



DURATION OF SUBJECT	ONE SEMESTER IN YEAR 8 & ONE SEMESTER IN YEAR 9	FINANCIAL COMMITMENT	NIL
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COURSE OVERVIEW

Computer Aided Design CAD focuses on the underpinning industry practices and production processes required to create, manipulate and produce graphical products in the engineering and construction industry.

Students understand industry practices, interpret specifications, including technical information and drawings, demonstrate and apply CAD production processes, communicate using oral, written and graphical modes. Organise, calculate and plan production processes and evaluate the products they create using predefined specifications. Produce handmade, 3D printed and Laser cut models.

Students develop transferable skills by engaging in production tasks that relate to business and industry, and that promote adaptable, competent, self-motivated and safe individuals who can work with colleagues to solve problems and complete practical work.

Students learn about and experience design through exploring needs, wants and opportunities; developing ideas and design concepts; using drawing and low-fidelity prototyping skills; and evaluating ideas and design concepts. They communicate design proposals to suit different audiences.

COURSE CONTENT

UNIT 1 – YEAR 8	UNIT 2 – YEAR 8	UNIT 1 – YEAR 9	UNIT 2 – YEAR 9
Letter Blocks and Maze	Cubby House	Drafting Exercises	Granny Flat
ASSESSMENT	ASSESSMENT	ASSESSMENT	ASSESSMENT
2D - sketching, Extrusion- 3D, Constraining – assembling Accurate use of measurement and drafting skills to produce machine parts.	Creation of the Chess set Folio. Including sketches and inventor drawings.	Using a range of technologies including a variety of graphical representation techniques to communicate, students generate and represent original ideas and production plans in two and three-dimensional representations using a range of technical drawings including perspective, scale, orthogonal and production drawings with sectional and exploded views.	Students identify the steps involved in planning the production of designed solutions. They produce rendered, illustrated views for marketing and use graphic visualisation software to produce dynamic views of virtual products.

COURSE REQUIREMENTS

By the end of Year 10 students will have had the opportunity to design at least four designed solutions focused on one or more of the five technologies contexts content descriptions. There is one optional content description for each of the following: Engineering principles and systems, and Materials and technologies specialisations. Students should have opportunities to experience creating designed solutions for products, services and environments.

CAREER PATHWAYS

A course of study in Computer Aided Drafting and Design (CADD) can establish a basis for further education and employment in engineering and construction industries. With additional training and experience, potential employment opportunities may be found, for example, as a Draftsman, CAD Designer, CNC operator and Graphic Designer. This will also be a great foundation for Architectural, Landscape Design and Industrial design careers.

INTERNET LINKS

- | [Graphics Industry](#)
- | [Construction Skills Queensland](#)
- | [Ai Group - Apprenticeships and Traineeships](#)
- | [Housing Industry Australia](#)

