Natural Science Research Methods

**Environmental Monitoring and** 

Complex Case Studies in Science

Work Internship for Science Professionals

Climate Change Science

Quantitative Thinking

Mathematics 1A

Biometry

Credit Points

Assessment

**Credit Points** 

**Credit Points** 

Field Project 1

**Credit Points** 

Water in the Landscape

Sustainable Environments

Ecology

MATH 1026

MATH 1014

MATH 1003

Select one elective

**Autumn session NATS 2025** 

**ENVL 2007** 

**EART 2001** 

Select one elective

Select one of the following:

Spring session

NATS 3044

**NATS 3045** 

**Autumn session** 

Select two electives

Spring session

**BIOS 3035** 

NATS 3015

**AGRI 3007** 

Select two electives

**BIOS 2008** 

Year 3

Year 2

10

40

10

10

10

10

40

10

10

20

40

10

10

20

40

10

# **SUSTAINABLE ENVIRONMENTAL FUTURES,** TESTAMUR MAJOR

Western Sydney University Major Code: T120

Previous code: MT3043.1

Available to students in other Western Sydney University programs?

This testamur major is available as an elective major for Bachelor of Medical Science students only.

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				Science of the Anthropocene	10
		Select two electives		20	
Campus	Mode	Advice		Credit Points	40
Hawkesbury Campus	Internal	Dr Narsimha Reddy (n.reddy@westernsydne	y.edu.au)	Total Credit Points	240

#### Recommended Sequence

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 foll	owing:	10

## **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 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 fol	lowing:	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	Natural Science Research Methods	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 foll	lowing:	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 the mandatory 40 credit point minor in Education Studies.

Education Studies, Minor (https://hbook.westernsydney.edu.au/archives/2021-2022/majors-minors/education-studies-minor/)

Students must meet this requirement by choosing the subjects from the minor in Education Studies 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 follo	owing:	10

	Total Credit Points	240
	Credit Points	40
Select one elective		10
NATS 3043	Advanced Science Research Project C	10
EART 3006	Science of the Anthropocene	10
BIOS 3035	Sustainable Environments	10
Spring session		
	Credit Points	40
Select one elective		10
NATS 3043	Advanced Science Research Project C	10
AGRI 3007	Water in the Landscape	10
NATS 3015	Field Project 1	10
Autumn session		
Year 3		
	Credit Points	40
Select one elective		10
NATS 3045	Work Internship for Science Professionals	
NATS 3044	Complex Case Studies in Science	
Select one of the following	-	10
NATS 2002	Advanced Science Project B	10
BIOS 2008	Ecology	10
Spring session	ordan i onito	40
	Credit Points	40
NATS 2001	Advanced Science Project A	10
EART 2001	Climate Change Science	10
ENVL 2007	Environmental Monitoring and Assessment	10
NATS 2025	Natural Science Research Methods	10
Autumn session		
Year 2		
	Credit Points	40
Select one elective		10
MATH 1003	Biometry	
MATH 1014	Mathematics 1A	
MATH 1026	Quantitative Thinking	

### **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
Year 1		
Year 1: College Sub	jects	
Standard 3-term year	ar	
Preparatory subject	t	
CHEM 0001	Chemistry (WSTC Prep)	10
Eight university-lev	el subjects as follows:	
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

# One unit from the following (depending on the testamur major chosen)

Food Science 1 (WSTC)

PROC 1003

	Total Credit Points	300
	Credit Points	40
Select two electives		20
EART 3006	Science of the Anthropocene	10
BIOS 3035	Sustainable Environments	10
Spring session		
	Credit Points	40
Select two electives		20
AGRI 3007	Water in the Landscape	10
NATS 3015	Field Project 1	10
Autumn session		
Year 3	<del></del>	
	Credit Points	40
Select one elective		10
NATS 3045	Work Internship for Science Professionals	
NATS 3044	Complex Case Studies in Science	. 3
Select one of the foll		10
ENVL 1004	Introduction to Environmental Science	10
BIOS 2008	Ecology	10
Spring session		.0
	Credit Points	40
Select one elective		10
EART 2001	Climate Change Science	10
LIVVE ZUUT	Assessment	10
ENVL 2007	Environmental Monitoring and	10
NATS 2025	Natural Science Research Methods	10
Year 2 Autumn session		
V0	Credit Points	140
NATS 1002	Concepts in Human Anatomy (WSTC)	10
	Management (WSTC)	
AGEN 1002	Water Quality Assessment and	10
ENVL 1003	Environmental Issues and Solutions (WSTC)	10
NATS 1021	Concepts in Human Physiology (WSTC)	10
BIOS 1023	Introduction to Human Biology (WSTC)	10

### Related Programs

Bachelor of Advanced Science (3757) (https://

hbook.westernsydney.edu.au/archives/2021-2022/programs/bacheloradvanced-science/)

Bachelor of Medical Science (3755) (https://

hbook.westernsydney.edu.au/archives/2021-2022/programs/bachelor-medical-science/)

Bachelor of Science (3754) (https://hbook.westernsydney.edu.au/archives/2021-2022/programs/bachelor-science/)

Bachelor of Science (Pathway to Teaching Primary/Secondary) (3756) (https://hbook.westernsydney.edu.au/archives/2021-2022/programs/bachelor-science-pathway-teaching-primary-secondary/)

Bachelor of Science/Bachelor of Arts (3763) (https://

hbook.westernsydney.edu. au/archives/2021-2022/programs/bachelor-science-bachelor-arts/)

Bachelor of Science/Bachelor of Business (4748) (https://

hbook.westernsydney.edu.au/archives/2021-2022/programs/bachelor-science-bachelor-business/)

Bachelor of Science/Bachelor of International Studies (3764) (https://hbook.westernsydney.edu.au/archives/2021-2022/programs/bachelor-science-bachelor-international-studies/)

Bachelor of Science/Bachelor of Laws (2743) (https://

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hbook.westernsydney.edu.au/archives/2021-2022/programs/bachelor-science-bachelor-laws/)

Diploma in Science/Bachelor of Medical Science (6042) (https://hbook.westernsydney.edu.au/archives/2021-2022/programs/diplomascience-bachelor-medical-science/)

Diploma in Science/Bachelor of Science (6043) (https://hbook.westernsydney.edu.au/archives/2021-2022/programs/diplomascience-bachelor-science/)