

Year 9			Curriculum Checkpoints: What do students know and what can they do?			
Information Technology (IT)			Developing	Securing	Mastering	Excelling
AF1	Unit R060 Data Manipulation using Spreadsheets	2.1.1 Formatting & Formulae	Use some simple cell formatting tools to improve the appearance of the spreadsheet.	Uses a wide range of cell formatting tools to improve the appearance of the spreadsheet.	Can explain a wide range of cell formatting options such as alignment, border, font, shading, text wrap and currency suitable for the spreadsheet design.	Justifies the use of a wide range of different cell formatting options such as alignment, border, font, shading, text wrap and currency matching the plan and design of the solution.
		2.1.1 Functions	Is able to use the SUM, MIN, MAX and AVERAGE functions to perform calculations on a spreadsheet.	Can use and explain the purpose of the SUM, MIN, MAX, AVERAGE, SUMIF & SUBTOTAL functions to solve problems within a spreadsheet.	Can use and explain the purpose of functions such as SUM, MIN, MAX, AVERAGE, SUMIF, SUBTOTAL, AND, OR, DATE, TODAY to solve problems in a spreadsheet.	Can confidently use a wide range of advanced function such as SUM, MIN, MAX, AVERAGE, AND, OR, DATE, TODAY, SUMIF & SUBTOTAL within a spreadsheet solution.
		2.1.1 Validation	Knows the term Validation.	Is able to explain within example the term Validation.	Is able to use a range of Validation rules within a spreadsheet on data entry.	Is able to effectively use validation checks within the spreadsheet solution.
AF2	Unit R060 Data Manipulation using Spreadsheets	2.1.1 COUNT & VLOOKUP Functions	Can identify the use of a COUNT function.	Can add a COUNT and VOOKUP function to a spreadsheet solution.	Can use a variety of COUNT functions and a VLOOKUP appropriately in a spreadsheet solution.	Can use all of the COUNT functions and both the V and H LOOKUPS to solve problems in a spreadsheet.
		2.1.1 Absolute Cell Referencing and IF statements	Knows that an \$ symbol must be used in an absolute cell reference.	Is able to use an absolute cell reference within a formulae. Can understand the purpose of an IF statement.	Is able to explain the use of both an absolute cell reference and an IF statement in a formulae.	Articulates the advantage of using an absolute cell reference. Is able to use an IF statement incorporating AND, OR within a spreadsheet solution.
		2.1.1 Filtering & Sorting	Understands the importance of the sort and filter tools.	Uses the sort and filter tools appropriately in a spreadsheet solution.	Explains the purpose of both the sort and filter tools and uses them in a spreadsheet.	Justifies the use of both the sort and filter and advanced filtering tools in a spreadsheet to solve problems.
		2.1.1 Macros & Recorded Macros	Can use recorded macros to navigate around a spreadsheet workbook.	Can create both new and recorded macros.	Uses recorded and new macros to create an interface which is fit for purpose.	Uses a range of created and recorded macros for users to fully navigate around the solution as planned and designed.
AF3	Unit R060 Data Manipulation using Spreadsheets	2.1.1 What IF statements and Goal Seek	Is able to use What IF modelling to make predictions.	Explains the purpose of both What If and Goal Seek to make predictions in a spreadsheet.	Applies modelling tools such as what-if and goal seek to predict different outcomes.	Fully justifies the use of modelling tools such as what-if and goal seek to predict different outcomes.
		2.1.1 Pivot Tables	Knows the term Pivot table.	Explains the purpose and use of a Pivot table.	Creates a Pivot table to analyse data in a spreadsheet solution.	Generates Pivot table reports to present information to the client and the end user, considering where the information is coming from.

AF4	R050 IT in the Digital World	1.1. Design Tools	Identifies the 4 different design tools.	Understands the components of each design tool and the type of software that can be used to create each design tool.	Explains the advantages and disadvantages of each design tool.	Can create an original document using relevant design tools either using software or by sketches.
		2.0 Human Computer Interface (HCI) in everyday life	Knows the term HCI.	Explains the term and purpose of a HCI in some application areas.	Clearly explains the use of a HCI in all 6 application areas.	Fully explains the advantages and disadvantages of the use of an HCI for each application area.
		2.2 Hardware and Software Consideration	Understands there are different display types and sizes that an HCI can be used on. Understands that a computer uses an Operating System.	Identifies the impact of display and resources on the HCI. Knows the purpose of an Operating System.	Explains the advantages and disadvantages of hardware considerations for using an HCI. Can define the term Operating System.	Can explain how the HCI is used on different hardware platforms. Clearly explains using examples the term Operating System.
		2.3 Digital Platforms	Knows the term digital platform.	Can give some examples of a digital platform.	Can explain the 4 different types of digital platforms.	Explains how the different digital platforms will impact on the design of a system.
		2.3 Information & Data Types	Can identify the terms data and information.	Explains the terms data and information.	Uses examples to explain the difference between the terms data and information.	Clearly explains how data is converted to information.
AF5	R050 IT in the Digital World	3.2 Validation & Verification	Understands the terms Validation and Verification.	Is able to explain the terms Validation and Verification.	Understands and explains the purposes of Validation and Verification.	Fully explains with relevant examples the terms Validation and Verification. Knows how Validation can reduce data input errors in a system.
		3.3 Data Collection	Identifies primary and secondary research methods.	Can explain with examples the terms primary and secondary research.	Explains the advantages and disadvantages of different data collection methods.	Can assess the suitability and justify the use of the data collection methods applied to a given context.
		3.4 Storage of Collected Data	Knows the terms logical and physical location methods.	Is able to give examples of logical and physical storage methods.	Clearly explains the advantages and disadvantages of each storage location.	Knows and explains the characteristics of each storage device and the advantages and disadvantages of each storage device.
		3.5 Testing & Types Testing	Understands why testing is needed.	States some advantages and disadvantages of testing.	Can give examples of extreme, invalid and valid test data.	Fully explains why technical and user testing is required and used within a system.
AF6	R060 Spreadsheet Coursework Practice	Design Tools	Uses a minimum of 2 design tools to plan an appropriate spreadsheet solution.	Creates a mind map, wireframe and visualisation diagram for the spreadsheet solution.	Creates a detailed mind map, wireframe, visualisation diagram and flowchart solution for the spreadsheet.	Creates a range of detailed design documentation for the spreadsheet solution including: functionality, navigation system and outputs.
		Creation Human Computer Interface	Creates a simple HCI system using macro buttons as navigation tools and some appropriate formatting.	Creates a suitable HCI system using appropriate formatting, layout and navigation for the end user.	Creates a clear navigation system that meets the user/client needs incorporating appropriate layout and user accessibility.	Creates a well designed interface which fully meets the needs of the user/client showing layout considerations and learnability and memorability in the design of the solution navigation.