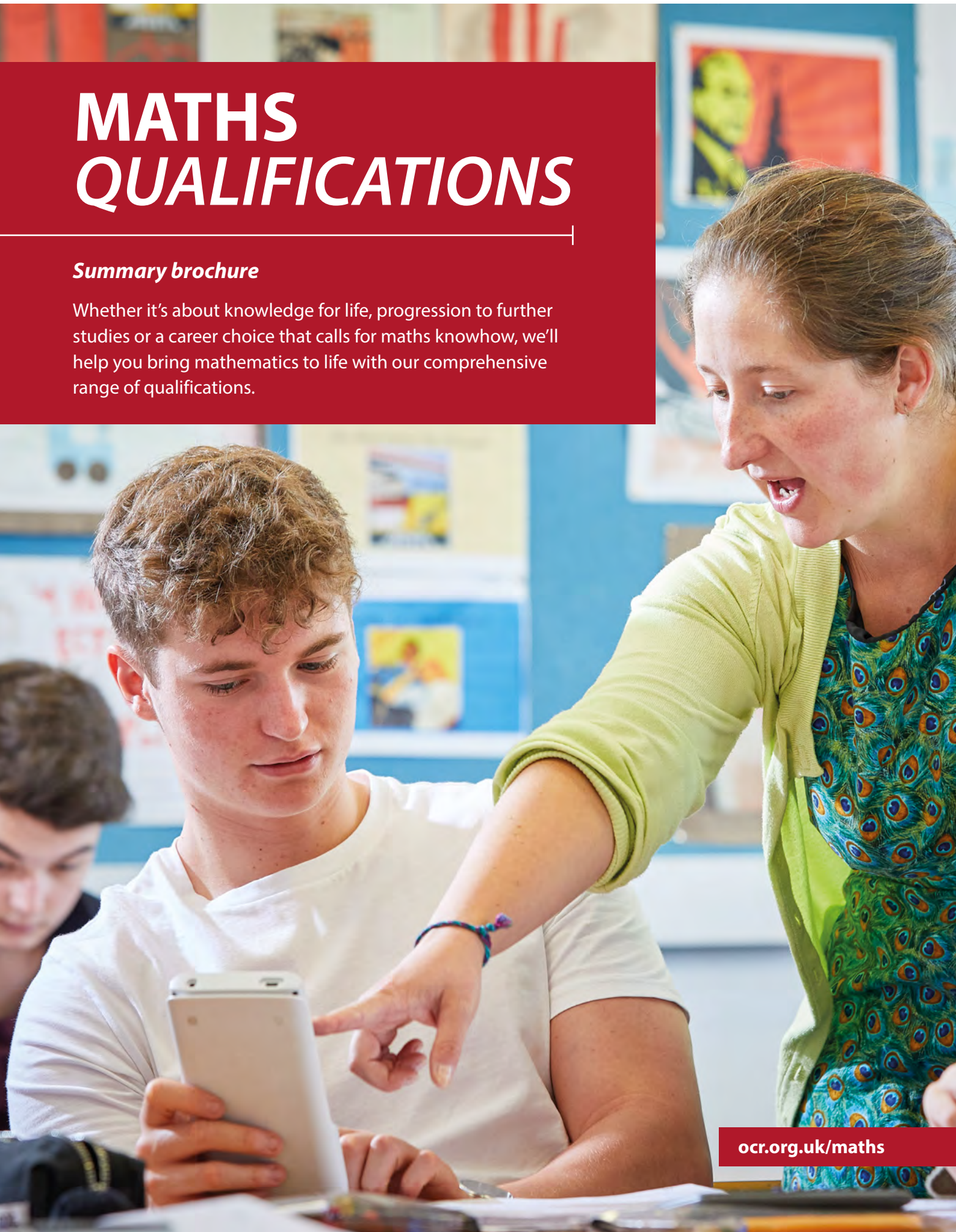
OCR
Oxford Cambridge and RSA

MATHS *QUALIFICATIONS*

Summary brochure

Whether it's about knowledge for life, progression to further studies or a career choice that calls for maths knowhow, we'll help you bring mathematics to life with our comprehensive range of qualifications.



ocr.org.uk/maths

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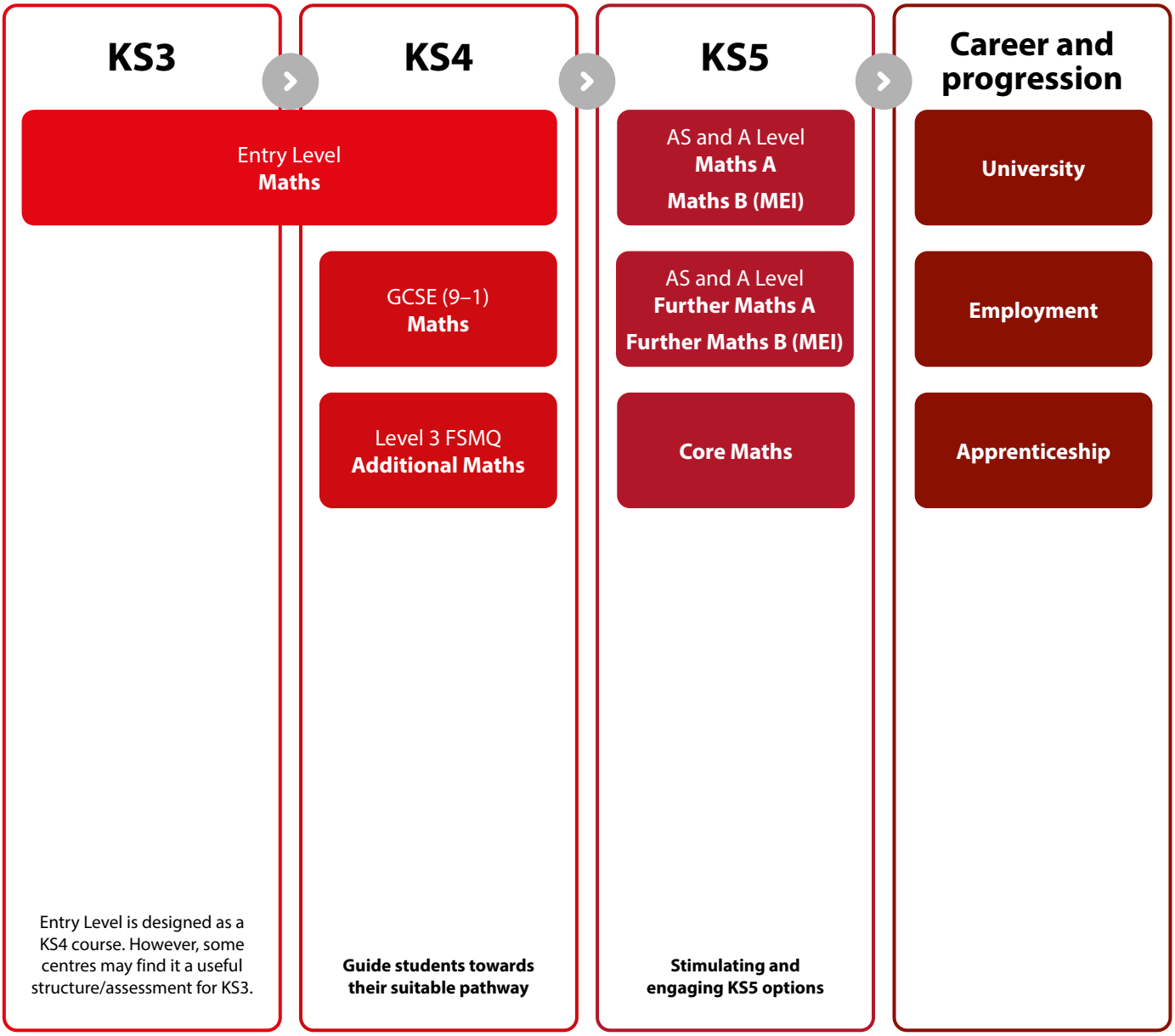
A full suite of qualifications for age 14 and above

Created for a modern world, our comprehensive suite of mathematics qualifications are designed to be engaging, relevant and inspiring. They're also backed up by practical, easy-to-use resources and professional development to support you in delivering them. Whatever your students' journey, we have OCR qualifications from Entry Level to A Level. Our Maths team are passionate about maths and education and are ready to support your delivery of our qualifications. You can reach them through our customer support centre on **01223 553998**, by email at **maths@ocr.org.uk** or on Twitter at **@OCR_Maths**

You can also find teacher support at **ocr.org.uk/maths**

Sign up for updates at **ocr.org.uk/updates**

PATHWAYS FOR MATHS



ENTRY LEVEL MATHS

KEY INFORMATION

SPECIFICATION CODE:

R449

IDEAL FOR:

A variety of students, including those who may find it difficult to access GCSE (9–1) qualifications, students on taster courses, students with learning difficulties and adult returners

PROGRESS TO:

GCSE (9–1) Maths and employment

FINAL AWARD:

Entry Level 3 (highest), Entry Level 2 or Entry Level 1

THE QUALIFICATION

We've created a qualification that's accessible, flexible and straightforward to administer, ensuring a positive experience that focuses on what your students can achieve.

There are many different ways you can choose to teach this qualification, and you can tailor this to your students. Students explore the same areas of study as those studying GCSE (9–1) Maths, enabling co-teachability.

Our qualification enables students to:

- Develop fluent knowledge, skills and understanding of fundamental mathematical methods and concepts
- Acquire, select and apply mathematical techniques to solve problems
- Reason mathematically, make deductions and inferences and draw conclusions
- Comprehend, interpret and communicate mathematical information in a variety of forms appropriate to the information and context.

ASSESSMENT

Our Entry Level Maths is 100% internally assessed and externally moderated. The assessment comprises two written tests (preliminary and final) and one practical task that can be taken at any point during the course. The preliminary written test is designed to be taken part way through the course, at a time appropriate for your students and convenient for your centre. The practical task is designed to allow students to undertake a project appropriate to their interests or aspirations, with marks awarded for the maths that has to be undertaken for a successful outcome of the project.

When making entries for OCR's Entry Level Maths, you do not have to determine and decide if candidates should be entered for the qualification at Entry Level 3, 2, or 1. All candidates take a common assessment and then are awarded Entry Level 3, 2, or 1, based on their performance.

Interim Bronze, Silver and Gold awards can be used to split the course into manageable stages and motivate students throughout the programme. The certificate is designed to be taken over a year, but is flexible enough to be taken over shorter or longer periods.

FIND OUT MORE:

ocr.org.uk/elmaths
ocr.org.uk/elmathscpd

GCSE (9–1) MATHS

KEY INFORMATION

SPECIFICATION CODE:

J560

IDEAL FOR:

Students who want to go on to A Levels or vocational qualifications, higher education or any career for which an understanding of maths is desirable

PROGRESS TO:

A variety of qualifications across subjects, as well as to employment

FINAL AWARD:

9 (highest) to 1 (lowest)

PERFORMANCE POINTS:

Yes

THE QUALIFICATION

Our GCSE (9–1) Maths encourages students to develop confidence and a positive attitude towards maths. Developed in consultation with teachers, employers and higher education, our qualification supports students in developing their own mathematical independence through a sound base of conceptual learning and understanding. We'll support you throughout your teaching, assisting you in enabling students to build their knowledge and recognise the importance of maths in daily life and beyond.

We've developed an inspiring, motivating and coherent maths specification for the entire ability range. It emphasises and encourages:

- Sound understanding of concepts
- Fluency in procedural skill
- Competency to apply mathematical skills in a range of contexts
- Confidence in mathematical problem solving.

ASSESSMENT

This specification brings you the benefits of a simple assessment model, with 3 × 90-minute papers for each tier, of equal length with identical mark allocations and identical weightings of assessment objectives and subject content.

There are 100 marks per paper, which gives us greater scope for awarding more method marks within questions. This means students can be better rewarded for each correct step on the way towards an answer.

Foundation Tier

Paper 1	Paper 2	Paper 3
1.5 hours Calculator Grades 1–5 100 marks	1.5 hours Non-calculator Grades 1–5 100 marks	1.5 hours Calculator Grades 1–5 100 marks

Higher Tier

Paper 4	Paper 5	Paper 6
1.5 hours Calculator Grades 4–9 100 marks	1.5 hours Non-calculator Grades 4–9 100 marks	1.5 hours Calculator Grades 4–9 100 marks

FIND OUT MORE:

ocr.org.uk/gcsemaths
ocr.org.uk/gcsemathscpd

LEVEL 3 FSMQ: ADDITIONAL MATHEMATICS

KEY INFORMATION

SPECIFICATION CODE:

6993

IDEAL FOR:

High achieving GCSE (9–1) Maths students

PROGRESS TO:

A variety of qualifications across subjects, as well as into employment

FINAL AWARD:

A (highest) to E (lowest)

PERFORMANCE POINTS:

No (unless an EBacc maths qualification has not been undertaken)

THE QUALIFICATION

The course is primarily designed to be co-taught with GCSE (9–1) Maths Higher tier as an enrichment programme. Many students taking this qualification intend to go on to study AS and/or A Level Maths and for these students this qualification provides an introduction to the subject at that level, with the possibility of subsequent, accelerated progress into AS and A Level Further Maths. For other students this qualification provides both a worthwhile and enriching course in its own right and also support for maths content in other subjects. This qualification would also be appropriate for mature students returning to study wanting to refresh and enhance their mathematical skills.

It consists of seven topic sections, covering:

- Algebra
- Enumeration
- Coordinate Geometry
- Pythagoras' Theorem and Trigonometry
- Calculus
- Numerical Methods
- Exponentials and Logarithms.

ASSESSMENT

This specification has a single 2 hour exam paper, with 100 marks.

Level 3 Free Standing Mathematics Qualifications (FSMQ) attracts up to 10 UCAS points in the new tariff.

FIND OUT MORE:

ocr.org.uk/fsmq
ocr.org.uk/fsmqcpd

AS AND A LEVEL MATHS A

KEY INFORMATION

SPECIFICATION CODES:

AS Level Maths A – H230
A Level Maths A – H240

IDEAL FOR:

Students who wish to study beyond GCSE (9–1) Maths

PROGRESS TO:

University, employment, L4 higher apprenticeships

FINAL AWARD:

AS Level Maths A: A (highest) to E (lowest)
A Level Maths A: A* (highest) to E (lowest)

PERFORMANCE POINTS:

Yes

THE QUALIFICATION

These specifications are based on our experience of what works well in the classroom, providing clear subject progression and teacher support. They've been developed to provide students with a coherent course of study to develop mathematical understanding. Students are encouraged to think, act and communicate mathematically, providing them with the skills to analyse situations in maths and elsewhere. There's increased focus on problem solving, mathematical argument, reasoning and modelling.

Our specification makes it clear where to pitch the subject content. It's arranged in columns to show the content for the AS/stage 1 alongside the content for the A Level only stage 2, giving you the flexibility for co-teaching AS and A Level, or teaching a two year A Level course.

ASSESSMENT

Our assessment places Statistics and Mechanics on separate papers to support teaching and learning throughout the course and to allow a progressive programme of revision leading up to the examinations.

Assessment for AS and A Level Maths is 100% by examination. Assessment for both qualifications is linear, which means that all the exams are taken at the end of the course.

AS Level Maths A

H230/01	Pure and Statistics	1.5 hours	Section A: 50 marks Pure Section B: 25 marks Statistics
H230/02	Pure and Mechanics	1.5 hours	Section A: 50 marks Pure Section B: 25 marks Mechanics

A Level Maths A

H240/01	Pure	2 hours	100 marks
H240/02	Pure and Statistics	2 hours	Section A: 50 marks Pure Section B: 50 marks Statistics
H240/03	Pure and Mechanics	2 hours	Section A: 50 marks Pure Section B: 50 marks Mechanics

FIND OUT MORE:

ocr.org.uk/alevelmathematics
ocr.org.uk/alevelmathscpd

AS AND A LEVEL MATHS B (MEI)

KEY INFORMATION

SPECIFICATION CODES:

AS Level Maths B (MEI) – H630
A Level Maths B (MEI) – H640

IDEAL FOR:

Students who wish to study beyond GCSE (9–1) Maths

PROGRESS TO:

University, employment, L4 higher apprenticeships

FINAL AWARD:

AS Level Maths B (MEI): A (highest) to E (lowest)
A Level Maths B (MEI): A* (highest) to E (lowest)

PERFORMANCE POINTS:

Yes

THE QUALIFICATION

Our Maths B (MEI) specifications have been developed by Mathematics in Education and Industry (MEI) and are delivered and administered by us. They provide your students with an opportunity to develop their mathematical understanding and skills.

Both specifications:

- Encourage students to develop a deep understanding of maths and an ability to apply it in a variety of contexts
- Encourage students to use appropriate technology to deepen their mathematical understanding and extend the range of problems they can solve
- Use pre-release data in statistics to enable students to develop an understanding of working with real data to solve real problems.

The content is separated into three strands: Pure Maths, Mechanics and Statistics. However, students are expected to explore the connections between Pure Maths and each of the applied strands.

ASSESSMENT

Assessment for AS and A Level Maths is 100% by examination. Assessment for both qualifications is linear, which means that all the exams are taken at the end of the course.

AS Level Maths B (MEI)

H630/01	Pure and Mechanics	1.5 hours	70 marks Section A: short answer questions Section B: longer questions
H630/02	Pure and Statistics	1.5 hours	70 marks Section A: short answer questions Section B: longer questions

A Level Maths B (MEI)

H640/01	Pure and Mechanics	2 hours	100 marks Section A: short answer questions Section B: longer questions
H640/02	Pure and Statistics	2 hours	100 marks Section A: short answer questions Section B: longer questions
H640/03	Pure and Comprehension	2 hours	75 marks – Includes mathematical comprehension in the assessment, enabling students to use maths in a variety of contexts in higher education and future employment.

FIND OUT MORE:

ocr.org.uk/alevelmathsmei
ocr.org.uk/alevelmathscpd

AS AND A LEVEL FURTHER MATHS A

KEY INFORMATION

SPECIFICATION CODES:

AS Level Further Maths A – H235
A Level Further Maths A – H245

IDEAL FOR:

Students who wish to study beyond A Level Maths

PROGRESS TO:

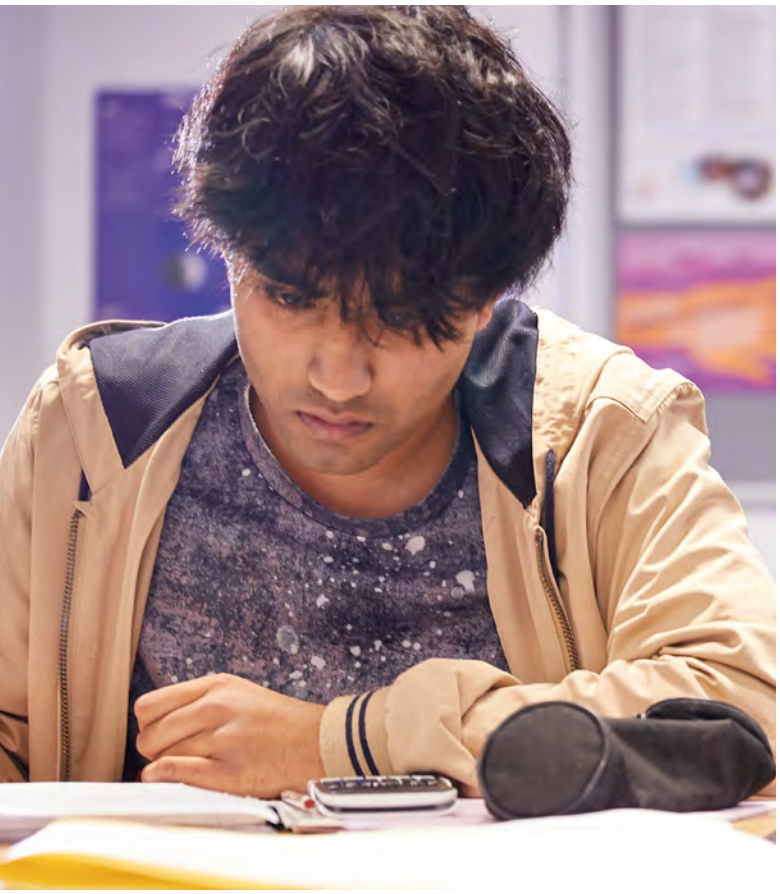
University, employment, L4 higher apprenticeships

FINAL AWARD:

AS Level Further Maths A: A (highest) to E (lowest)
A Level Further Maths A: A* (highest) to E (lowest)

PERFORMANCE POINTS:

Yes



THE QUALIFICATIONS

Our Further Maths A specifications provide students with an opportunity to develop mathematical understanding, encouraging them to think, act and communicate mathematically. They provide a solid foundation for further study in maths and other disciplines that make extensive use of mathematical skills.

The content is separated into five areas. All students must study Pure Core, then at least two of the four optional areas (Statistics, Mechanics, Discrete Maths and Additional Pure Maths).

Our Further Maths specifications are designed to support co-teaching with Maths. The A Level specification is arranged in columns to show the content for the AS/stage 1 alongside the content for the A Level only stage 2, giving you the flexibility to develop a programme of study to meet the needs of your students.

AS/Stage 1 Option 1	**AS/Stage 1** Pure	**AS/Stage1** Option 2
Stage 2 Option 1	**Stage 2** Pure	**Stage 2** Option 2

ASSESSMENT

At both AS Level Further Maths and A Level Further Maths, there's a compulsory core of Pure Maths (33.3% at AS Level and 50% at A Level), with the rest of the course made up of the optional areas. This means that you can choose topics that meet the needs and interests of your students.

AS Level Further Maths A

Students must take the mandatory Pure Core paper and two of the optional papers.

A Level Further Maths A

Students must take the two mandatory Pure Core papers and two of the optional papers.

Assessment for AS and A Level Further Maths is 100% by examination. Assessment for both qualifications is linear, which means that all the exams are taken at the end of the course.

Students may opt to study more than the minimum number of optional papers in the final assessment; the combination of optional papers that results in the best grade will be used.

FIND OUT MORE:

ocr.org.uk/alevelfurthermaths
ocr.org.uk/alevelmathscpd

AS AND A LEVEL FURTHER MATHS B (MEI)

KEY INFORMATION

SPECIFICATION CODES:

AS Level Further Maths B (MEI) – H635
A Level Further Maths B (MEI) – H645

IDEAL FOR:

Students who wish to study beyond A Level Maths

PROGRESS TO:

University, employment, L4 higher apprenticeships

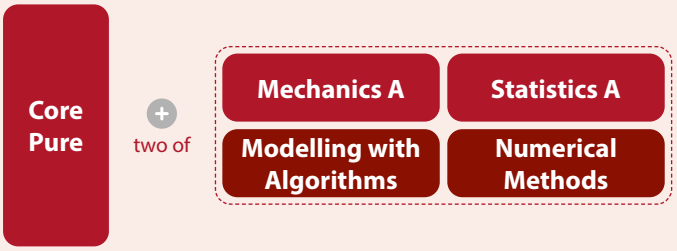
FINAL AWARD:

AS Level Further Maths B (MEI): A (highest) to E (lowest)
A Level Further Maths B (MEI): A* (highest) to E (lowest)

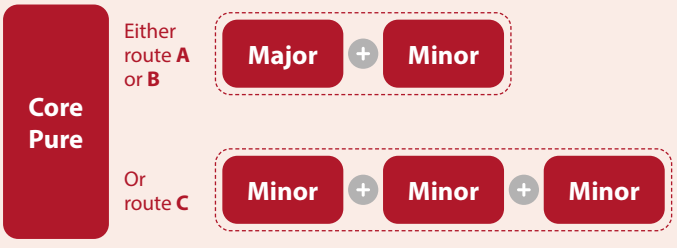
PERFORMANCE POINTS:

Yes

AS LEVEL



A LEVEL



THE QUALIFICATIONS

OCR Further Maths B (MEI) specifications have been developed by Mathematics in Education and Industry (MEI) and are delivered and administered by us.

Our AS and A Level Further Maths B (MEI) specifications develop students' mathematical understanding and skills, encouraging them to think, act and communicate mathematically.

ASSESSMENT

AS Level Further Maths B (MEI)

Students must take the mandatory Core Pure paper and then any two from the four optional papers (Mechanics A, Statistics A, Modelling with Algorithms and Numerical Methods).

Students can take more than two optional papers, to increase the breadth of their course.

A Level Further Maths B (MEI)

Students must take the mandatory Core Pure paper plus one of three routes through the qualification:

- Route A (Mechanics Major + one minor [not Mechanics])
- Route B (Statistics Major + one minor [not Statistics])
- Route C (three minors, no major)

Major options

- Mechanics Major
- Statistics Major

Minor options

- Mechanics Minor
- Statistics Minor
- Modelling with Algorithms
- Numerical Methods
- Extra Pure
- Further Pure with Technology

One third of the A Level Core Pure can be co-taught with the AS Core Pure content.

One half of the A Level major options can be co-taught with the equivalent AS option 'A' content.

The A Level minor options can be co-taught with the equivalent AS option. A Level only minor options of Extra Pure and Further Pure With Technology are also available.

Students may take more than the minimum minor optional papers, to increase the breadth of their course; the combination of optional papers that results in the best grade will be used.

FIND OUT MORE:

ocr.org.uk/alevelfurthermathsmei
ocr.org.uk/alevelmathscpd

CORE MATHS

KEY INFORMATION

SPECIFICATION CODES:

Level 3 Certificate in Core Maths A (MEI) – H868
Level 3 Certificate in Core Maths B (MEI) – H869

IDEAL FOR:

Post-16 students who have achieved grade 4 or above in GCSE (9–1) Maths, but who aren't intending to study AS or A Level Maths

PROGRESS TO:

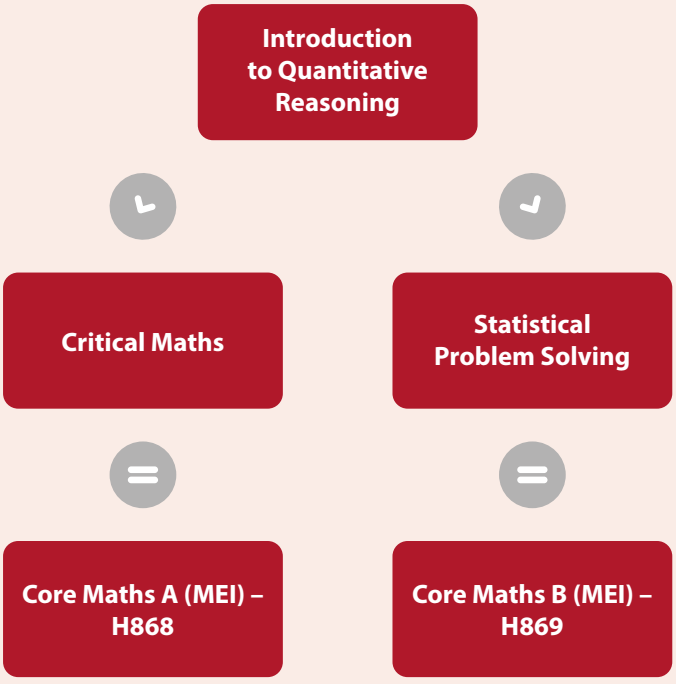
University, employment and L4 higher apprenticeships

FINAL AWARD:

A (highest) to E (lowest)

PERFORMANCE POINTS:

Yes



THE QUALIFICATIONS

Our Core Maths qualifications are designed to give students essential Level 3 problem-solving and quantitative skills.

Both qualifications were developed with MEI (**mei.org.uk**). They provide a solid foundation in using maths in everyday contexts, while also supporting students' studies in other Level 3 subjects, their future studies and employment. Building on GCSE skills, students are introduced to mathematical modelling, financial maths and the use of spreadsheets.

Core Maths A focuses on critical mathematical thinking and solving real-life problems. Core Maths B has an emphasis on statistical skills, as required in biology, environmental science, geography, sociology and psychology.

ASSESSMENT

Core Maths qualifications are the same size as an AS Level and can be delivered over one or two years.

Both specifications have two 2-hour exam papers, each worth 50% of the total.

The first exam paper is common to both qualifications.

Core Maths A is made up of Introduction to Quantitative Reasoning and Critical Maths.

Core Maths B is made up of Introduction to Quantitative Reasoning and Statistical Problem Solving.

Core Maths qualifications attract up to 20 UCAS points in the new tariff.

FIND OUT MORE:

ocr.org.uk/coremaths
ocr.org.uk/coremathscpd

SUPPORTING YOU IN QUALIFICATION DELIVERY

SUPPORT AND RESOURCES

EXPERT SUBJECT ADVICE

Our subject advisors provide information and support to teachers, including specification and non-exam assessment advice, updates on resource developments and a range of training opportunities. You can reach them through our customer support centre on **01223 553998**, by email at **maths@ocr.org.uk** or on Twitter **@ocr_maths**
You can also find teacher support at **ocr.org.uk/maths**

TEACHING AND LEARNING RESOURCES

Free resources available for qualifications can include the following. To see examples of our resources, please go to **ocr.org.uk/maths** and visit your qualification's webpage. For the full range of our assessment resources, please sign up for a Teach Cambridge account.

- **Teach Cambridge**
  Teach Cambridge is our new personalised and secure website that provides teachers with a single point of access to all the support and resources you need to teach our qualifications.
- **Check in and section check in tests**
  Short, focussed topic assessments with questions on a range of assessment objectives. Great for classroom tests and homeworks.
- **Teaching activities**
  Activities to support and inspire your maths lessons.
- **Skills guides**
  A range of generic skills guides providing knowledge and tips covering topics such as communication, research skills and exam techniques.
- **Teacher and delivery guides**
  A range of lesson ideas with associated activities that you can use with students to deliver the content of the qualification.
- **Transition guides**
- **Schemes of work**
  A selection of curriculum planners to suit a variety of delivery options.

PARTNER RESOURCES AND TEXTBOOKS

Our maths qualifications are supported by endorsed textbooks and resources published by leading publishers. You can find more details about our publisher partners and the resources they provide at **ocr.org.uk/publishing-partners**

BLOGS

Read our maths blogs at **ocr.org.uk/blog** and gain interesting insights from our subject advisors and other leading figures from the world of maths education.

KEEP UP TO DATE

Sign up today at **ocr.org.uk/updates** for for monthly OCR maths updates including subject news, upcoming events and useful resources.

ASSESSMENT

Free resources available for qualifications can include the following. To see examples of our resources, please go to **ocr.org.uk/maths** and visit your qualification's webpage. For the full range of our assessment resources, please sign up for a Teach Cambridge account.

SAMPLE ASSESSMENT MATERIALS

Sample question papers and sample candidate work.

PAST PAPERS

Previous examination papers for each subject that you and your students can use as mock assessments. Mark schemes and examiners reports are also available.

PRACTICE PAPERS

Use these for mock exams and help students get a clearer picture of the qualification requirements. We put all our practice papers through exactly the same long and detailed processes as the live papers to ensure that they match the style and rigour of the live assessments.

ALTERNATIVE PAPERS

Amended versions of past papers (the words and language are the same, but the values in questions have been changed so that students need to make new calculations). As well as giving students more opportunity to practice, using both the original and the alternative papers with students at different times can also help you monitor their progress.

CANDIDATE EXEMPLARS

A selection of candidate responses from live series, with associated examiner commentary.

ACTIVE RESULTS

Active Results, our **free** online results analysis service, helps you review the GCSE and A Level Maths performance of individual students or your whole school. Active Results provides access to detailed results data, enabling more comprehensive analysis of results to give you a more accurate measure of the achievements of your students and centre.
Find out more at **ocr.org.uk/activeresults**

EXAMBUILDER

A **free** online mock assessment service for GCSE and A Level Maths. Using a bank of past paper questions, you can custom build your own whole question papers or short tests. These can be given to students to practise real examinations, giving them even more opportunity to prepare and build up confidence.
Find out more at **ocr.org.uk/exambuilder**

TRAINING AND PROFESSIONAL DEVELOPMENT

PROFESSIONAL DEVELOPMENT TRAINING AND EVENTS

All our qualifications are supported with comprehensive training. Check out **ocr.org.uk/mathscpd** to find out what's available for face-to-face or online training courses.

TEACHER NETWORKS

Our **free** teacher network meetings are designed to encourage and develop local networking and support for maths in your area. They're an opportunity to speak with like-minded colleagues and one of our subject advisors.
Visit **teach.ocr.org.uk/teacher-network-events** to find a meeting near you.

For all the latest information and updates on new support, sign up for monthly OCR maths updates **ocr.org.uk/updates**

JOIN OUR *TEACHER PANEL*

SHARE VALUABLE FEEDBACK ON EVERYTHING FROM CREATIVE CONCEPTS TO TEACHING AND SUPPORT RESOURCES.

ocr.org.uk/join

NEXT STEPS

STEP 1

ALREADY AN OCR CENTRE?

GREAT, YOU'RE ALL SET.

IF NOT, CALL OUR CUSTOMER DEVELOPMENT TEAM ON 02476 856072

STEP 2

ASK YOUR **EXAMS OFFICER** FOR **ACCESS** TO **TEACH CAMBRIDGE**

teachcambridge.org

STEP 3

DOWNLOAD
THE **SPECIFICATION**
AND **CHECK OUT OUR**
RANGE OF **RESOURCES**

STEP 4

KEEP UP-TO-DATE
BY SIGNING UP FOR
EMAIL UPDATES

STEP 5

BOOK ONTO **PROFESSIONAL DEVELOPMENT EVENTS**
AND **TEACHER NETWORKS**

ocr.org.uk

For more information visit
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Alternatively, you can email us on
maths@ocr.org.uk

Visit our online support centre at
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