Three Masters degrees are offered in Geoscience at UWA

- Geoscience
- Ore Deposit Geology
- Hydrogeology

Course description, features and facilities
Geoscience is the study of our dynamic planet – its systems, processes and materials, to help us understand the origin and evolution of Earth, its ancient and modern environments and climates, natural hazards and the formation of natural resources including groundwater, petroleum and minerals. Knowledge of past and present Earth processes is fundamental to predicting future changes in environments and climate as well as contributing to management of Earth resources.

As the majority of Australia’s mineral and petroleum resources are found in Western Australia, UWA is in a prime location for students to gain geoscientific skills that can be directly applied to understanding these resources. These masters degrees focus on these key areas and include the opportunity to gain knowledge and develop practical skills in gathering and interpreting geoscientific information using the latest technology.

UWA has a well-established international reputation in geoscientific research and training that includes significant mineral and petroleum industry collaboration. The Geoscience community is truly global and our staff have strong international networks and actively undertake research projects in many countries around the world including in SE Asia, Africa, South America and Europe. The Geoscience staff have close links with the Centre for Microscopy Characterisation and Analysis, and the Oceans Institute at UWA.

Masters degrees
- Master of Geoscience (by coursework or coursework and dissertation) – provides students with advanced knowledge and skills with particular emphasis on the development of practical skills in a diverse range of geoscience areas. This degree provides the opportunity for students to explore diverse topics, develop advanced understanding and practical skills, and undertake fieldwork in well-known regions in Western Australia and overseas.

  Course duration: 2 years.
  Students may apply to undertake a research project in the second year of this degree.
  Intake period: February

- Master of Ore Deposit Geology (coursework or coursework and dissertation) – builds on students’ prior learning and work experience to provide advanced education focused on the formation, exploration and evaluation of ore mineral deposits. Increasingly innovative techniques are being used in this field including data integration and modelling approaches, and this is reflected in the opportunities provided by this degree to strengthen geoscientific, computing, exploration and management skills. Practical skill development including fieldwork is emphasised.

  Course duration: 2 years.
  Students may apply to undertake a research project in the second year of this degree.
  Intake period: February

- Master of Hydrogeology (by coursework or coursework and dissertation) – groundwater is vital to the sustainability of society, especially in Australia.

  Course duration: 1.5 – 2 years.
  Students may apply to undertake a research project within this degree.
  Intake period: February and July
Course duration: 1 year. Students may apply to undertake a research project within this degree.

Intake period: February and July

In these degrees you will study core units with other coursework units selected as options. Research projects may be undertaken in each of these degrees leading to a dissertation, and include experience in writing a research proposal and presenting a research seminar.

For admission information and course units for these degrees please visit: handbooks.uwa.edu.au/courses

Also offered is the Master of Science (by thesis and coursework) – a one year course that contains a major thesis. Students may specialise in Geoscience, Hydrogeology, Petroleum Geoscience or Mineral Geoscience. This course is available to students with a relevant bachelor’s degree with Honours with a >70% average or equivalent.

handbooks.uwa.edu.au/courses/coursedetails?id=c202

Our Strengths
Discovery-based science exploring Earth processes and history, with strong applied geoscience (resources and environmental) using geology, geophysics, geochemistry and mathematics.

- Located in Western Australia
- Multidisciplinary approaches to problem solving
- Multiscale investigations from nano-scale to global and beyond
- Focus on ancient Earth processes to modern day environments
- Continents and oceans
- Mineral and hydrocarbon exploration
- Groundwater
- Coastal and marine geoscience
- Geosequestration and reservoir modelling
- Resource assessment and predictive modelling

Why study the Geosciences at UWA?
Staff at UWA work in diverse aspects of geoscience disciplines including geology, geochemistry and geophysics, with well-established collaborative links and strong research activity that informs our teaching at all levels. Our location in Western Australia provides considerable opportunity for our researchers to explore the history of ancient terrains and associated mineral deposits, our coastal environments and coral reefs, and offshore sedimentary basins where hydrocarbon resources are located. Our onshore basins are important for groundwater and hydrocarbon resources.

Research projects in the degrees provide opportunities to develop research skills including critical reading and scientific writing. Projects are supervised by geoscience staff and are typically undertaken in collaboration with industry and/or government agencies. Students select their project topic.

Career Opportunities
Geoscience graduates have diverse employment options including working as geoscientists with resource companies, consultancy/service companies, or Commonwealth or state government agencies responsible for onshore and offshore resources including water and the environment. Resource company roles include exploration, mining, petroleum production, groundwater and/or environmental monitoring and management. Geoscience is also a valuable skill for employment in education, economics, finance, and government policy and planning.

Key Information
Scholarships for international students:
Visit: science.uwa.edu.au/courses/scholarships

Domestic students:
These courses qualify for a Commonwealth Supported Place

Visit the Future Students website for more information, including fees, refund policy and support services: studyat.uwa.edu.au/courses

How to apply:
Visit: studyat.uwa.edu.au/applynow

Course enquiries:
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