

Welcome to Business, Computer Science, IT and Media!

"For I know the plans I have for you, declares the LORD, plans for welfare and not for evil, to give you a future and a hope."

Jeremiah 29:11

Vision

To develop enterprising individuals who will have computer based skills needed to prepare them for a successful working life. Through a variety of subjects and teaching pedagogy, students will be encouraged to be creative, responsible and independent explorers; unlocking their potential by raising aspirations and developing a strong sense of values.

KS3 Summary/Topics

Key stage 3 IT starts in year 8 within a range of basic computer science components as well as IT and digital literacy in line with National Curriculum. To allow the pupils to gain a board, in-depth curriculum within this subject area, within year 9 the learning builds upon year 8 and prior vital experiences.

Year 8:

- Computer Systems
- Computational thinking
- Spreadsheet modelling
- Database
- HTML Programming
- Scratch Programming

Year 9:

- How a computer works
- Computational thinking
- Databases
- Business Enterprise
- Python Programming

KS4 Summary/Topics/Exam information

NCFE Lv2 Tech Award Interactive Media

At GCSE we offer **NCFE Lv2 Interactive Media** which is a tech-certificate – however is still a worthy GCSE. This is a 100% coursework based qualification, with 4 units of coursework and 1 controlled assessment. This is an exciting qualification which allows the pupils to express their creative and interactive side.

Within the qualification the pupils will be employees for Thomas Cook, where they will have to design, plan and create an interactive multimedia PowerPoint to be shared within Thomas Cook stores. The pupils have to opportunity to research different holiday destinations, then make the final decision of which destination they will complete their PowerPoint on. Throughout the course pupils will learn how to:

- Edit and manipulate images
- Design and create videos with special effects and sound
- Create exciting animations
- Skills and qualities of using PowerPoint.

The specification for this course is available at:

<https://www.qualhub.co.uk/media/7258/ncfe-l2-t-a-interactive-media-603-0852-7-qual-spec-issue-6.pdf>

Business Studies is an optional subject that can be chosen by students in KS4 and KS5.

Edexcel GCSE 9-1 Business

Throughout this course investigates how a business works within real life business environments. Pupils explore what business is and what factors can influence business outcomes. From decision making to financial documents, learners will gain an in-depth insight to what makes a business successful. The development of core knowledge and understanding including the range of enterprises and the key features and factors that contribute to an enterprise's levels of success.

Learners will also study the development and application of skills such as: analysing research, information, planning and financial forecasting, communicating and problem solving.

Module	Elements	Assessment	Date	%
<u>Theme 1:</u> Investigating Small Business	<ul style="list-style-type: none">• Topic 1.1 Enterprise and entrepreneurship• Topic 1.2 Spotting a business opportunity• Topic 1.3 Putting a business idea into practice• Topic 1.4 Making the business effective• Topic 1.5 Understanding external influences on business	Written: 1 hour 30 mins	June 2022	50%
<u>Theme 2:</u> Building a Business	<ul style="list-style-type: none">• Topic 2.1 Growing the business• Topic 2.2 Making marketing decisions• Topic 2.3 Making operational decisions• Topic 2.4 Making financial decisions• Topic 2.5 Making human resource decisions	Written: 1 hour 30 mins	June 2022	50%

What can I do after I've completed the course?

Study of the qualification as part of Key Stage 4 learning will help learners to make more informed choices for further learning either generally or in this sector. The choices that a learner can make post-16 will depend on their overall level of attainment and their performance in the qualification.

Learners who generally achieve at Level 2 across their Key Stage 4 learning might consider progression to:

- Study of a vocational qualification at Level 3, such as OCR Cambridge Technicals L3 in Business, which prepares learners to enter employment or apprenticeships, or to move on to higher education by studying a degree in the Business sector.

GCSE 9-1 Computer Science

Through the use of GCSE Computer Science, the pupils will achieve:

- Understand and apply the fundamental principles and concepts of Computer Science, including abstraction, decomposition, logic, algorithms, and data representation
- Analyse problems in computational terms through practical experience of solving such problems, including designing, writing and debugging programs
- Think creatively, innovatively, analytically, logically and critically
- Understand the components that make up digital systems, and how they communicate with one another and with other systems
- Understand the impacts of digital technology to the individual and to wider society
- Apply mathematical skills relevant to Computer Science.

How will I be assessed?

Module	Elements	Assessment	Date	%
<u>Paper 1:</u> Computer Systems	<ul style="list-style-type: none">• 1.1 Systems architecture• 1.2 Memory and Storage• 1.3 Computer networks, connections and protocols• 1.4 Network Security• 1.5 System Software• 1.6 Ethical, Legal, Cultural and Environmental impacts of digital technology	Written: 90 minutes	June 2022	50%
<u>Paper 2:</u> Computational thinking, algorithms and programming	<ul style="list-style-type: none">• 2.1 Algorithms• 2.2 Programming fundamentals• 2.3 Producing robust programs• 2.4 Boolean Logic• 2.5 Programming languages and integrated development environments <p>*Within section B of this exam, questions will be assessing students; ability to write or refine algorithms must be answered using either the OCR Exam Reference Language or the high-level programming language they are familiar with (Python).</p>	Written: 90 minutes	June 2020	50%

KS5 Summary/Topics/Exam information

OCR Cambridge Technical Lv3 Business: Extended Certificate

At key stage 5, we offer a vocational OCR Cambridge Technical course at Certificate. The OCR Cambridge Technical course gives students the opportunity to acquire the essential knowledge and tools for the world of business through the business environment, customers and communication as well as human resources.

Students complete five units overall:

- Unit 1 – The Business Environment (Examination)
- Unit 2 – Working in Business (Examination)
- Unit 4 – Customers and Communication (Coursework)
- Unit 8 – Introduction to Human Resources (Coursework)
- Unit 20 – Business Events (Coursework)

OCR Cambridge Technical Lv3 IT: Introductory Diploma

At key stage 5, we offer a vocational OCR Cambridge Technical course at Certificate. The OCR Cambridge Technical course gives students the opportunity to acquire the essential knowledge and tools for the world of website building and developing for a client requirement.

Students complete five units overall:

- Unit 1 – Fundamental of IT (Examination)
- Unit 2 – Global Information (Examination)
- Unit 6 – Application Design (Coursework)
- Unit 9 – Product Development (Coursework)
- Unit 21 – Web Design and Prototyping (Coursework)

OCR Cambridge Technical Lv3 Digital Media: Extended Certificate

At key stage 5, we offer a vocational OCR Cambridge Technical course at Certificate. The OCR Cambridge Technical course gives students the opportunity to acquire the essential knowledge and tools for the world of media and developing for a client requirement.

Students complete five units overall:

- Unit 1 – Media Products and Audiences (Examination)
- Unit 2 – Pre-Production and Planning (Examination)
- Unit 6 – Social Media and Globalisation (Examination)
- Unit 3 – Create a media product (Coursework)
- Unit 20 – Advertising Campaign (Coursework)

OCR Alevel Computer Science

Computer Science is a practical subject where students can apply the academic principles learned in the classroom to real-world systems. It's an intensely creative subject that combines invention and excitement, and can look at the natural world through a digital prism.

The aims of this qualification are to enable learners to develop:

- An understanding and ability to apply the fundamental principles and concepts of computer science, including: abstraction, decomposition, logic, algorithms and data representation
- The ability to analyse problems in computational terms through practical experience of solving such problems, including writing programs to do so.
- The capacity to think creatively, innovatively, analytically, logically and critically.
- The capacity to see relationships between different aspects of computer science Mathematical skills.

Content Overview

- The characteristics of contemporary processors, input, output and storage devices
- Software and software development
- Exchanging data.
- Data types, data structures and algorithms.
- Legal, moral, cultural and ethical issues.
- Elements of computational thinking.
- Problem solving and programming
- Algorithms to solve problems and standard algorithms.

Assessment:

Paper 1

- Computer Systems
- 2 Hour 30 Minutes written exam
- 40% of A Level

Paper 2

- Algorithms and programming
- 2 Hour 30 Minutes written exam
- 40% of A Level

Paper 3

- Programming project
- Non-exam assessment
- 20% of A Level

Extra-curricular opportunities

- Homework lunch club – every lunchtime in CIE and Media rooms
- Tuesday's after school – coursework clinic for Ks4 and Ks5 pupils of Business, Computing, IT and Media.

Useful websites

- Scratch – online version or downloadable on home PC
- Python – online version or downloadable on home PC
- OCR Cambridge Technical for our Ks5 qualifications - <https://www.ocr.org.uk/qualifications/cambridge-technicals/2016-suite-qualifications/>
- OCR Alevel Computer Science Ks5 - <https://ocr.org.uk/qualifications/as-and-a-level/computer-science-h046-h446-from-2015/>
- Edexcel 9-1 GCSE Business Ks4 - https://qualifications.pearson.com/content/dam/pdf/GCSE/Business/2017/specification-and-sample-assessments/GCSE_Business_Spec_2017.pdf
- NCFE Interactive Media Ks4 - <https://www.qualhub.co.uk/media/7258/ncfe-l2-t-a-interactive-media-603-0852-7-qual-spec-issue-6.pdf>
- GCSE 9-1 Computer Science Ks4 - <https://www.ocr.org.uk/qualifications/gcse/computer-science-j276-from-2016/>