

A - Level Maths and Further Maths

- Edexcel specification
 - Two-thirds Pure Maths
 - One-sixth Statistics
 - One-sixth Mechanics
 - 3 x 2 hour exams
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- Students will be assessed regularly throughout the course

Pure Maths

- Algebra and functions
- Quadratic and cubic functions
- Equations and inequalities
- Sketching curves
- Coordinate geometry
- Sequences
- Trigonometrical functions
- Differentiation and integration
- Exponentials and logarithms

What is Statistics?

Statistics – collecting and analysing data and using this to make predictions about future events.

e.g. actuaries study statistical information to calculate the risk of a driver of a certain age having a car accident.

An understanding of probability and risk is important in careers like insurance, medicine, engineering and the sciences.

What is Mechanics?

Mechanics – the modelling of the world around us

e.g. at what angle would a cricketer aim to hit the ball in order to maximise the distance the ball will travel?

Students planning careers in physics or engineering would find mechanics particularly useful.

Entry Requirements:

- Students must be in set 1 or 2 and achieve at least a grade 6 at GCSE.
- All students who apply to do maths in the 6th form will be required to attend a maths induction day and complete an algebra assignment in the Summer term of Year 11.

Further Mathematics?

- A Level further mathematics is a natural progression for those wishing to study any science subject, particularly maths and physics or engineering at university.
- Mathematics must be taken as well as further mathematics.
- It is suitable for students who have enjoyed GCSE maths and have achieved at least a grade 7 at GCSE

- Edexcel specification
 - 50% Pure Maths
 - 25% Further Mechanics
 - 25% Decision Maths
 - 4 x 1½ hour exams
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- Students will be assessed regularly throughout the course

Pure Maths

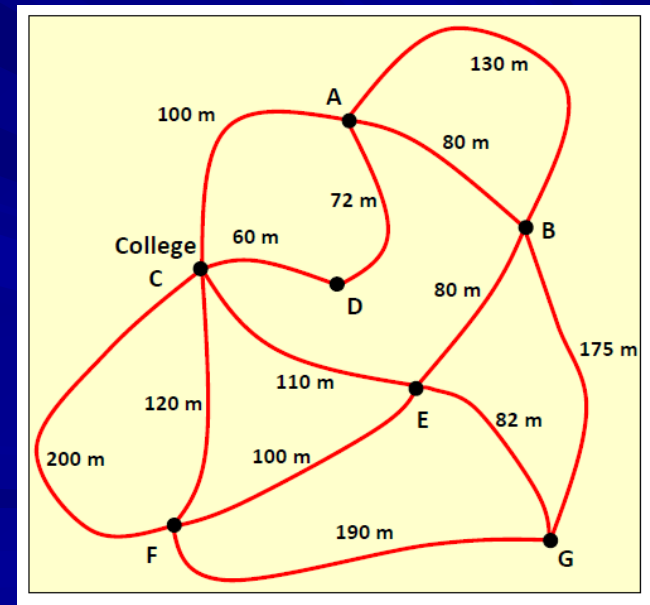
- Matrices
- Complex Numbers
- Vectors
- Sequences and Series
- Polar Coordinates
- Hyperbolic Functions
- Differential Equations

What is Decision Mathematics?

Decision Mathematics - finding efficient solutions to real life problems

e.g. what would be the most efficient route for delivering post around a network of streets?

The techniques are important in business, logistics and computer science.



Maths Quotes

- You have to work hard if you want to do well
- The afterschool support sessions really help
- The pace is fast – you don't get bored but you have to keep your work up to date
- It's both challenging and rewarding
- Maths really helps with physics and chemistry
- You get the maths buzz!!

Control Assets Academic Electrical Resource Portfolio Writer Business Specialist Executive Planning Lecturer Geographer Petroleum College Nuclear Games Foreign analyst Mechanical Researcher Professor Economist Climatologist Sales Consultant Tutor Programmer Computational Examiner
Urban Tax Officer Scientist Administrator Stockbroker Forensic Sciences Biostatistician Technical Financial
Recruitment Astronaut Purchasing Statistician Estimator Manager
Engineer Civil Air Market Research Risk Meth
Accountant Political Analyst Actuary Medical
Computer Biologist Geologist Agent Mathematician Budget Dealer Mathematical Derivatives
Animator Cartographer Teacher Operations Database Forecaster
Graphics Inventory Undertaker designer Security Quantitative Developer Reporter Primary
Scientific Groupier Exchange Property Architect Hydrologist Trader Controller
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