

Year 9 ICT Overview

Unit	Duration (lessons)	Learning Objectives/Outcomes
Using different application software in contexts	12	Develop understanding and expertise with applications software by completing a range of context-based tasks: <ul style="list-style-type: none"> • Word Processing • Spreadsheet • Databases • Image Editing • Desktop Publishing • Presentation
Theory Lessons Software types, Operating Systems	6	Build awareness and understanding of: <ul style="list-style-type: none"> • applications software, utility software, systems software • appropriate uses of software • the advantages and disadvantages of different software applications
Basic hardware and software, types & uses of computers	12	Develop understanding and knowledge of: <ul style="list-style-type: none"> • A range of common applications where microprocessor technology is used: personal computers, mainframe computers, super computers and embedded systems • the difference between hardware and software • input devices and their appropriate use: keyboards and pads, specialist keyboards, mouse, joystick, tracker ball, touch pad, microphones, remote controls, scanners, digital cameras, webcams, touch screens, readers for bar codes, magnetic stripes and chip and pin, sensors, MIDI instruments • output devices and their appropriate use: monitor/screens, printers, speakers, head/earphones, digital projectors, plotters, actuators • storage devices and their appropriate use: hard disks, optical storage devices, magnetic tape, drives, flash memory devices

<p>Theory Lessons Intro to testing, viruses & security</p> <p>Practice exam questions & assessment</p>	<p>6</p>	<p>Develop understanding and knowledge of a range of testing methods and the importance of testing software and systems, including the danger of viruses, malware, spyware etc. and methods of prevention.</p> <p>Assessment comprising questions on topics covered so far</p>
<p>Email & Office features</p> <p>Researching & Info Quality</p>	<p>12</p>	<p>Develop skills and understanding regarding use of web-based email features such as autoreply, out-of-office, signatures, CC/BCC, priority, etc.</p> <p>Build confidence and competence in searching effectively for information on the internet and being able to identify trustworthy information sources and disregarding superfluous data, including use of advanced search engine features.</p>
<p>Theory Lessons Legislation</p> <p>Data capture</p>	<p>6</p>	<p>The main aspects of legislation relating to the use of ICT: the Computer Misuse, Data Protection, Copyright Design and Patents Acts and other legislation as it applies to the use of ICT.</p> <p>Monitoring/detecting loss or corruption of information, preventing the abuse of personal information, the purpose and costing of national databases, security of public data, links between public and private databases, national identity cards, CCTV, government access to personal data, the surveillance society.</p> <p>Different data types, alpha numeric text, numeric (integer, real for example currency, percentage, fraction), date/time, limited choice (e.g. drop down lists, radio buttons, tick list) object, logical/Boolean (e.g. yes/no true/false) types</p>
<p>Accessibility</p> <p>Social impact of computing</p>	<p>12</p>	<p>Non-conventional methods of operating a computer employed by people with disabilities and/or impairments including specialised hardware/software adaptations and considerations made in application & web design.</p> <p>How ICT systems have changed the way people go about their daily lives: communication, shopping, gaming, entertainment, education and training, banking and financial services, social networking, online/remote working, the advantages/benefits and disadvantages/dangers of using ICT/the internet</p> <p>The impact of emerging technologies on organisations: artificial intelligence, robotics, biometrics, vision</p>

		enhancement, computer-assisted translation, quantum cryptography, 3D and holographic imaging, 3D printing, virtual reality.
Theory Lessons Theory to support Accessibility and Social Impact Practice exam questions & assessment	6	Further exploration through debates around the impact on society of computers, the internet, technology etc. for example: <ul style="list-style-type: none"> • closure of small/local shops/branches • shift to web-based businesses • change in expectations of customers • change in business hours • advantages and disadvantages to customers/owners/employees • use of monitoring in society & at work Assessment comprising questions on topics covered so far
Data handling	2	Boost and refine spreadsheet software skills ahead of practice coursework unit.
Theory Lessons Systems lifecycle, project management	6	Understand the necessity for a uniform approach to system development Understand the different stages of the lifecycle and explain the purpose of each stage
Interactive systems practice coursework	22	Opportunity to combine knowledge, skills and understanding gained this year and apply them to a practice coursework unit modelled on the R002 specification. Students will follow the Systems Lifecycle and complete a piece of mock coursework.
Theory Lessons Essay question examination technique	6	Introduce techniques to plan essay question responses such as RAPIPOCC.