

	Autumn – Year 12	Spring/Summer – Year 12
Content- WHAT will be learned? What previous learning can be linked? Why this order/sequence?	<p>Management Information Systems. Students will be introduced to database theory (relational databases, DBMS, ERDs, referential integrity...) in order to learn how to design and implement a database system for a given scenario.</p> <ul style="list-style-type: none"> • RDBMS • Relational Databases • ERD • Normalisation • Table/Records/Fields • Data Types • Data Validation • Input Masks • Referential integrity • Queries • SQL • Input Forms • Reports • Macros 	<p>Social Media Project Students will be researching how businesses use social media to communicate with customers and advertise products.</p> <ul style="list-style-type: none"> • Social networks • Social medias • Viral marketing • Targeted marketing • SEO • Target Audience • Copyright Legislation • Creative Commons Licenses • Data Protection Act & GDPR • Presentation Software • Gantt Chart
Skills- What will be developed?	<p>Students will learn how to use Microsoft Access to produce systems to manage data. They will be introduced to database theory (relational databases, DBMS, ERDs, referential integrity...)</p> <p>They will learn how to produce robust systems by creating different types of objects. The databases will need to be suitable for purpose and audience. Students will learn how to produce user-friendly input forms and output reports.</p> <p>They will produce comprehensive test plans ensuring that data input fields are robust using validation methods to produce supportive outputs.</p>	<p>Students will be researching how businesses use social media to communicate with customers and advertise products. They are expected to create a presentation which would be delivered to members of the local Chamber of Commerce. They will need to use tools and software features (speaker's notes, animations, use of white space...) to produce an attractive and informative presentation.</p> <p>Students will need to provide real-world examples of businesses using social media effectively as well as identifying any flaws.</p> <p>Students will also be required to produce a comprehensive social media campaign for a business. They will need to produce a series of planning documentation (GANTT charts, post schedules and questionnaires) which will support them in implementing the campaign across different social media platforms.</p> <p>They will need to use social media sites to produce appropriate content and use analysis tools to evaluate the success of their content.</p>
Key 'How'/'Why' Questions- What powerful knowledge will be gained? What areas/themes/concepts will be explored?	<p>Most IT systems used in the industry rely on the use of a relational databases. It is essential to understand how data is stored in a relational database environment and to be able to manipulate, query, import and export data from an IT system.</p>	<p>Most businesses and organisations now rely on the use of social media to communicate with their audience and to advertise their products/services. Understanding the potential and opportunities of social media platform can be a real asset for anyone pursuing a career in marketing, communication or business management</p>
SEND- how will support be seen? Seating plans? Simplified questions?	<ul style="list-style-type: none"> • Structured lessons and resources • KnowItAllNinja Homework Tasks • Fortnightly homework task set on RDMS concepts 	<ul style="list-style-type: none"> • Structured lessons and resources • Hands on approach where students use social media sites to produce appropriate content and use analysis tools to evaluate the success of their content.
Assessment- What? Why?	<p>Students are expected to be able to sit a 10-hour controlled assessment task in the first exam window. They will need to be able to confidently break down the scenario and apply techniques to the task.</p>	<ul style="list-style-type: none"> • Assessment of student's portfolio
What memory for learning skills will be required- modelling? Concrete answers? Retrieval?	<ul style="list-style-type: none"> • Teacher demonstrations • Students practice • Interleaving of key concepts, making connections between concepts covered in this unit at KS4. 	<ul style="list-style-type: none"> • Teacher demonstrations • Students practice • Theory Concepts / Practical tasks/application
Literacy- reading, extended accurate writing and oracy opportunities	<ul style="list-style-type: none"> • KnowItAllNinja Tasks 	<p>Communicating over a social network (conventions, use of persuasive language, adapting the language to the target audience). Producing a report and a report on this unit</p>

Numeracy /computing skills	<ul style="list-style-type: none"> • Storing numerical data in computer systems • Data validation techniques 	<ul style="list-style-type: none"> • Analysing statistical information • Representing data using charts
Character development	<ul style="list-style-type: none"> • Being resourceful and resilient when being exposed to challenging new concepts • Being kind and considerate, helping other students, working as a team for problem solving. 	<ul style="list-style-type: none"> • Improving communication skills in a professional context, taking into consideration the target audience when communicating on public platforms
Equality /Diversity opportunities	<ul style="list-style-type: none"> • Ethical discussion about how personal data can be stored and used in compliance with the DPA/GDPR regulation and the potential risks of misuse of personal data (e.g. discrimination) 	<ul style="list-style-type: none"> • Identifying and reflecting on stereotypes used in marketing
Homework /Independent learning	<ul style="list-style-type: none"> • KnowItAllNinja Homework Tasks • Fortnightly homework task set on RDMS concepts 	Students work on their coursework project to meet the coursework assessment objectives within the set deadlines
CIAG coverage/links	<ul style="list-style-type: none"> • Careers in IT including: Database Administrator, Database Designer, Software Developer, App Developer 	Careers in IT including: Web Designer, Digital Marketing Specialist, SEO specialist, Web Author, Social Media Consultant

	Autumn – Year 13	Spring/Summer – Year 13
Content- WHAT will be learned? What previous learning can be linked? Why this order/sequence?	<p>Information Systems Students will build on their prior knowledge, from previous units on topics and learn about how IT systems are used in industry.</p> <p>Topics include:</p> <ul style="list-style-type: none"> - Hardware - System Software - Application Software - Moral/Ethical Issues - Legal Issues - Networking - Online Communication - Protocols - Security 	<p>Website Design</p> <p>Students learn key web design and implementation concepts. They research these concepts and apply them to design a website based on a brief. They then develop their technical skills to implement the website. This includes producing the relevant assets using graphic editing software, video editing software and producing the HTML, CSS and JavaScript code needed to build the various pages of the website.</p> <ol style="list-style-type: none"> 4.1. Internet/web 4.2. Web address / URL / Domain names / IP Address 4.3. Bandwidth / Download / Upload 4.4. Web hosting 4.5. Web browser 4.6. Hardware devices 4.7. Client Brief / Purpose & Target Audience 4.8. Component of websites 4.9. Responsive layout / Wireframe Design 4.10. Moodboard 4.11. Storyboarding 4.12. Project Plan (Gantt Chart) 4.13. Copyright laws / Creative commons licenses / Source tables 4.14. HTML / CSS / JavaScript 4.15. Picture File formats (png, jpg, gif, ico) 4.16. Video file format (mp3, mov, avi) 4.17. Animated gif 4.18. Picture File optimisation & File compression 4.19. Resizing/Cropping picture files 4.20. Embedding widgets 4.21. Test plan
Skills- What will be developed?	Students will learn about the different technologies available to businesses and be able to identify and evaluate the use of, benefits, drawbacks and risks of these technologies.	<p>They will initially produce a detailed report which analyses how two websites compare based on a range of criteria (compatibility, accessibility, navigation, consistency...)</p> <p>Students will also need to plan and create a website based on a given scenario. They will learn how to use planning documentation to gather ideas and produce mock-ups which can be shared with a client. They will learn to communicate clearly and follow strict timescales to complete a project in time.</p> <p>During the creation of the site, students will learn and combine HTML, CSS and JavaScript to produce a professional looking website. They may also decide to investigate using a CMS to help with the structure and page layout. They will need to ensure the site is fully functional and suitable for purpose. This involves a thorough set of test plans across all page elements.</p>
Key 'How'/'Why' Questions- What powerful knowledge will be gained? What areas/themes/concepts will be explored?	Students will learn about the different technologies available to businesses and be able to identify and evaluate the use of, benefits, drawbacks and risks of these technologies.	Students develop their key knowledge of web-design concepts as listed above.
SEND- how will support be seen? Seating plans? Simplified questions?	<ul style="list-style-type: none"> • Structured lessons and resources • KnowItAllNinja Homework Tasks • Exam Practice / Model Answers / Mark Schemes • RAG learning grid 	<ul style="list-style-type: none"> • Structured lessons and resources • Video Tutorials
Assessment- What? Why?	<ul style="list-style-type: none"> • Written Exam (2 hours) 	<ul style="list-style-type: none"> • Assessment of Students' Portfolios • Assessment of Pre-production designs

What memory for learning skills will be required- modelling? Concrete answers? Retrieval?	<ul style="list-style-type: none"> • Low stake assessment task • Interleaving of key theory concepts • Exam Practice / Model Answers / Mark Schemes 	<ul style="list-style-type: none"> • Assessment of student's portfolio
Literacy - reading, extended accurate writing and oracy opportunities	<ul style="list-style-type: none"> • KnowItAllNinja Homework Tasks • Exam Practice / Model Answers / Mark Schemes 	<ul style="list-style-type: none"> • Teacher demonstrations • Students practice • Theory Concepts / Practical tasks/application
Numeracy /computing skills	<ul style="list-style-type: none"> • Comparing hardware specification using the relevant units. (e.g. storage unit conversions) 	<ul style="list-style-type: none"> • Reviewing the key characteristics of assets (e.g. Graphic files and video clips) including resolution, colour depth, file size, compression rate.
Character development	<ul style="list-style-type: none"> • Getting organised and proactive when producing revision resources and strategies 	<ul style="list-style-type: none"> • Developing project management skills around the lifespan of the project (Analysis/Design/Implementation/Testing/Evaluation)
Equality /Diversity opportunities	<ul style="list-style-type: none"> • Discussion on the legal and ethical impacts of IT in society including use of personal data (Data Protection Act / GDPR), network security issues, use of AI and its impacts on jobs and working conditions, impacts of the digital divide in society. 	<ul style="list-style-type: none"> • Identifying and reflecting on stereotypes used in marketing
Homework /Independent learning	Using their knowitallninja.com account, students are producing revision materials (including mindmaps) on each chapter of the exam unit.	Students work on their coursework project to meet the coursework assessment objectives within the set deadlines
CIAG coverage/links	Careers in IT and Business Management. Business Analyst, IT Project Manager, IT Trainer, IT Adviser/Consultant, IT Support/Technician, IT Maintenance	Careers in web design and development: Web designer, graphic designer, web author, copywriter, web developer, App developer, SEO specialist