Industrial Graphics Skills

Applied senior subject

Industrial Graphics Skills focuses on the underpinning industry practices and production processes required to produce the technical drawings used in a variety of industries, including building and construction, engineering and furnishing.

Students understand industry practices, interpret technical information and drawings, demonstrate and apply safe practical modelling procedures with tools and materials, communicate using oral and written modes, organise and produce technical drawings and evaluate drawings using specifications.

Students develop transferable skills by engaging in drafting and modelling 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 tasks.

Pathways

A course of study in Industrial Graphics Skills can establish a basis for further education and employment in a range of roles and trades in the manufacturing industries. With additional training and experience, potential employment opportunities may be found in drafting roles such as architectural drafter, estimator, mechanical drafter, electrical drafter, structural drafter, civil drafter and survey drafter.

Objectives

By the conclusion of the course of study, students should:

- describe industry practices in drafting and modelling tasks

- demonstrate fundamental drawing skills

- interpret drawings and technical information

- analyse drafting tasks to organise information

- select and apply drawing skills and procedures in drafting tasks

- use language conventions and features to communicate for particular purposes

- construct models from drawings

- create technical drawings from industry requirements

- evaluate industry practices, drafting processes and drawings, and make recommendations.

Structure

The Industrial Graphics Skills course is designed around core and elective topics.

Core topics	Elective topics
• Industry practices • Drafting processes	• Building and construction drafting • Engineering drafting • Furnishing drafting

Assessment

For Industrial Graphic Skills, assessment from Units 3 and 4 is used to determine the student's exit result, and consists of four instruments, including:

- at least two projects

- at least one practical demonstration (separate to the assessable component of a project).

Project	Practical demonstration	Examination
A response to a single task, situation and/or scenario.	A task that assesses the practical application of a specific set of teacher-identified production skills and procedures.	A response that answers a number of provided questions, scenarios and/or problems.

A project consists of a technical drawing (which incldues a model) component and at least one of the following components:
• written: 500–900 words
• spoken: 2½–3½ minutes
• multimodal
  – non-presentation: 8 A4 pages max (or equivalent)
  – presentation: 3-6 minutes
• product: continous class time.
	Students demonstrate production skills and procedures in class under teacher supervision.	• 60–90 minutes
		• 50–250 words per item

Additional Requirements

Study Requirements	Special Requirements
Students are expected to complete three lessons face to face, as well as attend tutorial time to access specialist equipment as and when required. Students will need to ensure they are following teacher advice regarding timelines and additional attendance at tutorials to complete set work.	Students are required to have a connected device to participate in this subject. Course will require students to access CAD software. The following specifications are recommended: - Operating **System**: 64-bit OS. - Processor: 2.5 GHz - Memory: 8 GB - Disk space: 7.0 GB - Display: 1920 x 1080 resolution with True Colour.