

Mathematics is important in everyday life. It allows us to make sense of the world around us and to manage our lives. Using mathematics allows us to model real-life situations and equips us with the skills we need to interpret and analyse information, simplify and solve problems and make informed decisions. The learning of mathematics also develops logical reasoning, analysis and the ability to think in abstract ways.

The development of mathematical skills and application of mathematical techniques in context will be furthered by exploiting the power of calculators and computer software where appropriate. Pupils will be required to purchase a scientific calculator for their own use (we recommend the Casio FX83GT).

The Mathematics courses are designed to build upon and extend students' mathematical knowledge from the Broad General Education in S1-S3 and to offer mathematical progression within the National Qualifications Framework. They cover the operational skills involved in algebra, geometry, trigonometry and statistics and also aid the development of reasoning (investigation, problem-solving, analysis and modelling) and numeracy skills (number process and information handling).

Mathematics is available at National 4, National 5, Higher and Advanced Higher levels. Further information on the Mathematics courses can be found on the SQA website see <http://www.sqa.org.uk/sqa/45750.html>).

NATIONAL 4 MATHEMATICS							
REQUIREMENTS	Students following this course are expected to have attained CfE Mathematics at Third Level or equivalent.						
COURSE CONTENT	<p>The course comprises three Units of study:</p> <ul style="list-style-type: none"> • Expressions and Formulae • Relationships • Numeracy 						
ASSESSMENT	<p>The Units are assessed internally. There is also an additional Added Value Unit in the form of a test which will sample the skills, knowledge and understanding of the course. The Added Value Unit consists of two papers:</p> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center; width: 50%;">Paper 1</td> <td style="text-align: center; width: 50%;">Paper 2</td> </tr> <tr> <td style="text-align: center;">20 mins</td> <td style="text-align: center;">40 minutes</td> </tr> <tr> <td style="text-align: center;">non-calculator</td> <td style="text-align: center;">calculator permitted</td> </tr> </table> <p>To achieve the National 4 course, students must pass all of the required Units, including the Added Value Unit.</p>	Paper 1	Paper 2	20 mins	40 minutes	non-calculator	calculator permitted
Paper 1	Paper 2						
20 mins	40 minutes						
non-calculator	calculator permitted						
PROGRESSION / NEXT STEPS	Progression from National 4 Mathematics would be to National 5 Mathematics.						

NATIONAL 5							
REQUIREMENTS	Students following this course are expected to have attained CfE Mathematics at Fourth Level, National 4 Mathematics or equivalent.						
COURSE CONTENT	<p>The course comprises three Units of study:</p> <ul style="list-style-type: none"> • Expressions and Formulae • Relationships • Applications 						
ASSESSMENT	<p>The Units may be assessed internally. There is also an externally assessed Course Assessment which will sample the skills, knowledge and understanding of the course.</p> <p>The external Course Assessment consists of two papers:</p> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center; width: 50%;">Paper 1</td> <td style="text-align: center; width: 50%;">Paper 2</td> </tr> <tr> <td style="text-align: center;">1 hour</td> <td style="text-align: center;">1 hour 30 minutes</td> </tr> <tr> <td style="text-align: center;">non-calculator</td> <td style="text-align: center;">calculator permitted</td> </tr> </table> <p>The Course Assessment will provide the basis for grading attainment (A-D) in the Course Award.</p>	Paper 1	Paper 2	1 hour	1 hour 30 minutes	non-calculator	calculator permitted
Paper 1	Paper 2						
1 hour	1 hour 30 minutes						
non-calculator	calculator permitted						
PROGRESSION / NEXT STEPS	<p>Progression from National 5 Mathematics would be to Higher Mathematics.</p> <p>National 5 Mathematics is an entry requirement for many further education and industry training courses.</p>						

HIGHER MATHEMATICS							
REQUIREMENTS	Students following this course are expected to have attained National 5 Mathematics at Grade A-C or equivalent.						
COURSE CONTENT	<p>The course comprises three Units of study:</p> <ul style="list-style-type: none"> • Expressions and Functions • Relationships and Calculus • Applications 						
ASSESSMENT	<p>The Units are assessed internally. To achieve the Higher course, students must pass all of the required Units and an additional externally assessed Course Assessment which will sample the skills, knowledge and understanding of the course.</p> <p>The external Course Assessment consists of two papers:</p> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center; width: 50%;">Paper 1</td> <td style="text-align: center; width: 50%;">Paper 2</td> </tr> <tr> <td style="text-align: center;">70 minutes</td> <td style="text-align: center;">90 minutes</td> </tr> <tr> <td style="text-align: center;">non-calculator</td> <td style="text-align: center;">calculator permitted</td> </tr> </table> <p>The Course Assessment will provide the basis for grading attainment (A-D) in the Course Award.</p>	Paper 1	Paper 2	70 minutes	90 minutes	non-calculator	calculator permitted
Paper 1	Paper 2						
70 minutes	90 minutes						
non-calculator	calculator permitted						
PROGRESSION / NEXT STEPS	<p>Progression from Higher Mathematics would be to Advanced Higher Mathematics.</p> <p>Pupils may wish to discuss relevant work experience/placements with Faculty staff and their Guidance Teacher.</p>						

ADVANCED HIGHER MATHEMATICS	
REQUIREMENTS	Students following this course are expected to have attained Higher Mathematics at Grade A-C or equivalent.
COURSE CONTENT	<p>The course comprises three Units of study:</p> <ul style="list-style-type: none"> • Methods in Geometry and Measure • Methods in Algebra and Calculus • Applications of Algebra and Calculus
ASSESSMENT	<p>The Units are assessed internally. To achieve the Advanced Higher course, students must pass all of the required Units and an additional externally assessed Course Assessment which will sample the skills, knowledge and understanding of the course.</p> <p>The Course Assessment (one paper, 3 hours, calculator permitted) will provide the basis for grading attainment (A-D) in the Course Award.</p>
PROGRESSION / NEXT STEPS	Pupils may wish to discuss relevant work experience/placements with Faculty staff and their Guidance Teacher.