

Bachelor of Science (Honours) (Deans Scholar) (Physical Geography) | 2020

In this course you will combine fieldwork, practical experience and research to develop an understanding of how the dynamics of physical processes acting on the surface of the Earth create landscapes. You will also investigate the impacts and consequences of human existence on the landscape. You will learn how to apply techniques used to examine the spatial pattern and evolution of landscapes over time. . This will equip you with the required knowledge of current issues related to Physical Geography and allow you to use the acquired skills to propose strategies and solutions to these problems.

Major Learning Outcomes:

On successful completion of this course students will be able to:

1. Demonstrate broad and coherent knowledge and understanding of the geographical trends, processes and impacts that shape the Earth including local, national, global, cultural, Indigenous and spatial perspectives
2. Critically evaluate information and data to assess scientific methods and frameworks in physical geography
3. Develop hypotheses and experiments to test against evidence-based scientific facts, laws, principles and evidence.
4. Identify and articulate real world physical geography problems.
5. Apply knowledge and appropriate techniques, including those associated with fieldwork, to evaluate possible solutions to real world problems and defend choice of solution against alternatives
6. Locate, interpret and evaluate data, information, results and literature pertaining to physical geography using appropriate methods, measurements, tools and technologies
7. Communicate physical geography perspectives and knowledge effectively to a range of audiences using appropriate technologies and communication skills
8. Demonstrate ethical, professional, public and personal conduct and capacity to reflect on and direct own learning and practice and participate constructively in decision-making within the context of physical geography
9. Independently plan and execute a research project in regard to Physical Geography



Course structure

To qualify for award of the degree, the Bachelor of Science (Honours) (Deans Scholar) (Physical Geography), a candidate must successfully complete at least 192 credit points, as outlined in the table below:

Year 1:

When selecting 100-level subjects students should note the pre-requisites required for the 200-level subjects they wish to take.

Subject Code	Subject name	Credit points	Session (s)
AUTUMN Year 1			
EESC101	Planet Earth	6	Autumn
SCII101	Global Challenges in Science	6	Autumn
EESC105	Introductory Geospatial Analysis	6	Autumn
MATH151*	General Mathematics 1A	6	Autumn
*MATH151 MUST be completed by all students who have not completed NSW HSC Mathematics or equivalent at Band 4 or higher.			
Plus 6 Credit points (students not required to do MATH151) of elective subjects from the General Schedule or Science Schedule.			
SPRING Year 1			
EESC102	Earth's Interconnected Spheres	6	Spring
EESC103	Earth's Dynamic Surface	6	Spring
Plus 12 Credit points of elective subjects from the General Elective Schedule, Science Schedule or the suggested list below:			
SCIE103	Climate Change	6	Spring
GEOG122	Human Geography: Living in a Material World	6	Spring
GEOG123	Indigenous Geographies: Questioning Country	6	Spring

Year 2:

When selecting 200-level subjects students should note the pre-requisites required for the 300-level subjects they wish to take.

Subject Code	Subject name	Credit points	Session (s)
AUTUMN Year 2			
EESC203	Biogeography and Environmental Change	6	Autumn
EESC207	Advanced Geospatial Analysis	6	Autumn
Plus 12 Credit points of elective subjects from the General Elective Schedule, Science Schedule or the suggested list below:			
GEOS215	Sedimentology, Stratigraphy and Palaeoenvironments	6	Autumn
CRLP200	Career Ready Learning & Practice	6	Autumn, Spring, Summer
SPRING Year 2			
EESC202	Shaping Earth's Surface	6	Spring
EESC209	G-cubed: Geochemistry, Geochronology, Geophysics	6	Spring
Plus 12 Credit points of elective subjects the General Elective Schedule, Science Schedule or the suggested list below:			
EESC250	Field Geology	6	Summer
GEOG222	Society and Environment: Resources, Challenges, Futures	6	Spring
GEOG231	Maps and Apps for Social Scientists	6	Spring
CRLP200	Career Ready Learning & Practice	6	Autumn, Spring, Summer



Year 3

Subject Code	Subject name	Credit points	Session (s)
AUTUMN Year 3			
EESC323	Fluvial Geomorphology and Sedimentology	6	Autumn
Plus 18 credit points of electives from the General Elective Schedule, Science Schedule or the suggested list below:			
GEOS309	Igneous-Metamorphic Geology and Processes	6	Autumn
EESC321	Plate Tectonics, Macrotopography and Earth History	6	Autumn
EESC328	Dung, Death and Decay: Modern scientific methods in archaeology	6	Autumn
SPRING Year 3			
EESC320	Capstone: Earth and Environmental Sciences	6	Spring
EESC322	Coastal Environments: Process and Management	6	Spring
EESC331	Changing Global Environments	6	Spring
Plus 6 credit points of electives the General Elective Schedule, Science Schedule or the suggested list below:			
SCII302	Science Interdisciplinary Project	6	Spring
GEOG337	Policy for Environmental and Heritage Management	6	Spring
EESC326	Resources and Environments	6	Spring

Year 4

Subject Code	Subject name	Credit points	Session (s)
ANNUAL Year 4 Select either the full time (48cp) or 48cp of the equivalent part-time subject (2x 24cp) option below:			
EESC401	Earth and Environmental Sciences Honours	48	SMAH Annual
EESC407	Earth and Environmental Sciences Honours (Part-Time)	24	SMAH Annual



A selection of research internships or project-based subjects may also be available to high achieving students wishing to complement their coursework with research projects. Entry into these subjects requires approval from the Head of School.

NOTE: Students may be required to contribute to food, transport and accommodation costs associated with the provision of field trips that form part of the course of study.

Minors

Students are encouraged to consider taking a *Minor study* as part of the BSc program. Inclusion of a *minor* in support of your *major* area of study allows you to broaden your view, knowledge and expertise while specialising in areas of interest.

Details on Minors can be found at <https://documents.uow.edu.au/handbook/minors/H20008091.html>

Options include (but not limited too): Earth and Environmental Science, Geoscience, Physical Geography, Archaeology, Biochemistry, Biodiversity, Ecology, Molecular Biology, Geology and Marine Biology.

Honours

See separate entry for the Bachelor of Science (Honours)

Entry Requirements and Credit Arrangements

Information on academic and English language requirements, as well as eligibility for credit for prior learning, is available from the Course Finder.

Other Information

For further information please email: smah-students@uow.edu.au