

Course Summary – AQA A Level Mathematics

Information about the Course

The A Level mathematics curriculum aims to encourage students to build their confidence in learning and applying their mathematical knowledge and skills across other subject lessons as well as in real life applications. This is because mathematical cognitive thinking is the base of STEM subjects and in engineering and digital technological courses, which is one of the focuses of UTC Swindon courses. The A Level Maths course is one of the biggest facilitating subjects since it is crucial for many higher education courses and in many careers.

The A Level curriculum consists of Algebra and Proof; Geometry, Calculus; Trigonometry; Exponentials and Logarithms. Sequences and series; Numerical methods; Statistics and Mechanics.

SUMMARY OF CONTENT

Core content

- Mathematical argument, language and proof
- Mathematical problem solving
- Mathematical modelling
- Proof
- Algebra and functions
- Coordinate geometry in the (x,y) plane
- Sequences and series
- Trigonometry
- Exponentials and logarithms

- Differentiation
- Integration
- Numerical methods
- Vectors
- Statistical sampling
- Data presentation and interpretation
- Probability
- Statistical distributions
- Statistical hypothesis testing
- Quantities and units in mechanics
- Kinematics
- Forces and Newton's laws
- Moments

ASSESSMENT STRUCTURE

Paper 1

What's assessed

Any content from:

A: Proof

B: Algebra and functions

C: Coordinate geometry

D: Sequences and series

E: Trigonometry

F: Exponentials and logarithms

G: Differentiation

H: Integration

I: Numerical methods

Paper 1

How it's assessed

Written exam: 2 hours

100 marks

33⅓ % of A-level

Questions

A mix of question styles, from short, single-mark questions to multi-step problems.

Paper 2

What's assessed

Any content from Paper 1 and content from:

J: Vectors

P: Quantities and units in mechanics

Q: Kinematics

R: Forces and Newton's laws

S: Moments

How it's assessed

Written exam: 2 hours

100 marks

33⅓ % of A-level

Questions

A mix of question styles, from short, single-mark questions to multi-step problems.

Paper 3

What's assessed

Any content from Paper 1 and content from:

K: Statistical sampling

L: Data presentation and Interpretation

M: Probability

N: Statistical distributions

O: Statistical hypothesis testing

How it's assessed

Written exam: 2 hours

100 marks

33⅓ % of A-level

Questions

A mix of question styles, from short, single-mark questions to multi-step problems.