Year 10 Agricultural Science

Overview

Agricultural Science develops students’ knowledge and understanding of scientific principles within the specialised area of agriculture. It is designed for students interested in managing their own farm, pursuing a professional career in one of the many agricultural fields or has a strong interest in agriculture. This subject also complements the other science subjects. Students will be involved with animal husbandry, crop trials, animal breeding programs, field observations and agriculture based experiments.

Year 10 Agricultural Science is an elective subject studied for three lessons per week. There is a theory as well as a practical component where students could be doing agricultural based experiments in laboratories in the Nicholson Street Campus or field work on the farm at the Bunya Campus.

An alternative subject to the more academic Agricultural Science is the skills based Certificate II in Agrifood Operations.

After year 10 students can continue their study of Agricultural Science by selecting the senior OP subject or they can choose to pursue the vocation subject, Certificate II in Agriculture. Students may also choose to follow one of the school’s signature programs of Agricultural Professionals or Agricultural Futures.

Topics studied

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
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<tbody>
<tr>
<td>Beef cattle</td>
<td>Students will investigate different breeds of beef cattle and the need for different breeds and study the role of genetics in breeding beef cattle. They will learn about the products from beef cattle including some value added products. They will also investigate pasture vs feedlotting.</td>
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<tr>
<td>Animals and plants for fibre</td>
<td>Students will investigate different types of fibres from both animals and plants. They will learn how each fibre is processed and the benefits and disadvantages of each growing fibre. Students will also investigate bamboo as an alternative fibre.</td>
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<tr>
<td>Viticulture</td>
<td>Students will investigate the different types of grapes (table, wine, dried fruit) and the different types of trellis used in viticulture. They will learn about grapevine physiology and the nutritional requirements of grape vines. They will also learn to control different pests and diseases.</td>
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<tr>
<td>Grains</td>
<td>Students will investigate which grains are suitable for growing on our farm and the region and compare summer and winter grains. They will investigate the modern techniques of broad acre farming. They will also study pests and diseases which can attack grain crops.</td>
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Study Pathways

- **Years 8 and 9**
  - Agricultural Science
- **Year 10**
  - Agricultural Science
- **Senior**
  - Agricultural Science
- **Tertiary**
  - Tertiary Courses: Bachelor of Science, Bachelor of Agricultural Science, Diploma courses, Food Science, Veterinary Sciences, Agricultural Engineering, Agribusiness
  - Vocational courses: Certificate II and Certificate IV Agriculture courses, Diploma courses