Exam Board: EDEXCEL

What qualifications do I need to take the course?

Minimum of 5 GCSEs at Grade 9 – 4 (or equivalent), including Grade 7 in Mathematics. Students who achieve a grade 6 in Mathematics may be considered on an individual basis.
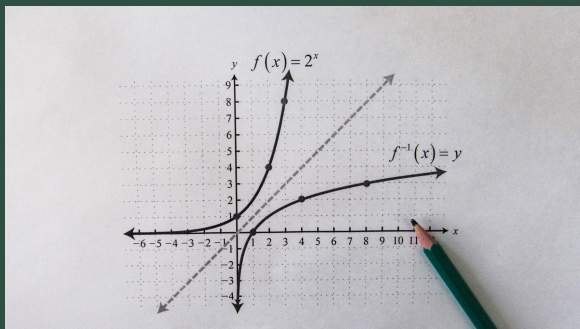
How is the course assessed?

Examinations are sat at the end of Year 13:
- Pure Mathematics: 2 x 2 hour exams
- Applied Mathematics: 1 x 2 hour exam

Textbooks and Resources

- Students have online access to textbooks.
- Extensive independent study resources are provided.
- Revision packs are available to purchase through the College at a reduced price.

Contact us

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Collingwood
College
BELIEVE SUCCEED

A Level
Maths

Collingwood
College
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THE COURSE
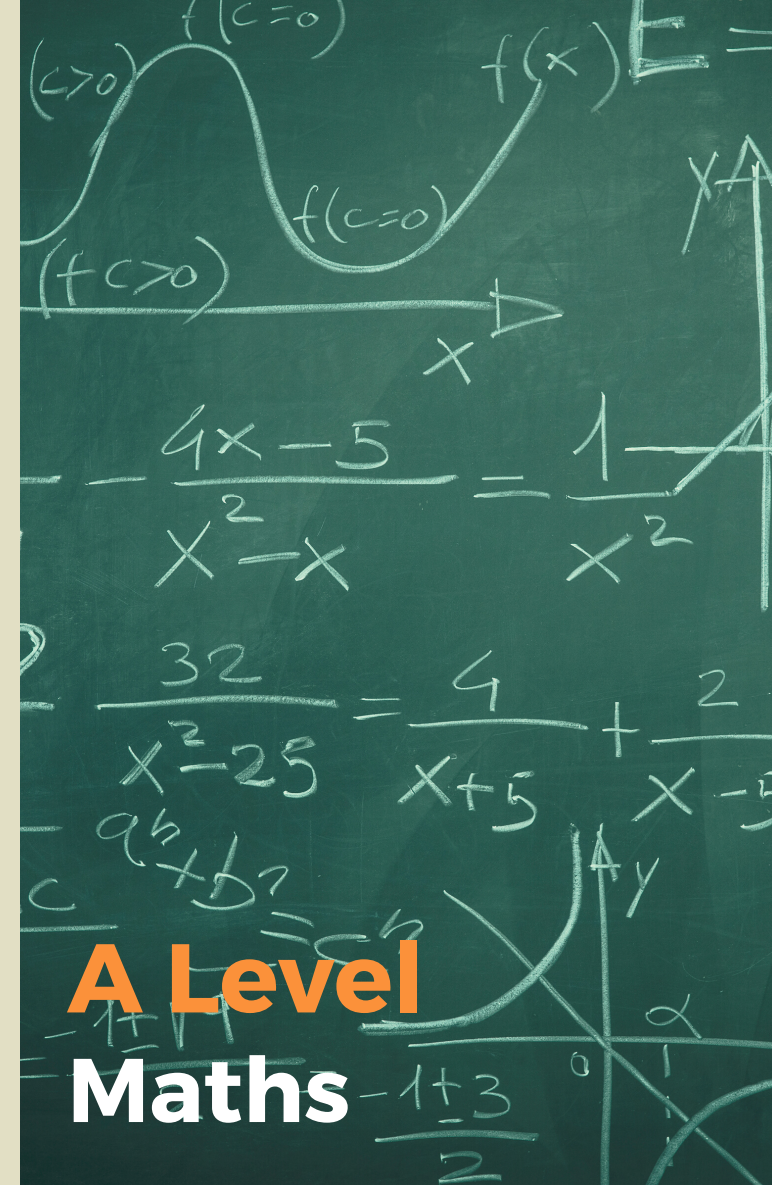
Pure Mathematics

Proof, algebra and functions, coordinate geometry in the (x,y) plane, sequences and series, trigonometry, exponentials and logarithms, differentiation, integration, vectors.

Applied Mathematics

Mechanics
The study of movement and forces; including Newton's laws, objects moving under constant acceleration, moments and variable acceleration.

Statistics
The science of collecting and analysing data and of using random variables; including measures of average and spread, histograms, correlation, binomial and normal distributions and hypotheses testing.

Technology

All students must purchase a Casio FX-911EX ClassWiz Scientific Calculator; this is a requirement of the exam board and students will be shown how to use them effectively.

Subject Description

The course is an exciting one with students exploring many aspects of mathematics. Problem solving skills are enhanced in the pure Maths units and practical applications of mathematics are examined in mechanics and statistics. The course involves the use of technology in the form of graphical calculators.

Where will the study of Mathematics A Level take me?

Students taking Mathematics often progress on to university courses in Medicine, Dentistry, Engineering, Computing, Science or financial disciplines, and also degrees in mathematics itself. Mathematics is often an essential A Level requirement for these courses. It also prepares students for the world of work by building skills of analysing, problem solving and resilience. Students considering University courses with a significant Mathematical content, such as Mathematics, Engineering and some Computing courses should also consider taking an A Level in Further Mathematics.

What other A Levels fit with Mathematics?

Mathematics will complement virtually all A Level programmes. Students often take Mathematics alongside combinations of Science subjects such as Chemistry, Biology, Physics and Computing.

It also supports subjects such as Economics and Psychology. Additionally, many students take mathematics alongside Humanities or Arts subjects in order to have a varied programme of study.

Students with a particular interest in Mathematics, should also consider taking an A Level in Further Mathematics.