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| **Subject name** | **Design and Technologies** |
| **Subject code** | DAT |
| **Course overview** | To introduce students to creating designed solutions from ideas (including sketches) to final product using AutoCad software and manufactured projects. Students are introduced to basic practical skills and associated theory as part of the design process. |

**Course outline**
- Investigate how social, ethical, technical and sustainability considerations influence the design of solutions to meet a range of present and future needs
- Investigate how the features of technologies influence design and production decisions
- Analyse a range of needs, opportunities or problems and define them in terms of functional requirements and constraints
- Collect, authenticate and interpret data from a range of sources to assist in making informed judgements
- Generate and document in digital and non-digital form, design ideas for different audiences using appropriate technical terms, and graphical representation techniques
- Independently and safely plan, design, test, modify and create a range of digital solutions that meet intended purposes
- Plan, document and effectively manage processes and resources to produce designed solutions
- Develop criteria for success, including innovation and sustainability considerations, and use these to judge the suitability of their ideas, solutions and processes
- Use appropriate protocols when collaborating, and creating and communicating ideas, information and solutions face-to-face and online

**Assessment**  Design folio of activities (completed in class and at home) and practical projects

**Subject requirements**  Students are expected to adhere to all safety requirements. Shoes with leather uppers, safety glasses and ear plugs are required for safety reasons should workshop activities be required. The textbook office sells the appropriate glasses and ear plugs. Students are required to purchase 1H and 2H pencils and an eraser.

**BYOD program**  Please refer to the 'Bring Your Own Device (BYOD) booklet for the minimum specifications required before purchasing a device. Autocad software would require i5 Intel capacity in order to achieve reasonable speed

**Career opportunities**  Design and Technologies motivates young people and engages them in a range of learning experiences that are transferable to family and home, constructive leisure activities, community contribution and the world of work.