

9 Design & Technologies – Semester Outline

YEAR LEVEL	9	SUBJECT	DAT	UNIT NAME	Design & Technologies
Unit Context Overview	First term establishes foundational skills and knowledges, while second term students learn how to manage a design project.			Unit Length	20 weeks / 1 Sem
Achievement Standard	<p>By the end of Year 9, students explain how people working in design and technologies occupations consider factors that impact on design decisions and the technologies used to produce products, services and environments. They identify the changes necessary to designed solutions to realise preferred futures they have described. When producing designed solutions for identified needs or opportunities, students evaluate the features of technologies and their appropriateness for purpose for one or more of the technologies contexts.</p> <p>Students create designed solutions for one or more of the technologies contexts based on a critical evaluation of needs or opportunities. They establish detailed criteria for success, including sustainability considerations, and use these to evaluate their ideas and designed solutions and processes. They create and connect design ideas and processes of increasing complexity and justify decisions. Students communicate and document projects, including marketing for a range of audiences. They independently and collaboratively apply sequenced production and management plans when producing designed solutions, making adjustments to plans when necessary. They select and use appropriate technologies skilfully and safely to produce high-quality designed solutions suitable for the intended purpose.</p>				

Assessment - PDD

Assessment: Term 1

1. Summative Test: combination short answer and practical
70 mins

Formative Design Challenge: Is that Design? Peer feedback & whole class discussion

Formative Design Challenge 2: The Design Process.

Formative Design Challenge 3: Reverse Design.

Summative: Introductory Folio: Product Design and the Inventor Program

Formative through set benchmarks that must be achieved before students can proceed to the next phase.

Assessment: Term 2

Formative: Design Challenge 4: Future bathroom (sustainable design)

1. Summative: Environmental Design: Preliminary design folio- Revit program

Formative through set benchmarks that must be achieved before students can proceed to the next phase.

Formative Design Challenge 5: Branding Packaging-Marketing
Summative: Graphic Design – Sketching - Focussing on Logos in particular

WK	TOPIC	LESSON NOTES	RESOURCES
Term 1			
1			
2			
3	Sketching Fundamentals	Basic Sketching Skills – perspective, Production drawings: Orthographic (third/first angles), Pictorial drawings: Isometric, Oblique, Perspective; DIMENSIONING; OPEN-IN-LINE FOR ASSEMBLY; SECTIONING	Paper pencils, ppt
4	Sketching Fundamentals	Basic Sketching Skills – perspective, Production drawings: Orthographic (third/first angles), Pictorial drawings: Isometric, Oblique, Perspective; DIMENSIONING; OPEN-IN-LINE FOR ASSEMBLY; SECTIONING	
5	UNIT 1 Foundation FOUNDATION STUDIES – KNOWLEDGE AND UNDERSTANDING	Introduction to Graphics: Design Challenge – Is that Design? Exploring design in the community	
6	Technologies and Society	Foundation Studies cont. Completing all worksheets, Isometric/Orthographic truck drawings DIMENSIONING and SECTIONING (+ Oblique)	
7	Unit 2 Processes & Production Skills	PROCESSES AND PRODUCTION SKILLS Introduction – INVENTOR Basic interface and tool exploration.	Inventor software
8		INVENTOR Basic interface and tool exploration - Isometric in practice - truck project	
9		INVENTOR Continue practices – different functions	
10		INVENTOR modelling of product drawing - dimensioning	
Term 2			
11	Unit 3 Introduction to Environmental Design	Introduction to Environmental Design - REVIT Design Challenge – Future bathroom ‘refresh refuge’ - sustainable design JNR SCHOOL COMMON ROOM OR DREAM BEDROOM	Revit software
12	User-centred design/Client needs	Floor plans. Draw floor plan of a room at home. Guess measurements. Check them for homework. Make Revit City login. Continue with folio for course work.	
13		Learn Revit – Make an existing room (folio)	
14		Sketch ideas	
15		Design Brief, criteria and research for dream room	
16		Rught plans	
17		Start making in Revit	
18		Continue in Revit	
19	Unit 4 Introduction to Graphic Design	Introduction to Graphic Design LOGO DESIGN – using initials Design Challenge – branding packaging – marketing - backstory Typography, Symbols, Elements and Principles of Design	
20		Finalise Logo Design and pitch	