

STAGE 5 COURSE: Design and Technology YEAR 10 2024

TERM 1		
TIMING Weeks: 1 - 10	Materials Technologies (Electronics)	
	UNIT OVERVIEW	ASSESSMENT
	<ul style="list-style-type: none"> • Select, justify, and use appropriate technologies and available resources in the development of design projects • Investigate human, technical, and environmental factors affecting design and production in design projects • Identify opportunities for new and better solutions • Evaluate the quality of a designed solution against criteria for success • Implement and evaluate a process of design • Calculate financial costs of design projects • Manage materials, tools and techniques when developing a design project • Evaluate the role of project management when developing a design project • Generate ideas, research solutions, and employ collaborative techniques when developing creative design ideas • Develop criteria for success for design projects • Justify and document decisions made during development of design projects • Initiate and manage action to successful completion in response to needs and opportunities when developing design projects 	Task Number: 1 Nature of Task: Written folio and practical Percentage: 25% Reported: Semester 1 Week: 8
TERM 2		
TIMING Weeks: 1 - 7	Information & Communication Technologies	
	UNIT OVERVIEW	Assessment
	<ul style="list-style-type: none"> • Develop a range of appropriate techniques to communicate and present design ideas to a targeted audience • Design and produce solutions using ICT as appropriate • Evaluate the impact of trends on society • Identify how designers use ICT and emerging technologies in their work • Investigate how designers respond ethically and responsibly to design issues when they develop design ideas and solutions • Define and describe innovation • Outline types and examples of innovation • Identify the impact of past, current, and emerging technologies and innovations across a range of focus areas • Assess the impact of past, current, and emerging technologies and innovation on society and environments 	Task Number: 2 Nature of Task: Report and Presentation Percentage: 25% Week: 7 Reported: Semester 2

TIMING Weeks: 8 - 10	Materials Technologies	
	Unit Overview	Assessment
	<ul style="list-style-type: none"> • Identify opportunities for new and better solutions • Consider the requirements of end users and stakeholders • Generate ideas, research solutions and employ collaborative techniques when developing creative design ideas • Apply design thinking when developing and producing design projects for preferred futures • Develop criteria for success for design projects • Access, identify and summarise information and data • Interpret and manipulate data to aid the development of design ideas • Research appropriate materials, processes and production methods for design projects • Apply and communicate research findings to design projects • Analyse the social, financial and environmental impact of design projects • Refine design ideas to address needs and opportunities • Develop a range of appropriate techniques to communicate and present design ideas to a targeted audience • Calculate material and resource requirements • Select and use a variety of materials, techniques, tools and equipment appropriate to the focus area of design • Justify techniques and resources being used in the creation of products, systems and environments for a preferred future • Design and produce practical projects in a safe manner • Document and evaluate design processes and solutions against criteria for success • Justify and document decisions made during development of design projects • Evaluate the short and long-term consequences of design projects on the individual, society and the environment • Initiate and manage action to successful completion in response to needs and opportunities when developing design projects 	<p>Task Number: 3</p> <p>Nature of Task: Folio and Product</p> <p>Percentage: 30%</p> <p>Week: 10</p> <p>Reported: Semester 2</p>

TERM 3

Timing Weeks: 1 - 10	Design Processes, Activity of Designers	
	UNIT OVERVIEW	Assessment
	See above Term 2	

TERM 4

TIMING Weeks: 1-2	UNIT OVERVIEW	Assessment
	See above term 2	
TIMING Weeks: 5 - 10	Design Processes, Activity of Designers, A Holistic Approach	
	Unit Overview	
	<ul style="list-style-type: none"> • Identify opportunities for new and better solutions • Initiate and manage action to successful completion in response to needs and opportunities when developing design projects • Self-assess and peer-assess design processes and solutions • Employ technological processes commonly used in commercial enterprises to develop design projects • Generate ideas, research solutions and employ collaborative techniques when developing creative design ideas • Maintain a safe work environment when producing a design project 	<p>Task Number:</p> <p>Nature of Task: 4 Yearly Examination</p> <p>Percentage: 20%</p> <p>Week: Week 4</p> <p>Reported: Semester 2</p>