Level 3 Core Maths @ WBS Year 12 Roadmap

Subject Aim: In Level 3 Mathematical Studies (Core Maths), students are able to gain an additional Maths qualification with equivalent UCAS points to an AS Level. The content of the course focuses on real world applications of mathematical skills, with many practical benefits.

ANALYSIS OF DATA > Sampling > 2D & 3D Shapes

- The Modelling Cycle
- Percentage Errors
- Fermi Estimations

PERSONAL FINANCE

Interest Rates & Savings

Standard

Deviation

Cumulative

Histograms

Frequency &

- Student Loans & Mortgages
- Income Tax, National Insurance & VAT
- Currency & Exchange Rates

EXPECTATION

CRITICAL ANALYSIS

- Critical Analysis vs Descriptive Writing
- Identifying Errors
- Criticising Arguments of Others
- Misleading Data

CRITICAL PATH ANALYSIS

- Experimental Probability
- Venn Diagrams
- Equally Likely Events
- > Tree Diagrams
- Conditional Probability
- Expected Value

- ProjectManagement
 - Activity Networks
 - Critical Activities
 - Gantt Charts

COSTBENEFIT ANALYSIS

- The Cost-Benefit Principle
- Uncertainty
- Insurance Myths
- Risk Analysis

Assessment – 5 Key Measures

- In the first week of the course, you will sit our Initial Assessment. This enables us to assess your suitability for the course, make clear which GCSE skills are fundamental to success, and identify any gaps in your current knowledge.
- Each week, you will sit a Weekly Assessment with one of your teachers. This is a past exam question and is designed to prepare you for the challenges of the terminal exams.
- 3. On the completion of each Unit, you will sit a **Key Assessment**. These assessments cover the content of the Unit most recently covered but will also reference previously gained knowledge. These tests are 45 minutes long and out of 30 marks.
- 4. In the Easter term, you sit Year 12 Exams. This is your first **Mock Exam** and covers all content to this point.
- 5. Finally, you will sit the **Level 3 Core Maths Exam** in May/June.

All assessment is graded and fed back in class. We then provide detailed walkthrough solutions in the next lesson.

Homework and Revision

- Homework tasks are set regularly and take a variety of forms due to the unique nature of the course. This includes short research tasks and presentations.
- Where appropriate, homework is set on Dr Frost Maths to help students prepare for assessments.

Revision resources and practice questions for assessments are published on Brightspace.

Enrichment Themes

Post-16 Maths Workshop runs after school in M8 on a Wednesday and is a vital source of additional support for all students.

Core Maths provides a deeper understanding of many aspects of Maths in real life, and practical exploration of these is encouraged and vital to success in the course.

Where Next?

In Year 13, when applying for University, a strong grade in Core Maths may well lead to a reduced University offer from many institutions. This includes a number of Russell Group Universities.