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 for 14–19 year olds with our comprehensive range of qualifications.

ocr.org.uk/maths
A full suite of qualifications for 14–19 year olds

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 CPD 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
Entry Level is designed as a KS4 course. However, some centres may find it a useful intervention programme for KS3.

Guide students towards suitable pathway

Stimulating and engaging KS5 options

Entry Level Maths

GCSE (9–1) Maths

Level 3 (FSMQ) Additional Maths

AS and A Level Maths A
Maths B (MEI)

AS and A Level Further Maths A
Further Maths B (MEI)

Core Maths

Functional Skills – Maths

University

Employment

Apprenticeship
ENTRY LEVEL MATHS

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/elmathscpdm

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, Functional Skills and employment

FINAL AWARD:
Entry Level 3 (highest), Entry Level 2 or Entry Level 1
GCSE (9–1) MATHS

THE QUALIFICATION
Developed in consultation with teachers, employers and higher education, our GCSE (9–1) Maths encourages students to develop confidence in, and a positive attitude towards, maths and recognise the importance of maths in daily life. It allows your students to develop mathematical independence built on a sound base of conceptual learning and understanding.

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 x 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

<table>
<thead>
<tr>
<th>Paper 1</th>
<th>Paper 2</th>
<th>Paper 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5 hours</td>
<td>1.5 hours</td>
<td>1.5 hours</td>
</tr>
<tr>
<td>Grades 1–5</td>
<td>Grades 1–5</td>
<td>Grades 1–5</td>
</tr>
<tr>
<td>100 marks</td>
<td>100 marks</td>
<td>100 marks</td>
</tr>
</tbody>
</table>

Higher Tier

<table>
<thead>
<tr>
<th>Paper 4</th>
<th>Paper 5</th>
<th>Paper 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5 hours</td>
<td>1.5 hours</td>
<td>1.5 hours</td>
</tr>
<tr>
<td>Grades 4–9</td>
<td>Grades 4–9</td>
<td>Grades 4–9</td>
</tr>
<tr>
<td>100 marks</td>
<td>100 marks</td>
<td>100 marks</td>
</tr>
</tbody>
</table>

FIND OUT MORE:
ocr.org.uk/gcsemaths
ocr.org.uk/gcsemathscpd

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
FUNCTIONAL SKILLS – MATHS
FROM ENTRY LEVEL TO LEVEL 2

KEY INFORMATION

SPECIFICATION CODES:

LEGACY
Entry Level – 09862, 09863, 09864
Level 1 – 09865
Level 2 – 09866

REFORMED (FROM SEPT 2019)
Entry Level – 08845, 08846, 08847
Level 1 – 08848
Level 2 – 08849

IDEAL FOR:
Young people and adults, whether they’re in education, training, work or preparing for work

THE QUALIFICATION

Functional Skills maths qualifications support the development of practical skills. They’re designed to help students gain the most out of work, education and everyday life.

Entry Level
Split into three levels, these qualifications recognise achievement at Entry Level. They aim to:
• Provide accreditation of the achievement of a range of maths skills in real life settings so that students can use maths in a functional way throughout life
• Provide a flexible assessment structure that can be adapted to meet the needs of individual students.

Level 1 and Level 2
These qualifications are suitable for students who wish to be recognised for their achievement of a wide range of mathematical skills for use in everyday life. They enable students to:
• Develop an understanding of functional skills in maths at Level 1 and 2
• Develop their skills and competences in maths
• Achieve a nationally recognised qualification
• Prepare for employment
• Progress to further study.

ASSESSMENT

Our Functional Skills assessments are based primarily on task-based scenarios with a limited duration and must be undertaken under controlled assessment conditions. There’s a strong focus on problem-solving, with a choice of paper assessment or on-screen, on-demand assessment.

Entry 1, 2 and 3
Assessment tasks are set by OCR. They can be used for assessment when candidates are ready in your centre, then are externally moderated by us.

Level 1 and Level 2
These qualifications each contain one mandatory unit. The assessments are by either a paper-based or an on-screen test that’s externally set by us and externally assessed by our examiners.

FIND OUT MORE:
ocr.org.uk/functionalskills
ocr.org.uk/fsmathscpd
LEVEL 3 (FSMQ) ADDITIONAL MATHEMATICS

KEY INFORMATION

SPECIFICATION CODE:
Level 3 (FSMQ) Additional Mathematics – 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 and Trigonometry
• Calculus
• Numerical Methods
• Exponentials and Logarithms.

ASSESSMENT

Level 3 (FSMQ) Additional Maths is a simple assessment model, which consists of one 2-hour examination, with no non-examination assessment.

FIND OUT MORE:
ocr.org.uk/fsmq
ocr.org.uk/fsmqcpd
THE QUALIFICATIONS

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Subject</th>
<th>Duration</th>
<th>Section A</th>
<th>Section B</th>
</tr>
</thead>
<tbody>
<tr>
<td>H230/01</td>
<td>Pure and Statistics</td>
<td>1.5 hours</td>
<td>50 marks</td>
<td>25 marks</td>
</tr>
<tr>
<td>H230/02</td>
<td>Pure and Mechanics</td>
<td>1.5 hours</td>
<td>50 marks</td>
<td>25 marks</td>
</tr>
</tbody>
</table>

A Level Maths A

<table>
<thead>
<tr>
<th>Code</th>
<th>Subject</th>
<th>Duration</th>
<th>Total Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>H240/01</td>
<td>Pure</td>
<td>2 hours</td>
<td>100 marks</td>
</tr>
<tr>
<td>H240/02</td>
<td>Pure and Statistics</td>
<td>2 hours</td>
<td>50 marks</td>
</tr>
<tr>
<td>H240/03</td>
<td>Pure and Mechanics</td>
<td>2 hours</td>
<td>50 marks</td>
</tr>
</tbody>
</table>

FIND OUT MORE:

ocr.org.uk/alevelmathematics
ocr.org.uk/alevelmathscpdp
AS AND A LEVEL MATHS B (MEI)

THE QUALIFICATIONS
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)

<table>
<thead>
<tr>
<th>Code</th>
<th>Exam Details</th>
<th>Duration</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>H630/01</td>
<td>Pure and Mechanics</td>
<td>1.5 hours</td>
<td>70 marks</td>
</tr>
<tr>
<td></td>
<td>Section A: short answer questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H630/02</td>
<td>Pure and Statistics</td>
<td>1.5 hours</td>
<td>70 marks</td>
</tr>
<tr>
<td></td>
<td>Section A: short answer questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Section B: longer questions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### A Level Maths B (MEI)

<table>
<thead>
<tr>
<th>Code</th>
<th>Exam Details</th>
<th>Duration</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>H640/01</td>
<td>Pure and Mechanics</td>
<td>2 hours</td>
<td>100 marks</td>
</tr>
<tr>
<td></td>
<td>Section A: short answer questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Section B: longer questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H640/02</td>
<td>Pure and Statistics</td>
<td>2 hours</td>
<td>100 marks</td>
</tr>
<tr>
<td></td>
<td>Section A: short answer questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Section B: longer questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H640/03</td>
<td>Pure and Comprehension</td>
<td>2 hours</td>
<td>75 marks</td>
</tr>
<tr>
<td></td>
<td>Includes mathematical comprehension in the assessment, enabling students to use maths in a variety of contexts in higher education and future employment.</td>
<td></td>
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</tbody>
</table>

FIND OUT MORE:
orc.org.uk/alevelmathsmei
orc.org.uk/alevelmathscpd
AS AND A LEVEL FURTHER MATHS A

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 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 Maths and Further Maths in parallel over two years or in series with Maths followed by Further Maths.

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/alevelmathscpdp
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

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 six optional papers (Mechanics A, Statistics A, Numerical Methods, Modelling With Algorithms, Mechanics B, and Statistics B).

They can opt for a depth of study by taking the two Mechanics or two Statistics options, or a broader course taking any other two from the six options. Students can also 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 other half of the A Level major options can be co-taught with the AS option ‘B’ 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.

FIND OUT MORE:
ocr.org.uk/alevelfurthermathsmei
ocr.org.uk/alevelmathscpd
CORE MATHS

THE QUALIFICATIONS
Core Maths qualifications are designed to be useful for students in their everyday lives; they can be considered a ‘mathematical literacy’ course.

We’ve jointly developed our two Core Maths qualifications with Mathematics in Education and Industry (MEI). We’ve designed them to support post-16 students with the mathematical and statistical needs of their further study of other subjects, as well as for employment and everyday life. Students are introduced to new content such as mathematical modelling, risk, statistics, financial maths and the use of spreadsheets.

Quantitative Reasoning (H866) is more appropriate for students following a less specialised study path, focusing on using and applying maths to address authentic problems drawn from study, work and life. Quantitative Problem Solving (H867) is more statistical and supports students taking A Levels in biology, social sciences (geography, psychology, economics) and business.

ASSESSMENT
Core Maths qualifications are designed to be the same size as an AS Level (at least 180 guided learning hours) and delivered over two years. This means students have continuous maths study up to the age of 18 and support for other A Level subjects that have a mathematical or statistical requirement. You can opt to deliver them over one year, but be aware that the examination dates fall early in the exam series (usually in week 1 and 2).

Both are assessed through two 2-hour papers, each worth 50% of the total Level 3 Certificate. Both papers are compulsory and each assesses one component of the qualification.

In Quantitative Reasoning (H866), these are Introduction to Quantitative Reasoning (01) and Critical Maths (02).

In Quantitative Problem Solving (H867), these are Introduction to Quantitative Reasoning (01) and Statistical Problem Solving (02).

A minimum of 25% of assessment for these qualifications will be synoptic.

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

FIND OUT MORE:
ocr.org.uk/coremaths
ocr.org.uk/coremathscpd

KEY INFORMATION

SPECIFICATION CODES:
Level 3 Certificate in Quantitative Reasoning (MEI) – H866
Level 3 Certificate in Quantitative Problem Solving (MEI) – H867

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

Introduction to Quantitative Reasoning
Critical Maths
Statistical Problem Solving
Quantitative Reasoning (H866)
Quantitative Problem Solving (H867)
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 or by email at maths@ocr.org.uk
You can also find teacher support at ocr.org.uk/maths

TEACHING AND LEARNING RESOURCES
Free resources available for qualifications can include the following. Please see the qualification webpages for the full range.

• 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

• Scheme of Work Builder
  Create and export your own schemes of work based on specification statements and our new teaching and learning resources.

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’re providing at ocr.org.uk/publishing-partners

MATHS COMMUNITY
If you want to interact with other teachers/lecturers, our online community is the place to go. Our virtual communities are grouped by subject area and offer an opportunity to ask for advice, swap resources and suggest ideas for teaching and lesson planning.

Join us on Twitter @OCR_Maths or sign up at social.ocr.org.uk

OCR 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.
ASSESSMENT

**Free** resources available for qualifications can include the following. Please see the qualification webpages for the full range.

**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.

**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](http://ocr.org.uk/activeresults)

**EXAMBUDDLEIR**
A **free** online mock assessment service for GCSE and A Level Maths. It enables you to custom build question papers based on a bank of past paper material to simulate a real examination and gives students the opportunity to practise and build up confidence. Find out more at [ocr.org.uk/exambuilder](http://ocr.org.uk/exambuilder)

**TRAINING AND PROFESSIONAL DEVELOPMENT**

**CPD TRAINING AND EVENTS**
Our qualifications are supported with comprehensive training. Check out [ocr.org.uk/mathscpd](http://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. Booking for our upcoming network is at [www.eventbrite.co.uk/o/ocr-7732496215](http://www.eventbrite.co.uk/o/ocr-7732496215)

Sign up for updates at [ocr.org.uk/updates](http://ocr.org.uk/updates)