

Earth Sciences

Year and Campus:	2016
Coordinator:	Associate Professor Kevin Walsh
Contact:	Email: mesc-coord@earthsci.unimelb.edu.au (mailto:mesc-coord@earthsci.unimelb.edu.au)
Overview:	<p>The Graduate Diploma in Science (Advanced) is designed to allow Earth Scientists to upgrade their skills and/or retrain by undertaking a year (or longer part-time) of coursework and thesis studies. In addition, the Diploma is open to Science graduates with a background or work experience in Earth Sciences who wish to undertake further studies in Earth Science for business or pleasure. The Diploma studies are modular and available part-time to encourage participation from industry Earth Scientists.</p> <p>-</p> <p>Duration: The Graduate Diploma in Science (Advanced) can be completed full-time in one year (100 points) or part-time over several years, allowing industry Earth Scientists to attend courses in 2-6 week blocks to complete subjects and carry out thesis and literature review studies remotely, if necessary. International students must take the diploma full-time. The Diploma involves completion of 12 one-week short courses, a literature review and a minor thesis.</p> <p>-</p> <p>Entry Requirements: Admission is open to candidates with a Bachelor of Science degree specialising in Earth Sciences, or with a Bachelor of Science degree with a background or work experience in Earth Sciences. Candidates will usually commence studies at the beginning of February, but mid-year starts are also possible. Admission is subject to the availability of a supervisor for the research component of the diploma.</p>
Learning Outcomes:	<ul style="list-style-type: none"> # increase their knowledge and understanding of Earth Sciences and awareness of current developments and issues relating to studies of our planet; # develop independent and critical thinking skills; # improve oral and written communication skills.
Structure & Available Subjects:	<p>The School of Earth Sciences offers a wide variety of one-week theory/practical or field studies from which to choose; typically there are 30 such short courses available each year, of which candidates must complete 12. These are offered within the formal 12.5 point subjects listed for the MSc (Earth Sciences), all of which are available to Graduate Diploma in Science (Advanced) students with authorisation from the coordinator. Please see the MSc (Earth Sciences) handbook entry. This allows the Graduate Diploma in Science (Advanced) candidate to specialise in a particular aspect of Earth Science or attain more broadly-based expertise.</p> <p>In addition to the coursework requirement (75 points), the Graduate Diploma in Science (Advanced) also requires the completion of a literature review and minor thesis (25 points).</p> <p>Candidates who attain an average mark of over 65% may be eligible to upgrade their studies to the Master of Science (MSc) or honours degree.</p> <p>Two options are available regarding your research topic:</p> <ol style="list-style-type: none"> 1 You may have your own research topic and dataset in mind, particularly if you are coming from industry. 2 You may wish to undertake a research project offered by one of the many academics within the School of Earth Sciences. <p>In both cases you can contact the Postgraduate Coursework Coordinator directly at mesc-coord@earthsci.unimelb.edu.au (mailto:mesc-coord@earthsci.unimelb.edu.au) who will direct your enquiry to the appropriate specialist in the School of Earth Sciences, or you can investigate the Earth Sciences staff members on this website and contact them directly http://www.earthsci.unimelb.edu.au/ (http://www.earthsci.unimelb.edu.au/)</p>
Subject Options:	<p>Subject prerequisites: For stream specific requirements please click here (http://science.unimelb.edu.au/available-stream-requirements%20) .</p> <p>Coursework Subjects</p>

Students will select 75 points from the following subjects:

Subject	Study Period Commencement:	Credit Points:
ATOC90004 Current Topics in Atmospheric Research	Semester 1	12.5
ATOC90005 Atmosphere Ocean Interaction and Climate	Not offered 2016	12.5
ATOC90006 Climate Analysis and Modelling	Not offered 2016	12.5
ATOC90007 Mesoscale Atmospheric Dynamics	May	12.5
ATOC90010 Statistics in Climate Dynamics	April, Semester 1	12.5
ATOC90011 Convective Clouds and Storms	Not offered 2016	12.5
ATOC90012 Advanced Dynamical Meteorology	Semester 1	12.5
ATOC90013 Atmospheric Modelling	March	12.5
COMP90059 Introduction to Python	February	6.25
ERTH90029 Environmental Geochemistry	June	6.25
ERTH90030 Mineral Exploration Through Cover	Not offered 2016	6.25
ERTH90031 Regolith Geoscience	Not offered 2016	6.25
ERTH90032 Interpretation of Satellite Images	February	6.25
GEOL90005 Hydrogeology/Environmental Geochemistry	Semester 1	12.5
GEOL90021 Earth's Biogeochemical Cycles	Not offered 2016	12.5
GEOL90027 Advanced Structural Mapping	February	6.25
GEOL90028 Geochronology and Thermochronology	March	6.25
GEOL90029 Geology of Gold	March	6.25
GEOL90030 Coastal Environmental Geomorphology	Not offered 2016	6.25
GEOL90031 Ore Reserve Estimation	March	6.25
GEOL90032 Introduction to Mineralogy	April, May	6.25
GEOL90033 Mine Safety and Engineering	May	6.25
GEOL90034 Practical Igneous Petrology	May	6.25
GEOL90035 Geodynamics	April	6.25
GEOL90036 Australian Coal Basins	Not offered 2016	6.25
GEOL90037 Applied Structural Geology	March	6.25
GEOL90038 Igneous Geodynamics and Ore Deposits	June	6.25
ERTH90033 Geology from Geophysics	February	6.25
GEOL90041 Mining Geology & Resource Evaluation	June	6.25
ERTH90034 Advanced Hydrogeology	May	6.25
GEOL90042 Ore Textures & Breccias	June	6.25

	GEOL90043 Fundamentals of Geological CO2 Storage	March, September	6.25						
	GEOL90044 Ore Deposit Models	May	6.25						
	GEOL90045 Exploration Skills Mapping	February	6.25						
	GEOM90044 Geoscience Information Systems	April	6.25						
	GEOL90046 Environmental Geology Field Techniques	August	6.25						
Research Project									
Students must complete the following Research Project subject:									
	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>ERTH40001 Earth Sciences Research Project</td> <td>Semester 1, Semester 2</td> <td>25</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	ERTH40001 Earth Sciences Research Project	Semester 1, Semester 2	25
Subject	Study Period Commencement:	Credit Points:							
ERTH40001 Earth Sciences Research Project	Semester 1, Semester 2	25							
Links to further information:	http://graduate.science.unimelb.edu.au								
Notes:	This program has a start-year and a mid-year intake.								
Related Course(s):	Graduate Diploma in Science (Advanced)								