

## Computer Science GCSE (Optional)

Board: OCR

### Skills

This qualification will help students understand current and emerging technologies and become independent and discerning users of IT. They will be able to develop computer programs to solve problems and evaluate the effectiveness of computer programs. Computer Science is now part of the English Baccalaureate.

The course specification has been updated for first delivery in 2020. The programming aspect of the course is now included in the written papers and not completed as a separate programming project. Please see the overview of the course below:

Content Overview	Assessment Overview
<p><b>J277/01: Computer systems</b></p> <p>This component will assess:</p> <ul style="list-style-type: none"><li>• 1.1 Systems architecture</li><li>• 1.2 Memory and storage</li><li>• 1.3 Computer networks, connections and protocols</li><li>• 1.4 Network security</li><li>• 1.5 Systems software</li><li>• 1.6 Ethical, legal, cultural and environmental impacts of digital technology</li></ul>	<p><b>Written paper: 1 hour and 30 minutes</b> <b>50% of total GCSE</b> <b>80 marks</b></p> <p>This is a non-calculator paper.</p> <p>All questions are mandatory.</p> <p>This paper consists of multiple choice questions, short response questions and extended response questions.</p>
<p><b>J277/02: Computational thinking, algorithms and programming</b></p> <p>This component will assess:</p> <ul style="list-style-type: none"><li>• 2.1 Algorithms</li><li>• 2.2 Programming fundamentals</li><li>• 2.3 Producing robust programs</li><li>• 2.4 Boolean logic</li><li>• 2.5 Programming languages and Integrated Development Environments</li></ul>	<p><b>Written paper: 1 hour and 30 minutes</b> <b>50% of total GCSE</b> <b>80 marks</b></p> <p>This is a non-calculator paper.</p> <p>This paper has two sections: Section A and Section B. Students must answer both sections.</p> <p>All questions are mandatory.</p> <p>In Section B, questions assessing students' ability to write or refine algorithms must be answered using <b>either</b> the OCR Exam Reference Language <b>or</b> the high-level programming language they are familiar with.</p>

For further details, please see Mrs Murfin (Head of Computer Science)