### INTRODUCTION TO LEVEL 3 CORE MATHEMATICS



Versatile qualification equal in size to an AS level



Interesting, engaging and relevant to the world we live in.

Supports maths in other courses

Excellent preparation for university. Universities recommend studying some mathematics as Post 16.



Mathematics of life and workplace

of life y / y

A course that develops valuable mathematical skills

## STRUCTURE

This is a two year Level 3 course which is of a similar length and UCAS points score as an AS qualification .

You will usually have 5 lessons per fortnight with one teacher.

There is **NO coursework**.

2 Examinations will be sat in the Summer of Year 13.

Paper 1: Introduction to quantitative reasoning

72Marks 2hours 50%

#### Paper 2: Statistical Problem Solving

60Marks 2hours 50%

Both exam papers include the use of pre-release material which is made available before the examination so that you can familiarize yourself with the contexts and data so that you can focus on problem solving in the examination.

# COURSE CONTENT

#### **Component 01: Introduction to quantitative reasoning**

Students use problem-solving cycles in modelling, statistics and financial mathematics in a variety of contexts, and check the outcomes of their calculations. They also use appropriate technology to work with quantitative information.

#### **Component 02: Statistical problem solving**

Students use spreadsheets, the statistical problem solving cycle and more sophisticated statistical techniques to analyse authentic problems in a variety of contexts, working with large, real data sets. Pre-release material comprises a large data set that can be used as teaching material throughout the course. It is comparable to a set text for a literature course.

Both components require understanding and application of:

- Modelling
- Statistics
- Finance
- Working with exponentials
- Use of technology

- Working with graphs and gradients
- Geometry and measures
- Risk
- Statistical problem solving

### HOW YOU WILL BE ASSESSED?

You will complete practice questions and exercises through out the course. Complete online assessments via integral for frequent feedback.

You will work on problem solving and investigations within the lesson, thinking about the mathematical skills you have to come up with a solution.

You will sit termly assessments and mock assessment in line with the school assessment calendar which will contain questions on all areas taught and so clear notes/examples and regular revision is important.

You will sit one Year 12 mock paper in the Summer of Year 12.

You will sit two exam papers at the end of Year 13. These will contribute to the Core Mathematics Grade that you are awarded in August.

See the Assessment Overview on slide 2 for weighting and length of each examination.

### WHY DO CORE MATHEMATICS?

Core Maths focuses on using maths to solve problems that arise in everyday life, business, or scientific contexts. It's designed to:

- consolidate and build mathematical and statistical understanding
- develop confidence in thinking mathematically and applying maths in unfamiliar situations
- build skills in mathematical reasoning and communication
- support students' learning in other subjects requiring quantitative skills
- prepare students for the real-life mathematical demands of further study and employment.

Core Maths is designed for students who've achieved a grade 4 or above in GCSE Mathematics, but don't intend to take AS/A level Mathematics. It's particularly valuable for any student planning a future that requires good quantitative and statistical skills, whether that's in higher education or employment.

Universities and colleges asked for a qualification to bridge the gap between Alevel and GCSE mathematics, which will encourage the continued use and development of mathematical skill. As such some universities will offer a lower grade requirement to study degree courses. If you achieve B or higher in Core Maths, you may be eligible for an alternative offer up to one A level grade (or equivalent) below our typical offer.

The University of York

This applies to a wide range of courses including Biology, Business and Management, History of Art, Midwifery Practice, Music, Philosophy, Social Work