The HSC Mathematics General 2 pathway provides students with the opportunity to develop an understanding of and competence in further aspects of mathematics for a range of concurrent HSC studies, such as in the life sciences, the humanities and business studies. The pathway also provides a strong foundation for students entering the workforce and/or undertaking further training, and for university courses in the humanities, nursing and paramedical sciences.

MAIN TOPICS COVERED

HSC Mathematics General 2 Course
- Strand Financial Mathematics
- Strand Data and Statistics
- Strand Measurement
- Strand Probability
- Strand Algebra and Modelling
- Focus Study Mathematics and Health
- Focus Study Mathematics and Resources

SYLLABUS OUTCOMES

MG2H-1 Uses mathematics and statistics to evaluate and construct arguments in a range of familiar and unfamiliar contexts
MG2H-2 Analyses representations of data in order to make inferences, predictions and conclusions
MG2H-3 Makes predictions about situations based on mathematical models, including those involving cubic, hyperbolic or exponential functions
MG2H-4 Analyses two-dimensional and three-dimensional models to solve practical problems, including those involving spheres and non-right-angled triangles
MG2H-5 Interprets the results of measurements and calculations and makes judgements about reasonableness, including the degree of accuracy of measurements and calculations and the conversion to appropriate units
MG2H-6 Makes informed decisions about financial situations, including annuities and loan repayments
MG2H-7 Answers questions requiring statistical processes, including the use of the normal distribution, and the correlation of bivariate data
MG2H-8 Solves problems involving counting techniques, multistage events and expectation
MG2H-9 Chooses and uses appropriate technology to locate and organise information from a range of contexts
MG2H-10 Uses mathematical argument and reasoning to evaluate conclusions drawn from other sources, communicating a position clearly to others, and justifies a response
### BOSTES Assessment Information

<table>
<thead>
<tr>
<th>External examination</th>
<th>Marks</th>
<th>Internal assessment</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1 – Objective Response Questions</td>
<td>25</td>
<td>A. Concepts, skills and techniques</td>
<td>50</td>
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<tr>
<td>Section 2 - Short answer questions</td>
<td>75</td>
<td>B. Reasoning and Communication</td>
<td>50</td>
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<td><strong>TOTAL MARKS</strong></td>
<td><strong>100</strong></td>
<td><strong>TOTAL MARKS</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

### School Based Evidence of Learning ~ Formal Task Schedule

<table>
<thead>
<tr>
<th>Task No.</th>
<th>Targeted Outcomes</th>
<th>Learning Context</th>
<th>Task</th>
<th>Date Due</th>
<th>Weighting</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>1</td>
<td>MG2 – 4, 8</td>
<td>Similarity of 2D figures, applications of trigonometry, multistage events and applications of probability</td>
<td>Assessment Task</td>
<td>Tm 4 Wk 9</td>
<td>12.5%</td>
<td>12.5%</td>
</tr>
<tr>
<td>2</td>
<td>MG2 – 5, 10</td>
<td>Further applications of area and volume, and mathematics and resources, further algebraic skills and techniques, modelling linear relationships</td>
<td>Assessment Task</td>
<td>Tm 1 Wk 8</td>
<td>12.5%</td>
<td>12.5%</td>
</tr>
<tr>
<td>3</td>
<td>MG2 – 1, 2, 3, 5, 7</td>
<td>All Areas</td>
<td>Trial HSC Examination</td>
<td>Tm 2 Wk 9/10</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>4</td>
<td>MG2 – 10</td>
<td>Focus Study Project – Mathematics and Health</td>
<td>Focus Study Project</td>
<td>Tm 3 Wk 2</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
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<td></td>
<td></td>
<td><strong>50%</strong></td>
<td><strong>50%</strong></td>
</tr>
</tbody>
</table>

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**Note:** The marks allocate are based on the weighted percentage of each task.

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**School Based Evidence of Learning ~ Formal Task Schedule**

- **Task No. 1:** MG2 – 4, 8
  - **Learning Context:** Similarity of 2D figures, applications of trigonometry, multistage events and applications of probability
  - **Task:** Assessment Task
  - **Date Due:** Tm 4 Wk 9
  - **Weighting:** 12.5% A, 12.5% B, 25% Marks

- **Task No. 2:** MG2 – 5, 10
  - **Learning Context:** Further applications of area and volume, and mathematics and resources, further algebraic skills and techniques, modelling linear relationships
  - **Task:** Assessment Task
  - **Date Due:** Tm 1 Wk 8
  - **Weighting:** 12.5% A, 12.5% B, 25% Marks

- **Task No. 3:** MG2 – 1, 2, 3, 5, 7
  - **Learning Context:** All Areas
  - **Task:** Trial HSC Examination
  - **Date Due:** Tm 2 Wk 9/10
  - **Weighting:** 20% A, 20% B, 30% Marks

- **Task No. 4:** MG2 – 10
  - **Learning Context:** Focus Study Project – Mathematics and Health
  - **Task:** Focus Study Project
  - **Date Due:** Tm 3 Wk 2
  - **Weighting:** 10% A, 10% B, 20% Marks

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**Note:** The marks allocate are based on the weighted percentage of each task.