

Mapping Using Mathematics to Occupational Studies Unit:- CAD (Computer Aided Design)

Requirements for Using Mathematics

Choose the appropriate materials, equipment and mathematics to use in a particular situation.

Use mathematical knowledge and concepts accurately.

Work systematically and check their work.

Use mathematics to solve problems and make decisions.

Develop methods and strategies, including mental mathematics.

Explore ideas, make and test predictions and think creatively.

Use mathematical understanding and language to ask and answer questions, talk about and discuss ideas and explain ways of working.

Use ICT to solve problems and/or present their

Opportunities for teaching and learning from Unit Specification

Use at least five of the following drawing commands: line, circle, arc, ellipse, polyline, hatch and rectangle.

Use the following modification commands: trim, stretch, break, extend and scale.

Draw a range of basic components from a relevant discipline.

Use at least five of the following drawing commands: line, circle, arc, ellipse, polyline, hatch and rectangle.

Use the following modification commands: trim, stretch, break, extend and scale.

Demonstrate a knowledge and understanding of how to retrieve and plot a drawing of scale.

Have a basic knowledge of the principles of technical drawings.

Use the skills developed in section one to create at least two component drawings for a library of symbols.

Draw a plan view and a front view or a range of drawings from either an engineering or construction discipline using the components created in section two.

Evaluate own performance in practical activities.

Draw a plan view and a front view or a range of drawings from either an engineering or construction discipline using the components created in section two.

Evaluate own performance in practical activities.

Draw a plan view and a front view or a range of drawings from either and

work.

engineering or construction discipline using the components created in section two.

Create a completed working drawing from their selected discipline.

Plot hard copies of their working drawings and associated components.

Use their CAD skill to complete a title block template including text.

Set up a paper space environment for printing to recognised scale.