

Year 9 Curriculum Map ICT

Year 9 ICT	MONTH	SEPTEMBER / OCTOBER	NOVEMBER / DECEMBER	JANUARY / FEBRUARY
	TERM	Autumn Half Term 1	Autumn Half Term 2	Spring Half Term 1
	LO	1. Project Lifecycle	3. Data and Information	4. Cyber Security
	Topic 1	1.1 Phases of the project life cycle and the tasks carried out in each phase	3.1 Types of Data	4.1 Types of threats
	Topic 2	1.2 The interaction and iteration between the phases of the project life cycle	3.2 the relationship of data and information	4.1 2. Malware
	Topic 3	1.3 The inputs and outputs of each phase of the project life cycle	3.3 Methods used to collect and store information.	4.1 3. Social engineering, 4.1 4. Hacking
	Topic 4	1.4 Initial project considerations	3.3.2 information technology and data collection	4.1 5. Distributed Denial of Service (DDoS), 4.1 6. pharming
	Topic 5	Understanding the tools available to manage a project (GANTT, PERT, CRITICAL PATH)	3.4 storage methods	4.2 The vulnerabilities which can be exploited in a cyber-security attack i.e.
	Topic 6	TOPIC REVIEW - Project Lifecycle	3.5. The use data and application.	
	Assessment	AP1 Test	TOPIC REVIEW	4.3 1. The impacts of a cyber-security attack
			4.3 2. Consequences of a cyber-security attack	
			TOPIC REVIEW	

Year 9 ICT	MONTH	FEBRUARY / MARCH	APRIL / MAY	JUNE / JULY
	TERM	Spring Half Term 2	Summer Half Term 1	Summer Half Term 6
	LO	4.Cyber Security & LO6 - Software Tools	6. Software Tools and Techniques	Skills Building
	Topic 1	4.4 Prevention measures	6.2.2. The purpose and suitability of methods of presenting information, 6.2.2 b. content limitations, 6.2 c. availability of information	2.3 Creating planning documentation using appropriate technology and planning tools
	Topic 2	4.5 Current relevant IT legislation, its implication and applications	6.2 d. what impact is to be achieved from distributing information, 6.2 e. selecting how the information is shared across distribution channels by individuals or organisations	2.4 How to undertake iterative testing
	Topic 3	4.6 The importance of validity, reliability and bias when collecting and using data and information	6.2 3. The advantages and disadvantages of methods used for presenting information	Application to Coursework
	Topic 4		6.3 The resources required for presenting information and the appropriateness of the use of these in context	
	Topic 5	6.1 Selection and justification of the appropriate software tools and techniques to process data to meet the defined objectives in a given context	2.1 How to initiate a project by analysing the requirements to a given context	
	Topic 6	6.2 1. Selection of the appropriate software tools and techniques to present information to meet the defined objectives in a given context. Justification of the use of the selected tool and format	2.2 How to mitigate risks through the planning process	
	Assessment	MOCK EXAM	2.3 Creating planning documentation using appropriate technology and planning tools	End of term Assessment on all topics
		TOPIC REVIEW		

Year 10 Curriculum Map ICT

Year 10 ICT	MONTH	SEPTEMBER / OCTOBER	NOVEMBER / DECEMBER	JANUARY / FEBRUARY
	TERM	Autumn Half Term 1	Autumn Half Term 2	Spring Half Term 1
	LO	1. Project Lifecycle	2. Initiate a plan	LO5 - Importing and manipulating data (SKILLS BUILDING)
	Topic 1	REVIEW OF YEAR 9 -- 1.1 Phases of the project life cycle and the tasks carried out in each phase	2.1 How to initiate a project by analysing the requirements to a given context	Spreadsheets Basics
	Topic 2	1.2 The interaction and iteration between the phases of the project life cycle	2.2 How to mitigate risks through the planning process	Spreadsheets Advance features
	Topic 3	1.3 The inputs and outputs of each phase of the project life cycle	2.3 Creating planning documentation using appropriate technology and planning tools	Spreadsheet importing and manipulating data
	Topic 4	1.4 Initial project considerations	2.4 How to undertake iterative testing	Spreadsheet - Presenting and data
	Topic 5	Understanding the tools available to manage a project (GANTT, PERT, CRITICAL PATH)		
	Topic 6	TOPIC REVIEW - Project Lifecycle	TOPIC REVIEW	TOPIC REVIEW
Assessment		AP1 Test		

Year 10 ICT	MONTH	FEBRUARY / MARCH	APRIL / MAY	JUNE / JULY
	TERM	Spring Half Term 2	Summer Half Term 1	Summer Half Term 6
	LO	LO7 - Select and Presenting Information	Progress Car Mock Coursework	Progress Car Mock Coursework
	Topic 1	Database Intro	2.1 How to initiate a project by analysing the requirements to a given context	Recall theory and apply to exam Questions
	Topic 2	Database - Importing	2.2 How to mitigate risks through the planning process	Planning - Application to coursework
	Topic 3	Database Validation	2.3 Creating planning documentation using appropriate technology and planning tools	Execution - Application to coursework
	Topic 4	Database - Input Forms	2.4 How to undertake iterative testing	Evaluation - Application to coursework
	Topic 5	Database - Query design	Application to coursework	
	Topic 6	Database - Reports / Database Security	TOPIC REVIEW	TOPIC REVIEW
Assessment	TOPIC REVIEW		MOCK EXAM	

Year 11 Curriculum Map ICT

Year 11 ICT	MONTH	SEPTEMBER / OCTOBER	NOVEMBER / DECEMBER	JANUARY / FEBRUARY
	TERM	Autumn Half Term 1	Autumn Half Term 2	Spring Half Term 1
	LO	1. Project Lifecycle & LO2 Initiate a plan	LO5 - Software Tools and Techniques	LO3 - Data and Information
	Topic 1	2.1 How to initiate a project by analysing the requirements to a given context	Skills building	3.1 Types of Data
	Topic 2	2.2 How to mitigate risks through the planning process	Skills building	3.2 the relationship of data and information
	Topic 3	2.3 Creating planning documentation using appropriate technology and planning tools	Coursework	3.3 Methods used to collect and store information.
	Topic 4	2.4 How to undertake iterative testing	Coursework	3.3.2 information technology and data collection
	Topic 5	Coursework	Coursework	3.4 storage methods
Topic 6	TOPIC REVIEW - Project Lifecycle	Coursework	3.5. The use data and application.	
Assessment	AP1 Test	Mini Assessment	AP2 Assessment	

Year 11 ICT	MONTH	FEBRUARY / MARCH	APRIL / MAY
	TERM	Spring Half Term 2	Summer Half Term 1
	LO	4.Cyber Security & LO7 Select and Presenting Informatio	LO5, LO6, LO8
	Topic 1	4.1 Types of threats, malware, social engineering, hacking, DDOS, Pharming	Spreadsheets
	Topic 2	4.2 The vulnerabilities which can be exploited in a cyber-security attack	Database
	Topic 3	4.3 1. The impacts of a cyber-security attack	Other Software tools and techniques
	Topic 4	4.4 Prevention measures	Iteratively review and evaluate the development of the solution
	Topic 5	4.5 Current relevant IT legislation, its implication and applications	Exam Practice
Topic 6	4.6 The importance of validity, reliability and bias when collecting and using data and information	REVISION	
Assessment	Mini Assessment	GCSE EXAM MAY 11th 2020	

Year 9 KS4 Curriculum Map

	Autumn Half Term 1 September to October
Year 9	Section 1: Systems architecture, memory and storage <ul style="list-style-type: none">- The CPU- Function and characteristics of the CPU- Memory- Storage
	Spring Half Term 4 - Mock Exam Feb to April
	Section 6 - Programming techniques <ul style="list-style-type: none">- SQL- Producing robust programs- Python challenges 1 - 15 - Exam revision and practice

GCSE Computing

Autumn Half Term 2 - AP Exam October to December	Spring Half Term 3 January to February
<p>Section 6: Programming Booklet (Lessons 1 - 10)</p> <ul style="list-style-type: none"> - Programming concepts - Three constructs (sequence, selection & Iteration) - Procedures and Functions <p>Section 5 Algorithms</p> <ul style="list-style-type: none"> - Computational thinking - Search and sort algorithm - Flow charts and Pseudocode - Interpret, correct and complete algorithms <p>Section 7: Logic and languages</p> <ul style="list-style-type: none"> - Logic diagrams and truth tables - Defensive design - Errors and testing - Facilities of an IDE 	<p>Section 1: Systems architecture, memory and storage</p> <ul style="list-style-type: none"> - Storage <p>Section 3: Systems software and security</p> <ul style="list-style-type: none"> - Network threats - Identifying and preventing vulnerabilities - Operating systems software - Utility software

Summer Half Term 5 April to May	Summer Half Term 6 - AP Exam May to July
<p>Section 8: Data representation</p> <ul style="list-style-type: none"> - Storage units and binary numbers - Binary arithmetic and hexadecimal - ASCII and Unicode - Images - Sound - Compression 	<p>Section 4 to continue if required</p> <p>Programming Techniques - Challenges 16 - 30</p> <ul style="list-style-type: none"> - Exam revision and practice - Revisit units based on feedback from pupils

Year 10 KS4 Curriculum Map GCSE Comput

	Autumn Half Term 1 September to October	Autumn Half Term 2 - AP Exam October to December
Year 10	Section 2: Wired and wireless networks <ul style="list-style-type: none"> - The internet - LAN and WAN - Wireless networking - Client-server and P2P networks - TCP/IP layers 	Section 4: Ethical, legal, cultural and environmental concerns <ul style="list-style-type: none"> - Computer systems in the modern world - Ethical, cultural and environmental issues - Legislation and privacy
	Spring Half Term 4 - Mock Exam Feb to April	Summer Half Term 5 April to May
Year 10	Revisit - Programming techniques <ul style="list-style-type: none"> - SQL - Producing robust programs - Python challenges revisit - Exam revision and practice Revisit units that class has not performed well in.	Revisit - Section 1: Systems architecture, memory and storage <ul style="list-style-type: none"> - The CPU - Function and characteristics of the CPU - Memory

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Spring Half Term 3

January to February

Section 6:

Programming Booklet (Revisit Lessons 1 - 10)

- Lesson 11 to 13
- Programming concepts
- Three constructs (sequence, selection & Iteration)
- Procedures and Functions
- Data structures (Lists, records and files)

Revisit Section 7:

Logic and languages

- Logic diagrams and truth tables
- Defensive design
- Errors and testing
- Facilities of an IDE

Summer Half Term 6 - AP Exam

May to July

Revisit - Section 1:

Systems architecture, memory and storage

- Storage

Section 3:

Systems software and security

- Network threats
- Identifying and preventing vulnerabilities
- Operating systems software
- Utility software

Year 11 KS4 Curriculum Map GCSE Comput

	Autumn Half Term 1 September to October	Autumn Half Term 2 - AP Exam October to December
11	NEA Project - Finish by end of NOV. - Deadline to submit 21st of March Section 2: Wired and wireless networks - The internet - LAN and WAN - Wireless networking - Client-server and P2P networks - TCP/IP layers	Section 4: Ethical, legal, cultural and environmental concerns - Computer systems in the modern world - Ethical, cultural and environmental issues - Legislation and privacy Section 3: Systems security - Network threats - Identifying and preventing vulnerabilities
	Spring Half Term 4 - Mock Exam Feb to April	Summer Half Term 5 April to May

Year :

<p>Exam revision</p> <p>Section 5 Algorithms</p> <ul style="list-style-type: none">- Computational thinking- Search and sort algorithm- Flow charts and Pseudocode- Interpret, correct and complete algorithms <p>Section 7: Logic and languages</p> <ul style="list-style-type: none">- Logic diagrams and truth tables- Defensive design- Errors and testing- Facilities of an IDE <p>Section 8: Data representation</p> <ul style="list-style-type: none">- Storage units and binary numbers- Binary arithmetic and hexadecimal- ASCII and Unicode- Images- Sound- Compression	<p>Exam revision and preparation</p>

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Spring Half Term 3

January to February

Revisit - Section 1:

Systems architecture, memory and storage

- The CPU
- Function and characteristics of the CPU
- Memory

Revisit - Section 1:

Systems architecture, memory and storage

- Storage

Summer Half Term 6 - AP Exam

May to July

Exam revision and preparation

GCSE Bus

Half Term 1 (September - October)

3.1 Business in the real world

- Purpose of business
- Basic functions and types of business
- Business Enterprise and entrepreneurship
- Dynamic nature of business
- Sole traders
- Partnerships

Half Term 4 (March - April) - MOCK exams

3.4 Human resources

3.4.1 Organisational structures

- Organisational structures
- Appropriateness
- Centralisation and decentralisation

3.4.2 Recruitment and selection of employees

- The need for recruitment
- Methods of recruitment
- Contracts of employment

Business Studies - Sequencing

Year 9

Half Term 2 (November - December)

3.1.2 Business ownership

- Private limited comp.
- Public limited comp.
- Not for profit organisations

3.1.3 Setting business aims and Obj.

- What are business aims & Obj.
- Purpose of objectives
- Changing objectives
- Use of objectives in judging success

3.1.4 Stakeholders

- Main stakeholders of businesses
- Impact of stakeholders
- Influence of stakeholders

3.1.5 Business locations

- Factors influencing the location

decision of a business

Half Term 5 (April - May)

3.4.3 Motivating employees

- Importance of motivating
- Methods to motivate staff

3.4.4 Training

- Importance of training
- Types of training undertaken

Preparation for mock will need to be also taken into account. Preparation can start early through homework, exam questions as starters, plenary Q&A.

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Half Term 3 (January - February)

3.1.5 Business planning

- The purpose of planning
- Main sections of a business plan
- Basic financial terms
- Basic financial calculations

3.1.6 Expanding a business

- Methods of expansion
- Benefits and drawbacks

Half Term 6 (June - July)

3.1 Business in the real world

3.1.3 Stakeholders

3.1.5 Business planning

3.1.6 Expanding a business

3.4 Human resources

Half Term 1 (September - October)

3.3 Business operations

3.3.1 Production processes

- Production of methods (job/flow)
- When to use each method

- Efficiency in production – lean production
- Efficiency in production – just in time (JIT)

3.3.2 The role of procurement

- Managing stock – just in time (JIT)
- Managing stock – just in case (JIC)

Half Term 4 (March - April)

3.2.3 The economic climate on businesses

- Interest rates
- Level of employment
- Consumer spending

3.2.4 Globalisation

- How UK businesses compete internationally
- Exchange rates

3.2.5 Legislation

- Employment law
- Health and Safety law and Consumer law

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Business Studies - Sequencing

Year 10

Half Term 2 (November - December)

3.3.2 The role of procurement

- Factors affecting choice of suppliers
- The effects of procurement and logistics on a business
- The value of effective supply chain management

3.3.3 The concept of quality

- Consequences of quality issues
- Methods of maintaining consistent quality: Total quality management (TQM)
- Costs and benefits of maintaining quality

Half Term 5 (April - May)

3.2.6 Competitive environment

- Impact on businesses of operating in competitive
- Uncertainty and risks businesses face

Recap units from Year 9

3.1.2 Business Ownership

- Private limited comp.
- Public limited comp.
- Not for profit organisations

Preparation for mock will need to be also taken into account. Preparation can start early through homework, exam questions as starters, plenary Q&A.

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Half Term 3 (January - February)

3.3.4 Good customer services

- Methods of good service
- Benefits of good customer service
- Dangers of poor customer service
- The ways in which advances in ICT have allowed customer services to develop

3.2 Influences on business

3.2.1 Technology

- Impact of the changing use of ICT
- E-commerce
- Digital communication

3.2.2 Ethical and environmental cond.

- Ethical considerations
- Environmental considerations part 2
- Sustainability

Half Term 6 (June - July) - **MOCK exams**

Recap units from Year 9

3.1.3 Stakeholders

3.1.5 Business planning

3.1.6 Expanding a business

3.4 Human resources

GCSE Business Studi

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Half Term 1 (September - October)

3.5 Marketing

3.5.1 Identifying and understanding customers

- The importance of identifying and satisfying
- Types of segmentation
- Purpose of market research
- Methods of market research

- Use of market research: information that may help

3.5.4 The elements of marketing mix (4Ps)

- Pricing methods

Half Term 3 (January - February)

3.5.4 The elements of marketing mix (4Ps)

- Place (the different channels of distribution used by businesses)
- e-commerce and m-commerce

- Integrated nature of the marketing mix
- Using the marketing mix to inform and implement

3.6 Finance

- Methods businesses use to raise finance
- Appropriateness of sources of finance
- Importance of cash to businesses
- Interpreting cash flow forecasts

- Difference between cash and profit

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Half Term 2 (November - December) - **MOCK exam**

3.5.4 The elements of marketing mix (4Ps)

- The factors that influence pricing decisions
- Product
- Product differentiation
- The product life cycle
- Product portfolio

- Promotional methods

Preparation for mock will need to be also taken into account. Preparation can start early through homework, exam questions as starters, plenary Q&A.

Half Term 4 (March - April)

3.6.3 Financial terms and calculations

- Basic financial terms and Basic financial calculations

- Average rate of return

- Break-even

3.6.4 Analysing the financial performance

- Purpose of financial statements
- Components of financial statements
- Interpretation of data given on financial statements

Remaining lessons it is strongly advised to go through exam papers and extended writing (9 marks and 12 marks)

Preparation for exams

- Exam papers
- Revist units
- Youtube videos on how to answer exam questions

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