

## Course Description

Year 10 Design and Visual Communication introduces students to different areas of design. The course involves digital media design, spatial design, architectural design and product design. Using the context of a container mall shop, students design and develop their own business logo; signage and promotional materials; store layout and design. During the development of these designs, students will gain knowledge of a variety of skills with digital media design tools and drawing skills. Year 10 DVC prepares students for NCEA options in DVC and Digital Technologies.

### Course Focus

- design principles and their application
- exploration of design ideas and problem solving in the context of a design brief
- drawing skills; freehand drawing, geometrical constructions, instrumental working and pictorial drawing
- rendering skills; showing texture, shade and light source
- development of digital vector graphic skills
- development of digital layout skills
- 3D modelling techniques and laser cutting
- applying electronics knowledge

<b>Course Modules</b>		
<i>Module</i>	<i>Module Description</i>	<i>Progress Outcome /Achievement Objective/Learning Objective Focus</i>
<b>Design Principles for Print and Print Layout skills</b>	<p>This module focuses on development of knowledge of design principles and skills in digital layout software to produce a print outcome (poster). Students:</p> <ul style="list-style-type: none"> <li>• analyse print layouts for application of design principles</li> <li>• create concept drawings</li> <li>• apply digital layout tools to develop their own outcome</li> <li>• refine their outcome based on feedback</li> <li>• combine digital content to create a poster</li> </ul>	<p>DDDO – Progress Outcome 3: In authentic contexts, students follow a defined process to design, develop, store, test and evaluate digital content to address given contexts or issues, taking into account immediate social, ethical and end-user considerations. They identify the key features of selected software and choose the most appropriate software and file types to develop and combine digital content.</p> <p>DVC - <i>Working Toward Learning Objective Graphics Practice at Level 6:</i> Demonstrate ability to explore and develop design ideas by applying visual communication and design techniques in response to a brief</p> <p>TK - <i>Technological Modelling Level 5:</i> Understand how evidence, reasoning, and decision making in functional modelling contribute to the development of design concepts.</p> <p>TP - <i>Outcome Development and Evaluation Level 5:</i> Analyse their own and others' outcomes to inform the development of ideas for feasible outcomes.</p>

<p><b>Logo and Business Card Design</b></p>	<p>This module focuses on design principles for logos, developing vector graphics skills and application of digital layout skills to develop a logo and business card. Students:</p> <ul style="list-style-type: none"> <li>analyse logos and business cards for application of design principles</li> <li>respond to a logo brief to develop their business and logo ideas</li> <li>create concept drawings</li> <li>develop and refine their logo and business card based on feedback and evaluation</li> <li>understand vector image file types</li> <li>combine digital content to create a business card</li> </ul>	<p>DDDO – Progress Outcome 3: In authentic contexts, students follow a defined process to design, develop, store, test and evaluate digital content to address given contexts or issues, taking into account immediate social, ethical and end-user considerations. They identify the key features of selected software and choose the most appropriate software and file types to develop and combine digital content.</p> <p>DVC - <i>Working Toward Learning Objective Graphics Practice at Level 6:</i> Demonstrate ability to explore and develop design ideas by applying visual communication and design techniques in response to a brief</p> <p>TK - Technological Modelling Level 5: Understand how evidence, reasoning, and decision making in functional modelling contribute to the development of design concepts and how prototyping can be used to justify ongoing refinement of outcomes.</p> <p>TP - Outcome Development and Evaluation Level 5: Analyse their own and others' outcomes to inform the development of ideas for feasible outcomes. Undertake ongoing functional modelling and evaluation that takes account of key stakeholder feedback and trialling in the physical and social environments. Use the information gained to select and develop the outcome that best addresses the specifications. Evaluate the final outcome's fitness for purpose against the brief.</p>
<p><b>Developing Shop Layout</b></p>	<p>This module focuses on development of skills and techniques for developing scale drawings and models in order to develop a scale container shop. Students:</p> <ul style="list-style-type: none"> <li>analyse container shops for application of layout and design principles and use of space</li> <li>develop a brief for their shop</li> <li>use planning to guide the development of their container shop</li> <li>create concept drawings and scale models</li> <li>develop digital layout drawings for laser cutting walls (windows and entrances)</li> <li>create scale models of store fittings and signage</li> </ul>	<p>DDDO – Progress Outcome 3: Students identify the key features of selected software and choose the most appropriate software and file types to develop and combine digital content.</p> <p>DVC - <i>Working Toward Learning Objective Knowledge of Design Practice at Level 6:</i> Demonstrate ability to explore and develop design ideas by applying visual communication and design techniques in response to a brief</p> <p>DVC - <i>Working Toward Learning Objective Visual Communication at Level 6:</i> Demonstrate understanding of and skills in fundamental visual communication techniques.</p> <p>TP - Brief Development Level 5: Justify the nature of an intended outcome in relation to the need or opportunity. Describe specifications that reflect key stakeholder feedback and that will inform the development of an outcome and its evaluation.</p> <p>TP - Planning for Practice Level 5: Analyse their own and others' planning practices to inform the selection and use of planning tools. Use these to support and justify planning decisions (including those relating to the management of resources) that will see the development of an outcome through to completion.</p> <p>TK - Technological Modelling Level 5: Understand how evidence, reasoning, and decision making in functional modelling contribute to the development of design concepts and how prototyping can be used to justify ongoing refinement of outcomes.</p>

<b>Electronics – Adding lighting to the shop</b>	<p>This module focuses on application of electronics and programming knowledge to develop lighting for their shop. Students:</p> <ul style="list-style-type: none"> <li>• use LED's, sensors, and conductive material to develop a lighting system for their shop</li> <li>• program the lighting system to respond to input from sensors</li> </ul>	<p>DDDO – Progress Outcome 3: Students identify the specific role of components in a simple input-process-output system and how they work together, and they recognise the “control role” that humans have in the system.</p> <p>CT – Progress Outcome 4: Students create programs that use inputs, outputs, sequence, basic selection using comparative operators, and iteration.</p> <p>TK Level 4 – Technological Systems: Understand how technological systems employ control to allow for the transformation of inputs to outputs.</p>
<b>Web Design Creating marketing for shop</b>	<p>This module focuses on creating on-line marketing materials for their shop. Students will:</p> <ul style="list-style-type: none"> <li>• analyse websites for design principles, layout and content</li> <li>• create a website using Google Sites for the marketing of their shop</li> <li>• combine digital content to develop their website</li> <li>• understand about image file types and file sizes appropriate for web</li> </ul>	<p>DDDO – Progress Outcome 3: In authentic contexts, students follow a defined process to design, develop, store, test and evaluate digital content to address given contexts or issues, taking into account immediate social, ethical and end-user considerations. They identify the key features of selected software and choose the most appropriate software and file types to develop and combine digital content.</p> <p>TP - Outcome Development and Evaluation Level 5: Analyse their own and others' outcomes to inform the development of ideas for feasible outcomes. Undertake ongoing functional modelling and evaluation that takes account of key stakeholder feedback and trialling in the physical and social environments. Use the information gained to select and develop the outcome that best addresses the specifications. Evaluate the final outcome's fitness for purpose against the brief.</p>