



Australian Curriculum: Design and Technologies- Year 10

DAT- Design and Technologies

Band Plan-2023

CURRICULUM		YEAR 10					
		SEMESTER 1			SEMESTER 2		
		Term 1	Term 2	Term 3	Term 4		
Unit name	Environment and Product Sustainability	Young Entrepreneurs and Innovators	Human Centred Web Design <i>*To be reviewed 2023</i>	21st Century Service Design			
Unit description	<p>In this unit, students will investigate, design, and evaluate a design solution for an environment that addresses an identified need or opportunity. They will make judgments on how the features, technical considerations, properties and materials of a <i>shipping container</i> can be transformed into a 'new environment', while providing a solution to meet the identified need.</p> <p>They will critically analyse factors, including social, ethical, cultural and sustainability considerations, that impact on designed solutions for global preferred futures.</p> <p>Students will apply 'interior and architectural design principles' as they design and produce an environmental design that meets a need.</p>	<p>In this unit, students will become young entrepreneurs through an interactive program exploring design, critical thinking, business models, and ideation tools. They will work in teams to collaborate, design or re-design a new product or business opportunity and 'pitch' the design proposal in 'shark tank'. They will establish detailed criteria for success; explore the needs and wants for their target audience; define the problem in a design brief; use drawing and low-fidelity prototyping skills; use convergent and divergent thinking skills to develop the ideas; and produce a design proposal that includes a prototype.</p>	<p>In this unit, students will investigate, explore, and design, using a human-centered design approach to problem solving, which puts the people they are designing for at the heart of the process. Students will learn about a group or community and what matters to them, to design a website or app that suits that community's needs. Students will explore the needs, wants and opportunities of the chosen community; use problem solving skills to define the problem; use low fidelity drawing skills to create wireframes; explain their designs in a design brief, develop ideas through the process of mood boards, and present a design proposal, including an evaluation of the design process.</p>	<p>In this unit, students will design, create, and present a design solution for Bentley Park College. The design solution will provide a service for visitors and help them navigate their way around the school more effectively. The design solution will involve the use of a QR code, multimedia design and animations. They will establish detailed criteria for success, including sustainability considerations and use these to evaluate their ideas, processes, and their design solution. They will communicate, document, manage and make judgments on how good design principles, technical considerations, and service design have been met to meet the identified need.</p>			
ASSESSMENT		YEAR 10					
		SEMESTER 1			SEMESTER 2		
		Environmental design- AT1	Designing for sustainability- AT3	Entrepreneurial Design Project - AT5	Human Centred Web Design-AT1	21 st Century Service Design-AT4	
Range and balance of summative assessment conventions	Technique	Exam	Investigation	Project	Project	Investigation	
	Type of text	Portfolio	Portfolio	Portfolio	Portfolio	Presentation	
	Mode	Written	Multimodal	Multimodal	Multimodal	Multimodal	

	Conditions	<ul style="list-style-type: none"> • Class time only • 3 lessons • Hand-drawn and written • Exam conditions 	<ul style="list-style-type: none"> • Uploaded to Microsoft Teams Assignment Folder • Class time + own time. 	4 Weeks of class time x 3 lessons/week min	<ul style="list-style-type: none"> • Class time + own time. • Completed portfolio uploaded to Microsoft Teams Assignment Folder 	<ul style="list-style-type: none"> • Class time + own time. • Completed presentation uploaded to Microsoft Teams Assignment Folder • Presentation could be live or pre-recorded with digital support materials (eg; Powerpoint)
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Aspects of the achievement standard

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					
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					
create designed solutions for one or more of the technologies contexts based on a critical evaluation of needs or opportunities		✓	✓	✓	✓
establish detailed criteria for success, including sustainability considerations, and use these to evaluate their ideas and designed solutions and processes		✓	✓	✓	✓
create and connect design ideas and processes of increasing complexity and justify decisions		✓			
communicate and document projects, including marketing for a range of audiences	✓	✓	✓	✓	✓
independently and collaboratively apply sequenced production and management plans when producing designed solutions, making adjustments to plans when necessary	✓		✓	✓	✓
select and use appropriate technologies skilfully and safely to produce high-quality designed solutions suitable for the intended purpose	✓		✓	✓	✓

Term 1 Term 2 Term 3 Term 4 ✓

indicates opportunities that summative assessments provide for students to demonstrate evidence against aspects of the achievement standard