

Subject: Computer Science

Examination Board OCR

Specification Number J277

Teacher responsible Mr Rogers

Introduction

GCSE Computer Science content has been designed not only to allow students to build a solid basis of understanding but to get them thinking about real world applications. Throughout the course students are examined using both examination and practical programming tasks.

Course Content

Component 01 will introduce learners to the Central Processing Unit (CPU), computer memory and storage, wired and wireless networks, network topologies, system security and system software. It is expected that learners will become familiar with the impact of Computer Science in a global context through the study of the ethical, legal, cultural and environmental concerns associated with Computer Science.

Component 02 incorporates and builds on the knowledge and understanding gained in Component 01, encouraging learners to apply this knowledge and understanding using computational thinking. Learners will be introduced to algorithms and programming, learning about programming techniques, how to produce robust programs, computational logic, translators and facilities of computing languages and data representation. Learners will become familiar with computing related mathematics.

Assessment

Unit 1: Computer Systems (50% Exam)

Written paper (90 minutes) testing sections of the curriculum content. Externally assessed; 80 marks worth 50% of the overall qualification.

Unit 2: Computational thinking, algorithms and programming (50% Exam)

Written paper (90 minutes) testing sections of the curriculum content. Externally assessed; 80 marks worth 50% of the overall qualification.

Progression

Computer Science will give you a good knowledge of Computing and ICT. Students can go on to study Computer Science AS-Level and A-Level courses.

Future careers opportunities could include game design and development, software engineering, and ICT based jobs, as well as complementing other areas such as Mathematics and Business sectors.