills needed to manage multi-faceted projects across a wide range of industries through a fast-tracked postgraduate qualification in project management. Study core courses in risk management, leadership, strategy and international best practice. You can also specialise in Contract Management – the only offering of its kind in Australia. Enjoy the flexibility of online study through Open Universities Australia (OUA) and have the option of choosing the Defence Industries specialisation (only offered online).

See page 32 for more information.
A SPACE ODYSSEY

With the new Australian Space Agency making its home in Adelaide, interest in space data and technologies has skyrocketed – and UniSA is at the forefront of the next space odyssey. Each year, we play host to the annual Southern Hemisphere Space Studies Program, in partnership with the International Space University. The program brings together participants from around the world to Mawson Lakes Campus for inspiring workshops with industry experts, scientists and cutting-edge researchers. This unique learning program is open to students who share a curiosity for space, and explores key areas of space-related knowledge including exploration, spaceflight, systems engineering, policy and law.

BUILDING YOUR CAREER

UniSA offers South Australia’s only undergraduate degrees in construction management, which are also accredited by the Australian Institute of Building. Graduate with the skills to work across large infrastructure projects, redevelopments and commercial builds. Study core construction courses covering technical and non-technical topics, along with courses in both quantity and building surveying. You can also study construction management through UniSA Online.

A SUCCESSFUL START

Accelerate your ideas and launch a startup business with in-house support from UniSA’s global experts. Venture Catalyst is an incubator program led by UniSA’s Innovation & Collaboration Centre (ICC), providing support to entrepreneurs to develop their business ideas from concept to reality. The program offers workshops, one-on-one mentoring, office space in the co-working environment at ICC, and opportunities to travel overseas. You’ll be assisted by industry experts as you take your idea from generation through to growth and expansion.

unisa.edu.au/icc
Learn a language
Develop the skills you need to work internationally and increase your career opportunities by studying a second language. Learn French, Italian, Japanese or English (for speakers of English as a second language) through a Diploma in Languages. Access the Multimedia Languages Lab at Magill Campus and connect with native speakers from around the world in real-time. Graduate with an additional qualification by studying the diploma alongside your undergraduate degree.
unisa.edu.au/languages

Experience student life
Enjoy life beyond the classroom by getting involved in campus culture. Connect with new people at Orientation, keep active with UniSA Sport and on-campus fitness centres, or find your tribe with more than 100 student clubs to choose from. Discover our wide range of events throughout the year and connect with our student association, USASA.
unisa.edu.au/studentexperience

Get career ready
Prepare for your future career from first year with support from our Career Services team. Access our online Career Hub for self-help resources, including tips on resume writing and an interview simulator. There are also professional and exclusive job listings. Connect with a career adviser for help with career mapping, attend industry events to build your professional networks, and walk into one of our drop-in centres on campus for general careers advice.
unisa.edu.au/careers

“So many of the innovations we encounter in everyday life come about through engineering. Our degrees give students opportunities to collaborate and learn by doing. By using their knowledge in a real-life context, they end up with the practical skills required to launch their career.”

Liz Smith | Senior Lecturer and Program Director in Civil Engineering
GET CONNECTED
with Australia’s University of Enterprise

PRACTICAL LEARNING
UniSA offers more than 200 world-class degrees across a wide range of discipline areas. You will learn in a highly practical environment. Take the opportunity to complete an internship or placement during your studies, learning from experts in a real-world setting. Build your networks and graduate career-ready with the skills required of tomorrow’s professionals.

TOP RANKING TEACHERS
Make your study experience relevant, and learn from highly qualified academics and industry professionals. In fact, UniSA is one of Australia’s best young universities for teaching quality (Ranked #2, 2019 THE Young University Rankings).

WORLD-CLASS FACILITIES
Study in modern, purpose-built facilities across all six UniSA campuses. Learn with the latest industry-standard tools and technologies that will take you from the classroom into the workplace. This includes state-of-the-art laboratories, collaborative learning areas, creative studios, workshops and simulation spaces.

POWERFUL PARTNERSHIPS
We collaborate with more than 2,500 companies worldwide to bring our students placement, project, research and work opportunities. Connect with industry professionals during your studies and benefit from curriculum informed by the latest industry practices.

REAL RESEARCH
Our research is innovative and inspired by challenges. We produce new knowledge that provides solutions to industry, businesses and the wider community. Explore cutting-edge insights in your chosen degree, influenced by our world-class research outcomes.

“A strong degree foundation is important regardless of your field, but it’s only the beginning of a lifelong learning process and the start of a rewarding and exciting career. Seeing how knowledge is used in the real world allows you to gain that perspective, as well as discover different directions about where your degree can take you.”

Brad Yelland | Chief Technology Officer | BAE Systems Australia
GET CONNECTED with Australia's University of Enterprise

COLLABORATING WITH OVER 2,500 COMPANIES WORLDWIDE

PRACTICAL LEARNING
UniSA offers more than 200 world-class degrees across a wide range of discipline areas. You will learn in a highly practical environment. Take the opportunity to complete an internship or placement during your studies, learning from experts in a real-world setting. Build your networks and graduate career-ready with the skills required of tomorrow's professionals.

TOP RANKING
Teachers
Make your study experience relevant, and learn from highly qualified academics and industry professionals. In fact, UniSA is one of Australia's best young universities for teaching quality (Ranked #2, 2019 THE Young University Rankings).

WORLD-CLASS FACILITIES
Study in modern, purpose-built facilities across all six UniSA campuses. Learn with the latest industry-standard tools and technologies that will take you from the classroom into the workplace. This includes state-of-the-art laboratories, collaborative learning areas, creative studios, workshops and simulation spaces.

POWERFUL PARTNERSHIPS
We collaborate with more than 2,500 companies worldwide to bring our students placement, project, research and work opportunities. Connect with industry professionals during your studies and benefit from curriculum informed by the latest industry practices.

REAL RESEARCH
Our research is innovative and inspired by challenges. We produce new knowledge that provides solutions to industry, businesses and the wider community. Explore cutting-edge insights in your chosen degree, influenced by our world-class research outcomes.

No.1 IN SA FOR EMPLOYER SATISFACTION
2019 QILT Employer Satisfaction Survey – Overall Satisfaction Indicator.
Jump on the tram

Take advantage of the new city tram service operating along North Terrace for a convenient ride between City East and City West campuses or stop at other destinations along the way. Visit the Adelaide Metro website for more information.

Find out more at adelaidemetro.com.au

Public transport

You will find bus stops near each campus and train stations close to the city and Mawson Lakes campuses. Check your bus, train or tram options on the Adelaide Metro website. You can also get student discounts on tickets once you have enrolled.

Find out more at adelaidemetro.com.au
MAP YOUR STUDY JOURNEY

FLEXIBLE ENTRY
Want to study engineering but not sure what specialisation to choose?

Study our one-year Bachelor of Engineering (Honours) (Flexible Entry) and keep your options open. You will receive full credit for successfully completed courses before transferring into your chosen specialisation in second year.

FIRST YEAR
Study common engineering courses

TRANSFER
Transfer into your chosen specialisation in areas such as civil, surveying, electrical or mechanical engineering, and graduate with a Bachelor of Engineering (Honours) degree after an additional three years of study.

CIVIL ENGINEERING

STUDY

Bachelor of Engineering (Honours) (Civil)

CHOOSE

A major
Study core courses and choose one of the following majors:
- Business Innovation
- Construction Management
- Structural Engineering
- Surveying

A flexible study plan
Study core courses + eight electives in areas that interest you most

We also offer a Bachelor of Engineering (Honours) (Civil and Structural) and Bachelor of Engineering (Honours) (Civil and Construction Management)

UniSA MATHS SHORT COURSE
Want to study an engineering degree but didn't complete the SACE Stage 2 Mathematical Methods prerequisite? If you have completed 20 credits of SACE Stage 1 Mathematics, we offer a unique short course for you to complete the required prerequisite before starting your degree. You will learn alongside highly qualified tutors in small groups over the summer period before Semester 1 kicks off.
For more information, visit unisa.edu.au/maths-short-course

ASSOCIATE DEGREE IN ENGINEERING
Didn't get the score you need to study engineering or complete the SACE Stage 2 Mathematical Methods prerequisite, but completed 20 credits of SACE Stage 1 Mathematics? Study a two-year associate degree at UniSA and transfer into the second year of your chosen Bachelor of Engineering (Honours) degree with credit for successfully completed courses.
See page 12 for more information.
Learn more at unisa.edu.au/engineering

**ELECTRICAL AND ELECTRONIC ENGINEERING**

**STUDY**

Bachelor of Engineering (Honours) (Electrical and Electronic)

**A major**

Study core courses and choose one of the following majors:
- Computer Engineering
- Power Engineering
- Telecommunications

**A flexible study plan**

Study core courses and electives + choose a minor in either Optical Engineering or Business Innovation

We also offer a Bachelor of Engineering (Honours) (Electrical and Mechatronic)

**MECHANICAL ENGINEERING**

**STUDY**

Bachelor of Engineering (Honours) (Mechanical)

**A major**

Study core courses and choose one of the following majors:
- Energy Systems
- Engineering Management
- Mechanical Design

**A flexible study plan**

Study core courses and electives + a minor in Business Innovation

We also offer a Bachelor of Engineering (Honours) (Mechanical and Mechatronic) and Bachelor of Engineering (Honours) (Mechanical and Advanced Manufacturing)

**INTERESTED IN SURVEYING?**

You can also choose to study the Bachelor of Engineering (Honours) (Surveying) degree, which builds on a strong foundation of civil engineering while gaining specialised knowledge in capturing data to help shape and contour different land environments. For more information, see page 18.
Associate Degree in Engineering

unisa.edu.au/engineering

Mawson Lakes Campus
On-campus
2 years full-time

Intakes: Feb, Jul
Real-world projects

Selection Rank:
cut-off 2020 ............................................ 60.30
guaranteed entry ................................ 65.00

VET:
guaranteed entry ........................................... CIV

SATAC code ............................................ 435021
Program code ........................................... LTEN

UniSA College pathways: Foundation Studies
Prerequisites: SACE Stage 1 Mathematics or equivalent
Assumed knowledge: none

Kick-start your studies in engineering with an associate degree, before transitioning into a Bachelor of Engineering (Honours) to become a fully-qualified engineer or start a professional career in civil engineering, electrical engineering, mechanical engineering, or surveying. Graduate with credit (up to 1.5 years) for successfully completed courses that you can use towards your bachelor degree (entry criteria apply). Study introductory courses in engineering, mathematics, physics and chemistry in your first year and then complete core courses in your chosen specialisation in second year. Benefit from flexible learning options including on-campus, some online or blended study.

Bachelor specialisations:
• Civil
• Civil and Structural
• Civil and Construction Management
• Electrical and Electronic
• Electrical and Mechatronic
• Mechanical
• Mechanical and Advanced Manufacturing
• Mechanical and Mechatronic
• Surveying

CAREERS
Construction supervisor / project coordinator / site supervisor / maintenance engineer / technical support engineer / project scheduler / estimator

DEGREE STRUCTURE

FIRST YEAR

Essential Mathematics 1: Algebra and Trigonometry
Introduction to Engineering Physics
Programming Concepts
Sustainable Engineering Practice

SECOND YEAR

Engineering Materials
Mathematical Methods for Engineers 1
Introduction to Surveying and Spatial Sciences
Engineering and Environmental Geology
Mathematical Methods for Engineers 2
Engineering Mechanics
Professional Engineering Design Practice
Fluid and Energy Engineering
Bachelor of Engineering (Honours) (Flexible Entry)

unisa.edu.au/engineering

Mawson Lakes Campus
On-campus
4 years full-time*

Intakes: Feb, Jul
Professional Practice Program

Selection Rank:
cut-off 2020 .................. 70.95
guaranteed entry .............. 70.00

SATAC code ......................... 434242
Program code ....................... LHEF
VET: guaranteed entry ........... Dip

UniSA College pathways: Foundation Studies or Diploma in Engineering
UniSA pathways: Associate Degree in Engineering
SAITB pathways: Diploma of Technology

Prerequisites: SACE Stage 2 Mathematical Methods
The UniSA Maths Short Course is available for students who do not have the mathematics prerequisites. See page 10.

Assumed knowledge: SACE Stage 2 Physics

*Transfer into your chosen engineering specialisation at the end of 12 months’ full-time study.

Study the first year of your engineering degree in a flexible program that introduces you to key engineering concepts, then transfer into a Bachelor of Engineering (Honours) with a specialisation of your choice to complete your qualification. Complete common first year courses and receive a full year of study credit. Learn about the fundamentals in engineering practices, mathematics, engineering materials, computer applications, engineering design and innovation, mechanics, and electronic systems. Go on to graduate with honours after an additional three years of study with a specialisation focusing on civil engineering, electrical engineering, mechanical engineering, or surveying. Gain practical experience through real engineering projects, professional practice or overseas study exchange. Benefit from a degree accredited by Engineers Australia and be eligible to apply for graduate membership. You will also be eligible for membership with comparable international institutions.

Specialisations:
• Civil
• Civil and Construction Management
• Civil and Structural
• Electrical and Electronic
• Electrical and Mechatronic
• Mechanical
• Mechanical and Advanced Manufacturing
• Mechanical and Mechatronic
• Surveying

CAREERS

Depending on your chosen specialisation, you can go on to a career in the following roles:
Civil engineer / construction manager / project engineer / civil project manager / structural engineer / electrical engineer / electrical design engineer / mechanical engineer / mechatronics engineer / industrial engineer / renewable energy engineer / automation engineer / robotics engineer / electronics engineer / surveyor

Looking for alternative entry?

Preference a packaged Diploma in Engineering/Bachelor of Engineering (Honours) (Flexible Entry).
For more information, visit unisa.edu.au/college

SATAC code: 426068

DEGREE STRUCTURE

FIRST YEAR

Programming Concepts
Engineering Materials
Mathematical Methods for Engineers 1
Sustainable Engineering Practice
Electrical and Electronic Systems
Engineering Mechanics
Mathematical Methods for Engineers 2
Engineering Design and Innovation

Following the successful completion of the common first-year engineering courses, you will then transfer into your preferred specialisation in either civil engineering, electrical engineering, mechanical engineering, or surveying.

Looking for alternative entry?

Preference a packaged Diploma in Engineering/Bachelor of Engineering (Honours) (Flexible Entry).
For more information, visit unisa.edu.au/college

SATAC code: 426068
Bachelor of Engineering (Honours) (Civil)

unisa.edu.au/engineering

Mawson Lakes Campus

Intakes: Feb, Jul

On-campus

Professional Practice Program

4 years full-time

Selection Rank:

cut-off 2020 ............................................ 70.85

guaranteed entry ................................ 75.00

VET:

guaranteed entry .................................... Dip

SATAC code: 434481

Program code: LHMI

part-time study available

Unisa College pathways: Foundation Studies or Diploma in Engineering

UniSA pathways: Associate Degree in Engineering

SAIT pathways: Diploma of Technology

Prerequisites: SACE Stage 2 Mathematical Methods

The UniSA Maths Short Course is available for students who do not have the Stage 2 mathematics prerequisite. See page 10.

Assumed Knowledge: SACE Stage 2 Physics

Learn to design and maintain critical infrastructure such as bridges, buildings, airports, roads, railways and water systems. Focus on core courses in road design, soil mechanics, hydraulics and hydrology, geotechnical engineering, and reinforced concrete design. Tailor your studies by choosing a major study area in either Surveying, Business Innovation, Structural Engineering, or Construction Management. Access industry-standard facilities on campus, including the largest strong floor in Australia, along with high-tech testing and computer-modelling equipment. Graduate career-ready by completing the Professional Practice Program as part of your degree. Gain at least 450 hours of skills and competencies through a range of engagement activities such as placements, internships, guest lectures, industry panels, site visits, networking and events. All our engineering specialisations feature opportunities to complete projects that tackle engineering challenges for real clients, from the tender phase through to feasibility, concept development and detailed design. Go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide. Graduate with a degree accredited by Engineers Australia and be eligible for membership with comparable international institutions.

CAREERS

Civil engineer / geotechnical engineer / water resources engineer / environmental engineer / engineering consultant / project engineer / transport engineer / structural engineer / project coordinator

YOU MIGHT ALSO LIKE

• Bachelor of Engineering (Honours) (Civil and Construction Management)
• Bachelor of Engineering (Honours) (Civil and Structural)
• Bachelor of Engineering (Honours) (Surveying)
• Bachelor of Construction Management (Honours)

FURTHER STUDY

• Master of Engineering – civil specialisations
• Master of Engineering (Engineering Management)
• Master of Applied Project Management
• Master of Surveying

DEGREE STRUCTURE

FIRST YEAR

Programming Concepts

Engineering Materials

Mathematical Methods for Engineers 1

Sustainable Engineering Practice

Mathematical Methods for Engineers 2

Engineering Mechanics

Electrical and Electronic Systems

Engineering Design and Innovation

SECOND YEAR

Engineering Modelling

Mechanics of Materials

2 x Major

Introduction to Water Engineering

Road Design and Traffic Management

Professional Engineering Design Practice

Major

THIRD YEAR

Business Management for Engineers

Soil Mechanics

Steel and Timber Design

Hydraulics and Hydrology

Water Resources Systems Design

Geotechnical Engineering

Reinforced Concrete Design

Major

FOURTH YEAR

Industrial Experience N

Engineering Capstone Experience A

Engineering Honours Project A

2 x Major

Engineering Capstone Experience B

Engineering Honours Project B

2 x Major

4+1 Pathway to Masters

Package a Bachelor of Engineering (Honours) (Civil) + Master of Engineering (Civil and Infrastructure) or (Water Resource Management) and graduate in just five years.

Learn more at unisa.edu.au/engineering4plus1

SATAC code: 434013 (Civil)

SATAC code: 434014 (Water)
Bachelor of Engineering (Honours) (Civil and Construction Management)

unisa.edu.au/engineering

Mawson Lakes Campus
On-campus
4 years full-time

Intakes: Feb, Jul
Professional Practice Program

Selection Rank:
cut-off 2020 ............................................ 74.85
guaranteed entry ........................................ 75.00

VET:
guaranteed entry ............................................. Dip

SATAC code: 434151
Program code: LHMI

Guaranteed entry: 75.00
Part-time study available

UniSA College pathways: Foundation Studies or Diploma in Engineering
UniSA pathways: Associate Degree in Engineering
SAIBT pathways: Diploma of Technology

Prerequisites: SACE Stage 2 Mathematical Methods
The UniSA Maths Short Course is available for students who do not have the Stage 2 mathematics prerequisite. See page 10

Assumed Knowledge: SACE Stage 2 Physics

Study South Australia’s only degree combining civil engineering and construction management. Learn to plan, implement and deliver major construction projects while meeting critical deadlines and budgets. Develop a strong foundation of engineering knowledge in your first year, with specialist construction management courses such as Construction Scheduling and Advanced Construction Management starting in third year. Access industry-standard facilities on campus, including the largest strong floor in Australia, along with high-tech testing and computer-modelling equipment. Graduate career-ready by completing the Professional Practice Program as part of your degree. All our engineering specialisations feature opportunities to complete projects that tackle engineering challenges for real clients, from the tender phase through to feasibility, concept development and detailed design. Go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide. Graduate with a degree accredited by Engineers Australia and be eligible to apply for membership. You will also be eligible for membership with comparable international institutions.

CAREERS
Civil project manager / civil construction manager / civil engineer / geotechnical engineer / project engineer / engineering consultant / project coordinator / capital works manager

YOU MIGHT ALSO LIKE
- Bachelor of Engineering (Honours) (Civil)
- Bachelor of Engineering (Honours) (Civil and Structural)
- Bachelor of Construction Management (Honours)
- Bachelor of Engineering (Honours) (Surveying)

FURTHER STUDY
- Master of Engineering – civil specialisations
- Master of Engineering (Engineering Management)
- Master of Applied Project Management

DEGREE STRUCTURE

FIRST YEAR
- Programming Concepts
- Engineering Materials
- Mathematical Methods for Engineers 1
- Sustainable Engineering Practice
- Mathematical Methods for Engineers 2
- Engineering Mechanics
- Electrical and Electronic Systems
- Engineering Design and Innovation

SECOND YEAR
- Engineering Modelling
- Mechanics of Materials
- Introduction to Surveying and Spatial Sciences
- Engineering and Environmental Geology
- Introduction to Water Engineering
- Road Design and Traffic Management
- Civil Engineering Techniques
- Professional Engineering Design Practice

THIRD YEAR
- Business Management for Engineers
- Soil Mechanics
- Steel and Timber Design
- Hydraulics and Hydrology
- Water Resources Systems Design
- Geotechnical Engineering
- Reinforced Concrete Design
- Construction Scheduling
- Industrial Experience N
- Engineering Capstone Experience A
- Engineering Honours Project A
- Contract Administration
- Principles of Project Management
- Engineering Capstone Experience B
- Engineering Honours Project B
- Advanced Construction Management
- Building Estimating

FOURTH YEAR
- 4+1 Pathway to Masters

Package a Bachelor of Engineering (Honours) (Civil and Construction Management) + Master of Engineering (Civil and Infrastructure) and graduate in just five years.
Learn more at unisa.edu.au/engineering4plus1
SATAC code: 434005

YOU MIGHT ALSO LIKE
- Bachelor of Engineering (Honours) (Civil)
- Bachelor of Engineering (Honours) (Civil and Structural)
- Bachelor of Construction Management (Honours)
- Bachelor of Engineering (Honours) (Surveying)

FURTHER STUDY
- Master of Engineering – civil specialisations
- Master of Engineering (Engineering Management)
- Master of Applied Project Management

DEGREE STRUCTURE

FIRST YEAR
- Programming Concepts
- Engineering Materials
- Mathematical Methods for Engineers 1
- Sustainable Engineering Practice
- Mathematical Methods for Engineers 2
- Engineering Mechanics
- Electrical and Electronic Systems
- Engineering Design and Innovation

SECOND YEAR
- Engineering Modelling
- Mechanics of Materials
- Introduction to Surveying and Spatial Sciences
- Engineering and Environmental Geology
- Introduction to Water Engineering
- Road Design and Traffic Management
- Civil Engineering Techniques
- Professional Engineering Design Practice

THIRD YEAR
- Business Management for Engineers
- Soil Mechanics
- Steel and Timber Design
- Hydraulics and Hydrology
- Water Resources Systems Design
- Geotechnical Engineering
- Reinforced Concrete Design
- Construction Scheduling
- Industrial Experience N
- Engineering Capstone Experience A
- Engineering Honours Project A
- Contract Administration
- Principles of Project Management
- Engineering Capstone Experience B
- Engineering Honours Project B
- Advanced Construction Management
- Building Estimating

FOURTH YEAR
- 4+1 Pathway to Masters

Package a Bachelor of Engineering (Honours) (Civil and Construction Management) + Master of Engineering (Civil and Infrastructure) and graduate in just five years.
Learn more at unisa.edu.au/engineering4plus1
SATAC code: 434005
Bachelor of Engineering (Honours) (Civil and Structural)

unisa.edu.au/engineering

Mawson Lakes Campus
On-campus
4 years full-time

Intakes: Feb, Jul
Professional Practice Program

Selection Rank:
cut-off 2020 ............................................ 88.25
guaranteed entry ...................................... 75.00

VET:
guaranteed entry ....................................... Dip

SATAC code:......................... 434941
Program code:...................... LHMI

UniSA College pathways: Foundation Studies or Diploma in Engineering
UniSA pathways: Associate Degree in Engineering
SAIT pathways: Diploma of Technology
Prerequisites: SACE Stage 2 Mathematical Methods
The UniSA Maths Short Course is available for students who do not have the Stage 2 mathematics prerequisite. See page 10.
Assumed knowledge: SACE Stage 2 Physics

Build a career constructing, managing and maintaining the civil infrastructure that supports modern living. Develop the skills to design the formation of structures like bridges, buildings, airports, tunnels, ports and water systems. Study specialist structural engineering courses covering structural analysis, earthquake and masonry engineering, and advanced steel and concrete structures. Learn how to manage the social, environmental and financial components of large-scale construction projects to ensure they are delivered with a minimal footprint, on time and on budget. Access industry-standard facilities on campus, including the largest strong floor in Australia, along with high-tech testing and computer-modelling equipment. Graduate career-ready by completing the Professional Practice Program as part of your degree. Gain at least 450 hours of skills and competencies through a range of engagement activities such as placements, internships, guest lectures, industry panels, site visits, networking and events. All our engineering specialisations feature opportunities to complete projects that tackle engineering challenges for real clients, from the tender phase through to feasibility, concept development and detailed design. Go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide. Graduate with a degree accredited by Engineers Australia and be eligible for graduate membership. You will also be eligible for membership with comparable international institutions.

CAREERS
Structural engineer / civil engineer / structural design engineer / civil designer / construction manager / environmental engineer / transport engineer / geotechnical engineer / project coordinator

YOU MIGHT ALSO LIKE
- Bachelor of Engineering (Honours) (Civil and Construction Management)
- Bachelor of Construction Management (Honours)
- Bachelor of Engineering (Honours) (Surveying)

FURTHER STUDY
- Master of Engineering – civil specialisations
- Master of Engineering (Engineering Management)
- Master of Applied Project Management

DEGREE STRUCTURE

FIRST YEAR
- Programming Concepts
- Engineering Materials
- Mathematical Methods for Engineers 1
- Sustainable Engineering Practice
- Mathematical Methods for Engineers 2
- Engineering Mechanics
- Electrical and Electronic Systems
- Engineering Design and Innovation

SECOND YEAR
- Engineering Modelling
- Mechanics of Materials
- Introduction to Surveying and Spatial Sciences
- Engineering and Environmental Geology
- Introduction to Water Engineering
- Road Design and Traffic Management
- Civil Engineering Techniques
- Professional Engineering Design Practice

THIRD YEAR
- Business Management for Engineers
- Soil Mechanics
- Steel and Timber Design
- Hydraulics and Hydrology
- Water Resources Systems Design
- Geotechnical Engineering
- Reinforced Concrete Design
- Structural Analysis
- Industrial Experience
- Engineering Capstone Experience A
- Engineering Honours Project A
- Civil Engineering Elective 1
- Advanced Concrete Structures
- Engineering Capstone Experience B
- Engineering Honours Project B
- Earthquake and Masonry Engineering
- Advanced Steel Structures

FOURTH YEAR
- 4+1 Pathway to Masters
  Package a Bachelor of Engineering (Honours) (Civil and Structural) + Master of Engineering (Civil and Infrastructure) and graduate in just five years.
  Learn more at unisa.edu.au/engineering4plus1
  SATAC code: 434006
Bachelor of Engineering (Honours) (Civil)
Bachelor of Business

unisa.edu.au/engineering

Mawson Lakes Campus
On-campus
5 years full-time

Intakes: Feb, Jul
Professional Practice Program

Selection Rank: cut-off 2020
NEW guaranteed entry 75.00
VET: guaranteed entry 75.00

SATAC code: 434016
Program code: LBCB

unisa.edu.au/apply

Cindy Oliver
civil engineering graduate

"My degree was very practical, which has been useful in my career. You’re provided with the foundation needed to become an engineer and, once you’re working, everything makes sense when you apply your skills to real situations. You can go anywhere with civil engineering because it’s such a broad area of practice, it’s really unlimited."

Cindy Oliver
civil engineering graduate

Complete a double degree combining civil engineering with business in just five years of study. Learn to work creatively and sustainably in the design, construction and maintenance of critical infrastructure, including bridges and roads. Give yourself a competitive edge by also building core knowledge in marketing, management, international business and entrepreneurship, in order to develop the skills needed to work in diverse, interdisciplinary teams in the global business environment. Graduate career-ready by completing the Professional Practice Program as part of your degree. Gain at least 450 hours of skills and competencies through a range of engagement activities such as placements, internships, guest lectures, industry panels, site visits, networking and events. You can also go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide.

CAREERS
Civil engineer / geotechnical engineer / water resources engineer / environmental engineer / business development engineer / engineering operations manager / engineering consultant

YOU MIGHT ALSO LIKE
• Bachelor of Engineering (Honours) (Civil and Construction Management)
• Bachelor of Construction Management (Honours)

FURTHER STUDY
• Master of Engineering – civil specialisations
• Master of Engineering (Engineering Management)
• Master of Applied Project Management

DEGREE STRUCTURE

FIRST YEAR
- Programming Concepts
- Engineering Materials
- Mathematical Methods for Engineers 1
- Sustainable Engineering Practice
- Engineering Mechanics
- Electrical and Electronic Systems
- Engineering Design and Innovation

SECOND YEAR
- Engineering Modelling
- Mechanics of Materials
- Accounting for Business Principles of Economics
- Introduction to Water Engineering
- Road Design and Traffic Management
- Business and Society
- Professional Engineering Design Practice

THIRD YEAR
- Business Management for Engineers
- Civil Mechanics
- Steel and Timber Design
- Hydraulics and Hydrology
- Water Resources Systems Design
- Geotechnical Engineering
- Reinforced Concrete Design
- Business Law

FOURTH YEAR
- Industrial Experience N
- Engineering Capstone Experience A
- Engineering Honours Project A
- Marketing Principles: Trading and Exchange
- Civil Engineering Elective

- Engineering Capstone Experience B
- Engineering Honours Project B
- Entrepreneurship for Social and Market Impact
- Civil Engineering Elective

- International Business Environments
- Strategic Management
- 2 x Business Electives
- 2 x Business Electives
- 2 x Advanced Business Electives

UNISA College pathways: Foundation Studies or Diploma in Engineering
UNISA pathways: Associate Degree in Engineering
Prerequisites: SACE Stage 2 Mathematical Methods
The Unisa Maths Short Course is available for students who do not have the Stage 2 mathematics prerequisite. See page 10
Assumed Knowledge: SACE Stage 2 Physics

part-time study available

17 unisa.edu.au/apply
Bachelor of Engineering (Honours) (Surveying)

unisa.edu.au/engineering

Mawson Lakes Campus
On-campus
4 years full-time

Intakes: Feb, Jul
Professional Practice Program

Selection Rank:
cut-off 2020 ............................................ 78.00
guaranteed entry ................................ 75.00

SATAC code: 434002
Program code: LHES

VET: 
guaranteed entry .................................... Dip

part-time study available

UniSA College pathways: Foundation Studies or Diploma in Engineering
UniSA pathways: Associate Degree in Engineering

Prerequisites: SACE Stage 2 Mathematical Methods
The UniSA Maths Short Course is available for students who do not have the Stage 2 mathematics prerequisite. See page 10.

Assumed knowledge: SACE Stage 2 Physics

Study SA’s only undergraduate degree providing a pathway to become a licensed surveyor. Learn to capture data about the shape and contour of different land environments for engineering, mapmaking and construction projects. You will study core courses in civil engineering and develop highly specialised knowledge in surveying, remote sensing, cartography and photogrammetry, along with business management to prepare you for the workplace. Explore key concepts such as modelling, spatial data analysis, engineering design and law. Graduate career-ready by completing the Professional Practice Program as part of your degree. Gain at least 450 hours of skills and competencies through a range of engagement activities such as placements, internships, guest lectures, industry panels, site visits, networking and events. All our engineering specialisations feature opportunities to complete projects that tackle engineering challenges for real clients, from the tender phase through to feasibility, concept development and detailed design. Go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide. Graduate with a degree recognised by the Surveyors Board of South Australia and continue your professional training to become a certified surveyor.

Note: Graduates will be eligible to apply to the Surveyors Board of South Australia to complete training in cadastral surveying, which can lead to formal licensing as a Surveyor.

CAREERS
Licensed surveyors can work in a variety of settings, including:
- Construction companies / private consultancies / government departments / councils / engineering firms / environmental protection agencies

YOU MIGHT ALSO LIKE
- Bachelor of Engineering (Honours) (Civil)
- Bachelor of Engineering (Honours) (Civil and Construction Management)
- Bachelor of Construction Management (Honours)
- Bachelor of Environmental Science

FURTHER STUDY
- Master of Surveying
- Master of Engineering – civil specialisations
- Master of Engineering (Engineering Management)
- Master of Applied Project Management

DEGREE STRUCTURE

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<td>GNSS and Advanced Surveying Technologies</td>
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NEW
“Through my degree, I’ve been on plenty of field trips that have taken me all across South Australia. This has allowed me to see and explore places that I never would have gone to. All of the teaching staff are either working or have worked in the surveying industry, which has also provided great insight.”

Michael Button
surveying student
Bachelor of Engineering (Honours) (Electrical and Electronic)

unisa.edu.au/engineering

Mawson Lakes Campus
On-campus
4 years full-time

Intakes: Feb, Jul

Professional Practice Program

Selection Rank:

VET: guaranteed entry..........................Dip

SATAC code.................................434951

Program code...............................LHIF

guaranteed entry..........................75.00

VET: guaranteed entry..........................Dip

Unisa College pathways: Foundation Studies or Diploma in Engineering

UniSA pathways: Associate Degree in Engineering

SAIBT pathways: Diploma of Technology

Prerequisites: SACE Stage 2 Mathematical Methods

The UniSA Maths Short Course is available for students who do not have the Stage 2 mathematics prerequisite. See page 10.

Assumed Knowledge: SACE Stage 2 Physics

Graduate as an electrical and electronics engineer, focused on the design, development and optimisation of electrical and electronic devices, equipment, technology and systems. Learn about the generation, transmission and distribution of electrical energy. Study analog electronics, digital electronics, embedded systems, electrical machines, computer networking, signal processing and control systems, and prepare for Industry 4.0 using cutting-edge software platforms and collaborative digital environments. Access our industry-standard facilities, including the Robotics and Machine Vision and the Sustainable Energy Systems learning spaces. Graduate career-ready by completing the Professional Practice Program as part of your degree. Gain at least 450 hours of skills and competencies through a range of engagement activities such as placements, internships, guest lectures, industry panels, site visits, networking and events. Take the opportunity to complete projects that tackle engineering challenges for real clients, from the tender phase through to feasibility, concept development and detailed design. Go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide. Graduate with a degree accredited by Engineers Australia and be eligible for graduate membership, along with comparable membership with international institutions.

CAREERS

Electrical engineer / electrical design engineer / electronics engineer / power systems engineer / renewable energy engineer / control systems engineer / telecommunications engineer

YOU MIGHT ALSO LIKE

- Bachelor of Engineering (Honours) (Electrical and Mechatronic)
- Bachelor of Software Engineering (Honours)

FURTHER STUDY

- Master of Engineering – electrical specialisations
- Master of Engineering (Engineering Management)
- Master of Applied Project Management
- Master of Defence Systems Integration

DEGREE STRUCTURE

FIRST YEAR

Programming Concepts
Engineering Materials
Mathematical Methods for Engineers 1
Sustainable Engineering Practice

Mathematical Methods for Engineers 2
Engineering Mechanics
Electrical and Electronic Systems Engineering Design and Innovation

Mathematical Methods for Engineers 3
Circuits and Signals
Engineering Physics

Major

Analogue Devices and Circuits
Digital Logic Fundamentals
Data Communication Technologies
Professional Engineering Design Practice

SECOND YEAR

Control Systems
Microcontroller Interfacing and Applications
Electrical Machines

Major

Embedded System Design
Business Management for Engineers
2 x Major

Industrial Experience
Engineering Capstone Experience A
Engineering Honours Project A
2 x Major

Engineering Capstone Experience B
Engineering Honours Project B
2 x Major

THIRD YEAR

FOURTH YEAR

Electrical and Electronic Systems Engineering Design and Innovation

Mathematical Methods for Engineers 2
Engineering Mechanics
Electrical and Electronic Systems Engineering Design and Innovation

Mathematical Methods for Engineers 3
Circuits and Signals
Engineering Physics

Major

Mechanical Engineering Practice
Robotics and Autonomous Systems

Industrial Experience
Engineering Capstone Experience A
Engineering Honours Project A
Advanced Control and Signal Processing
Machine Learning and Vision Systems

Engineering Capstone Experience B
Engineering Honours Project B
Mobile Autonomous Robotic Systems
Integrated Industrial Actuation

Bachelor of Engineering (Honours) (Electrical and Mechatronic)

unisa.edu.au/engineering

Mawson Lakes Campus
On-campus
4 years full-time

Intakes: Feb, Jul

Professional Practice Program

Selection Rank:

VET: guaranteed entry..........................Dip

SATAC code.................................434951

Program code...............................LHIF

guaranteed entry..........................75.00

VET: guaranteed entry..........................Dip

Unisa College pathways: Foundation Studies or Diploma in Engineering

UniSA pathways: Associate Degree in Engineering

SAIBT pathways: Diploma of Technology

Prerequisites: SACE Stage 2 Mathematical Methods

The UniSA Maths Short Course is available for students who do not have the Stage 2 mathematics prerequisite. See page 10.

Assumed Knowledge: SACE Stage 2 Physics

Combine studies in electrical and mechatronic engineering, studying the fundamental principles underlying the generation, transmission, distribution and utilisation of electrical energy. Learn how to design, develop, control and integrate electromechanical devices and platforms, including automation systems and robots. Prepare for Industry 4.0 using cutting-edge software for 3D design, analysis, simulation and collaborative digital environments. Access our industry-standard facilities, including the Robotics and Machine Vision and the Sustainable Energy Systems learning spaces. Graduate career-ready by completing the Professional Practice Program as part of your degree. Gain at least 450 hours of skills and competencies through a range of engagement activities such as placements, internships, guest lectures, industry panels, site visits, networking and events. Take the opportunity to complete projects that tackle engineering challenges for real clients, from the tender phase through to feasibility, concept development and detailed design. Go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide. Graduate with a degree accredited by Engineers Australia and be eligible for graduate membership, along with comparable membership with international institutions.

CAREERS

Mechatronics engineer / mechatronic device designer / power systems engineer / renewable energy engineer / control systems engineer / robotics engineer / electronics engineer

YOU MIGHT ALSO LIKE

- Bachelor of Engineering (Honours) (Electrical and Electronic)
- Bachelor of Engineering (Honours) (Mechanical and Mechatronic)

FURTHER STUDY

- Master of Engineering – electrical specialisations
- Master of Engineering (Engineering Management)
- Master of Applied Project Management
- Master of Defence Systems Integration

DEGREE STRUCTURE

FIRST YEAR

Programming Concepts
Engineering Materials
Mathematical Methods for Engineers 1
Sustainable Engineering Practice

Mathematical Methods for Engineers 2
Engineering Mechanics
Electrical and Electronic Systems Engineering Design and Innovation

Mathematical Methods for Engineers 3
Circuits and Signals
Engineering Physics

Major

Analogue Devices and Circuits
Digital Logic Fundamentals
Data Communication Technologies
Professional Engineering Design Practice

SECOND YEAR

Control Systems
Microcontroller Interfacing and Applications
Electrical Machines

Major

Embedded System Design
Business Management for Engineers
2 x Major

Industrial Experience
Engineering Capstone Experience A
Engineering Honours Project A
2 x Major

Engineering Capstone Experience B
Engineering Honours Project B
2 x Major

THIRD YEAR

FOURTH YEAR

Electrical and Electronic Systems Engineering Design and Innovation

Mathematical Methods for Engineers 2
Engineering Mechanics
Electrical and Electronic Systems Engineering Design and Innovation

Mathematical Methods for Engineers 3
Circuits and Signals
Engineering Physics

Major

Mechanical Engineering Practice
Robotics and Autonomous Systems

Industrial Experience
Engineering Capstone Experience A
Engineering Honours Project A
Advanced Control and Signal Processing
Machine Learning and Vision Systems

Engineering Capstone Experience B
Engineering Honours Project B
Mobile Autonomous Robotic Systems
Integrated Industrial Actuation
Bachelor of Engineering (Honours) (Electrical and Electronic) Bachelor of Business

unisa.edu.au/engineering

Mawson Lakes Campus On-campus 5 years full-time

Intakes: Feb, Jul Professional Practice Program

Selection Rank:
cut-off 2020 ............................................ 81.15
guaranteed entry ................................ 75.00

VET:
guaranteed entry ..................................... Dip

SATAC code ......................... 634010
Program code .................... LBZB

✓ part-time study available

UniSA College pathways: Foundation Studies or Diploma in Engineering
UniSA pathways: Associate Degree in Engineering
Prerequisites: SACE Stage 2 Mathematical Methods
The UniSA Maths Short Course is available for students who do not have the Stage 2 mathematics prerequisite. See page 10.
Assumed Knowledge: SACE Stage 2 Physics

Complete a double degree combining electrical and electronic engineering with business in just five years of study. Focus on the design and operation of devices, equipment, technology and systems. Learn about the generation, transmission and distribution of electrical energy. Study analog electronics, digital electronics, embedded systems, electrical machines, computer networking, signal processing and control systems, and prepare for industry 4.0 using cutting-edge software platforms and collaborative digital environments. Give yourself a competitive edge by also building core knowledge in marketing, management, international business and entrepreneurship, in order to develop the skills needed to work in diverse, interdisciplinary teams in the global business environment. Graduate career-ready by completing the Professional Practice Program as part of your degree. Gain at least 450 hours of skills and competencies through a range of engagement activities such as placements, internships, guest lectures, industry panels, site visits, networking and events. Go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide.

CAREERS
Electrical engineer / electronics engineer / power system engineer / telecommunications engineer / systems engineer / business development engineer / engineering operations manager / engineering consultant

YOU MIGHT ALSO LIKE
• Bachelor of Engineering (Honours) (Electrical and Electronic)
• Bachelor of Engineering (Honours) (Electrical and Mechatronic)

FURTHER STUDY
• Master of Engineering — electrical specialisations
• Master of Engineering (Engineering Management)
• Master of Applied Project Management
• Master of Defence Systems Integration

DEGREE STRUCTURE

FIRST YEAR
Programming Concepts
Engineering Materials
Mathematical Methods for Engineers 1
Sustainable Engineering Practice
Mathematical Methods for Engineers 2
Engineering Mechanics
Electrical and Electronic Systems
Engineering Design and Innovation

SECOND YEAR
Mathematical Methods for Engineers 3
Circuits and Signals
Engineering Physics N
Software Development
Analogue Devices and Circuits
Digital Logic Fundamentals
Data Communications Technologies
Professional Engineering Design Practice

THIRD YEAR
Control Systems
Microcontroller Programming and Interfacing
Electrical Machines 1
Accounting for Business
Embedded System Design
Principles of Economics
Business and Society
Business Management for Engineers

“Engineering is so much more than maths and physics; think robots, drones and exposure to world-class technology. No two days are ever the same and the opportunities are ridiculous. The future of every economy is based on electricity and electronics, meaning that this degree will be sustainable in terms of employment for many years to come.”

Franke Agenbag
electrical and mechatronic engineering student

unisa.edu.au/apply
Bachelor of Engineering (Honours) (Mechanical)

unisa.edu.au/engineering

Mawson Lakes Campus
On-campus
4 years full-time

Intakes: Feb, Jul
Professional Practice Program

YOU MIGHT ALSO LIKE
• Bachelor of Engineering (Honours) (Mechanical and Advanced Manufacturing)
• Bachelor of Engineering (Honours) (Mechanical and Mechatronic)

FURTHER STUDY
• Master of Engineering (Engineering Management)
• Master of Applied Project Management
• Master of Defence Systems Integration

DEGREE STRUCTURE

FIRST YEAR
- Programming Concepts
- Engineering Materials
- Mathematical Methods for Engineers 1
- Sustainable Engineering Practice
- Mathematical Methods for Engineers 2
- Engineering Mechanics
- Electrical and Electronic Systems
- Engineering Design and Innovation

SECOND YEAR
- Mathematical Methods for Engineers 3
- Mechanical Engineering Practice
- Mechanics of Materials
- Major
- Engineering Dynamics
- Fluid and Energy Engineering
- Mechanical Design Practice
- Professional Engineering Design Practice

THIRD YEAR
- Control Systems
- Computer Aided Engineering Practice
- Engineering Capstone Experience A
- Engineering Honours Project A
- 2 x Major
- Industrial Experience
- Engineering Capstone Experience B
- Engineering Honours Project B
- 2 x Major

Selection Rank:
cut-off 2020 ................................. 72.75
guaranteed entry .................................... 75.00

SATAC code ................................. 434321
Program code ................................. LHMR

VET:
guaranteed entry ............................... Dip

UniSA College pathways: Foundation Studies or Diploma in Engineering
UniSA pathways: Associate Degree in Engineering
SAIBT pathways: Diploma of Technology
Prerequisites: SACE Stage 2 Mathematical Methods
The UniSA Maths Short Course is available for students who do not have the Stage 2 mathematics prerequisite. See page 10.
Assumed knowledge: SACE Stage 2 Physics

Become a mechanical engineer, creating innovative designs and mechanised solutions that use power, advanced mechanisms and digital tools. Study the key principles of motion, energy and force. Build a career designing components, machines, or systems that meet human and environmental needs such as engines, appliances, generators and production equipment. Develop the skills to take a product to market, focusing on the full production cycle from functional design and practicality to aesthetics, manufacturing and maintenance. Prepare for Industry 4.0 using cutting-edge software platforms and collaborative digital environments. Benefit from valuable practical experience by participating in the Warman Design and Build Competition, applying hands-on skills and knowledge to a complex engineering project. Access our industry-standard facilities, including the Robotics and Machine Vision, and the Sustainable Energy Systems spaces. Graduate career-ready by completing the Professional Practice Program as part of your degree. Gain at least 450 hours of skills and competencies through a range of engagement activities such as placements, internships, guest lectures, industry panels, site visits, networking and events. All our engineering specialisations feature opportunities to complete projects that tackle engineering challenges for real clients, from the tender phase through to feasibility, concept development and detailed design. Go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide. Graduate with a degree accredited by Engineers Australia and be eligible for graduate membership. You will also be eligible for membership with comparable international institutions.

CAREERS
Mechanical engineer / industrial engineer / mechanical design engineer / maintenance engineer / hydraulics engineer / energy system engineer / product development manager / entrepreneur / project coordinator

unisa.edu.au/study
Bachelor of Engineering (Honours) (Mechanical and Advanced Manufacturing)

Integrate mechanical engineering knowledge with high-precision machinery, and advanced manufacturing and management techniques. Combine information and communication technologies with automation and innovative manufacturing practices to improve products and processes. Explore the latest in manufacturing such as intelligent systems, additive manufacturing, digital manufacturing, and industrial actuation and automation. Prepare for industry 4.0 using cutting-edge software platforms and collaborative digital environments. Benefit from valuable practical experience by participating in the Warman Design and Build Competition, applying hands-on skills and knowledge to a complex engineering project. Access our industry-standard facilities, including the Robotics and Machine Vision and the Sustainable Energy Systems learning spaces. Graduate career-ready by completing the Professional Practice Program as part of your degree. Gain at least 450 hours of skills and competencies through a range of engagement activities such as placements, internships, guest lectures, industry panels, site visits, networking and events. All our engineering specialisations feature opportunities to complete projects that tackle engineering challenges for real clients, from the tender phase through to feasibility, concept development and detailed design. Go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide. Graduate with a degree accredited by Engineers Australia and be eligible for graduate membership. You will also be eligible for membership with comparable international institutions.

CAREERS
Mechanical engineer / manufacturing engineer / industrial engineer / systems engineer / CAE engineer / quality engineer / product development manager / entrepreneur / project coordinator

YOU MIGHT ALSO LIKE
• Bachelor of Engineering (Honours) (Mechanical)
• Bachelor of Engineering (Honours) (Mechanical and Mechatronic)

FURTHER STUDY
• Master of Engineering (Engineering Management)
• Master of Applied Project Management
• Master of Defence Systems Integration

DEGREE STRUCTURE

FIRST YEAR
- Programming Concepts
- Engineering Materials
- Mathematical Methods for Engineers 1
- Sustainable Engineering Practice
- Mathematical Methods for Engineers 2
- Engineering Mechanics
- Electrical and Electronic Systems
- Engineering Design and Innovation

SECOND YEAR
- Mathematical Methods for Engineers 3
- Mechanical Engineering Practice
- Mechanics of Materials
- Manufacturing Processes
- Engineering Dynamics
- Fluid and Energy Engineering
- Mechanical Design Practice
- Professional Engineering Design Practice

THIRD YEAR
- Control Systems
- Computer Aided Engineering Practice
- Energy Conversion and Management
- Intelligent Manufacturing Systems
- Mechanics of Machines
- Advanced Thermo-Fluid Engineering
- Design in Plastics and Advanced Composites
- Business Management for Engineers

FOURTH YEAR
- Industrial Experience
- Engineering Capstone Experience A
- Engineering Honours Project A
- Total Quality Management
- Robotics and Automation
- Engineering Capstone Experience B
- Engineering Honours Project B
- Integrated Industrial Actuation
- Design for Manufacture and Assembly

UniSA College pathways: Foundation Studies or Diploma in Engineering
UniSA pathways: Associate Degree in Engineering
SAIBT pathways: Diploma of Technology
Prerequisites: SACE Stage 2 Mathematical Methods
The UniSA Maths Short Course is available for students who do not have the Stage 2 mathematics prerequisite. See page 10.
Assumed knowledge: SACE Stage 2 Physics

SATAC code: ................. 434791
Program code: ................. LHMR
VET: guaranteed entry ............... Dip

Selection Rank:
cut-off 2020 ................. 77.95
guaranteed entry ............... 75.00
part-time study available

UniSA College pathways: Foundation Studies or Diploma in Engineering
UniSA pathways: Associate Degree in Engineering
SAIBT pathways: Diploma of Technology
Prerequisites: SACE Stage 2 Mathematical Methods
The UniSA Maths Short Course is available for students who do not have the Stage 2 mathematics prerequisite. See page 10.
Assumed knowledge: SACE Stage 2 Physics

Selection Rank:
cut-off 2020 ................. 77.95
guaranteed entry ............... 75.00
part-time study available
Bachelor of Engineering (Honours) (Mechanical and Mechatronic)

Mawson Lakes Campus
On-campus
4 years full-time

Intakes: Feb, Jul
Professional Practice Program

Selection Rank:
cut-off 2020 ............................................ 72.00
guaranteed entry ................................ 75.00

SATAC code ............................................ 434781
Program code ....................................... LHMR

VET:
guaranteed entry .................................... 75.00

part-time study available

UniSA College pathways: Foundation Studies or Diploma in Technology
UniSA pathways: Associate Degree in Engineering
SAIBT pathways: Diploma of Technology

Prerequisites: SACE Stage 2 Mathematical Methods
The UniSA Maths Short Course is available for students who do not have the Stage 2 mathematics prerequisite. See page 10.

Assumed knowledge: SACE Stage 2 Physics

Learn to combine mechanical components with computing, integrated automation, and digital control to create new products and improve technical operating systems. Explore new ways to make systems smarter and improve technologies that meet human and environmental needs. Study specialised courses and the latest developments in robotics, machine tool control and machine vision systems. Prepare for industry 4.0 using cutting-edge software platforms and collaborative digital environments. Benefit from valuable practical experience by participating in the Warman Design and Build Competition, applying hands-on skills and knowledge to a complex engineering project. Access our industry-standard facilities, including the Robotics and Machine Vision, and the Sustainable Energy Systems spaces. Graduate career-ready by completing the Professional Practice Program as part of your degree. Gain at least 450 hours of skills and competencies through a range of engagement activities such as placements, internships, guest lectures, industry panels, site visits, networking and events. All our engineering specialisations feature opportunities to complete projects that tackle engineering challenges for real clients, from the tender phase through to feasibility, concept development and detailed design. Go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide. Graduate with a degree accredited by Engineers Australia and be eligible for graduate membership. You will also be eligible for membership with comparable international institutions.

CAREERS
Mechanical engineer / systems engineer / mechatronic device designer / mechatronic development engineer / automation engineer / robotics engineer / electronics engineer / entrepreneur / project coordinator

YOU MIGHT ALSO LIKE
- Bachelor of Engineering (Honours) (Mechanical)
- Bachelor of Engineering (Honours) (Mechanical and Advanced Manufacturing)
- Bachelor of Engineering (Honours) (Electrical and Mechatronic)

FURTHER STUDY
- Master of Engineering (Engineering Management)
- Master of Applied Project Management
- Master of Defence Systems Integration

DEGREE STRUCTURE

FIRST YEAR
- Programming Concepts
- Engineering Materials
- Mathematical Methods for Engineers 1
- Sustainable Engineering Practice
- Mathematical Methods for Engineers 2
- Engineering Mechanics
- Electrical and Electronic Systems
- Engineering Design and Innovation

SECOND YEAR
- Mathematical Methods for Engineers 3
- Mechanics of Materials
- Circuits and Signals
- Engineering Dynamics
- Fluid and Energy Engineering
- Mechanical Design Practice
- Professional Engineering Design Practice

THIRD YEAR
- Control Systems
- Computer Aided Engineering Practice
- Energy Conversion and Management
- Electronics
- Mechanics of Machines
- Digital Logic Fundamentals
- Industrial Automation Systems
- Business Management for Engineers

FOURTH YEAR
- Industrial Experience
- Engineering Capstone Experience A
- Advanced Control and Signal Processing
- Machine Learning and Vision Systems
- Engineering Capstone Experience B
- Engineering Honours Project B
- Integrated Industrial Actuation
- Mobile Autonomous Robotic Systems
“My UniSA degree has been essential in getting me to where I am today. The hands-on approach and skills-based learning was particularly beneficial when applied to real-world engineering issues. My biggest career highlight to date is being involved in the launch of two Hobart Class Air Warfare Destroyers, highly capable military warships built in Adelaide.”

Bradley Toole
mechanical engineering graduate
I was interested in a career within construction that was hands-on, yet still included a focus on management, so this degree was the perfect blend. My studies have taken me overseas to South Korea where I was lucky enough to experience different dynamics and cultural practices within the construction industry. I’ve also secured part-time employment as an estimator and look forward to a career in the commercial sector when I graduate.

Edward Holmes
construction management student
Bachelor of Construction Management (Honours)

unisa.edu.au/construction

City East Campus
On-campus
4 years full-time

Intakes: Feb, Jul
Professional Practice Program

Selection Rank:
cut-off 2020 ............ 82.10
guaranteed entry ........... 85.00

VET:
guaranteed entry ............ AdvDIP

Unisa College pathways: Foundation Studies or Diploma in Construction
Prerequisites: none
Assumed knowledge: none

Study South Australia’s only honours degree combining construction management, quantity surveying and building surveying. Prepare for future leadership and managerial roles in the building and construction industry and develop the technical and practical skills to manage large-scale commercial, infrastructure and residential projects. Learn about the fundamentals of construction, including building technology and building structures. Develop your knowledge in contract administration, development regulation and development economics.

Tailor your studies by choosing to focus on two key specialisation areas in your final year, including Quantity Surveying, Building Surveying or Construction Management. Graduate career-ready by completing the Professional Practice Program as part of your degree. Gain at least 450 hours of skills and competencies through a range of engagement activities such as placements, internships, guest lectures, industry panels, site visits, networking and events. Depending on your final year specialisation, you will be able to apply for corporate membership with the Australian Institute of Building, the Australian Institute of Building Surveyors (Level 1), the Australian Institute of Quantity Surveyors, and/or the Royal Institution of Chartered Surveyors (UK).

Note: Students that successfully complete the three-year Bachelor of Construction Management (BIBB) can also transfer directly into the fourth and final year of this program. Eligibility criteria apply.

CAREERS
Construction manager / capital works manager / operations manager / quantity surveyor / building surveyor / project manager / site supervisor / estimator / construction planner / contract administrator / bid manager

YOU MIGHT ALSO LIKE
• Bachelor of Construction Management
• Bachelor of Architectural Studies
• Bachelor of Business (Property)
• Bachelor of Engineering (Honours) (Civil and Construction Management)
• Bachelor of Engineering (Honours) (Surveying)

FURTHER STUDY
• Graduate Diploma in Building Surveying
• Master of Applied Project Management
• Master of Applied Project Management (Contract Management)

DEGREE STRUCTURE

FIRST YEAR
Introduction to Contract Administration
Construction 1
Introduction to Construction Management
Construction Communication
Construction Materials
Introduction to Construction Business Management
Structures 1
University Elective

SECOND YEAR
Quantity Surveying Practice 1
Contract Administration
Construction 2
Structures 2
Building Estimating
Construction Cost Planning
Construction Scheduling
Building Services N

THIRD YEAR
Development Regulation
Project Appraisal
Construction Environmental Science
Building Surveying

CONSTRUCTION OPERATIONS AND SAFETY

FOURTH YEAR
Research Theory and Practice
Integrated Project
AND two of the following three specialisation courses:
• Quantity Surveying Specialisation: Quantity Surveying Practice 2
• Building Surveying Specialisation: Asset Management and Building Pathology
• Construction Management Specialisation: Construction Business Management

NBE Honours Research Project
Industry Experience
AND two of the following three specialisation courses:
• Quantity Surveying Specialisation: Advanced Quantity Surveying
• Building Surveying Specialisation: Advanced Building Surveying
• Construction Management Specialisation: Advanced Construction Management

AND two of the following three specialisation courses:

CAREREP
Construction Operations and Safety
Advanced Contract Administration
Fire Engineering N
Sustainable Construction

Looking for alternative entry?
Preference a packaged Diploma in Construction/Bachelor of Construction Management (Honours).
For more information, visit unisa.edu.au/college
SATAC code: 426072
Bachelor of Construction Management

unisaonline.edu.au/construction-management

**100% online**

**Intakes:** Jan, Apr, Jun, Sept

**UnSA Online**

**Real-world projects**

**3 years full-time**

Program code: XBBE

✓ part-time study available

**Time commitment:** 10–15 hours per week per course

**Pathways:** Literacy and Numeracy Test with relevant work experience (UnSA Online); or Foundation Studies or Diploma in Construction (UnSA College)

**Prerequisites:** none

**Assumed knowledge:** none

**STUDY ON DEMAND**

Study a 100% online construction management degree designed specifically for flexible learning. Prepare for a professional career in the construction industry covering the development of low-rise residential, light commercial and high-rise buildings. Study core courses in construction, building surveying, quantity surveying, law, economics, construction management and communication. Benefit from a degree developed in collaboration with industry bodies such as the Australian Institute of Building, Australian Institute of Building Surveyors, Australian Institute of Quantity Surveyors and the Royal Institution of Chartered Surveyors. Access online support services seven days a week, view learning resources 24/7 and log in to the interactive online environment anywhere, anytime, and on any device. Benefit from flexible study with no need to attend lectures or come on campus — all courses and assessments are delivered online. Scholarships and grants are also available for eligible students.

**CAREERS**

Construction manager / quantity surveyor / building surveyor / project manager / site supervisor / estimator / construction planner / contract administrator

**CREDIT CHECK**

Fast-track your degree and receive credit for past study and/or work experience.

**HOW TO APPLY**

1. Check your eligibility at unisaonline.edu.au/eligibility
2. Gather your relevant documents
3. Complete your application and send through your documents

Apply directly at unisaonline.edu.au or call 1800 531 962

**DEGREE STRUCTURE**

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
<th>SECOND YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Approaches to Online Learning</td>
<td>Construction Scheduling</td>
</tr>
<tr>
<td>Introduction to Construction Management</td>
<td>Construction 2</td>
</tr>
<tr>
<td>Construction Communication</td>
<td>Quantity Surveying Practice 1</td>
</tr>
<tr>
<td>Construction 1</td>
<td>Contract Administration</td>
</tr>
<tr>
<td>Construction Materials</td>
<td>Structures 2</td>
</tr>
<tr>
<td>Introduction to Construction Business Management</td>
<td>Building Estimating</td>
</tr>
<tr>
<td>Structures 1</td>
<td>Building Services</td>
</tr>
<tr>
<td>Introduction to Contract Administration</td>
<td>Construction Cost Planning</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>THIRD YEAR</th>
<th>FOURTH YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Regulation</td>
<td>4 x Electives*</td>
</tr>
<tr>
<td>Sustainable Construction</td>
<td>Development Regulation</td>
</tr>
<tr>
<td>Project Appraisal</td>
<td>Sustainable Construction</td>
</tr>
<tr>
<td>Construction Environmental Science</td>
<td>Project Appraisal</td>
</tr>
<tr>
<td>Construction Operations and Safety</td>
<td>Construction Environmental Science</td>
</tr>
<tr>
<td>Fire Engineering</td>
<td>Construction Operations and Safety</td>
</tr>
<tr>
<td>Building Surveying</td>
<td>Fire Engineering</td>
</tr>
<tr>
<td>Advanced Contract Administration</td>
<td>Building Surveying</td>
</tr>
<tr>
<td></td>
<td>Advanced Contract Administration</td>
</tr>
</tbody>
</table>

*Choose electives from two of three specialisations in quantity surveying, building surveying, or construction project management.

Bachelor of Construction Management (Honours)

unisaonline.edu.au/construction-management-honours

**100% online**

**Intakes:** Jan, Apr, Jun, Sept

**UnSA Online**

**Real-world projects**

**4 years full-time**

Program code: XHCM

✓ part-time study available

**Time commitment:** 10–15 hours per week per course

**Pathways:** Literacy and Numeracy Test with relevant work experience (UnSA Online); or Foundation Studies or Diploma in Construction (UnSA College)

**Prerequisites:** none

**Assumed knowledge:** none

**STUDY ON DEMAND**

Study a 100% online construction management honours degree designed specifically for flexible learning. Study a four-year professional degree that will prepare you for future leadership and managerial roles in the building and construction industry. Develop the technical and practical skills to manage large-scale commercial, infrastructure and residential projects. Choose to specialise in one of three high-growth areas in construction project management, quantity surveying or building surveying in your final year. Study a degree developed in collaboration with industry bodies such as the Australian Institute of Building, Australian Institute of Building Surveyors, Australian Institute of Quantity Surveyors and the Royal Institution of Chartered Surveyors. Access online support services seven days a week, view learning resources 24/7 and log in to the interactive online environment anywhere, anytime, and on any device. Benefit from flexible study with no need to attend lectures or come on campus — all courses and assessments are delivered online. Scholarships and grants are also available for eligible students.

**CAREERS**

Construction manager / quantity surveyor / building surveyor / project manager / site supervisor / estimator / construction planner / contract administrator

**CREDIT CHECK**

Fast-track your degree and receive credit for past study and/or work experience.

**HOW TO APPLY**

1. Check your eligibility at unisaonline.edu.au/eligibility
2. Gather your relevant documents
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Apply directly at unisaonline.edu.au or call 1800 531 962

**DEGREE STRUCTURE**

<table>
<thead>
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<tbody>
<tr>
<td>Critical Approaches to Online Learning</td>
<td>Development Regulation</td>
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<td>Introduction to Construction Management</td>
<td>Sustainable Construction</td>
</tr>
<tr>
<td>Construction Communication</td>
<td>Project Appraisal</td>
</tr>
<tr>
<td>Construction 1</td>
<td>Construction Environmental Science</td>
</tr>
<tr>
<td>Construction Materials</td>
<td>Construction Operations and Safety</td>
</tr>
<tr>
<td>Introduction to Construction Business Management</td>
<td>Fire Engineering</td>
</tr>
<tr>
<td>Structures 1</td>
<td>Building Surveying</td>
</tr>
<tr>
<td>Introduction to Contract Administration</td>
<td>Advanced Contract Administration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND YEAR</th>
<th>FOURTH YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Regulation</td>
<td>Integrated Project</td>
</tr>
<tr>
<td>Sustainable Construction</td>
<td>Research Theory and Practice</td>
</tr>
<tr>
<td>Project Appraisal</td>
<td>NBE Honours Research Project A &amp; B</td>
</tr>
<tr>
<td>Construction Environmental Science</td>
<td>4 x Electives*</td>
</tr>
<tr>
<td>Construction Operations and Safety</td>
<td>Development Regulation</td>
</tr>
<tr>
<td>Fire Engineering</td>
<td>Sustainable Construction</td>
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<td>Project Appraisal</td>
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<tr>
<td>Advanced Contract Administration</td>
<td>Construction Environmental Science</td>
</tr>
</tbody>
</table>

*Choose electives from two of three specialisations in quantity surveying, building surveying, or construction project management.
POSTGRADUATE AND RESEARCH DEGREES

Take your career to the next level and develop your knowledge further through postgraduate study.

You can also make a positive and lasting contribution to your field through a research degree.

To explore our postgraduate degrees, visit unisa.edu.au/study

To learn more about our research degrees, visit unisa.edu.au/resdegrees

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Space Studies / 35

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Master of Engineering

Degrees:
• Master of Engineering (Civil and Infrastructure)
• Master of Engineering (Water Resources Management)

unisa.edu.au/engineering

Mawson Lakes Campus
On-campus
2 years full-time

Intakes: Feb, Jul
Commonwealth supported*
Professional Practice Program

Civil and Infrastructure

<table>
<thead>
<tr>
<th>2 years</th>
<th>1.5 years with Advanced Standing</th>
<th>1 year with Advanced Standing</th>
</tr>
</thead>
<tbody>
<tr>
<td>SATAC code</td>
<td>4CM156</td>
<td>4CM155</td>
</tr>
<tr>
<td>Program code</td>
<td>LMCL</td>
<td>LMCL</td>
</tr>
</tbody>
</table>

Water Resources Management

<table>
<thead>
<tr>
<th>2 years</th>
<th>1.5 years with Advanced Standing</th>
<th>1 year with Advanced Standing</th>
</tr>
</thead>
<tbody>
<tr>
<td>SATAC code</td>
<td>4CM162</td>
<td>4CM161</td>
</tr>
<tr>
<td>Program code</td>
<td>LMCL</td>
<td>LMCL</td>
</tr>
</tbody>
</table>

✅ part-time study available
*see page 36 for more information

Develop advanced knowledge in civil engineering theory and practice, and tailor your studies by choosing the specialisation that interests you most. In the Civil and Infrastructure stream, you will focus on structural and geotechnical engineering, and study critical infrastructure such as bridges, buildings, roads and transport systems. In the Water Resources Management stream, you will learn to create and design key water resources and management systems. Access industry-standard facilities on campus, including high-tech testing and computer-modelling equipment. You can also choose to study project management and leadership in your degree through elective courses. Have your eligible prior learning recognised by applying for Advanced Standing and complete the program in less than two years of full-time study.

CAREERS

Depending on your chosen program, your career options can include:
Project manager / operations manager / civil engineer / structural engineer / water resources engineer / construction manager / engineering consultant / lead engineer / engineering manager / researcher

ENTRY REQUIREMENTS
• Bachelor degree or equivalent qualification in civil engineering, or a related discipline, from a recognised higher education institution. A related discipline may be other four-year engineering or science degrees.
• Applicants who do not meet the standard entry requirements will be assessed on a case-by-case basis by the University.
• Some applicants may be eligible for Advanced Standing and can complete the program in 1.0 or 1.5 years full-time study, or equivalent part-time study.

YOU MIGHT ALSO LIKE
• Master of Engineering (Engineering Management)
• Master of Applied Project Management

DEGREE STRUCTURE

FIRST YEAR

INDICATIVE OF CIVIL AND INFRASTRUCTURE PROGRAM

- Soil Mechanics
- Steel and Timber Design
- Research Data Analysis
- Elective 1
- Geotechnical Engineering
- Reinforced Concrete Design
- Advanced Soil Mechanics
- Elective 2

SECOND YEAR

INDICATIVE OF WATER RESOURCES MANAGEMENT PROGRAM

- Engineering Masters Industrial Experience
- Engineering and Environmental Masters Design Project
- Masters Research Theory and Practice
- Elective 3
- NBE Masters Research Project
- Elective 4
- Elective 5
Master of Engineering

Degrees:
- Master of Engineering (Electrical Power)
- Master of Engineering (Telecommunications)

unisa.edu.au/engineering

Master of Engineering (Engineering Management)

Nested with:
- Graduate Certificate in Engineering (Engineering Management) (LCEB)
- Graduate Diploma in Engineering (Engineering Management) (LGEB)

unisa.edu.au/engineering

Mawson Lakes Campus

On-campus

2 years full-time

Intakes: Feb, Jul

Commonwealth supported*

Professional Practice Program

part-time study available

*see page 36 for more information

Learn how to manage operations within an engineering project, department or organisation. Develop advanced knowledge and skills in operations management, total quality management, supply chain management, enterprise resource planning, automation, and project management. Tailor your studies through a wide range of electives including project planning and control, intelligent production systems and energy management. Complete a major industry project or a minor research thesis in an area of interest. Explore the latest findings and innovations in engineering by connecting with our leading research concentrations.

CAREERS

Operations manager / engineering manager / quality assurance manager / business development manager / department manager / bid manager

ENTRY REQUIREMENTS

- Bachelor degree in engineering, science or technology from a recognised higher education institution; or
- Graduate certificate or graduate diploma in engineering from a recognised higher education institution; or
- Entry is competitive and experience in engineering and information technology, along with completion of professional qualifications will be taken into account.

YOU MIGHT ALSO LIKE

- Master of Engineering – various specialisations
- Master of Applied Project Management
- Master of Defence Systems Integration

DEGREE STRUCTURE

FIRST YEAR

- Professional Engineering Practice E
- Elective
- Engineering Research Practice
- Elective
- Elective

SECOND YEAR

- Engineering Economic Analysis
- Enterprise Resource Planning
- Minor Thesis 1 (Eng)
- Supply Chain Management
- Operations Management Systems
- Minor Thesis 2 (Eng)

Develop advanced knowledge in electrical engineering theory and practice, and tailor your studies by choosing the specialisation that interests you most. In Electrical Power, you will focus on electrical engineering by studying the operation and control of modern power systems, renewable and distributed energy generation, and modelling of electrical machines. In Telecommunications, you will learn about information and communication technologies by exploring wireless and mobile communication systems, theory and coding, and complex telecommunication networks. Complete a major research project and a minor engineering thesis during your studies, focusing on real-world engineering challenges. Benefit from links to our internationally-recognised Institute for Telecommunications Research, dedicated to developing new technologies for wireless communications, and the multi-million dollar Future Industries Institute located on campus, aimed at transforming the industries of today and seeding the futures of tomorrow.

CAREERS

Depending on your chosen program, your career options can include:
Electrical engineer / telecommunications engineer / operations manager / networking planning manager / project manager / renewable energy engineer / engineering consultant / researcher

ENTRY REQUIREMENTS

- Bachelor degree in electrical engineering or a related discipline, or equivalent qualification.
- Entry is competitive and experience in engineering and information technology, along with completion of professional qualifications will be taken into account.

YOU MIGHT ALSO LIKE

- Master of Defence Systems Integration
- Master of Engineering (Engineering Management)
- Master of Applied Project Management

DEGREE STRUCTURE

FIRST YEAR

<table>
<thead>
<tr>
<th>INDICATIVE OF ELECTRICAL POWER PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE COURSES</td>
</tr>
<tr>
<td>Renewable Energy Systems</td>
</tr>
<tr>
<td>Power System Analysis</td>
</tr>
<tr>
<td>Engineering Research Practice</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>SPECIALISATION COURSES</td>
</tr>
<tr>
<td>Select a total of 22.5 units from the following:</td>
</tr>
<tr>
<td>Design and Integration of Renewable Energy Systems</td>
</tr>
<tr>
<td>Operation and Control of Modern Power Systems</td>
</tr>
<tr>
<td>Power Electronics</td>
</tr>
<tr>
<td>Learning in the Workplace Project</td>
</tr>
</tbody>
</table>

SECOND YEAR

<table>
<thead>
<tr>
<th>CORE COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Masters Industrial Experience</td>
</tr>
<tr>
<td>Renewable and Distributed Power Generation</td>
</tr>
<tr>
<td>Advanced Electrical Machines</td>
</tr>
<tr>
<td>Advanced Power System Modelling and Analysis</td>
</tr>
<tr>
<td>Engineering Minor Thesis 1</td>
</tr>
<tr>
<td>Engineering Minor Thesis 2</td>
</tr>
</tbody>
</table>

Select one of:
- Engineering Economic Analysis
- Total Quality Management
- Lean Six Sigma
- Project Planning and Control G
- Enterprise Resource Planning
- Operations Management Systems

part-time study available

*see page 36 for more information
“I wanted to study engineering management because I was interested in overseeing large-scale projects at multiple stages. My studies are preparing me to manage and balance time, costs, resources, quality controls, communications, procurements and risk management – all the things you need for successful project delivery. Through a workplace project, I was able to get industry experience and work on my presentation skills in professional meetings with real clients.”

Hazel Zapanta
engineering management student
Master of Defence Systems Integration

Nested with:
- Graduate Certificate in Defence Systems Integration (LCDI)
- Graduate Diploma in Defence Systems Integration (LDDI)

unisa.edu.au/engineering

Mawson Lakes Campus
On-campus
3 years part-time

Intakes: Jun
Intakes: Jul
Real-world projects

$39,750* indicative 2020

Master of Applied Project Management

Degrees:
- Master of Applied Project Management
- Master of Applied Project Management (Contract Management)
- Master of Applied Project Management (Defence Industries)

Nested with:
- Graduate Certificate in Project Management (ICPM)
- Graduate Diploma in Project Management (IGBP)

unisa.edu.au/projectmanagement

City East Campus
On-campus/Online
15 years full-time

$79,500* indicative 2020

Intakes: Feb, Jul
Commonwealth supported*
Real-world projects

Designed for mid-career engineers and defence industry professionals looking to move into senior leadership positions, you will develop high-level engineering skills relevant to Australia’s national defence priorities. Learn to apply advanced interdisciplinary skills in engineering management, integrated logistics support, testing and evaluation, and project management. Explore the full systems engineering lifecycle, from conceptual design through to delivery into operations. Draw on your experience and expertise to complete real-world projects focusing on key industry challenges. Graduate with the knowledge and skills needed of a highly specialised workforce, ready to deliver on the Australian Government’s $200 billion investment in the nation’s defence capability over the next decade.

CAREERS
This program is designed for qualified engineers and defence industry professionals seeking to further their qualifications and can lead to senior roles within the defence industry and government, spanning leadership, strategy, management and technical positions.

ENTRY REQUIREMENTS
- Bachelor degree, graduate certificate or a graduate diploma in a relevant discipline from a recognised higher education institution. Relevant disciplines typically include engineering (aeronautics, astronautics, biomedical, chemical, civil, computer, electrical, environmental, industrial, mechanical, nuclear, software or systems), chemistry, physics, computer science, or mathematics.
- Applicants with qualifications in other disciplines are encouraged to apply and will be assessed on a case-by-case basis.

YOU MIGHT ALSO LIKE
- Master of Engineering (Engineering Management)
- Master of Engineering — electrical specialisations
- Master of Applied Project Management

DEGREE STRUCTURE

FIRST YEAR
- Principles of Systems Engineering
- Defence Systems
- Principles of Test and Evaluation
- Elective

SECOND YEAR
- Systems Integration Project Planning
- AND
- Systems Integration Project Execution
- OR
- Minor Thesis 1 (Eng)
- AND
- Minor Thesis 2 (Eng)

This program is studied primarily through intensive on-campus delivery, but may also include some online delivery options, and can only be completed with a part-time study load.

CAREERS
Qualified project managers can work across a wide range of industries, including:
- Information technology / construction / engineering / health / defence / finance / mining and resources / pharmaceuticals / the arts / government / not-for-profit / education / marketing

ENTRY REQUIREMENTS
- Bachelor degree from a recognised higher education institution; or
- Graduate certificate or graduate diploma in project management from a recognised higher education institution.

DEGREE STRUCTURE

FIRST YEAR
- Principles of Project Management
- Project Risk Management
- Procurement and Contract Management
- Project Governance and Ethics
- Project Control Methods
- Project Leadership and Teams
- Economic, Social and Environmental Analysis
- Masters Research Theory and Practice

SECOND YEAR
- Portfolio and Program Management
- NBE Masters Research Project
- Select one of the following courses:
  - Strategy in Project Organisations
  - Managing Complexity in Projects

Students may be required to undertake a combination of on-campus or online study. Students may be required to attend on-campus lectures, tutorials and practicals.
“UniSA brings together like-minded individuals who are passionate about lifelong learning. I believe that project management is an important area of study, and continuing education enhances professional skills, project outcomes and productivity.”

Alison Boag
project management graduate
## Graduate Diploma in Building Surveying

**Nested with:**
- Graduate Certificate in Building Surveying (ICBE)

[unisa.edu.au/surveying](unisa.edu.au/surveying)

<table>
<thead>
<tr>
<th>City East Campus</th>
<th>intakes: Feb, Jul</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-campus/Online</td>
<td>$ Commonwealth supported*</td>
</tr>
</tbody>
</table>

SATAC code ......................... 4GD097  ✔ part-time study available
Program code ....................... IGBE

*see page 36 for more information

Develop the knowledge and skills to become a professionally accredited building surveyor in Australia, with the ability to assess building plans to ensure they comply with particular codes and standards. Gain a strong understanding of the construction industry and the complete building lifecycle. Focus on core courses in building processes and technologies, assessment and analysis of structures, construction law, and building codes and regulations. Graduate with accreditation as a Building Surveyor (Level 1) with the Australian Institute of Building Surveyors (AIBS).

### CAREERS

Licensed building surveyors can work across a wide range of projects from residential through to multidisciplinary construction works.

### ENTRY REQUIREMENTS

- Bachelor degree in built environment, civil engineering, structural engineering, building surveying, quantity surveying, property, construction management or architecture from a recognised higher education institution, or
- Graduate Certificate in Building Surveying (ICBE) from the University of South Australia, or equivalent qualification from a recognised higher education institution, or
- Applicants that have completed bachelor degrees from other relevant disciplines will also be considered on a case-by-case basis.

### DEGREE STRUCTURE

#### FIRST YEAR

- The Constructed Environment
- Introduction to Construction Law
- Building Structures and Materials
- Building Surveying
- Fire Engineering N
- Development Regulation
- Asset Management and Building Pathology
- Advanced Building Surveying

This program is delivered completely online; however, students also have the option of studying through a blended mode of online and on-campus delivery.

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## Master of Surveying

[unisa.edu.au/surveying](unisa.edu.au/surveying)

<table>
<thead>
<tr>
<th>Mawson Lakes Campus</th>
<th>Intakes: Feb</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-campus</td>
<td>$ Commonwealth supported*</td>
</tr>
</tbody>
</table>

1.5 years full-time

SATAC code ......................... 4CM210  ✔ part-time study available
Program code ....................... LMSV

*see page 36 for more information

Build a career as a land surveyor with the ability to measure and map the surrounding environment using mathematics and science coupled with specialised technology and equipment. Develop the skills to prepare field plans and onsite measurements that can be used across a wide range of projects from major construction to mining exploration, land subdivision and structural builds. Complete fieldwork during your studies and attend study camps where you will gain practical experience in cadastral surveying, GPS surveying, geodetic science and precision positioning. Connect with industry through a real-world project in your final year. Graduate with a degree recognised by the Council of Reciprocating Surveyors Boards of Australia and New Zealand. Students can exit after one year of successful study with a Graduate Diploma in Surveying.

### CAREERS

Licensed surveyors can work in a variety of settings, including:

- Major construction / government infrastructure projects
- Mining and resources / councils / agriculture / environmental remediation / exploration

### ENTRY REQUIREMENTS

- Bachelor degree or equivalent qualification in a related discipline from a recognised higher education institution with a minimum Grade Point Average (GPA) of 4.5. The qualification must show strength in geospatial science and reside in disciplines such as Geographical Information Systems (GIS), science, environmental science, natural resource management, or geography.
- Applicants that do not meet the GPA requirements may also be considered for entry based upon three years of full-time relevant work experience. Relevant experience would typically be in the field of engineering or cadastral surveying. These applicants are also required to submit a detailed curriculum vitae.
- All applicants must have passed university coursework that includes basic and advanced courses in land surveying including GPS; earth systems; geography, geodetic information systems, maps and coordinate systems; mathematics (preferably engineering mathematics), physics, remote sensing, and urban planning.

### DEGREE STRUCTURE

#### FIRST YEAR

- Cadastral Surveying
- Geodetic Science
- Remote Sensing: Photogrammetry (KGG544, University of Tasmania)
- Survey Computations B (SVY2105, University of Southern Queensland)

#### SECOND YEAR

- Cadastral Surveying Experience
- Land Law and Administration
- GNSS and Advanced Surveying Techniques
- Surveying Applications
- Surveying Project 1N
- Surveying Project 2

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34 | unisa.edu.au/study
Contribute to the progress of science and technology by investigating a topic of interest. Flourish in a technological hub of theoretical, applied and cross-disciplinary research. Benefit from links to our multi-million dollar Future Industries Institute located on campus, aimed at transforming the industries of today and seeding the futures of tomorrow. Learn alongside world-class supervisors on industry-based projects focused on meeting the challenges of modern enterprise.

**DISCIPLINE AREAS**
- Applied Physics
- Bioinformatics
- Biomaterials Engineering and Nanomedicine
- Civil Engineering
- Computer and Information Science
- Construction Management
- Electrical Engineering
- Energy and Advanced Manufacturing
- Environmental Science
- Environmental Science and Engineering
- Geographic Information Science
- Information and Communication Technology
- Mathematics
- Mechanical Engineering
- Minerals and Resources
- Project Management
- Statistics
- Systems Engineering

**ENTRY REQUIREMENTS**
- Masters by Research
  - Bachelor degree of at least three years in a relevant discipline with a minimum credit average; or
  - Honours 1, Honours 2, Honours 3 or an appropriate master’s degree or equivalent qualification; or
  - No tertiary qualifications (some discipline areas only) with demonstration of research capabilities via assessment of relevant quality publications and professional experience.

- Doctor of Philosophy (PhD)
  - Honours 1, Honours 2A, or an appropriate master’s degree or equivalent qualification.

**Alternative entry**
- Other postgraduate and undergraduate degrees may be considered for admission into the Masters by Research or Doctor of Philosophy (PhD) with demonstration of research capabilities via assessment of relevant quality publications and professional experience.

Eligibility for entry into a research degree is also subject to an assessment of the proposed research, supervisor availability, and any University or research-specific eligibility requirements.
Minimum entry requirements for undergraduate degrees

APPLYING WITH YEAR 12
Applicants are required to have successfully completed the South Australian Certificate of Education (SACE) with:

- a competitive Selection Rank (ATAR) including adjustment factors; AND
- the fulfilment of the program’s prerequisite requirements (where applicable).

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

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

For some degrees, applicants who have not achieved the Selection Rank (ATAR) required for automatic selection into their preferred degree may be selected for any remaining places based on the grades of their Year 12 subjects.

ADJUSTMENT FACTORS
Universities in South Australia include ATAR-related adjustment factors (previously known as bonus points) for Australian high school students applying for entry into university via the following schemes:

- The Universities Equity Scheme — provides additional points for students coming from specified schools, as well as individuals experiencing socio-economic disadvantage.
- The Universities Language, Literacy and Mathematics Adjustment Scheme — provides additional points for students who successfully complete a language other than English, or specified English and Mathematics subjects.

unisa.edu.au/adjustmentfactors

GUARANTEED ENTRY
UniSA offers guaranteed entry into many programs for domestic Year 12 and VET students. If your Selection Rank (ATAR) or VET award meets the UniSA Guaranteed Entry score for that program, you have met the prerequisites and any other program specific entry requirements, and you have listed the program as your first preference, you are in. It’s guaranteed. Please note application timelines may apply.

unisa.edu.au/guaranteed

FEES
All domestic undergraduate students at the University of South Australia are in Commonwealth-supported places. Students in these places pay a contribution of their fees depending on the program chosen 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.

As per the Australian Government guidelines, the student contribution amounts for 2020 are:

<table>
<thead>
<tr>
<th>BAND</th>
<th>AREA OF STUDY</th>
<th>STUDENT CONTRIBUTION For one year of full-time load (1 EFTSL)</th>
<th>STUDENT CONTRIBUTION For each subject (0.125 EFTSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Humanities, behavioural science, social studies, foreign languages, visual and performing arts, clinical psychology, nursing and education.</td>
<td>$6,684</td>
<td>$835</td>
</tr>
<tr>
<td>2</td>
<td>Computing, built environment, health, engineering, surveying, agriculture, mathematics, statistics and science.</td>
<td>$9,527</td>
<td>$1,190</td>
</tr>
<tr>
<td>3</td>
<td>Law, dentistry, medicine, veterinary science, accounting, administration, economics and commerce.</td>
<td>$11,155</td>
<td>$1,394</td>
</tr>
</tbody>
</table>

Need some help? Contact Future Student Enquiries on (08) 8302 2376 or at unisa.edu.au/enquire

*Some postgraduate programs are also Commonwealth-supported (or CSP), while others are full fee-paying; this is listed on applicable programs. For programs under 10 year full-time study, fees are listed as the whole program fee (indicative of 2020). For programs over 10 years full-time study, fees are listed based on the cost per annum. For more information on fees including eligibility for Commonwealth-supported places, deferring your student contribution through HECS-HELP or FEE-HELP loans, please visit: unisa.edu.au/fees
All domestic undergraduate students at the University of South Australia are in Commonwealth-supported places.

**FEES**

unisa.edu.au/guaranteed

Preference, you are in. It’s guaranteed. Please note application entry requirements, and you have listed the program as your first award meets the UniSA Guaranteed Entry score for that program. UniSA offers guaranteed entry into many programs for domestic factors (previously known as bonus points) for Australian based on the grades of their Year 12 subjects.

Selection Rank (ATAR) required for automatic selection into their degrees.

For some degrees, applicants who have not achieved the minimum entry requirements for undergraduate degrees have completed one of the following:

- the International Baccalaureate Diploma with a minimum score of 24 points.
- the fulfilment of the program’s prerequisite requirements (where applicable).
- the South Australian Certificate of Education (SACE) with:
  - English, or specified English and Mathematics subjects.
  - a competitive Selection Rank (ATAR) including adjustment points for students coming from specified schools, as well as adjustment scheme.
  - the Universities Language, Literacy and Mathematics College, including diplomas and the UniSA College (applicable programs listed on unisa.edu.au/scholarships).
  - a Higher education diploma from UniSA, including Honki Tonki, Zambriero, Abbots and Kinney and more.
  - a competitive Special Entry – a competitive Special Point Average (GPA).
  - a competency qualification for a major or core subject.

Applicants may also be eligible to compete for entry if they provide financial assistance as well as relevant employment experience may also be considered for some programs.

Special entry – a competitive Special Entry

Higher education institution.

Special entry provides additional points for students coming from specified schools, as well as relevant employment experience may also be considered for some programs.

SCHOLARSHIPS

UniSA offers a range of scholarships providing financial assistance as well as special entry opportunities.

SUPPORT SERVICES

UniSA offers a full range of support services including career advice, disability and inclusion services, and student services. Check the eligibility criteria, visit: unisa.edu.au/enquire

Events on campus – participate in a wide range of events and activities on campus throughout the year.

Your student experience

**Orientation** is the start of your journey at university. Explore your campus, meet new people, get study advice, and enjoy different activities and entertainment.

**Campus Central** are the on-campus gurus for ID cards, enrolment, fees and student services.

**Support services** are available to you throughout your time at university, including study support, personal counselling and peer mentoring, along with access to a range of community health clinics located on campus.

**USASA** is your student association at UniSA. They provide advocacy services, organise social activities and coordinate over 100 student clubs.

**UniSA+** can provide you with an extensive range of leadership, entrepreneurial, volunteering and self-development opportunities during your degree.

**Student lounges** provide you with a space to study or chill out, featuring work spaces, kitchen facilities, mobile charging stations, social spaces, lockers, gaming stations and more.

**Food vendors** and café-style dining facilities are now open at all UniSA campuses, including Honki Tonki, Zambriero, Abbots and Kinney and more.

**UniSA Sport** has over 25 sporting clubs, including rowing, netball, gridiron, rock climbing and so much more. You can also gain access to fully-equipped gym facilities on all metro campuses.

**Accommodation services** are available to help you set up a home away from home.

**24-hour security** services are available on campus and the free SafeZone app is available for download through the App Store or Google Play.

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2020 EVENTS

Our events give you the opportunity to take a tour around campus, attend presentations, ask questions about different degrees and careers, and talk to current staff and students.

**UniSA OPEN DAY**

Sunday 16 August / 9:00am–4:30pm / City West and City East Campus

**CAMPUS DAYS**

- **Magill Campus Day:** Wednesday 26 August / 4:00pm–8:00pm
- **Mawson Lakes Campus Day:** Tuesday 25 August / 4:00pm–7:30pm
- **Mount Gambier Open Day:** Sunday 9 August / 11:00am–4:00pm
- **Whyalla Open Day:** Sunday 30 August / 11:00am–3:00pm

For more information, visit unisa.edu.au/infosessions

**SCHOOL HOLIDAY TOURS**

We also offer campus tours during the school holidays. Make an online booking at unisa.edu.au/campustours

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**MyCareerMatch** is a free personality and career profiling tool that you can complete before you start university. Contact Future Student Enquiries on (08) 8302 2376 or at unisa.edu.au/enquire

**ATAR > DEGREE FINDER**

Go online and check out our new ATAR > Degree Finder, to explore which degrees you may be eligible for using your Selection Rank. unisa.edu.au/ATAR-DEGREE-FINDER