

## **BTEC National IT – Key Stage 5 Statement of Intent**

*“Sometimes it is the people no one can imagine anything of who do the things no one can imagine.” Alan Turing*

BTEC National IT is a Sixth Form option available from the 2021-22 academic year.

We align to the school vision of *‘Living well together with dignity, faith and hope.’* Students are taught to live well together by exploring cyber security issues, exploring laws and ethics behind IT. Students are afforded dignity by the provision of a laptop free of charge. Students demonstrate faith as they develop their A-Level projects, overcoming syntax and logical errors to develop a fully functional programme.

SEND students are supported in understanding abstract concepts through visual demonstrations. For example, when teaching Databases, teachers practically demonstrate skills before giving students tasks based on a different scenario but demonstrate the same skills.

Pupil Premium students are provided with a free laptop to ensure that they do not fall behind their peers academically through lack of resources. These are used in Computer Science lessons and across the school for homework and to allow students to review taught content when completing tasks.

High Attaining students are challenged to merge multiple concepts together (e.g. selection and iteration in programming). Extended project work is available for students to achieve higher levels of work (e.g. the creation of a game).

### **Year 12**

#### **Substantive Knowledge**

In the Unit 2: Databases unit, students study the specification areas of:

- A1 Relational Database Management Systems
- A2 Manipulating data structures and data in relational databases.
- A3 Normalisation
- B1 Relational Database Design
- B2 Design Documentation (including queries and reports)
- C1 Producing a database solution (including database validation)
- C2 Testing and refining the database solution
- D1 Database design evaluation
- D2 Evaluation of database testing
- D3 Evaluation of the database.

In the Unit 3 Social Media Unit, students learn about the specification areas:

- A1 Social media sites.
- A2 Business use of social media.
- A3 Risks and issues.
- B1 Social Media Planning
- B2 Business requirements
- B3 Content planning and publishing
- B4 Developing an online community
- B5 Developing a Social Media policy
- B6 Reviewing and refining plans
- C1 Creating accounts and profiles.
- C2 Content creation and publication
- C3 Implementation of online community building
- C4 Data gathering and analysis
- C5 Skills, knowledge and behaviours.

**Disciplinary Knowledge**

While studying Unit 2 (Databases), students will explore the key skills behind creating a relational database. Students will be able to carry out normalisation, create tables with correct data types, and linked through relationships. Students will be able to add validation, queries, reports and forms. Students will understand the testing and evaluation stages.

While studying Unit 3 (Social Media), students will gain experience of using techniques to plan and post social media posts. They will be able to add interactive features to raise the number of likes, shares and comments on their posts.