

Specification of Competency Standards for the Jewellery Industry
Unit of Competency

1. Title	Employ computerized rapid prototyping technique in the jewellery industry
2. Code	JLZZPD402A
3. Range	This unit of competency is applicable in the prototyping department of jewellery worksites. Practitioners should be capable to employ computerized rapid prototyping technique in the jewellery industry to integrate various kinds of manual prototyping techniques, so as to enhance the quality and production effectiveness of prototyping and to further apply such technique in product development.
4. Level	4
5. Credit	9
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Understand the processing method in jewellery manufacturing</p> <ul style="list-style-type: none"> ◆ Know about the jewellery manufacturing techniques <ul style="list-style-type: none"> • Manual wax carving • The method of manual silver prototyping • Setting technique • Casting technique • Invisible setting technique • Micro setting technique <p>6.2 Employ computerized rapid prototyping technique</p> <ul style="list-style-type: none"> ◆ Know about the advantages of computerized prototyping technique <ul style="list-style-type: none"> • Meet the requirement of high precision products • Enhance the quality of casting pieces and improve the variation in the thickness of the cross section of the casting mould • Reduce the time needed for each manufacturing process

	<ul style="list-style-type: none"> ◆ Co-ordinate the duties of production and development in each department <ul style="list-style-type: none"> • Integrate machine prototyping technique and manual prototyping technique • Meet the setting requirement of the stone-setting department • Enhance the quality of casting pieces • Master the vulcanizing method and casting method of rapid prototyping • Communicate with the staff in the design department to tie in with the development of innovative design pattern
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> (i) Capable to apply rapid prototyping technique to enhance the quality and production effectiveness of jewellery products; and (ii) Capable to analyze and assess the strengths and weaknesses of applying computerized rapid prototyping technique in the jewellery industry, so as to coordinate the manufacturing technique in each department to complement the deficiencies in both machine prototyping and manual prototyping techniques.
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person concerned already possesses basic knowledge of applying computerized rapid prototyping technique in the jewellery industry.</p>