Pearson
Edexcel

Level 2
Extended
Mathematics
Certificate

Course Guide

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Why choose the Pearson Edexcel Level 2 Extended Maths Certificate?

We want to make sure that every learner has the chance to achieve their full potential. Our Level 2 Extended Maths Certificate provides stretch and challenge that allows learners to dive deeper into maths.
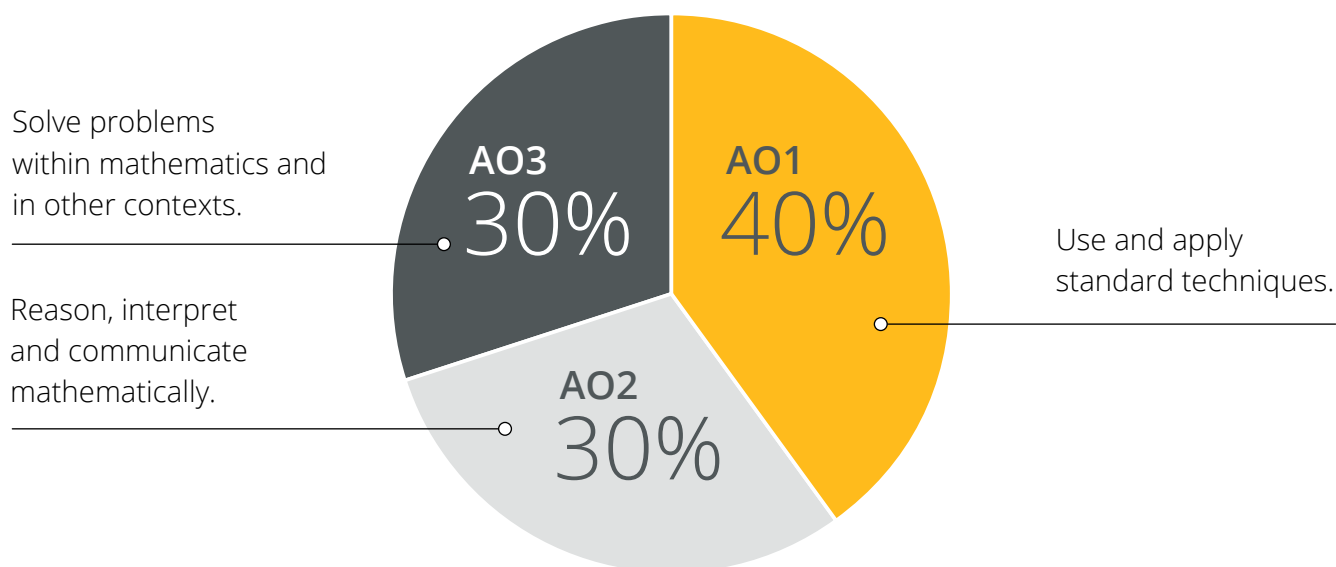
Expand on student's mathematical knowledge to help them achieve their potential at KS4 and prepare for further study in many subjects.

This qualification extends the GCSE mathematics higher tier course, offering an excellent transition to A level mathematics or to simply foster a deeper understanding of the GCSE maths content.
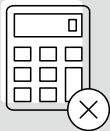
Based on teacher feedback, this course contains key topics and concepts that allows students to extend their knowledge and skills as part of their maths learning journey.

Ongoing free support and resources provided via our Qualifications website, the Maths Emporium and the PD Academy. A paid-for textbook is also available as well as digital support.

Qualification at a glance

Solve problems within mathematics and in other contexts.

Reason, interpret and communicate mathematically.

AO3
30%

AO1
40%

AO2
30%

Use and apply standard techniques.

Our Level 2 Extended Maths Certificate consists of two externally examined papers. Students must complete both assessments in the summer series of any single year.

Assessment Structure			Range of Content	Grading Structure
Paper 1	Non-Calculator	Each assessment is: **75 mins** **(60 marks)**	Both papers focus on the same content and Assessment Objectives Students will be assessed on content in algebra, geometry, probability, number and ratio.	The grade structure for the Level 2 Extended Maths Certificate allows for clear differentiation in the outcomes at GCSE. Students will be awarded either a Pass, Merit, Distinction or Distinction*.
Paper 2	Calculator			

Who is the Level 2 Extended Maths Certificate designed for and what content is covered?

The Level 2 Extended Maths Certificate is aimed at students targeted to achieve a grade 7 or above in GCSE Mathematics.

The content provides students the opportunity to challenge themselves at Key Stage 4 and builds the perfect foundation for further study, easing the transition to many KS5 qualifications.

The content is an extension of the GCSE mathematics higher tier course. The specification covers topics within Number, Algebra, Ratio and Proportion, Geometry and Probability.

|	Content
Number	1. Integer, negative and fractional indices 2. Surds
Algebra	1. Simplify and manipulate algebraic expressions including expanding, factorising, completing the square and algebraic fractions 2. Algebraic proof 3. Functions including domain and range, inverse functions and composite functions 4. Graphs of linear, quadratic, cubic, quartic, exponential, reciprocal and trigonometric functions 5. Transformations of graphs/functions 6. Estimate gradients of graphs and areas under graphs, including quadratic and other non-linear graphs 7. Equation of a circle 8. Solve linear and quadratic equations including trigonometric equations 9. Solve simultaneous equations 10. Solve linear and quadratic inequalities
Ratio, proportion and rates of change	1. Interpret gradient and rates of change
Geometry	1. Apply and prove standard circle theorems 2. 2D and 3D Pythagoras' theorem 3. 2D and 3D trigonometry 4. Vectors 5. Geometric proof
Probability	1. Enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams and tree diagrams 2. Probability of independent and dependent events 3. Conditional probability

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How to deliver the Level 2 Extended Maths Certificate

The delivery of the course content can vary depending on your demands and capacity. It can be delivered alongside the delivery of GCSE mathematics, with many resources supporting this approach.

Whether you choose to deliver the content within your current GCSE maths lessons, at lunchtime or after-school sessions; the recommended learning time for a Level 2 qualification is 121 hours. The specification indicates 60 Guided Learning Hours.

The structure of the course has been designed with an emphasis on independent study, and many of our resources have embedded support to guide students through their learning and practice.

We have produced grade descriptors which can be used as a teaching and learning tool for both teachers and students, to help understand what the examiners will be looking for under the grading structure.
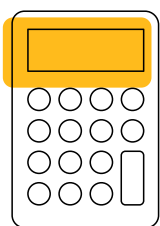
Example questions

3   Triangles *ABC* and *PQR* are similar.

Triangle *ABC* is an isosceles triangle where

one of the angles is 40°
one of the angles is obtuse
two of the sides are each 10 cm.

Length *PQ* = 1.5 × length *AB*

Work out the area of triangle *PQR*.
Give your answer correct to 3 significant figures.

Total for Question 3 is 4 marks

9 $\overrightarrow{OA} = 2\mathbf{a}$ $\overrightarrow{OB} = 3\mathbf{b}$

C is a point such that $\overrightarrow{AC} = \dfrac{5}{3}\overrightarrow{AB}$

D is a point such that $\overrightarrow{AD} = x\mathbf{a} + y\mathbf{b}$ and $\overrightarrow{CD} = \dfrac{-2}{3}x\mathbf{a} + \dfrac{13}{33}y\mathbf{b}$

Find the ratio *OB* : *BD*
Give your ratio in its simplest form.

Total for Question 9 is 8 marks
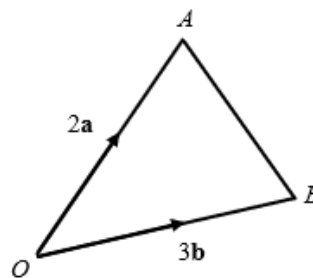
Find out more and register your interest:

quals.pearson.com/extendedmaths

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