De La Salle School IT Curriculum Year 11

RO60 and RO70 are controlled assessment units. We complete one of the units with both Year 10 and Year 11 at the same time so that moderation and exam results can be entered together. This also gives Year 10 students the opportunity to resit if needed, or to achieve their results in Year 10, which can help motivate them for Year 11 and give them a clearer understanding of what they need to do to continue progressing. **Please check with the department to see which controlled assessment the pupils will be starting in term 1.**

Year 10 Term 1	Year 10 Term 2	Year 10 Term 3
Unit R060 – Data manipulation using spreadsheets (Controlled assessment) Task 2 – Creating a spreadsheet solution This task requires pupils to use spreadsheet software to build a working solution based on their Task 1 plan using the provided asset files. Pupils will create a spreadsheet that models the required scenarios, with each one completed separately and clearly. They will use appropriate spreadsheet features such as formulas, formatting, and structure to meet the client's requirements. Testing will take place during development using the test plan, and pupils will check that their results are correct as they work. Finally, pupils will review their spreadsheet to ensure it meets all client requirements and works as intended. Task 3 – Testing and evaluating a spreadsheet solution This task requires pupils to use spreadsheet software to build a solution based on their Task 1 plan using the provided asset files. Pupils will create a spreadsheet that models each scenario clearly and separately, using suitable features such as formulas, formatting, and structure to meet client requirements. Testing will take place during development using the test plan, and the pupils will check results as they work. Finally, the pupils will review their spreadsheet to ensure it meets all requirements and works as intended.	Unit R050: IT in the digital world (Exam) Topic Area 4: Cyber-security and legislation 4.1 Threats pupils will learn about cyber security threats including DoS attacks, hacking, malware, and social engineering. Pupils will understand what each threat is, how it works, and how attackers use it to access data or disrupt systems. 4.2 Impacts of attacks pupils will learn how cyber attacks affect individuals and organisations, including data loss, theft, modification, and system disruption, as well as financial and reputational damage. 4.3 Prevention measures pupils will learn how physical and logical security methods such as biometrics, passwords, encryption, firewalls, and backups are used to protect systems, along with secure data destruction methods. 4.4 Legislation pupils will learn about key IT laws and how organisations follow them to protect data, ensure legal use of systems, and deal with cyber security issues. Topic Area 5: Digital communications	Topic Area 6: Internet of Everything (IoE) 6.1 Use of IoE pupils will learn what the Internet of Everything (IoE) is and how it connects people, devices, data, and processes using the internet. Pupils will understand the four pillars, how they interact, and how device-to-device and human-to-device communication works, including how systems can be tailored to user needs, along with advantages and disadvantages. 6.2 Application areas pupils will learn how the IoE is used in areas such as health, transport, energy, manufacturing, emergency services, and smart devices. Pupils will understand its purpose, benefits, risks, and security issues, and assess its suitability in different contexts.

	5.1 Types of digital communication pupils will learn about different communication types such as audio, video, websites, social media, presentations, reports, newsletters, infographics, leaflets, collaboration tools, and VoIP. Pupils will understand their purpose and how to choose the most suitable type for a given context. **5.2 Software** pupils will learn about DTP and standard office software used to create digital communications, and will select suitable software based on user requirements and devices. **5.3 Digital devices** pupils will learn about devices such as smartphones, tablets, PCs, laptops, smart TVs, and smartboards, and will assess their suitability for different communication needs. **5.4 Distribution channels** pupils will learn how content is shared using channels like email, cloud, messaging, websites, apps, and VoIP, along with connectivity methods such as Wi-Fi, 4G/5G, Bluetooth, and wired connections. **5.5 Audience demographics** pupils will learn how audience factors like age, location, accessibility, and gender affect the choice of communication methods, channels, and devices.	
Knowledge, Skills and Understanding		
Unit R060 – Data manipulation using spreadsheets (Controlled assessment) **2. Creating (Task 2)** - Pupils will build a working spreadsheet solution - Pupils will follow their design plans	**Topic Area 4: Cyber-security and legislation** - Pupils will understand cyber threats such as hacking, malware, DoS attacks, and social engineering.	**Topic Area 6: Emerging digital technologies (IoE)** - Pupils will understand the Internet of Everything (IoE) and how it connects people, devices, data, and processes.

- Pupils will use provided data correctly
- Pupils will ensure the solution is fit for purpose

3. Testing (Task 3)

- Pupils will use the test plan provided
- Pupils will use valid, invalid, and extreme data
- Pupils will check actual results against expected results

4. Evaluation (Task 4)

- Pupils will evaluate how well the solution meets requirements
- Pupils will explain interface and navigation design
- Pupils will suggest improvements to the solution
- Get smarter responses, upload files and images, and more.

- Pupils will understand the impacts of cyber-attacks on data, users, and organisations.
- Pupils will know security measures including physical and logical controls and secure data destruction.
- Pupils will understand key IT legislation and how it protects systems and data.

Topic Area 5: Digital communications – Essential Knowledge, Skills and Understanding

- Pupils will understand different types of digital communication (e.g. audio, video, websites, social media, reports, presentations, VoIP) and their purposes.
- Pupils will understand how to choose suitable communication methods, software, devices, and distribution channels for different audiences and contexts.
- Pupils will know connectivity methods (e.g. Wi-Fi, 4G/5G, Bluetooth, wired connections) and how they affect communication.
- Pupils will understand how audience factors (e.g. age, location, accessibility) influence the design and delivery of digital communications.

- Pupils will understand the four pillars of IoE and how they interact through device-to-device and human-to-device communication.
- Pupils will understand how IoE is used in real-life areas such as health, transport, energy, manufacturing, and emergency services.

Pupils will understand the benefits, risks, and security issues of IoE and how systems can be tailored to user needs.

Assessment and Assessment Focus

- Pupils will also complete regular knowledge recall activities at the start of lessons, usually consisting of five short questions based on previous learning. These help teachers identify gaps in understanding and decide whether pupils are ready to move on.
- Mini whiteboards will be used during lessons to quickly assess pupils' progress and understanding in real time.
- Teachers will provide demonstrations and use knowledge organisers to help pupils focus on the most important content and key terminology.
- Pupils will complete weekly homework using e.Revision, which provides exam-board-created practice questions. Pupils receive instant feedback, a breakdown of strengths and weaknesses, and personalised revision lists. Teachers can also use homework leader boards to motivate and encourage pupils.
- At the end of the Exam RO50 units, pupils will complete a 45-minute exam under formal exam conditions. The paper is created using the OCR Exam Builder and assesses knowledge and understanding from the whole unit.

- The end-of-unit assessment will be marked by the teacher and used in a follow-up therapy lesson, where pupils review mistakes and improve gaps in their learning.
- The RO60 & RO70 Controlled assessment units are assessed using marking criteria with three-mark bands. Work is marked against these bands, and an overall mark band is awarded based on the level of evidence achieved across the criteria.