Year 1	Knowledge and Skills	Vocabulary & Reading	Checking of understanding	Rationale
Autumn Term	**Students will be introduced to the database unit 2:** Students will develop an understanding of relational database management systems and entity relationship diagrams. They will be able to use simple SQL statements to update and retrieve data. Developing an ability to normalize data from a given data set. **Topic A: The purpose and structure of relational database management systems** **A1: Relational database management systems:** Types of relational database management systems (RDBMS) and their characteristics. **A2: Manipulating data structures and data in relational databases:** Use of RDBMS software tools and structured query language (SQL) for defining, modifying and removing data structures and data. **A3: Normalisation:** The role of normalisation to develop efficient data structures **Topic B: Standard methods and techniques to design relational database solutions:** **B1: Relational database design**	Key reading identified in on-line resource Course handbook provided further understanding Numeracy is covered extensively throughout Unit 2 Summary checklists provided for some controlled assessments	Weekly Homework's- using past papers Key reading Folder checks Mock task tests Controlled assessment **Examination preparation.** Students will build knowledge of relational database. Students will learn to identify how the relational database can be developed using given dataset. Past Exam papers will be used in teaching and learning. Students will complete the Mock controlled assessment for Unit 2.	Students will study the design, creation, testing and evaluation of a relational database system 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. The skills students gain in this unit support progression to IT-related higher education courses and to employment in a role that requires computing-related expertise.

	Selection of RDBMS and SQL software, tools, techniques and processes. **B2: Design documentation:** The features and characteristics of relational database design techniques and their application to solve problems. **Topic C Creating a relation database structure** **C1: Producing a database solution:** Select and configure appropriate RDBMS and SQL tools to produce a database solution to meet client's requirements **C2 Testing and refining the database solution** **Topic D: Evaluating a database development project:** The characteristics, concepts, impact and implications of testing methodologies to monitor and evaluate database design, the database created, testing processes and success of the solution. **D1 Database design evaluation:** Evaluating a design against the given requirements: **D2 Evaluation of database testing:** Evaluating the application of test data to ensure that the database solution meets requirements. **D3 Evaluation of the database:** **Controlled Assessment** **Unit 2 -** Students will complete the controlled exam.			

Spring Term	**Unit 3(Social Media In Business)** **A1 Social Media in Business.** The following is included: 1. Social Media Websites: Developments in social media affect the way businesses promote products and services: 2. How businesses can use social media websites to support their business aims and needs. 3. Features of social media websites tailored to business needs. **A2 Business uses of social media:** Relationship between social media website and company website. **A3 Risks and Issues** Security issues related to increased company profile as a result of use of social media. **Unit 2 (Re-take) Exam Revision** All activity will be focused on revision and preparation for Unit Re-take exam **Unit 1 Information Technology Systems** Students will sit the external unit 1 Exam in January but are freed up in the final term of year 12 to begin learning some of the theory. **Learning Aim A:** **A1 Digital devices, their functions and use** The features and uses of digital devices in IT systems to meet the needs of	Key reading identified in on-line resource Course handbook provided further understanding Literacy, Numeracy, project planning, time management skills covered extensively throughout Unit 3 Summary checklists provided for each learning aim.	Weekly set Tasks Key reading Folder/Progress checks Assignment Completion Statistical data generated by social media websites, An analysis of how it was used to optimise the use of social media. A written report evaluating the use of social media in a business against the plan. Documentation showing the planning, preparation and implementation of the use of social media. Students will demonstrate their ability to set up posts and collect data about their followers.	Social media is an invention of the internet age. Nothing like it existed before, but its influence now is huge and it is an exciting, dynamic area. Students will explore different social media websites, the ways in which they can be used and the potential pitfalls when using them for business purposes. The scenario-based learning provides to explore the impact of social media on the businesses the way they promote their products and services. Students will develop and implement a social media campaign and social media strategies for business purposes to achieve specific aims and objectives. Students will develop analytical skills by reviewing the data collected from the posts. High-quality, accurate communication skills in written and verbal forms are vital for progression into higher education and in employment. Students will be confident in presenting thoughts and ideas to others, as well as producing

Summer Term	individuals and organisations. **A2 Peripheral devices and media** The features and uses of peripheral devices and media in IT systems to meet the needs of individuals and organisations. **A3 Computer software in an IT system** The concepts and implications of the use of, and relationships between, hardware and software that form large- and small-scale IT systems and their impact on individuals and organisations. **A4 Emerging technologies** How emerging technologies can be used by individuals and organisations. **A5 Choosing IT systems** How the features of an IT system can affect its performance and/or the performance of a larger IT system. **Learning Aim - F Issues** The concepts, impacts and implications of issues resulting from the use of IT systems. **F1 Moral and ethical issues** The implications, for individuals, organisations and wider society, of moral and ethical factors of using information technology. **F2 Legal issues** The legal issues relating to the use of IT systems and the implications for individuals, organisations and wider society.	Key reading identified in on-line resource (Know it Ninja) for each learning aim IT Key Terms Summary checklists provided for each learning aim.	Weekly Homework's Key reading Folder checks Revision tasks Past Exam paper questions Case studies	well-presented, accurate and appropriate documentation for all stages of this project. Students will learn how to effectively evaluate the success of a project and the factors that contributed to the final outcome, including their own skills, knowledge and behaviours. IT systems are involved in almost everything we do in society. In this unit students will be learning about hardware and software and how they form an IT system. They will learn about the relationship between users and systems. They will also learn about the decisions that individuals or businesses make and how does that affect the IT systems and business practices. Theory on digital devices has been covered before at KS4 and KS3 in ICT. It is therefore a good confidence booster to start with this section of the specification. However, they need to learn how to apply knowledge to a business context.

				It is important for students to learn about the uses, issues and implications of IT systems and their impact on individuals and organisations and the legal issues relating to the use of IT systems and the implications for individuals, organisations and wider society.

Year 2	Knowledge and Skills	Vocabulary & Reading	Checking of understanding	Rationale
Autumn Term	**Unit 1 Information Technology Systems** **Learning Aim B** **Transmitting data** The concepts, process and implications of transferring data within and between IT systems **B1 Connectivity** • Wireless and wired methods of connecting devices and transmitting data within and between IT systems. **B2 Networks** The concepts and implications for individuals and organisations of connecting devices to form a network. **B3 Issues relating to transmission of data** How the features and processes of data transmission affect the use and performance of IT systems **Learning Aim C** **Operating online**		It is important for students to experience a mock on unit 1, as this will give them exposure to the theory in examined conditions and will help us to identify problems with exam technique and areas which need to be recovered. Impact of IT systems: Online services Impact on organisations Using and manipulating data Issues: Moral and ethical issues Legal issues Students will be exposed to past paper style questions relating to this topic area. Re-coverage of any topics which mock exam analysis reveals as	It is important for students to learn how the features and processes of data transmission affect the use and performance of IT systems. Students will understand the concept of networking as they are able to visualise the school network. Students will learn about the implications for individuals and organisations of using online IT systems and how to deal with threats as this is something they will encounter and need to deal with in their everyday and working lives. **Prior learning** Theory on protecting data and information has been covered before at KS4, both in Computing and ICT and at KS3 in ICT. Much of the operating online theory will be familiar to students as it has been covered as part of the using social media in business.

	The implications for individuals and organisations of using online IT systems. **C1 Online systems** The features, impact and implications of the use of online IT systems to store data and perform tasks. **C2 Online communities** The features of online communities and the implications of their widespread use for organisations and individuals. **Learning Aim D- Protecting data and information** The issues and implications of storing and transmitting information in digital form. **D1 Threats to data,** information and systems The implications of accidental and malicious threats to the security and integrity of data, held in, and used by, IT systems.		needing further clarification.	Students will learn processes and implications of techniques for protecting data and systems. The features, characteristics and implications of using firewalls to protect data. The features, applications and implications of encryption methods used to protect data. The impact on individuals and organisations of legislation designed to protect data and IT systems. The impact of IT systems focuses on the features of online services are used to meet the needs of individuals and organisations. The features and implications of IT systems used by organisations. The uses, processes and implications for individuals and organisations of accessing and using data and information in digital form.

	D2 Protecting data The features, uses and implications of systems and procedures used to protect the data of individuals and organisations. **Learning Aim - E Impact of IT systems** The uses, issues and implications of IT systems and their impact on individuals and organisations. **E1 Online services** How the features of online services are used to meet the needs of individuals and organisations **E2 Impact on organisations** The features and implications of IT systems used by organisations **E3 Using and manipulating data** The uses, processes and implications for individuals and organisations of accessing and using data and information in digital form			

Spring Term	**Unit 5: Data Modelling** **Learning Aim A** Investigate data modelling and how it can be used in the decision-making process Investigate data modelling and how it can be used in the decision-making process • Stages in the decision making process • Spreadsheet features used to support data modelling • Using data modelling to consider alternatives • Evaluating models Documenting and justifying decisions **Learning aims (B&C)** Design a data model to meet client requirements Design a data model to meet client requirements: • Functional specification	Numeracy is covered extensively throughout Unit 5 Summary checklists provided for each learning aim. Course handbook provided for further understanding	In readiness for starting the data modelling unit in year 13, students are reminded how to use: Spreadsheets and work through a series of tasks to build up spreadsheet skills. A presentation or report evaluating the role of data modelling in the decision-making process A practical activity, involving the design and development of a data model to fulfil identified client requirements. Demonstrate project planning and management skills	Students are familiar with the use of data models that has been covered in KS3 and KS4 ICT but the focus here is on detailed design and planning followed up by development, testing and evaluation. They will design and implement a data model to meet client requirements. The aim of this unit is to give learners an understanding of the decision-making process and the role that data modelling plays in the process. Students will be given opportunity to explore the use of data modelling in a range of vocational scenarios. This could be achieved by a combination of case studies and individual research into a wide range of businesses and organisations. Students will be given time to experiment with creating and developing complex data models software to meet identified needs and make decisions, in a vocational scenario. High quality, accurate, verbal and written communication skills are vital for progressing in higher education and in employment.

	• Spreadsheet model design • Reviewing and refining data model designs			During summer term students will learn how to present their ideas and thoughts to others. They will learn selecting and applying different testing methods, creating and completing test documentation and working with others to review and refine data models. Students will learn how to effectively evaluate the success of a project, factors that contributed to the final outcome.
Summer Term	**Learning Aim C** Develop a data model to meet client requirements • Developing a data model solution • Testing the data model solution • Reviewing and refining the data model solution • Skills, knowledge and behaviours A functional specification, design documentation, spreadsheet development and testing logs.			

	A report that evaluates the effectiveness of the alternatives considered, and suggests ways in which the alternatives could be improved if the task were to be repeated.			