Stage 5 Information and Software Technology

Unit 5: Authoring and multimedia (Option 2)

Unit title: Major project

Duration: 15 weeks   **Sequence:** Term 3 – Week 5 Term 4

Project overview	Individual negotiated major project.
Outcomes	5.2.1, 5.2.2, 5.2.3, 5.3.1, 5.3.2, 5.5.1, 5.5.2, 5.2.3
Assessment outcomes	A student: 5.2.1 describes and applies problem-solving processes when creating solutions 5.2.2 designs, produces and evaluates appropriate solutions to a range of challenging problems 5.2.3 critically analyses decision-making processes in a range of information and software solutions 5.5.2 communicates ideas, processes and solutions to a targeted audience

Core	Students learn about:	Students learn to:
	Design, produce and evaluate **Defining and analysing the problem** • identification of need or problem to be solved • factors that impact on problem solving: – technical such as hardware – operational – financial – ethical **Designing possible solutions using techniques** such as • concept mapping • brainstorming • prototyping	• identify the need or problem to be solved • analyse the problem and a range of possible solutions • generate ideas using a range of methods • apply set criteria to choose the most appropriate software solution • develop a storyboard of ideas and/or solutions • summarise research data when generating creative solutions

	Students learn about:	Students learn to:
	• storyboarding	• evaluate the suitability of solutions by testing and experimenting • examine, evaluate and modify existing solutions
	Producing solutions • producing the solution	• develop and implement the stages involved in the completion of a solution • apply set criteria to choose the most appropriate solution

	Evaluation criteria
	• functionality of solution
	• quality of information such as:
	  − accuracy
	  − relevance
	  − integrity
	  − timeliness
	• ethics
	• environment
		• establish criteria for the evaluation of solutions
		• evaluate solutions using established criteria

	Methods of evaluation • individual • groups such as peer, end user, specific target group	• use feedback evaluation in order to modify solutions • reflect upon and document feedback

	Management
	• planning
	• resources, such as:
	  − time
	  − finances
	  − people
	Communication techniques, including
		• apply management plans and techniques

	• verbal • written • graphical and visual	• document decision-making and problem-solving in the development of solutions • outline a range of communication techniques appropriate to the solution • communicate ideas, processes and solutions to a targeted audience

	Students learn about:	Students learn to:
	Collaboration and group work • criteria for group formation such as expertise and group dynamics • roles and responsibilities of group members • effective collaboration strategies	• identify and negotiate roles and responsibilities of group members • establish and use strategies for effective collaboration • outline and reflect on the benefits/advantages of collaboration during group work • evaluate individual and group contributions to the project • apply collaborative work practices when developing solutions
	People **Careers in information and software technology** • career paths	• discuss the use of information technology skills across industry and for self-employment
Option 2: Authoring and multimedia	**Project development** • processes and techniques • GUI design for the multimedia product • design principles including layout and balance of data types **Additional content** • innovation in a selected data type such as animation	• design, produce and evaluate a simple project for a real-world application either separately for this option, or integrated with other option/s • apply interface design features used for the production of the multimedia product • examine and analyse design principles used in a range of multimedia products • create a storyboard and script • research in detail a data type and produce an original product