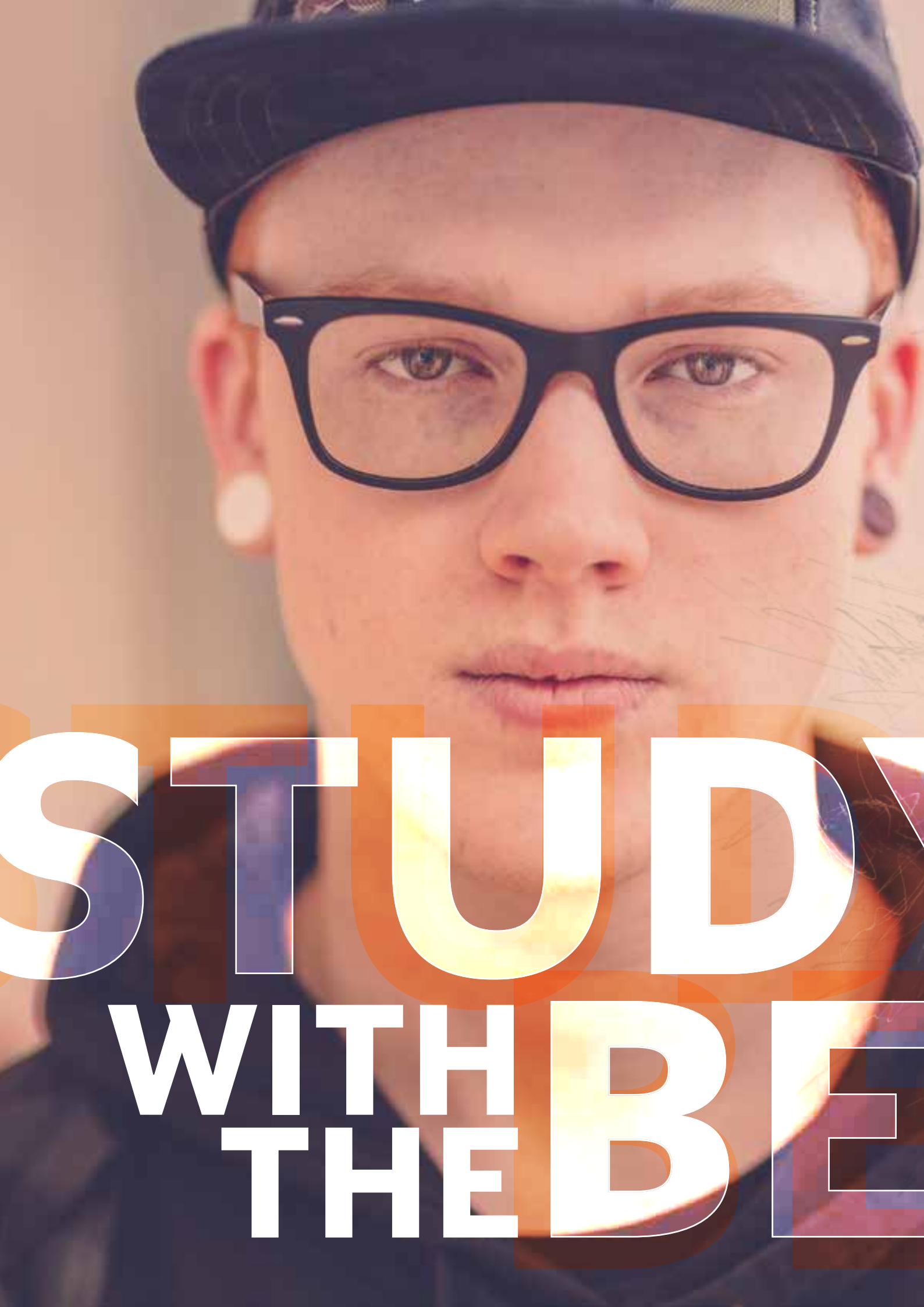
University of South Australia

2019 ENGINEERING


STUD
WITH
THE
BE

SA's #1 UNIVERSITY FOR GRADUATE CAREERS

QILT: Graduate Destinations Survey 2015 and Graduate Outcomes Survey 2016–17 – Full-time Employment Indicator. Public SA-founded universities only.

No.1 INSA FOR STUDENT SATISFACTION

QILT: Course Experience Questionnaire 2016–17. Public SA-founded universities only.

RANKED 26th IN THE WORLD'S TOP 50 UNDER 50

2017 QS Top 50 Universities Aged Under 50

To be the best in your field, you need a university that offers a choice of over 200 world-class degrees, and is globally recognised for its teaching, research and facilities.

GET CONNECTED

with Australia's University of Enterprise

REAL CAREERS

We are number one in South Australia for graduate careers.* We take a practical approach to teaching and learning so that our graduates can make a real impact in their chosen field.

**QILT: Graduate Destinations Survey 2015 and Graduate Outcomes Survey 2016–17 – Full-time Employment Indicator. Public SA-founded universities only.*

unisa.edu.au/careers

WORLD-CLASS FACILITIES

Be surrounded by impressive, purpose-built facilities across all six campuses. Be supported by the latest technologies including our fully interactive online learning platform.

unisa.edu.au/campus-facilities

TOP RANKING TEACHERS

Make your study experience relevant and learn from highly qualified academics and industry professionals. UniSA is Australia's best young university for teaching quality.

**Ranked Number 1, 2017 THE Top 200 Under 50 – Teaching Indicator.*

GLOBAL EXPOSURE

Take part in international field trips, work placements, internships, study tours, short-term programs, volunteer opportunities, conferences or a student exchange.

unisa.edu.au/globalopportunities

POWERFUL PARTNERSHIPS

Our learning is influenced by industry, and the latest trends and demands. We collaborate with over 2,500 companies worldwide to bring our students placement, project, research and work opportunities.

SYC

DXC.technology

Jam Factory

SAAB

Unilever

mayne pharma

Cancer Council SA

fta

rsp RISING SUN PICTURES

MARS incorporated

Government of South Australia
Department for Education and Child Development

Helping Hand

Adelaide Crows

Navantia Australia

Government of South Australia
SA Health

BAE SYSTEMS
INSPIRED WORK

KPMG

University of South Australia | Online

STUDY ON DEMAND

Take full control over your study with our new 100% online, career-focused degrees. Get online student support seven days a week, plan your study to fit around your life, access learning resources 24/7, and log in to an online interactive learning environment anywhere, any time and on any device.

Explore our range of degrees in:

- ACCOUNTING
- BUILDING AND CONSTRUCTION
- COMMUNICATION
- COMMUNITY HEALTH
- CRIMINAL JUSTICE
- DIGITAL MEDIA
- HUMAN RESOURCE MANAGEMENT
- IT AND DATA ANALYTICS
- MANAGEMENT
- MARKETING
- NUTRITION AND EXERCISE
- PSYCHOLOGICAL SCIENCE AND SOCIOLOGY

Take the next step and see if you're eligible by answering a few short questions.

unisaonline.edu.au

ASC

EY Building a better working world

ANZ

tacsi THE AUSTRALIAN CENTRE FOR SOCIAL INNOVATION

Calvary

UNITING COMMUNITIES

SA Power Networks

STUDY A NEW ONE-YEAR FLEXIBLE ENGINEERING PROGRAM
AND THEN TRANSFER INTO A UniSA BACHELOR OF ENGINEERING (HONOURS) IN A CHOSEN SPECIALISATION

COMPLETE REAL ENGINEERING PROJECTS
THROUGH A 12-WEEK INDUSTRY PLACEMENT

#1 IN SA FOR ENGINEERING RESEARCH
THE ONLY UNIVERSITY IN SA TO HAVE ALL ITS ASSESSED ENGINEERING RESEARCH RATED WELL-ABOVE WORLD STANDARD

2015 Excellence in Research for Australia (ERA)

Turn ideas into action and inspire the next wave of engineering. Learn to build new foundations and explore diverse areas such as robotics, manufacturing systems, renewable energy sources, infrastructure, and more. Get a competitive advantage by developing professional leadership skills in project management, which can be applied to a wide variety of industries.

unisa.edu.au/study

ENGINEERING

REAL-WORLD EXPERIENCE

Connect with industry through a 12-week internship or placement embedded in your degree. Attend guest lectures, networking events and site visits. Further your experiential learning by completing a hands-on design project and link-up with our leading research concentrations.

TECHNOLOGY PARK

Our Mawson Lakes campus is located next to Technology Park, a hub of more than 100 companies spanning growing industries such as defence, aerospace, advanced electronics, engineering, communication and information technology. This world-class location provides the ideal environment for collaboration with leading businesses, opening doors for knowledge sharing, product development, research and networking opportunities. Mawson Lakes Campus is also home to sustainable and award-winning five-star green rated buildings and wetlands, and is only a 15 minute express train trip from the city.

UNDERGRADUATE

POSTGRADUATE

RESEARCH

CAMPUS SPACES

ENGINEERING LABS / Purpose-built spaces for the making and testing of building materials including high-tech facilities for the research and development of water and wastewater treatment processes.

MECHATRONICS LAB / A place where technology and engineering students come together to experiment.

FUTURE INDUSTRIES INSTITUTE / A multi-million dollar research space focusing on building knowledge and capacity in core future industries through innovation in engineering and the physical sciences.

New SPACES

PRIDHAM HALL / A $50 million space that has transformed our campus blueprint in the city's west end; featuring a sports centre, lap pool, gym, dance/aerobics studio, function rooms, and facilities to seat 1800 students and their families for graduation ceremonies.

Discover the virtual fly-through at unisa.edu.au/pridhamhall

Image courtesy of Insight Visuals (photographer Chris Oaten)

UNIVERSITY OF SOUTH AUSTRALIA CANCER RESEARCH INSTITUTE / Located in SA's health and biomedical precinct in the Adelaide CBD, this $247 million building is the new leading destination for health research and teaching.

See this world-class project at unisa.edu.au/facilities/unisaCRI

MOD. / This futuristic museum of discovery offers immersive experiences to the public through dynamic and changing exhibition programs across seven dedicated gallery spaces.

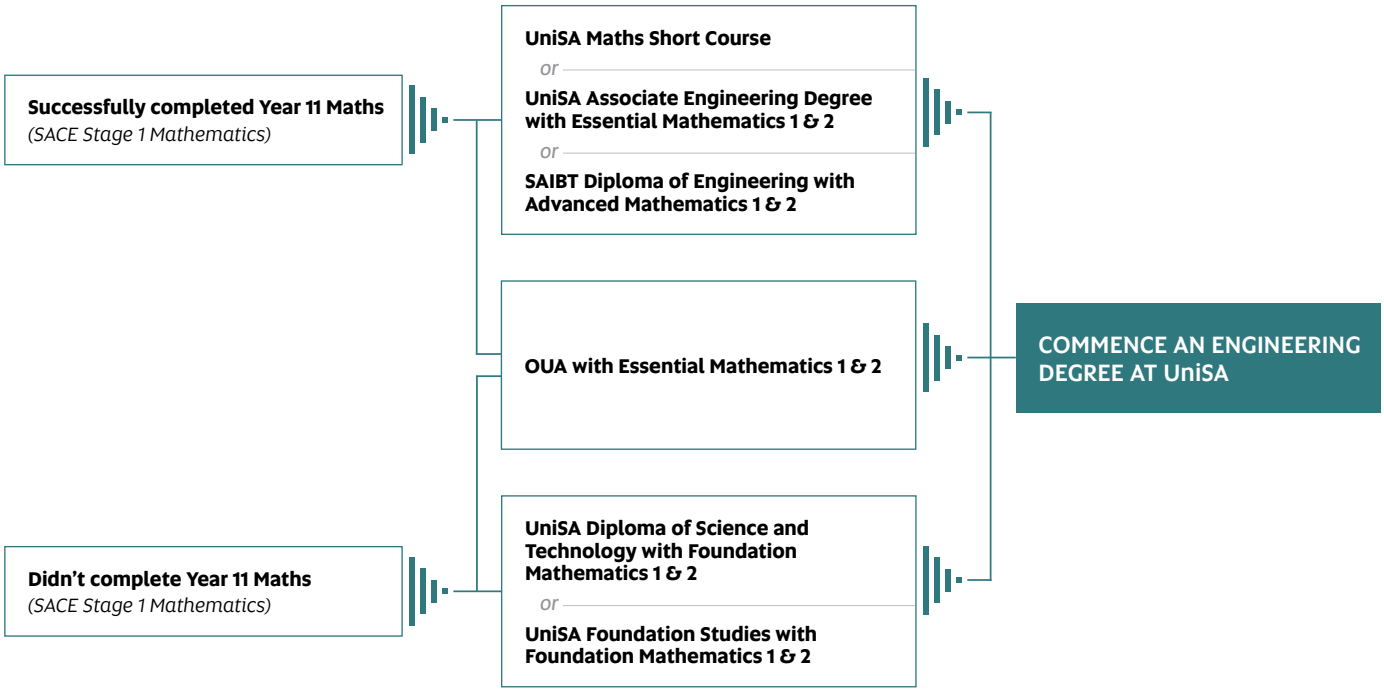
To find out more visit unisa.edu.au/MOD

Your PATHWAY OPTIONS

GET THE MATHS YOU NEED

Do you have the Selection Rank (ATAR) score to study engineering but haven't completed the required SACE Stage 2 Mathematical Methods?* Successfully pass any of the programs below including the mathematics courses specified to get into a UniSA engineering degree.

** Stage 2 Mathematical Methods from 2017, or Stage 2 Mathematical Studies if studied in 2016 or prior*



UniSA MATHS SHORT COURSE EXPLAINED

Want to study an engineering degree but didn't complete SACE Stage 2 Mathematical Methods? We offer a unique short course for students to complete the required prerequisite before commencing their degree at UniSA. Work alongside highly qualified tutors in small learning groups, and get prepared for tertiary study.

For more information visit *unisa.edu.au/maths-short-course*

UNDERGRADUATE

Your tertiary learning and career starts with undergraduate study.

QUALIFICATIONS*

- Associate degree: 2 years
- Bachelor (Honours): 4 years

**study times are approximate and based on a full-time study load.*

FIND OUT MORE

For more information about all of the undergraduate degrees on offer and entry requirements visit:

unisa.edu.au/study

Further details about studying with UniSA are also outlined on page 20 of this guide.

HOW TO APPLY

Go online for all the information you need on applying to study at UniSA including SATAC requirements, admissions pathways, guaranteed entry scores, study credit and other commonly asked questions.

unisa.edu.au/apply

Please note: The Selection Rank (ATAR) scores listed in the Entry information are indicative of the 2018 cut-offs.

Campus: CE: City East, CW: City West, M: Magill, ML: Mawson Lakes, MG: Mount Gambier or W: Whyalla (C)

Full-time program duration in years (1) Part-time study available (PT)

Associate Degree in

ENGINEERING LTEN

ON-CAMPUS (ML) (2) (PT) *unisa.edu.au/engineering*

ENTRY

SATAC code 435021
Selection Rank *(ATAR)* 60.1
Guaranteed Entry:
Selection Rank *(ATAR)* 65
Selection Rank *(VET)* CIV
Prerequisites ..... SACE Stage 1 Mathematics or equivalent
Assumed knowledge ..... none
Start date(s) ..... February, July

Pathway into a Bachelor Engineering (Honours) degree at UniSA or start a professional career in civil, mechanical, mechatronic or electrical engineering.

Graduate with credit to use towards your honours degree by studying introductory courses in engineering, mathematics, physics and chemistry in first year and then core engineering courses in your chosen specialisation in second year.

Take part in the Warman Design and Build Competition, applying hands-on skills and knowledge to a complex engineering project.

Benefit from flexible learning options including on-campus, some online or blended study.

CAREER OPPORTUNITIES

Engineering technologist / maintenance engineer / construction supervisor / project coordinator

ADMISSIONS PATHWAYS

Students interested in this degree should also consider the Diploma in Science and Technology offered by UniSA College, which can also be used as a pathway program into a Bachelor of Engineering (Honours) with UniSA.

EXTERNAL STUDY

This degree can also be studied online via Open Universities Australia (OUA). For more information visit *open.edu.au/courses*

FURTHER STUDY

Bachelor of Engineering (Honours) in the following specialisations:

- Civil
- Civil and Structural
- Civil and Project Management
- Electrical and Electronic
- Electrical and Mechatronic
- Mechanical
- Mechanical and Advanced Manufacturing
- Mechanical and Mechatronic
- Mechatronic

STUDY CREDIT

If you decide to continue your studies and enrol in a Bachelor Engineering (Honours) degree with UniSA and maintain your specialisation (in either Electrical, Mechanical, Mechatronic or Civil Engineering) you may be eligible for up to 12 courses of credit (or up to 1.5 years).

PROGRAM STRUCTURE

INDICATIVE OF CIVIL ENGINEERING SPECIALISATION
FIRST YEAR
Sustainable Engineering Practice Mathematical Methods for Engineers 1 Engineering Materials Engineering Computer Applications
SECOND YEAR
Engineering Materials Mathematical Methods for Engineers 1 Geospatial Science for Engineers Professional Engineering Practice E
Engineering Design and Innovation Mathematical Methods for Engineers 2 Engineering Mechanics Electrical and Electronic Systems

Bachelor of

ENGINEERING (HONOURS) (FLEXIBLE ENTRY) LHEF

ON-CAMPUS ML 1 PT *unisa.edu.au/engineering*

ENTRY

SATAC code 434242
Selection Rank *(ATAR)* ..... NEW
Guaranteed Entry:
Selection Rank *(ATAR)* 80
Selection Rank *(VET)* ..... DIP
Prerequisites ..... SACE Stage 2 Math Methods
Assumed knowledge ..... SACE Stage 2 Physics
Start date(s) ..... February, July

Study a flexible one-year program that introduces key engineering concepts and then transfer into a Bachelor of Engineering (Honours) degree with a chosen specialisation.

Complete common first year courses and receive full study credit.

Graduate with an honours degree in just four years of study with a specialisation in the area of civil, electrical or mechanical engineering.

Learn about the fundamentals in engineering practice, mathematics, engineering materials, computer applications, engineering design and innovation, mechanics and electronic systems.

Gain practical experience through real engineering projects, a 12-week industry placement or overseas study exchange during your honours degree.

CAREER OPPORTUNITIES

Depending on your chosen specialisation, your career options can include:

Civil engineer / construction manager / project engineer / civil project manager / electrical engineer / commissioning engineer / mechatronic development engineer / mechanical engineer / industrial engineer / project manager – renewable energy / automation engineer / software engineer

IMPORTANT INFORMATION

After successful completion of the common core courses, students will transfer into a named Bachelor of Engineering (Honours) degree and may choose a specialisation in areas such as civil, electrical and mechanical engineering. For a full list, see Related Degrees. Students will complete their honours degree in just four years of study.

PROFESSIONAL ACCREDITATION

This degree is accredited by Engineers Australia (EA) and meets the requirements for graduate membership with EA and comparable international institutions.

ADMISSIONS PATHWAYS

Alternative entry options include:

- Associate Degree in Engineering with UniSA
- Foundation Studies or the Diploma in Science and Technology with UniSA College
- SAIBT Diploma of Technology

For more information see page 8.

RELATED DEGREES

- Bachelor of Engineering (Honours)
  - (Civil)
  - (Civil and Structural)
  - (Civil and Project Management)
  - (Electrical and Electronic)
  - (Electrical and Mechatronic)
  - (Mechanical)
  - (Mechanical and Mechatronic)
  - (Mechanical and Advanced Manufacturing)
  - (Mechatronic)

FURTHER STUDY

- Master of Engineering (Civil and Infrastructure)
- Master of Engineering (Water Resource Management)
- Master of Engineering (Electrical Power)
- Master of Engineering (Telecommunications)
- Master of Engineering Management
- Master of Project Management
- Master of Applied Project Management

PROGRAM STRUCTURE

SP2
Sustainable Engineering Practice Mathematical Methods for Engineers 1 Engineering Materials Engineering Computer Applications
SP5
Engineering Design and Innovation Mathematical Methods for Engineers 2 Engineering Mechanics Electrical and Electronic Systems

Bachelor of

ENGINEERING (HONOURS) (ELECTRICAL AND ELECTRONIC) LHIF

ON-CAMPUS ML 4 PT *unisa.edu.au/engineering*

ENTRY

SATAC code 434951
Selection Rank *(ATAR)* 70.4
Guaranteed Entry:
Selection Rank *(ATAR)* 80
Selection Rank *(VET)* ..... DIP
Prerequisites ..... SACE Stage 2 Math Methods
Assumed knowledge ..... SACE Stage 2 Physics
Start date(s) ..... February, July

Focus your studies on the design and operation of devices, equipment, technology and systems.

Learn about the generation, transmission and distribution of electrical energy, and about computer networking, control systems and digital electronics.

Access the Mechatronics Lab and Experience One Studios featuring the latest technologies located on campus.

Gain practical experience and work on real engineering projects through a 12-week industry placement.

Go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide.

CAREER OPPORTUNITIES

Electrical engineer / electrical design engineer / commissioning engineer / renewable energy engineer

PROFESSIONAL ACCREDITATION

This degree is accredited by Engineers Australia (EA) and meets the requirements for graduate membership with EA and comparable international institutions.

ADMISSIONS PATHWAYS

Alternative entry options include:

- Associate Degree in Engineering with UniSA
- Foundation Studies or the Diploma in Science and Technology with UniSA College
- SAIBT Diploma of Technology

For more information see page 8.

RELATED DEGREES

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

FURTHER STUDY

- Master of Engineering (Electrical Power)
- Masters by Research
- Doctor of Philosophy (PhD)

PROGRAM STRUCTURE

FIRST YEAR
Sustainable Engineering Practice Mathematical Methods for Engineers 1 Engineering Materials Engineering Computer Applications
Engineering Design and Innovation Mathematical Methods for Engineers 2 Engineering Mechanics Electrical and Electronic Systems
SECOND YEAR
Programming for Engineers Electrical Circuit Theory Methods of Applied Mathematics 1 Elective 1
Microcontroller Programming and Interfacing Electronic Devices and Circuits Signals and Systems Elective 2
THIRD YEAR
Control Systems Digital Circuits and Systems Professional Engineering Practice E Linear Electronic Circuits
Embedded System Design Data Communications and Networks Systems Engineering Industrial Experience Elective 3
FOURTH YEAR
Engineering Research Practice Engineering Honours Project 1 Elective 4 Elective 5
Engineering Honours Project 2 Elective 6 VLSI Design

Bachelor of

ENGINEERING (HONOURS) (ELECTRICAL AND MECHATRONIC) LHIF

ON-CAMPUS ML 4 PT *unisa.edu.au/engineering*

ENTRY

SATAC code 434451
Selection Rank *(ATAR)* 76.8
Guaranteed Entry:
Selection Rank *(ATAR)* 80
Selection Rank *(VET)* DIP
Prerequisites SACE Stage 2 Math Methods
Assumed knowledge SACE Stage 2 Physics
Start date(s) February, July

Explore the mechanical world of robotics, machine tool control, medical design technology and automated guided vehicles.

Learn about the generation, transmission, distribution and utilisation of electrical energy, along with the design, control and integration of electromotion devices.

Access the Mechatronics Lab and Experience One Studios featuring the latest technologies located on campus.

Gain practical experience and work on real engineering projects through a 12-week industry placement.

Go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide.

CAREER OPPORTUNITIES

Electrical and mechatronic engineer / mechatronic device designer / mechatronic development engineer / renewable energy engineer

PROFESSIONAL ACCREDITATION

This degree is accredited by Engineers Australia (EA) and meets the requirements for graduate membership with EA and comparable international institutions.

ADMISSIONS PATHWAYS

Alternative entry options include:

- Associate Degree in Engineering with UniSA
- Foundation Studies or the Diploma in Science and Technology with UniSA College
- SAIBT Diploma of Technology

For more information see page 8.

RELATED DEGREES

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

FURTHER STUDY

- Master of Engineering (Electrical Power)
- Master of Engineering (Telecommunications)
- Masters by Research
- Doctor of Philosophy (PhD)

PROGRAM STRUCTURE

FIRST YEAR

Sustainable Engineering Practice
Mathematical Methods for Engineers 1
Engineering Materials
Engineering Computer Applications

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

SECOND YEAR

Programming for Engineers
Electrical Circuit Theory
Electromechanics
Methods of Applied Mathematics 1

Microcontroller Programming and Interfacing
Electronic Devices and Circuits
Signals and Systems
University Wide Elective

THIRD YEAR

Digital Circuits and Systems
Electrical Machines 1
Control Systems
Professional Engineering Practice E

Advanced Control
Power System Analysis
Embedded System Design
Industrial Experience
Systems Engineering

FOURTH YEAR

Autonomous Mechatronic Systems
Power Electronics and Drives
Engineering Research Practice
Engineering Honours Project 1

Operation and Control of Modern Power Systems
Industrial Automation Systems
Engineering Honours Project 2

Bachelor of

ENGINEERING (HONOURS) (MECHANICAL) LHMR

ON-CAMPUS ML 4 PT *unisa.edu.au/engineering*

ENTRY

SATAC code 434321
Selection Rank *(ATAR)* 70.45
Guaranteed Entry:
Selection Rank *(ATAR)* 80
Selection Rank *(VET)* DIP
Prerequisites SACE Stage 2 Math Methods
Assumed knowledge SACE Stage 2 Physics
Start date(s) February, July

Create design solutions that use mechanised power, machinery and tools.

Learn about the latest industry developments in machinery design, manufacturing technologies and sustainable energy.

Access state-of-the-art facilities including the Mechatronics Lab, Experience One Studio and Experiential Learning Suite located on campus.

Gain practical experience by completing a 12-week industry placement and a major industry project in your final year.

Go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide.

CAREER OPPORTUNITIES

Mechanical engineer / industrial engineer / mechanical engineering supervisor / hydraulics engineer / mechanical designer / project manager – renewable energy

PROFESSIONAL ACCREDITATION

This degree is accredited by Engineers Australia (EA) and meets the requirements for graduate membership with EA and comparable international institutions.

ADMISSIONS PATHWAYS

Alternative entry options include:

- Associate Degree in Engineering with UniSA
- Foundation Studies or the Diploma in Science and Technology with UniSA College
- SAIBT Diploma of Technology

For more information see page 8.

RELATED DEGREES

- Bachelor of Engineering (Honours) (Mechanical and Advanced Manufacturing)
- Bachelor of Engineering (Honours) (Mechanical and Mechatronic)

FURTHER STUDY

- Master of Engineering (Engineering Management)
- Masters by Research
- Doctor of Philosophy (PhD)

PROGRAM STRUCTURE

FIRST YEAR

Sustainable Engineering Practice
Mathematical Methods for Engineers 1
Engineering Materials
Engineering Computer Applications

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

SECOND YEAR

Mechanics of Materials
Engineering Modelling
Manufacturing Processes
Mechanical Engineering Practice N

Engineering Dynamics
Mechanical Design Practice
Fluid and Energy Engineering
Elective

THIRD YEAR

Energy Conversion and Management
Professional Engineering Practice E
Computer Aided Engineering Practice
Methods of Applied Mathematics 1

Design in Plastics and Advanced Composites
Mechanics of Machines
Operations and Project Management for Engineers
Fluid and Energy Management Practice
Industrial Experience

FOURTH YEAR

Sustainable Energy System Design
Vibration Analysis of Mechanical Systems
Engineering Research Practice
Engineering Honours Project 1

Design for Manufacture and Assembly
Sustainable Development and Design Practice
Engineering Honours Project 2

Bachelor of

ENGINEERING (HONOURS) (MECHANICAL AND MECHATRONIC) LHMR

ON-CAMPUS ML 4 PT *unisa.edu.au/engineering*

ENTRY

SATAC code 434781
Selection Rank *(ATAR)* 71.55
Guaranteed Entry:
Selection Rank *(ATAR)* 80
Selection Rank *(VET)* DIP
Prerequisites SACE Stage 2 Math Methods
Assumed knowledge SACE Stage 2 Physics
Start date(s) February, July

Focus on the integration of mechanical engineering with computing, control and automation.

Study specialised courses in robotics and machine vision systems.

Access the state-of-the-art Mechatronics Lab and join the Mechatronic Engineering & Robotics Club.

Gain practical experience and work on real engineering projects through a 12-week industry placement.

Go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide.

CAREER OPPORTUNITIES

Mechanical engineer / systems engineer / mechanical engineering supervisor / mechatronic device designer / mechatronic development engineer / automation engineer

PROFESSIONAL ACCREDITATION

This degree is accredited by Engineers Australia (EA) and meets the requirements for graduate membership with EA and comparable international institutions.

ADMISSIONS PATHWAYS

Alternative entry options include:

- Associate Degree in Engineering with UniSA
- Foundation Studies or the Diploma in Science and Technology with UniSA College
- SAIBT Diploma of Technology

For more information see page 8.

RELATED DEGREES

- Bachelor of Engineering (Honours) (Mechanical and Advanced Manufacturing)
- Bachelor of Engineering (Honours) (Mechanical)
- Bachelor of Engineering (Honours) (Electrical and Mechatronic)
- Bachelor of Engineering (Honours) (Mechatronic)

FURTHER STUDY

- Master of Engineering (Engineering Management)
- Masters by Research
- Doctor of Philosophy (PhD)

PROGRAM STRUCTURE

FIRST YEAR

Sustainable Engineering Practice
Mathematical Methods for Engineers 1
Engineering Materials
Engineering Computer Applications

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

SECOND YEAR

Mechanics of Materials
Methods of Applied Mathematics 1
Introduction to Computer Systems
Mechanical Engineering Practice N

Engineering Dynamics
Mechanical Design Practice
Fluid and Energy Engineering
Elective

THIRD YEAR

Programming for Engineers
Control Systems
Professional Engineering Practice E
Electromechanics

Advanced Control
Mechanics of Machines
Industrial Automation Systems
Fluid and Energy Management Practice
Industrial Experience

FOURTH YEAR

Autonomous Mechatronic Systems
Computer Aided Engineering Practice
Engineering Research Practice
Engineering Honours Project 1

Machine Vision Systems
Industrial Actuation and Automation
Engineering Honours Project 2

Bachelor of

ENGINEERING (HONOURS) (MECHANICAL AND ADVANCED MANUFACTURING) LHMR

ON-CAMPUS ML 4 PT *unisa.edu.au/engineering*

ENTRY

SATAC code 434791
Selection Rank *(ATAR)* 73.15
Guaranteed Entry:
Selection Rank *(ATAR)* 80
Selection Rank *(VET)* DIP
Prerequisites SACE Stage 2 Math Methods
Assumed knowledge SACE Stage 2 Physics
Start date(s) February, July

Learn to combine new manufacturing and management techniques with sophisticated, high-precision machinery.

Apply information and communication technologies with electronics and new practices to improve products and processes.

Access the Mechatronics Lab and Experience One Studios featuring the latest technologies located on campus.

Gain practical experience and work on real engineering projects through a 12-week industry placement.

Go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide.

CAREER OPPORTUNITIES

Mechanical engineer / industrial engineer / mechanical engineering supervisor / systems engineer / CAD engineer

PROFESSIONAL ACCREDITATION

This degree is accredited by Engineers Australia (EA) and meets the requirements for graduate membership with EA and comparable international institutions.

ADMISSIONS PATHWAYS

Alternative entry options include:

- Associate Degree in Engineering with UniSA
- Foundation Studies or the Diploma in Science and Technology with UniSA College
- SAIBT Diploma of Technology

For more information see page 8.

RELATED DEGREES

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

FURTHER STUDY

- Master of Engineering (Engineering Management)
- Masters by Research
- Doctor of Philosophy (PhD)

PROGRAM STRUCTURE

FIRST YEAR

Sustainable Engineering Practice
Mathematical Methods for Engineers 1
Engineering Materials
Engineering Computer Applications

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

SECOND YEAR

Mechanics of Materials
Engineering Modelling
Manufacturing Processes
Mechanical Engineering Practice N

Engineering Dynamics
Mechanical Design Practice
Fluid and Energy Engineering
Elective

THIRD YEAR

Intelligent Manufacturing Systems
Energy Conversion and Management
Professional Engineering Practice E
Computer Aided Engineering Practice

Design in Plastics and Advanced Composites
Mechanics of Machines
Operations and Project Management for Engineers
Fluid and Energy Management Practice
Industrial Experience

FOURTH YEAR

Sustainable Energy System Design
Total Quality Management
Engineering Research Practice
Engineering Honours Project 1

Design for Manufacture and Assembly
Industrial Actuation and Automation
Engineering Honours Project 2

Campus: CE: City East, CW: City West, M: Magill, ML: Mawson Lakes, MG: Mount Gambier or W: Whyalla (C)

Full-time program duration in years (1) Part-time study available (PT)

Bachelor of

ENGINEERING (HONOURS) (MECHATRONIC) LHEG

ON-CAMPUS (ML) (4) (PT) *unisa.edu.au/engineering*

ENTRY

SATAC code 434031
Selection Rank *(ATAR)* 71.4
Guaranteed Entry:
Selection Rank *(ATAR)* 80
Selection Rank *(VET)* ..... DIP
Prerequisites ..... SACE Stage 2 Math Methods
Assumed knowledge ..... SACE Stage 2 Physics
Start date(s) ..... February, July

Learn about the design and operation of intelligent products and systems.

Study the interdisciplinary area of mechatronics, where computer science is combined with mechanical and electrical engineering.

Focus on autonomous vehicle systems, robotics and automatic production systems.

Access state-of-the-art facilities including the Mechatronics Lab, Experience One Studio and Experiential Learning Suite located on campus.

Gain practical experience and work on real engineering projects through a 12-week industry placement.

Go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide.

CAREER OPPORTUNITIES

Mechatronic device designer / mechatronic development engineer / systems engineer / automation engineer / software engineer

PROFESSIONAL ACCREDITATION

This degree is accredited by Engineers Australia (EA) and meets the requirements for graduate membership with EA and comparable international institutions.

ADMISSIONS PATHWAYS

Alternative entry options include:

- Associate Degree in Engineering with UniSA
- Foundation Studies or the Diploma in Science and Technology with UniSA College
- SAIBT Diploma of Technology

For more information see page 8.

RELATED DEGREES

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

FURTHER STUDY

- Master of Engineering (Engineering Management)
- Masters by Research
- Doctor of Philosophy (PhD)

PROGRAM STRUCTURE

FIRST YEAR

Sustainable Engineering Practice
Mathematical Methods for Engineers 1
Engineering Materials
Engineering Computer Applications

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

SECOND YEAR

Programming for Engineers
Mechanics of Materials
Methods of Applied Mathematics 1
Electrical Circuit Theory

Microcontroller Programming and Interfacing
Engineering Dynamics
Signals and Systems
Electronic Devices and Circuits

THIRD YEAR

Control Systems
Professional Engineering Practice E
Electromechanics
Mechanical Design Practice

Embedded System Design
Advanced Control
Mechatronic System Design 1
Fluid and Energy Engineering
Industrial Experience

FOURTH YEAR

Mechatronic System Design 2
Computer Aided Engineering Practice
Engineering Research Practice
Engineering Honours Project 1

Industrial Automation Systems
Final year elective
Engineering Honours Project 2

"Daniel was drawn to engineering because of its focus on problem-solving and innovation.

"The ever-adapting technologies and approaches within engineering present many unique challenges that I find interesting."

Putting theory into practice, Daniel had the opportunity to be part of the SA Health Infrastructure Practical Experience Program, working with hospital personnel and consulting engineers to improve facilities at the Lywell McEwin Hospital.

"Building relationships with professionals in this industry was invaluable and has helped me to secure an internship with an international engineering consultancy."

Daniel Cluse / BACHELOR OF ENGINEERING (HONOURS) (MECHANICAL AND MECHATRONIC)

Bachelor of

ENGINEERING (HONOURS) (CIVIL) LHMI

ON-CAMPUS ML 4 PT *unisa.edu.au/engineering*

ENTRY

SATAC code 434481
Selection Rank *(ATAR)* 80.55
Guaranteed Entry:
Selection Rank *(ATAR)* 80
Selection Rank *(VET)* DIP
Prerequisites SACE Stage 2 Math Methods
Assumed knowledge SACE Stage 2 Physics
Start date(s) February, July

Learn to design and maintain critical infrastructure such as bridges, buildings, airports, roads, railways and water systems.

Focus on core courses in road design, geospatial science, soil mechanics, hydraulics and hydrology, geotechnical engineering and reinforced concrete design.

Access industry-standard facilities on campus including the largest strong floor in the southern hemisphere, along with high-tech testing and computer modelling equipment.

Gain practical experience and work on real engineering projects through a 12-week industry placement.

Go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide.

CAREER OPPORTUNITIES

Civil engineer / geotechnical engineer / water resources engineer / environmental engineer

PROFESSIONAL ACCREDITATION

This degree is accredited by Engineers Australia (EA) and meets the requirements for graduate membership with EA and comparable international institutions.

ADMISSIONS PATHWAYS

Alternative entry options include:

- Associate Degree in Engineering with UniSA
- Foundation Studies or the Diploma in Science and Technology with UniSA College
- SAIBT Diploma of Technology

For more information see page 8.

RELATED DEGREES

- Bachelor of Engineering (Honours) (Civil and Structural)
- Bachelor of Engineering (Honours) (Civil and Project Management)
- Bachelor of Geospatial Science
- Bachelor of Construction Management and Economics (Honours)

FURTHER STUDY

- Master of Engineering (Civil and Infrastructure)
- Master of Engineering (Water Resources Management)
- Master of Engineering (Engineering Management)
- Masters by Research
- Doctor of Philosophy (PhD)

PROGRAM STRUCTURE

FIRST YEAR

Sustainable Engineering Practice
Mathematical Methods for Engineers 1
Engineering Materials
Engineering Computer Applications

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

SECOND YEAR

Engineering Modelling
Mechanics of Materials
Principles of Geospatial Science
Elective

Introduction to Water Engineering
Water Chemistry
Civil Engineering Practice
Road Design and Traffic Management

THIRD YEAR

Professional Engineering Practice E
Soil Mechanics
Steel and Timber Design
Hydraulics and Hydrology

Water Resources Systems Design
Geotechnical Engineering
Reinforced Concrete Design
Civil Engineering Elective 1

FOURTH YEAR

Industrial Experience N
Civil Engineering Design Project
Ciil Engineering Elective 2
Research Theory and Practice

NBE Honours Research Project
Civil Engineering Elective 3
Civil Engineering Elective 4

Bachelor of

ENGINEERING (HONOURS) (CIVIL AND STRUCTURAL) LHMI

ON-CAMPUS ML 4 PT *unisa.edu.au/engineering*

ENTRY

SATAC code 434941
Selection Rank *(ATAR)* 72.9
Guaranteed Entry:
Selection Rank *(ATAR)* 80
Selection Rank *(VET)* DIP
Prerequisites SACE Stage 2 Math Methods
Assumed knowledge SACE Stage 2 Physics
Start date(s) February, July

Focus on the design and construction of buildings and structures, including masonry and steel work.

Develop the skills to manage the social, environmental and financial components of large-scale construction projects.

Access industry-standard facilities on campus including the largest strong floor in the southern hemisphere, along with high-tech testing and computer modelling equipment.

Gain practical experience and work on real engineering projects through a 12-week industry placement.

Go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide.

CAREER OPPORTUNITIES

Civil draftsperson / civil engineer / structural engineer / environmental engineer

PROFESSIONAL ACCREDITATION

This degree is accredited by Engineers Australia (EA) and meets the requirements for graduate membership with EA and comparable international institutions.

ADMISSIONS PATHWAYS

Alternative entry options include:

- Associate Degree in Engineering with UniSA
- Foundation Studies or the Diploma in Science and Technology with UniSA College
- SAIBT Diploma of Technology

For more information see page 8.

RELATED DEGREES

- Bachelor of Engineering (Honours) (Civil)
- Bachelor of Engineering (Honours) (Civil and Project Management)
- Bachelor of Geospatial Science
- Bachelor of Construction Management and Economics (Honours)

FURTHER STUDY

- Master of Engineering (Civil and Infrastructure)
- Master of Engineering (Water Resources Management)
- Masters by Research
- Doctor of Philosophy (PhD)

PROGRAM STRUCTURE

FIRST YEAR

Sustainable Engineering Practice
Mathematical Methods for Engineers 1
Engineering Materials
Engineering Computer Applications

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

SECOND YEAR

Engineering Modelling
Mechanics of Materials
Principles of Geospatial Science
Elective

Introduction to Water Engineering
Water Chemistry
Civil Engineering Practice
Road Design and Traffic Management

THIRD YEAR

Professional Engineering Practice E
Soil Mechanics
Steel and Timber Design
Hydraulics and Hydrology

Geotechnical Engineering
Reinforced Concrete Design
Structural Analysis
Water Resources Systems Design

FOURTH YEAR

Industrial Experience N
Civil Engineering Design Project
Research Theory and Practice
Advanced Concrete Structures

NBE Honours Research Project
Earthquake and Masonry Engineering
Advanced Steel Structures

Campus: CE: City East, CW: City West, M: Magill, ML: Mawson Lakes, MG: Mount Gambier or W: Whyalla (C)

Full-time program duration in years (1) Part-time study available (PT)

Bachelor of

ENGINEERING (HONOURS) (CIVIL AND PROJECT MANAGEMENT) LHMI

ON-CAMPUS (ML) (4) (PT) *unisa.edu.au/engineering*

ENTRY

SATAC code 434151
Selection Rank *(ATAR)* 74.4
Guaranteed Entry:
Selection Rank *(ATAR)* 80
Selection Rank *(VET)* ..... DIP
Prerequisites ..... SACE Stage 2 Math Methods
Assumed knowledge ..... SACE Stage 2 Physics
Start date(s) ..... February, July

Join Australia's only degree combining civil engineering and project management.

Learn to plan, implement and deliver major construction projects while keeping to deadlines and budgets.

Access industry-standard facilities on campus including the largest strong floor in the southern hemisphere, along with high-tech testing and computer modelling equipment.

Gain practical experience and work on real engineering projects through a 12-week industry placement.

Go on an overseas study exchange and choose from over 25 countries and more than 60 universities worldwide.

CAREER OPPORTUNITIES

Civil engineer / geotechnical engineer / construction manager / project engineer / civil project manager

PROFESSIONAL ACCREDITATION

This degree is accredited by Engineers Australia (EA) and meets the requirements for graduate membership with EA and comparable international institutions.

ADMISSIONS PATHWAYS

Alternative entry options include:

- Associate Degree in Engineering with UniSA
- Foundation Studies or the Diploma in Science and Technology with UniSA College
- SAIBT Diploma of Technology

For more information see page 8.

RELATED DEGREES

- Bachelor of Engineering (Honours) (Civil)
- Bachelor of Engineering (Honours) (Civil and Structural)
- Bachelor of Built Environment
- Bachelor of Construction Management and Economics (Honours)

FURTHER STUDY

- Master of Engineering (Civil and Infrastructure)
- Master of Engineering (Water Resources Management)
- Master of Engineering (Engineering Management)
- Master of Project Management

PROGRAM STRUCTURE

FIRST YEAR
Sustainable Engineering Practice Mathematical Methods for Engineers 1 Engineering Materials Engineering Computer Applications
Engineering Design and Innovation Mathematical Methods for Engineers 2 Engineering Mechanics Electrical and Electronic Systems
SECOND YEAR
Engineering Modelling Mechanics of Materials Principles of Geospatial Science Elective
Introduction to Water Engineering Water Chemistry Civil Engineering Practice Road Design and Traffic Management
THIRD YEAR
Contract Administration Soil Mechanics Steel and Timber Design Hydraulics and Hydrology
Water Resources Systems Design Geotechnical Engineering Reinforced Concrete Design Construction Scheduling
FOURTH YEAR
Industrial Experience N Civil Engineering Design Project Research Theory and Practice Principles of Project Management
NBE Honours Research Project Advanced Construction Management Building Estimating

"Cameron is currently working as a site engineer for Australia's leading construction company, Hansen Yuncken.

He completed a 12-week internship with the company during his degree and continued to work there one day a week until he graduated.

"As a student I also gained additional experience working on projects at Mark Oliphant College and Rundle Place.

"After completing my studies, I worked as a graduate engineer and then became a site engineer on the new Royal Adelaide Hospital project.

"My career aspiration is to become a project manager and oversee my own projects."

Cameron Holoubek / BACHELOR OF ENGINEERING (HONOURS) (CIVIL AND PROJECT MANAGEMENT)

POSTGRADUATE

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

QUALIFICATIONS*

- Graduate Certificate: 6 months
- Graduate Diploma: 1 year
- Master: 1–2 years

**study times are approximate and based on a full-time study load.*

FIND OUT MORE

For more information about all of the postgraduate qualifications on offer and entry requirements visit:

unisa.edu.au/study

Further details about studying with UniSA are also outlined on page 20 of this guide.

HOW TO APPLY

Go online for all the information you need on applying to study at UniSA.

unisa.edu.au/apply

Master of

ENGINEERING LMCL

DEGREES

- Master of Engineering (Civil and Infrastructure)
- Master of Engineering (Water Resources Management)

ON-CAMPUS ML 2 PT unisa.edu.au/engineering

ENTRY

SATAC code ..... *(Civil and Infrastructure)* 4CM154, 4CM155, 4CM156 *(Water Resources Management)* 4CM160, 4CM161, 4CM162
Fees ..... CSP
Start date(s) ..... February, July

Develop advanced knowledge in engineering theory and practice, and tailor your studies depending on your chosen program.

Specialise in either structural and geotechnical engineering or water and environmental engineering.

Study critical infrastructure such as bridges, buildings, roads, water systems and transport systems through the civil degree.

Learn to create and design key water resources and management systems through the water resources degree.

Gain access to industry-standard facilities, including high-tech testing and computer modelling equipment.

Benefit from links to the University's Natural and Built Environments Research Centre, focused on addressing real-world, multi-disciplinary challenges faced by industry and the wider community.

Choose to focus specifically on project management and leadership through your elective course selection.

CAREER OPPORTUNITIES

Depending on your chosen program, your career options can include:

Engineering project manager / engineering operations manager / civil engineer / structural engineer / water resources engineer

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.

Note: Applicants who do not meet the standard entry requirements will be assessed on a case-by-case basis by the Program Director.

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.

RELATED DEGREES

- Master of Engineering (Engineering Management)
- Master of Project Management

FURTHER STUDY

- Masters by Research
- Doctor of Philosophy (PhD)

PROGRAM STRUCTURE

INDICATIVE OF CIVIL AND INFRASTRUCTURE
FIRST YEAR
Soil Mechanics Steel and Timber Design Research Data Analysis Elective 1
Geotechnical Engineering Reinforced Concrete Design Advanced Soil Mechanics Elective 2
SECOND YEAR
Engineering Masters Design Project Masters Research Theory and Practice Elective 3
NBE Masters Research Project Elective 4 Elective 5

Campus: CE: City East, CW: City West, M: Magill, ML: Mawson Lakes, MG: Mount Gambier or W: Whyalla (C)

Full-time program duration in years (1) | Part-time study available (PT) | Commonwealth-supported (CSP) *(see page 20 for more info)*

Master of

ENGINEERING (ENGINEERING MANAGEMENT) LMEB

NESTED WITH

- Graduate Certificate in Engineering (Engineering Management) (LCEB)
- Graduate Diploma in Engineering (Engineering Management) (LGEB)

ON-CAMPUS ML 2 PT *unisa.edu.au/engineering*

ENTRY

SATAC code ..... *(Master)* 4CM122
..... *(GradCert)* 4GCO76
..... *(GradDip)* 4GDO98
Fees ..... CSP
Start date(s) ..... February, July

Learn about managing operations within an engineering organisation or department.

Develop advanced knowledge and skills in operations management, total quality management, supply chain management, enterprise recourse 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 the University's leading research concentrations.

CAREER OPPORTUNITIES

Energy manager / engineering operations manager / quality assurance manager / business development engineer

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.

EXTERNAL STUDY

This degree can also be studied online via Open Universities Australia (OUA).

For more information visit *open.edu.au/courses*

RELATED DEGREES

- Master of Engineering (Electrical Power)
- Master of Engineering (Telecommunications)
- Master of Engineering (Civil and Infrastructure)
- Master of Engineering (Water Resources Management)
- Master of Project Management

FURTHER STUDY

- Masters by Research
- Doctor of Philosophy (PhD)

PROGRAM STRUCTURE

FIRST YEAR
Professional Engineering Practice E 3 x Electives
Engineering Research Practice 3 x Electives
SECOND YEAR
Engineering Economic Analysis Enterprise Resource Planning Minor Thesis 1 (Eng)
Supply Chain Management G Operations Management Systems Minor Thesis 2 (Eng)

"After working for a car company in the Philippines, Mariel decided she wanted to learn the management side of engineering. Her dream is to one day become the head of a high-tech manufacturing business.

"I would specifically like to work in the car manufacturing industry. Cars fascinate me; and planning and working on something that people rely on everyday feels very rewarding."

Mariel says that time management has been a key to succeeding in the program; and that the teaching staff are very approachable."

Mariel Ong / MASTER OF ENGINEERING MANAGEMENT

Master of

ENGINEERING LMEL

DEGREES

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

ON-CAMPUS ML 2 PT *unisa.edu.au/engineering*

ENTRY

SATAC code..... *(Electrical Power)* 4CM126
..... *(Telecommunications)* 4CM127
Fees..... CSP
Start date(s)..... February, July

Develop advanced knowledge in engineering theory and practice, and tailor your studies depending on your chosen program.

Specialise in electrical engineering or information and communication technologies.

Study the operation and control of modern power systems, renewable and distributed energy generation, and modelling of electrical machines through the electrical power degree.

Learn about wireless and mobile communication systems, theory and coding, and telecommunication networks through the telecommunications degree.

Complete a research project and a minor engineering thesis during your studies.

Benefit from links to the University's internationally-recognised Institute for Telecommunications Research, dedicated to developing new technologies for wireless communications.

CAREER OPPORTUNITIES

Depending on your chosen program, your career options can include:

Electrical engineer / energy researcher / engineering operations manager / renewable energy development manager / network planning manager / telecommunications researcher / telecommunications development manager

ENTRY REQUIREMENTS

Bachelor degree in electrical engineering, or a related discipline, or equivalent qualification.

Note: Entry is competitive and experience in engineering and information technology, along with completion of professional qualifications will be taken into account.

RELATED DEGREES

- Master of Engineering (Engineering Management)
- Master of Project Management

FURTHER STUDY

- Masters by Research
- Doctor of Philosophy (PhD)

PROGRAM STRUCTURE

INDICATIVE OF ELECTRICAL POWER
FIRST YEAR
CORE COURSES
Renewable Energy Systems UG Power System Analysis Engineering Research Practice
ELECTIVE COURSES
Design and Integration of Renewable Energy Systems Operation and Control of Modern Power Systems Power Electronics and Drives Learning in the Workplace Project
SECOND YEAR
CORE COURSES
Renewable and Distributed Power Generation Advanced Electrical Machines Advanced Power System Modelling and Analysis Engineering Minor Thesis 1 Engineering Minor Thesis 2
Engineering Economic Analysis OR Engineering Management

Master of

PROJECT MANAGEMENT IMPA

NESTED WITH

- Graduate Certificate in Project Management (ICPM)
- Graduate Diploma in Project Management (IGBP)
- Master of Applied Project Management (IMAM) **NEW**

ON-CAMPUS CE 2 PT *unisa.edu.au/projectmanagement*

ENTRY

SATAC code..... *(Master)* 4CMOO1, 4CM15O, 4CM151
..... *(GradCert)* 4GCO5O
..... *(GradDip)* 4GDOO1
..... *(Master Applied)* 4CM2O9
Fees..... CSP
Start date(s)..... February, July

Undertake industry-standard studies in project management that can be applied across different industries, businesses and government institutions.

Learn the fundamentals of project management and gain an advanced understanding of risk management, leadership, strategy and international best practice.

Graduate with the skills to apply project management methodologies, work in interdisciplinary project teams, and manage projects from inception to commissioning.

Complete a major integrated research project, which can focus on a real issue within your workplace.

Benefit from coursework based on the industry-standard *A Guide to the Project Management Body of Knowledge (PMBoK® Guide)*.

Fast-track your studies with the new Master of Applied Project Management program, and complete your qualification while you work.

CAREER OPPORTUNITIES

Qualified project managers can work across a wide range of industries, including:

Information technology / construction / engineering / health / defence / finance / mining and resources / biopharmaceuticals / the arts / government / not-for-profit

PROFESSIONAL RECOGNITION

This program is endorsed by the Australian Institute of Project Management (AIPM).

ENTRY REQUIREMENTS

- Bachelor degree or equivalent qualification from a recognised higher education institution; or
- Graduate certificate or graduate diploma in project management, or equivalent qualification, from a recognised higher education institution.

Some applicants may be eligible for Advanced Standing and can complete the program in 1.0 or 1.5 years of full-time study, or equivalent part-time study.

EXTERNAL STUDY

The 1.5 year Master of Applied Project Management program can also be studied online via Open Universities Australia (OUA). For more information visit *open.edu.au/courses*

PROGRAM 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
NBE Masters Research Project Portfolio and Program Management Strategy in Project Organisations
International Project Practices Professional Practice Project Elective 1 Elective 2

RESEARCH

Make a lasting contribution to your field through a research degree.

QUALIFICATIONS*

- Masters by Research: 2 years^
- Doctor of Philosophy (PhD): 4 years^

**study times are approximate and based on a full-time study load.*
^in total including examination time. Candidates must be prepared to submit 6-12 months prior to official completion of their program.

FIND OUT MORE

unisa.edu.au/resdegrees

ENTRY REQUIREMENTS

unisa.edu.au/resdegrees-eligibility

HOW TO APPLY

unisa.edu.au/apply

Masters by

RESEARCH LMIE

Doctor of

PHILOSOPHY LPHD

DIVISION OF INFORMATION TECHNOLOGY, ENGINEERING AND THE ENVIRONMENT

SCHOOL OF ENGINEERING

SCHOOL OF INFORMATION TECHNOLOGY AND MATHEMATICAL SCIENCES

SCHOOL OF NATURAL AND BUILT ENVIRONMENTS

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 the University's multi-million dollar Future Industries Institute – aimed at transforming the industries of today and seeding the industries of tomorrow.

Work 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
- Statistics
- Systems Engineering

ENTRY REQUIREMENTS

MASTERS BY RESEARCH:

- Bachelor degree of at least three years with a minimum credit average in a relevant discipline; 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 degree or equivalent.

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.

Note: Eligibility for entry into a research program is also subject to an assessment of the proposed research, supervisor availability, and any school or research-specific eligibility requirements.

STUDY AT UniSA — THE BASICS

Minimum entry requirements for undergraduate bachelor and associate 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); 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.

ADJUSTMENT FACTORS

Universities in South Australia include ATAR-related adjustment factors (previously known as bonus points) to 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 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.

Need some help? Visit *unisa.edu.au/adjustmentfactors* or contact Future Student Enquiries on (08) 8302 2376 or submit an enquiry via *unisa.edu.au/enquire*

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.

unisa.edu.au/guaranteed

ADMISSIONS PATHWAYS

Entering your chosen program straight from high school is not the only pathway into UniSA. Applicants may also meet the minimum requirements to apply for entry (via competitive selection) through one of the following pathways.

Higher Education Study — completion of at least half a year of full-time equivalent study, at UniSA or a recognised higher education institution. You can apply using your Grade Point Average (GPA).

Higher Education Diploma — completion of a higher education diploma, from the UniSA College (applicable programs listed on each bachelor program in this guide), the South Australian Institute of Business and Technology (SAIBT), or another recognised higher education institution.

Special Entry — a competitive Special Tertiary Admissions Test (STAT) score. A personal competencies statement or employment experience may also be considered for some programs.

Vocational Education Training (VET) — applicants may be eligible for entry with the completion of an award from TAFE or another Registered Training Organisation at AQF Certificate IV or above.

UniSA College — there are a variety of pathway options offered through UniSA College including diplomas and the Foundation Studies program.

Alternative Pathways — there are a range of alternative pathways including bridging qualifications offered through SAIBT and Eynesbury.

Open Universities Australia — completion of at least four Open Universities Australia (OUA) courses at an undergraduate level or higher.

unisa.edu.au/pathways

BEFORE APPLYING

All applicants should check and ensure that they meet all entry and prerequisite requirements before applying. For more information on entry requirements, visit:

unisa.edu.au/study

SUPPORT SERVICES

UniSA offers services to assist rural and/or socio-economically disadvantaged students, Aboriginal and Torres Strait Islander people, and people with a disability. For more information, contact (08) 8302 2376 or visit:

unisa.edu.au/studentservices

SCHOLARSHIPS

UniSA offers a range of scholarships and grants to support students from all walks of life. Each year, 2500 students benefit from scholarships at UniSA, providing financial assistance as well as valuable work experience, mentoring opportunities and even overseas travel. For more information and to check the eligibility criteria, visit:

unisa.edu.au/scholarships

HOW TO APPLY TO THE UNIVERSITY OF SOUTH AUSTRALIA

Applications to most programs at UniSA are administered through the South Australian Tertiary Admission Centre (SATAC). For more information visit:

unisa.edu.au/apply

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 2018 are:

BAND	AREA OF STUDY	STUDENT CONTRIBUTION *For one year of full-time load (1 EFTSL)*
1	Humanities, behavioural science, social studies, foreign languages, visual and performing arts, clinical psychology, nursing and education	$6,444
2	Computing, built environment, health, engineering, surveying, agriculture, Mathematics, statistics, science	$9,185
3	Law, dentistry, medicine, veterinary science, accounting, administration, economics, commerce	$10,754

Some postgraduate programs are also Commonwealth-supported (or CSP), while others are full fee-paying (the fees for these are listed on each applicable program in this guide and are based on an equivalent full-time student load). For more information on fees including eligibility for Commonwealth-supported places, deferring your student contribution through HECS-HELP, FEE-HELP loans, or fee information relating to international students please visit:

unisa.edu.au/fees

INDUSTRY *insight*

"A strong degree foundation is important, regardless of your field, but it is only the beginning of a lifelong learning process. 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."

Steve Worlock / ENGINEERING DIRECTOR BAE SYSTEMS AUSTRALIA

Stay in touch

Sign up to receive updates directly to your inbox and keep up to date with the latest information including:

Invitations to career events and information sessions / competition alerts / insights into life on campus from students and teachers / updates on new degrees / scholarship opportunities / breaking industry and career news

unisa.edu.au/stayintouch

Artist: Rikurani

Acknowledgement of Country

UniSA respects the Kaurna, Boandik and Barngarla peoples' spiritual relationship with their country. We also acknowledge the diversity of Aboriginal peoples, past and present.

Find out more about the University's commitment to reconciliation at unisa.edu.au/RAP

2018 EVENTS

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

UniSA OPEN DAY

Sunday 12 August / 9:00am–4:30pm / City West Campus and City East Campus

CAMPUS DAYS

Magill@Twilight
Wednesday 29 August / 4:00pm–8:00pm / Magill Campus

Mawson Lakes Campus Day
Tuesday 28 August / 4:00pm–7:30pm / Mawson Lakes Campus

Mount Gambier Open Day
Sunday 5 August / 11:00am–4:00pm / Mount Gambier Campus

Whyalla Open Day
Sunday 26 August / 11:00am–3:00pm / Whyalla Campus

unisa.edu.au/openday

University of
South Australia

unisa.edu.au
Telephone: (08) 8302 2376
Make an enquiry: *unisa.edu.au/enquire*

youtube.com/unisouthaustralia
facebook.com/UniSA
twitter.com/UniversitySA
instagram.com/universitysa

Information correct at time of printing (March 2018)

CRICOS provider number 00121B

For information specific to international students, please visit *unisa.edu.au/international*

Australia's University of Enterprise