



## Business Studies and Computing Department

### Departmental overview

Computing is a compulsory subject for Key Stage 3 (Years 7 - 9) and Key Stage 4 (Years 10 - 11). In Years 10 and 11, pupils can opt to take GCSE Computer Science or WJEC Vocational Award in Retail Business. In Sixth Form, our department offers A Level Computer Science, Business BTEC National Diploma Business and BTEC Extended Certificate.

### Computing/Computer Science

Computing is a compulsory subject from Years 7 - 9. The curriculum is revised year on year to reflect the changes in ICT and therefore equip students with skills appropriate to work and life.

The main aim of the department is to ensure that students are given the opportunity to learn skills which are pertinent to life today and as a result, topics covered are revised each year in line with developments in technology. Students are encouraged from the outset to be independent learners and to be confident in their use of ICT.

We offer after school clubs whereby students can learn more aspects of computing related to programming. Activities include animation, gaming and programming.

#### Key Stage 3

##### Year 7:

Pupils have the opportunity to develop their skills in the following areas:

- Online Safety
- Web Design
- Python Programming

##### Year 8:

Pupils build on the knowledge and skills acquired in Year 7 alongside working with new software. Pupils also learn about e-safety, hardware, software and legislation.

- Cyber Security
- Python Programming
- Animation

##### Year 9:

Pupils follow a programme of study including:

- Understanding Computer, including the CPU, storage and binary
- Sound Manipulation using Audacity
- Further programming using Python

Pupils are assessed at the end of each unit of study and then three times during the year they will be given a report grade to reflect their computing capability.

## Key Stage 4

### GCSE Computer Science

This exciting GCSE gives pupils an excellent opportunity to investigate how computers work, how they're used and to develop computer programming and problem-solving skills. They will undertake fascinating in-depth research, build computers from their core components and practise programming in languages such as Python. The course will help them learn about critical thinking, analysis and problem solving. Our pupils follow the Pearson syllabus which covers six topics:

- Topic 1: Computational thinking: understanding algorithms; what they are used for and how they work; ability to follow, amend and write
- Topic 2: Data: binary, data representation, data storage and compression
- Topic 3: Computers: hardware and software components of computer systems and characteristics of programming languages
- Topic 4: Networks: computer networks and network security
- Topic 5: Issues and impact: emerging trends in computing technologies, impact of computing on individuals, society and the environment
- Topic 6: Problem solving with programming: creating programs; understanding how to decompose and analyse problems.

It is 100% exam based as follows:

Paper 1: Principles of Computer Science, Written examination: 1 hour and 30 min (75 marks) worth 50%

Paper 2: Application of Computational Thinking, Onscreen practical examination: 2 hours (75 marks) worth 50%

## Key Stage 5

### A Level Computer Science

A Level Computer Science helps students understand the core academic principles of computer science. Classroom learning is transferred into developing real-world systems through the creation of an independent programming project. This course will develop technical understanding and ability to analyse and solve problems using computational thinking.

Summary of what is studied (specification)

Component 1: Computer Systems. Students will be introduced to the internal workings of the CPU, data exchange, software development, data types and legal and ethical issues.

Component 2: Algorithms and Programming. This builds on Component 1 to include computational thinking and problem-solving.

Project: Students will apply the principles of computational thinking to a practical programming project. They will analyse, design, develop, test, evaluate and document a program written in a suitable programming language.

Summary of exam structure:

Computer Systems exam: 2 hours 30 min 40% 140 marks

Algorithms and Programming exam: 2 hours 30 min 40% 140 marks

Programming project: 20% 70 marks

# Business Studies

## Key Stage 4

### WJEC Vocational Award in Retail Business

The retail economy generated £394 billion in retail sales in 2020 and 5% of the UK's GDP. The employment opportunities presented by the retail sector are diverse and this course helps to prepare young people to enter this huge UK sector. Retail is the largest private sector employer in the UK and young people can aspire to many employment opportunities from the shop floor to the show room, and from head office functions to international positions. Studying Business will equip pupils with the skills and knowledge needed for future careers in this sector and also an understanding of how businesses work and how they impact all of us.

The course structure

Year 10 pupils will be studying the new WJEC Retail Business Qualification. This is a vocational qualification, with one exam and two controlled assessment projects completed during the course. We aim to give pupils a taste of business through engaging and interesting lessons based on real life events and trips to local businesses. Projects are based around pupils' own interests which helps them to relate what they learn to things they enjoy. The units studied during the course are:

#### Unit 1: The Business of Retail

This unit introduces learners to the business of retail and provides them with the opportunity to explore the dynamic and competitive nature of the retail industry. They will gain knowledge and understanding of different types of retail business and retail activity, as well as the impact of external factors on the industry. This is assessed through a written examination at the end of the course.

#### Unit 2: Customer Service

This unit allows learners to develop knowledge and understanding of the principles of customer service for retail business and offers the opportunity for learners to develop skills in investigating the customer service experience across retail organisations. This unit is assessed through a controlled assessment, which pupils will complete at the end of Year 10.

#### Unit 3: Marketing in Retail

This unit provides learners with the opportunity to develop their understanding of the importance of merchandising and marketing retail products, and how retail businesses use merchandising and marketing to achieve their aims. Learners will also apply their knowledge and understanding to develop skills in designing visual merchandising installations and promotional materials that achieve specific aims. This unit is assessed through a controlled assessment which will be completed in Year 11.

## Key Stage 5

### Pearson BTEC Level 3 National Diploma in Business

Pearson BTEC Level 3 National Diploma in Business is an Applied General qualification. It is for post-16 learners who want to continue their education through applied learning and who aim to progress to higher education and ultimately to employment in the business sector.

The qualification is equivalent to two A Levels, and it has been designed as a full two-year programme, normally taken alongside a further Level 3 qualification.

What does this qualification cover?

The content of this qualification has been developed in consultation with academics to ensure that it supports progression to higher education. In addition, employers and professional bodies have been involved and consulted in order to confirm that the content is appropriate and consistent with current practice for learners planning to enter employment directly in the business sector.

The qualification gives learners the knowledge, understanding and skills that underpin the business sector that will prepare them for further study or training. This includes the opportunity for learners to choose two units from a selection of options to supplement the mandatory units which reflect the key topics in business:

- marketing
- business environments
- international business
- management
- finance

What could this qualification lead to?

The qualification is recognised by higher education institutions as fully meeting admission requirements to many relevant courses in a variety of areas in the business sector, as single or joint programmes at degree, foundation degree or HND level. When studied with other qualifications in the study programme, learners can progress to higher education on combined courses. After this qualification, learners can progress directly to employment, however it is likely that many will do so via higher study. Areas of employment include junior business roles in marketing, administration, finance, events management, HR, marketing and other related areas in the business sector, including higher apprenticeships.

### **Pearson BTEC Level 3 National Extended Certificate in Business**

The Pearson BTEC Level 3 National Extended Certificate in Business is an Applied General qualification. It is for post-16 learners who want to continue their education through applied learning and who aim to progress to higher education and ultimately to employment in the business sector.

The qualification is equivalent to one A Level and aims to provide a coherent introduction to study of the business sector.

What does this qualification cover?

The content of this qualification has been developed in consultation with academics to ensure that it supports progression to higher education. Employers and professional bodies have been involved and consulted in order to confirm that the content is appropriate and consistent with current practice for learners planning to enter employment directly in the business sector.

The learning programme covers the following content areas:

- business environments
- finance
- marketing

The optional units have been designed to support choices in progression to business courses in higher education and to link with relevant occupational areas:

- human resources
- accounting
- marketing
- law

What could this qualification lead to?

The qualification carries UCAS points and is recognised by higher education providers as contributing to meeting admission requirements for many courses if taken alongside other qualifications as part of a two-year programme of learning. It will support entry to many higher education courses, depending on the other qualifications learners have taken. The qualification can also support progression to employment directly, or via an apprenticeship.