RIVERSACADEMY
West London An Aspirations Academy

BTEC IT- Curriculum Plan

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 10 curriculum overview	**Component 1: Exploring User Interface Design Principles and Project Planning Techniques**Learning Aim A: Investigate user interface design principles	**Component 1**Learning Aims B, C and D: Plan, create and evaluate a user interface	**Component 2: Collecting, Presenting and Interpreting Data**Learning Aim A: Collect and prepare data	**Component 2**Learning Aim B: Present, interpret and draw conclusions from data	Completion of Component 2 assessment, retrieval practice and improvement activities	End-of-year review, digital skills consolidation and preparation for Component 3
Key knowledge outcomes (students should know)	Purpose of user interfaces, accessibility, audience requirements, user interface design principles,	Interface design, prototyping, navigation, usability, accessibility, testing, evaluation and refinement	Data collection methods, primary and secondary data, validation, verification, data quality and data types	Spreadsheet formulae and functions, charts, dashboards, data presentation	Synoptic application of Component 1 and 2 knowledge	Retrieval of core knowledge and preparation for externally assessed content

	project planning techniques			and interpretation		
Key skills (students should be able to)	Analyse existing interfaces, identify user requirements and plan projects	Design, create and evaluate user interface prototypes using specialist software	Collect, validate and organise data accurately	Analyse data, create charts and dashboards and interpret findings	Complete coursework independently and evaluate own work	Apply digital skills confidently in realistic scenarios

	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Year 11 curriculum overview	**Component 3: Effective Digital Working Practices**Topic A: Modern technologies	**Topic B:** Cyber security	**Topic C:** Planning and communication in digital systems	Complete Component 3 content and examination preparation	Revision and exam practice	External assessment

Key knowledge outcomes (students should know)	Modern digital technologies, cloud computing, mobile technologies and collaborative working	Cyber security threats, vulnerabilities, malware, phishing, authentication, legislation and security measures	Digital communication, project planning, legislation, ethical and environmental impacts of digital technology	Synoptic understanding of all Component 3 topics	Examination techniques, command words and extended-response strategies	Secure understanding across the specification
Key skills (students should be able to)	Explain the use of modern technologies in organisations	Evaluate cyber security risks and recommend appropriate solutions	Analyse workplace scenarios and justify digital solutions	Apply knowledge to unfamiliar scenarios	Demonstrate effective exam technique	Produce well-structured extended responses using technical vocabulary

	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**

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Year 12 curriculum overview (AAQ BTEC National Information Technology)	**Component 2: Cyber Security**	Continue **Component 2: Cyber Security**	**Component 1**	Continue **Component 1**	**Component 4: Relational Database Development**Le arning Aim A	Continue **Learning Aim A**
Key knowledge outcomes (students should know)	Cyber security principles, cyber threats, malware, phishing, social engineering, vulnerabilities, attacks and organisational security	Security controls, authentication, encryption, access control, legislation, standards, policies, incident response and risk management	Core information technology principles, hardware, software, networking, cloud technologies and digital systems	Legal, ethical, environmental and organisational impacts of information technology, system performance and emerging technologies	Client requirements, database planning, entities, attributes, relationships, entity relationship diagrams and normalisation	Database design documentation, planning and preparation for implementation
Key skills (students should be able to)	Identify cyber threats and recommend appropriate	Evaluate cyber risks and justify suitable security solutions	Analyse information technology systems and	Apply technical knowledge to vocational scenarios using	Produce professional relational	Plan database development projects to meet

	security measures		evaluate their effectiveness	appropriate terminology	database designs	client requirements

	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Year 13 curriculum overview (AAQ BTEC National Information Technology)	**Component 4: Relational Database Development**Learning Aims B and C	Complete **Component 4** assessment	**Component 3: Website Development**	Continue **Component 3: Website Development**	Examination preparation, revision and resit support	Final revision, external assessment preparation and progression
Key knowledge outcomes (students should know)	Database implementation, SQL, forms, queries, reports, validation, testing, documentation and evaluation	Refinement, optimisation and completion of database solutions	Website planning, HTML, CSS, JavaScript, user experience, accessibility and responsive design	Website testing, debugging, optimisation, maintenance and evaluation	Synoptic understanding across all externally assessed components and	Strategies for success in external assessments and progression to higher education,

					examination techniques	apprenticeships or employment
Key skills (students should be able to)	Develop, test and refine fully functioning relational databases using SQL	Evaluate database solutions and recommend improvements	Design and develop responsive, accessible websites using industry-standard technologies	Test, debug and optimise websites to meet client requirements	Apply technical knowledge to vocational scenarios and examination questions	Demonstrate confident analytical, evaluation and problem-solving skills across the qualification