

SUSTAINABLE ENVIRONMENTAL FUTURES, TESTAMUR MAJOR (T120)

Western Sydney University Major Code: T120

Previous code: MT3043.1

Available to students in other Western Sydney University programs?

No

This major is available as an elective in Bachelor of Science 3754, and an elective major option in Bachelor of Medical Science 3755. See the related programs tab for more information.

Please note, the BSc Major Environmental Health T076, BSc Adv 3757, Bachelor of Science (Pathway to Teaching Primary/Secondary) 3756 & BMedSc Adv 3758, do not have sufficient Flexible space to accommodate a second/elective Major.

Managing our environment sustainably requires professionals who are trained in new technologies across multiple disciplines, including biological and physical sciences, risk assessment, policy and management. Understanding how life interacts with water, soil and the atmosphere empowers us to develop sustainable management solutions for our most pressing environmental challenges. You will learn how to apply fundamental scientific knowledge to evaluate and mitigate the impacts of human activities on natural and managed ecosystems, including the built environment. You will have access to world class ecological and environmental research facilities, and will engage in hands-on, field-based learning, taught by a team at the cutting edge of research in this field. As a graduate, you are prepared for a career in environmental management, consultancy and biological conservation. All students must complete 60 credit points of study at Level 3 to meet course requirements. Students will need to select at least 10 credit points of elective study at Level 3 to meet this requirement.

Location

Campus	Mode	Advice
Hawkesbury Campus	Internal	science@westernsydney.edu.au

Recommended Sequence Current

All students must complete 60 credit points of study at Level 3 to meet course requirements. Students will need to select at least 10 credit points of elective study at Level 3 to meet this requirement.

Select the link for your program below to see details of the major

Bachelor of Science

Qualification for the award of Bachelor of Science with a major in Sustainable Environmental Futures requires the successful completion of 240 credit points as per the recommended sequence below.

Course	Title	Credit Points
Year 1		
Autumn session		
NATS 1019	Scientific Literacy	10
BIOS 1001	Biodiversity	10
CHEM 1008	Introductory Chemistry	10
BIOS 1027	Management of Aquatic Environments	10
Credit Points		40

Spring session		
BIOS 1012	Cell Biology	10
ENVL 1004	Introduction to Environmental Science	10
Select one of the following:		10
MATH 1026	Quantitative Thinking	
MATH 1014	Mathematics 1A	
MATH 1003	Biometry	
Select one elective		10
	Credit Points	40
Year 2		
Autumn session		
NATS 2025		10
ENVL 2007	Environmental Monitoring and Assessment	10
EART 2001	Climate Change Science	10
Select one elective		10
	Credit Points	40
Spring session		
BIOS 3039	Ecology	10
Select one of the following:		10
NATS 3044	Complex Case Studies in Science	
NATS 3045	Work Internship for Science Professionals	
Select two electives		20
	Credit Points	40
Year 3		
1H session		
NATS 3055	Practicum 1	10
	Credit Points	10
Autumn session		
AGRI 3007	Water in the Landscape	10
Select two electives		20
	Credit Points	30
Spring session		
BIOS 3035	Sustainable Environments	10
EART 3006	Science of the Anthropocene	10
Select two electives		20
	Credit Points	40
	Total Credit Points	240

Bachelor of Science (Pathway to Teaching Primary/Secondary)

Qualification for the Bachelor of Science (Pathway to Teaching Primary/Secondary) with a major in Sustainable Environmental Futures requires the successful completion of 240 credit points as per the recommended sequence for the Bachelor of Science with a major in Sustainable Environmental Futures, given above.

In addition, all students must complete a mandatory 40 credit point minor in Education Studies. Students must choose one of:

Education Studies – Primary Teaching, Minor (0296) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/education-studies-primary-teaching-minor/>)

Or

Education Studies - Secondary Teaching, Minor (0267) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/education-studies-secondary-teaching-minor/>)

Students must meet this requirement by choosing subjects from the selected Education Studies minor as electives within their Bachelor of Science program.

Course	Title	Credit Points	Course	Title	Credit Points		
Year 1							
Autumn session							
NATS 1019	Scientific Literacy	10	NATS 1019	Scientific Literacy	10		
BIOS 1001	Biodiversity	10	BIOS 1001	Biodiversity	10		
CHEM 1008	Introductory Chemistry	10	CHEM 1008	Introductory Chemistry	10		
BIOS 1027	Management of Aquatic Environments	10	BIOS 1027	Management of Aquatic Environments	10		
Credit Points		40	Credit Points		40		
Spring session							
BIOS 1012	Cell Biology	10	BIOS 1012	Cell Biology	10		
ENVL 1004	Introduction to Environmental Science	10	ENVL 1004	Introduction to Environmental Science	10		
Select one of the following:		10	Select one of the following:		10		
MATH 1026	Quantitative Thinking		MATH 1026	Quantitative Thinking			
MATH 1014	Mathematics 1A		MATH 1014	Mathematics 1A			
MATH 1003	Biometry		MATH 1003	Biometry			
Select one elective		10	Select one elective		10		
Credit Points		40	Credit Points		40		
Year 2							
Autumn session							
NATS 2025		10	NATS 2025		10		
ENVL 2007	Environmental Monitoring and Assessment	10	ENVL 2007	Environmental Monitoring and Assessment	10		
EART 2001	Climate Change Science	10	EART 2001	Climate Change Science	10		
Select one elective		10	NATS 2001	Advanced Science Project A	10		
Credit Points		40	Credit Points		40		
Spring session							
BIOS 3039	Ecology	10	BIOS 3039	Ecology	10		
Select one of the following:		10	NATS 2002	Advanced Science Project B	10		
NATS 3044	Complex Case Studies in Science		NATS 3044	Complex Case Studies in Science			
NATS 3045	Work Internship for Science Professionals		NATS 3045	Work Internship for Science Professionals			
Select one elective		10	Select one elective		10		
Credit Points		40	Credit Points		40		
Year 3							
1H session							
NATS 3055	Practicum 1	10	NATS 3055	Practicum 1	10		
Credit Points		10	Credit Points		10		
Autumn session							
AGRI 3007	Water in the Landscape	10	AGRI 3007	Water in the Landscape	10		
Select two electives		20	NATS 3043	Advanced Science Research Project C	10		
Credit Points		30	Select one elective		10		
Spring session							
BIOS 3035	Sustainable Environments	10	BIOS 3035	Sustainable Environments	10		
EART 3006	Science of the Anthropocene	10	EART 3006	Science of the Anthropocene	10		
Select two electives		20	NATS 3043	Advanced Science Research Project C	10		
Credit Points		40	Select one elective		10		
Total Credit Points		240	Credit Points		40		
Total Credit Points		240	Total Credit Points		240		

Bachelor of Advanced Science

Qualification for the award of Bachelor of Advanced Science with a major in Sustainable Environmental Futures requires the successful completion of 240 credit points as per the recommended sequence below.

Diploma in Science/Bachelor of Science

Qualification for this award requires the successful completion of 250 credit points which include the units listed in the recommended sequence below.

Course	Title	Credit Points	20
Year 1			
Year 1: College Subjects			
Standard 3-term year			
Preparatory subject			
CHEM 0001	Chemistry (WSTC Prep)	10	
Eight university-level subjects as follows:			
BIOS 1014	Cell Biology (WSTC)	10	
CHEM 1013	Essential Chemistry (WSTC)	10	
NATS 1020	Scientific Literacy (WSTC)	10	
CHEM 1009	Introductory Chemistry (WSTC)	10	
BIOS 1003	Biodiversity (WSTC)	10	
MATH 1027	Quantitative Thinking (WSTC)	10	
BIOS 1034	Management of Aquatic Environments (WSTC)	10	
One unit from the following (depending on the testamur major chosen)		10	
PROC 1007	Introduction to Food Science (WSTC)		
BIOS 1038	Anatomy and Physiology in Health (WSTC)		
NATS 1029	Human Anatomy and Physiology 1 (WSTC)		
ENVL 1007	Environmental Health Issues and Solutions (WSTC)		
NATS 1030	Human Anatomy and Physiology 2 (WSTC)		
Credit Points		90	
Year 2			
Autumn session			
NATS 2025		10	
ENVL 2007	Environmental Monitoring and Assessment	10	
EART 2001	Climate Change Science	10	
Select one elective		10	
Credit Points		40	
Spring session			
BIOS 3039	Ecology	10	
ENVL 1004	Introduction to Environmental Science	10	
Select one of the following:		10	
NATS 3044	Complex Case Studies in Science		
NATS 3045	Work Internship for Science Professionals		
Select one elective		10	
Credit Points		40	
Year 3			
1H session			
NATS 3055	Practicum 1	10	
Credit Points		10	
Autumn session			
AGRI 3007	Water in the Landscape	10	
Select two electives		20	
Credit Points		30	
Spring session			
BIOS 3035	Sustainable Environments	10	
EART 3006	Science of the Anthropocene	10	
Credit Points		30	
Recommended Sequence 2023			
All students must complete 60 credit points of study at Level 3 to meet course requirements. Students will need to select at least 10 credit points of elective study at Level 3 to meet this requirement.			
Select the link for your program below to see details of the major			
Bachelor of Science			
Qualification for the award of Bachelor of Science with a major in Sustainable Environmental Futures requires the successful completion of 240 credit points as per the recommended sequence below.			
Course	Title	Credit Points	
Year 1			
Autumn session			
NATS 1019	Scientific Literacy	10	
BIOS 1001	Biodiversity	10	
CHEM 1008	Introductory Chemistry	10	
BIOS 1027	Management of Aquatic Environments	10	
Credit Points		40	
Spring session			
BIOS 1012	Cell Biology	10	
ENVL 1004	Introduction to Environmental Science	10	
Select one of the following:		10	
MATH 1026	Quantitative Thinking		
MATH 1014	Mathematics 1A		
MATH 1003	Biometry		
Select one elective		10	
Credit Points		40	
Year 2			
Autumn session			
NATS 2025		10	
ENVL 2007	Environmental Monitoring and Assessment	10	
EART 2001	Climate Change Science	10	
Select one elective		10	
Credit Points		40	
Spring session			
BIOS 2008	Ecology	10	
Select one of the following:		10	
NATS 3044	Complex Case Studies in Science		
NATS 3045	Work Internship for Science Professionals		
Select one elective		10	
Credit Points		40	
Year 3			
Autumn session			
NATS 3015	Field Project 1	10	
AGRI 3007	Water in the Landscape	10	
Select two electives		20	
Credit Points		40	
Spring session			
BIOS 3035	Sustainable Environments	10	
EART 3006	Science of the Anthropocene	10	
Credit Points		40	

Recommended Sequence 2023

All students must complete 60 credit points of study at Level 3 to meet course requirements. Students will need to select at least 10 credit points of elective study at Level 3 to meet this requirement.

Select the link for your program below to see details of the major

Bachelor of Science

Qualification for the award of Bachelor of Science with a major in Sustainable Environmental Futures requires the successful completion of 240 credit points as per the recommended sequence below.

Course	Title	Credit Points
Year 1		
Autumn session		
NATS 1019	Scientific Literacy	10
BIOS 1001	Biodiversity	10
CHEM 1008	Introductory Chemistry	10
BIOS 1027	Management of Aquatic Environments	10
Credit Points		40
Spring session		
BIOS 1012	Cell Biology	10
ENVL 1004	Introduction to Environmental Science	10
Select one of the following:		10
MATH 1026	Quantitative Thinking	
MATH 1014	Mathematics 1A	
MATH 1003	Biometry	
Select one elective		10
Credit Points		40
Year 2		
Autumn session		
NATS 2025		10
ENVL 2007	Environmental Monitoring and Assessment	10
EART 2001	Climate Change Science	10
Select one elective		10
Credit Points		40
Spring session		
BIOS 2008	Ecology	10
Select one of the following:		10
NATS 3044	Complex Case Studies in Science	
NATS 3045	Work Internship for Science Professionals	
Select two electives		20
Credit Points		40
Year 3		
Autumn session		
NATS 3015	Field Project 1	10
AGRI 3007	Water in the Landscape	10
Select two electives		20
Credit Points		40
Spring session		
BIOS 3035	Sustainable Environments	10
EART 3006	Science of the Anthropocene	10

Select two electives	20
Credit Points	40
Total Credit Points	240

Bachelor of Science (Pathway to Teaching Primary/Secondary)

Qualification for the Bachelor of Science (Pathway to Teaching Primary/Secondary) with a major in Sustainable Environmental Futures requires the successful completion of 240 credit points as per the recommended sequence for the Bachelor of Science with a major in Sustainable Environmental Futures, given above.

Course	Title	Credit Points
Year 1		
Autumn session		
NATS 1019	Scientific Literacy	10
BIOS 1001	Biodiversity	10
CHEM 1008	Introductory Chemistry	10
BIOS 1027	Management of Aquatic Environments	10
	Credit Points	40
Spring session		
BIOS 1012	Cell Biology	10
ENVL 1004	Introduction to Environmental Science	10
Select one of the following:		10
MATH 1026	Quantitative Thinking	
MATH 1014	Mathematics 1A	
MATH 1003	Biometry	
Select one elective		10
	Credit Points	40
Year 2		
Autumn session		
NATS 2025		10
ENVL 2007	Environmental Monitoring and Assessment	10
EART 2001	Climate Change Science	10
Select one elective		10
	Credit Points	40
Spring session		
BIOS 2008	Ecology	10
Select one of the following:		10
NATS 3044	Complex Case Studies in Science	
NATS 3045	Work Internship for Science Professionals	
Select two electives		20
	Credit Points	40
Year 3		
Autumn session		
NATS 3015	Field Project 1	10
AGRI 3007	Water in the Landscape	10
Select two electives		20
	Credit Points	40
Spring session		
BIOS 3035	Sustainable Environments	10
EART 3006	Science of the Anthropocene	10
Select two electives		20
	Credit Points	40
	Total Credit Points	240

In addition, all students must complete a mandatory 40 credit point minor in Education Studies. Students must choose one of:

Education Studies – Primary Teaching, Minor (0296) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/education-studies-primary-teaching-minor/>)

Or

Education Studies - Secondary Teaching, Minor (0267) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/education-studies-secondary-teaching-minor/>)

Students must meet this requirement by choosing subjects from the selected Education Studies minor as electives within their Bachelor of Science program.

Bachelor of Advanced Science

Qualification for the award of Bachelor of Advanced Science with a major in Sustainable Environmental Futures requires the successful completion of 240 credit points as per the recommended sequence below.

Course	Title	Credit Points
Year 1		
Autumn session		
NATS 1019	Scientific Literacy	10
BIOS 1001	Biodiversity	10
CHEM 1008	Introductory Chemistry	10
BIOS 1027	Management of Aquatic Environments	10
	Credit Points	40
Spring session		
BIOS 1012	Cell Biology	10
ENVL 1004	Introduction to Environmental Science	10
Select one of the following:		10
MATH 1026	Quantitative Thinking	
MATH 1014	Mathematics 1A	
MATH 1003	Biometry	
Select one elective		10
	Credit Points	40
Year 2		
Autumn session		
NATS 2025		10
ENVL 2007	Environmental Monitoring and Assessment	10
EART 2001	Climate Change Science	10
Select one elective		10
	Credit Points	40
Year 3		
Autumn session		
NATS 3015	Field Project 1	10
AGRI 3007	Water in the Landscape	10
Select two electives		20
	Credit Points	40
Spring session		
BIOS 2008	Ecology	10
NATS 2002	Advanced Science Project B	10
Select one of the following:		10
NATS 3044	Complex Case Studies in Science	
NATS 3045	Work Internship for Science Professionals	
Select one elective		10
	Credit Points	40
Year 3		
Autumn session		
NATS 3015	Field Project 1	10
AGRI 3007	Water in the Landscape	10

NATS 3043	Advanced Science Research Project C	10	Select one elective	10
Select one elective		10		
	Credit Points	40		
Spring session			Year 3	
BIOS 3035	Sustainable Environments	10	NATS 3015	Field Project 1
EART 3006	Science of the Anthropocene	10	AGRI 3007	Water in the Landscape
NATS 3043	Advanced Science Research Project C	10	Select two electives	20
Select one elective		10		
	Credit Points	40		
	Total Credit Points	240		

Diploma in Science/Bachelor of Science

Qualification for this award requires the successful completion of 250 credit points which include the units listed in the recommended sequence below.

Course	Title	Credit Points	Related Programs
Year 1			
Year 1: College Subjects			
Standard 3-term year			Bachelor of Advanced Science (3757) (https://hbook.westernsydney.edu.au/archives/2024-2025/programs/bachelor-advanced-science/)
Preparatory subject			Bachelor of Medical Science (3755) (https://hbook.westernsydney.edu.au/archives/2024-2025/programs/bachelor-medical-science/)
CHEM 0001	Chemistry (WSTC Prep)	10	Bachelor of Science (3754) (https://hbook.westernsydney.edu.au/archives/2024-2025/programs/bachelor-science/)
Eight university-level subjects as follows:			Bachelor of Science (Pathway to Teaching Primary/Secondary) (3756) (https://hbook.westernsydney.edu.au/archives/2024-2025/programs/bachelor-science-pathway-teaching-primary-secondary/)
BIOS 1014	Cell Biology (WSTC)	10	Bachelor of Science/Bachelor of Arts (3763) (https://hbook.westernsydney.edu.au/archives/2024-2025/programs/bachelor-science-bachelor-arts/)
CHEM 1006	Essential Chemistry 2 (WSTC)	10	Bachelor of Science/Bachelor of Business (4748) (https://hbook.westernsydney.edu.au/archives/2024-2025/programs/bachelor-science-bachelor-business/)
NATS 1020	Scientific Literacy (WSTC)	10	Bachelor of Science/Bachelor of Laws (2743) (https://hbook.westernsydney.edu.au/archives/2024-2025/programs/bachelor-science-bachelor-laws/)
CHEM 1009	Introductory Chemistry (WSTC)	10	Diploma in Science/Bachelor of Medical Science (6042) (https://hbook.westernsydney.edu.au/archives/2024-2025/programs/diploma-science-bachelor-medical-science/)
BIOS 1003	Biodiversity (WSTC)	10	Diploma in Science/Bachelor of Science (6043) (https://hbook.westernsydney.edu.au/archives/2024-2025/programs/diploma-science-bachelor-science/)
MATH 1027	Quantitative Thinking (WSTC)	10	
BIOS 1034	Management of Aquatic Environments (WSTC)	10	
One unit from the following (depending on the testamur major chosen)			
PROC 1003	Food Science 1 (WSTC)	10	
BIOS 1023	Introduction to Human Biology (WSTC)	10	
NATS 1021	Concepts in Human Physiology (WSTC)	10	
ENVL 1003	Environmental Issues and Solutions (WSTC)	10	
AGEN 1002	Water Quality Assessment and Management (WSTC)	10	
NATS 1002	Concepts in Human Anatomy (WSTC)	10	
	Credit Points	140	
Year 2			
Autumn session			
NATS 2025		10	
ENVL 2007	Environmental Monitoring and Assessment	10	
EART 2001	Climate Change Science	10	
Select one elective		10	
	Credit Points	40	
Spring session			
BIOS 2008	Ecology	10	
ENVL 1004	Introduction to Environmental Science	10	
Select one of the following:		10	
NATS 3044	Complex Case Studies in Science		
NATS 3045	Work Internship for Science Professionals		