

Bachelor of Environmental Science and Management

INFORMATION FOR STUDENTS WHO COMMENCED IN THE BACHELOR OF ENVIRONMENTAL SCIENCE AND MANAGEMENT [11587] PRIOR TO 2023

The University is incorporating Work Integrated Learning (WIL) into all undergraduate programs as a 10-unit Core Course (ENVS3008 – Work Integrated Learning in the Environmental and Development Sectors), for students commencing in the program from 2023 onwards. WIL provides students from all disciplines and backgrounds with the opportunity to gain real world work experience and improve employability outcomes. ENVS3008 has been revised to increase the placement hours from 80 to 140 hours for students commencing in the program from 2023 onwards.

Transition Arrangements

Pre-2023 students who have not successfully completed either ENVS3008 (current 80-hour iteration) or GEO3250, will need to complete placement course **ENVS3008 – Work Integrated Learning in the Environmental and Development Sectors** (140-hour iteration), as part of their degree.

Students who need to complete a further 10-unit 3000 level Directed course (as part of their major) may wish to complete GEOS3250 to fulfill this requirement.

The table below provides a summary of the changes to the Bachelor of Environmental Science and Management:

2022 Program Requirements	2023 Program Requirements	Notes
Core Courses (90 Units)	Core Courses (100 Units)	Increased by 10 units
BIOL1002 – Organisms to Ecosystems (10 units)	BIOL1002 – Organisms to Ecosystems (10 units)	No change
ENVS1001 – Environmental Science Concepts and Methods (10 units)	ENVS1001 – Environmental Science Concepts and Methods (10 units)	No change
ENVS1002 – Physical and Chemical Environmental Systems (10 units)	ENVS1002 – Physical and Chemical Environmental Systems (10 units)	No change
ENVS1003 – Environmental Values and Ethics (10 units)	ENVS1003 – Environmental Values and Ethics (10 units)	No change
SCIE1002 – Multidisciplinary Laboratories (10 units)	SCIE1002 – Multidisciplinary Laboratories (10 units)	No change
ENVS2002 – Environmental Legislation and Planning (10 units)	ENVS2002 – Environmental Legislation and Planning (10 units)	No change
GEOS2161 – Spatial Science (10 units)	GEOS2161 – Spatial Science (10 units)	No change
ENVS3001 – Integrated Impact Assessment (10 units)	ENVS3001 – Integrated Impact Assessment (10 units)	No change

2022 Program Requirements	2023 Program Requirements	Notes
ENVS3002 – Environmental Management Perspectives (10 units)	ENVS3002 – Environmental Management Perspectives (10 units)	No change
	Work Integrated Learning Placement ENVS3008 – Work Integrated Learning in the Environmental and Development Sectors (10 units).	New core course Students who have not successfully completed either ENVS3008 (current 80-hour iteration) or GEO3250 by the end of 2022 will need to complete ENVS3008. ENVS3008 placement hours have increased from 80 to 140 hours. This course has been moved from major directed course lists to core for students commencing in the program from 2023 onwards.
Mathematics Directed Courses (10 Units) Complete 10 units from the following directed courses. Which course you should complete will depend on your previous mathematical background, please refer to each course handbook for more information.	Mathematics Directed Courses (10 Units) Complete 10 units from the following directed courses. Which course you should complete will depend on your previous mathematical background, please refer to each course handbook for more information.	
MATH1001 – Preparatory Studies in Mathematics (10 units)	MATH1001 – Preparatory Studies in Mathematics (10 units)	No change
MATH1002 – Foundational Studies in Mathematics (10 units)	MATH1002 – Foundational Studies in Mathematics (10 units)	No change
MATH1110 – Mathematics for Engineering, Science and Technology 1 (10 units)	MATH1110 – Mathematics for Engineering, Science and Technology 1 (10 units)	No change
Statistics Directed Courses (10 Units) Complete 10 units from the following directed courses.	Statistics Directed Courses (10 Units) Complete 10 units from the following directed courses.	
STAT1020 – Statistical Reasoning and Literacy (10 units)	STAT1020 – Statistical Reasoning and Literacy (10 units)	No change
STAT1070 – Statistics for the Sciences (10 units)	STAT1070 – Statistics for the Sciences (10 units)	No change
3000 Level Directed Courses (10 Units) Complete 30 units from the following directed courses.		3000 level program directed course list has been removed
ENVS3008 – Organisational Placement in the Environmental Sector (10 units)		Removed from program directed course list. This course has been revised and is now included in the core of the program.

2022 Program Requirements	2023 Program Requirements	Notes
GEOS3250 – Advanced Spatial Science (10 units)		Removed from program directed course list. Pre-2023 students who need to complete a further 10-unit 3000 level Directed course (as part of their major) may wish to complete GEOS3250 to fulfill this requirement.
Ecosystems and Biodiversity Major (80 Units)		
1000 Level Directed Courses (10 Units) Complete 10 units from the following directed courses.	1000 Level Directed Courses (10 Units) Complete 10 units from the following directed courses.	
BIOL1001 – Molecules, Cells and Organisms (10 units)	BIOL1001 – Molecules, Cells and Organisms (10 units)	No change
CHEM1010 – Introductory Chemistry I (10 units)	CHEM1010 – Introductory Chemistry I (10 units)	No change
CHEM1020 – Introductory Chemistry II (10 units)	CHEM1020 – Introductory Chemistry II (10 units)	No change
GEOS1040 – Earth: The Dynamic Planet (10 units)	GEOS1040 – Earth: The Dynamic Planet (10 units)	No change
2000 Level Directed Courses (30 Units) Complete 30 units from the following directed courses.	2000 Level Directed Courses (30 Units) Complete 30 units from the following directed courses.	
BIOL2090 – Microbial Biology (10 units)	BIOL2090 – Microbial Biology (10 units)	No change
ENVS2004 – Ecology (10 units)	ENVS2004 – Ecology (10 units)	No change
ENVS2005 – Management of Australian Flora (10 units)	ENVS2005 – Management of Australian Flora (10 units)	No change
ENVS2006 – Ecology and Management of Wildlife (10 units)	ENVS2006 – Ecology and Management of Wildlife (10 units)	No change
ENVS2009 – Catchment and Water Resource Management (10 units)	ENVS2009 – Catchment and Water Resource Management (10 units)	No change
	ENVS2320 – Experimental Design and Analysis in Ecology (10 units)	Replaces 3000 level course MARI3320. ENVS2320 will count as a 3000 level course for pre-2023 students who were intending to complete MARI3320.

2022 Program Requirements	2023 Program Requirements	Notes
3000 Level Directed Courses (40 Units) Complete 40 units from the following directed courses.	3000 Level Directed Courses (40 Units) Complete 40 units from the following directed courses.	
ECON3006 – Environmental Economics (10 units)	ECON3006 – Environmental Economics (10 units)	No change
ENVS3003 – Conservation Biology (10 units)	ENVS3003 – Conservation Biology (10 units)	No change
ENVS3004 – Ecotoxicology (10 units)	ENVS3004 – Ecotoxicology (10 units)	No change
ENVS3005 – Animal Behaviour (10 units)	ENVS3005 – Animal Behaviour (10 units)	No change
ENVS3009 – Advanced Water Science and Resource Management (10 units)	ENVS3009 – Advanced Water Science and Resource Management (10 units)	No change
ENVS3010 – Extended Organisational Placement in the Environmental Sector (10 units)		Removed from directed course list.
	GEOS3250 – Advanced Spatial Science (10 units)	Added to directed course list.
MARI3320 – Experimental Design and Analysis in Ecology (10 units)		Replaced by 2000 level course ENVS2320. ENVS2320 will count as a 3000 level course for pre-2023 students who were intending to complete MARI3320.
SCIE3500 – Research Integrated Learning (10 units)	SCIE3500 – Research Integrated Learning (10 units)	No change
SRMT3060 – Restoration Ecology (10 units)	SRMT3060 – Restoration Ecology (10 units)	No change
Marine Science Major (80 Units)		
Compulsory Courses (70 Units) Complete the following compulsory courses.	Compulsory Courses (70 Units) Complete the following compulsory courses.	
MARI1000 – Our Oceans (10 units)	MARI1000 – Our Oceans (10 units)	No change
ENVS2004 – Ecology (10 units)	ENVS2004 – Ecology (10 units)	No change
MARI2300 – Marine Biology (10 units)	MARI2300 – Marine Biology (10 units)	No change

2022 Program Requirements	2023 Program Requirements	Notes
MARI2500 – Coastal and Marine Ecosystem Services (10 units)	MARI3500 – Fisheries and Aquaculture (10 units)	MARI2500 has been replaced by MARI3500.
GEOS3220 – Coastal Environments and Processes (10 units)	GEOS3220 – Coastal Environments and Processes (10 units)	No change
MARI3300 – Integrated Coastal Ecosystems (10 units)	MARI3300 – Integrated Coastal Ecosystems (10 units)	No change
MARI3320 – Experimental Design and Analysis in Ecology (10 units)	ENVS2320 – Experimental Design and Analysis in Ecology (10 units)	Replaced by 2000 level course ENVS2320. ENVS2320 will count as a 3000 level course for pre-2023 students who were intending to complete MARI3320.
Directed Courses (10 Units) Complete 10 units from the following directed courses.	Directed Courses (10 Units) Complete 10 units from the following directed courses.	
ECON3006 – Environmental Economics (10 units)	ECON3006 – Environmental Economics (10 units)	No change
ENVS3005 – Animal Behaviour (10 units)	ENVS3005 – Animal Behaviour (10 units)	No change
ENVS3009 – Advanced Water Science and Resource Management (10 units)	ENVS3009 – Advanced Water Science and Resource Management (10 units)	No change
ENVS3010 – Extended Organisational Placement in the Environmental Sector (10 units)		Removed from directed course list.
	GEOS3250 – Advanced Spatial Science (10 units)	Added to directed course list.
MARI3410 – Coral Reef Biology, Ecology and Sustainability (10 units)	MARI3410 – Coral Reef Biology, Ecology and Sustainability (10 units)	No change
SCIE3500 – Research Integrated Learning (10 units)	SCIE3500 – Research Integrated Learning (10 units)	No change
Natural Resources and Hazards Major (80 Units)		
Compulsory Courses (50 Units) Complete the following compulsory courses.	Compulsory Courses (50 Units) Complete the following compulsory courses.	
GEOS1040 – Earth: The Dynamic Planet (10 units)	GEOS1040 – Earth: The Dynamic Planet (10 units)	No change
GEOS2050 – Catchments and Climate (10 units)	GEOS2050 – Catchments and Climate (10 units)	No change

2022 Program Requirements	2023 Program Requirements	Notes
GEOS2060 – Soil Properties and Processes (10 units)	GEOS2060 – Soil Properties and Processes (10 units)	No change
GEOS3250 – Advanced Spatial Science (10 units)	GEOS3250 – Advanced Spatial Science (10 units)	No change
GEOS3340 – Climate Change and Resource Management (10 units)	GEOS3340 – Climate Change and Resource Management (10 units)	No change
2000 Level Directed Courses (10 Units) Complete 10 units from the following directed courses.	2000 Level Directed Courses (10 Units) Complete 10 units from the following directed courses.	
ENVS2009 – Catchment and Water Resource Management (10 units)	ENVS2009 – Catchment and Water Resource Management (10 units)	No change
GEOS2080 – Earth Sciences Fieldwork (10 units)	GEOS2080 – Earth Sciences Fieldwork (10 units)	No change
3000 Level Directed Courses (20 Units) Complete 20 units from the following directed courses.	3000 Level Directed Courses (20 Units) Complete 20 units from the following directed courses.	
ECON3006 – Environmental Economics (10 units)	ECON3006 – Environmental Economics (10 units)	No change
ENVS3007 – Environmental Remediation (10 units)	ENVS3007 – Environmental Remediation (10 units)	No change
ENVS3009 – Advanced Water Science and Resource Management (10 units)	ENVS3009 – Advanced Water Science and Resource Management (10 units)	No change
ENVS3010 – Extended Organisational Placement in the Environmental Sector (10 units)		Removed from directed course list.
GEOS3220 – Coastal Environments and Processes (10 units)	GEOS3220 – Coastal Environments and Processes (10 units)	No change
	GEOS3250 – Advanced Spatial Science (10 units)	Added to directed course list.
GEOS3280 – Global Change and the Rise of Modern Environments (10 units)	GEOS3280 – Global Change and the Rise of Modern Environments (10 units)	No change
SCIE3500 – Research Integrated Learning (10 units)	SCIE3500 – Research Integrated Learning (10 units)	No change

2022 Program Requirements	2023 Program Requirements	Notes
Sustainability Major (80 Units)		
1000 Level Directed Courses (10 Units) Complete 10 units from the following directed courses.	1000 Level Directed Courses (10 Units) Complete 10 units from the following directed courses.	
BIOL1001 – Molecules, Cells and Organisms (10 units)	BIOL1001 – Molecules, Cells and Organisms (10 units)	No change
ENVS1004 – Social Development and the Environment (10 units)	ENVS1004 – Social Development and the Environment (10 units)	No change
GEOG1020 – Introduction to Human Geography (10 units)	GEOG1020 – Introduction to Human Geography (10 units)	No change
2000 Level Directed Courses (30 Units) Complete 30 units from the following directed courses.	2000 Level Directed Courses (30 Units) Complete 30 units from the following directed courses.	
ENVS2004 – Ecology (10 units)	ENVS2004 – Ecology (10 units)	No change
ENVS2005 – Management of Australian Flora (10 units)	ENVS2005 – Management of Australian Flora (10 units)	No change
ENVS2006 – Ecology and Management of Wildlife (10 units)	ENVS2006 – Ecology and Management of Wildlife (10 units)	No change
ENVS2008 – The Sustainable Society (10 units)	ENVS2008 – The Sustainable Society (10 units)	No change
ENVS2009 – Catchment and Water Resource Management (10 units)	ENVS2009 – Catchment and Water Resource Management (10 units)	No change
	ENVS2320 – Experimental Design and Analysis in Ecology (10 units)	Replaces 3000 level course MARI3320. ENVS2320 will count as a 3000 level course for pre-2023 students who were intending to complete MARI3320.
GEOG2080 – Cities and Regions (10 units)	GEOG2080 – Cities and Regions (10 units)	No change
GEOG2130 – Geographies of Development (10 units)	GEOG2130 – Geographies of Development (10 units)	No change
SOCS2400 – Applied Social Research (10 units)	SOCS2400 – Applied Social Research (10 units)	No change

2022 Program Requirements	2023 Program Requirements	Notes
3000 Level Directed Courses (40 Units) Complete 40 units from the following directed courses.	3000 Level Directed Courses (40 Units) Complete 40 units from the following directed courses.	
ECON3006 – Environmental Economics (10 units)	ECON3006 – Environmental Economics (10 units)	No change
ENVS3003 – Conservation Biology (10 units)	ENVS3003 – Conservation Biology (10 units)	No change
ENVS3006 – Surviving the Anthropocene: Sustainability in the 21st Century (10 units)	ENVS3006 – Surviving the Anthropocene: Sustainability in the 21st Century (10 units)	No change
ENVS3009 – Advanced Water Science and Resource Management (10 units)	ENVS3009 – Advanced Water Science and Resource Management (10 units)	No change
ENVS3010 – Extended Organisational Placement in the Environmental Sector (10 units)		Removed from directed course list.
GEOG3090 – Society and Space (10 units)	GEOG3090 – Society and Space (10 units)	No change
	GEOS3250 – Advanced Spatial Science (10 units)	Added to directed course list.
GEOS3340 – Climate Change and Resource Management (10 units)	GEOS3340 – Climate Change and Resource Management (10 units)	No change
MARI3320 – Experimental Design and Analysis in Ecology (10 units)		Replaced by 2000 level course ENVS2320. ENVS2320 will count as a 3000 level course for pre-2023 students who were intending to complete MARI3320.
SCIE3500 – Research Integrated Learning (10 units)	SCIE3500 – Research Integrated Learning (10 units)	No change
SRMT3060 – Restoration Ecology (10 units)	SRMT3060 – Restoration Ecology (10 units)	No change
	MARI3500 – Fisheries and Aquaculture (10 units)	Added to directed course list.

2022 Program Requirements	2023 Program Requirements	Notes
<p>Electives (40 Units) Complete 40 units of electives to fulfil the requirements of this program. Electives can be used to extend and complement your core studies with more courses in the same field of study, or from areas that might be of interest to you. Electives can be chosen from all courses available at the University that do not have any other conditions (such as a course requisite) applied to them.</p>	<p>Electives (40 Units) Complete 40 units of electives to fulfil the requirements of this program. Electives can be used to extend and complement your core studies with more courses in the same field of study, or from areas that might be of interest to you. Electives can be chosen from all courses available at the University that do not have any other conditions (such as a course requisite) applied to them.</p>	<p>No change</p>

If you have any questions regarding your remaining program, please email ProgramAdvice@newcastle.edu.au.