

Earth and Environmental Science

Earth and Environmental Science explores environmental issues surrounding the Earth's renewable and non-renewable resources. Students will gain an understanding of these resources and the ability to live sustainably on the planet. Students will undertake practical and secondary-sourced investigations to acquire a deeper understanding of the Earth's features and naturally occurring phenomena and cycles.

Who should choose to study Earth and Environmental Science?

Students interested in environmental issues, ecology, environmental planning and managing human impacts should consider this course. The course builds on knowledge and understanding gained in the Science Stage 5 course. It provides the foundational knowledge and skills required to study earth and environmental science after completing school and supports participation in careers in a range of related industries. The application of earth and environmental science is essential in addressing current and future environmental issues and challenges. It is also necessary for the use and management of geological resources that are important to Australia's sustainable future.

Course Content

The Year 11 and Year 12 courses each comprise four modules.

Year 11

- Module 1: Earth's Resources
- Module 2: Plate Tectonics
- Module 3: Energy Transformations
- Module 4: Human Impacts

Year 12

- Module 5: Earth's Processes
- Module 6: Hazards
- Module 7: Climate Science
- Module 8: Resource Management

Earth and Environmental Science uses Working Scientifically processes to develop scientific investigative skills. It focuses on developing problem-solving and critical thinking skills in order to understand the Earth's features and naturally occurring phenomena and cycles. Communication skills are also essential in forming evidence-based conclusions or arguments.

Students engage with inquiry questions and carry out first-hand and secondary sourced investigations both individually and collaboratively. A minimum of 15 hours of in-class time is allocated to **depth studies** in both Year 11 and Year 12. The course focuses on the processing, analysis and evaluation of qualitative and quantitative data in order to formulate explanations and solve problems.

See the NESA Earth and Environmental Science syllabus on the website below for more information.

<https://educationstandards.nsw.edu.au/wps/portal/nesa/11-12/stage-6-learning-areas/stage-6-science/earth-and-environmental-science-2017>