

Year 9		<b>Curriculum Checkpoints: What do students know and what can they do?</b>				
Information Technology (IT)		Developing	Securing	Mastering	Excelling	
AF1	R050 IT in a Digital World & R070 Using Augmented Reality to Present Information	3.4 Storage of collected data & Types of Testing (Technical & User)	Know that there are physical and logical storage locations.	Be able to give examples of logical physical and external storage devices.	States the advantages and disadvantages of each storage location.	Explains the characteristics of each storage device and the advantages and disadvantages of them.
		4.1 Cyber Security	Identifies the names of some security threats.	Explains the definitions of some types of security threats.	Can explain why security threats occur, how the threat occurs and knows some preventions to mitigate the threats. Identifies some methods of social engineering.	Fully explains with examples how types of social engineering can be used to gather data and information and how to mitigate against the security threats.
		R070 2.1 Plan purpose & User Requirements & Assets	Explains the purpose and user requirements of an AR product.	Can explain the target audience for an AR product and identify the content and assets required to create an AR product.	Is able to identify and explain the quality of the assets used to create an AR product.	Clearly explains in detail the triggers and user interactions required for an AR product.
AF2	R050 IT in a Digital World & R070 Using Augmented Reality to Present Information	4.2 Data destruction, manipulation, modification, data theft	Is aware of some impacts of a cyber-security attack on individuals and/or organisations.	Can explain the terms data destruction, data manipulation and data modification.	Explains the impact of a Denial of service (DoS) to authorised others and data and Identify theft.	Justifies how cyber security attacks can impact an individual and an organisation.
		4.3 Prevention Measures. Physical & Logical	States some physical and logical security prevention methods.	Knows how some of the physical and logical security prevention methods work.	Explains with examples how the prevention measures keeps data and devices secure.	Fully explains how the prevention measures can be used to mitigate against security risks including both physical and logical.
		4.3 Secure destruction of data	Identifies some methods of securely destroying data.	Explains the terms data erasure and data sanitation.	Can explain the terms data erasure, data sanitation, magnetic wipe and physical destruction and knows when to use each method.	Is able to compare the use of data erasure, data sanitation, magnetic wipe and physical destruction.
		4.4 Legislation	Can identify some Legislation related to the use of IT systems i.e. Computer Misuse Act.	Knows the purpose of some Legislation related to the use of IT.	Summarises how / what is required of individuals / business to comply with each area of legislation.	Explains the implications of the legislation for: data and information, individuals and organisations. Knows how the legislation can be used when dealing with cyber-security issues.
		5.1 Types of Digital Communication	States 5 different methods of digital communication.	Knows the purpose of some digital communication methods.	Can explain the purpose of all digital methods of communication and some advantages and disadvantages of each.	Explains the suitability and justifies the use of a digital communication applied to a given context.
		2.2 Design Tools Mind Map and Wireframes, Planning AR Model	Can create a mind map to plan and design the content for an AR model.	Creates a mind map and wireframe to design and plan the content for an AR model.	Creates a suitable mind map and wireframe to support the creation of an AR product including; content and action design.	Creates a detailed mind map and wireframe to support the creation of an AR product including; content and action design and house style.

AF3	R050 IT in a Digital World & R070 Using Augmented Reality to Present Information	5.2 Software & uses of software	Can identify some features of desk top publishing and standard office software features.	Knows some of the characteristics of the software used to create digital communications.	Can explain the characteristics of the software used to create digital communications.	Is able to select and assess software to meet user requirements.
		5.3 Digital Devices	States some digital devices.	Can identify all 5 digital devices.	Knows and explains the characteristics of all 5 digital devices.	Selects and assesses the suitability of digital device(s) applied to a given context.
		R070 3.2, 3.3 & 3.4 Creation of AR Prototype App	Can add simple triggers and single layers to the AR prototype model.	Is able to add triggers which contain graphical elements and shapes so that all markers look the same. Can add multiple layers to the prototype.	Can add unique triggers which made use of object recognition and location and superimposition. The layers added have suitable names to indicate how they are organised.	The Trigger type selection added is based on requirements of the context. The layers used are both static and interactive and have to be set up to use the triggers.
AF4	R050 IT in a Digital World & R070 Using Augmented Reality to Present Information	5.4 Distribution Channels	Knows the different types of distribution channels.	Can explain the characteristics of each type of distribution channel and the characteristics of each connectivity method.	Explains the advantages and disadvantages of each type of distribution channel and connectivity method.	Selects, assesses, and justifies, the suitability of distribution channel(s) and connectivity applied to a given context.
		5.5 Audience Demographics	Identifies the 4 audience demographics.	Can identify and explain the 4 different audience demographics.	Can explain when it is appropriate to use the different audience demographics.	Is able to select and assess the suitability of the digital communication, distribution channel and connectivity linked to specific audience demographics.
		R070 3.1 Creation of AR Prototype App	Can create a AR prototype model with some working functionality.	Is able to create model prototype to demonstrate the working functionality of the AR product.	Can create model AR prototype based on produced design documentation including suitable aesthetics.	Can create model AR prototype based on produced design documentation including suitable aesthetics and has access to real time data.
AF5	R050 IT in a Digital World & R070 Using Augmented Reality to Present Information	6.1 Internet of Everything Revision	Can recall the term IOE and explain its meaning.	Is able to explain the 4 pillars of the IOE and how they interact with each other.	Can explain the advantages and disadvantages of the IOE.	Is able to describe the IOE digital interactivity and how devices can be tailored to meet the needs of the end users.
		R070 4.1 Augmented Reality Testing	Is able to create a simple test plan and carry out some testing of the AR model prototype.	Creates a test plan which includes user and technical test data and carries out some testing of the AR model prototype.	Carries out testing to ensure the AR model prototype can be used as intended. Any changes made due to testing are commented upon.	Creates a detailed test plan to record test results and when to carry out remedial action. Any changes made due to testing are thoroughly documented.
AF6	R050 IT in a Digital World & R070 Using Augmented Reality to Present Information	R050 6.2 Application areas in everyday life Exam Revision	Knows the purpose of the IOE applied to some of the application areas in everyday life.	Can identify some advantages and disadvantages of the IOE applied to each application area.	Describes the suitability of the use of the IOE for each application area.	Fully explains the suitability of the use and security issues of the IOE for each application area.
		R070 4.2 Augmented Reality Review	Writes a basic review and comments on what worked well and what didn't.	A review is written which describes the the effectiveness of the process during the designing and creation of the AR model.	A review is created which describes the effectiveness of the tools and techniques used during the designing and creation of the AR model.	A comprehensive review is completed which explains the effectiveness of the processes followed during the designing and creation of the AR model.