AWARDING BODY: OCR

Introduction

The Computer Science GCSE will enable students to develop a real,

in-depth understanding of how computer technology works, giving

them an insight into what goes on ‘under the lid’ of a computer.

You will need to think creatively, innovatively and logically to

design and program solutions to real-world problems.

Students will investigate the components that make up digital

systems and how they communicate with one another and with

other systems. They will also develop an understanding of the

impacts of digital technology to the individual and to wider society

Content

Unit 1 – Computer Systems

This unit covers knowledge of computer systems

Systems architecture

Memory and storage

Computer networks, connections and protocols

Network security

Systems software

Ethical, legal, cultural and environmental impacts of

digital technology

Unit 2 – Computational thinking, algorithms and programming

This unit covers

Algorithms

Programming fundamentals

Producing robust programs

Boolean logic

Programming languages and Integrated Development

Environments

Practical Programming

All students will be given the opportunity to undertake a

programming task(s), either to a specification or to solve a problem

(or problems), during their course of study. Students may draw on

some of the content in both components when engaged in

Practical Programming. Practical Programming skills will be

assessed in part of the second exam paper.

Assessment

The course will be assessed by two written exams. Each exam is

1hr 30mins long and both are worth 80 marks each. Each exam is

worth 50% of the total GCSE.

Career Relevance

Careers in this industry include software development, computer

programming, network manager, web developer, computer

forensics, data administrator, project manager and database

developer.