**GCSE COMPUTING
2012**

OCR

GCSE COMPUTING IS NOW REVISED AND AVAILABLE

...G IS OUT OF PILOT
...E TO ALL CENTRES

Our specification has been developed involving teachers and key stakeholders in the Computing teaching community. We've done this so that our GCSE Computing specification, support materials and publisher resources provides you with everything you need to teach this qualification with confidence.

"We have spent two years running the OCR GCSE Computing course, and we're very happy with it."
Chris Wiggins, Head of ICT & Computing, Twyford C of E School

GCSE COMPUTING

You and your students can benefit from our Computing specification because:

- The course gives students a real, in-depth understanding of how computer technology works. Students will no doubt be familiar with the use of computers and other related technology from their other subjects and elsewhere. However, this course will give them an insight into what goes on 'behind the scenes', including computer programming, which many students find absorbing.

- The course provides excellent preparation for higher study and employment in the field of computer science. The increasing importance of information technologies means there will be a growing demand for professionals who are qualified in this area. Students who've taken a GCSE in Computing and who then progress to study the subject at A Level or university will have an advantage over their colleagues who are picking up the subject at these levels.

- The course will develop critical thinking, analysis and problem-solving skills through the study of computer programming, giving students a fun and interesting way to develop these skills, which can be transferred to other subjects and even applied in day-to-day life. In this respect, the course provides excellent preparation for students who want to study or work in areas that rely on these skills, especially where they are applied to technical problems. These areas include engineering, financial and resource management, science and medicine.

- A full support package has been designed to save you preparation time and to increase your confidence in teaching and marking the Computing specification. You can find out more about our support package on page 10.

"The world is changing and we are using computers a lot more now. I thought it would be a relevant topic to learn about to help me in future life. I like GCSE Computing because it's challenging. I most enjoyed the programming section of the course because it allowed us to write our own programs, such as calculators and conversion devices."
Kareem – Year 11 student

COURSE SUMMARY

Here's a summary of the course details and the Assessment Objectives for GCSE Computing:

Unit title and description	Assessment and duration	Weighting
Unit A451: Computer systems and programming		
This unit covers the body of knowledge about computer systems on which the examination will be based.	1 hour 30 minutes Written paper 80 marks	40%
Unit A452: Practical investigation		
An investigative computing task, chosen from a list provided by OCR, which assesses the following: research, technical understanding, analysis of problem, historical perspective, use of technical writing skills, recommendations/evaluation.	Controlled assessment Investigative task. OCR-set scenario with a choice of research tasks. 45 marks	30%
Unit A453: Programming project		

Students will need to:
• Understand standard programming techniques
• Be able to design a coded solution to a problem including the ability to:
  - Develop suitable algorithms
  - Design suitable input and output formats
  - Identify suitable variables and structures
  - Identify test procedures.
• Create a coded solution fully annotating the developed code to explain its function
• Test their solution:
  - To show functionality
  - To show how it matches the design criteria
  - Identifying successes and any limitations.
	Controlled assessment Programming task. Design, develop and test a solution to a problem within the OCR-set scenario. 45 marks	30%

Assessment Objectives		

Students are expected to demonstrate the following:
• **AO1** Recall, select and communicate their knowledge and understanding of computer technology
• **AO2** Apply knowledge, understanding and skills to solve problems by using computer programs
• **AO3** Analyse and evaluate, make reasoned judgements and present conclusions

CHANGES TO ASSESSMENT

From September 2012 all unitised GCSEs were replaced by linear assessment for candidates starting a two-year course.

The reforms are designed to:

- Ensure that GCSE examinations are taken at the end of the course by making all assessment linear

- Remove the potential for re-sitting individual units, meaning that examinations for Computing will only take place in the June series.

WHAT THIS MEANS

- Candidates who start a two-year course from September 2012 will take all of their GCSE units in June 2014 at the end of their course and in the same series that they will certificate for their qualification.

- These changes do not affect any candidates on a two-year course that started in September 2011, or candidates who started a one-year course in September 2012, who will still be able to enter in a unitised way.

- They will have an impact on Year 9 candidates who started a three-year programme in September 2011. These candidates will now be required to take all of their assessment in June 2014.

RE-TAKES/RE-SITS

The introduction of linear GCSEs also prevents the mid-course re-sitting of units.

- Candidates who started a two-year course in September 2011 and are certificating in June 2013 will have the opportunity to re-sit a whole qualification, taking all their external assessments in the same sitting: in the June 2014 series where linear assessment rules apply. They will, however, be able to carry forward their most recent results used for certification from controlled assessment unit(s).

- Candidates who started a two-year course in September 2012 and who are certificating in June 2014 will have the opportunity to re-sit a whole qualification in the June 2015 series where linear assessment rules apply.

For more information about the changes to GCSEs from 2012, visit ocr.org.uk/gcse2012

SUPPORT

WORKING IN PARTNERSHIP TO SUPPORT YOU

Our aim is to help you at every stage and we work in close consultation with teachers and other experts to provide a practical package of high-quality resources and support.

We provide support to teach our specifications with confidence and ensure that your students get as much as possible from our qualifications.

Our support materials are designed to save you time while you prepare for and teach our specifications. In response to what you have told us, we offer detailed guidance on key topics, controlled assessment and curriculum planning.

Visit **ocr.org.uk/computing/gcse** to access all of our support.

Our essential FREE support includes the following.

Materials and resources

• Specimen assessment materials and mark schemes

• Guide to controlled assessment

• Sample controlled assessment material

• Exemplar candidate work

• Teacher's handbook

• Sample schemes of work and lesson plans

• Parent and learner guide

• Past papers

• iBytes – support updates.

ENDORSED PUBLISHER PARTNER MATERIALS

As part of our comprehensive support, we're now able to offer you up to 20% off Hodder Education Computing resources, exclusive to OCR.

To get this offer and for more information visit **ocr.org.uk/cshodder**

Terms and Conditions – 20% off is on OCR Computing for GCSE Students book (9781444177794). 10% off on OCR Computing for GCSE Dynamic Learning. Both offers are available until 31 December 2013. OCR and Hodder Education reserve the right to withdraw this offer without notice. For full terms & conditions visit **ocr.org.uk/cshodder**

OCR PROFESSIONAL DEVELOPMENT PROGRAMME

Here at OCR we are constantly looking for ways in which we can improve the support we offer to teachers. Most recently we have been considering the increasing challenges that schools face in releasing teachers for INSET, and how OCR can make its professional development programme more accessible and convenient for all by offering a number of courses online.

Thousands of users have already visited our new online training website to view and download the free material that is now available. If you haven't already done so, register today and take a look at the variety of support we offer.

Our new improved programme includes the following.

Self-managed learning – the training you want, where and when you want it.

If you want to better understand the specification or keep abreast of information about previous examinations then these resources are for you. Available on demand, 24 hours a day, 7 days a week, with no travel or training costs, these self-contained units allow you to manage your own learning at a pace that suits you. New content is added daily, and the website currently has free material available in over 90 subjects for teachers to download, as well as several training videos and online presentations.

Live broadcasts – information and training straight to your classroom.

Free broadcast events streamed live over the internet focus on improving your delivery skills and understanding of our qualifications. These interactive sessions via single-presenter webinars, studio discussions and multi-site broadcasts give you the chance to hear advice and guidance from our subject specialists and Senior Assessors who will be taking your questions live, or pre-submitted, and providing you with an immediate response.

Premier professional development – inspiring and advancing your teaching.

Don't miss your opportunity to attend our range of face-to-face premier professional events giving you the opportunity to keep up to date with the latest developments in your subject area, visit subject-related venues and obtain new and interesting approaches to teaching certain topic areas.

Providing professional development for teachers at a reduced cost for centres, this is your opportunity to gain new insights and ideas from leaders in their field and to interact with a large number of subject specialist teachers.

Face-to-face – A portfolio of more traditional INSET events.

We currently have over 275 events scheduled to take place in England and Wales: training sessions to help you understand and manage GCSE controlled assessment and A Level coursework and to support some vocational courses.

WHAT TO DO NEXT?

Check out our self-managed learning at **ocronlinetraining.org.uk**

For further information and to book your place on our premier professional development, face-to-face and live broadcast events, visit **ocreventbooker.org.uk**

Sign up for updates at **ocr.org.uk/updates** and be the first to find out about our exciting professional development programme.

NEED MORE HELP?

You can contact our team at **professionaldevelopment@ocr.org.uk**

SERVICES

Answers @ OCR is a web-based service where you can access specific, up-to-date information, browse hot topics and FAQs, or email us with your questions.
Visit **http://answers.ocr.org.uk**

Active Results for GCSE is a free online results analysis service to help you review the performance of individual students or your whole school. Active Results provides access to detailed results data, enabling more comprehensive analysis of results in order to give you a more accurate measure of the achievements of your centre and individual students.
For more information, go to **ocr.org.uk/activeresults**

OCR Interchange is a secure website for centres which offers a variety of services for Exams Officers and teachers, including the ability to carry out day-to-day administrative online functions quickly and efficiently.

OCR social network is a free platform where teachers can engage with each other – and with OCR – to share ideas and best practice, offer guidance and access a range of support materials produced by other teachers. To sign up, go to **social.ocr.org.uk**

WHY OCR

A FEW GOOD REASONS TO WORK WITH OCR

- You can enjoy the **freedom and excitement** of teaching qualifications that have been developed to help you inspire students of all abilities.

- We've built specifications **with you in mind**, using a clear and easy-to-understand format, making them straightforward for you to deliver.

- Our **clear and sensible assessment** approach means that exam papers and requirements are clearly presented and sensibly structured for you and your students.

- **Pathways for choice** – we have the broadest range of qualifications and our GCSEs provide an ideal foundation for students to progress to more-advanced studies and into the workplace.

- **Working in partnership to support you** – together with teachers we've developed a range of practical help and support to save you time. We provide support for you to teach our specifications with confidence and ensure that your students get as much as possible from our qualifications.

OUR AIM IS TO ASSIST YOU HOWEVER WE CAN

As well as providing you with a wide range of support services and resources to pick and choose from, we're also here to help you with specialist advice, guidance and support for those times when you simply need a more individual service.

HERE'S HOW TO CONTACT US FOR SPECIALIST ADVICE:

Phone: 01223 553998

Email: general.qualifications@ocr.org.uk

Fax: 01223 552627

Post: Customer Contact Centre, OCR, Progress House, Westwood Business Park, Coventry CV4 8JQ

DON'T FORGET – you can download specifications and all our support materials at **ocr.org.uk/computing/gcse**

YOUR CHECKLIST

- Bookmark **ocr.org.uk/computing/gcse**

- Be among the first to hear about support materials and resources as they become available. Register for email updates at **ocr.org.uk/updates**

- Access FREE online training and book onto courses at **ocronlinetraining.org.uk**

- Book your place on face-to-face courses and premier professional events at **ocreventbooker.org.uk**

- Learn more about Active Results at **ocr.org.uk/activeresults**

- Join our social network community for teachers at **social.ocr.org.uk**

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Contact us

Keep up to date on the latest news by registering to receive e-alerts at **ocr.org.uk/updates**

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