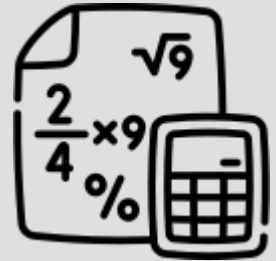


## A Level Mathematics - Year 13

**Summer Term 1**  
Pure Mathematics  
Statistics  
Mechanics



**Spring Term 2**  
Integration, Proof,  
Further Kinematics

**Spring Term 1**  
Differentiation, Numerical  
methods, Integration, Application  
of forces, Vectors

**Autumn Term 2**  
Trigonometry 2, Differentiation,  
Parametric equations, Moments,  
Projectile

**Autumn Term 1**  
Functions, Sequences,  
Trigonometry 2, Kinematics,  
Forces and Newton's Law



Knowledge	Attributes / Character	Skills	Experiences
<ul style="list-style-type: none"> <li>• Functions and graphs</li> <li>• Sequences and Series</li> <li>• Radians</li> <li>• Trigonometric functions and modelling</li> <li>• Numerical methods</li> <li>• Parametric equations</li> <li>• Integration</li> <li>• Differentiation</li> <li>• Vectors</li> </ul>	<ul style="list-style-type: none"> <li>• Constant acceleration</li> <li>• Forces and motion</li> <li>• Variable acceleration</li> <li>• Moments</li> <li>• Friction</li> <li>• Projectiles</li> <li>• Application of forces</li> <li>• Further kinematics</li> </ul>	<ul style="list-style-type: none"> <li>• Confidence - students are encouraged to work through the problems which they have struggled on prior to A Level and build the confidence in that before moving forward. They are encouraged to model their work to their peers which develops their presentation skills and confidence in public speaking</li> <li>• Organisation - students are given week by week schedules to ensure they are organised and ready for learning. Students need to manage their time efficiently and ensure they are organised when coming into lesson with the correct resources</li> <li>• Resilience - students develop resilience by working on challenging problems where they need to try and try again to get to the solution</li> <li>• Empathy - students are encouraged to work in peers and support each other when they are stuck</li> </ul>	<p>Algebraic manipulation</p> <p>Analysis - to be able to identify and analyse skills needed in each question</p> <p>Application of mathematical processes in problem solving situations</p>