

The Technology-Science University Pathway

This pathway will interest you IF:

- You enjoy working with physics, chemistry and maths to design and operate advanced engineering, scientific and technical products
- You enjoy working with computers
- You enjoy doing research and carrying out experiments

There are a large number of courses and many have new names

You will need to do some further reading in University course guides to understand all of the courses listed on the right.

Many are straight engineering courses (civil, electrical/electronic, mechanical, mineral/mining).

BUT many are in areas like:-

- Agricultural scientist
- Biotechnology
- Bioinformatics (applying maths to areas of DNA research)
- Medical and Health research
- Environmental Science
- Nanotechnology – the science of very small objects
- Space and Aeronautical Science
- Robotics
- Winemaking

NOTE: Biological sciences are under “Biological/Earth sciences” pathway chart

School Subjects

Many of the Adelaide Uni courses want highest level maths, physics and chemistry.

The boxes below show the subjects that will allow you to get into ALL of the courses listed on the right. BUT many courses –especially at Flinders and Uni SA don’t require quite so much maths and many don’t require chemistry.

SO.....check the requirements for each course.

Subjects that allow entry to any of the courses opposite:-

Stage 1 Subjects:-

Semester 1
Humanities 4 Unit Maths 4 Unit Maths Physics Chemistry English Any

Semester 2
Humanities 4 Unit Maths 4 Unit Maths Physics Chemistry English Any

Stage 2 Subjects:-

Full Year Maths Studies Specialist Maths Physics Chemistry Any Humanities

University courses

Adelaide University degrees:-

- Agricultural Sciences
- Agriculture
- Biotechnology
- Computer Science

Engineering degrees

- Chemical
- Civil
- Civil/Environmental
- Computer Systems
- Electrical/Electronic
- Info.Technology /Telecommunications
- Mechanical
- Mechatronic
- Petroleum
- Engineering Double degrees with Arts or Management
- Environmental Studies
- Maths/Computer Science
- Food Technology and Management
- Health Science
- Science
- Biomedical Science
- Optics and Photonics
- Space Science and Astro Physics

University of SA degrees:-

Computing and Info. Technology:

- Computing and Info. Science
- Computing and Multi –media
- Electronic Commerce
- Maths and Computer Modelling
- Software Engineering

Engineering:-

- Civil /Civil and Water
- Computer Systems
- Electrical & Mechatronic
- Electronics/Microengineering
- Info Tech Engineering
- Electrical and Mechatronic
- Mechanical and Manufacturing
- Telecommunications

Medical/Health Sciences:-

- Science
- Biomolecular Chemistry
- Food Science/Nutrition
- Human Movement

Flinders Uni degrees:-

- Bioinformatics and Molecular Biology
- Biotechnology

Engineering:-

- Biomedical Engineering
- Computer Engineering
- Electrical and Electronic Engineering
- Software Engineering
- Environmental Science
- Forensic and Analytical Chemistry
- Health Sciences
- Information Technology
- Marine Biology
- Medical Science
- Nanotechnology
- Nutrition and Dietetics
- Science

Biological-Earth Sciences University Pathway

This pathway will interest you IF:-

- You enjoy the natural environment and would like to study to understand it further
- You may like observing and classifying animals and plants
- You may be interested in geographic or weather systems
- You may also like working to manage wildlife and protect species

Some occupations in this group are the following:-

Agricultural officer	Botanist
Biologist	Cultural heritage officer
Environmental scientist	Fisheries officer
Forester	Geographer
Hydrographer	Life scientist
Marine biologist	Meteorologist
Park ranger	Surveyor
Tourism manager	Zoologist
Natural resource manager	

(Also check careers and courses in “Technology-Science” chart)

School Subjects:-

The courses opposite have a range of requirements – many have none – but the following require some prerequisites or assumed knowledge as follows and are marked with an asterisk (*):-

Adelaide University: *Science* requires ONE of Stage 2 Chem, Maths Studies, Physics and ONE of Ag Sci, Chem, Biol, or Physics. *Natural Resource Management* and *Ag. Science* assume Maths Studies and Chem. *Agriculture* assumes Maths Studies and stage 1 Chem.

Flinders University: *Marine Biology and Biodiversity recommend Stage 1*

University of SA: *Geo Informatics & Surveying* assumes Maths Studies/Specialist Maths and Physics

The *Diploma* courses opposite can be entered with HESS G or HESS R subjects in stage 2.

For the rest, the pattern is as follows:

Stage 1 Subjects:-

Semester 1	Any English*	Any Maths	Extra Maths or free choice	Any Humanities
Science/Tech	Free choice			

Semester 2	Any English	Any Maths	Extra Maths or free choice	j Any Humanities
Science/Tech	Free choice			

Stage 2 Subjects:-

Full Year	i HESS G Humanities	l HESS G Science/Tech	Any HESS G	Any HESS G
Any SUBJECT**				

** Note: Some courses have high uni entry (TER) scores and HESS G Subjects generally perform better when it come to points.

University courses

Adelaide University:-

Degrees:-

- Agricultural Science * (horticulture; pest mngmt. Plant breeding; oenology; viticultural science.)
- Arts degree with geography and/or biology and related subjects
- Environmental Studies
- Natural Resource Management*
- Science*

Diploma:-

- Agricultural Production
- Natural Resource Management

Flinders University:-

Degrees:-

- Aquaculture
- Arts with subjects like geography, biology etc)
- Biodiversity and Conservation*
- Ecotourism
- Environmental Health
- Environmental Management
- Environmental Science
- Marine Biology
- Science

University of SA:-

Degrees:-

- Biodiversity, Environmental and Park Management
- Geographic Information Systems
- Info Tech (Geographic Info Systems and Computing)
- Geoinformatics and Surveying*
- Recreation Planning and Management

Diploma:-

- Geographic Information Systems