What is Agricultural Science all about?

Agricultural Science is a hands-on subject that lets you explore and investigate ideas, systems, issues and problems in agriculture.

It lets you experience the agricultural industry through plant science, animal science and the facets of business that impact on agricultural production. You will also investigate and analyse issues relating to sustainable resource management that affect agricultural production systems.

What will you learn?

As you study Agricultural Science, you will learn key concepts that relate to plant science, animal science and agribusiness.

The key concepts of plant science and animal science involve the anatomy and physiology of plants and animals, and their influence on agricultural production systems. The key concepts of agribusiness will show you how agriculture has a major impact on the Australian economy and economies around the world, as well as teaching you about the management and strategic decision making involved in the short- and long-term supply of food, fibres and other products.

You will also look at significant ways in which agricultural production systems can be sustainably managed. These fall into four areas that you will consider across the course of study: plant and animal management, soil and water management, climate and weather, land management.

How will you learn?

Agricultural Science uses an inquiry-based approach to learning, which lets you conduct practical and research-based agricultural investigations. You will have opportunities to devise research questions and hypotheses, test ideas, and formulate plans for investigation either on your own or in groups. Over the course of study, your investigations may be teacher-directed or self-directed.

As part of your investigations, you may manipulate variables to see what effects they have on aspects of agricultural production. You will compare your research results as you analyse and interpret these effects. As you evaluate your research, you will make and justify decisions and recommendations for the future.

Depending on your location and the resources available, you may be able to take part in field trips or agricultural shows as you explore agricultural production systems.
How will you be assessed?

Assessment in Agricultural Science gives you opportunities to demonstrate your knowledge and understanding through investigating, analysing and evaluating agricultural information. You will have a chance to present this information to audiences through writing and speaking, or by combining modes for a presentation.

In Agricultural Science, assessment instruments include

- extended response — responses to research or stimulus materials, such as an extended agricultural investigation report, field report, essay, article, speech or presentation
- examinations — extended response tests or short-response tests.

In Year 12, you will be expected to complete five to seven assessment responses, including at least one extended agricultural investigation and at least one examination.

How can parents/carers help?

Your parents/carers may help you by:

- discussing different views of current Agricultural Science issues with you
- encouraging and helping you find suitable websites, documentaries, journals and other resources
- encouraging you to take part in school-based activities, including field trips, and extracurricular activities
- offering their services as guest speakers if they are involved in this area of study or related industry
- encouraging safe and ethical behaviour
- contacting your school to establish communication with your teachers to help understand the work undertaken at senior level, and to become familiar with assessment requirements.

Where can Agricultural Science take you?

This subject contributes four credits towards the Queensland Certificate of Education (QCE). If you would like to learn more about this certificate, please visit the QCE page on the QCAA website [www.qcaa.qld.edu.au/589.html](http://www.qcaa.qld.edu.au/589.html).

A course of study in Agricultural Science can establish a basis for further education and employment in the fields of agriculture, horticulture, agronomy, food technology, aquaculture, veterinary science, equine science, environmental management, biotechnology, business, marketing and agricultural education, research and development.


More information

This subject guide relates to courses developed from the Agricultural Science Senior Syllabus 2013. If you would like more information, please visit the subject page on the QCAA website [www.qcaa.qld.edu.au/20318.html](http://www.qcaa.qld.edu.au/20318.html) or email senior.syllabuses@qcaa.qld.edu.au.