information technology

BTEC National Extended Certificate

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What is this subject about?

This is a practical course for students who wish to develop their expertise with IT and its uses. The Extended Certificate is a two year course equivalent to one A Level.

What will I study in the first year?

In the first year there is focus on how databases are used in businesses and organisations. You will create a database from a client's brief and learn how to analyse test results and problems to optimise the performance of a database. There is also focus on how businesses use social media to promote their products and services, and you will develop a plan for a business to do this.

What will I study in the second year?

In the second year there is focus on learning how to develop good websites and you will design and develop a website to meet a client's requirements. The course also develops a strong overall understanding of IT terms, standards, concepts and processes, as well as a good grasp of how to select, use, analyse and evaluate IT systems and procedures, in order to ensure effective solutions to the issues businesses and organisations face.

How is the course assessed?

There are four units over the two years. Two are assessed through coursework; one through an assessment under controlled conditions; and one through a written exam. You need to be able to demonstrate good written English skills and you will need to have (or develop) strong organisation and time management, as well as effective spoken communication.

What skills will I need and develop in this course?

Previous study of IT at GCSE level is useful but not essential. You will develop your skills in self learning and taking control of your studies. Technical skills include working with computers, together with developing your ability to think out solutions to problems, give presentations, take part in group discussion in an effective way, share work in a team with others, and write reports and technical documents.

What can the course lead to in terms of higher education and future careers?

This course provides a practical approach to modern day Information Technology and carries the same UCAS points and weight as a practically orientated A Level course. Alongside an appropriate choice of other courses, it gives progression to university, as well as expertise and skills for IT and for business more broadly.

What are the formal entry requirements for this course?

In addition to the general entry criteria that the College has, you will be expected to have achieved at least Grade 4 in GCSE English Language. A good standard of English is important during group discussion work, presentation work, and report and technical writing.

What extra support/enrichment activities are on offer?

Students have opportunities to take part in IT/ Computing related visits, such as Kingston University Gaming Lab, Emirates Aviation; IT in the Airline Business and 'behind the scenes' at Thorpe Park. Students are also encouraged to take up employment in IT environments outside college hours and to undertake work placements during the College's Wider Skills Week at the end of their first year. Occasionally a student's employment can be used as evidence towards the assessment criteria.

Subject combination advice:

The course is useful and interesting in its own right as well as complementing a wide range of subjects such as Business, Science, Art, Drama, Media or 3D Design.

How does BTEC Information Technology differ from A level Computer Science?

Overall approach: BTEC Information Technology focuses on the "user side" of computers and on understanding how to operate a range of software to get tasks completed, often in the context of a particular organisation or business. A level Computer Science deals with the "behind the scenes" work of developing and implementing various sets of instructions to enable a computer to do a particular task.

Content of the course: BTEC Information Technology has a broad variety of content which enables students to focus on particular computing interests and plans they have for next steps into further study, an apprenticeship, or employment. It works through units to understand user theory and how to produce documents, files, presentations, spreadsheets, databases etc to perform day to day tasks. A level Computer Science is more narrowly focused on computer theory and programming, consisting of the fundamentals of programming, data structures, algorithms, and object-orientated programme design. You learn about the detail of the internal workings of a computer, right down to the basics of how all data is stored using binary, covering aspects of computer architecture, showing the specifics of the fetchexecute cycle and exactly how data is accessed from main memory using assembly language instructions.

Assessment: In BTEC Information Technology 1/3 of the marks go on a formal exam and the other 2/3 of the marks are for coursework and a task done in the classroom under controlled conditions over a period of a week. In A level Computer Science 80% of the marks go on two formal exams and 20% of the marks on a coursework project.