**ICT**

Curriculum Statement



**Intent**

ICT is an integral cog in the fundamentals of today’s world. ICT is no longer just about the tools needed to use a computer; with many of our daily tasks needed to be carried out online. ICT will be needed throughout the rest of the pupil’s lives, ICT and the online world is forever changing and our pupils will need to be able to stay abreast of these changes for it to have a positive impact on their lives. ICT is not only taught as an individual subject throughout each year group but is implemented throughout each subject area’s timetable also to allow our pupils to build the strong foundation they will need to continue to succeed.

ICT teaches the pupils how to make sense of the world around them, this is achieved by developing skills such as:

•Communication

•Data Handling

•Modelling and Simulation

•E-safety Awareness

•Cyber-safety Awareness

•Digital Literacy

Pupils not only develop skills to solve tasks and improve on work but also develop their understanding of social impacts both positive and negative of the online world.

Our aims are:

•To encourage all pupils to engage and enjoy the ICT curriculum

•Combine practical, paper-based and online activities

•Develop confidence and capability in problem solving

•How to manipulate texts

•Develop an understanding in reasoning and bias

•To understand the importance of online safety

•To have a functional understanding of digital literacy

•For pupils to understand the global and economic impacts

•To be able to use ICT to develop life skills

**Implementation**

ICT is forever changing, meaning so is the scheme of work. Certain elements of ICT are covered numerous times across the key stages, such as; e-safety, cyber awareness and life skills. Many of the elements we offer to support pupils for online safety is also offered to parents and carers through our National Online Accreditation.

Elements such as life skills are crucial in our pupils’ development and in supporting them to continue to succeed after their education at Rosewood has come to an end.

All fundamentals that are covered in ICT aim to support two greater elements; that being to safeguard the pupil against the dangers of the online world and to prepare them for their GCSE curriculum.

Pupils have 172% additional needs that are not outlined as their primary or secondary needs in their EHCP. Many pupils have attachment issues, global learning difficulties, low working memory, and many are low on the percentile for receptive and expressive languages. To support and guide our pupils a differentiated scheme of work is delivered and re-visited each term and each time in greater depth, thus allowing the pupils to develop and build on previous learning.

On entry pupils are baseline assessed enabling us to identify the level of support and differentiation each pupil may need. Within ICT pupils use a Red, Amber, and Green (RAG) system to allowing them to self – assess throughout their lesson and clear success criteria’s are presented giving opportunity for peer to peer assessment also. This allows the pupils to drive their own learning and gives them a great sense of ownership over their work.

Lessons are planned and differentiated for each individual taking their Individual Education Plan Targets into consideration. Pupil’s spelling and reading ages, any difficulties they may currently be going through and any trauma they may have preciously encountered. Within ICT there are elements that need to be approached sensitively such as online grooming, sexting and so on.

Pupils also have the opportunity to complete two GCSE’s in ICT meaning they can potentially leave with 3 accreditations in ICT.

**Impact**

Many of our pupils start Rosewood deprived of high quality resources thus meaning they have very few usable ICT skills. We aim to make the world of ICT ‘come alive’ by using interactive boards, I-Pads, Bluetooth Lego, coding Robots, Eco-bots, trips and visits and so on. ICT has become a favoured subject across the school and has been so for many years now. If a pupil enjoys a subject they naturally develop, and along with it an inquisitiveness to want to develop their understanding.

ICT is completed at GCSE by all pupils, from year 7 through to year 11 pupils. All pupils are aware of the predicted and aspirational targets. All pupils at Rosewood for the last 12 years have been given the opportunity to complete an ICT GCSE.

Due to the nature of our cohort many of our pupils find Coding and Modelling and Simulation difficult meaning that offering GCSE Computer Science would not be as beneficial as Digital Literacy. I firmly believe that we deliver the best possible courses to not only allow pupils to accomplish at school but give them the skills they need to continue to achieve post 16. Through developing skills and knowledge of the continuously evolving world of technology we aim to enable our pupils to live fulfilled, prosperous adult lives that contribute positively to society and their families.

### Year 5/6 – Rosewood School

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| Cycle 1 | Topic | Elements Covered | Resources |
| Autumn 1 | E safety  Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. | The law and e-safety. Staying safe online and cyberbullying. | http://www.childnet.com/resources/young-people-and-social-networking-sites  <http://www.digizen.org/> |
| Autumn 2 | Research and E-awareness  Be able to state some facts that the human element contributes to the risk of using computers  Be able to use links on simple websites to find information | Searching information, using and refining searches  Importing sounds, images and media.  Creating professional presentations on PowerPoint | PowerPoint  Internet |
| Spring 1 | Modelling Simulation & Systems  Use a simulation to explain real things, read and understand instructions to be able to predict outcomes. | Use a robot or create patterns to test ideas, and understand the consequences of making changes. | FLOWOL  J2Code |
| Spring 2 | Digital Literacy and ICT  Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration  use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content | Searching for specific images/content.  Search races, searching for an image in class on internet – who and how will it be found? Refine search criteria etc… | Show children a very specific image on screen, children ‘race’ each other online to find it using vocabulary in search engines.  Search for the same images on different search engines, how/why do they not appear in the same places? |
| Summer 1 | Digital literacy and ICT  Risks of working online | How to keep personal details safe  Benefits of accessing technology  Navigating websites  Reporting online behaviour | Digizen  Think you know |
| Summer 2 | Digital literacy and ICT  ICT is all around us | Discover the world of ICT, ICT is around us, look at sensors, input and output.  How our information is held and recorded. | School trip to local Co-op. |

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| Cycle 2 |  |  |  |
| Autumn 1 | E safety  Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. | Year 6 E-safety.  Social media  Evaluate effectiveness of school website for e-safety. | http://www.childnet.com/resources/young-people-and-social-networking-sites  http://www.digizen.org/ |
| Autumn 2 | Digital literacy and ICT  Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. | Evaluate effectiveness of school website for target audience,  Children write questionnaire for staff to test their e-safety knowledge,  Show children an image, create keywords #hashtags, write a sentence about the picture and group the hashtags together. Are all of the sentences on a similar theme? | internet/school website |
| Spring 1 | Computer science  design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts  use sequence, selection, and repetition in programs; work with variables and various forms of input and output  use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs | Scratch / J2Code  Complete ‘if/when’ statements online.  Debug (fix) programmes/algorithms,  Programmes of increasing complexity.  Starting to write out code using technical coding language. | Faulty algorithms which need fixing (on computers and not on computers – flashcards?) |
| Spring 2 | Digital Literacy and ICT  select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information | Collecting and analysing data in order to support evidence within key projects, or topics such as the ‘Virtual Reality’ project. | \*scratch: <http://www.code-it.co.uk/csplanning.html>  Google tech team |
| Summer 1 | Modelling, Simulation & Systems  Create a key frame animation | Draw out a light house scene – create animation (group task)  Design own key frame animation with a specific target audience. | Serif Draw Plus |
| Summer 2 | Data Handling & Development  Develop understanding and use pictograms, and identify ‘more or less’. Design questions to find things out, enter simple information into a database. | Store data in multiple ways, sort data, create simple charts from a table | Access and Excel |

### Year 7 / 8 – Rosewood School

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| Cycle 1 | Topic | Elements Covered | Resources |
| Autumn 1 | E safety  Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. | The law and e-safety. Staying safe online and cyberbullying.  Watch think you know DVD  Discuss outcomes  Design e-safety presentation for specific target audience. | http://www.childnet.com/resources/young-people-and-social-networking-sites  <http://www.digizen.org/>  Thinkyouknow  PowerPoint – Animation  Internet - Research |
| Autumn 2 | Research and E-awareness  Research to support or deny the statement that ‘The lack of technologies can disadvantage particular groups or individuals within society’.  Attach a document to an e-mail  Use a wide range of software well | Searching information, using and refining searches  Importing sounds, images and media.  Creating professional presentations on PowerPoint  Edit information well to suit the audience and purpose | PowerPoint  Internet  E-mail  Word |
| Spring 1 | Modelling Simulation & Systems  Create a spreadsheet that will allow a range of calculations to be used and tested. | Enter simple formulas into a spreadsheet  Ask ‘What If’ questions  Identify patterns and relationships in spreadsheets | Edexcel  Word |
| Spring 2 | Digital Literacy and ICT  Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration  Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content | Understand the need for care when framing questions online  Think about key words to narrow down options  Combine information from different resources to aid my research  Discuss why people have different images or answers  How to reference information which has been found on the internet | Internet  Word  Powerpoint |
| Summer 1 | Digital literacy and ICT  Risks of working online | Understanding the risks of security  Learning key words such as Trojan, virus etc…  Know why to be careful when opening e-mails from unknown sources | Internet  You Tube  Word  Images |
| Summer 2 | Digital literacy and ICT  ICT is all around us | When do we first have a digital footprint or tattoo?  Positives and negatives of having a digital footprint  Positives and negatives of social media – age restrictions | Internet  You Tube  CEOP  http://www.childnet.com/resources/young-people-and-social-networking-sites |

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| Cycle 2 |  |  |  |
| Autumn 1 | E safety  Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour. | E-safety.  Social media  Outcomes of misusing social media  Elements of the law and criminalisation  It never goes away - video | http://www.childnet.com/resources/young-people-and-social-networking-sites  Internet  Youtube |
| Autumn 2 | Digital literacy and ICT  Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. | Animation – Halloween Project  Web Design – Guy Fawkes Project  Key Frame Animation – Christmas Project | Internet/school website |
| Spring 1 | Computer science  Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts  use sequence, selection, and repetition in programs; work with variables and various forms of input and output  use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs | Scratch / J2Code  Complete ‘if/when’ statements online.  Debug (fix) programmes/algorithms,  Programmes of increasing complexity.  Write out code using technical coding language.  Start to use micro bits / Raspberry Pi | Micro Bits  Raspberry Pi  Lego |
| Spring 2 | Digital Literacy and ICT  Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information | Show a clear understanding of copyright and plagiarism.  Show a clear understanding of sourcing effectively.  Link different sources of information with live updates. | Word  Internet |
| Summer 1 | Modelling, Simulation & Systems  Develop skills from simple to complex formula  Ask ‘What If’ questions | Sweet Shop Project  Sports Shop Project  Excel Zoo Project - Assessment | Excel  Word |
| Summer 2 | Data Handling & Development  Create an Access data base.  Understand both numbers and text can be used in a database.  Use the database to create forms, queries and reports. | Murder Most Horrid Project  Assessment | Access Database  Word  PowerPoint  Internet  Guess Who – Flash Cards / Bingo game. |

### Year 9 – Rosewood School

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| Cycle 1 | Topic | Elements Covered | Resources |
| Autumn 1 | E safety  Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. | The law and e-safety. Staying safe online and cyberbullying.  Trolling and outcomes of self-trolling  Positive and negatives of internet and social medias | NSPCC – online videos  Internet - Research |
| Autumn 2 | Research and E-awareness  Be able to use a wide range of software well and display advanced use of some of the software. | Design and evaluate work and effectiveness for target audiences.  Area covered across many pieces of work – refer to KPI booklet. | Word  PowerPoint  Internet  Publisher |
| Spring 1 | Modelling Simulation & Systems  Create a spreadsheet that will allow a range of calculations to be used and tested. | Enter complex formulas into a spreadsheet  Ask ‘What If’ questions  Identify patterns and relationships in spreadsheets  Develop models according to audience needs  Assessment Task – Design and create own working model for a school tuck shop. Ask classmate to test usability. Give feedback and conclude / review outcomes. | Edexcel  Word |
| Spring 2 | Digital Literacy and ICT  Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration  Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content | Structure information for clarity and accuracy  Present work across several medias  Create a podcast  Alter presentation for purpose and audience  Ensure all work has effect SOAP | Internet  Word  PowerPoint |
| Summer 1 | Digital literacy and ICT  Risks of working online | Create an e-safety quiz for peers  Complete BCS online accredited course – new 2018. | Internet  Word  PowerPoint  Animation / Transition |
| Summer 2 | Digital literacy and ICT  ICT is all around us | What information is kept bout us?  How is used?  Positive and Negative of information held | Internet  Word |

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| Cycle 2 |  |  |  |
| Autumn 1 | E safety  Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour. | E-safety.  Social media  Outcomes of misusing social media  Elements of the law and criminalisation  Consent – Cup of Tea Video  NSPCC / Little Billy | http://www.childnet.com/resources/young-people-and-social-networking-sites  Internet  Youtube |
| Autumn 2 | Digital literacy and ICT  Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. | Animation – Car Project / linked to database  Web Design – Car Project  Key Frame Animation – Car Project | Internet/school website |
| Spring 1 | Computer science  Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts  use sequence, selection, and repetition in programs; work with variables and various forms of input and output  use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs | Scratch / J2Code  Complete ‘if/when’ statements online.  Debug (fix) programmes/algorithms,  Programmes of increasing complexity.  Write out code using technical coding language.  Use micro bits / Raspberry Pi effectively  Build and program Lego | Micro Bits  Raspberry Pi  Lego |
| Spring 2 | Digital Literacy and ICT  Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information | Show a clear understanding of copyright and plagiarism, and display this within work  Show a clear understanding of sourcing effectively and use it in your work successfully | Word  Internet |
| Summer 1 | Modelling, Simulation & Systems  Develop skills from simple to complex formula  Ask ‘What If’ questions | Football Project  Final Excel - Assessment | Excel  Word |
| Summer 2 | Data Handling & Development  Create an Access data base.  Understand both numbers and text can be used in a database.  Use the database to create forms, queries and reports. | Cars Database  Final Assessment – Correct formatting of ‘forms, queries and reports’  Adaption of layout and formatting | Access Database |

### Year 10 and 11 – Rosewood School

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| Term | Topic | Elements Covered | Resources used throughout all stages of learning |
| Autumn | Project Life Cycle | The phases of the project life cycle and the tasks carried out in each phase i.e.  a. initiation  b. planning  c. execution  d. evaluation  The advantages of following a project life cycle.  The interaction and iteration between the phases of the project life cycle i.e.    Iterative reviews occur throughout the project life cycle at the end of every phase  The output from the reviews are the inputs into the next phase or they inform actions to be implemented within the current phase.  The inputs and outputs of each phase of the project life cycle  Initial project considerations i.e.  SMART (Specific, Measurable, Achievable, Realistic, Time)  Goals  User requirements  Success criteria  Constraints/limitations i.e.   * time * resources * regulations * security/risk management   Mitigation of risks  The purpose and importance of setting objectives  Planning tools and the software types used to develop project plans i.e.  Purpose of planning tools i.e.   * Gantt * PERT (Project Evaluation and Review Technique) * critical path * visualisation diagram * flow chart * mind map * task list   Components of the planning tools    Advantages and disadvantages of different planning tools  Software types used i.e.   * Project management software * Spreadsheets * Word processors * Desktop Publishing (DTP) | OCR Cambridge National J808  Teaching Resources given by OCR  Teacher led activities  Database Software  Spreadsheet software  Internet  Presentation Software  Word |
| Spring | To be able to initiate and plan a solution to meet an identified need | How to initiate a project by analysing the requirements to a given context i.e.   * Key word analysis (e.g. select the important aspects of the brief) * Carry out a SWOT analysis * How to create SMART objectives * Scoping project into tasks and actions   Creation of schedule for solution including:   * tasks * activities * workflow * timescales * resources * milestones * contingencies   How to mitigate risks through the planning process i.e.   * time issues - use of contingencies, workflow * resources - hardware, software * regulations - how to conform to various regulations, designs for how data will be protected * security - use of passwords to protect data from being viewed and/or edited * ethical and moral - avoiding defamation of character, misuse of data and equipment, bias   Creating planning documentation using appropriate technology and planning tools i.e.   * project planning software (e.g. ProjectLibre, Microsoft Project, Gantt Project, Microsoft Excel) * project planning tools (e.g. Critical Path, GANTT, visualisation) * project documentation (e.g. data dictionaries, asset log, prototype, house style)   How to undertake iterative testing for i.e.   * functionality, how the various aspects of the solution work * usability, how easily the user can use the aspects of the solution * accessibility, how the solution caters for ‘users with a variety of different needs and abilities’   Creating and using a test plan i.e.   * test number * test type (e.g. what are you testing) * expected result * actual result/evidence * resolution * retest number/evidence using: * normal data erroneous data * extreme data |  |
| Summer | Understand how data and information can be collected, stored and used | Learners must be taught about data:     * What Data is * Data types and appropriateness of the use of these in a given context i.e. * text * alphanumeric (e.g. combination of letters and numbers) * numeric – integer, real, currency, percentage, fraction, decimal * date/time * limited choice (e.g. drop down lists, radio buttons, tick list) * object * logical/Boolean (e.g. yes/no true/false)   Information   * what information is * how data and information are related i.e. a. data must be processed to become information * information is in context whilst data has no context * information is data which has been coded, structured and has context   The methods used to collect data and store data/information, and the appropriateness of the use of these in a given context i.e.   * methods to collect and store i.e. * questionnaires / surveys - online and hard copy * email * sensors * interviews * consumer panels * loyalty schemes * statistical reports (e.g. Government departments) * secondary research methods (e.g. search engines) * Appropriateness of methods i.e. * suitability * advantages * disadvantages   Information Technology (IT) used to support data collection, and the appropriateness of the use of these in context i.e.   * barcode/QR code readers * web-based surveys * wearable technology * mobile technologies   Different storage methods and the appropriateness of the use of these in context i.e.   * cloud * physical devices   The use of data in a given context including Big Data  Applications and interaction of data stores i.e.   * law enforcement * education * health and fitness * shopping * entertainment / leisure * lifestyle   Benefits and drawbacks of the use of data |  |
| Summer 2 | Understand the factors to be considered when collecting and processing data and storing data/information | Learners must be taught:  Types of threats i.e.   * Botnet * Malware i.e. * adware * bot * bug * ransomware * rootkit * spyware * Trojan horse * virus * worm * Social engineering i.e. a. Phishing * pretexting * baiting * quid pro quo * tailgating/piggybacking * shoulder surfing   Hacking i.e.   * white hat hacking - given permission to hack into systems to identify loopholes and weaknesses * grey hat hacking - hacking into systems for ‘fun’ or to ‘troll’ * black hat hacking - hacking into systems with malicious intent to steal, exploit and sell data   Distributed Denial of Service (DDoS)  Pharming  The vulnerabilities which can be exploited in a cyber-security attack i.e.   * environmental - natural disasters * physical - theft of identity, theft of property   System - insecure software applications, weak passwords, insecure modems  The impacts of a cyber-security attack i.e.   * denial of service (DoS) to authorised others * identify theft * data destruction * data manipulation * data modification * data theft   Consequences of a cyber-security attack  loss   * financial * data * reputation   disruption   * operational * financial * commercial   safety   * individuals * equipment * finance   Prevention measures i.e.  Physical i.e.   * biometric access device * emerging measures   Logical i.e.   * access rights and permissions including authentication, usernames and passwords * anti-virus software * encryption * secure backups of data * emerging measures   Secure destruction of data i.e.   * over writing * magnetic wipe * physical destruction   Current relevant IT legislation, at time of delivery, its implications and applications i.e.   * legal protection of i.e. * individuals * organisations * technological equipment * data * information * intellectual property   Ethical and moral i.e.   * avoiding defamation of character * misuse of data, information and equipment   The importance of validity, reliability and bias when collecting and using data and information |  |

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| Year 11  Autumn 1 | To be able to import and manipulate data to develop a solution to meet an identified need | Learners must be taught:  How to create, edit, delete and process data using appropriate software tools and techniques including:  Spreadsheet software i.e.   * functions i.e. * arithmetic and rounding - SUMPRODUCT, ROUNDUP, ROUNDOWN, ROUND * decision making and error-trapping - IF, IFERROR * lookup - VLOOKUP, INDEX, INDIRECT, MATCH * joining/splitting and presenting text - CONCATENATE/CONCAT, TEXTJOIN, LEFT, RIGHT, UPPER, PROPER * date/time - DATE, NOW * counting and adding cells that meet certain criteria - COUNTIF, SUMIF, SUBTOTAL * absolute cell referencing * linking worksheets * what if analysis * macros i.e. * close/open objects * carry out repetitive processes * print and close * import data from different sources i.e. * www * surveys * iii. social media * iv. sensors * v. emerging technologies * vi. other file types * link to external data * how to present data using i.e. * pivot charts/tables * dynamic charts * combination charts * hide/unhide columns rows * applying security measures to i.e. * sheets * cells * open documents * allow read only access * export and link data to other applications/technologies (e.g. hyperlink a spreadsheet to a presentation, meaning that the data within the presentation is automatically updated with any subsequent changes to the data) * Database software i.e. * relational database i.e. two tables or more linked by foreign keys * import data from i.e.   i. www  ii. surveys  iii. social media  iv. sensors  v. emerging technologies  vi. other file types   * data validation techniques i.e.   i. presence check  ii. length check  iii. format check  iv. lookup value  v. range check  vi. input masks   * create and use i.e.   i. input forms - multiple table entry, sub forms, list box, check box, text field  ii. controls - via use of macros (e.g. from switchboard/dashboard to navigate between aspects of the database)   * design and create queries using i.e.   i. multiple tables  ii. wildcards  iii. parameters  iv. crosstab  v. grouping data in query - SUM, MAX, MIN  vi. complex query i.e. multiple criteria search   * design and create reports using i.e.   i. multiple tables  ii. results of complex queries   * applying appropriate security measures to i.e.   i. tables  ii. queries  iii. forms  iv. reports  v. database   * export and link data to other applications/technologies (e.g. hyperlink a database to a presentation, meaning that the data within the presentation is automatically updated with any subsequent changes to the data) |  |
| Autumn 2 | Understand the different methods of processing data and presenting information | Learners must be taught:  Selection and justification of the appropriate software tools and techniques to process data to meet the defined objectives in a given context i.e.  Tools i.e.   * spreadsheet * databases   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 i.e.  a. word processor  b. spreadsheet  c. databases  d. desktop publishing (DTP)  e. presentation software  The purpose and suitability of methods of presenting information i.e.   * target audience * demographics i.e.   1. gender  2. age  3. ethnicity  4. income  5. location  6. accessibility   * visibility   1. public facing i.e. website  2. targeted i.e. email   * content limitations * availability of information i.e. i. real-time (e.g. travel, traffic, weather) * delay effects * what impact is to be achieved from distributing information * selecting how the information is shared across distribution channels by individuals or organisations i.e. * messaging services i.e.   1. email  2. social media for business (e.g. LinkedIn, iMessage, Twitter, Instagram, Facebook WhatsApp)   * internal messaging services (e.g. Moodle) * websites i.e.   1. Blogs  2. vLogs  3. intranet  4. internet site  5. internal website   * Voice over Internet Protocol (VOIP) i.e.   1. Skype  2. Lync  3. Podcast   * Multimedia i.e.   1. YouTube  2. Web Conference   * vCloud Based (e.g. Google Drive, Office 365) * Mobile Apps (e.g. fitness app, travel app) * selection of presentation method i.e. * report (e.g. formal business report) * presentation (e.g. presentation to company board, presentation to customers) * graphs/charts i.e.   1. pivot  2. line  3. bar  4. pie  5. dynamic   * iv. tables (e.g. table of results) * v. integrated documents (e.g. document featuring components from other documents) * vi. end user documentation i.e.   1. user guide  2. installation guide  3. The advantages and disadvantages of methods used for presenting information.  The resources required for presenting information and the appropriateness of the use of these in context i.e.  1. hardware requirements  2. software requirements  3. connectivity requirements |  |
| Spring 1 | To be able to select and present information in the development of the solution to meet an identified need  Introduction of Coursework   * Exam Brief given to pupils | Learners must be taught:  How to select and extract data for an identified need.  How to present information using appropriate software tools and techniques i.e.  1. word processing/desktop publishing (DTP) i.e.  a. convert table to text and text to table  b. use referencing tools i.e.  i. footnotes  ii. endnotes  iii. captions  c. create tables of contents and indexes  d. advanced mail merge - linking from external data sources (e.g. databases/spreadsheets)  e. use of macros for automation of tasks (e.g. navigation)  f. link and embed to integrate data  g. use of watermarks, sections, headers, and footers  h. document review i.e.  i. comments  ii. tracking amendments  iii. reading ability (e.g. Flesch-Kincaid)  i. apply appropriate security measures to documents  j. save and export in appropriate formats (e.g. for import into other software, accessibility regardless of platform)  2. presentation techniques i.e.  a. enhancing text and objects i.e.  i. text anchoring  ii. advanced drawing tools i.e.  1. layering  2. grouping  3. flipping  4. rotating  iii. scaling  b. managing slideshows i.e.  i. sound  ii. video  iii.  iv. branching slideshows (e.g. running a slideshow from within a slideshow)  v. non - linear slideshows  c. presentation techniques - effective use of speaker notes  d. customising i.e.  ii. appropriate change of colours and backgrounds  iii. modifying templates  e. integrating with other applications i.e.  i. text to presentation  ii. presentation to text  iii. embedding of spreadsheet charts and graphs  iv. editing of embedded objects  v. linking objects  vi. launching applications from within a presentation  vii. launching websites  f. applying appropriate security measures to documents  g. saving and exporting in appropriate formats  3. web/mobile technologies, i.e.  a. HTML to create and layout electronic/digital documents  b. use of cascading style sheets (CSS) to enhance look of electronic/digital documents (e.g. use of wizards)  c. applying appropriate security measures  d. consideration of aesthetics and information design (e.g. appearance, usability, accessibility) |  |
| Spring 2 | To be able to iteratively review and evaluate the development of the solution | Learners must be taught:  How to carry out and document an iterative review i.e.  1. phase review, reviewing the following aspects at each phase of the project life cycle, considering:  a. if on track/on schedule  b. any issue(s) arising (e.g. technical, security, legal, usability)  c. any questionnaire/survey(s) from user/audience  d. resolutions to issues  e. adaptions to original plan  2. final evaluation i.e.  a. measure success against criteria/objectives  b. review deviations from original plans  c. project delivery on schedule  d. effect of processes and resources on delivering solution - software selected, tools and techniques used, compatibility between software and systems  e. maintainability - further development of system in future, use of emerging technologies, adapting to a changed environment. |  |
| Spring 2 cont… | Coursework – 60 Hours | Please see attached brief relevant for 2020/2021  <https://www.ocr.org.uk/Images/371960-specification.pdf>  <https://www.ocr.org.uk/Images/603145-developing-technological-solutions-end-of-june-2021.zip> |  |