

MATHEMATICS

AWARD LEVEL: HIGHER

ENTRY LEVEL

You would be expected to have attained a National 5 Applications of Mathematics or N5 Mathematics pass at A or B level to access the Higher Applications of Mathematics Course.

COURSE CONTENT

The Higher Applications of Mathematics course focuses on developing the mathematical and analytical skills required in society and in the future workforce. The course develops candidates' quantitative and mathematical literacy, problem-solving skills and reasoning skills as they apply mathematics in real-life contexts.

Applying mathematics in real-life contexts includes identifying relevant information, formulating a problem in appropriate mathematical or statistical terms, selecting and applying tools correctly, finding solutions, interpreting solutions in the context of a problem, and evaluating the approach taken.

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.

The topics are:

Mathematical Modelling

The general aim of this Unit is to develop understanding and the skills to apply to evaluate, analyse, and interpret mathematic models.

Finance

In this unit students will apply mathematical skills to solving problems related to personal financial products and transactions and analyse the results. They will also analyse and interpret the risks associated with financial planning strategies.

Statistics and Probability

This unit will extend knowledge and understanding of statistics and probability, increasing, and enhancing statistical literacy. Students will construct and interpret statistical diagrams, and apply skills to data analysis, interpretation, and communication

Planning and Decision making

This unit requires students to understand and apply project planning and decision-making skills using activity networks, critical activities, pathways.

ASSESSMENT

This course is assessed in 2 parts.

- 1) Is by an external examination, set, and marked by the SQA. The question paper is worth 80 marks and the paper is 2h and 30 min in length.
- 2) Is a project worth 30 marks conducted over 8 hours).

The grade awarded is based on the total marks achieved across both course assessment components.

HOMEWORK

Short pieces of homework set 2-3 times a week based on classwork. One extended homework exercise at end of each outcome. Homework notification is in class and through the student calendar.

PROGRESSION

HNC/HND/Degree or Employment