Bachelor of Science (Earth Science)

The Earth is an amazing place and for an earth scientist, it offers a unique natural laboratory that covers space and time. Earth science is a multidisciplinary science that applies chemistry, physics, biology and mathematics tools to understand earth processes, decipher its past and predict its future. Earth scientists work to monitor changes in the Earth’s environment and suggest solutions to problems. They study natural hazards to prevent loss of life and reduce property damage. Earth scientists play key roles in the search for fuels and minerals. Climate change, earthquakes and geothermal energy are just a few of the issues that require knowledge of earth science.

Earth science (also known as geoscience) blends the traditional fields of geology, physical geography and oceanography/ hydrology. Geology describes the rocky parts of the Earth’s crust (or lithosphere) and its development. Physical geography, which studies the Earth’s surface, includes geomorphology, soil science and biogeoscience. The marine and freshwater parts of the Earth define the fields of oceanography and hydrology.

Why choose this course?
If you enjoy working outdoors and are interested in understanding how the world works, then you will find earth science a rewarding area of study. Blending current research issues and problem solving with theory and industry-related, hands-on practicals, the earth science major provides you with a fundamental background to pursue a career in either the resource or the environmental sector.

Subject prerequisites
- Mathematical Methods (Units 3 & 4, C)

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements
Students must meet the English proficiency requirements.

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Real graduate

Find out what Katrina found the most rewarding about studying geology. Since graduating from her Bachelor of Applied Science degree, she’s completed an internship on the PIXL project led by NASA scientist Dr Abigail Allwood, based at the Jet Propulsion Laboratory in California. The PIXL is an instrument that’s helping scientists look for signs of past microbial life on Mars.
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**Careers and outcomes**
There is currently a shortage of earth scientists in Australia and employment rates are high and salaries great. Earth scientists are in high demand in the energy sector (oil, gas, coal, geothermal) and exploration and mining industries. Many earth scientists find employment in environmental consulting companies tackling geotechnical, groundwater contamination, natural hazards or climate change issues. Earth scientists may work for government agencies such as CSIRO and Geoscience Australia doing applied research, or for state or local governments.

**Professional recognition**
Graduates are eligible for membership in a number of professional societies, such as the Geological Society of Australia, Australian Institute of Geologists and other overseas professional societies.

**Other study options**
- Bachelor of Business/Bachelor of Science
- Bachelor of Information Technology/Bachelor of Science
- Bachelor of Laws (Honours)/Bachelor of Science
- Bachelor of Mathematics/Bachelor of Science