

# PROGRAM PLAN

## BACHELOR OF ENVIRONMENTAL SCIENCE AND MANAGEMENT

**PROGRAM OPTION:**  
Standard

**START DATE:**  
Semester 1, 2021

**LOCATION:**  
Callaghan and Central Coast

This Program Plan is an enrolment guide to ensure you are on track to graduate. If at any time you wish to vary from this program plan seek advice from your Academic Program Advisor to ensure you remain on track.

 [PROGRAM HANDBOOK](#)

 [COURSE HANDBOOK](#)

**NAME:**

**STUDENT NO.:**

### COURSE STATUS KEY

**C** = Completed

**En** = Enrolled

**NS** = Not Started

YEAR 1	SEMESTER 1	<b>ENVS1001</b> Environmental Science Concepts and Methods	<b>SCIE1002</b> Multidisciplinary Laboratories	<b>PROGRAM MATH DIRECTED*</b>  <b>MATH1001 or MATH1002 or MATH1110</b>	<b>MAJOR</b>
		CORE	CORE	DIRECTED	MAJOR

SEMESTER 2	<b>ENVS1002</b> Physical and Chemical Environmental Systems	<b>ENVS1003</b> Environmental Values and Ethics	<b>ELECTIVE**</b> 1000, 2000 or 3000 level	<b>BIOL1002</b> Organisms to Ecosystems
	CORE	CORE	ELECTIVE	CORE

YEAR 2	SEMESTER 1	<b>ENVS2002</b> Environmental Legislation and Planning	<b>MAJOR</b>	<b>MAJOR</b>	<b>ELECTIVE**</b> 1000, 2000 or 3000 level
		CORE	MAJOR	MAJOR	ELECTIVE

SEMESTER 2	<b>GEOS2161</b> Spatial Science	<b>MAJOR</b>	<b>PROGRAM STAT DIRECTED</b>  <b>STAT1070 or STAT1020</b>	<b>ELECTIVE**</b> 2000 or 3000 level
	CORE	MAJOR	DIRECTED	ELECTIVE

YEAR 3	SEMESTER 1	<b>ENVS3001</b> Integrated Impact Assessment	<b>PROGRAM DIRECTED^</b> 3000 level  <b>ENVS3008^ or GEOS3250</b>	<b>MAJOR</b>	<b>MAJOR</b>
		CORE	DIRECTED	MAJOR	MAJOR

SEMESTER 2	<b>ENVS3002</b> Environmental Management Perspectives	<b>MAJOR</b>	<b>MAJOR</b>	<b>ELECTIVE**</b> 2000 or 3000 level
	CORE	MAJOR	MAJOR	ELECTIVE

^ Students undertaking the Natural Resources and Hazards Major must complete ENVS3008 as their 3000 level Program Directed course.

\* Students choose their MATH Directed course based on previous mathematical background. See the [Enrolling in mathematics](#) – Maths Placement Test information.

\*\*Elective Options include: Environmental Science and Management Elective Pathways or any unrestricted courses offered within the university.

## PROGRAM PLAN

# BACHELOR OF ENVIRONMENTAL SCIENCE AND MANAGEMENT

To be eligible to graduate make sure you have completed 240 units (10 units = 1 course unless otherwise specified) which meet the following criteria:

- Core courses – 90 units.
- Directed courses – 30 units (10 units of STAT, 10 units of MATH\* and 10 units Program Directed^ at 3000 level)
- Major courses – 80 units, visit the [Program Handbook](#) for more information.
- Elective courses – 40 units, Electives can be chosen from Environmental Science and Management Elective Pathways or any unrestricted courses offered within the university. Refer to the Environmental Science and Management Elective Pathway Documents located on the [Program Handbook](#) or visit the [Course Handbook](#) to see a list of available Electives.
- Students must not exceed 100 units at 1000 level in this program.
- Students must take a minimum of 60 units at the 3000 level.
- The duration of this program is 3 year full-time (40 units per semester) or part-time equivalent.
- The maximum time to complete this program is 8 years.

^ Students undertaking the Natural Resources and Hazards Major must complete ENVS3008 as their 3000 level Program Directed course.

\* Students choose their MATH Directed course based on previous mathematical background. See the [Enrolling in mathematics](#) – Maths Placement Test information.



Some courses have assumed knowledge and/or requisites please refer to the individual [Course Handbook](#). Please refer to the [Program Handbook](#) for specific information on program structure. If you are intending varying from this program plan please seek advice from your [Academic Program Advisor](#).

# PROGRAM PLAN

## BACHELOR OF ENVIRONMENTAL SCIENCE AND MANAGEMENT

### PROGRAM DIRECTED COURSES

#### MATHEMATICS DIRECTED COURSES

Complete 10 units from:

- MATH1001 Preparatory Studies in Mathematics
- MATH1002 Foundational Studies in Mathematics
- MATH1110 Mathematics for Engineering, Science and Technology 1

#### STATISTICS DIRECTED COURSES

Complete 10 units from:

- STAT1020 Statistical Reasoning and Literacy
- STAT1070 Statistics for the Sciences

#### 3000 LEVEL DIRECTED COURSES

Complete 10 units from:

- \*ENVS3008 Organisational Placement in the Environmental Sector
- GEOS3250 Advanced Spatial Science

\*Students undertaking the National Resources and Hazards Major must complete ENVS3008 as their 3000 level Program Directed course.

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## BACHELOR OF ENVIRONMENTAL SCIENCE AND MANAGEMENT

### NATURAL RESOURCES AND HAZARDS MAJOR

#### COMPULSORY COURSES

GEOS1040: Earth: The Dynamic Planet  
GEOS2050: Catchments and Climate  
GEOS2060: Soil Properties and Processes  
GEOS3250: Advanced Spatial Science  
GEOS3340: Climate Change and Resource Management

#### DIRECTED COURSES – 2000 LEVEL

Complete 10 units from:

ENVS2009: Catchment and Water Resource Management  
GEOS2080: Earth Science Field Course

#### DIRECTED COURSES – 3000 LEVEL

Complete 20 units from:

ECON3006: Environmental Economics  
ENVS3007: Environmental Remediation  
ENVS3009: Advanced Water Science and Resource Management  
ENVS3010: Extended Organisational Placement in the Environmental Sector  
GEOS3220: Coastal Environments and Processes  
GEOS3280: Global Change and the Rise of Modern Environments  
SCIE3500: Research Integrated Learning

### ECOSYSTEMS AND BIODIVERSITY MAJOR

#### DIRECTED COURSES – 1000 LEVEL

Complete 10 units from:

BIOL1001: Molecules, Cells and Organisms  
CHEM1010: Introductory Chemistry I  
CHEM1020: Introductory Chemistry II  
GEOS1040: Earth: The Dynamic Planet

#### DIRECTED COURSES – 2000 LEVEL

Complete 30 units from:

BIOL2090: Microbial Biology  
ENVS2004: Ecology  
ENVS2005: Management of Australian Flora  
ENVS2006: Wildlife Management  
ENVS2009: Catchment and Water Resource Management

#### DIRECTED COURSES – 3000 LEVEL

Complete 40 units from:

ECON3006: Environmental Economics  
ENVS3003: Conservation Biology  
ENVS3004: Ecotoxicology  
ENVS3005: Animal Behaviour  
ENVS3009: Advanced Water Science and Resource Management  
ENVS3010: Extended Organisational Placement in the Environmental Sector  
MARI3320: Ecological Methodology  
SCIE3500: Research Integrated Learning  
SRMT3060: Restoration Ecology

### SUSTAINABILITY MAJOR

#### DIRECTED COURSES – 1000 LEVEL

Complete 10 units from:

BIOL1001: Molecules, Cells and Organisms  
ENVS1004: Social Development and the Environment  
GEOG1020: Introduction to Human Geography

#### DIRECTED COURSES – 2000 LEVEL

Complete 30 units from:

ENVS2004: Ecology  
ENVS2005: Management of Australian Flora  
ENVS2006: Wildlife Management  
ENVS2008: The Sustainable Society  
ENVS2009: Catchment and Water Resource Management  
GEOG2080: Cities and Regions  
GEOG2130: Geographies of Development  
SOCS2400: Applied Social Research

#### DIRECTED COURSES – 3000 LEVEL

Complete 40 units from:

ECON3006: Environmental Economics  
ENVS3003: Conservation Biology  
ENVS3006: Surviving the Anthropocene  
ENVS3009: Advanced Water Science and Resource Management  
ENVS3010: Extended Organisational Placement in the Environmental Sector  
GEOG3090: Society and Space  
GEOS3340: Climate Change and Resource Management  
MARI3320: Ecological Methodology  
SCIE3500: Research Integrated Learning  
SRMT3060: Restoration Ecology

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# BACHELOR OF ENVIRONMENTAL SCIENCE AND MANAGEMENT

### MARINE SCIENCE AND MANAGEMENT MAJOR

#### COMPULSORY COURSES

MARI1000: Our Oceans  
ENVS2004: Ecology  
MARI2300: Marine Biology  
MARI2500: Coastal and Marine Ecosystem Services  
GEOS3220: Coastal Environments and Processes  
MARI3300: Integrated Coastal Ecosystems  
MARI3320: Experimental Design and Analysis in Ecology

#### DIRECTED COURSES – 3000 LEVEL

Complete 10 units from:

ECON3006: Environmental Economics  
ENVS3005: Animal Behaviour  
ENVS3009: Advanced Water Science and Resource Management  
ENVS3010: Extended Organisational Placement in the Environmental Sector  
MARI3410: Coral Reef Biology, Ecology and Sustainability  
SCIE3500: Research Integrated Learning