



Mathematics – Senior Phase Course Overview

Applications of Maths

National 4 & National 5 Applications of Mathematics (SCQF Levels 4 & 5)

Entry Requirements: If sitting National 4 Applications of Maths, a pass is required to progress to National 5.

Course Summary: Learners will use a range of mathematical concepts and relationships, applying skills in finance, geometry, measurement and statistics within real-life mathematical contexts. These courses are less algebraic than Maths courses, designed for students who wish to continue in maths without pursuing further education or career in science or engineering. Maths National 5 or Applications of Maths National 5 are essential for anybody who wishes to pursue a career in teaching.

Assessment: Applications of Maths National 4: Learners are assessed on the outcomes for each unit throughout the year, with the Added Value Unit assessment at the end of the year. These assessments are completed internally.

Applications of Maths National 5: Learners are assessed by a final examination at the end of the year. This examination makes up 100% of the final mark. The final examination comprises two papers: • Non-Calculator (45 marks) • Calculator (65 marks). Any learner who does not sit the final exam has the option of completing ‘Units Only’. These assessments are completed internally.

Progression: A pass at National 4 Applications of Maths can lead to National 5 Applications of Maths. A pass at National 5 Applications of Maths can lead to Higher Applications of Maths.

Higher Applications of Mathematics (SCQF Level 6)

Entry Requirements: A pass at National 5 Maths or National 5 Applications of Maths.

Course Summary: The Higher Applications of Mathematics course focuses on developing the mathematical and analytical skills required in society and for the future workforce. The course develops learners quantitative and mathematical literacy, problem-solving skills and reasoning skills as they apply mathematics in real-life contexts. The skills, knowledge and understanding in the course supports learning and further study and builds confidence in a wide range of curricular areas, such as humanities, social sciences, healthcare, and business.

Assessment: The assessment of Higher Applications of Maths consists of an internal project (30 marks) and a final examination paper (80 marks).

Progression: A pass at Higher Applications of Maths can support entry into a wide range of college and university courses.

Mathematics

Mathematics plays an important role in our lives. It is used in everyday activities such as budgeting, keeping time and playing games. Mathematics has been one of the decisive factors in shaping the modern world and continues to grow and find new uses in science, technology, business and social life.

Mathematics courses will help develop the Numeracy and analytical skills required for the world of work, recreation and further study of STEM subjects.

National 4 Mathematics (SCQF Level 4)

Entry Requirements: Completion of BGE Third Level Mathematics and Numeracy.

Course Summary and Assessment: The course consists of the following internally assessed units:

* Expressions and Formulae * Relationships * Numeracy* National 4 Added Value

The Added Value assessment is timed and consists of two parts: Non-Calculator Question Paper (20 mins) and Calculator Question Paper (40 mins).

For pupils who make sufficient progress, there may also be the opportunity to achieve the National 5 Numeracy award.

Progression: A pass at National 4 Maths can lead to National 5 Applications of Maths in S5&6.

National 5 Mathematics and National 5 Numeracy Award (SCQF Level 5)

Entry Requirements: For S4 pupils- completion of BGE Fourth Level Mathematics.

Course Summary and Assessment: The course consists of the following units: * Expressions and Formulae * Relationships * Applications

The course is assessed externally through timed Non – Calculator (50 marks) and Calculator Question Papers (60 marks).

National 5 Applications of Mathematics Additional Qualification

For pupils who make sufficient progress with National 5 Mathematics, there may also be the opportunity to achieve the additional qualification of National 5 Applications of Mathematics. This is assessed externally by the SQA through timed Non – Calculator Question (45 marks) and Calculator Question Papers (65 marks).

Progression: A pass at National 5 Maths can lead to Higher Maths.

Higher Mathematics (SCQF Level 6)

Entry Requirements: A pass at National 5 Mathematics.

Course Summary: The Higher Mathematics course provides an in-depth study of mathematical concepts and the ways in which mathematics describes our world. This is

a challenging course and to be successful pupils must have a sound knowledge of the following N5 skills: factorising, indices, fractions, quadratics, trigonometric equations and graphs.

The course consists of three units:

* Expressions and Functions * Relationships & Calculus * Applications

Assessment: The course is assessed externally by the SQA through timed Non – Calculator (60 marks) and Calculator Question Papers (70 marks).

Progression: A pass at Higher Maths can lead to Advanced Higher Maths.

Advanced Higher Mathematics (SCQF Level 7)

Entry Requirements: A pass at Higher Mathematics

Course Summary: The course provides the foundation for many developments in the sciences and in technology as well as having its own intrinsic value. This is a challenging course and to be successful pupils must have a sound knowledge of the following skills from Higher Mathematics: differentiation, integration, curve sketching, trigonometric identities and equations.

Assessment: The Advanced Higher course consists of the following units:

*Methods in Algebra & Calculus *Applications of Algebra & Calculus *Geometry, Proof & Systems of Equations

The course is assessed externally by the SQA through a timed Question Paper (100 marks)

Progression: A pass at Advanced Higher Maths can support University and College applications in a wide range of courses including Maths, Engineering and Science courses.

Personal Finance

Personal Finance Award (SCQF Level 4)

Entry Requirements: A pass at National 3 Maths or N3 Apps of Maths is beneficial but this is a masterclass option for S4 so no prior attainment is needed.

Course Summary: Unit 1 - Principles of Money and Unit 2 – Money Management

Assessment: Candidates must achieve 50% in all tasks to gain a pass in each unit. All tasks are completed **internally**. There is no external assessment.

Progression: Level 5 Personal Finance

Personal Finance Award (SCQF Level 5)

Entry Requirements: A pass at N4 Maths or N4 Apps

Course summary: Unit 1 – Money Management and Unit 2 – Understanding Money

Assessment: Candidates must achieve 50% in all tasks to gain a pass in each unit. All tasks are completed **internally**. There is no external assessment.

Progression: Level 6 Personal Finance

Personal Finance Award (SCQF Level 6)

Entry requirements: A pass at N5 Maths or N5 Apps or L5 Personal Finance

Course summary: Unit 1 – Money Management and Unit 2 – Personal Finance in Action

Assessment structure: Candidates must achieve 50% in all tasks to gain a pass in each unit. All tasks are completed **internally**. There is no external assessment.

Progression: The Personal Finance Awards at SCQF levels 4, 5 and 6 will develop knowledge and skills to cope confidently and effectively with the types of financial matters individuals are likely to encounter. From student loans, to pensions, the awards will prepare learners for financial decision making and managing personal finances throughout their lives.