

# Core Maths B Level 3 Certificate

**Curriculum Intent:** We build confidence with mathematical reasoning which is essential for everybody's future. We ensure that all students have the mathematical fluency, reasoning, and problem-solving skills to not only excel in assessments, but to fulfil their hopes and dreams in the world beyond. We motivate, challenge and inspire a very able cohort, whilst supporting and nurturing students who lack confidence and those that struggle with mathematics. We deliver a curriculum which allows students to achieve the best they can.

## Core knowledge:

Core Maths is a one-year course, taught in Year 12 only. Equal in size and UCAS tariff points to an AS Level, they are aimed at students who are not studying AS or A Level Maths but need mathematical skills to support their other subjects and for future study and employment. Students should have passed GCSE Mathematics at grade 4 or better.

Core knowledge is guided by the subject content of the A Level Mathematics curriculum, under the headings:

- Introduction to Quantitative Reasoning (IQR).
- Statistical Problem Solving (SPS).

The Year 12 Trial assessments will examine all of the headings:

### Introduction to Quantitative Reasoning (IQR)

- Use of Technology.
- Modelling.
- Statistics.
- Finance.
- Working with Exponentials.
- Working with Graphs & Gradients.
- Risk.

### Statistical Problem Solving (SPS)

- Problem Analysis.
- Data Collection.
- Process & Presentation.
- Reporting / Interpretation.

## Procedural knowledge (how to..):

The intention is to prepare learners to tackle mathematical problems. The aim is to emphasise and encourage the following widely recognised and desirable outcomes:

- Sound understanding of mathematical concepts, skills and techniques from GCSE and beyond.
- Fluency in procedural skills, common problem-solving skills and strategies.
- Confidence in applying mathematical and statistical thinking and reasoning in a range of new and unfamiliar contexts to solve real life problems.
- Competency in interpreting and explaining solutions of problems in context.

## Assessment:

- Teacher questioning in lessons.
- Regular review questions at the beginning of lessons to check on prior learning.
- Regular exam question practice with either whole class or individual feedback.
- Exam week in January of Year 12.
- Trial exam week in February of Year 12.
- Final exams in May / June of Year 12.

## Homework:

- Weekly homework is set using predominantly the course textbook and the Integral online resources.
- Revision tasks are also set as homework to prepare for the assessments.

## Links to careers and personal development include:

- Mathematical knowledge, skills and their application to problem solving is key and requires resilience and the willingness to make mistakes and learn from them.
- The curriculum is linked to the real world wherever possible and we make cross curricular links with Science, Technology, Geography, Food etc wherever possible.
- We support students to get the best grades that they can, so they have as much career choice as possible.