THE UNIVERSITY OF MELBOURNE

Agriculture 2018

Contents

"The highlight of my Melbourne experience so far has been going to the Dookie campus to work hands-on with animals and further understand the operations of a working farm."

Eliza Redfern (Australia),
Bachelor of Agriculture, major in Production Animal Science

Agriculture at Melbourne

Become a highly skilled agricultural specialist, ready to take on the world.

Agriculture is a major contributor to the Australian economy. Productivity is booming – more than in any other industry sector.

To develop the Bachelor of Agriculture, the University of Melbourne consulted widely with industry, employers and graduates. This degree empowers you with the general, technical and problem-solving skills required to meet the high demand for graduates in agriculture.

Bachelor of Agriculture

Duration

3 years full time

Part time available (domestic students only)

Campus

Parkville

Optional practical semester at Dookie

Entry

Semester 1

Contact hours (first year, full time)

Approximately 16–22 hours per week plus independent study time of approximately 20 hours per week

Find out more

- fvas.unimelb.edu.au
- facebook.com/FVASunimelb
- instagram.com/FVASunimelb
- twitter.com/FVASunimelb
- youtube.com/FVASunimelb

About the Bachelor of Agriculture

Our Bachelor of Agriculture enables you to develop knowledge and core practical skills across plant and soil science, animal science and agricultural economics.

You will examine key aspects of agricultural production from different points of view: scientific, economic, environmental and ethical. You'll work in cross-disciplinary teams to apply your knowledge to address major industry challenges – from improving animal production and welfare to addressing climate change and food sustainability.

In first year, you'll build a solid foundation in agricultural science, with core studies in biology, natural environments, agricultural production and science.

In second and third year, you'll pursue your interests by selecting a major in one of: Agricultural Economics, Plant and Soil Science or Production Animal Science.

During second year, you'll also have the opportunity to enjoy the best of both worlds: access to our Parkville campus, close to the city, and an optional semester at our Dookie campus, near Shepparton in regional Victoria.

Living at the Dookie campus allows you to focus on practical learning in a hands-on environment on the largest farm campus in the southern hemisphere.

Majors

- Agricultural Economics
- Plant and Soil Science
- Production Animal Science

Honours

Honours is an optional fourth year of study where you'll draw together your previous studies and focus your knowledge, skills and intellect on original research. Honours can further prepare you for employment, or a research higher degree.

Course structure

You'll complete 300 credit points of study in total (equivalent to three years of full-time study). Most subjects are equal to 12.5 credit points.

$465 000
in scholarships awarded in 2017

Agricultural Economics

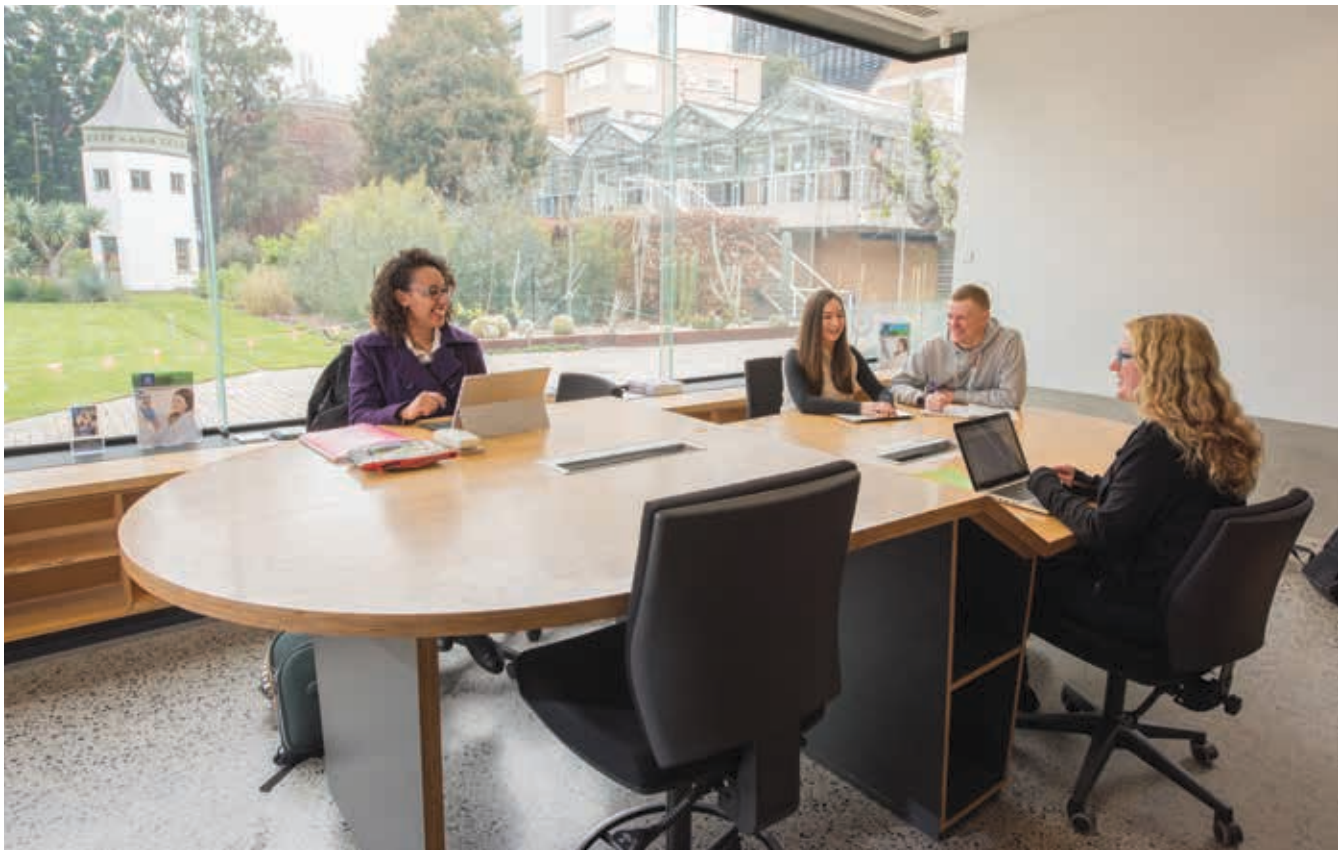
In the Agricultural Economics major, you will study subjects in economics, resource and farm management, and value chain analysis. You will be well equipped to analyse agricultural systems from an economic perspective, and be able to provide advice on management decision-making in this context.

Sample course plan – Bachelor of Agriculture [1]
Major in Agricultural Economics

Year 1	**Semester 1**	Agricultural Production Systems 1	Agricultural Production Systems 2	Biology of Cells and Organisms	Natural Environments
	Semester 2	Foundations of Agricultural Science 1	Foundations of Agricultural Science 2	Agricultural Production Systems 3	Genetics and the Evolution of Life
Year 2	**Semester 1**	Agricultural Economics	Water for Sustainable Futures	Plant Growth Processes	Biochemistry in Agricultural Systems
	Semester 2 (Parkville campus)	Principles of Soil Science	Comparative Nutrition and Digestion	Ecology and Grazing Management	Crop Production and Management
	Alternative Semester 2 (Dookie campus)	Ecology and Grazing Management	Enterprise Management	Principles of Soil Science	Applied Crop Production and Horticulture
Year 3	**Semester 1**	Applied Industry Studies		Farm Management Economics	Production Animal Health 1
	Semester 2	Value Chains and Trade	Agricultural Systems Analysis	Reproduction and Genetics	Production Animal Health 2

Core Agriculture subjects Major subjects Elective subjects

[1] This is a sample course plan only. Subjects offered may change from year to year. You will be advised of current subject offerings prior to subject selection and enrolment. Year 3 subjects are subject to Academic Board approval.



Plant and Soil Science

In the Plant and Soil Science major, you will study subjects in soil biology and management, and in plant health for growth and production. You will gain a detailed understanding of the drivers of plant industries and how management strategies can optimise yield and product quality.

Sample course plan – Bachelor of Agriculture[1] Major in Plant and Soil Science

Year 1	Semester 1	Agricultural Production Systems 1	Agricultural Production Systems 2	Biology of Cells and Organisms	Natural Environments
	Semester 2	Foundations of Agricultural Science 1	Foundations of Agricultural Science 2	Agricultural Production Systems 3	Genetics and the Evolution of Life
Year 2	Semester 1	Agricultural Economics	Biochemistry in Agricultural Systems	Microbiology in Agriculture	Animal Physiology and Growth
	Semester 2 (Parkville campus)	Principles of Soil Science	Crop Production and Management	Sustainable Food Systems	Comparative Nutrition and Digestion
	Alternative Semester 2 (Dookie campus)	Ecology and Grazing Management	Enterprise Management	Principles of Soil Science	Applied Crop Production and Horticulture
Year 3	Semester 1	Applied Industry Studies		Plant Health and Improvement	Agronomy
	Semester 2	Soil Management	Irrigation and Water Management	Applied Animal Behaviour	Reproduction and Genetics

Core Agriculture subjects | Major subjects | Elective subjects

[1] This is a sample course plan only. Subjects offered may change from year to year. You will be advised of current subject offerings prior to subject selection and enrolment. Year 3 subjects are subject to Academic Board approval.

Production Animal Science

In the Production Animal Science major, you will study subjects in animal biology, nutrition, physiology, health and welfare. You will gain a detailed understanding of animal production industries, and how management strategies can optimise growth and product quality.

Sample course plan – Bachelor of Agriculture [1]
Major in Production Animal Science

Year 1	**Semester 1**	Agricultural Production Systems 1	Agricultural Production Systems 2	Biology of Cells and Organisms	Natural Environments
	Semester 2	Foundations of Agricultural Science 1	Foundations of Agricultural Science 2	Agricultural Production Systems 3	Genetics and the Evolution of Life
Year 2	**Semester 1**	Agricultural Economics	Biochemistry in Agricultural Systems	Microbiology in Agriculture	Animal Physiology and Growth
	Semester 2 (Parkville campus)	Principles of Soil Science	Ecology and Grazing Management	Comparative Nutrition and Digestion	Crop Production and Management
	Alternative Semester 2 (Dookie campus)	Ecology and Grazing Management	Enterprise Management	Principles of Soil Science	Applied Crop Production and Horticulture
Year 3	**Semester 1**	Applied Industry Studies		Applied Reproduction and Genetics	Production Animal Health 1
	Semester 2	Production Animal Health 2	Applied Animal Behaviour	Value Chains and Trade	Physiology of Production

Core Agriculture subjects Major subjects Elective subjects

[1] This is a sample course plan only. Subjects offered may change from year to year. You will be advised of current subject offerings prior to subject selection and enrolment. Year 3 subjects are subject to Academic Board approval.

If you choose the Production Animal Science major and gain entry into the Doctor of Veterinary Medicine, you will receive a minimum of 30 points of subject credit towards the first year of your graduate studies.

For more information, see page 7.

Further study

In an increasingly competitive global employment market, graduate study can give you an edge with a professional qualification at a masters or doctorate level. Our graduate professional entry programs offer intensive, focused study and professional knowledge – preparing you for the career of your choice.

The Bachelor of Agriculture is a pathway to masters degrees in agribusiness, agricultural sciences, environmental science, business and economics.

Research pathways include an honours degree, the Master of Agricultural Sciences or a research higher degree. Studies in areas such as architecture, engineering, information technology, law, psychology and teaching are also available.

Graduate programs

Agricultural science

- Master of Agribusiness
- Master of Agricultural Sciences
- Graduate Diploma in Agricultural Sciences
- Graduate Certificate in Agricultural Sciences

Food science

- Master of Food Science
- Graduate Diploma in Food Science
- Graduate Certificate in Food Science
- Master of Food and Packaging Innovation

Veterinary science

- Doctor of Veterinary Medicine
- Master of Veterinary Studies

Other graduate programs

A wide range of graduate courses in other areas is also available for Bachelor of Agriculture graduates. You can choose to undertake further study in business and economics, law, nursing, teaching and more.

coursesearch.unimelb.edu.au

Research programs

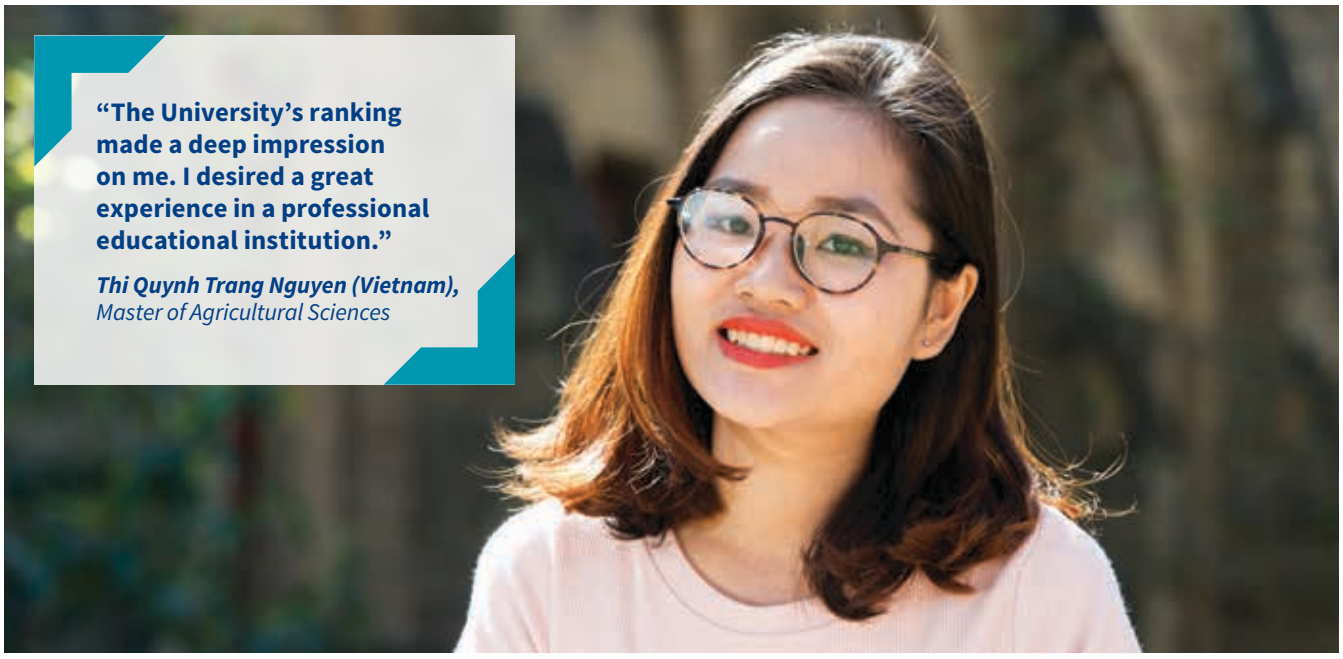
- Master of Philosophy (Agriculture)
- Doctor of Philosophy (Agriculture)

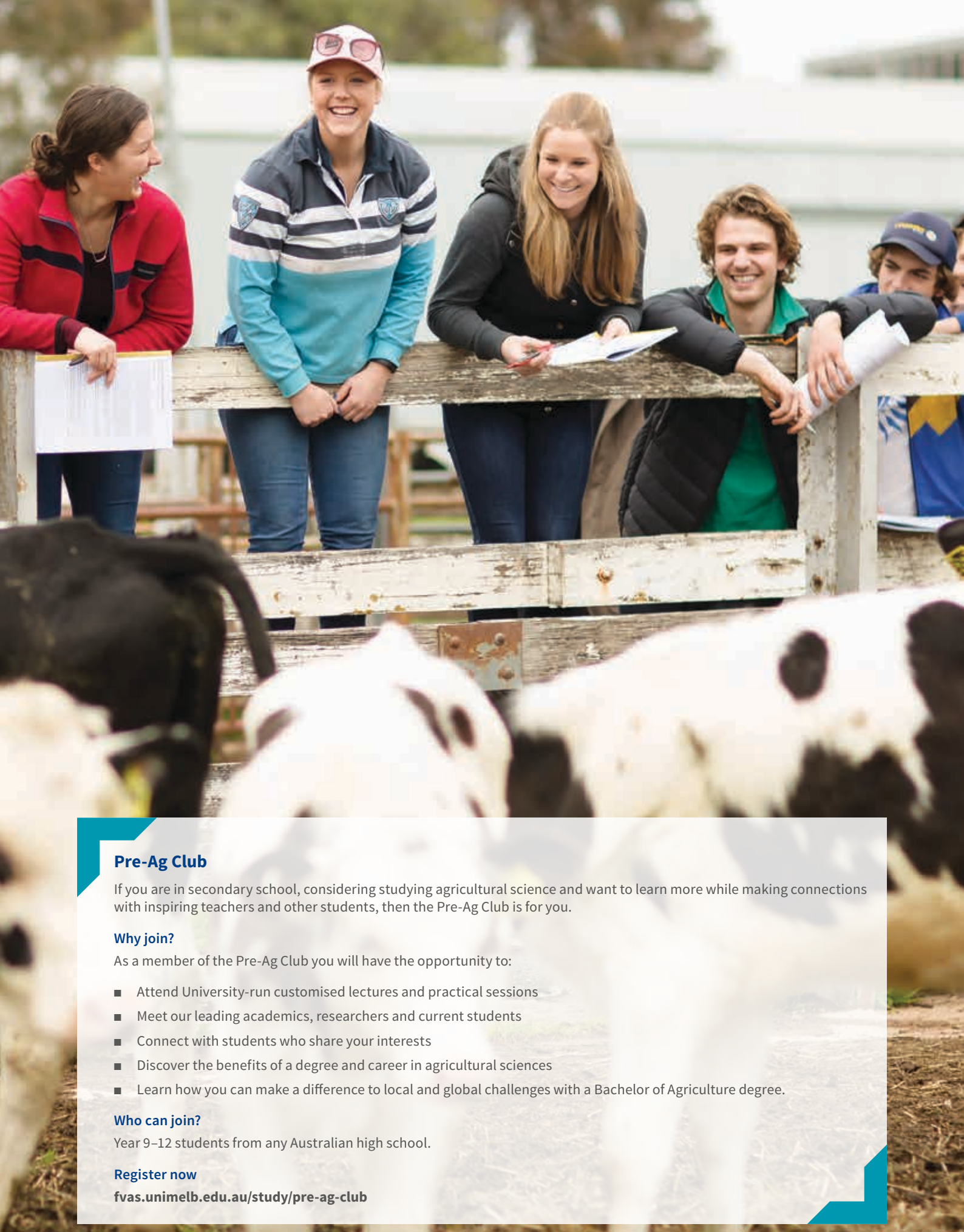
For further information visit:
fvas.unimelb.edu.au/study/courses

Doctor of Veterinary Medicine pathway

If you wish to progress into the Doctor of Veterinary Medicine (DVM) from the University of Melbourne's Bachelor of Agriculture you must complete the Production Animal Science major. If you successfully complete the Bachelor of Agriculture, including all subjects in the Production Animal Science major, you'll be eligible to apply for entry into the DVM. Selection is on the basis of academic merit, based on results from the last two years of tertiary study.

If you choose the Production Animal Science major and gain entry into the Doctor of Veterinary Medicine, you will receive a minimum of 30 points of subject credit towards the first year of your graduate studies.





Pre-Ag Club

If you are in secondary school, considering studying agricultural science and want to learn more while making connections with inspiring teachers and other students, then the Pre-Ag Club is for you.

Why join?

As a member of the Pre-Ag Club you will have the opportunity to:

- Attend University-run customised lectures and practical sessions
- Meet our leading academics, researchers and current students
- Connect with students who share your interests
- Discover the benefits of a degree and career in agricultural sciences
- Learn how you can make a difference to local and global challenges with a Bachelor of Agriculture degree.

Who can join?

Year 9–12 students from any Australian high school.

Register now

fvas.unimelb.edu.au/study/pre-ag-club

Career outcomes

With important input from industry experts and potential employers, our curriculum focuses on developing graduate agricultural scientists who are job-ready from day one.

Be job-ready and in demand

Our agricultural graduates are in high demand, with five jobs for every agriculture graduate in the sector.[1] Around 90 per cent of graduates gain full-time employment within four months of graduation – significantly above the average of 71 per cent for all bachelors degree graduates in Australia. A high percentage of positions are available in cities as well as rural and remote areas.

For further information visit:

acda.edu.au

Career opportunities for agricultural specialists exist in a range of areas including:

Agronomy

Agronomy is the science of producing and using plants for food, fuel, fibre and land reclamation. It includes work in the areas of plant genetics, plant physiology, meteorology and soil science.

Career spotlight: Agronomist

An agronomist applies their scientific and technical knowledge to help farmers increase their crop yield and maximise profits. You may gain specialist positions in research, consultation, sales, crop nutrition, soils or farming sustainability.

Career spotlight: Soil scientist

As a soil scientist you will examine the biology, chemistry, physics and hydrology of soil systems, and conduct relevant research to advise on the best strategies for their effective conservation and management. You may work in a lab, an office or out in the field (or a combination of these), alone or in teams, working closely with farmers and their staff.

Animal production

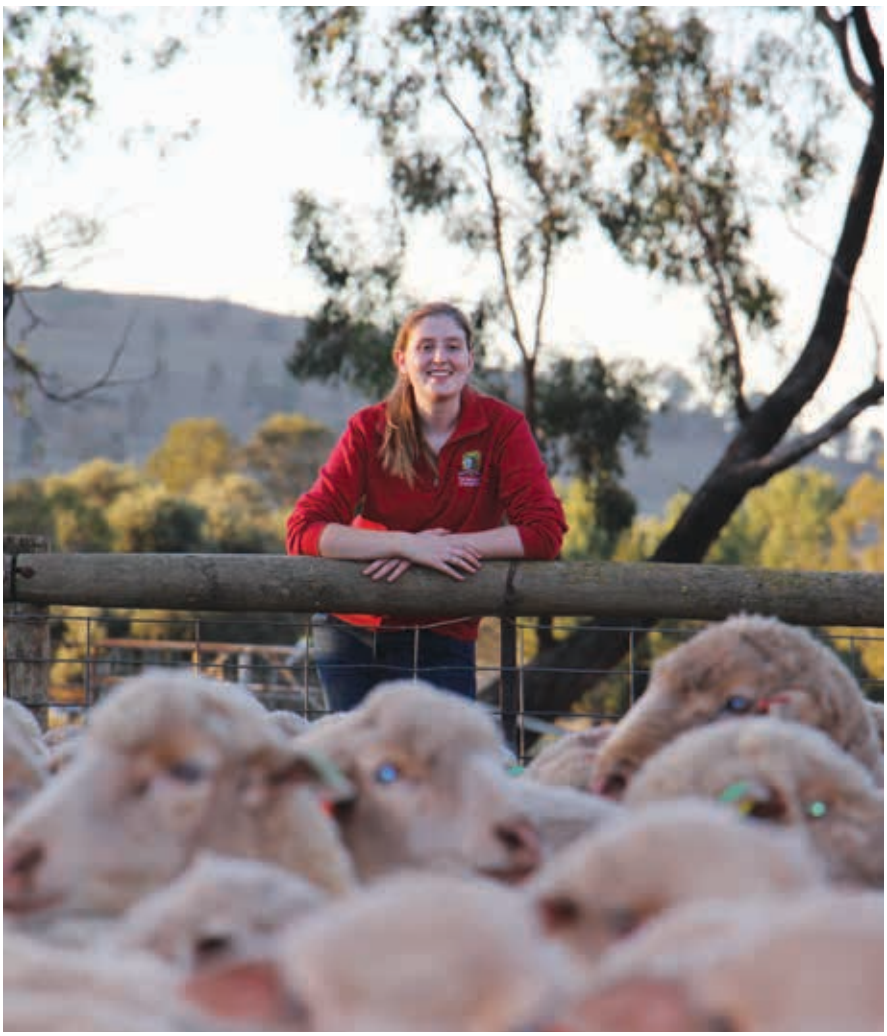
Consider a range of interesting careers relating to animal production such as:

- Agricultural/farm consultant
- Animal health/welfare officer
- Animal husbandry
- Animal nutritionist
- Artificial breeding technician
- Feedlot manager
- Pharmaceutical sales
- Quality assurance
- Quarantine officer/biosecurity officer.

Career spotlight: Animal health officer

You will have the important role of enforcing the law and educating the public on the prevention of cruelty to animals. You will investigate complaints, rescue animals from harmful situations, care for them and re-home them.

You will carry out inspections of domestic properties and commercial operations. You will assist in preparing cases for hearings. You will need a love for animals as well as communication skills and the ability to work alone or as part of a team.



[1] Based on data from the Australian Council of Deans of Agriculture.

Admissions

How to apply

Domestic students

Domestic students applying for an undergraduate course must submit an application through the Victorian Tertiary Admissions Centre (VTAC). Domestic students studying overseas must also apply through VTAC.

vtac.edu.au

Non-school leaver entry pathway

All applicants to the University must demonstrate academic merit and meet other requirements as part of the application process. As a non-school leaver, you may not have a recent study history and therefore may not meet the standard entry requirements for the course of your choice. The non-school leaver entry pathway, available through the Access Melbourne special admissions scheme, provides mature-age applicants and those who are not entering direct from Year 12 an alternative way to demonstrate their eligibility for entry and their likelihood to succeed in their chosen course.

access.unimelb.edu.au/nsl

International students

International students studying Year 12 or IB in Australia must apply through VTAC.

All other international students, including those undertaking foundation studies in Australia, must apply directly to the University or through one of our overseas representatives.

futurestudents.unimelb.edu.au/admissions

Pathway to Agriculture: Diploma in General Studies

If you want a year to decide what to do next, and you want it to count, choose the Diploma in General Studies.

Completion of the Diploma in General Studies may give you guaranteed entry into degree courses at the University of Melbourne and improves your employment prospects. The Diploma in General Studies combines subjects from the Melbourne bachelors degrees, and provides you with the opportunity to study agriculture, biomedicine, commerce, design or science.

This course is available to domestic students only. To be eligible for the guarantee you must provide evidence that you would have been eligible for Access Melbourne entry, and satisfy the prerequisite for the relevant degree course.

fvas.unimelb.edu.au/digs

Access Melbourne

If you are a domestic student, Access Melbourne can help you gain a place in a course, even if your ATAR is below the Clearly-in Rank. You may even be eligible for a scholarship. You can apply using one or more of the following categories:

- Disadvantaged financial background
- Applicants from rural or isolated areas
- Under-represented schools
- Difficult circumstances
- Disability or medical condition
- Non-English speaking background
- Recognition as an Indigenous Australian
- Mature-age consideration (non-school leaver entry pathway).

Applications for Access Melbourne and Melbourne Access Scholarships are made using the Special Entry Access Scheme (SEAS) form on the VTAC website.

access.unimelb.edu.au

Fees

Domestic students

All domestic undergraduate students are enrolled in a Commonwealth Supported Place (CSP), subsidised by the Australian Government. Payment of the student contribution amount can be deferred through HECS-HELP for eligible students.

International students

Tuition fees are charged for each year that you are enrolled. You will pay tuition fees according to your specific enrolment in any given semester. Detailed fee information, including the fee policy covering your enrolment, will be provided when you are offered a place at the University.

futurestudents.unimelb.edu.au/admissions/fees

Scholarships

Melbourne Scholarships

Melbourne Scholarships recognise outstanding academic achievement and provide access to higher education to students who might otherwise be excluded by socioeconomic, cultural, geographic and other disadvantages.

Visit our website for the most up-to-date information on scholarships, including closing dates:

scholarships.unimelb.edu.au

Entry requirements

Qualification	Bachelor of Agriculture
Australian Year 12	
Domestic students: 2018 Minimum ATAR [1]	70.00
Domestic students: 2017 Clearly-in Rank	70.30
International students: 2018 Guaranteed ATAR [2]	70.00
VCE (units 3 and 4)	A study score of at least 25 in English/English Language/Literature or at least 30 in EAL, and at least 25 in Mathematical Methods or Specialist Mathematics or a study score of at least 30 in Further Mathematics
International Baccalaureate (IB) Diploma	
International students: 2018 Guaranteed IB score [2]	25
IB prerequisite subjects	English and one of Grade 5 in Mathematical Studies (SL) or Grade 4 in Mathematics or Further Mathematics
GCE A Levels/Singapore A Levels	
International students: 2018 Guaranteed score [2]	CDD
A Level prerequisite subjects	A grade of at least C in Mathematics or Further Mathematics and in an accepted AS Level English subject
Trinity College Foundation Studies	
International students: 2018 Guaranteed score [2]	75
TCFS prerequisite subjects	EAP, English and Mathematics 1

[1] Domestic students: Applicants who achieve the minimum ATAR for a course will be eligible for a place, provided prerequisite studies and any other specific course requirements are met. The Clearly-in Rank may be higher, depending on demand for the course and the number of places available. Only applicants eligible for special entry schemes will be admitted below the minimum ATAR.

[2] International students: The University guarantees admission to a course when an international student achieves the required score, meets prerequisite studies, satisfies the English language requirements and there are still places available in the course at the time of acceptance. If you do not meet the guaranteed score your application will not be considered for entry. Guaranteed scores apply only if no further study has been undertaken after completion of one of these programs.

Domestic students completing an international qualification: The score listed should be considered a minimum score to be eligible for a place in that course. The actual standard required may be higher depending on the demand for the course and the number of Commonwealth Supported Places (CSPs) available.

THE UNIVERSITY OF MELBOURNE

futurestudents.unimelb.edu.au

Open Day

Sunday 20 August 2017
10am—4pm
Parkville and Southbank campuses

Course Information Day

Monday 18 December 2017
Parkville campus

Events near you

futurestudents.unimelb.edu.au/events

Contact us

For information on our courses and entry requirements contact Stop 1

Submit an enquiry online at futurestudents.unimelb.edu.au/contact

Call 13 MELB (13 6352)
+ 61 3 9035 5511

Visit us at Stop 1 (Parkville):
757 Swanston Street
The University of Melbourne
Victoria 3010 Australia

Connect with us

coursesearch.unimelb.edu.au

facebook.com/unimelb

twitter.com/unimelb

youtube.com/unimelb

instagram.com/unimelb

futurestudents.unimelb.edu.au/contact/brochure

weibo.com/melbourneuni

MelbUni1853

unimelb

Agriculture 2018

Intellectual property

Copyright in this publication is owned by the University and no part of it may be reproduced without the permission of the University.

For further information, refer to:
unimelb.edu.au/governance/statutes

Statement on Privacy Policy

When dealing with personal or health information about individuals, the University of Melbourne is obliged to comply with the *Information Privacy Act 2000* and the *Health Records Act 2001*.

For further information, refer to:
unimelb.edu.au/governance/compliance/privacy

Disclaimer

The University endeavours to ensure that information contained in this publication is current and correct at the time of printing. However, the University may change details relating to its courses from time to time (such as subjects offered, fees or academic staff). You should not rely on this publication to make any decision about making or accepting any application to study at the University. Before doing so, you should contact the School or Faculty directly to ensure that the relevant information is current and correct. This does not affect any rights you may have under the Australian Consumer Law.

Photography: Sharon Walker, On Location Photography.

Cover image: Emily Ware (Australia), Bachelor of Agriculture majoring in Production Animal Science.

Authorised by:
Director, External Relations, March 2017

CRICOS Provider Code: 00116K

Printed on paper from responsible sources.