



All Saints' Academy Computer Science Department KS5 Curriculum Overview 2023-2024

Aims and Learning Outcomes

Pearson BTEC Level 3 National Extended Certificate in Information Technology 360 GLH (475 TQT) Equivalent in size to one A Level.

4 units of which 3 are mandatory and 2 are external.

Mandatory content (83%). External assessment (58%).

This qualification is designed for learners who are interested in an introduction to 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.

| Assessment Overview |
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| Unit 2 – Creating Systems to Manage Information |
| Unit 6 – Website Design |
| Unit 1 – Information Technology Systems |

All Saints' Academy Computer Science Department KS5 Curriculum Overview, Year 13 - September 2023

| Cycle | Year 13 | Topic Overview |
|-------|---|--|
| 1 | <p>Unit 6: Website Development - Learners investigate website development principles. They will design and develop a website using scripting languages</p> <p>Learning aim, A: Understand the principles of website development A.D1 Evaluate how the principles of website design are used to produce creative, high-performance websites that meet client requirements A.P1 Compare the principles of website design used in two websites, including their suitability for the intended audience and intended purpose. A.M1 Analyse how the principles of website design are used to produce creative, high-performance websites that meet client requirements.</p> <p><u>Understand the principles of website development</u> A1 Purpose and principles of website products A2 Factors affecting website performance Produce a report describing the different types and purposes of websites. This will include an explanation of the factors that affect website performance and mathematical principles used in website development.</p> <p><u>Design a website to meet client requirements.</u> Website design B2 Common tools and techniques used to produce websites</p> <p>Marking Criteria – P1, M1, D1</p> <p>&</p> <p>Unit 1: Information Technology Systems – Re-sit, Learners study the role of computer systems and the implications of their use in personal and professional situations.</p> <p>Digital Devices in IT, Functions and their uses, Peripherals, Software, Emerging Technologies, Choosing a system, Transmitting Data, Networks and Connectivity, Operating Online, Systems and Communities, Data and Data Protection, Threats to Information Systems, Protecting Data and the impact if not, Using and Manipulating Data, Moral, Legal Ethical Issues in ICT.</p> | <p>A report describing the different types and purposes of websites. This will include an explanation of the factors that affect website performance and mathematical principles used in website development</p> <p>Learners' devised design documentation arising from the identification of client requirements.</p> |
| 2 | <p>Design a website to meet client requirements</p> <p>Learning aim B: Design a website to meet client requirements BC.D2Evaluate the design and optimised website against client requirements. BC.D3Demonstrate individual responsibility, creativity and effective self-management in the design, development and review of a website. B.P2 Produce designs for a website that meet client requirements. B.P3 Review the website design proposals with others to identify and inform improvements. B.M2 Justify the design decisions, explaining how they will meet the user's needs and be fit for purpose.</p> <p>Start to deliver - Unit 2: Creating Systems to Manage Information, Learners study the design, creation, testing and evaluation of a relational database system to manage information.</p> <ul style="list-style-type: none"> - A The purpose and structure of relational database management systems - B Standard methods and techniques to design relational database solutions - C Creating a relation database structure - D Evaluating a database development project | <p>A digital version of the website product, including an observation record sheet and supporting documentation, such as scripts and annotated screenshots, to justify design decisions. A report evaluating the design and the website against the client requirements.</p> |

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| 3 | <p>Continue to Deliver for the May/June exam, Unit 2: Creating Systems to Manage Information, Learners study the design, creation, testing and evaluation of a relational database system to manage information.</p> <ul style="list-style-type: none"> - A The purpose and structure of relational database management systems - B Standard methods and techniques to design relational database solutions - C Creating a relation database structure - D Evaluating a database development project <p>Learning aim C: Develop a website to meet client requirements C.P4 Produce a website for an intended audience and purpose. C.P5 Test the website for functionality, compatibility and usability. C.P6 Review the extent to which the website meets client requirements.</p> <p>Common tools and techniques used to produce websites & Develop a website to meet client requirements C1 Client-side scripting languages C2 Website development C3 Website review C4 Website optimisation C5 Skills, knowledge and behaviours</p> <p>Marking Criteria – P2, P3, M2, BCD2, P4, P5, P6, M3, BCD3</p> | <p>AO1 Demonstrate knowledge of database development terminology, standards, concepts and processes AO2 Apply knowledge and understanding of database development terminology, standards, concepts and processes to create a software product to meet a client brief AO3 Analyse information about database problems and data from test results to optimise the performance of a database solution AO4 Evaluate evidence to make informed judgements about the success of a database's design and performance AO5 Be able to develop a database solution to meet a client brief with appropriate justification</p> |
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Topic & Cycle Assessments, Mock Exams and Final Examinations

Year 13

| Cycle | Topics Assessed | Month |
|-------|--|-----------|
| 1 | Unit 1 – Information Systems – Resit of June | November |
| 1 | Unit 6 – Learning Aims A Deadline | October |
| 1 | | |
| 2 | Unit 1 – Information Systems – January | January |
| 2 | Unit 6 – Learning Aims B Deadline | March |
| 2 | | |
| 3 | Unit 6 – Learning Aims C Deadline | May |
| 3 | Unit 2 - Creating Systems to Manage Information, Intense | May, June |
| 3 | preparation for the 8 hour, 2 x day external exam | |