

**Specification of Competency Standards**  
**for the Jewellery Industry**  
**Unit of Competency**

Functional Area - Research and Product Development

Title	Know about relevant technologies for the development of jewellery products
Code	108906L2
Range	This unit of competency is applicable to practitioners responsible for research and product development in the jewellery industry. Practitioners should be capable of making certain assessments. They should also know about the scope and development of relevant technologies for the development of jewellery products, and be able to assist the staff concerned to develop jewellery products under instruction.
Level	2
Credit	6
Competency	<p>Performance Requirements</p> <p>1. Understand relevant technologies for product development</p> <ul style="list-style-type: none"> <li>• Know about the purposes and safety standards of the basic technologies related to the development of various jewellery products</li> <li>• The characteristics, application, development and improvement in materials technology</li> <li>• Manufacturing technology <ul style="list-style-type: none"> <li>○ Compare the pros and cons of different jewellery manufacturing technologies, their application and effects, development and improvement</li> <li>○ Know about the characteristics of traditional and modern technologies applicable to the development of jewellery products</li> </ul> </li> <li>• Supplementary technology <ul style="list-style-type: none"> <li>○ Computer-aided design (CAD)</li> <li>○ Computer-aided manufacturing (CAM)</li> </ul> </li> <li>• Collect information and analyze supplementary technology <ul style="list-style-type: none"> <li>○ 3-D scanner operation</li> <li>○ Virtual reality, augmented reality and mixed reality</li> <li>○ Big data, artificial intelligence</li> <li>○ International safety standards for jewellery materials and finished products</li> </ul> </li> <li>• Maintain continuous learning of the latest research and development technology: <ul style="list-style-type: none"> <li>○ Studying at the college</li> <li>○ Obtain information from books and online search</li> </ul> </li> </ul> <p>2. Apply product development technology</p> <ul style="list-style-type: none"> <li>• Apply a range of basic materials, manufacturing and supplementary technologies to help perform the duty of jewellery product development or improvement under instruction, such as information collection, analysis and testing</li> </ul> <p>3. Professionalism</p> <ul style="list-style-type: none"> <li>• Ensure that the jewellery materials/finished products/techniques developed meet international safety standards</li> <li>• Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights when assisting in product development</li> </ul>
Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <ul style="list-style-type: none"> <li>• Able to know about the scope and development of various basic materials, manufacturing and supplementary technologies, and effectively help perform the duty of jewellery product development under instruction.</li> </ul>

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Remark	
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