

# Computer Science

Head of ICT - Mr S Howe

KS4 Co-ordinator - ?

## The Course:

Key aspects of the qualification include; how computers work, making connections, data matters, computational thinking, practice and programming.

### **Unit 1: Computer systems (Exam 40%)**

This component 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.

### **Unit 2: Computational thinking, algorithms and programming (Exam 40%)**

This unit encourages learners to apply 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.

### **Unit 3: Programming project (Non-Exam Assessment 20%)**

This is a practical unit where you will create a program that provides a solution to a specified problem. You will be expected to design, write a program (in a programming language), test your problem and then evaluate it.

**Skills you will learn include;** programing in Python, Linux commands, Shell script, Algorithms, software design, problem solving and critical thinking skills.

### **What could it lead to in Sixth Form?**

Level 3 qualifications such as Diplomas

A Level/GCE ICT/Computing

### **What careers/University courses would this subject help me to enter?**

#### **Possible University Courses**

Computer Forensics, Ethical Hacking, Software Engineering, Computer Science, Artificial Intelligences and Computer and Video Games

#### **Possible Careers**

Software Developer, App Designer, Project Management and Technical ICT

# GCSE ICT

Head of ICT - Mr Howe

## **The Course:**

This qualification will enable you to become an independent and discerning user of ICT, as well as being able to make informed decisions about its use and awareness of its implications for individuals, organisations and society; in addition to acquiring and applying creative and technical skills, knowledge and understanding of ICT in a range of contexts. This course will enable you to develop ICT based solutions to solve problems and will give you an understanding of current and emerging technologies and their social and commercial impact.

You will learn about website design, creating podcasts, spreadsheet design, digital editing, databases and research skills.

## **Unit 1 – Living in a Digital World (Assessment through a written exam)**

Students will explore how digital technology impacts on the lives of individuals, organisations and society. Students learn about current and emerging digital technologies and their issues raised by their use in a range of contexts (learning and earning, leisure, shopping and money management, health and well-being and on the move).

## **Unit 2 – Using Digital Tools (Controlled Assessment)**

This is a practical unit. Students broaden and enhance their ICT skills and capability. They work with a range of digital tools and techniques to produce effective ICT solutions in a range of contexts.

## **What could it lead to in Sixth Form?**

Level 3 qualifications such as Diplomas

A Level/GCE ICT/Computing

## **What careers/University courses would this subject help me to enter?**

### **Possible University Courses**

IT and Business, Multimedia, Computer Science, Media and Computer & Video Games.

### **Possible Careers**

Media, Project Management, Technical ICT and Apprenticeships.

# OCR ICT Creative iMedia

Head of ICT - Mr Howe

## **The Course:**

These qualifications will assess the application of creative media skills through practical use. The Creative iMedia course will equip you with a range of creative media skills and provide opportunities to develop, in context, desirable and transferable skills such as research, planning and review, working with others and communicating creative concepts effectively. Through the use of these skills, you will ultimately be creating fit-for-purpose creative media products. The Creative iMedia will also challenge you, by introducing creative media techniques; encouraging independence, creativity and providing tasks that engage. The 'hands on' approach will require you to use various technology. The qualification design, including the range of units available, will allow learners the freedom to explore the areas of creative media that interest them as well as providing good opportunities to enhance their learning in a range of areas.

### **Unit 1 – Pre-production skills**

This unit will enable you to understand pre-production skills used in the creative and digital media sector. It will develop your understanding of the client brief, time frames, deadlines and preparation techniques that form part of the planning and creation process.

### **Unit 2 – Creating digital graphics**

The aim of this unit is for you to understand the basics of digital graphics editing for the creative and digital media sector. You will learn where and why digital graphics are used and what techniques are involved in their creation.

Possible optional units include creating 2D and 3D digital characters, storytelling with a comic strip, creating a multipage website, creating a digital animation, creating interactive multimedia products, creating a digital sound sequence, creating a digital video sequence, digital photography, designing a game concept and developing digital games.

## **What could it lead to in Sixth Form?**

Level 3 qualifications such as Diploma in Creative Media  
A Level ICT and Media

## **What careers/University courses would this subject help me to enter?**

### **Possible University Courses**

IT and Business, Multimedia, Computer Science and Media

### **Possible Careers**

Media, Project Management, Graphic Designer, Technical ICT, Journalist and Web Designer

# Film Studies

Head of ICT - Mr Howe

## **The Course:**

Become aware of film 'language', audiences and the organisations which produce, distribute and exhibit film. The qualification aims to capture your experiences and creative ideas of film and how these relate to the themes and issues we see in the media. The course is underpinned by the relationship between films, their audiences and the organisations which produce, distribute and exhibit them.

## **Paper 1: Exploring Film – 30% (1 hr 30 minutes) (External written exam)**

In lessons, you will study one film genre in detail and answer four compulsory questions. These questions will assess knowledge and understanding of film language and key industry and audience issues.

## **Paper 2: Exploring Film outside Hollywood – 20% (1 hour) (External written exam)**

In lessons you will study in detail, one independent film. In your exam you will answer three compulsory questions on one film produced outside Hollywood, chosen from a list prescribed by WJEC. You will focus on various elements of the film such as characters, narratives, places, events and the themes and issues in the film chosen and how they are represented. You will also complete a creative question involving individual responses to the film (e.g. reviews, blogs and website entries).

## **Film Exploration and Creation - 50% (Controlled Assessment)**

### **Area 1 - Exploring a film of your choice (30 marks)**

You will research and create a micro analysis on a film of your choice, focusing on a short extract from the film.

### **Area 2 - Production (70 marks)**

This section of the controlled assessment is much more practical. You will focus on four main tasks which can include; storyboards, scripts, magazine covers, posters, DVD covers and filming.

## **What could it lead to in Sixth Form?**

Level 3 Diploma in Creative Media

A Level Media

A Level Film Studies

A Level English

## **What careers/University courses would this subject help me to enter?**

### **Possible University Courses**

Media, Film Production, English Language, IT & Business, Multimedia

### **Possible Careers**

Media, Film/TV Production, Radio, Education