

Specification of Competency Standards for the Jewellery Industry
Unit of Competency

1. Title	Apply CAD/CAM technologies in jewellery manufacturing
2. Code	JLZZPD302A
3. Range	This unit of competency is applicable in computer-to-plate (CTP) department or design department. Practitioners should be capable to make analysis independently according to the information contained in the hand-drawn design sketch. They should also be capable to draw computerized design for jewellery by using CAD 3-D software to tie in with manufacturing procedure, thus fulfilling the requirements of design display and rapid prototyping.
4. Level	3
5. Credit	6
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Understand the structure of the jewellery and the requirement of design sketch</p> <ul style="list-style-type: none"> ◆ Know about the requirement of design sketch ◆ Capable to construct 3-D pattern for jewellery ◆ Know about the basic structure of jewellery <ul style="list-style-type: none"> • Stone-setting methods and the size of the collet • The structure of movable links of chains <p>6.2 Master the operation of CAD software</p> <ul style="list-style-type: none"> ◆ Master prototyping method by using CAD software ◆ Determine the size and measurement of the jewellery and ring size ◆ Master the weight of the materials used ◆ Prepare materials for replacement as a result of shrinkage from die-casting ◆ Master the allocation of materials and lighting techniques necessary for 3-D design

<p>7. Assessment Criteria</p>	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> (i) Capable to understand thoroughly the manufacturing operations and make analysis independently according to the information contained in the hand-drawn design sketch, and draw computerized design for jewellery by using CAD 3-D software; and (ii) Capable to match with manufacturing operations to effectively fulfill the requirement of design display and rapid prototyping.
<p>8. Remarks</p>	<p>The credit value of this unit of competency is set on the presumption that the person concerned already possesses knowledge of computer application.</p>