



Newton Moore Senior High School
Technology and Enterprise
Year 9 Technical Graphics (CAD)
Semester 1 or 2
2016



Course Description

Technical Graphics (CAD)

Technical Graphics provides students with an insight into Architecture, Engineering and product design. Students will be introduced to computer and mechanical drawing through a series of practical drawing activities. This course develops skills using software such as Auto Desk, Inventor, mechanical instruments, freehand sketching and rendering.

Technology Process

Students apply a technology process to create or modify products, processes, systems, services or environments to meet human needs and realise opportunities.

Investigating – Students investigate issues, values, needs and opportunities.

Designing – Students devise and generate ideas and prepare production proposals.

Producing – Students produce solutions and manage production processes

Evaluating – Students evaluate intentions, plans and actions

Information

Students design, adapt use and present information that is appropriate to achieving solutions to technology changes.

The Nature of Information – Students understand the form, structure, quality and purpose of information products and processes.

Students apply an understanding of the nature of information when designing and presenting information products and processes to meet a need.

Course Outline

Week	Content
1	File types; Software history, origins. File structures 2d-sketching on computer extruding
2-3	2-d sketching Creating a computer generated working drawing including: <ul style="list-style-type: none">• Dimensions• Annotations

4-8	2-d sketching Creating a computer generated working drawing including: <ul style="list-style-type: none"> • Dimensions • Annotations
9-11	2-d sketching Creating a computer generated working drawing including: <ul style="list-style-type: none"> • Dimensions • Annotations
12-14	Investigation, ideation, Production and response <ul style="list-style-type: none"> • Measuring • Sustainability Field sketching parts and assembly with sizes and annotations.
15-17	Combining all techniques above. Practice to create a 3d printed prototype
18-20	Course Survey, Finalisation of portfolios, Printing of key tags

This course outline may be subject to change, any changes will be communicated to students.

Assessment Outline

Type of assessment	Due Date	Outcomes	Max Score	Weighting
Task 1: Box with Sliding Lid (Producing)	Week 3	Technology Process	12	10%
Task 2: Bench Hook (Producing)	Week 5	Technology Process	12	10%
Task 3: Toy Truck (Producing)	Week 8	Technology Process	12	15%
Task 4: Ute (Producing)	Week 11	Technology Process	12	15%
Task 5: Key tag Design Brief (Investigating)(Information)	Week 14	Information Technology Process	16	10%
Task 5: Key tag Design Brief (Designing)(Information)	Week 17	Information Technology Process	12	10%
Task 5: Key tag Design Brief (Evaluating) (Information)	Week 17	Information Technology Process	14	10%
Task 6: Key Ring CAD Solutions (Producing)	Week 17	Technology Process	14	20%
Total				100%

The above weightings are intended to show the importance of each task. The allocation of a grade at the end of a semester is determined based on grade related descriptors issued by School Curriculum and Standards Authority.