## Specification of Competency Standards for the Jewellery Industry <u>Unit of Competency</u>

1. Title	Employ CAD techniques in relatively simple jewellery design
2. Code	JLZZDE305A
3. Range	This unit of competency is applicable in jewellery companies or worksites. Practitioners should be capable to apply computer software to facilitate the design of relatively simple jewellery pattern.
4. Level	3
5. Credit	4
6. Competency	Performance Requirements
	<ul> <li>Understand the workflow of computer-aided design and master the drawing of sketch and its application</li> <li>Know how to use parametric method in drawing</li> <li>Know how to produce and handle the components of jewellery</li> <li>Know how to prepare engineering drawing</li> <li>Understand the photo-realistic images produced by relevant software</li> <li>Understand the output files of numerical control machining, rapid prototyping and engineering analysis</li> </ul>
	<ul> <li>Apply computer-aided design</li> <li>design</li> <li>Use computer-aided software to design relatively simple jewellery pattern</li> <li>Draw the necessary parts according to the characteristics of the jewellery design</li> <li>Build solid models with the aid of curved surfaces</li> <li>Use different components necessary for designing various kinds of jewellery</li> </ul>

	<ul> <li>Use engineering drawing to facilitate jewellery manufacturing</li> <li>Use photo-realistic images to facilitate communication</li> <li>Use data from output files to match with numerical control machining</li> <li>Make rapid prototypes</li> <li>Capable to use rapid prototypes and engineering analysis to facilitate jewellery manufacturing</li> </ul>
7. Assessment Criteria	The integrated outcome requirements of this unit of competency are:  (i) Capable to apply computer software to facilitate the design of relatively simple jewellery, such as: rings, ear-rings and pendants, etc.; and  (ii) Capable to produce and output computerized model drawings, and apply such knowledge in jewellery manufacturing and present the drawings.
8. Remarks	The credit value of this unit of competency is set on t the presumption that the person concerned already possesses basic knowledge of using computer-aided software to design jewellery products.