

# 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 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
<b>Year 1</b>		
<b>Autumn session</b>		
NATS 1019	Scientific Literacy	10
BIOS 1001	Biodiversity	10
CHEM 1008	Introductory Chemistry	10
BIOS 1027	Management of Aquatic Environments	10
<b>Credit Points</b>		<b>40</b>

<b>Spring session</b>		
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
<b>Credit Points</b>		<b>40</b>

<b>Year 2</b>		
<b>Autumn session</b>		
NATS 2025	Natural Science Research Methods	10
ENVL 2007	Environmental Monitoring and Assessment	10
EART 2001	Climate Change Science	10
Select one elective		10
<b>Credit Points</b>		<b>40</b>

<b>Spring session</b>		
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
<b>Credit Points</b>		<b>40</b>

<b>Year 3</b>		
<b>Autumn session</b>		
NATS 3015	Field Project 1	10
AGRI 3007	Water in the Landscape	10
Select two electives		20
<b>Credit Points</b>		<b>40</b>

<b>Spring session</b>		
BIOS 3035	Sustainable Environments	10
EART 3006	Science of the Anthropocene	10
Select two electives		20
<b>Credit Points</b>		<b>40</b>
<b>Total Credit Points</b>		<b>240</b>

## 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
<b>Year 1</b>		
<b>Autumn session</b>		
NATS 1019	Scientific Literacy	10
BIOS 1001	Biodiversity	10
CHEM 1008	Introductory Chemistry	10
BIOS 1027	Management of Aquatic Environments	10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
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
<b>Credit Points</b>	<b>40</b>
<b>Year 2</b>	
<b>Autumn session</b>	
NATS 2025 Natural Science Research Methods	10
ENVL 2007 Environmental Monitoring and Assessment	10
EART 2001 Climate Change Science	10
Select one elective	10
<b>Credit Points</b>	<b>40</b>
<b>Spring session</b>	
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
<b>Credit Points</b>	<b>40</b>
<b>Year 3</b>	
<b>Autumn session</b>	
NATS 3015 Field Project 1	10
AGRI 3007 Water in the Landscape	10
Select two electives	20
<b>Credit Points</b>	<b>40</b>
<b>Spring session</b>	
BIOS 3035 Sustainable Environments	10
EART 3006 Science of the Anthropocene	10
Select two electives	20
<b>Credit Points</b>	<b>40</b>
<b>Total Credit Points</b>	<b>240</b>

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/majors-minors/education-studies-primary-teaching-minor/>)

Or

Education Studies - Secondary Teaching, Minor (0267) (<https://hbook.westernsydney.edu.au/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
<b>Year 1</b>		
<b>Autumn session</b>		
NATS 1019	Scientific Literacy	10
BIOS 1001	Biodiversity	10
CHEM 1008	Introductory Chemistry	10
BIOS 1027	Management of Aquatic Environments	10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
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
<b>Credit Points</b>		<b>40</b>
<b>Year 2</b>		
<b>Autumn session</b>		
NATS 2025	Natural Science Research Methods	10
ENVL 2007	Environmental Monitoring and Assessment	10
EART 2001	Climate Change Science	10
NATS 2001	Advanced Science Project A	10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
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
<b>Credit Points</b>		<b>40</b>
<b>Year 3</b>		
<b>Autumn session</b>		
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
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
BIOS 3035	Sustainable Environments	10
EART 3006	Science of the Anthropocene	10
NATS 3043	Advanced Science Research Project C	10
Select one elective		10
<b>Credit Points</b>		<b>40</b>
<b>Total Credit Points</b>		<b>240</b>

## 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
<b>Year 1</b>		
<b>Year 1: College Subjects</b>		
Standard 3-term year		
<b>Preparatory subject</b>		
CHEM 0001	Chemistry (WSTC Prep)	10
<b>Eight university-level subjects as follows:</b>		
BIOS 1014	Cell Biology (WSTC)	10
CHEM 1006	Essential Chemistry 2 (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
<b>One unit from the following (depending on the testamur major chosen)</b>		
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
<b>Credit Points</b>		<b>140</b>
<b>Year 2</b>		
<b>Autumn session</b>		
NATS 2025	Natural Science Research Methods	10
ENVL 2007	Environmental Monitoring and Assessment	10
EART 2001	Climate Change Science	10
Select one elective		10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
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	
Select one elective		10
<b>Credit Points</b>		<b>40</b>
<b>Year 3</b>		
<b>Autumn session</b>		
NATS 3015	Field Project 1	10
AGRI 3007	Water in the Landscape	10
Select two electives		20
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
BIOS 3035	Sustainable Environments	10
EART 3006	Science of the Anthropocene	10
Select two electives		20
<b>Credit Points</b>		<b>40</b>
<b>Total Credit Points</b>		<b>300</b>

## Recommended Sequence 2024

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
<b>Year 1</b>		
<b>Autumn session</b>		
NATS 1019	Scientific Literacy	10
BIOS 1001	Biodiversity	10
CHEM 1008	Introductory Chemistry	10
BIOS 1027	Management of Aquatic Environments	10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
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
<b>Credit Points</b>		<b>40</b>
<b>Year 2</b>		
<b>Autumn session</b>		
NATS 2025	Natural Science Research Methods	10
ENVL 2007	Environmental Monitoring and Assessment	10
EART 2001	Climate Change Science	10
Select one elective		10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
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
<b>Credit Points</b>		<b>40</b>
<b>Year 3</b>		
<b>1H session</b>		
NATS 3055	Practicum 1	10
<b>Credit Points</b>		<b>10</b>
<b>Autumn session</b>		
AGRI 3007	Water in the Landscape	10
Select two electives		20
<b>Credit Points</b>		<b>30</b>
<b>Spring session</b>		
BIOS 3035	Sustainable Environments	10
EART 3006	Science of the Anthropocene	10

Select two electives	20
<b>Credit Points</b>	<b>40</b>
<b>Total Credit Points</b>	<b>240</b>

## 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/majors-minors/education-studies-primary-teaching-minor/>)

Or

Education Studies - Secondary Teaching, Minor (0267) (<https://hbook.westernsydney.edu.au/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
<b>Year 1</b>		
<b>Autumn session</b>		
NATS 1019	Scientific Literacy	10
BIOS 1001	Biodiversity	10
CHEM 1008	Introductory Chemistry	10
BIOS 1027	Management of Aquatic Environments	10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
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
<b>Credit Points</b>		<b>40</b>
<b>Year 2</b>		
<b>Autumn session</b>		
NATS 2025	Natural Science Research Methods	10
ENVL 2007	Environmental Monitoring and Assessment	10
EART 2001	Climate Change Science	10
Select one elective		10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
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
<b>Credit Points</b>	<b>40</b>

### Year 3

#### 1H session

NATS 3055	Practicum 1	10
<b>Credit Points</b>		<b>10</b>

#### Autumn session

AGRI 3007	Water in the Landscape	10
Select two electives		20
<b>Credit Points</b>		<b>30</b>

#### Spring session

BIOS 3035	Sustainable Environments	10
EART 3006	Science of the Anthropocene	10
Select two electives		20
<b>Credit Points</b>		<b>40</b>
<b>Total Credit Points</b>		<b>240</b>

## 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
<b>Year 1</b>		
<b>Autumn session</b>		
NATS 1019	Scientific Literacy	10
BIOS 1001	Biodiversity	10
CHEM 1008	Introductory Chemistry	10
BIOS 1027	Management of Aquatic Environments	10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
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
<b>Credit Points</b>		<b>40</b>
<b>Year 2</b>		
<b>Autumn session</b>		
NATS 2025	Natural Science Research Methods	10
ENVL 2007	Environmental Monitoring and Assessment	10
EART 2001	Climate Change Science	10
NATS 2001	Advanced Science Project A	10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
BIOS 3039	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
<b>Credit Points</b>		<b>40</b>

**Year 3****1H session**

NATS 3055	Practicum 1	10
<b>Credit Points</b>		<b>10</b>

**Autumn session**

AGRI 3007	Water in the Landscape	10
NATS 3043	Advanced Science Research Project C	10
Select one elective		10
<b>Credit Points</b>		<b>30</b>

**Spring session**

BIOS 3035	Sustainable Environments	10
EART 3006	Science of the Anthropocene	10
NATS 3043	Advanced Science Research Project C	10
Select one elective		10
<b>Credit Points</b>		<b>40</b>
<b>Total Credit Points</b>		<b>240</b>

**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
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**Year 1****Year 1: College Subjects**

Standard 3-term year

**Preparatory subject**

CHEM 0001	Chemistry (WSTC Prep)	10
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**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)	
<b>Credit Points</b>		<b>90</b>

**Year 2****Autumn session**

NATS 2025	Natural Science Research Methods	10
ENVL 2007	Environmental Monitoring and Assessment	10
EART 2001	Climate Change Science	10
Select one elective		10
<b>Credit Points</b>		<b>40</b>

**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
<b>Credit Points</b>		<b>40</b>

**Year 3****1H session**

NATS 3055	Practicum 1	10
<b>Credit Points</b>		<b>10</b>

**Autumn session**

AGRI 3007	Water in the Landscape	10
Select two electives		20
<b>Credit Points</b>		<b>30</b>

**Spring session**

BIOS 3035	Sustainable Environments	10
EART 3006	Science of the Anthropocene	10
Select two electives		20
<b>Credit Points</b>		<b>40</b>
<b>Total Credit Points</b>		<b>250</b>

**Related Programs**

Bachelor of Advanced Science (3757) (<https://hbook.westernsydney.edu.au/programs/bachelor-advanced-science/>)

Bachelor of Medical Science (3755) (<https://hbook.westernsydney.edu.au/programs/bachelor-medical-science/>)

Bachelor of Science (3754) (<https://hbook.westernsydney.edu.au/programs/bachelor-science/>)

Bachelor of Science (Pathway to Teaching Primary/Secondary) (3756) (<https://hbook.westernsydney.edu.au/programs/bachelor-science-pathway-teaching-primary-secondary/>)

Bachelor of Science/Bachelor of Arts (3763) (<https://hbook.westernsydney.edu.au/programs/bachelor-science-bachelor-arts/>)

Bachelor of Science/Bachelor of Business (4748) (<https://hbook.westernsydney.edu.au/programs/bachelor-science-bachelor-business/>)

Bachelor of Science/Bachelor of International Studies (3764) (<https://hbook.westernsydney.edu.au/programs/bachelor-science-bachelor-international-studies/>)

Bachelor of Science/Bachelor of Laws (2743) (<https://hbook.westernsydney.edu.au/programs/bachelor-science-bachelor-laws/>)

Diploma in Science/Bachelor of Medical Science (6042) (<https://hbook.westernsydney.edu.au/programs/diploma-science-bachelor-medical-science/>)

Diploma in Science/Bachelor of Science (6043) (<https://hbook.westernsydney.edu.au/programs/diploma-science-bachelor-science/>)