Scheme of work – R050 IT in the digital world

## About this scheme of work

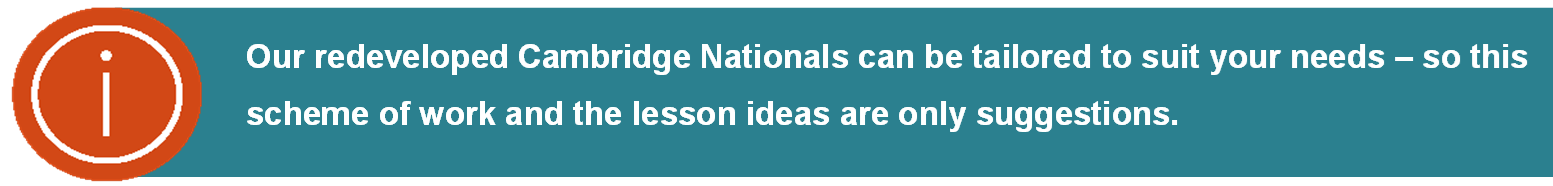
**Our redeveloped Cambridge National in IT Level 1/2 J836 is for first teaching from September 2022.**

This qualification provides lots of flexibility, allowing you to find the best route to suite your centre’s needs. Our curriculum planner shows you at a high level how you could teach the course over two or three years. Our schemes of work provide examples for how you could deliver each unit, integrating the knowledge and understanding learned in the externally assessed unit.

All schemes of work should provide opportunity for integrating the knowledge and understanding learned from the externally assessed unit content alongside the NEA assessment content. This scheme of work provides one example for delivery of this unit. You may find that a different approach would work better in your centre. We have provided a blank template should you wish to create your own or adapt one of the approaches provided.

You’ve given us lots of feedback on what you need from a scheme of work, so we’ve made sure this resource features:

* a **unit-specific** and **lesson by lesson** approach
* **simple** and **editable** Word format – or you can use our [blank template](https://www.ocr.org.uk/Images/639549-scheme-of-work-template.docx) to create your own version
* links to our [curriculum planner’s first model](https://www.ocr.org.uk/Images/619706-curriculum-planner.docx) which is one teacher teaching the qualification over two years, broken down into half terms
* each lesson’s **key words**
* **ideas** for teaching and learning with useful **links**
* some ‘warm up’ teaching ideas if you’re teaching over three years.





**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**



**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**



**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**



**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**



**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**

**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**

**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**

**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**

**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**

**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**



**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**



**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**



**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**



**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**



**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**



**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**



**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**



**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**

**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**

**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**

**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**

## Units and guided learning hours

Here is a reminder of the 3 units in the redeveloped Cambridge National in IT Level 1/2 J836:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Unit** | **Unit title** | **Guided learning hours (GLH)** | **How are they assessed?** | **Mandatory or optional?** |
| **R050** | **IT in the digital world** | **48** | **OCR set and marked** | **Mandatory** |
| R060 | Data manipulation using spreadsheets | 36 | Centre-assessed tasks, OCR moderated | Mandatory |
| R070 | Using Augmented Reality to present information | 36 | Centre-assessed tasks, OCR moderated | Mandatory |

## Assumptions

* You will adapt the SOW and lesson content to match your own timetabling arrangements and will choose how to spread the 48 GLH over the two years as best fits your needs. We have worked on the basis that the average lesson time is around 45 minutes.
* Students can access some resources outside of lessons for any online homework or extension tasks.
* You will refer to the [specification](https://www.ocr.org.uk/Images/610951-specification-cambridge-nationals-it-j836.pdf) as the key document for detailed insight into the qualification’s content and assessment requirements.

Summary of software/other equipment in this scheme of work

* There is no specific software required for this unit of work. Access to a range of software used on Android, Apple and Window operating systems would be of benefit, however.
* There is no specific equipment required apart from that needed to take and record notes. Access to different devices such as PCs,   
  Laptops, Smart Phones and other mobile devices would be of benefit.

## First year of teaching

|  |  |
| --- | --- |
| Autumn 1 | |
| **Summary of what you  will cover from the** [**curriculum planner**](https://ocr.org.uk/Images/619706-curriculum-planner.docx)**:** | **TA1 Design tools, creating original design documents using the design tools, assess suitability of documents produced** |

| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | TA 1 - Design tools  1.1 Types of design tools | You could start the unit by introducing the different tools that can be used to design technological solutions.  In the first lesson you could:   * Introduce the different types of design tools and their components * Explain the advantages and disadvantages of each of the design tools. * Explain the difference between Low Fidelity tools and High- Fidelity tools. | **Components**  **Flow charts**  **Mind maps** | Summarise the key components, advantages and disadvantages of each of the different design tools that can be used:  flow charts, mind maps, | [Guide to flowchart symbols, from basic to advanced](https://www.gliffy.com/blog/guide-to-flowchart-symbols)  (gliffy.com)  [3 Basic Types of Mind Maps](https://www.edrawsoft.com/3-basic-mind-map-types.html)  (edrawsoft.com)  Note: Low or High-Fidelity tools refers to the level of details for using relevant design tools. This could be high, medium, or low. | **R060** **TA1** and **R070 TA2** Students are required to use a range of design tools to plan their products in the task 1 for both NEAs |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| 2 | TA 1 - Design tools  1.1 Types of design tools | This is a continuation of the first lesson focussing on the other design tools from the specification.  Students could create knowledge organisers for each of the design tools. | **Components**  **Visualisation diagrams**  **Wireframes** | Summarise the key components, advantages, and disadvantages of each of the different design tools that can be used: visualisation diagrams, wireframes. | [Visualisation Diagrams](http://www.lakelandscomputing.com/visualisation-diagrams.html)  (lakelandscomputing.com)  [What Is a Wireframe & How to Design Them: A Beginner’s Guide](https://designshack.net/articles/graphics/what-is-a-wireframe/)  (designshack.net) | **R060 TA1** and **R070 TA2** Students are required to use a range of design tools to plan their products in the task 1 for both NEAs |
| 3 | TA 1 - Design tools  1.1 Types of design tools | Summarise the software that can be used to create the different design tools.  You could:   * Divide the class into small groups and ask each group to find 3 software examples that can be used to create a design tool * Each groups produces a summary sheet on their design tool * Include Storyboards and Mood boards as these are needed in the R060 and R070 NEA Units. | **Components**  **Flow charts**  **Mind maps**  **Visualisation diagrams**  **Wireframes** | Summarise the types of software that can be used to create the design tools.  Justify the selection of different software to create design tools. | [Compare the 10 best mind mapping software of 2021](https://thedigitalprojectmanager.com/mind-mapping-software/)  (thedigitalprojectmanager.com)  [Flowchart software](https://www.lucidchart.com/pages/examples/flowchart_software)  (lucidchart.com)  [10 best online flowchart software of 2021](https://thedigitalprojectmanager.com/flowchart-software/)  (thedigitalprojectmanager.com)  [10 tools for creating infographics and visualisations](https://moz.com/blog/10-tools-for-creating-infographics-visualizations)  (moz.com)  [Transform the way you design software](https://www.mockflow.com/)  (mockflow.com)  [Life’s too short for bad software!](https://balsamiq.com/)  (balsamiq.com) | **R060 TA1** and **R070 TA2** Students are required to use a range of design tools to plan their products in the task 1 for both NEAs |
| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| 4 | TA 1 - Design tools  1.1 Types of design tools | This follows on from lesson 1 and 2 and you could provide scenarios for students to work through.   * Students select the correct design tools * Produce design documents to meet to answer scenarios requirements. * Produce Low Fidelity and High-Fidelity versions of the design documents.   These activities could be given as a homework. | **Create**  **Suitability**  **Flow charts**  **Mind maps**  **Visualisation diagrams**  **Wireframes** | Select the appropriate design tool for a scenario.  Produce a design document using the design tools to meet the scenario needs. | Flow charts  [Create Presentations, Infographics, Design & Video](https://www.visme.co/)  (visme.co)  Wireframes  [The go to free online wireframing tool](https://wireframe.cc/)  (wireframe.cc)  [The differences in wireframe fidelity: from low to high fidelity wireframes](https://blog.hubspot.com/website/high-fidelity-wireframe)  (blog.hubspot.com) | **R060 TA1 and R070 TA2** Students are required to use a range of design tools to plan their products in the task 1 for both NEAs |
| 5 | TA 1 - Design tools  1.1 Types of design tools | This is a continuation of the previous lesson work.  You could get students:   * Practise producing the documents using different design tools * Different contexts could be provided for students to produce the documents:   + Spreadsheets   + Augmented Reality (AR) SDKs   + Mobile apps   + Websites. | **Create**  **Suitability**  **Flow charts**  **Mind maps**  **Visualisation diagrams**  **Wireframes** | Select the appropriate design tool for a scenario.  Produce a design document using the design tools to meet the scenario needs. | Provided in previous lessons | **R060 TA1 and R070 TA2** Students are required to use a range of design tools to plan their products in the task 1 for both NEAs. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| 6 | TA 1 - Design tools  1.1 Types of design tools | This is a continuation of the previous lesson work.  You could get students:   * Practise producing the documents using different design tools * Different contexts could be provided for students to produce the documents:   + Spreadsheets   + Augmented Reality (AR) SDKs   + Mobile apps   + Websites. | **Create**  **Suitability**  **Flow charts**  **Mind maps**  **Visualisation diagrams**  **Wireframes** | Select the appropriate design tool for a scenario.  Produce a design document using the design tools to meet the scenario needs. | Provided in previous lessons | **R060 TA1 and R070 TA2** Students are required to use a range of design tools to plan their products in the task 1 for both NEAs. |
| 7 |  | The rest of the term can build upon the R050 Design tools content and link the work to:   * **R060: TA1**- Design tools including Storyboards * **R070: TA2.2** – Design tools including Storyboards and Mood boards. |  |  |  | **R060 TA1**  **R070 TA2** 2.2 |

|  |  |
| --- | --- |
| Autumn 2 | |
| **Summary of what you  will cover from the** [**curriculum planner**](https://ocr.org.uk/Images/619706-curriculum-planner.docx)**:** | **TA2 Human Computer Interface in everyday life**  **TA3 How information and data is used** |

| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | **R050:** **TA2** - Human Computer Interface in everyday life  2.1 Purpose, importance and use of HCI in application areas | In this lesson students can be given the opportunity to investigate what a Human Computer Interface (HCI) is and how it is used.    In small groups students could research how HCI is used in each of the following areas:   * Banking * Embedded systems * Entertainment * Fitness * Home appliances * Retail.   For each of the areas a group of students could produce   * Visualisation Diagrams of at least 3 examples of a HCI that is used in that area * A list of the advantages and disadvantages of using an HCI in the selected examples.   The groups can then share the research that they gathered.  The research activities could be given as a homework. | **Purpose**  **Human computer Interface**  **Visualisation diagram** | Review the use of HCI in each of the areas identified in the specification.  Identify the importance, advantages and disadvantages of using an HCI. | [The Alan Turing Institute human computer interaction theory](https://www.turing.ac.uk/research/research-areas/computer-systems-architectures/human-computer-interface)  (turing.ac.uk)  [Adobe human computer interaction information](https://xd.adobe.com/ideas/principles/human-computer-interaction/man-and-machine-guide-to-human-computer-interaction/)  (xd.adobe.com) Adobe human computer interaction information)  [BBC Bitesize Human computer interfaces (HCI)](https://www.bbc.co.uk/bitesize/guides/z4b3pg8/revision/3)  (bbc.co.uk)  [A guide to human computer interface](https://www.softwaretesttips.com/human-computer-interface/)  (softwaretesttips.com) | **R060 TA1** 1.2 HCI use in spreadsheet solutions |
| 2 | **R050:** **TA2** - Human Computer Interface in everyday life  2.1 Purpose, importance and use of HCI in application areas | This is a continuation of lesson 1 and will probably cover a number of lessons to ensure the quality of the work is high.  You could then collate all the work together and provide each student with the information for the full set of areas from the specification. |  |  |  | **R060 TA 1** 1.2 HCI use in spreadsheet solutions |
| 3 | **R050:** **TA2** - Human Computer Interface in everyday life  2.2 Hardware considerations | This lesson looks at the importance of how the design of a HCI is affected by the hardware that it will be used on.  You could:   * consider non-standard users * Identify the input and output devices required for each interaction method * Explain the levels of processing power required for different HCIs. | **Display**  **Memory**  **Processing Power** | Explain what processing resources are required for a HCI. | [Theory of human computer interaction](https://psu.pb.unizin.org/ist110/chapter/5-2-human-computer-interaction/)  (Penn State University – psu.pb.unizin.org)  [Human machine interface](https://www.britannica.com/technology/human-machine-interface)  (britannica.com)  [Human computer interaction](https://cs3240team9.wordpress.com/category/interactive-devices/)  (wordpress.com)  [Human computer interaction](https://www.microsoft.com/en-us/research/group/human-computer-interaction/)  (microsoft.com) | **R060 TA 1** 1.2 HCI use in spreadsheet solutions |
| 4 | **R050:** **TA2** - Human Computer Interface in everyday life  2.4. User interaction methods | This lesson looks at how humans interact with different devices.  You could:   * Identify all the ways that humans can interact with a computer system * Explain the advantages and disadvantages of each form of interaction method. | **Gesture**  **Keyboard**  **Mouse**  **Touch**  **Voice** | Explain how users interact with computer systems.  Explain the advantages and disadvantages of each interaction method. | [Theory of human computer interaction](https://psu.pb.unizin.org/ist110/chapter/5-2-human-computer-interaction/)  (Penn State University – psu.pb.unizin.org)  [Human computer interaction](https://www.microsoft.com/en-us/research/group/human-computer-interaction/)  (microsoft.com) | **R070 TA4** 1.3 Devices used with AR |
| 5 | **R050:** **TA2** - Human Computer Interface in everyday life  2.3 Software considerations | In this lesson you could give students a research task to assess how existing HCIs operate and look on different Operating Systems.   * Students compare the HCI used on:   + Windows based machines   + Android based machines   + OS/iOS based machines * Students compare the difference between mobile and desktop versions * Students look at consistencies / differences between the HCIs.   These activities could be given as a homework to look at devices at home. | **Operating systems**  **Interaction methods**  **HCI Layout** | Explain how different operating systems enable different interactions.  How different devices enable different interface designs and interactions. | [The human computer interface](https://www.technologyuk.net/computing/computer-software/operating-systems/human-computer-interface.shtml)  (technologyuk.net)  [Window interfaces](https://www.encyclopedia.com/computing/news-wires-white-papers-and-books/window-interfaces)  (encyclopedia.com)  [Design for andriod](https://developer.android.com/design)  (android.com)  [Android interfaces](https://link.springer.com/chapter/10.1007/978-1-4842-0100-8_7)  (springer.com)  [Human interface guidelines](https://developer.apple.com/design/human-interface-guidelines/)  (developer.apple.com)  [iOS design themes](https://developer.apple.com/design/human-interface-guidelines/ios/overview/themes/)  (developer.apple.com) | **R070 TA4** 1.3 Devices used with AR |
| 6 | R050:TA2 -Human Computer Interface in everyday life  2.3 Software considerations | This is a continuation of the previous lesson with students looking at a range of Operating systems on both mobile and desktop devices. | **Operating systems**  **Interaction methods**  **HCI Layout** | Explain how different operating systems enable different interactions.  How different devices enable different interface designs and interactions. | [UK software and interfaces](https://www.technologyuk.net/computing/computer-software/operating-systems/human-computer-interface.shtml)  (technologyuk.net)  [Window interfaces](https://www.encyclopedia.com/computing/news-wires-white-papers-and-books/window-interfaces)  (encyclopedia.com)  [Android interfaces](https://developer.android.com/design)  (developer.android.com)  [GUI design for android apps Part 1](https://link.springer.com/chapter/10.1007/978-1-4842-0100-8_7)  (springer.com - Android interfaces)  [iOS design themes](https://developer.apple.com/design/human-interface-guidelines/ios/overview/themes/)  (developer.apple.com)  [macOS design themes](https://developer.apple.com/design/human-interface-guidelines/macos/overview/themes/)  (developer.apple.com) | **R070 TA1** 1.3 Devices used with AR |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| 7 | **R050:** **TA2** - Human Computer Interface in everyday life  2.3 Software considerations | Students can continue with their research looking at existing HCI for different digital platforms.   * Identify the consistencies / differences between the HCI for   + Database   + Mobile Apps   + Spreadsheet   + Website. * Explain why the HCIs are different to meet the needs of the platforms’ users. | **Applications**  **Interaction methods**  **HCI Layout** | Explain how different digital platforms have different interface designs and components. | [Excel user interface](https://www.real-statistics.com/excel-environment/excel-user-interface/)  (real-statistics.com)  [iOS design themes](https://developer.apple.com/design/human-interface-guidelines/ios/overview/themes/)  (developer.apple.com)  [macOS design themes](https://developer.apple.com/design/human-interface-guidelines/macos/overview/themes/)  (developer.apple.com) | **R060 TA 1** 1.2.3 HCI use in spreadsheet solutions |
| 8 | **R050**: **TA3** Data & Testing  3.1 Information & data, 3.2 Data use | This lesson looks at what data is and what information is. The lesson explores how data is converted into information.   * Identify the differences between data and information * Identify how data is converted into information * Identify the different types of data that exist * Knowledge organisers of the different types of data and the characteristics * Explain the use of the | **Data**  **Information**  **Alphanumeric**  **Boolean**  **Date**  **Numeric**  **Text** | Explain the difference between data and information.  Explain the different types of data that can be used in different contexts.  Explain the reason for using those types of data. | [BBC Bitesize A definition of data - Data, information and knowledge](https://www.bbc.co.uk/bitesize/guides/zkfbkqt/revision/1)  (bbc.co.uk)  [Types of data](https://www.teach-ict.com/ks3/year7/data_handling/miniweb/pg7.htm)  (teach-ict.com)  [BBC Bitesize Databases and data capture](https://www.bbc.co.uk/bitesize/guides/z8yg87h/revision/1)  (bbc.co.uk)  [Types of computers](https://www.teach-ict.com/ks3/year7/data_handling/miniweb/pg7.htm)  (teach-ict.com)  [OCR J808 Teacher delivery pack module 1](https://www.ocr.org.uk/Images/467124-teacher-delivery-pack-module-1.zip)  (ocr.org.uk) **\***  **\*** This link refers to current specification resources but are relevant to the new specification. | **R060 TA 2**  2.1 Use spreadsheet tools and techniques to create the solution |
| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
|  |  | * different types of data in different contexts   These activities could be given as a homework with students looking at data use at home such as energy smart meters, online shopping. |  |  |  |  |
| 9 | **R050**: **TA3** Data & Testing  3.2 Data use  3.2.2 The difference between validation and verification  3.2.3 Data validation tools  3.2.4 Data verification tools | This lesson looks at how data integrity can be improved by using different validation and verification tools.   * Explain the difference between validation and verification * Create flash cards of the different types of data validation tools and their uses. * Research websites where users book appointments, flights, holidays etc and create visualisation diagrams of pages highlighting data validation tools being used this could be set as homework) * Explain why Double entry and manual checking is used. | **Validation**  **Verification**  **Validation tools**  **Verification tools** | Explain the difference between validation and verification.  Explain the importance of using validation and verification tools.  Describe how validation and verification tools are used in different contexts. | [BBC Bitesize Data validation and verification](https://www.bbc.co.uk/bitesize/guides/zdvrd2p/revision/1)  (bbc.co.uk)  [Validation techniques](https://www.computerscience.gcse.guru/theory/validation)  (computerscience.gcse.guru)  [Validation and verification](https://www.teach-ict.com/gcse_new/databases/validation_verification/miniweb/index.htm)  (teach-ict.com)  [Validation and verification](https://www.bitsofbytes.co/validation-and-verification.html)  (bitsofbytes.co) | **R060 TA 2**  2.1 Use spreadsheet tools and techniques to create the solution |

|  |  |
| --- | --- |
| Spring 1 | |
| **Summary of what you  will cover from the** [**curriculum planner**](https://ocr.org.uk/Images/619706-curriculum-planner.docx)**:** | **R060** |

| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| --- | --- | --- | --- | --- | --- | --- |
|  | **This term is all about teaching R060** | | | | |  |

|  |  |
| --- | --- |
| Spring 2 | |
| **Summary of what you  will cover from the** [**curriculum planner**](https://ocr.org.uk/Images/619706-curriculum-planner.docx)**:** | **R060 Coursework**  **R070 – TA1 SoW** |

| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | **This term is all about completing R060 Assessment and learning unit R070 TA1 content** | | | | |  |

|  |  |
| --- | --- |
| Summer 1 | |
| **Summary of what you  will cover from the** [**curriculum planner**](https://ocr.org.uk/Images/619706-curriculum-planner.docx)**:** | **R060 Coursework**  **R050 – TA3 How data is collected and stored**  **R070 – TA2 SoW** |

| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | **R060: NEA Assessment (submit for moderation) – minimal time required** | | | | |  |
| 2 | **R050:** TA3 -Data and testing  3.3 Data collection methods | This lesson is about how data can be collected and stored in the wider context.  You could ask students to:   * Research into the advantages and disadvantages of primary and secondary data collection methods * Students produce summary/flash cards for each Primary and Secondary method in the specification explaining:   + How the method collects data   + What data can be collected   + Contexts where method can be used   + Disadvantages of the method.   These activities could be given as a homework. | **Primary methods**  **Secondary methods**  **Suitability of use** | Explain the purpose of different data collection methods.  Select appropriate data collection methods for different contexts. | [Data collection methods for obtaining quantitative and qualitative data](https://www.leadquizzes.com/blog/data-collection-methods/)  (leadquizzes.com)  [OCR J808 Teacher delivery pack module 7](https://www.ocr.org.uk/Images/481047-teacher-delivery-pack-module-7.zip)  (ocr.org.uk)  **\***  **\*** This link refers to current specification resources but are relevant to the new specification. |  |
| 3 | **R050:** TA3 -Data and testing  3.4 Storage of collected data | This lesson is about how data is stored in different locations.  You could ask students to create the following:   * Students produce a Presentation with a slide about each location and device * This can be done in small groups * Students can be given a scenario and be asked to create a presentation that justifies the selection of a storage location for that scenario   These activities could be given as a homework. | **Logical location**  **Cloud**  **Physical location**  **Internal device**  **External device** | Identify the characteristics of each storage location and device.  Explain the advantages of each storage location and device.  Explain the disadvantages of each storage location and device. | [Storage devices](https://www.teach-ict.com/gcse_new/computer%20systems/storage_devices/miniweb/index.htm)  (teach-ict.com)  [Magnetic storage](https://www.teach-ict.com/2016/AS_Computing/OCR_H046/1_1_characteristics_components/113_input_output_storage/storage/miniweb/pg3.php)  (teach-ict.com)  [Storage devices](https://www.computerscience.gcse.guru/theory/storage-devices)  (computerscience.gcse.guru) |  |
| 4 | **R050:** TA3 -Data and testing  3.4 Storage of collected data | This is a continuation of the previous lesson. | **Logical location**  **Cloud**  **Physical location**  **Internal device**  **External device** | Each storage location and device.  Explain the advantages of each storage location and device.  Explain the disadvantages of each storage location and device. | [Storage devices](https://www.teach-ict.com/gcse_new/computer%20systems/storage_devices/miniweb/index.htm)  (teach-ict.com)  [Magnetic storage](https://www.teach-ict.com/2016/AS_Computing/OCR_H046/1_1_characteristics_components/113_input_output_storage/storage/miniweb/pg3.php)  (teach-ict.com)  [Storage devices](https://www.computerscience.gcse.guru/theory/storage-devices)  (computerscience.gcse.guru) |  |
| 5 | **R050:** TA5 -Digital communications  5.1. Types  5.2 Software | This lesson is about the different digital communication methods that are available and their use. You could ask students to work in small groups:   * In small groups students can produce summary sheets for each type of communication including: * Purpose   + Advantage   + Disadvantage   + Examples of uses   + Software used to create. | **Types of communication**  **Software used to create** | Explain the purpose and use of different types of communication.  Identify the software used to create the types of communication. | [BBC Bitesize Technology and business](https://www.bbc.co.uk/bitesize/guides/zdmfpg8/revision/3)  (bbc.co.uk)  [Software classification](https://studyrocket.co.uk/revision/gcse-computer-science-aqa/written-assessment/software-classification)  (studyrocket.co.uk)  [OCR J808 Teacher delivery pack module 5](https://www.ocr.org.uk/Images/475797-teacher-delivery-pack-module-5.zip)  (ocr.org.uk) **\***  **\*** This link refers to current specification resources but are relevant to the new specification. |  |
| 6 | **R050:** TA5 -Digital communications  5.1. Types  5.2 Software | This is a continuation of the previous lesson.   * Produce summary sheets for each of the different software explaining:   + Characteristics of the software   + Examples of use in business   + Compatibility across different devices. | **DTP**  **Office Applications**  **PC**  **Macs**  **Mobile** | Identify the characteristic of each type of software.  Justify the use of different software for different contexts. | [Software 101: a complete guide to different types of software](https://www.goodcore.co.uk/blog/types-of-software/)  (goodcore.co.uk)  [What is application software and its types](https://www.educba.com/what-is-application-software-its-types/)  (educba.com)  [Types of software](https://www.youtube.com/watch?v=BTB86HeZVwk)  (YouTube) |  |
| 7 | **R050:** TA5 -Digital communications  5.3 Digital Devices | This lesson is about the different devices that are used to communicate information.  This lesson content links well to the TA5.4 and TA5.5 with understanding being further developed when relationships between content is emphasised  You could ask students to:   * Create mind map of devices with sub nodes containing:   + Characteristics   + Use   + Audiences to communicate to   + Examples of use in society and business. | **Smartphones**  **Smart TV**  **PC/Laptop**  **Tablet**  **Smartboard** | Identify the characteristics of the different digital devices.  Justify the use of the device in different contexts. |  | **R070 TA4** 1.3 Devices used with Augmented Reality (AR) Products |
| 8 | **R050:** TA5 -Digital communications  5.4 Distribution channels | This lesson is all about the different distribution channels that can be used by devices to communicate information.  This lesson links with the content in TA5.1, TA5.3 and TA5.5.  You could ask students to create:   * Knowledge organisers of different distribution channels including:   + Characteristics   + Advantages   + Disadvantages   + Connection method   + Device used on   + Communication type suitable for * Mind map of different channel connections including:   + Characteristics   + Advantages   + Disadvantages * These activities could be given as a homework. | **Distribution channel**  **Channel connectivity** | Identify suitable distribution channels for different contexts.  Justify the use of a distribution channel for different contexts. | [Connectivity](https://www.csnewbs.com/ctech-1-4-connectivity)  (csnewbs.com)  [9 digital marketing channels (that actually work)](https://www.spiralytics.com/blog/digital-marketing-channels/)  (spiralytics.com)  [Internet connection and access methods](https://stevessmarthomeguide.com/connect-methods/)  (stevessmarthomeguide.com) | **R070 TA4** 1.3 Devices used with Augmented Reality (AR) Products |
| 9 | **R050:** TA5 -Digital communications  5.5. Audience demographics | This lesson is about the key aspects that can be used to target audiences by.  You could:   * Summarise why audience demographics is important * Get students to create a mind map of the different demographic characteristics including:   + Characteristic of group   + Main distribution channels used   + Main digital devices used   + Examples of businesses using targeting the groupings. | **Accessibility**  **Age**  **Gender**  **Location** | Identify the different audience demographics used by a business.  Explain why a business choose the digital communication type and connection method to use with their business. | [BBC Bitesize Target audience](https://www.bbc.co.uk/bitesize/guides/zy24p39/revision/1)  (bbc.co.uk)  [A blog on how to engage audiences](https://kbcreativedigital.com/engage-compel-blog/top-16-demographics-of-your-audience/)  (kbcreativedigital.com)  [Target audiences](https://www.youtube.com/watch?v=Ic0IF5qVK0I)  (YouTube) |  |

|  |  |
| --- | --- |
| Summer 2 | |
| **Summary of what you  will cover from the** [**curriculum planner**](https://ocr.org.uk/Images/619706-curriculum-planner.docx)**:** | **TA6 The Internet of Everything (IoE)**  **R070 – TA3 SoW** |

| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | **R050:** TA6 -Internet of Everything (IoE)  6.1 use of IoE | This lesson introduces the Internet of Things and how the WWW and Internet are used to allow the IoE to exist.  You could:   * Explain the difference between the Internet and the World Wide Web (WWW) * Explain the 4 pillars of the IoE and how they interact * Get your students to list all the items that they own that are linked to the internet * In groups choose one item and draw a Flow Chart or Mind map of:   + How data is collected   + What data is collected | **Internet of Everything**  **People**  **Device**  **Data**  **Process** | Explain what the IoE is.  Explain how the 4 Pillars of the IoE interact. | [What is IoT?](https://www.oracle.com/uk/internet-of-things/what-is-iot/)  (oracle.com)  [What is the internet of things?](https://www.wired.co.uk/article/internet-of-things-what-is-explained-iot)  (wired.co.uk)  [What is the internet of things (IoT)?](https://www.ibm.com/blogs/internet-of-things/what-is-the-iot/)  (ibm.com)  [IoT – internet of things](https://www.youtube.com/watch?v=6mBO2vqLv38)  (YouTube)  [What is IoT (internet of things)?](https://www.youtube.com/watch?v=6YaXKxXSli0&t=1s)  (YouTube)  [The four pillars of IoT](https://www.open.edu/openlearn/ocw/mod/oucontent/view.php?id=48819&section=1)  (open.edu) | **R070 TA1:** TA1 - Augmented Reality (AR) (Purpose and uses, Types of AR, Devices used with AR) |
|  |  |  |  |  |  |  |
| **Lesson no.** | **Topic areas/sub topic areas** | **Lesson ideas and activities** | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
|  |  | * + How data is transmitted   + How the data is processed.   Where the information is then used. |  |  |  |  |
| 2 etc | **R050:** TA6 -Internet of Everything (IoE)  6.1 use of IoE  6.2. Application areas in everyday life | This is a continuation of the previous lesson.  You could then:   * Explain the advantages and disadvantages of the IoE * Students in small groups could research and create a presentation about how the IoE is used in different areas of everyday life * These activities could be given as a homework - research into what IoE is used at home. | **IoE**  **Security threats**  **Energy management**  **Health**  **Manufacturing**  **Military/Emergency Services**  **Smart Devices**  **Transport** | Describe the use of IoT in different areas of everyday life.  Explain the advantages and disadvantages of the IoE. | [The 9 most important applications of the Internet of Things](https://www.fracttal.com/en/blog/the-9-most-important-applications-of-the-internet-of-things)  (fracttal.com)  [Real world IoT applications in different domains](https://www.edureka.co/blog/iot-applications/)  (edureka.co)  [Top uses of IoT](https://www.jigsawacademy.com/top-uses-of-iot/)  (jigsawacademy.com)  [Internet of things on IBM cloud](https://www.ibm.com/cloud/internet-of-things?lnk=STW_US_STESCH&lnk2=trial_Cloudgen&pexp=DEF&psrc=NONE&mhsrc=ibmsearch_a&mhq=IoT)  (ibm.com) | **R070 TA1:** TA1 - Augmented Reality (AR) (Purpose and uses, Types of AR, Devices used with AR) |
| 3 & 4 |  | These are a continuation of the previous lesson. |  |  |  |  |
| 5 | **The rest of the lessons in this term look at the use of AR technologies for R070.** | | | | |  |

## Second year of teaching

|  |  |
| --- | --- |
| Autumn 1 | |
| **Summary of what you  will cover from the** [**curriculum planner**](https://ocr.org.uk/Images/619706-curriculum-planner.docx)**:** | **R070 Augmented Reality - coursework**  **R070 – Recap TA2, TA3 and TA4** |

| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | **R070: TA2** -Designing an AR model prototype (Planning and design consideration, Design tools).  Recap from R050 TA1.  Rest of term is about R070. | | | | |  |

|  |  |
| --- | --- |
| Autumn 2 | |
| **Summary of what you  will cover from the** [**curriculum planner**](https://ocr.org.uk/Images/619706-curriculum-planner.docx)**:** | **R070 Augmented Reality - coursework** |

| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | **Recap on R050:** TA3 Testing.  **R070:** Completion of Coursework. | | | | |  |

|  |  |
| --- | --- |
| Spring 1 | |
| **Summary of what you  will cover from the** [**curriculum planner**](https://ocr.org.uk/Images/619706-curriculum-planner.docx)**:** | **TA4: Cyber security and legislation**  **TA3: Data and testing**  **R070: NEA assessment submission** |

| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | **R070:** **NEA Assessment (submit for moderation) – minimal time required** | | | | |  |
| 2 | **R050**: **TA3** Data & Testing  3.5 Application of testing to a range of contexts | This lesson looks at the importance of testing and how to carry testing out.  You could ask students to create:   * Identify why testing is important * Research case studies of existing systems that were not tested properly and the issues caused.   Knowledge organiser or flash cards of different test data types. | **Testing**  **Extreme**  **Invalid**  **Valid** | Explain why testing is important.  Explain the different types of data that can be used in testing and what they are used to test for. | [Testing and test data](https://teachallaboutit.school/gcse-computer-science/ocr-gcse-j276/testing-test-data/)  (teachallaboutit.school)  [Why is testing necessary?](https://www.toolsqa.com/software-testing/istqb/why-is-testing-necessary/)  (toolsqa.com)  [Test data](https://www.teach-ict.com/2016/GCSE_Computing/OCR_J276/2_3_producing_robust_programs/testing/miniweb/pg3.php)  (teach-ict.com) | **R060 TA3** 3.1 Test the user interface and the technical aspects of the spreadsheet solution.  **R070 TA4** 4.1 Testing  Both NEAs require testing to be carried out |
| 3 | **R050**: **TA3** Data & Testing  3.5 Application of testing to a range of contexts | This lesson looks at the different types of testing that can be carried out on data and digital systems in general.  You could ask students to:   * List all the technical tests that can be carried out on:   + Website   + Mobile App   + Spreadsheet * Design a new screen layout for an app and show it to 5 people to get their feedback * Create an online survey to gather data about peoples’ thoughts on the new design.   These activities could be given as a homework. | **User testing**  **Technical testing** | Explain why different types of testing are used  Explain the advantages and disadvantages of using different types of testing.  Set up and carry out different types of testing. | [What is user testing](https://www.omniconvert.com/what-is/user-testing/)  (omniconvert.com)  [How to conduct usability testing in six steps](https://www.toptal.com/designers/ux-consultants/how-to-conduct-usability-testing-in-6-steps)  (toptal.com)  [What is a test plan?](https://www.practitest.com/qa-learningcenter/best-practices/write-a-test-plan/)  (practitest.com)    [User testing 101 basics you need to know](https://www.youtube.com/watch?v=0_EboPrWj_k)  (YouTube) | **R060 TA3** 3.1 Test the user interface and the technical aspects of the spreadsheet solution.  **R070 TA4** 4.1 Testing  Both NEAs require testing to be carried out |
| 4 | **R050**: **TA3** Data & Testing | This lesson looks at testing and how to carry out testing on computer systems. Both NEAs require testing to be carried out:  **R060:** Test plan provided with tests included  **R070:** Test plan provided without any tests included  You could ask students to:   * Review an existing spreadsheet system and complete a test plan for it considering: * Technical testing   + Formula   + Functions   + Calculations   + Outputs   + Filters   + Sorts   + Others * User testing   + Navigation ease   + Date entry ease   + Output access * Review an AR app or other mobile app and complete a test plan for it considering: * Technical testing   + Loading   + Processes   + Interactions * User testing   + Appearance   + Ease of use   + Instruction clarity.   These activities could be given as a homework. | **Test Plan**  **Extreme**  **Invalid**  **Valid** | Write a test plan.  Understand what types of testing need to be included in a test plan. | [Write a test plan](https://www.practitest.com/qa-learningcenter/best-practices/write-a-test-plan/)  (practitest.com)  [How to write a software test plan](https://www.ministryoftesting.com/dojo/lessons/how-to-write-a-software-test-plan)  (ministryoftesting.com)  [Test data](https://www.teach-ict.com/2016/GCSE_Computing/OCR_J276/2_3_producing_robust_programs/testing/miniweb/pg3.php#:~:text=There%20are%20three%20types%20of%20test%20data%20%3A,boundary%20of%20acceptable%20data.%20...%203%20Invalid%20data)  (teach-ict.com) | **R060 TA3** 3.1 Test the user interface and the technical aspects of the spreadsheet solution.  **R070 TA4** 4.1 Testing  Both NEAs require testing to be carried out |
| 5 | **R050:** TA4 –Cyber security & legislation  4.1. Threats  4.2 Impact | This lesson is about the threats to computer systems.  You could:   * Split class into small groups each research into one threat and create a presentation slide about that threat. * Students create knowledge organiser about the different types of threat from the specification. * Students learn about the impact of these threats on individual and/or society. | **DoS**  **Hacking**  **Malware**  **Social Engineering**  **Data Destruction**  **Data Manipulation**  **Data Theft**  **Identity Theft** | Explain the different threats to a computer system.  Explain why these threats are used by attackers.  The impact of a cyber-security attack on individuals and/or society. | [Pharming](https://www.computerscience.gcse.guru/theory/pharming)  (computerscience.gcse.guru)  [Social engineering](https://www.futurelearn.com/info/courses/teaching-cybersecurity/0/steps/57175)  (futurelearn.com)  [BBC Bitesize system security](https://www.bbc.co.uk/bitesize/guides/zj89dxs/revision/2)  (bbc.co.uk)  [Cyber security](https://teachcomputing.org/home-teaching/key-stage-3-cybersecurity-lesson-4/)  (techcomputing.org)  [DDoS attacks](https://www.cloudflare.com/en-gb/learning/ddos/famous-ddos-attacks/)  (cloudflare.com)  [Social engineering the oldest hack](https://teachingsecurity.org/lesson-3-social-engineering-the-oldest-hack/)  (teachingsecurity.org) |  |
| 6 | **R050:** TA4 –Cyber security & legislation  4.1. Threats  4.2 Impact | This is a continuation of the previous lesson.  Slides can be collated, and a single presentation provided to each student with all the areas covered. | **DoS**  **Hacking**  **Malware**  **Social Engineering**  **Data Destruction**  **Data Manipulation**  **Data Theft**  **Identity Theft** | Explain the different threats to a computer system.  Explain why these threats are used by attackers.  The impact of a cyber-security attack on individuals and/or organisations. | [Pharming](https://www.computerscience.gcse.guru/theory/pharming)  (computerscience.gcse.guru)  [Social engineering](https://www.futurelearn.com/info/courses/teaching-cybersecurity/0/steps/57175)  (futurelearn.com)  [Pharming](https://www.tes.com/teaching-resource/pharming-7123174)  (tes.com)  [BBC Bitesize system security](https://www.bbc.co.uk/bitesize/guides/zj89dxs/revision/2)  (bbc.co.uk)  [Cybersecurity](https://teachcomputing.org/home-teaching/key-stage-3-cybersecurity-lesson-4/)  (teachcomputing.org)  [DDos attacks](https://www.cloudflare.com/en-gb/learning/ddos/famous-ddos-attacks/)  (cloudflare.com)  [Social engineering](https://teachingsecurity.org/lesson-3-social-engineering-the-oldest-hack/)  (teachingsecurity.org) |  |

|  |  |
| --- | --- |
| Spring 2 | |
| **Summary of what you  will cover from the** [**curriculum planner**](https://ocr.org.uk/Images/619706-curriculum-planner.docx)**:** | **TA 4: Cyber Security and legislation**  **R050 Revision** |

| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | **R050:** TA4 –Cyber security & legislation  4.3 Prevention methods | This lesson is about the prevention methods that can be used to mitigate the risks identified earlier.  You could ask students to:   * Create a mind map of each type of measure with sub nodes of how they prevention method works * Create flashcards of threats and mitigation that can be used to counter them. * Create a table listing all the possible physical protection methods. For each method students explain what the method prevents, where it can be used, and the cost.   These activities could be given as a homework. | **Physical**  **Logical**  **Secure destruction of data** | Explain how threats can be mitigated against.  Identity which mitigation method is suitable for each threat. | [10 steps to cybersecurity](https://www.ncsc.gov.uk/collection/10-steps)  (ncsc.gov.uk)  [Infographics at the NCSC](https://www.ncsc.gov.uk/information/infographics-ncsc)  (ncsc.gov.uk)  [BBC Bitesize fundamentals of cyber security](https://www.bbc.co.uk/bitesize/guides/znnny4j/revision/1)  (bbc.co.uk)  [Cyber security](https://www.stem.org.uk/resources/community/collection/401587/gcse-cyber-security)  (stem.org.uk)  [Understand ethical and operational issues and threats to computer systems](https://kscslevel3technicalit.wordpress.com/unit-1-lo5/)  (kscslevel3techicalit.wordpress.com)  [Fundamentals of IT](https://www.csnewbs.com/ctech-unit-1-fundamentals-of-it)  (csnewsbs.com) |  |
| 2 | **R050:** TA4 –Cyber security & legislation  4.4. Legislation related to the use of IT systems | This lesson is about the legislation that the use of computer systems must comply with.   * You could start by explaining what legislation is and how it is catching up with computer system development.   You could ask your students to:   * Work in small groups to produce a summary of each of the legislations in the specification including:   + Purpose   + Requirements of legislation   + How effects individuals   + How effects organisations.   What happens if law broken. | **Legislation**  **Data**  **Information**  **Individuals**  **Organisations**  **Cyber Security** | Explain the purpose of the legislation related to computer systems.  Explain how the legislation can be complied with.  Explain the implications of the legislation. | [BBC Bitesize legislation and ethical revision](https://www.bbc.co.uk/bitesize/guides/zhx26yc/revision/1)  (bbc.co.uk)  [BBC Bitesize legal implications](https://www.bbc.co.uk/bitesize/guides/z2w6tfr/revision/2)  (bbc.co.uk - pages 2,3 4)  [Impact of legislation on technology](https://studyrocket.co.uk/revision/gcse-computer-science-aqa/written-assessment/impact-of-digital-technology) (studyrocket.co.uk)  [BBC Bitesize health and safety when working with computers](https://www.bbc.co.uk/bitesize/guides/zkyg87h/revision/1)  (bbc.co.uk)  [Legislation](https://isaaccomputerscience.org/topics/legislation)  (isaaccomputerscience.org)  [Legislation related to computer science](https://teachallaboutit.school/legislation-related-to-computer-science/)  (teachallaboutit.school) |  |
| 3 | **R050:** TA4 –Cyber security & legislation  4.4. Legislation related to the use of IT systems | This is continuation of the previous lesson with summary from each group being collated or presented. | **Legislation**  **Data**  **Information**  **Individuals**  **Organisations**  **Cyber Security** | Explain the purpose of the legislation related to computer systems.  Explain how the legislation can be complied with.  Explain the implications of the legislation. | Resources from previous lessons. |  |
| 4 | **R050:** ExamRevision  TA1 – Design tools | This lesson is about revising for the final exam for R050.  You could:   * Recap TA1 teaching * Students create revision resources on Design tools * Students answer practice paper questions. |  |  | Link back to work in Autumn Term 1 of the first year of course |  |
| 5 | **R050:** ExamRevision  TA2 – Human Computer Interface in everyday life | You could:   * Recap TA2 teaching * Students create revision resources on HCI from previous work * Students answer practice paper questions. |  |  | Link back to work in Autumn Term 2 of the first year of course |  |
| 6 | **R050:** ExamRevision  TA3 – Data and testing | You could:   * Recap TA3 teaching * Students create revision resources on Data and testing from previous work * Students answer practice paper questions. |  |  | Link back to work in Autumn Term 2, Spring Term 1 and Summer Term 1 of the first year of course |  |
| 7 | **R050:** ExamRevision  TA5 – Digital Communications | You could:   * Recap TA5 teaching * Students create revision. resources on Digital Communications from previous work * Students answer practice paper questions |  |  | Link back to work in Summer Term 1 of the first year of course |  |
| 8 | **R050:** ExamRevision  TA6 – Internet of Everything | You could:   * Recap TA6 teaching * Students create revision resources on the Internet of Everything from previous work * Students answer practice paper questions |  |  | Link back to work in Summer Term 2 of the first year of course |  |
| 9 | **R050:** ExamRevision  TA4 – Cyber security | You could:   * Recap TA4 teaching * Students create revision resources on Cyber Security from previous work Students answer practice paper questions |  |  | Link back to work in Spring Term 1 of the second year of course |  |

|  |  |
| --- | --- |
| Summer 1 | |
| **Summary of what you  will cover from the** [**curriculum planner**](https://ocr.org.uk/Images/619706-curriculum-planner.docx)**:** | **R050 Revision** |

| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | R050 revision |  |  |  |  |  |
| 2 etc |  |  |  |  |  |  |

|  |  |
| --- | --- |
| Summer 2 | |
| **Summary of what you  will cover from the** [**curriculum planner**](https://ocr.org.uk/Images/619706-curriculum-planner.docx)**:** | Students will be in their GCSE exam session |

| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| --- | --- | --- | --- | --- | --- | --- |

Please note – web links are correct at date of publication but other websites may change over time. If you have any problems with a link you may want to navigate to that organisation’s website for a direct search.



We’d like to know your view on the resources we produce. Click [‘Like’](mailto:resources.feedback@ocr.org.uk?subject=I%20liked%20the%20Cambridge%20Nationals%20IT%20R050%20Scheme%20of%20work%20) or ‘[Dislike’](mailto:resources.feedback@ocr.org.uk?subject=I%20disliked%20the%20Cambridge%20Nationals%20IT%20R050%20Scheme%20of%20work%20) to send us an auto generated email about this resource. Add comments if you want to. Let us know how we can improve this resource or what else you need. Your email will not be used or shared for any marketing purposes.

Looking for another resource? There is now a quick and easy search [tool to help find free resources](https://www.ocr.org.uk/qualifications/resource-finder/) for your qualification.

OCR is part of Cambridge University Press & Assessment, which is itself a department of the University of Cambridge.

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored.   
Oxford Cambridge and RSA Examinations is a Company Limited by Guarantee. Registered in England. Registered office   
The Triangle Building, Shaftesbury Road, Cambridge, CB2 8EA. Registered company number 3484466. OCR is an exempt charity.

OCR operates academic and vocational qualifications regulated by Ofqual, Qualifications Wales and CCEA as listed in their qualifications registers including A Levels, GCSEs, Cambridge Technicals and Cambridge Nationals.

OCR provides resources to help you deliver our qualifications. These resources do not represent any particular teaching method we expect you to use. We update our resources regularly and aim to make sure content is accurate but please check the OCR website so that you have the most up to date version. OCR cannot be held responsible for any errors or omissions in these resources.

Though we make every effort to check our resources, there may be contradictions between published support and the specification, so it is important that you always use information in the latest specification. We indicate any specification changes within the document itself, change the version number and provide a summary of the changes. If you do notice a discrepancy between the specification and a resource, please [contact us](mailto:resources.feedback@ocr.org.uk).

© OCR 2022 - You can copy and distribute this resource freely if you keep the OCR logo and this small print intact and you acknowledge OCR as the originator of the resource.

OCR acknowledges the use of the following content: N/A

Whether you already offer OCR qualifications, are new to OCR or are thinking about switching, you can request more information using our [Expression of Interest form](https://www.ocr.org.uk/qualifications/expression-of-interest/).

Please [get in touch](mailto:resources.feedback@ocr.org.uk) if you want to discuss the accessibility of resources we offer to support you in delivering our qualifications.