Environmental Science major

Year and Campus:	2016
Coordinator:	Professor Michael Keough
Contact:	Email: **mjkeough@unimelb.edu.au (mailto:mjkeough@unimelb.edu.au)** **Currently enrolled students:** • Contact **Stop 1 (http://students.unimelb.edu.au/stop1)** • General information: **https://ask.unimelb.edu.au (http://ask.unimelb.edu.au/)** **Future students:** • Further information: **https://futurestudents.unimelb.edu.au (https://futurestudents.unimelb.edu.au)** • Email via: **http://benvs.unimelb.edu.au/ (http://benvs.unimelb.edu.au/)**
Overview:	Impact on the Earth's environment arises from human activities, including land degradation and industrial pollution, as well as naturally occurring phenomena, such as earthquakes, cyclones and tsunamis. Studies in Environmental Science provides students with the skills to identify and understand the causes or environmental problems triggered by human activity. **Careers and Further Study** A major in Environmental Science opens doors to laboratory, outdoor and indoor careers. Specialisations can include studies in hydrogeology, marine and terrestrial ecology, conservation biology and assessing and measuring environmental risk. The Environmental Science major also provides a pathway to the Master of Science (Environmental Science) which was launched in 2009. For more information on the Master of Science please visit the Melbourne Graduate School of Science web site: **http://graduate.science.unimelb.edu.au (http://graduate.science.unimelb.edu.au/)**
Learning Outcomes:	By the end of a three year Bachelor of Environments degree with an Environmental Science major, students will have developed robust, scientifically sound and practical skills to find solutions to problems impacting on the Earth.
Structure & Available Subjects:	112.5 points of Environmental Science subjects.
Majors/Minors/ Specialisations	Course planning for an Environmental Science major A major in Environmental Science in the Bachelor of Environments consists of: # 37.5 points of Environmental Science Core subjects; # 75 points of Major Elective subjects; **PLUS** **# In first year:** 25 points of Optional Core (or Environments Elective) required for the major Specific details of the Bachelor of Environments course structure can be found at: **https://handbook.unimelb.edu.au/view/current/B-ENVS (../../view/current/B-ENVS)**
Subject Options:	The following description of the Environmental Science major aligns with the Study Plan Structure viewable on the Portal for students who commenced the Bachelor of Environments in 2015 or later. The components within the structure of this major have been designed to enforce the requirements of both this specific major and of the course overall, e.g. the requirement that at least 62.5 points of Environments discipline subjects (which can include subjects taken within the major) are taken at each of Level 2 and Level 3. **PRE-2015 STUDENTS**: Students who commenced the Bachelor of Environments prior to 2015 should refer to the handbook entry for the year they commenced in conjunction with the 2015 handbook listings for Environments elective and Breadth subject listings. View 2014 Bachelor of Environments Handbook entry **here (../../view/2014/B-ENVS)** **Level 1 Optional Core and Environments & Enabling Electives (25 points)**

In order to complete this major, enrol in the following Level 1 Optional Core subject:

Subject	Study Period Commencement:	Credit Points:
ENVS10001 Natural Environments	Semester 1, Semester 2	12.5

IMPORTANT: This subject can also be taken as a Level 1 Environments Elective.

PLUS one of the following:

Subject	Study Period Commencement:	Credit Points:
MAST10002 Data & Decisions	July	12.5
MAST10005 Calculus 1	Semester 1, Semester 2	12.5
MAST10006 Calculus 2	Semester 1, Semester 2	12.5
MAST10007 Linear Algebra	Summer Term, Semester 1, Semester 2	12.5
MAST10010 Data Analysis 1	Semester 2	12.5

This requirement may be taken as breadth.

Environmental Science major - core subjects (37.5 points)

All of

Subject	Study Period Commencement:	Credit Points:
ECOL20003 Ecology	Semester 2	12.50
EVSC30002 Problem Solving in Environmental Science	Semester 2	12.50
EVSC30003 Environmental Risk Assessment	Semester 1	12.50

Major Electives & Environments Discipline subjects

Choose the total of

1. 75 points of Major elective subjects;
2. 37.5 points of Environments Discipline subjects

RULES:

Please note these rules when choosing the Major electives & Environments Discipline subjects below

1. Must complete 50 points level 2 subjects
2. Must complete 37.5 points level 3 subjects

Major Electives (75 points)

Select from the list below

Subject	Study Period Commencement:	Credit Points:
CHEM10004 Chemistry 2	Summer Term, Semester 2	12.50
CHEM20011 Environmental Chemistry	Semester 1	12.50
CHEM20018 Chemistry: Reactions and Synthesis	Semester 1	12.50
CHEM20019 Practical Chemistry 2	Semester 2	12.50
CHEM20020 Chemistry: Structure and Properties	Semester 2	12.50

EVSC20001 Leaves to Landscape	Semester 1	12.50
MAST20006 Probability for Statistics	Semester 1	12.50
MAST20005 Statistics	Semester 2	12.50
GEOG20002 Understanding Global Landforms	Semester 1	12.50
ERTH20001 Dangerous Earth	Semester 2	12.50
BOTA30004 Vegetation Management and Conservation	Semester 2	12.50
CHEM30012 Analytical & Environmental Chemistry	Semester 2	12.50
ECOL30005 Applied Ecology	Semester 2	12.50
ERTH30001 Hydrogeology/Environmental Geochemistry	Semester 1	12.50
GEOG30022 River Ecology & Ecosystem Management	Semester 1	12.50
GEOM30009 Imaging the Environment	Semester 1	12.50
MAST30025 Linear Statistical Models	Semester 1	12.50
EVSC30006 Ecology of Urban Landscapes	Semester 1	12.50
GEOG30001 Coastal Landforms & Processes	Semester 1	12.50
EVSC30005 Fire in the Australian Landscape	Semester 2	12.50
ECOL30007 Marine Ecosystems: Ecology & Management	Semester 1	12.50
ENST20002 Environmental Change Field Class	June	12.5

Environments Discipline subjects (37.5 points)

Select from this list: **Environments Discipline subjects (../../view/current/%21B-ENVS-SPC%2B1000)**

Breadth subjects and restrictions for Environmental Science major students

The breadth requirements for the Bachelor of Environments include the restriction of some subjects as breadth options, depending on an individual student's choice of major. Subjects in the Handbook that are marked as available as breadth in the Bachelor of Environments may be subject to further restrictions, depending up which major a student is completing in that course. Detailed information on these **Restrictions for Breadth Options (../../view/CURRENT/%21B-ENVS-SPC%2B1001)** is available.

Students undertaking the Environmental Science major are not permittedto take as breadth:

- any Agricultural Science subjects (subject codes beginning AGRI)
- any Biology subjects (subject codes beginning BIOL)
- any Biochemistry and Molecular Biology subjects (subject codes beginning BCMB)
- any Botany/Plant Science subjects (subject codes beginning BOTA)
- any Chemistry subjects (subject codes beginning CHEM)
- any Civil Engineering subjects (subject codes beginning CVEN)
- any Engineering subjects (subject codes beginning ENGR)
- any Environmental Science subjects (subject codes beginning EVSC)
- any Geography subjects (subject codes beginning GEOG)
- any Geomatics subjects (subject codes beginning GEOM)
- any Mathematics and Statistics subjects (subject codes beginning MAST)
- any Physics subjects (subject codes beginning PHYC)

Notes:

For more information on this major and to view a sample course plan please visit: **http://edsc.unimelb.edu.au/sample-course-plans-bachelor-environments (http://edsc.unimelb.edu.au/sample-course-plans-bachelor-environments)**

Related Course(s):	Bachelor of Environments