

Specification of Competency Standards
for the Jewellery Industry
Unit of Competency

Functional Area - Production

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| Title | Apply CAD technology in gemstone faceting/polishing |
| Code | 108959L4 |
| Range | This unit of competency is applicable to practitioners working in the diamond/faceted gemstone cutting/polishing department of jewellery manufacturing organizations. Practitioners should be capable of making judgments and understanding the characteristics of diamonds/gemstones and rough stones. They should also master the use of CAD (computer-aided design) software to conduct faceting and polishing analysis/design for diamond/gemstone materials after careful analysis and assessment, so as to achieve the highest brilliancy by obtaining the cutting angles/proportion and facets required by the organization. |
| Level | 4 |
| Credit | 6 |
| Competency | <p>Performance Requirements</p> <p>1. Know about CAD support for diamond/gemstone faceting/polishing</p> <ul style="list-style-type: none"> • Know about diamond/gemstone faceting/polishing <ul style="list-style-type: none"> ○ Cuts of diamonds/gemstones and their specifications ○ The angles and proportion of facets ○ The characteristics of rough stones for designing their cuts • Know about CAD software and equipment <ul style="list-style-type: none"> ○ GemCad ○ Rough stone colour grading instrument ○ Diamond/Gemstone proportion determination system ○ Girdle identifier reading instrument ○ Hearts and Arrows magnifier <p>2. Apply CAD in cutting and polishing faceted gemstones</p> <ul style="list-style-type: none"> • Master the knowledge and techniques for faceting/polishing diamonds • Master the use of CAD software and equipment for faceting and polishing diamonds and faceted gemstones • Master diamond/gemstone facet trimming/repairing techniques <p>3. Professionalism</p> <ul style="list-style-type: none"> • Ensure that the content, data and information provided are accurate • Take into account the overall interests of the clients and business partners of the organization when making CAD support for cutting and polishing diamonds/faceted gemstones |
| Assessment Criteria | <p>The integrated outcome requirement of this unit of competency is:</p> <ul style="list-style-type: none"> • Able to understand the characteristics of diamonds/gemstones and rough stones, and use CAD software to conduct faceting and polishing analysis/design for diamond/gemstone materials after careful analysis and assessment, so as to achieve the highest brilliancy by obtaining the cutting angles/proportion and facets required by the organization. |
| Remark | |