



BTEC Level 3 Extended Certificate

COMPUTING



What is the BTEC National Extended Certificate?

This course is aimed at those learners who are interested in an developing their core knowledge and skills in understanding computer programming. Students will explore the critical components that safeguard IT systems and data. Students will learn computational thinking skills to manage the development of software solutions to a problem.

You will develop strong computer and problem-solving skills whilst undertaking this course.

The BTEC National Extended Certificate is equivalent to one A Level.

Subject Information Sheet



Course Content and Assessment:

There are 4 units to complete of which 3 are mandatory and 2 are external.

Mandatory content (83%)

Externally assessed Content (66%)

Unit 1: Programming Fundamentals

Unit 2: Computer Network Security and Encryption

Unit 3: Human-Computer Interaction

Unit 4: Practical programming

Course Overview:

Unit 1: Programming Fundamental

Students will explore the core knowledge, skills and understanding that underpin computer programming. The unit will support the development of computational thinking and programming skills, as well as developing an understanding of how these skills are used to solve problems.

Unit 2: Computer Network Security and Encryption

Students will explore computer network security and encryption, the methods used to protect against threats and how to use encryption to secure data transmission and storage.

Unit 3: Human-Computer Interaction

Students will examine the underlying principles of human-computer interaction (HCI) and develop a HCI solution to meet the requirements of a given brief.

Unit 4: Practical Programming

Students explore the principles of computer science in connection with the concepts of software development. Students use a systematic and methodical approach to manage the development of a software solution to a problem

Learning Methods:

An interest in modern technology is a core part of developing knowledge within the subject. Students will be guided by the teacher but will also be required to carry out work independently, including extended research to become proficient in this subject.

Career Opportunities:

This qualification when taken alongside other Level 3 qualifications, provides an opportunity to progress into higher education to study a HND in a computing discipline, an apprenticeship or even straight into employment within the IT Sector.

The BTEC Nationals attract UCAS points.

Entry Requirements:

- Grade 4 or above in English
- Grade 4 or above in Maths
- L2 qualification in a computer-based subject

Staff Contacts

K McCarthy - Assistant Headteacher Key Stage 5

N Winterflood - Year Leader

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N Smith - Computing Teacher



Web Link Address

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