

MODULE DES1050: CAD FUNDAMENTALS (COMPUTER-AIDED DESIGN)**Level:** Introductory**Theme:** Drafting for Design and Technical Drawing Skills**Prerequisite:** None**Module Description:** Students develop basic knowledge and skills in computer-aided design (CAD).**Module Parameters:** Access to a computer with a CAD software package, a printer and/or plotter, and basic sketching and drawing tools and equipment.**Note:** It is recommended that students have access to instruction from an individual with formal, specialized training in a design discipline, drafting and in CAD.**Supporting Module:** DES1060 Drafting/Design Fundamentals**Curriculum and Assessment Standards**

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> demonstrate basic knowledge and skills required to operate CAD software 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> skills examination on CAD software. <p><i>Assessment Tool</i> <i>Teacher-designed examination (approximately 20 questions/tasks) specific to designated CAD application</i></p> <p><i>Standard</i> <i>Performance rating of 1 for each criteria</i></p>	30
<ul style="list-style-type: none"> use CAD to produce and print/plot a multiview drawing and/or pictorial drawing and/or surface development 	<ul style="list-style-type: none"> production of a multiview and/or pictorial drawing and/or surface development. <p><i>Assessment Tool</i> <i>Project Assessment: CAD Fundamentals, (DES1050-1)</i></p> <p><i>Standard</i> <i>Performance rating of 1 for each criteria</i></p>	60

MODULE DES1050: CAD FUNDAMENTALS (COMPUTER-AIDED DESIGN (continued)

Concept	Specific Learner Expectations	Notes
Skills Development (continued)	<i>The student should:</i>	<p>Teachers will determine the computer and software students will use.</p> <p>An important indication of a student's skill development in this module will be how quickly they can access and use the CAD software to produce assigned drawings. This element of "speed" can be one indicator of capability when the student is assessed.</p>
Applied Problem Solving	<ul style="list-style-type: none"> • select and use CAD tools, methods and functions to produce multiview drawing(s) (minimum three views) from simple three-dimensional objects (e.g., angled wooden blocks, foot stool, chair) or from pictorial drawing(s) (e.g., isometric, oblique, perspective) of these objects and/or pictorial drawings and/or surface developments • demonstrate the use of layers on at least one drawing. 	Applied problem solving in this module centres on the student's ability to select appropriate tools, methods and functions for achieving specific tasks.
Presentation, Design Journal and Portfolio	<ul style="list-style-type: none"> • print/plot drawings and include them in a design portfolio. 	As this is a skill development module, students may not formally present their work as they would in other modules (e.g., 3-D Design Fundamentals). Students should still be able to describe what they are doing if asked.

