



GCSE Computing – ACCREDITED

SUMMARY BROCHURE

A new qualification which will run as a pilot that will engage your learners in computing technology.

APRIL 2010

www.ocr.org.uk/computing/gcse2010



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Introducing GCSE Computing

From September 2010, we are offering a new course in GCSE Computing.

We've involved teachers and consulted with key stakeholders in the Computing teaching community throughout the development process. We've done this so that our new GCSE Computing specification, support materials and publisher resources will provide you with everything you need to teach our new GCSE with confidence.

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

- The course will give learners a real, in-depth understanding of how computer technology works. Learners will no doubt be familiar with the use of computers and other related technology from their other subjects and elsewhere. However, the course will give them an insight into what goes on 'behind the scenes', including computer programming, which many learners find absorbing.
- The course provides excellent preparation 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. Learners 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. For many learners, it'll be 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 will make an excellent preparation for learners 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.

- Keep you fully up to date. Look out for our *Focus on 14–19* magazine, and check in online at www.ocr.org.uk/computing/gcse2010

Making GCSE Computing easier for you

We want to make it as easy as possible for you to manage the new GCSE.

We will:

- Make available a range of Computing support materials designed to save you time in preparing to teach our specification – including specimen assessment materials and a Guide to Curriculum Planning
- Tailor our publisher resources to our new specification and make them available ahead of first teaching





Course summary for GCSE Computing

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

Unit title and description	Assessment and duration	Weighting
<p>Unit A451: Computer systems and programming</p> <p>This unit covers the body of knowledge about computer systems on which the examination will be based.</p>	<p>1 hour 30 minutes</p> <p>Written paper</p> <p>80 marks</p>	<p>40%</p>
<p>Unit A452: Practical investigation</p> <p>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.</p>	<p>Controlled assessment</p> <p>Investigative task. OCR-set scenario with a choice of research tasks.</p> <p>45 marks</p>	<p>30%</p>
<p>Unit A453: Programming project</p> <p>Learners will need to:</p> <ul style="list-style-type: none"> • Understand standard programming techniques • Be able to design a coded solution to a problem including: <ul style="list-style-type: none"> - 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: <ul style="list-style-type: none"> - To show functionality - To show how it matches the design criteria - Identifying successes and any limitations. 	<p>Controlled assessment</p> <p>Programming task. Design, develop and test a solution to a problem within the OCR-set scenario.</p> <p>45 marks</p>	<p>30%</p>

Assessment Objectives

Learners are expected to demonstrate the following in the context of the content described:

- **AO1 Recall, select and communicate**
Learners demonstrate their ability to recall, select and communicate their knowledge and understanding of computer technology
- **AO2 Apply knowledge, understanding and skills**
Learners demonstrate their ability to apply knowledge, understanding and skills to solve problems by using computer programs
- **AO3 Analyse and evaluate**
Learners demonstrate their ability to analyse, evaluate, make reasoned judgements and present conclusions





Controlled assessment FAQs

What is controlled assessment?

Controlled assessment is coursework in a supervised environment or classroom and will be under different levels of control. Controlled assessment has been introduced by QCA to address some of the issues raised in coursework reviews, such as plagiarism.

How much will controlled assessment be worth?

In GCSE Computing, controlled assessment will be worth 60% of a learner's final mark.

Why is controlled assessment being introduced by QCA?

There are a number of reasons. Firstly, it allows learners the opportunity to produce an original response without the drawbacks of 'over-preparation'. It also allows greater freedom, while still allowing centres more control than is offered in examined units. Your centre decides when your learners do the assessment, and you can contextualise tasks to meet your own learners' needs.

Another advantage is that you can be confident that work is authentic, which will mean improved reliability and validity.

Who sets the task?

This is done by awarding bodies. Tasks will be reviewed every two years, and will be released in the late spring to allow you to prepare for teaching them in the following academic year.

How much time will controlled assessment take?

Different tasks will have different amounts of time allocated to them, and centres will be informed about these by the awarding body. You will be advised of the amount of time you should spend preparing learners for each task, as well as a set time limit for completion of the final response after formal teaching has stopped.

Although the time for completing the final response will be set, centres can decide when this time is allocated, and how to split the time. For example if four hours are allowed, you may wish to have learners use this as one session, or split the time up throughout several different sessions (e.g. four one-hour sessions). This allows centres to work controlled assessment around their existing timetables.

When can I do controlled assessment?

The task can be completed in Years 9, 10 or 11, but you must make sure that you do the correct task for that year. You can complete the task at any point in the academic year, provided that you meet the deadline for submission.

How will it be supervised?

The final response to the task must be closely supervised, either by the class teacher or another supervisor. It is up to you whether you wish to use your classrooms or make other arrangements. If you choose to divide the allowed time between several sessions, centres must ensure that all work is handed in at the end of each session and held securely. Learners may not bring notes in with them to these final response sessions, and teachers must not comment or give feedback on the work while it is being completed.

How will controlled assessment responses be marked?

Teachers will mark it, much as they do now, using mark schemes supplied by the awarding body. We will provide extensive support for the tasks that are set in that year. Work will then be moderated by the awarding body.

Can I access ongoing support?

Rest assured that we will provide extensive guidance on controlled assessment at all stages of the process. We will also help centres in specific tasks that are being set for a particular year.

When can I see some controlled assessment tasks?

Some specimen controlled assessment tasks will be available in early July as part of the specimen material available for the new specification.

Supporting you all the way

We recognise that the introduction of the new specification will bring challenges for implementation and teaching. Our aim is to help you at every stage and we're working hard to provide a practical package of support in close consultation with teachers and other experts so that we can make the qualification work for you. The support will be designed to save you time while you prepare for and teach our new specification.

An even better service

Our core support services will also include:

- FREE INSET training
- Schemes of work and lesson plans
- Teacher's handbook
- Specimen assessment materials including mark schemes
- Guide to controlled assessment
- Sample controlled assessment materials
- Guide to curriculum planning
- Endorsed publisher partner resources
- Social network where you can communicate with other subject specialists to share knowledge, resources, views and ideas at www.social.ocr.org.uk
- Interchange – a completely secure, free website that helps you and your exams officer save time on administrative tasks at examination time
- e-alert updates – keep up to date by email. Register online at www.ocr.org.uk/updates





Publisher support for you



Working as OCR's publisher partner for Computing, Hodder Education will be producing new digital resources to support the 2010 specification.

For more information and publication dates, please visit www.ocr.org.uk/computing/gcse2010 and choose *Published resources* from the menu on the right.



INSET Training – designed for you

Our GCSE Computing *Get Started* events include information about our new specification direct from the experts. Designed to help smooth the path to the 2010 changes, they provide useful information and an opportunity to chat with our team. Keep up to date with the details of training dates and locations by visiting www.ocreventbooker.co.uk.

Get Started – towards successful delivery of our new specification

This course will suit you, whether you're a newly qualified teacher or an experienced teacher new to our specification.

These will be constructive full-day courses that will provide essential information, guidance and practical support to enable successful delivery of our Computing specification. Further details will be available on www.ocreventbooker.co.uk shortly.





Introducing OCR

We're a leading UK awarding body, providing an exciting range of qualifications to meet the needs of learners of all ages and abilities.

We want to help you make the most of your passion for your subject and believe in developing specifications that help you bring it to life, so learners are more likely to engage with it and achieve more. We listen to and learn from you to help us improve our qualifications and support services, and to make sure you and your learners get as much as possible from our qualifications.

You'll receive full support when you're teaching our qualifications. You can enjoy free training events, and choose from a useful selection of teaching materials and resources – all written for you by expert developers to make working with us easier and more rewarding.



Next steps – your checklist

We hope we've whetted your appetite to find out more about our new draft GCSE Computing specification. Our range of support services will certainly help you to do just that. Why not check them out today.

- Bookmark www.ocr.org.uk/computing/gcse2010
- Be among the first to hear about support materials and resources as they become available. Register for email updates at www.ocr.org.uk/updates
- Book your FREE INSET training place online at www.ocreventbooker.org.uk
- Find out about controlled assessment consultancy
- Apply to be an OCR approved centre at www.ocr.org.uk/administration
- Join our e-community at www.ocr.org.uk/community/2010computing

And don't forget...

- Send in your completed Expression of Interest (EOI) form.

Letting us know about your intention to offer our new GCSE will help us ensure that we have the right level of support in place to meet your needs – and it's now even easier to do! Simply fill in the enclosed EOI form and return it using the pre-paid envelope or fax back your form to 024 76 851633.

Need more help?

Our aim is to assist you however we can.

As well as giving you a toolkit 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:

By phone: 01223 553998

By email: general.qualifications@ocr.org.uk

By fax: 01223 552627

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



www.ocr.org.uk
OCR customer contact centre

General qualifications

Telephone 01223 553998

Facsimile 01223 552627

Email general.qualifications@ocr.org.uk

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