Course Title:	**Mathematics**
Title of qualification to be gained:	GCSE (9-1) Mathematics
Awarding Body :	Edexcel
Essential materials:	
Pen, pencil, rubber, sharpener, ruler (30cm), protractor, compass and a scientific calculator	

Course Aims
Acquire and use problem-solving strategies
–Select and apply mathematical techniques and methods in mathematical, every day and engineering situations
–Questions will be set in real-world contexts.
––Reason mathematically, make deductions and inferences and draw conclusions
–Interpret and communicate mathematical information in a variety of forms appropriate to the information and context.
–Emphasis on the assessment of applying mathematics and using mathematics to solve problems
–Questions will also require students to be able to communicate the mathematics they have applied (a requirement called Quality of Written Communication, QWC, which is compulsory for all GCSE examinations).
–In maths, this means giving a reason for an answer, correctly setting out a proof or accurately marking up a statistical diagram.
–About 5% of marks in the examination will be given over to QWC

Course Description

● Two tiers are available: Foundation and Higher (content is defined for each tier).

● The qualification will be graded and certificated on a nine-grade scale from
9 to 1 using the total mark across all three papers where 9 is the highest grade.
Individual papers are not graded.

● Foundation tier: grades 1 to 5.
● Higher tier: grades 4 to 9 (grade 3 allowed).

● Each student is permitted to take assessments in either the Foundation tier or
Higher tier.

● The qualification consists of three equally-weighted written examination papers
at either Foundation tier or Higher tier.

● All three papers must be at the same tier of entry and must be completed in the
same assessment series.

● Paper 1 is a non-calculator assessment and a calculator is allowed for Paper 2

and Paper 3.

● Each paper is 1 hour and 30 minutes long.

Main topics covered
List identifiable topics covered during the course, in order 1 Number 2 Algebra 3 Ratio, proportion and rates of change 4 Geometry and measures 5 Probability 6 Statistics

Learning Outcomes
This qualification in Mathematics encourages students to develop confidence in, and a positive attitude towards, mathematics and to recognise the importance of mathematics in their own lives and to especially to engineering. This qualification prepares students to make informed decisions about the use of technology, the role of mathematics in the advancement of ideas, further learning opportunities and career choices.

Teaching and learning methods used
Students are fully involved in the topic being studied. They tackle problems individually or as part of a small group and discuss the answers they get as well as improvements that could be made. Lessons are led by a Maths specialist but are helped by a Special Needs teacher and/or some members of year 12 where appropriate. We use computers, tapping into the rich source of online teaching programmes including 'MyMaths' and 'Conquer Maths'

How your work will be assessed
Assignments are set by the class teacher once a week. They should take about 50 minutes. There is a period set aside so that teachers are available to guide and advise students with their assignments. There will be end of topic tests and end of year examinations.

Suggested progression routes
A level Mathematics, A level Computing and apprenticeships