

Year 10 Curriculum Overview Plan: Digital Information Technology

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p><u>Key Theme:</u></p> <p>2 lessons per week: Component 2 coursework - learning aim A</p> <p>1 lesson a week: Preparation for component 3 exam - Learning aim A - Modern technologies</p> <p><u>Key Concepts, Knowledge & Skills to be Embedded:</u></p> <p><u>Component 3</u> - Ad hoc networks - Cloud computing - Collaborative working</p>	<p><u>Key Theme:</u></p> <p>2 lessons per week: Component 2 coursework - Learning aim B</p> <p>1 lesson a week: Preparation for component 3 exam - Learning aim B - Cyber security</p> <p><u>Key Concepts, Knowledge & Skills to be Embedded:</u></p> <p><u>Component 3</u> - Malware - Internal threats - External threats - User access restrictions</p>	<p><u>Key Theme:</u></p> <p>2 lessons per week: Component 2 coursework - Learning aim B</p> <p>1 lesson a week: Preparation for component 3 exam - Learning aim C - The wider implications of digital systems</p> <p><u>Key Concepts, Knowledge & Skills to be Embedded:</u></p> <p><u>Component 2</u> -The use of spreadsheets exam -Functions and formulas exam</p>	<p><u>Key Theme:</u></p> <p>2 lessons per week: Component 2 coursework - Learning aim C</p> <p>1 lesson a week: Preparation for component 3 exam - Learning aim D - Forms of notation</p> <p><u>Key Concepts, Knowledge & Skills to be Embedded:</u></p> <p><u>Component 2</u> - Analysing trends in data - Making suggestions for improvements based on analysis of data</p>	<p><u>Key Theme:</u></p> <p>2 lessons per week: Revision of component 2 - modern technologies exam - LAA and LAB</p> <p>1 lesson a week: Programming practice - Python basics</p> <p><u>Key Concepts, Knowledge & Skills to be Embedded:</u></p> <p><u>Component 3</u> - Ad hoc networks - Cloud computing - Collaborative working - Malware - Internal threats - External threats</p>	<p><u>Key Theme:</u></p> <p>2 lessons per week: Revision of component 2 - modern technologies exam - LAC and LAD</p> <p>1 lesson a week: Programming practice - Making a user interface with Python</p> <p><u>Key Concepts, Knowledge & Skills to be Embedded:</u></p> <p><u>Component 3</u> - Password policy - Disaster recovery policy - Acceptable use policy -Software policy</p>

<p><u>Component 2</u> -Data and information - Methods of data collection -Spreadsheet skills</p> <p><u>Links to Prior Learning:</u> Ad hoc networks, external threats and cloud computing taught across KS3.</p> <p>Spreadsheets covered at KS3 in spreadsheets unit.</p> <p><u>Key Assessment Pieces:</u> <u>Oct 2021</u> - mock exam - 1.5 hours written paper</p> <p>Hand in of Learning aim A - October</p>	<p><u>Component 2</u> -The use of spreadsheets preparation -Functions and formulas preparation - The use of a dashboard preparation</p> <p><u>Links to Prior Learning:</u> Malware taught at KS3 in Y8 and Y9 as part of the computing fundamentals unit.</p> <p>Spreadsheets covered at KS3 in spreadsheets unit.</p>	<p>- The use of a dashboard exam</p> <p><u>Component 3</u> - Password policy - Disaster recovery policy - Acceptable use policy -Software policy -Environmental issues</p> <p><u>Links to Prior Learning:</u> Password policy taught at KS3 in Y7.</p> <p>Spreadsheets covered at KS3 in spreadsheets unit.</p> <p><u>Key Assessment Pieces:</u></p>	<p><u>Component 3</u> - Flowcharts -Information flow diagrams -Tables</p> <p><u>Links to Prior Learning:</u> Flowcharts covered at KS3 in programming units.</p> <p>Spreadsheets covered at KS3 in spreadsheets unit.</p> <p><u>Key Assessment Pieces:</u> Hand in learning aim B - May 2022</p>	<p>- User access restrictions</p> <p><u>Programming</u> Variables Selection Iteration</p> <p><u>Links to Prior Learning:</u> Multiple topics from the Comp 3 exam taught including Ad hoc networks, cloud computing and malware.</p> <p>Python basics taught at KS3 in Y7, Y8 and Y9.</p> <p><u>Key Assessment Pieces:</u></p> <p><u>End of unit test</u> - May 2022</p> <p><u>Tier 3 Vocabulary Vault:</u> Network Ad-hoc Cloud Remote</p>	<p>-Environmental issues - Flowcharts -Information flow diagrams -Tables</p> <p><u>Programming</u> User interfaces Adding features to an interface using Python</p> <p><u>Links to Prior Learning:</u> Multiple topics from the Comp 3 exam taught including flowcharts, and safe passwords.</p> <p>Python basics taught at KS3 in Y7, Y8 and Y9.</p> <p><u>Key Assessment Pieces:</u> <u>Mock exam-</u> June/July 2022</p>
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<p><u>Tier 3 Vocabulary</u> <u>Vault:</u> Network Ad-hoc Cloud Remote Storage Collaboration Data Information Primary data Secondary data Qualitative data Quantitative data Spreadsheet Modelling</p> <p><u>Reading Exposure:</u> Reading of component 3 revision guide</p> <p>Excel for dummies 2016 version - FREE pdf</p>	<p><u>Key Assessment Pieces:</u> Mock exam - Nov 2022</p> <p><u>Tier 3 Vocabulary Vault:</u> -formulae -function -dashboard - spreadsheet -data -manipulation -Malware -Virus -Trojan -Hacker -Man in the middle - Phishing -Pharming -Should surfing -Encryption -Firewall -User access restrictions -Biometrics</p>	<p>Hand in learning aim B - Feb 2022</p> <p><u>Tier 3 Vocabulary Vault:</u> -formulae -function -dashboard - spreadsheet -data -manipulation - password -environment - disaster recovery -server -software</p> <p><u>Reading Exposure:</u> Reading of component 3 revision guide</p> <p>http://www.teach-ict.com/2016/GCSE/Computing/OCR_J27_6/1_6_network_security/security_proced</p>	<p><u>Tier 3 Vocabulary Vault:</u> -data -trends -flowchart -algorithm -data flow</p> <p><u>Reading Exposure:</u> Reading of component 3 revision guide</p> <p><u>Strategies to enable new concepts, knowledge & skills to embed in long-term memory:</u> Repetition, Retrieval exercises (DIN's), chunking, low-stakes quizzing, true false, odd one out, false facts, retrieval, interleaving</p>	<p>Storage Collaboration -Malware -Virus -Trojan -Hacker -Man in the middle - Phishing -Pharming -Should surfing -Encryption -Firewall</p> <p><u>Programming</u> Algorithm Iteration String Variable Selection</p> <p><u>Reading Exposure:</u> Reading of component 3 revision guide</p> <p><u>Strategies to enable new concepts, knowledge & skills to embed in long-term memory:</u></p>	<p><u>Tier 3 Vocabulary Vault:</u> - password -environment - disaster recovery -server -software -data -trends -flowchart -algorithm -data flow</p> <p><u>Strategies to enable new concepts, knowledge & skills to embed in long-term memory:</u> Repetition, Retrieval exercises (DIN's), chunking, low-stakes quizzing, true false, odd one out, false facts, Kahoot, retrieval, interleaving</p>
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<p><u>Strategies to enable new concepts, knowledge & skills to embed in long-term memory:</u> Repetition, Retrieval exercises (DIN's), chunking, low-stakes quizzing, true false, odd one out, false facts, Know it all Ninja tests, retrieval, interleaving</p>	<p><u>Reading Exposure:</u> Reading of component 3 revision guide</p> <p>https://www.smartsheet.com/how-create-dashboard-excel</p> <p><u>Strategies to enable new concepts, knowledge & skills to embed in long-term memory:</u> Repetition, Retrieval exercises (DIN's), chunking, low-stakes quizzing, true false, odd one out, false facts, retrieval, interleaving</p>	<p>https://www.bbc.com/bitesize/guides/z9tf9j6/revision/4</p> <p><u>Strategies to enable new concepts, knowledge & skills to embed in long-term memory:</u> Repetition, Retrieval exercises (DIN's), chunking, low-stakes quizzing, true false, odd one out, false facts, retrieval, interleaving</p>		<p>Repetition, Retrieval exercises (DIN's), chunking, low-stakes quizzing, true false, odd one out, false facts, Kahoot, retrieval, interleaving</p>	
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