

UNIT 2: DELIVERY OF ENGINEERING PROCESSES SAFELY AS A TEAM

This is an internally assessed unit where you need to complete 3 assignments.

Learning aim A: Examine common engineering processes to create products or deliver services safely and effectively as a team.

As part of this assignment you will look at:

- A1 Common engineering processes
- A2 Health and safety requirements
- A3 Human factors affecting the performance of engineering processes

For this assignment you will research and write a report.

Learning aim B: Develop two-dimensional computer-aided drawings that can be used in engineering processes.

As part of this assignment you will look at:

- B1 Principles of engineering drawing
- B2 2D computer-aided drawing

For this assignment you will be using AutoCAD which is 2D drawing software.



The final assignment in this unit is practical based where you will work in teams to manufacture products in the workshop.



Learning aim C: Carry out engineering processes safely to manufacture a product or to deliver a service effectively as a team.

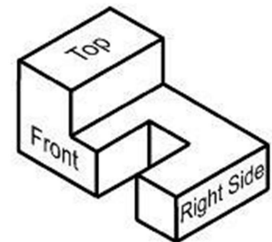
As part of this assignment you will look at:

- C1 Principles of effective teams
- C2 Team set-up and organisation
- C3 Health and safety risk assessment
- C4 Preparation activities for batch manufacture or batch service delivery
- C5 Delivery of manufacturing or service engineering processes

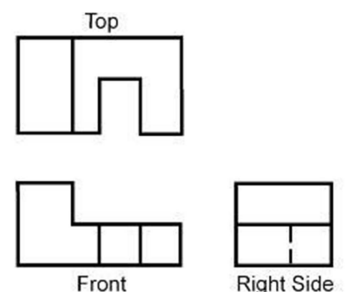
TASKS

1. Research an engineered product such as a lawnmower or bicycle or Xbox controller. Investigate the manufacturing process which are used to produce the product as well as the materials used. Explain why these are the most suitable materials and processes in the production of these products.

2. Look at examples of orthographic drawings of simple products. Be able to identify the difference between the views and also the difference between first and third angle Projection. Produce a range of Orthographic projections for some simple products in your home.



3D Representation



2D Orthographic Projection

3. Research the following Health and Safety Legislation involved in Engineering. Explain what each piece of legislation covers:
 - Health and Safety at Work Act 1974
 - Control of Substances Hazardous to Health Regulations 2002
 - Manual Handling Operations Regulations 1992