Sandwell Academy

BTEC ICT – EXTENDED CERTIFICATE

WHY ICT?

This qualification is designed for learners who are interested in an introduction into the study of creating IT systems to manage and share information alongside other fields of study, with a view to progressing to a wide range of higher education courses, not necessarily in IT.

A course in ICT will open doors in both an academic or career based pathway. All areas of employment demand ever-increasing ICT skills to be held by its members and a qualification that is both skill and theory based can offer the foundation for further study at University or careers in public and private sector organisations in areas such as:

E-Commerce	Business Administration	Network Management
Finance	Software Engineering	Systems Analysis
Marketing	Web Development	Web Administration
Programming	Knowledge Management	Telecommunications

The BTEC ICT course is designed to provide both academic and vocational experiences. These will prepare students for their choice of career in either the world of work or Higher Education.

SPECIFIC ENTRY REQUIREMENTS

- Grade 4 in Mathematics and English

COURSE OUTLINE

4 units, 3 are mandatory, 2 are externally assessed (58%)

Unit 1: Information Technology Systems *(Mandatory)*
You will explore the relationships between the hardware and software that form an IT system, the way systems work individually and together as well as the relationship between the user and the system. You will examine issues related to the use of IT systems and the impact that these have on organisations and individuals. In this unit you will draw on your learning from across your programme to complete assessment tasks. This unit will give you a fundamental and synoptic understanding of all areas of IT, which supports progression to an IT-related higher education course.

Unit 2: Creating systems to manage information *(Mandatory)*
You will examine the structure of data, its origins and how an efficient data design follows through to an effective and useful database. You will examine a given scenario and develop an effective design solution to produce a database system. You will then test your solution to ensure it works correctly. Finally, you will evaluate each stage of the development process and the effectiveness of your database solution. These skills support progression to IT-related higher education courses or employment in a role which requires computing-related expertise.

Unit 3: Using Social Media in Business *(Mandatory)*
In this unit, you will explore different social media websites, the ways in which they can be used and the potential pitfalls when using them for business purposes. You will develop a plan to use social media strategies for business purposes to achieve specific aims and objectives. You will then implement the plan, developing and posting content and interacting with others. Finally, you will collect data on the business use of social media and review the effectiveness of your efforts. Understanding how to use social media for business purposes is useful for employment in information technology and a variety of business sectors. Social media skills are also closely linked with web and mobile applications development. This unit provides a starting point for progression to roles such as a social media specialist, content developer or web developer.

Unit 5: Data Modelling *(Optional)*
In this unit, you will investigate the fundamentals of the decision-making process. You will find out how using data modelling provides the computational ability to compare consequences, and determine a preferred course of action. You will develop the skills and techniques necessary to create complex spreadsheets, in order to produce accurate information that informs decision making. You will examine a scenario and then design, develop and test a spreadsheet; you will review your spreadsheet and make refinements based on user feedback, providing an evaluation of the effectiveness of the alternatives produced. The skills developed in this unit are useful for progression to computing or business-related higher education courses, or for use in decision making in the work place.

Unit 6: Website Development *(Optional)*
In this unit, you will review existing websites, commenting on their overall design and effectiveness. You will use scripting languages such as Hypertext Markup Language (HTML), Cascading Style Sheets (CSS) and JavaScript® and a simple text editor, or rapid application development tools. Finally, you will reflect on the website design and functionality using a testing and review process. Many software developers, database experts and systems managers need web client development skills as an integral part of their overall portfolio of expertise. This unit will prepare learners for employment as a website developer or a website development apprenticeship. This unit will also benefit learners who wish to further their studies in higher education.