



The Science Faculty

Computing

Subject Intent:

We want to teach our students to become creative problem solvers, in a world where technology is advancing at such a rapid pace. We aim to provide a continuous journey that builds upon their achievements in computing at primary school, and takes them all the way through to Sixth Form and beyond. Students will gain practical experience using a range of technologies as well as having this underpinned by a foundation in the underlying theories of computing and modern technologies.

Course Overview:

Core ICT

Key stage 3

All students in KS3 have a two lessons over the two week period and these will be in one of our dedicated ICT suites.

They will learn how to:

- Use a range of graphics editing tools to create a personalised animated introduction for a video or piece of online content, stylised posters, and book covers
- Work with industry standard software to produce 3D models and animations, short video productions, and manipulate audio tracks
- Create software and games by developing their skills from a block based language through to a text based language, as well as developing their own algorithms, freeing them to write programs of their own
- Build web pages and websites, both in code and by using software
- Choose the most appropriate application that is needed for a given task

Key stage 4

Students will continue to develop their expertise in the OCR Cambridge Nationals Creative iMedia course. This is ideal for students that are interested in careers relating to media, journalism, online content creation, television, and the movies. Students will learn about the design principles needed to plan a multimedia project, as well as the practical skills required to build a project from the ground up. This is largely a practical subject.

Key Stage 5

Students will study the BTEC Level 3 in Information Technologies. This qualification is designed for learners who are interested in an introduction to the study of creating IT systems to manage and share information, alongside other fields of study, with a view to progressing to a wide range of higher education courses, not necessarily in IT.

Course Detail:

A list the key content students will cover, broken down into these headings

OCR Cambridge Nationals in Creative iMedia – Key Stage 4

This course is comprised of three coursework units and an examination

Part 1 – Preproduction Documents – Examination – 25% of total marks

This unit covers the necessary theory and practical preparation that allows students to plan and prepare a multimedia production. The examination is 60 marks over 1hr 15mins and accounts for 25% of the final grade for the course.

Part 2 – Creating Digital Graphics – Coursework – 25% of total marks

This is a largely practical unit where students are taught to edit and manipulate images using specialised software. They will then be given a scenario, for which, they will have to design and plan a production, as well as apply the learnt skills in order to create and document their work. It is marked out of 70 marks and accounts for 35% of the final course grade.

Part 3 – Creating a Multipage Website – Coursework – 25% of total marks

This is a largely practical unit where students are taught to plan and create a multipage website using specialised software. They will then be given a scenario, for which, they will have to design and plan a production, as well as apply the learnt skills in order to create and document their work. It is marked out of 70 marks and accounts for 35% of the final course grade.

Part 4 – Creating an Animation – Coursework – 25% of total marks

This is a largely practical unit where students are taught to plan and create a 3D animation using specialised software. They will then be given a scenario, for which, they will have to design and plan a production, as well as apply the learnt skills in order to create and document their work. It is marked out of 70 marks and accounts for 35% of the final course grade.

How can I use what I have learnt on this course in the future?

Students typically go on to further studies but it would be possible for students to move into apprenticeships and work straight from this qualification. This is ideal for students that are interested in careers relating to media, journalism, online content creation, television, and the movies.

BTEC Level 3 National Extended Certificate in Information Technology - Key Stage 5

The qualification provides a broad basis of study for IT. The Extended Certificate is designed to support progression to Higher Education when taken as part of a programme of study that includes other appropriate BTEC Nationals or A levels.

This is a two-year course equivalent in size to one A level (360 Guided Learning Hours). The course consists of four units, of which of them 3 are mandatory and 2 of which are externally assessed (examined units).

Mandatory Units

- Unit 1 Information Technology Systems- Written exam- guided learning hours 120
- Unit 2 Creating Systems to Manage Information - coursework- guided learning hours 90
- Unit 3 Using Social Media in Business – Written exam- guided learning hours 90
- Unit 6 Website Development - Coursework- guided learning hours 60

Career progression:

This course is good for students considering a higher education in IT, Computing, Media, Business and Finance

Enrichment Opportunities

Enrichment opportunities

- Students will have the opportunity to take part in Computing Club, which is open to all age groups
- Students can become subject ambassadors, helping others with IT issues and work

Useful links

<https://ocr.org.uk/qualifications/cambridge-nationals/creative-imedia-level-1-2-award-certificate-j807-j817/>

<https://qualifications.pearson.com/en/qualifications/btec-nationals/information-technology-2016.html>

(Choose the Extended Certificate option)