UniSA College provides high quality educational opportunities for all South Australians.

Our UniSA Connect program engages with secondary schools and the community to inspire further study and educational attainment.

Our academic programs provide a supportive pathway to university study.
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UniSA Connect: Secondary school programs

UniSA College utilises academic expertise to identify current and emerging Science, Technology, Engineering and Maths (STEM) ideas to develop interactive experiential programs. Scenario based problem solving is used as a key approach in the programs, with authentic learning links for secondary school students. STEM programs are delivered at UniSA’s Mawson Lakes campus utilising specialised equipment and facilities.

The UniSA Connect secondary school programs also connect with careers. The Career Awareness Program is designed to give secondary students (years 10-12) the opportunity to explore career options and pathways.

Our programs connect with:

- Chemistry
- Engineering
- Mathematics
- Physics
- Technology
- Careers
- Industry
- Teachers
- Student development
Microfluidics
For: Year 10 Science students and Year 11 Chemistry students

The microfluidics practical explores how advances in science and emerging technologies can significantly affect people’s lives. Students have the opportunity to work with researchers in the laboratory and use current experimental techniques to investigate the science of microfluidics.

Engineers Without Borders
For: Year 10 students

In the Engineers Without Borders workshop, students learn about the important role engineers play in developing countries. In groups, students plan, design and construct a water filter from products obtainable in developing countries, and test solar-powered water pumps to develop a sustainable solution to water access problems in remote communities.

The Engineers Without Borders program has been developed by UniSA College in partnership with The South Australian Chapter of Engineers Without Borders.

Penguin Pong
For: Year 8, 9 and 10 students

Penguin Pong is a simple electronic activity board assembled and soldered together by students. Once assembled, the activity board becomes an interactive electronic game, incorporating a variety of basic electronic components (resistors, LEDs, switches, diodes, buzzers, capacitors, etc.) and a microcontroller (PIC chip). At the completion of the session, students get to keep their completed electronic game board. Penguin Pong is an ideal introduction to electronics and microcontroller programming.
Sensor Technology
For: Year 10, 11 and 12 students

This workshop explores sensors; what they are, how they work, and how they enhance our lives. Students measure and analyse the results from infra-red and ultrasonic sensor technology using data acquisition hardware and computer software to form conclusions. Students then apply their knowledge in an attempt to ‘hide’ an object from the sensors.

Maths Experience Programs
For: Year 10 and 11 students with an aptitude for mathematics

The Maths Experience Program engages students in an intensive one day experiential program delivered by academic staff from the UniSA School of Mathematics and Statistics. The program encourages students to develop relationships with like-minded students from other secondary schools, assists students to develop an understanding of mathematical applications, and provides information about mathematics-based careers.

Momentum in Two Dimensions
For: Year 12 Physics students

This workshop is linked to the ‘Motion in Two Dimensions’ section of the SACE Stage 2 Physics curriculum. Students use large air tables and digital video cameras to record a collision between moving pucks. They then analyse the movie of the collision using data logging software to see if momentum is conserved.

Nuclear Physics
For: Year 12 Physics students

In this workshop, students participate in three experimental procedures linked to the ‘Atoms and Nuclei’ section of the SACE Stage 2 Physics curriculum. Students measure the decay of a radioactive indium isotope and use the results to determine the isotope’s half-life, observe and measure the attenuation of gamma rays through a range of solid materials, and investigate the absorption of beta particles by aluminium.
The Interference of Light

For: Year 12 Physics students

This workshop is linked to the ‘Light and Matter’ section of the SACE Stage 2 Physics curriculum. Students participate in two experiments. The first uses double slit interferometers to observe, measure and calculate the interference pattern of light from a sodium vapour source. The second measures the wavelength of a helium-neon laser to calculate the diameter of a hair using laser diffraction.

The Motion of Charged Particles in Electric and Magnetic Fields

For: Year 12 Physics students

This workshop is linked to the ‘Electricity and Magnetism’ section of the SACE Stage 2 Physics curriculum. Students participate in two experiments. The first measures the effect of electric and magnetic fields on electrons using Teltron Tubes. The second recreates and analyses the Hall Effect. This experiment demonstrates current flow of negatively charged particles. Students also explore the wide range of applications of the Hall Effect including smart phones, sensors, GPS systems and semiconductors and its use in calculating carrier density of conductors.

3D Printers

For: Year 10 and 11 students

An introductory session to the world of 3D printers, this workshop will provide students with an insight into a technology that many are calling the future of manufacturing. Students will discover the uses and applications of 3D printing technology, watch 3D printers in action, get hands-on experience with a CAD-based software package, and design a three dimensional object.
Career Awareness Program
For: Year 10, 11 and 12 students

The Career Awareness Program is designed to give secondary students the opportunity to explore career options. This program is delivered in secondary schools utilising the MyCareerMatch tool to profile the skills and abilities of each student. Third year Psychology students from UniSA assist UniSA College in the delivery of personalised profiles and work with students to interpret the information. The program is negotiated with the individual secondary school to meet the needs of the school, with many using it as part of the Year 10 Personal Learning Plan subject.

Aviation
For: Year 10 and 11 students

The Aviation program will engage and excite students about the possibility of careers in the aviation industry. The program will run for a full day at both Mawson Lakes and the Aviation Academy at Parafield. Students will explore the basics of aviation through a workshop and then visit the Aviation Academy where they will experience the flight simulator, the control tower and will have a close up look at the aircraft.

DSTO Radar Technology
For: Year 11 and 12 students

This program is a collaboration with the Defence Science and Technology Organisation (DSTO) to demonstrate perspectives on the application of radar technology. It will provide an experiential workshop on radar concepts where secondary school students will use an audio radar as a learning tool.

Teacher Professional Learning
For: Secondary school teachers

UniSA Connect offers a range of teacher professional learning opportunities for secondary school teachers. Workshops for Physics teachers will be offered prior to the student workshops on Momentum in Two Dimensions, Motion of Charged Particles in Electric and Magnetic Fields, The Interference of Light and Nuclear Physics. Other workshops will focus on new technologies, such as the use of 3D Printers, Sensor Technology using data acquisition software, mechatronics and problem based learning.
Experiential programs for regional schools
For: Year 10, 11 and 12 students

Regional schools can negotiate a full day science, technology, engineering, maths or careers program for their students. The programs are held at the Mawson Lakes campus utilising high-tech equipment and state of the art learning facilities.

Rural Reconnect
For: Year 10 students

Rural Reconnect is an orientation program for rural secondary students who are considering studying at university. Participating students will experience life at a university first-hand as they tour around a UniSA campus, learning about programs and services the university offers along the way. Schools will be provided with an expression of interest form to nominate students to participate.

SACE research support
For: Year 10, 11 and 12 classes

The University of South Australia provides support to assist students with their SACE Research Project and for teachers to involve their class in research as part of a school subject.

To help secondary school students and teachers, UniSA is offering opportunities for some SACE students to undertake their research projects within bigger UniSA group projects and for teachers to involve their whole class in a research project. Most of this research will be undertaken in collaboration with other researchers.

Participation in group projects will give students extra knowledge, academic support and practical experience. It is also likely that research projects undertaken within these projects will contribute to knowledge that will affect Australia and perhaps the world – the projects could make a real difference.
Science Booster
For: Year 12 Physics and Chemistry students interested in Health Science, Materials or Engineering

This two day program aims to motivate and support students to maximize their performance in SACE Stage 2 Chemistry and Physics. Students explore future pathways and reinforce their subject studies through experiential learning.

SMS@UniSA
For: Year 12 students

SMS@UniSA caters for senior Maths and Science students from schools in the Northern Adelaide region which have low student numbers in SACE Stage 2 Chemistry, Physics or Specialist Maths. UniSA College provides facilities, access to equipment and enrichment opportunities for SMS students.

UniSA College Information Sessions
For: Year 12 students

This is a one hour session for students to find out more about pathways into university. UniSA College presents information about Foundation Studies and Diploma programs and how they can prepare students for and provide entry into university degrees.
UniSA Connect: Community programs

UniSA College partners with many community centres and organisations to run programs for members of the public. Collaboration with community centre staff allows UniSA College to develop working relationships to encourage their clients to re-engage with education and to promote UniSA College Foundation Studies and Diplomas. Targeted sessions provide information about enabling education and career opportunities.

Our community programs include:

- Aboriginal Power Cup
- Australian Indigenous Mentoring Experience (AIME)
- Career Awareness Program
- College Information Sessions
Aboriginal Power Cup

UniSA College partners with community groups to contribute to the Aboriginal Power Cup, an early intervention strategy that engages young Aboriginal people in a leadership development program. The Aboriginal Power Cup is SACE Board accredited and encourages students to continue their education and make positive life choices. The program is an initiative of the Attorney General’s Department in partnership with Port Adelaide Football Club.

Australian Indigenous Mentoring Experience (AIME)

The University’s commitment to Indigenous reconciliation is based firmly on the acceptance that educational institutions have a particularly valuable contribution to make to the process of reconciliation by educating the Australian community about the cultures, languages, history and contemporary experiences of Australia’s Indigenous peoples.

By virtue of its founding Act, UniSA has a special responsibility to provide leadership in the areas of Indigenous research and education. In line with this responsibility, UniSA College is coordinating the university’s relationship with Australian Indigenous Mentoring Experience (AIME).

AIME pairs university students (Indigenous or non-Indigenous) with Indigenous Year 8 to 12 secondary school students to provide one to one tutoring, university-based activities and access to an after school learning centre. UniSA College has formed partnerships with eight northern secondary schools to deliver the program from 2013 to 2016.

Career Awareness Program

The Career Awareness Program provides community centre clients with the opportunity to utilise the MyCareerMatch tool to profile their skills and abilities, and to explore pathways to higher education. The program is delivered on site at community centres.
UniSA College Information Sessions

This is a one hour session for members of the general public to find out more about pathways into university. UniSA College presents information about Foundation Studies and Diploma programs and how they can prepare people for and provide entry into university degrees.

For further information about the Foundation Studies and Diploma programs offered by UniSA College see pages 14-15.

Bookings

To book into a UniSA Connect secondary school or community workshop visit unisa.edu.au/college
UniSA College: Pathways to degrees

UniSA College’s academic programs provide more than just entry into university – they equip students with the knowledge and skills to succeed in their chosen degree.

Programs on offer:

- Diploma of Allied Health
- Diploma of Arts
- Diploma of Science and Technology
- Foundation Studies

The Diplomas are 2 year programs providing guaranteed entry into linked degrees at UniSA (upon successful completion). In the first year of the program students build the skills and confidence they need to succeed at university. In the second year, students start the first year of their undergraduate degree, but come back to UniSA College for additional support.
Foundation Studies is a one-year, fee-free program for people with no previous qualifications. The program prepares students for study at university. On completion of the program students use their grade point average to apply for entry into a university degree. This process is competitive.

Which pathway is best for you?

Start here:

- **Do you have?**
  - an ATAR of 50+
  - OR a STAT score 139+
  - OR a Certificate III

- **YES**
  - Are you interested in these degrees?
    - Arts
    - Communication (Media and Culture)
    - Media Arts
    - Social Science (Human Services)
    - Social Work
    - Writing and Creative Communication

  - **YES**
    - One of these degrees
    - Your pathway: Diploma of Arts

  - **NO**
    - Your pathway: Foundation Studies

- **OR**
  - Environmental Science
  - Human Movement
  - Health Science
  - Laboratory Medicine
  - Medical Science
  - Nursing
  - Nutrition and Food Sciences
  - Pharmaceutical Science
  - Science
  - Science and Education

  - **YES**
    - One of these degrees
    - Your pathway: Diploma of Science & Technology

- **Interested in a different degree?**

Your pathway: Foundation Studies
‘I am the first in my family to get a university degree. Because I dared to dream I have created a life I am happy with, doing something that I am passionate about and giving back to my community.’

Catherine, Education
‘I am a happier, more confident person. University has given me the knowledge and the skills to succeed.’

Heather, Law
‘I wanted a job that would challenge me every day and a career that would last a lifetime. My parents wanted a better life for me.’

Tyson, Occupational Therapy
How to get involved

UniSA Connect: School & community programs

To involve your school, community centre or community group in a UniSA Connect workshop please contact the Manager: UniSA Connect Programs.

Deb Turley
Manager: UniSA Connect Programs
Phone: (08) 8302 6819
Email: deb.turley@unisa.edu.au

To make a booking visit: unisa.edu.au/college

SACE research support

For support with SACE research, please contact the Director: SACE Research.

Dr Judy Ford
Director: SACE Research
Phone: (08) 8302 5778
Email: judy.ford@unisa.edu.au

UniSA College pathways to degrees

For more information about the pathways to degrees programs offered by UniSA College please visit our website unisa.edu.au/college or contact our academic program enquiries office.

UniSA College

Academic program enquiries
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Email: college@unisa.edu.au
UniSA College

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Adelaide, South Australia

The University of South Australia reserves the right to alter, amend or delete any program, fee, course, admission requirement, mode of delivery or other arrangement, without prior notice.

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