Seaford Head School Sixth Form

Mathematics & Computing:

- A-Level Mathematics
- A-Level Further Maths
- A-Level Computer Science

Standard Entry Guidelines

5 GCSEs with a mixture of grades 9-5 in a least 5 different subjects including English Language and Mathematics

A-Level Mathematics

Exam Board: Edexcel

Entry Requirements

Standard plus grade 7 in GCSE Mathematics. Students with grades 5 or 6 could consider Core Maths *(Level 3 Certificate in Mathematical Studies).*

How is the subject assessed?

100% examination: 3 papers, each 2 hours long.

What will I study?

A balanced A-Level covering Pure Mathematics (building on GCSE skills) and Applied Mathematics (Statistics and Mechanics). Statistics focuses on analysing and interpreting data, while Mechanics applies maths to real-world physics and engineering problems.

Is this subject right for me?

If you can study A-Level Mathematics, you should. It develops strong analytical, problem-solving and research skills. The course builds a solid mathematical foundation, preparing you for university study or employment in a wide range of fields.

What next?

Mathematics A-Level students and graduates are highly sought after by employers.

Maths is a core transferable skill across science, engineering, technology and many other fields. However, 59% of employers report difficulty finding candidates with strong mathematical skills.

It is recommended or required for a wide range of degree courses, including Computer Science, Accounting, Chemistry, Biology and Life Sciences, Medicine, Nursing, Dentistry, Business, Finance, Architecture, Geology, Psychology, Surveying and even Philosophy.

A-Level Further Mathematics

Exam Board: Edexcel

Entry Requirements

Standard plus grade 8 in GCSE Mathematics. Students with grades 5 or 6 could consider Core Maths *(Level 3 Certificate in Mathematical Studies).*

How is the subject assessed?

100% examination: 4 papers, each 1.5 hours long.

What will I study?

You'll learn more advanced maths, including topics like complex numbers, vectors, and curves. You'll also choose some extra units: one focuses on deeper pure maths (like harder calculus and equations), and another looks at statistics—using maths to analyse real-world data and make predictions.

Is this subject right for me?

Further Maths is a challenging but highly respected A-Level. It's a good choice if you really enjoy maths and are willing to spend extra time working on it. It helps you build strong skills that universities and employers value.

What Next?

Further Mathematics students and graduates are in high demand by employers.

Mathematics is a key transferable skill across science, engineering, technology and many other fields. Currently, 59% of employers report difficulty recruiting people with strong maths skills.

It is recommended or required for a wide range of degree courses including Computer Science, Accounting, Chemistry, Biology and Life Sciences, Medicine, Nursing, Dentistry, Business, Finance, Architecture, Geology, Psychology, Surveying and even Philosophy.

A-Level Computer Science

Exam Board: AQA

Entry Requirements

Standard plus grade 6 in Mathematics and grade 5 in GCSE Computer Science (if taken).

How is the subject assessed?

A-Level Computer Science is assessed at the end of the course through exams and coursework:

- Paper 1: 2 hours 30 minutes on-screen exam focused mainly on programming and some theory (40%)
- Paper 2: 2 hours 30 minutes written exam covering theory (40%)
- NEA: A practical programming project where you design, build, test and evaluate your own solution, documented in a report of around 40 pages (20%)

What will I study?

You will cover programming and problem solving, theory of computation, data representation, computer systems, hardware and software, networking, and databases. You will also explore ethical issues linked to modern and emerging technologies.

Is this subject right for me?

This course suits students who enjoy programming and logical problem solving. You should be prepared to research independently and apply logical thinking to complex problems.

What Next?

This A-Level can lead to a range of university degrees, including Computer Science, Computing, Games Design, Web Design and Artificial Intelligence. .