

# Computing

Exam Board: Edexcel

FULSTON MANOR SCHOOL



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## WHY TAKE THIS COURSE?

The influence of computing has been profound in shaping the world in which we now live. The use of technology is almost universal among UK businesses, and increasingly businesses are adopting strategic technologies to deliver new opportunities. There are approximately 1.3 million people working in technology specialist roles in the UK, and technology specialist employment is consistently increasing.

Computing is concerned both with computers and computer systems – how they work and how they are designed, constructed, and used. The core study of computing encompasses programming languages, data structures, algorithms, and the underlying science of information and computation. BTEC's embody a fundamentally learner-centred approach to the curriculum, with a flexible, unit-based structure and knowledge applied in project-based assessments. They focus on the holistic development of the practical, interpersonal and thinking skills required to be able to succeed in higher education and employability within this industry.

## AIMS OF THE COURSE

The content of this qualification has been developed in consultation with academics to ensure that it incorporates the most up-to-date knowledge and skills to enable progression to higher education. In addition, employers and professional bodies have been consulted on the content development to confirm its relevance with current industry practice used in computing and related occupational disciplines.

## **COURSE STRUCTURE AND CONTENT**

The qualification is the equivalent in size to one A Level. It consists of 4 units. Students study three mandatory units, 2 of which are externally assessed:

- **Unit 1** – Principles of Computer Science
- **Unit 2** - Fundamentals of Computer Systems
- **Unit 7** - IT Systems Security and Encryption
- **Unit 14** – Games Development

## **ASSESSMENT**

Assessment of units 1 and 2 is by external assessment (examination). All other units are assessed by practical portfolio assessment.

## **ENTRY REQUIREMENTS**

A student is expected to have achieved either at least 5 GCSEs grade 9-4 (or equivalent), one of these being GCSE computing at 4 grade or above. It is strongly advised that a student should have gained grade 5 at GCSE in Mathematics or a 5 in GCSE Science. Students are also expected to have a keen interest in computing and keep themselves up to date with technological developments and advances.