

1. Title	Use computer to draw complicated mechanical engineering drawings
2. Code	EMCUDE315A
3. Range	Use computer to draw complicated mechanical engineering drawings in electrical and mechanical workplaces.
4. Level	3
5. Credit	5
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Computer engineering drawing techniques and methods</p> <ul style="list-style-type: none"> <li>◆ Understand the techniques and methods of using computer to draw complicated mechanical engineering drawings</li> </ul> <p>6.2 Application of computer in drawing electrical and mechanical drawings</p> <ul style="list-style-type: none"> <li>◆ Use the computer to draw complicated mechanical engineering drawings according to design <ul style="list-style-type: none"> <li>• Draw 3D drawings for mechanical parts <ul style="list-style-type: none"> <li>▸ Full 3D drawings</li> <li>▸ Sectional 3D drawings</li> <li>▸ Perspective 3D drawings</li> </ul> </li> <li>• Draw different shapes of air ducts <ul style="list-style-type: none"> <li>▸ Cylindrical pipe</li> <li>▸ Conical pipe</li> <li>▸ Irregular surface pipe</li> <li>▸ Air duct unit</li> </ul> </li> <li>• Draw mechanical equipment assembly drawings <ul style="list-style-type: none"> <li>▸ Weld joints of pipes with different diameters</li> <li>▸ Assembly of mechanical parts</li> </ul> </li> </ul> </li> </ul>
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <p>(i) Capable to draw a 3D mechanical equipment assembly drawings according to the design; and</p> <p>(ii) Capable to integrate several complicated mechanical components drawings into an integrated mechanical assembly drawing, including the developing drawings and assembly drawings, according to the design.</p>
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses the competency of drawing basic electrical and mechanical engineering drawings using computer.