

# Computer Science: Key Stage 4 -Components

GCSE course: OCR's GCSE (9–1) in Computer Science (J277)

Assessment: ( written examinations at the end of year 11)

<i>Course Title</i>	<b>OCR's GCSE (9–1) in Computer Science (J277)</b>	<i>Weighting and assessment End of Year 11</i>
J277/01: Computer systems	This component will assess: • 1.1 Systems architecture • 1.2 Memory and storage • 1.3 Computer networks, connections and protocols • 1.4 Network security • 1.5 Systems software • 1.6 Ethical, legal, cultural and environmental impacts of digital technology	Written paper: 1 hour and 30 minutes 50% of total GCSE 80 marks
J277/02: Computational thinking, algorithms and programming	This component will assess: • 2.1 Algorithms • 2.2 Programming fundamentals • 2.3 Producing robust programs • 2.4 Boolean logic • 2.5 Programming languages and Integrated Development Environments	Written paper: 1 hour and 30 minutes 50% of total GCSE 80 marks

# Computer Science: Key resources

The resources below will help your child to succeed in the topics they are studying at school. Some resources will be useful for revising key content, others might provide an exciting opportunity to extend knowledge with visits to exciting places in London or to challenge them.

<p style="text-align: center;"><u>Books:</u></p> <p>GCSE Computer Science OCR Revision Guide - for the Grade 9-1 Course by CGP</p> <p>GCSE Computer Science OCR Exam Practice Workbook - for the Grade 9-1 Course (includes Answers) by CGP</p> <p>Learning to Program in Python 2017 by Heathcote</p>	<p style="text-align: center;"><u>Websites:</u></p> <p><a href="https://www.teach-ict.com/2016/GCSE_Computing/OCR_J276/OCR_J276_home.html">https://www.teach-ict.com/2016/GCSE_Computing/OCR_J276/OCR_J276_home.html</a></p> <p><a href="https://www.senecalearning.com/">https://www.senecalearning.com/</a></p> <p><a href="https://quizizz.com/">https://quizizz.com/</a></p>
<p style="text-align: center;"><u>Places to visit:</u></p> <p>Amazon Web Services Head Office British Science Museum Bloomberg Head Office Teen Tech London</p>	<p style="text-align: center;"><u>Text books</u></p> <p>OCR GCSE (9-1) Computer Science J277 (Textbook) by S Robson and PM Heathcote</p>

# Tech Award in Digital Information Technology: Key Stage 4 -Components

Pearson BTEC Level 1/Level 2 Tech Award in Digital Information Technology  
 Assessment: ( written examinations at the end of year 11)

<i>Course Title</i>	<b>Pearson BTEC Level 1/Level 2 Tech Award in Digital Information Technology</b>	<i>Weighting and assessment End of Year 11</i>
Component number 1 Exploring user interface designs	Investigate user interface design for individuals and organisations• Use project planning techniques to plan and design a user interface• Develop and review a user interface.	Internal assessed assignments (30 %)
Component number 2 (Collecting, presenting and interpreting Data)	Investigate the role and impact of using data on individuals and organisations • Create a dashboard using data manipulation tools• Draw conclusions and review data presentation methods.	Internal assessment assignments (30%)
Component number 3 (Effective Digital Working Practices)	Learners will explore how organisations use digital systems and the wider implications associated with their use.	External assessment must be completed in 1 hour 30 minutes. • 60 marks (40%)

# Tech Award in Digital Information Technology: Key Stage 4 - Resources

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<p><u>Books:</u></p>	<p><u>Websites:</u></p> <p><a href="https://www.teach-ict.com/">https://www.teach-ict.com/</a></p> <p><a href="https://quizizz.com/">https://quizizz.com/</a></p>
<p><u>Places to visit:</u></p> <p>British Science Museum Bloomberg Head Office Teen Tech London</p>	<p><u>Text books</u></p> <p>BTEC Tech Award Digital Information Technology Student Book Publisher: Pearson</p> <p>Pearson BTEC Level 1/2 Tech Award in DIT: Component 3 Textbook Publisher: PG Online</p>