INNOVATIVE FOODS, TESTAMUR MAJOR (T124)

Western Sydney University Major Code: T124

Previous code: MT3046.1

Available to students in other Western Sydney University Programs: Yes, however the following restrictions apply.

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.

There is more to innovative foods, food marketing and healthy eating than you realise. This major will help you understand nutrition, and the science behind food in the largest business sector in the world. A major in Innovative Foods will prepare you to be a leader in developing innovative, safe, healthy and sustainable foods. A solid foundation in the biological and chemical sciences, needed to underpin food science, will enable graduates from this program to be confident in the rapidly evolving food technology sector. Graduates can pursue opportunities in food formulation, food research and development, quality assurance, food plant management, food molecular biology, flavour chemistry, consumer relations, food quality assurance and teaching. This flexible program has links with industry and community and enables you to make use of modern sensory and food processing facilities while undertaking units in human nutrition and health, food production, biotechnology, integrated management.

Location

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

Recommended Sequence Current

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 Innovative Foods 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
CHEM 1008	Introductory Chemistry	10
BIOS 1001	Biodiversity	10
Choose one elective		10
	Credit Points	**40**
Spring session		
CHEM 1012	Essential Chemistry	10
PROC 1005	Introduction to Food Science and Nutrition	10
Select one of the following:		10
MATH 1026	Quantitative Thinking	
MATH 1014	Mathematics 1A	
MATH 1003	Biometry	
Choose one elective		10
	Credit Points	**40**
Year 2		
Autumn session		
NATS 2042	Science Research Methods	10
PROC 2002	Novel Foods	10
Choose two electives		20
	Credit Points	**40**
Spring session		
NATS 2041	Functionality of Food Ingredients	10
NATS 3020	Food Microbiology and Safety	10
Choose one of		10
NATS 3045	Work Internship for Science Professionals	
NATS 3044	Complex Case Studies in Science	
Choose one elective		10
	Credit Points	**40**
Year 3		
1H session		
NATS 3055	Practicum 1	10
	Credit Points	**10**
Autumn session		
NATS 3038	Quality Assurance and Food Analysis	10
NATS 3048	Food Formulations and Sensory Evaluations	10
Choose one elective		10
	Credit Points	**30**
Spring session		
PROC 3003	New Food Product Development	10
PROC 3007	Food Innovation and Processing Technologies	10
Choose 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 Innovative Foods requires the successful completion of 240 credit points as per the recommended sequence for the Bachelor of Science with a major in Innovative Foods, 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
Year 1		
Autumn session		
NATS 1019	Scientific Literacy	10
CHEM 1008	Introductory Chemistry	10
BIOS 1001	Biodiversity	10
Choose one elective		10
	Credit Points	**40**
Spring session		
CHEM 1012	Essential Chemistry	10
PROC 1005	Introduction to Food Science and Nutrition	10
Select one of the following:		10
MATH 1026	Quantitative Thinking	
MATH 1014	Mathematics 1A	
MATH 1003	Biometry	
Choose one elective		10
	Credit Points	**40**
Year 2		
Autumn session		
NATS 2042	Science Research Methods	10
PROC 2002	Novel Foods	10
Choose two electives		20
	Credit Points	**40**
Spring session		
NATS 2041	Functionality of Food Ingredients	10
NATS 3020	Food Microbiology and Safety	10
Choose one of		10
NATS 3044	Complex Case Studies in Science	
NATS 3045	Work Internship for Science Professionals	
Choose one elective		10
	Credit Points	**40**
Year 3		
1H session		
NATS 3055	Practicum 1	10
	Credit Points	**10**
Autumn session		
NATS 3038	Quality Assurance and Food Analysis	10
NATS 3048	Food Formulations and Sensory Evaluations	10
Choose one elective		10
	Credit Points	**30**
Spring session		
PROC 3003	New Food Product Development	10
PROC 3007	Food Innovation and Processing Technologies	10
Choose two electives		20
	Credit Points	**40**
	Total Credit Points	**240**

Bachelor of Advanced Science

Qualification for the award of Bachelor of Advanced Science with a major in Innovative Foods 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
CHEM 1008	Introductory Chemistry	10
BIOS 1001	Biodiversity	10
Choose one elective		10
	Credit Points	**40**
Spring session		
CHEM 1012	Essential Chemistry	10
PROC 1005	Introduction to Food Science and Nutrition	10
Choose one of the following:		10
MATH 1026	Quantitative Thinking	
MATH 1014	Mathematics 1A	
MATH 1003	Biometry	
Choose one elective		10
	Credit Points	**40**
Year 2		
Autumn session		
NATS 2042	Science Research Methods	10
PROC 2002	Novel Foods	10
NATS 2001	Advanced Science Project A	10
Choose one elective		10
	Credit Points	**40**
Spring session		
NATS 2041	Functionality of Food Ingredients	10
NATS 3020	Food Microbiology and Safety	10
NATS 2002	Advanced Science Project B	10
Choose one of		
NATS 3044	Complex Case Studies in Science	10
NATS 3045	Work Internship for Science Professionals	10
	Credit Points	**50**
Year 3		
1H session		
NATS 3055	Practicum 1	10
	Credit Points	**10**
Autumn session		
NATS 3038	Quality Assurance and Food Analysis	10
NATS 3048	Food Formulations and Sensory Evaluations	10
NATS 3043	Advanced Science Research Project C	10
	Credit Points	**30**
Spring session		
PROC 3003	New Food Product Development	10
PROC 3007	Food Innovation and Processing Technologies	10
NATS 3043	Advanced Science Research Project C	10
Choose one elective		10
	Credit Points	**40**
	Total Credit Points	**250**

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 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
PROC 1007	Introduction to Food Science (WSTC)	10
NATS 1030	Human Anatomy and Physiology 2 (WSTC)	10
	Credit Points	**90**
Year 2		
Autumn session		
NATS 2042	Science Research Methods	10
PROC 2002	Novel Foods	10
NATS 3020	Food Microbiology and Safety	10
Choose one elective		10
	Credit Points	**40**
Spring session		
NATS 2041	Functionality of Food Ingredients	10
Choose one of		10
NATS 3044	Complex Case Studies in Science	
NATS 3045	Work Internship for Science Professionals	
Choose two electives		20
	Credit Points	**40**
Year 3		
1H session		
NATS 3055	Practicum 1	10
	Credit Points	**10**
Autumn session		
NATS 3038	Quality Assurance and Food Analysis	10
NATS 3048	Food Formulations and Sensory Evaluations	10
Choose one elective		10
	Credit Points	**30**
Spring session		
PROC 3003	New Food Product Development	10
PROC 3007	Food Innovation and Processing Technologies	10
Choose two electives		20
	Credit Points	**40**
	Total Credit Points	**250**

Recommended Sequence 2023

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 Innovative Foods 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
CHEM 1008	Introductory Chemistry	10
BIOS 1001	Biodiversity	10
Choose one elective		10
	Credit Points	**40**
Spring session		
CHEM 1012	Essential Chemistry	10
PROC 1005	Introduction to Food Science and Nutrition	10
Select one of the following:		10
MATH 1026	Quantitative Thinking	
MATH 1014	Mathematics 1A	
MATH 1003	Biometry	
Choose one elective		10
	Credit Points	**40**
Year 2		
Autumn session		
NATS 2042	Science Research Methods	10
PROC 2002	Novel Foods	10
Choose two electives		20
	Credit Points	**40**
Spring session		
NATS 2041	Functionality of Food Ingredients	10
NATS 3020	Food Microbiology and Safety	10
Choose one of		10
NATS 3045	Work Internship for Science Professionals	
NATS 3044	Complex Case Studies in Science	
Choose one elective		10
	Credit Points	**40**
Year 3		
Autumn session		
NATS 3015	Field Project 1	10
NATS 3038	Quality Assurance and Food Analysis	10
NATS 3048	Food Formulations and Sensory Evaluations	10
Choose one elective		10
	Credit Points	**40**
Spring session		
PROC 3003	New Food Product Development	10
PROC 3007	Food Innovation and Processing Technologies	10
Choose 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 Innovative Foods requires the successful completion of 240 credit points as per the recommended sequence for the Bachelor of Science with a major in Innovative Foods, given above.

Course	Title	Credit Points
Year 1		
Autumn session		
NATS 1019	Scientific Literacy	10
CHEM 1008	Introductory Chemistry	10
BIOS 1001	Biodiversity	10
Choose one elective		10
	Credit Points	**40**
Spring session		
CHEM 1012	Essential Chemistry	10
PROC 1005	Introduction to Food Science and Nutrition	10
Select one of the following:		10
MATH 1026	Quantitative Thinking	
MATH 1014	Mathematics 1A	
MATH 1003	Biometry	
Choose one elective		10
	Credit Points	**40**
Year 2		
Autumn session		
NATS 2042	Science Research Methods	10
PROC 2002	Novel Foods	10
Choose two electives		20
	Credit Points	**40**
Spring session		
NATS 2041	Functionality of Food Ingredients	10
NATS 3020	Food Microbiology and Safety	10
Choose one of		10
NATS 3044	Complex Case Studies in Science	
NATS 3045	Work Internship for Science Professionals	
Choose one elective		10
	Credit Points	**40**
Year 3		
Autumn session		
NATS 3015	Field Project 1	10
NATS 3038	Quality Assurance and Food Analysis	10
NATS 3048	Food Formulations and Sensory Evaluations	10
Choose one elective		10
	Credit Points	**40**
Spring session		
PROC 3003	New Food Product Development	10
PROC 3007	Food Innovation and Processing Technologies	10
Choose 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:

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Bachelor of Advanced Science

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Year 1		
Autumn session		
NATS 1019	Scientific Literacy	10
CHEM 1008	Introductory Chemistry	10
BIOS 1001	Biodiversity	10
Choose one elective		10
	Credit Points	**40**
Spring session		
CHEM 1012	Essential Chemistry	10
PROC 1005	Introduction to Food Science and Nutrition	10
Choose one of the following:		10
MATH 1026	Quantitative Thinking	
MATH 1014	Mathematics 1A	
MATH 1003	Biometry	
Choose one elective		10
	Credit Points	**40**
Year 2		
Autumn session		
NATS 2042	Science Research Methods	10
PROC 2002	Novel Foods	10
NATS 2001	Advanced Science Project A	10
Choose one elective		10
	Credit Points	**40**
Spring session		
NATS 2041	Functionality of Food Ingredients	10
NATS 3020	Food Microbiology and Safety	10
NATS 2002	Advanced Science Project B	10
Choose one of		
NATS 3044	Complex Case Studies in Science	10
NATS 3045	Work Internship for Science Professionals	10
	Credit Points	**50**
Year 3		
Autumn session		
NATS 3015	Field Project 1	10
NATS 3038	Quality Assurance and Food Analysis	10

NATS 3048	Food Formulations and Sensory Evaluations	10
NATS 3043	Advanced Science Research Project C	10
	Credit Points	**40**
Spring session		
PROC 3003	New Food Product Development	10
PROC 3007	Food Innovation and Processing Technologies	10
NATS 3043	Advanced Science Research Project C	10
Choose one elective		10
	Credit Points	**40**
	Total Credit Points	**250**

Diploma in Science/Bachelor of Science

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NATS 1020	Scientific Literacy (WSTC)	10
CHEM 1009	Introductory Chemistry (WSTC)	10
BIOS 1003	Biodiversity (WSTC)	10
MATH 1027	Quantitative Thinking (WSTC)	10
PROC 1007	Introduction to Food Science (WSTC)	10
NATS 1030	Human Anatomy and Physiology 2 (WSTC)	10
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Year 2		
Autumn session		
NATS 2042	Science Research Methods	10
PROC 2002	Novel Foods	10
NATS 3020	Food Microbiology and Safety	10
Choose one elective		10
	Credit Points	**40**
Spring session		
NATS 2041	Functionality of Food Ingredients	10
Choose one of		10
NATS 3044	Complex Case Studies in Science	
NATS 3045	Work Internship for Science Professionals	
Choose two electives		20
	Credit Points	**40**
Year 3		
Autumn session		
NATS 3015	Field Project 1	10
NATS 3038	Quality Assurance and Food Analysis	10
NATS 3048	Food Formulations and Sensory Evaluations	10
Choose one elective		10
	Credit Points	**40**
Spring session		
PROC 3003	New Food Product Development	10
PROC 3007	Food Innovation and Processing Technologies	10
Choose two electives		20
	Credit Points	**40**
	Total Credit Points	**250**

Related Programs

Diploma in Science/Bachelor of Medical Science (6042) (https://hbook.westernsydney.edu.au/archives/2024-2025/programs/diploma-science-bachelor-medical-science/)

Diploma in Science/Bachelor of Science (6043) (https://hbook.westernsydney.edu.au/archives/2024-2025/programs/diploma-science-bachelor-science/)