



Curriculum Map

Subject: Information technology (IT)

Year Group: 13

Unit 2: Creating Systems to Manage Information. In order to produce information to support many business processes as well as our social lives, relational databases are widely used to manage and process data. From the smallest in-house systems to stock control systems for large online retailers, databases are repositories of information that are a significant part of organisational operating requirements. You will examine the structure of data and 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 that it works correctly. Finally, you will evaluate each stage of the development process and the effectiveness of your database solution. In this unit you will draw on your learning from across your programme to complete assessment tasks. The skills you gain in this unit support progression to IT-related higher education courses and to employment in a role that requires computing-related expertise.

Unit 3: Social media websites are a popular way for people to communicate and share information with friends and family. You may be familiar with social media for personal use and in this unit you will discover how it can be used in a business context. 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 in a variety of business sectors. Also, social media skills are closely linked with web and mobile applications development. This unit gives you a starting point for progression to roles such as social media specialist, content developer and web developer.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Content	<p>Unit 2: Creating Systems to Manage Information (externally assessed set task)</p> <p>Key Areas: A: The purpose and structure of relational database management systems</p> <p>A1 Relational database</p>	<p>Unit 2: Creating Systems to Manage Information (externally assessed set task)</p> <p>Key Areas: B: Standard methods and techniques to design relational database solutions B1 Relational database design B2 Design documentation</p> <p>C: Creating a relation database structure</p>	<p>Unit 2: Creating Systems to Manage Information (externally assessed set task)</p> <p>Key Areas: D: Evaluating a database development project D1 Database design evaluation D2 Evaluation of database testing D3 Evaluation of the database</p> <p>Keywords: data dictionary, normalisation, normal</p>	<p>Unit 3: Using Social Media in Business (internally assessed)</p> <p>Key Areas: Learning aim A: Explore the impact of social media on the ways in which businesses promote their products and services A1 Social media websites</p>	<p>Unit 3: Using Social Media in Business (internally assessed))</p> <p>Key Areas: Learning aim B: Develop a plan to use social media in a business to meet requirements B1 Social media planning processes B2 Business requirements</p>	<p>Unit 3: Using Social Media in Business (internally assessed)</p> <p>Key areas: Learning aim C: Implement the use of social media in a business C1 Creating accounts and profiles C2 Content creation and publication</p>

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	<p>management systems</p> <p>A2 Manipulating data structures and data in relational databases</p> <p>A3 Normalisation</p> <p>Keywords: RDBMS, relational data structures, primary key, foreign key, entity relationship, referential integrity, one-to-one, one-to-many, many-to-many, normalisation, tables, fields, data types, validation</p>	<p>C1 Producing a database solution</p> <p>C2 Testing and refining the database solution</p> <p>Keywords: naming conventions, validation rules, user-generated queries, automated queries, reports, user interface, navigation, data-entry forms, sub-forms, SQL, referential integrity, functionality, security</p>	<p>test data, erroneous test data, extreme test data, fitness for purpose, constraints, maintainability,</p>	<p>A2 Business uses of social media</p> <p>A3 Risks and issues</p> <p>Keywords: Social media, target audience, brand, e-commerce, SEO, Facebook InsightsTM, Twitter AnalyticsTM, Google AnalyticsTM, audience profile, direct and indirect advertising</p>	<p>B3 Content planning and publishing</p> <p>B4 Developing an online community</p> <p>B5 Developing a social media policy</p> <p>B6 Reviewing and refining plans</p> <p>Keywords: social media policies, client requirements, target audience, timescales, Google AdwordsTM, client, stakeholders</p>	<p>C3 Implementation of online community building</p> <p>C4 Data gathering and analysis</p> <p>C5 Skills, knowledge and behaviours</p> <p>Keywords: Customisation, configuration, company profile, privacy settings, colour schemes, branding guidelines, hashtags, tagging, Facebook Insights, Twitter Analytics, Google Analytics and TweetReachTM, data analysis</p>
Skills	<ul style="list-style-type: none"> ➤ Analytical skills ➤ Critical-thinking skills ➤ Problem-solving skills ➤ Programming skills ➤ Evaluative skills ➤ Creative skills ➤ Reflective skills ➤ Media and communication skills 					

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Key questions	<ul style="list-style-type: none"> ➤ Demonstrate knowledge of database development terminology, standards, concepts and processes ➤ Explain types of relational database management systems (RDBMS) and their characteristics. ➤ Explain the use of RDBMS software tools and structured query language (SQL) for defining, modifying and removing data structures and data: ➤ Explain the role of normalisation to develop efficient data structures ➤ Apply knowledge and understanding 	<ul style="list-style-type: none"> ➤ Analyse information about database problems and data from test results to optimise the performance of a database solution. ➤ Explain the features and characteristics of relational database design techniques and their application to solve problems ➤ Develop a database solution to meet a client brief with appropriate justification 	<ul style="list-style-type: none"> ➤ Evaluate evidence to make informed judgements about the success of a database's design and performance. ➤ Evaluate the application of test data to ensure that the database solution meets requirements. ➤ Evaluate the software outcome against the given requirements and evaluate the strengths and weaknesses of the database. 	<ul style="list-style-type: none"> ➤ A.P1 Explain the different ways in which a business can use social media. ➤ A.P2 Explain the audience profiles of different social media websites. ➤ A.M1 Assess the different ways in which a business can use social media to attract a target audience. ➤ A.D1 Evaluate the business use of social media to interact with customers and promote products or services to a target audience. 	<ul style="list-style-type: none"> ➤ B.P3 Produce a plan to use social media in a business to meet its business requirements. ➤ B.P4 Review the plan with others in order to identify and inform improvements ➤ B.M2 Justify planning decisions made, showing how the plan will fulfil its purpose and business requirements. ➤ BC.D2 Evaluate the plan and use of social media in a business against business requirements. 	<ul style="list-style-type: none"> ➤ C.P5 Produce business-related content using appropriate features of social media which meet the requirements of the plan. ➤ C.P6 Review data obtained on social media usage and interaction ➤ C.M3 Optimise the content, format and features of social media which meet the requirements of the plan. ➤ BC.D3 Demonstrate individual responsibility, creativity, and effective self-management in the planning and

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	of database development terminology, standards, concepts and processes to create a software product to meet a client brief and performance					use of social media in a business context.
Assessment	<p>Unit 2 - External Assessment: This unit is externally assessed through a task set and marked by Pearson. The set task will be completed under supervised conditions for 5 hours in a two-day period set by Pearson. Part A will be carried out in three hours on the afternoon of the first day. Part B will be carried out in two hours on the morning of the second day. The assessment availability is on January and May/June of each year.</p> <p>Unit 3 - Internal Assessment: This unit is internally assessed through a series of assignments.</p>					
Literacy/ Numeracy/ SMSC/ Character	<p>Demonstrate and apply knowledge and understanding of database development terminology, standards, concepts and processes.</p> <p>Analyse and evaluate database problems and data from test results to optimise the performance of a database solution.</p> <p>Plan, record and set relevant targets with timescales.</p> <p>Review and respond to outcomes, including the use of feedback from others.</p> <p>Demonstrate own behaviours and their impact on outcomes to include professionalism, etiquette, supporting others, timely and appropriate leadership, accountability and individual responsibility.</p> <p>Demonstrate appropriate use of tone and language for verbal and written communications to convey intended meaning and make a positive and constructive impact on audience.</p> <p>Evaluate outcomes to help inform high-quality, justified recommendations and decisions.</p> <p>Respond constructively to the contributions of others, by being supportive, managing contributions, responding to objections, managing expectations, resolving conflict.</p>					