

MODULE DES3140: TECHNICAL DRAWING STUDIO 1

Level: Advanced

Theme: Drafting for Design and Technical Drawing Skills

Prerequisite: None

Module Description: Students produce sections, elevations and auxiliary drawings, and build upon their learnings from the intermediate level. Students may use previously produced sketches and multiview drawings as a basis for further work.

Module Parameters: Basic sketching and drawing tools and equipment, drafting tables, equipment and materials and/or a computer with a computer-aided design (CAD) software package, a printer and/or plotter. Specialized equipment or facilities depend on the approach taken to the module.

Note: It is recommended that students have access to instruction from an individual with formal, specialized training in a design discipline, drafting and CAD.

Supporting Module: DES2050 Technical Drawing Applications

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"> • produce detailed section, elevation and auxiliary views for fabrication, manufacturing and/or construction • identify and use codes, specifications and conventions as they apply in the drawings produced 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> • production of a set of detailed technical drawings based on an advanced level assignment and including one of each of the following: <ul style="list-style-type: none"> – section – elevation – auxiliary. <p><i>Assessment Tool</i> <i>Project Assessment: Technical Drawing Studio 1 (DES3140-1)</i></p> <p><i>Standard</i> <i>Performance rating of 2 for each criteria</i></p> <ul style="list-style-type: none"> • identification and application of codes and specifications, standards and conventions as they pertain to the project and as determined by the teacher and/or other qualified individual. <p><i>Assessment Tool</i> <i>Local, regional, provincial, national and international reference manuals for codes and standards</i> <i>Project Assessment: Technical Drawing Studio 1 (DES3140-1)</i></p> <p><i>Standard</i> <i>Performance rating of 2 for each criteria</i></p>	<p>70</p> <p>10</p>

MODULE DES3140: TECHNICAL DRAWING STUDIO 1 (continued)

Concept	Specific Learner Expectations	Notes
Applied Problem Solving	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • from sketches and/or multiview drawing prepared in previous modules or provided by the teacher, identify and select appropriate additional views and produce them • accurately calculate dimensions as required • use codes, specifications and conventions as required • select and use appropriate tools and materials. 	<p>Students may work in several different contexts in this module including electrical, plumbing, process piping and manufacturing. Students may use traditional drafting equipment, CAD or other technology specified by the teacher to complete the module.</p> <p>Electrical or plumbing systems, process piping systems, molds for cast products, machined gear systems and manufacturing jigs can form the basis for this module.</p> <p>Teachers may choose to teach sections, elevations and auxiliary views through projects specific to this module and/or through longer term projects that will carry on into other modules.</p>
Presentation, Design Journal and Portfolio	<ul style="list-style-type: none"> • see Specific Learner Expectations for 2-D Design Studio 1 and Drafting/Design Studio 1. 	<p>See notes from other Studio modules.</p>

