




General Mathematics



Year 12 at Walford

Her Best

You will further extend and develop mathematical skills in ways that apply to practical problem solving. A problem-based approach is integral to the development of mathematical models and the associated key concepts in the topics. You will investigate a diverse range of applications of mathematics, including personal financial management, the statistical investigation process, modelling using linear and non-linear functions, and discrete modelling using networks and matrices.

SACE Stage 2
20 Credits

 Engage <i>Skills</i>	 Extend <i>Knowledge</i>	 Enrich <i>Experiences</i>
<p>The focus is to develop a strong understanding of the process of mathematical modelling and its application to problem-solving in everyday workplace contexts.</p> <p>Students find solutions to mathematical questions that may:</p> <ul style="list-style-type: none"> • be routine, analytical, and/or interpretative • be posed in a variety of familiar and new contexts • require discerning use of electronic technology 	<p>Stage 2 General Mathematics consists of the following five topics (not necessarily studied in this order):</p> <p>Topic 1: Modelling with linear relationships</p> <p>Topic 2: Modelling with matrices</p> <p>Topic 3: Statistical models</p> <p>Topic 4: Financial models</p> <p>Topic 5: Discrete models</p>	<p>Students are encouraged to participate in Senior Level Mathematics competitions:</p> <ul style="list-style-type: none"> • The Computational and Algorithmic Thinking Competition (CAT), from the Australian Mathematics Trust (AMT) • The Australian Mathematics Competition (AMC), from The Australian Mathematics Trust (AMT)

 Assessments/Outcomes	 Pathways
<p>40%: Five Skills and Application Tasks (SATs) (including the equivalent of one conducted without the use of notes or a graphics calculator);</p> <p>30%: Two Investigation tasks (up to 12 pages each);</p> <p>30%: SACE 130 minute examination on Topics 3, 4 & 5 only (use of a graphics calculator and one double-sided A4 page of hand-written notes is allowed).</p>	<p>Career Pathways: Stage 2 General Mathematics prepares students for entry to tertiary courses requiring a non-specialised background in mathematics. Tertiary options currently include some Engineering, Commerce (Accounting), and Computer Science degrees at some Universities.</p>