FOOD SCIENCE AND INNOVATION, TESTAMUR MAJOR (T163)

Western Sydney University Major Code: T163

Previous code: T124

Available to students in other Western Sydney University Programs: No.

NOTE: This Major Testamur replaces T124 - Innovative Foods, Testamur Major from Spring 2025.

Innovations in food science are crucial to address many food systems challenges including food security and sustainability. This major will help you understand the science of innovative technologies and new food product development in the largest global business sector. A major in Food Science and Innovation will prepare you to be a leader in developing novel, 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 production management, food molecular biology, flavour chemistry, consumer relations, food safety, and teaching. This flexible program has links with industry and community and enables you to make use of modern food processing and sensory facilities, while undertaking subjects such as food product development, food production, human nutrition and health.

Campus	Attendance	Mode	Advice
Hawkesbury		Internal	science@westernsyd

Recommended Sequence Current

All students must complete 60 credit points of study at Level 3 to meet program requirements.

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 AgriFood 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		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 3055	Practicum 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 Agrifood requires the successful completion of 240 credit points as per the recommended sequence for the Bachelor of Science with a major in Agrifood, 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
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		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 3055	Practicum 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 Advanced Science

Qualification for the award of Bachelor of Advanced Science with a major in AgriFood 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		10
NATS 3020	Food Microbiology and Safety	10
NATS 2002	Advanced Science Project B	10
Choose one of		10
NATS 3044	Complex Case Studies in Science	
NATS 3045	Work Internship for Science Professionals	
	Credit Points	**40**
Year 3		
Autumn session		
NATS 3055	Practicum 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	**240**

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/)

Bachelor of Science/Bachelor of Laws (Honours) (2832) (https://hbook.westernsydney.edu.au/programs/bachelor-sciencebachelor-laws-honours/)

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/)