## MATHEMATICS

# **A LEVEL**

### EDEXCEL

| Entry Requirements                      | GCSE Higher Tier – High<br>Grade 6 following 2 year<br>Linear Course |
|-----------------------------------------|----------------------------------------------------------------------|
| Head of Department or<br>Course Contact | Mrs S Wilcox<br>Mr R Lloyd                                           |
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#### Brief introduction to subject:

This course will build upon GCSE Mathematics knowledge - extending familiar algebraic, spatial and statistical concepts. <u>All</u> students <u>must</u> have at least a high <u>Grade 6</u> in GCSE Higher Mathematics to start the course but be advised that in order to achieve pass grades you must be able to show competence in the Grade 7/8 GCSE Algebraic techniques. (Evidence of your ability to do this may be sought through the satisfactory completion of a preparatory workbook prior to your acceptance on the course). Maths Mechanics will also benefit students following Physics and Engineering, whilst Statistics will benefit students following Geography, Economics, Biology, Chemistry and Law.

#### Progression to Career/ University Courses:

Mathematics can be studied as a subject in its own right or used to support study in other areas. Mathematical competence is a vital component in the physical sciences, technology and business. It is an essential tool for all engineers and is of growing importance in the discipline of Medicine, whilst Law Departments have shown their preference for employing A Level Mathematicians. Many courses at University will accept students who offer A-level mathematics as they will have shown that they can develop reasoned arguments as well as having the ability to analyse problems and break them into smaller, more manageable tasks.

#### Key Points:

- There is no coursework component in this specification, which allows students more time to concentrate on practising their techniques. All units will be examined in the summer.
- Each module has been broken down into smaller sections which make learning more accessible.
- Students have to study Mechanics and Statistics as their applied units.
- Each paper will consist of short (3 or 4 marks) and long questions (up to 16 marks)
- There are 4 Pure Core units which make up two-thirds of the full A level qualification and provide the techniques in Algebra, Geometry, Trigonometry and Calculus that form the fundamental building blocks of the subject.