PATHWAY ONE – FURTHER EDUCATION – AUSTRALIAN TERTIARY ADMISSION RANKING (ATAR)

Students who take this pathway aspire to undertake further studies at a university level. The subjects studied in this pathway enable students to obtain an ATAR. It is recommended that students choosing this course have achieved at an A or B level in Year 10.

➤ Please note that places may be limited to 22 students

<table>
<thead>
<tr>
<th>SUBJECT/CERTIFICATE</th>
<th>YR 11</th>
<th>YR 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Production Systems</td>
<td>Stage 2A/2B</td>
<td>Stage 3A/3B</td>
</tr>
<tr>
<td>Plant Production Systems</td>
<td>Stage 2A/2B</td>
<td>Stage 3A/3B</td>
</tr>
<tr>
<td>English</td>
<td>Stage 2A/2B</td>
<td>Stage 3A/3B</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Stage 2C/2D</td>
<td>Stage 3A/3B</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Complete one or more certificates over 2 years to Certificate II and/or Certificate III level</td>
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</tr>
<tr>
<td>Design and Technology</td>
<td>Two courses to be undertaken to Certificate I or Certificate II level over 2 years in Automotives, Building and Construction, Engineering, Furnishing</td>
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</tbody>
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• Please note that students who undertake this pathway are required to sit internal examinations in their class subjects twice a year and also sit the WACE examinations at the end of Yr 12. These examinations are compulsory.

Animal Production Systems 2A /2B

In this course 2A and 2B are run concurrently throughout the year, students focus on meeting society’s needs for animal production with minimal impact on the environment, and select animals for markets based on product demand. Students examine and monitor the growth and life cycles of animals to ensure marketing requirements are met. Students consider the interconnections between the natural environment and animal production systems. They determine how to provide and maintain optimal production, production conditions and prevent ill health while complying with industry codes of practice. Students consider environmental, economic and social issues that affect production and determine strategies to modify enterprises to compliment these issues. Practical activities include the running of chicken trials and monitoring of College livestock.

Animal Production Systems 3A/3B

In Stage 3 Animal Production Systems, students complete the units 3A and 3B concurrently throughout the year. In these units students examine the technologies used to increase the reproductive performance of animals, as well as the genetic principles and processes used by producers to achieve optimum production. Students focus on the impact and ethics of these technologies on animal production systems. Domestic and international markets for Australian animal production are examined and students learn how to maintain financial control of an enterprise in order to maximise its profitability. Students analyse the effects of social, economic and environmental influences on production, including the impact on natural resources, and students develop an appreciation for the importance of conservation and restoration.

Plant Production Systems 2A / 2B

Students will identify the requirements to successfully produce and market a crop while complying with industry codes of best practice. Students will monitor the growth and lifecycle of crop varieties and determine how they can minimise production loss by analysing both internal and external influences. They will develop their understanding of sustainable agriculture and investigate the benefits of adopting new farming technologies.
Plant Production Systems Unit 3A / 3B
In this unit students examine domestic and international influences on local plant production, and apply critical thinking to propose systems to manipulate processes, ultimately to optimise production. Students examine the relationships between physiological processes, genetics, stages of life, and management decisions and determine how genetics and the environment influence growth and development. They examine new technologies, detailing how they can be used in plant production. They critically analyse the advantages and disadvantages of new technologies and consider the moral/ethical issues associated with their adoption. They analyse the effects of social, economic and environmental influences on production and include the impact on natural resources and appreciate the importance of conservation and restoration.

English 2A/2B
These units cater for students who may like to go on to university, or students who have a more academic background in English. Through the study of both contemporary and period texts including films, documentaries and written texts, students become aware of the way ideologies are presented in texts, and the way these texts shape society. These critical reading skills allow students to identify power relations within a text and adopt a neutral position in order to analyse their effects on the reader. This stream develops persuasive, analytical and creative writing skills in preparation for external examinations.

English 3A/3B
This course is for students who wish to pursue university entrance. The units build on concepts learnt in 2A, 2B with a focus on identities and ideas. The Stage 3 course is very eye opening and interesting, as students learn new ways of approaching history. Students analyse representations of historical events such as colonisation, war and slavery, as well as current texts such as advertisements and films. Stage 3 English develops the high-level reading and writing skills needed for university.

Mathematics 2C/2D
Students calculate interest and repayments in order to make decisions about savings and loans, and they interpret information on financial statements that are part of everyday living. They study and apply quadratic relationships. They extend their knowledge of coordinate geometry, and represent information in networks and interpret network diagrams. Students calculate and interpret probabilities for events with more than one chance component. They analyse datasets, determine trends in data and use trend lines for prediction. They use mental and written methods, online learning and calculator-assisted technologies where appropriate.

*Year 11 students undertaking this course will need to have achieved A (or high B) grade in Year 10.

Mathematics 3A/3B
Students explore and analyse the properties of functions and their graphs. They develop and use algebraic skills for solving equations. They apply recursion in practical situations, including for finance. They use trigonometry for the solution of triangles. Students use counting principles to calculate probabilities and analyse normally distributed data. They plan sampling methods, analyse data from samples and infer results for populations. They use mental and written methods and technologies where appropriate.

*Available Year 12 only. Students undertaking this course will need to demonstrate A or B grade achievement in Year 11.