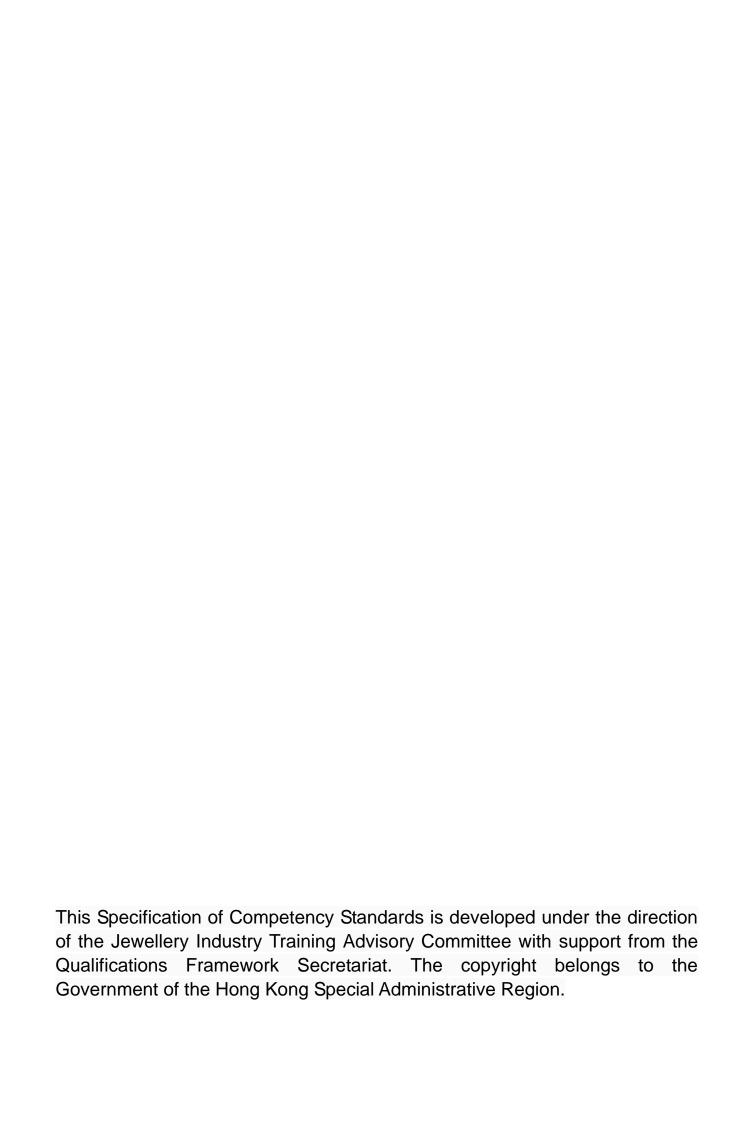


# **Jewellery Industry**

# Specification of Competency Standards

Second Edition

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### **Table of Contents**

		Page
Chamtar 1	Preface	1 - 1
Chapter 1		1 - 1 1 - 1
	Background of the Industry	
	Current Status of the Industry	1 - 3
01 ( 0	Specification of Competency Standards	1 - 23
Chapter 2	Qualifications Framework	
	Hong Kong Qualifications Framework	2 - 1
	Qualifications Framework Levels	2 - 2
Chapter 3	Competency Standards	
	Major Functional Areas of the Jewellery Industry	3 - 1
	Functional Map of the Major Functional Areas	3 - 5
	Competency Standards	3 - 6
	Units of Competency ······	3 - 6
	Recognition of Prior Learning	3 - 6
Chapter 4	Units of Competencies	
	Table of Contents for Units of Competencies	4 - 1
Chapter 5	Content of the Units of Competencies	
	Sales	5 - 1
	Marketing and Promotion	5 - 41
	Operational Management ·····	5 - 53
	Design	5 - 103
	Research and Product Development·····	5 - 155
	Production	5 - 179
	Technology Support ·····	5 - 246
	Quality Management ······	5 - 275
	Logistics and Purchasing······	5 - 295
	Testing and Certification	5 - 321
Appendix		
Appendix I	Generic Level Descriptors·····	6 - 1

#### Chapter 1

#### **Preface**

In July 2005, the Education Bureau established the Jewellery Industry Training Advisory Committee (ITAC) to implement the Qualifications Framework. The ITAC developed the Specification of Competency Standards (SCS) for the jewellery industry in 2008. The first edition of the SCS for the jewellery industry has been finalized for more than eight years. With the continuous development of the jewellery industry and technology, the ITAC reviewed the first edition of the SCS in early 2017, and proposed to update and revise it to meet the needs of the development of the industry. The Vocational Training Council has been commissioned to carry out this update. The work mainly includes updating and enriching the content of the "Units of Competency" in response to the new skills and new knowledge required currently in the jewellery industry, and adding a new functional area named "Testing and Certification". The second edition of the SCS for the jewellery industry not only lists the competencies required for the current and future development of the jewellery industry, but also meets the practical needs of the industry in a better way.

#### **Background of the Industry**

- 2. The jewellery industry has been developed in Hong Kong for a few decades. In early years, family-run traditional jewellery businesses were operated in the way that the jewellery was sold and manufactured at the front and at the back of the stores (or upstairs worksites) respectively. Some of the jewellery stores relied on jewellery worksites for jewellery manufacturing. In those days, jewellery products were produced manually (mainly for making fine-gold or k-gold ornaments). At that time, Hong Kong had a small population and the people were living a simple life. In addition, they had limited knowledge of the value of jewellery and therefore the jewellery industry was not mature at this time.
- 3. With the liberation of the mainland China at the end of the 1950s, people from all

walks of life in the Mainland moved south to Hong Kong, causing a sharp increase in Hong Kong's population. Many jewellery professionals and technicians (especially from Shanghai) came to Hong Kong and improved the jewellery making techniques significantly. Business people engaged in the jewellery industry including the trading and retailing of gold, jewellery and jade, as well as assembled jewellery, continued to run business in Hong Kong. It happened at the time when the Korean War occurred and a large number of American officers serving on the warships visited Hong Kong for a vacation. The number of foreign tourists visiting Hong Kong also began to increase, leading to an increase in the sales of jewellery. At the same time, foreign jewellers started to purchase goods in Hong Kong, which has laid the foundation for Hong Kong to become the jewellery trade centre in Asia, making Hong Kong an important distribution centre of the jewellery industry worldwide.

- 4. Since then, Hong Kong has gradually become a jewellery supply centre. By the mid- to late 70s of the 20th century, the jewellery industry began to introduce advanced technology, knowledge and machinery for jewellery production from foreign countries. Manual production was replaced by techniques such as flow line manufacturing and lost-wax casting, enabling the products of Hong Kong to meet the world standards and the requirements of overseas customers. These are all important factors driving the development of the local jewellery industry, making the tiny place of Hong Kong the world's fastest growing city of jewellery business. From 1980 to 2000, the jewellery industry indeed entered a stage of rapid development.
- 5. Hong Kong is now the world's leading jewellery manufacturing, trading and exhibition centre. Local precious metal jewellery exports are among the top three in the world. Hong Kong is also the world's largest exporter of artificial jewellery, with the total annual value of exports in jewellery up to billions of US dollars. In addition, Hong Kong is also a leading manufacturing centre for pure gold and jade jewellery. It is also a diamond trading centre in Southeast Asia, and a wholesale trading and distribution hub for jewellery materials such as gemstones and pearls.

- 6. The development of Hong Kong's jewellery industry is closely related to the local retail of jewellery. With the expansion of the scope of the "Individual Visit Scheme" for Mainland travellers to visit Hong Kong, Hong Kong's jewellery has become the first choice for Mainland customers, mainly because Hong Kong jewellery manufacturers have a good reputation, the product quality is guaranteed and the products are diversified. The jewellery industry has thus entered another stage of development. Some Hong Kong jewellery manufacturers have taken the opportunity to expand their local retail and distribution business. Existing jewellery retailers have opened a large number of sales outlets. In addition, Hong Kong jewellery retail stores providing a wide range of fashionable products, their products being reasonably priced, their services being professional, and their delivery time being fast and accurate are all factors that bring about the significant development of the local jewellery retail market. In particular, the shops that serve Mainland tourists are the most benefited.
- Looking back at the history of the development of Hong Kong's jewellery industry, it can be seen that drastic changes have occurred during the past few decades, from low-cost, labour-intensive original equipment manufacturing (OEM) to original design manufacturing (ODM) with its own design expertise, and further developing to original brand manufacturing (OBM) with proprietary technology and original brands. Through the perseverance, the belief in forging ahead and the innovative spirit of the practitioners of the jewellery industry, Hong Kong's jewellery products have become renowned internationally and rank among the top three in the world in terms of export volume and value. However, with the globalization of the economy, the Hong Kong jewellery industry also faces a lot of challenges. The following is an analysis of the current situation of the jewellery industry from the political, economic, social and technological aspects to explore the prospects and future development directions of the industry, so as to consolidate the world status of the Hong Kong jewellery industry and to maintain its edge for sustainable development.

#### Current Status of the Industry

#### Scan of Political, Economic, Social and Technological (PEST) Factors

8. Prior to the formulation of the Specification of Competency Standards, a critical

review of the macro-environment has been conducted by adopting a systematic approach known as PEST analysis, in which the political, economic, social and technological factors affecting the macro-environment of the jewellery industry have been scanned, so as to master the present situation of and the challenges faced by the industry, and to predict the future development trend of the industry.

#### **Political Factors**

9. Hong Kong jewellery manufacturers have begun relocating their factories to the Mainland since the 1980s and they established large processing and production bases in the Pearl River Delta Region. As a result, the policy changes in the Mainland have greatly influenced Hong Kong's jewellery industry.

#### World Trade Organization (WTO)

- 10. China's accession to the WTO in 2001 speeds up its comprehensive convergence with the international economic system, leading Hong Kong to new horizons by being the major service centre for businesses between the Mainland and the rest of the world. Hong Kong is a major investor in the manufacturing industry in the Mainland. As tariffs are lowered, production costs are correspondingly reduced. In accordance with the regulations on national treatment of the WTO, the mainland China has lifted the restrictions on the ratio of domestic sales of foreign-invested enterprises, resulting in a surge in sales activities of Hong Kong jewellers in the Mainland. In addition, to gain accession to the WTO, the mainland China has promised to significantly reduce import tariffs. With the reduction of tariffs on imported machinery and raw materials, Hong Kong jewellery manufacturers can save a portion of import tariffs on parts, thereby reducing the production costs and domestic sales costs.
- 11. After the Mainland's accession to the WTO, its import and export system has been adjusted accordingly, including acceleration of the reform of port system and the implementation of the "three-in-one inspection" (i.e. the combination of the port departments

for commodity inspection, health inspection, and animal and plant inspection). This has benefited Hong Kong jewellery manufacturers in the import, export and inspection procedures for jewellery products, diamonds, gemstones, pearls, jade and precious metals.

#### Closer Economic Partnership Arrangement (CEPA)

- 12. According to the "Mainland/Hong Kong Closer Economic Partnership Arrangement" (CEPA), starting from 1 January, 2006, all products originating in Hong Kong, including jewellery, can be imported into the Mainland tariff free. Jewellery not made in Hong Kong is still subject to tariff when imported into the Mainland.
- 13. The zero import tariff has attracted jewellery manufacturers to invest in the high-end consumer market, producing more branded products and introducing more high value-added elements or original designs into the production processes. However, CEPA also requires the major production processes for these products to be carried out in Hong Kong, precious metal moulding including processes, and pearl, precious gemstone/semi-precious gemstone moulding/setting processes and assembly processes during the manufacturing processes of the finished jewellery. Therefore, even though the jewellery manufacturers have migrated their production processes to the factories in Shenzhen and Panyu, the high value-added processes required by CEPA still need to be conducted in Hong Kong. Moreover, some Hong Kong companies who are very concerned about the brand image have also shifted some operation departments responsible for certain important design processes and/or value-added processes back to Hong Kong in order to ensure their products possess the outstanding characteristics carried by the mark "Made in Hong Kong" (such as reliable products, unique design and excellent quality). This has encouraged Hong Kong jewellery manufacturers to re-invest resources in the development of the local jewellery industry.

#### Labour Contract Law of the People's Republic of China

14. Although China's accession to the WTO and the signing of CEPA have brought a

positive impact on the development of the jewellery industry, the implementation of the Labor Contract Law of the People's Republic of China in the Mainland in 2008 has greatly increased labour costs and reduced the flexibility in the use of human resources by enterprises. In addition, operational difficulties were encountered in fulfilling the law. These have increased the operating costs of Hong Kong jewellery manufacturers and made it difficult for the manufacturers to run the business.

#### Individual Visit Scheme

- 15. The "Individual Visit Scheme" implemented in 2003 has brought a positive impact on the development of Hong Kong's retail industry, allowing local retail market to grow prosperously and promoting the local jewellery retail business.
- 16. Furthermore, the Chinese government's policies of encouraging consumption in recent years have greatly stimulated the purchasing power of the people and the demand for imported goods, more or less helpful in promoting the sales of Hong Kong's jewellery products in the Mainland. The steady increase in the number of mainland visitors to Hong Kong in recent years also helps stimulate the local jewellery retail business. Some Hong Kong jewellery manufacturers have taken the opportunity to expand their local retail and distribution businesses.

#### The 13th Five-Year Plan of the People's Republic of China: Made in China 2025

The "13th Five-Year Plan of the People's Republic of China" was promulgated in March 2016 in which "Made in China 2025" pointed out that enterprises would be encouraged to pursue innovation to promote industrial upgrading and to enhance product-design capability and brand building. The Plan should provide opportunities in design and brand building for Hong Kong jewellery enterprises. With the experience in providing quality service by Hong Kong jewellery brands, they should be able to provide related support and collaboration opportunities for mainland jewellery enterprises in such aspects as (i) product development and design services, (ii) brand design and promotion

strategy services, and (iii) marketing strategy services.

#### Guangdong-Hong Kong-Macao Greater Bay Area

18. The establishment of the Guangdong-Hong Kong-Macao Greater Bay Area (Greater Bay Area) will accelerate the co-operation between Hong Kong and the Mainland in terms of finance, trade and tourism, bringing new opportunities to Hong Kong and expanding the mainland market of Hong Kong's jewellery enterprises. Hong Kong's jewellery brands have the edge in being relatively mature in terms of market sales and influence, which are the areas where the mainland jewellery brands need to learn and improve. Under the planning of the Greater Bay Area, the deepening of co-operation between Guangdong and Hong Kong will promote a better development of the jewellery industry in the Mainland.

#### The Regulations and Code of Practice of the Hong Kong Jewellery Retail Industry

- 19. Under the Trade Descriptions Ordinance, Chapter 362, sellers shall ensure that there are no misstatements in respect of the goods on sale to consumers. The seven pieces of subsidiary legislation related to the jewellery industry are:
  - i. Trade Descriptions (Marking) (Gold and Gold Alloy) Order;
  - ii. Trade Descriptions (Definition of Platinum) Regulation;
  - iii. Trade Descriptions (Marking) (Platinum) Order;
  - iv. Trade Descriptions (Definition of Fei Cui and Natural Fei Cui) Regulation;
  - v. Trade Descriptions (Definition of Diamond) Regulation;
  - vi. Trade Descriptions (Provision of Information on Natural Fei Cui) Order; and
  - vii. Trade Descriptions (Provision of Information on Diamond) Order.
- 20. The "Standard Methods for Testing Fei Cui for Hong Kong" developed and implemented by the Gemmological Association of Hong Kong has increased consumers' understanding and confidence in the related products.
- Besides, in order to increase consumer confidence and to maintain the reputation

of the jewellery industry, there are some quality assurance schemes implemented by the industry, for example, the "Quality Gold Mark" and "Natural Fei Cui Quality Mark" schemes which are jointly implemented by the Hong Kong Jewellers' & Goldsmiths' Association and the Kowloon Pearls, Precious Stones, Jade, Gold and Silver Ornament Merchants Association and also the "Natural Diamond Quality Assurance" Mark which is implemented by the Diamond Federation of Hong Kong.

- The "Code of Practice of the Jewellery Retail Industry" was also jointly launched by the Consumer Council, The Hong Kong Jewellers' & Goldsmiths' Association, and the Kowloon Pearls, Precious Stones, Jade, Gold and Silver Ornament Merchants Association in July 2017, which aims to encourage the industry to implement self-monitoring measures, improve service levels, and regulate online after-sales service. In accordance with this code, the invoices shall set out the details of the fees and charges based on the original gold fineness, weights and prices, such as commissions and craftsmanship fees, so as to ensure that there are no "hidden fees", strengthening the protection for consumers. The monitoring covers six major areas of jewellery retail operations, including quality certification, promotion, customer service, intellectual property, market competition and online sales.
- The above Hong Kong regulations and code will become the norms for testing and certification of relevant jewellery products sold in Hong Kong jewellery retail stores.

# Regulations and Directives on the Testing and Certification of Jewellery Materials in the Mainland

24. The Mainland has also established regulations and directives on such areas as precious metal jewellery, precious metal jewellery terminology, pearl grading, Fei Cui grading, transparent Fei Cui (colourless) grading, jewellery, jade and precious metal product classifications and codes, jewellery and jade naming, jewellery and jade identification, diamond grading, and jewellery identification. They will become the norms of the gemmological laboratories in Hong Kong for the testing and certification of jewellery

materials imported and exported to China.

#### International Import and Export Regulations and Directives

- As the request of society on product safety and green living becomes stronger, governments of various countries have established different import standards and regulations. Developed countries in Europe and the United States (US) have implemented a series of strict regulations on goods imported from foreign countries, prohibiting the import of goods that fail to meet their relevant specifications. At present, all products exported to Europe and the US must fulfil the relevant tests, and may even be required to be examined by certified laboratories and issued with a certificate of compliance with the safety standards. This has caused the operating costs of Hong Kong jewellery manufacturers to increase significantly.
- 26. In the European Union (EU), environmental and health issues remain to be the focus of attention. The EU has banned the import of jewellery containing nickel, as an allergic reaction of the skin may occur when nickel comes into contact with the skin. Nevertheless, this measure has provided an opportunity for Hong Kong exporters to provide the EU with specialty jewellery made of other materials; however, other suppliers have also adapted to the above regulation and are catching up. In addition, lead-containing imitation jewellery is also strictly regulated by the US Consumer Product Safety Commission regulations.

#### **Economic Factors**

The Hong Kong jewellery industry has become an important member of the global market of jewellery products, whose products are well received by buyers worldwide. However, Hong Kong jewellers are facing great challenges brought about by the rising labour cost in the Mainland, the fluctuation of Renminbi (RMB), the economic downturn in Europe and the US, the shrinkage of overseas markets, and the intensification of market competition.

#### Rising Labour Cost in the Mainland

28. The rising labour cost in the Mainland is one major challenge currently faced by Hong Kong jewellery manufacturers. The average wages of employees in the Mainland have been increasing year by year, and the wages of employees in Guangdong Province have also increased significantly. In addition, the Consumer Price Index in the Mainland continues to increase in general. Since most Hong Kong traders operating in the Pearl River Delta Region must provide food and accommodation for migrant workers from other provinces, the increase in food prices will inevitably affect their operating costs.

#### Fluctuations of the RMB and Gold Price

- 29. The fluctuations of the RMB and gold price have also become a major challenge faced by Hong Kong jewellery manufacturers. For example, if the RMB appreciates, the production costs in the Mainland will increase, thereby increasing the operating costs of Hong Kong manufacturers.
- 30. Although the massive depreciation of the RMB in August 2015 gave Hong Kong manufacturers in the Mainland a helping hand with the production and operating costs to a certain degree, the decrease in consumption by the mainland tourists has caused a decline in the business of the Hong Kong jewellery retail market.
- On the other hand, fluctuations in the gold price have an important impact commonly on both the jewellery manufacturers and retailers. The gold price is not only affected by the supply and demand of commodities, it is also very sensitive to economic and political changes. Oil crisis and financial crisis will also cause the gold price to rise or fall sharply. In addition, investment demand also has a significant influence on the movement of the gold price. In recent years, wars in the Middle East, refugees and terrorist attacks in Europe, the rally of the international oil price, and the recent political threat in the Northeast Asia region have stimulated the rise in the gold price. Fluctuations in the gold price will directly increase the costs of precious metal raw materials for jewellery manufacturers.

They will also affect the sales of jewellery retail stores in fine gold jewellery.

#### The Decline of Traditional Export Markets

Following a 27% decline in the first quarter of 2015, the Hong Kong Jewellery Industry Export Index dropped by a further 41% in 2016, where a fall in exports to most major markets<sup>1</sup> was recorded. In the first quarter of 2017, the Index has not improved and still stayed in the negative region. It is believed that the short-term export performance will remain sluggish. In 2016, Hong Kong's exports to the three major markets, i.e. the United States, the European Union and Switzerland (accounting for 59.9% of total precious jewellery exports) fell by 9%, 7% and 3% respectively<sup>2</sup>.

#### **Intense Market Competition**

33. The jewellery industry of India and Thailand has seen a tremendous growth in recent years, becoming strong competitors for Hong Kong jewellery exporters. In addition, with the lifted import restrictions and reduced tariffs after China's accession to the WTO, brand jewellers from all over the world have entered into the mainland market, causing an even more severe competition in the jewellery sales market of the Mainland. Since the 1980s, Hong Kong manufacturers have relocated the production lines to the Mainland, and have gradually trained a group of mainland employees with exquisite workmanship and knowledge, who have then started their own businesses. Furthermore, since May 2003, the Mainland has abolished the licensing system for businesses trading in gold or silver products. As a result, the production, processing, wholesale and retail of jewellery are all now fully deregulated, meaning that any individual can now register to operate a business in the jewellery production, processing and wholesaling sectors, which pose a growing threat to Hong Kong manufacturers. In order to cope with the competition from Southeast Asian, overseas and the mainland counterparts, Hong Kong manufacturers must actively explore new markets and enhance their competitiveness by improving their quality, design and

Source: Hong Kong Trade Development Council Research

<sup>&</sup>lt;sup>2</sup> Source: Hong Kong Trade Statistics, HKSAR Census and Statistics Department

productivity.

#### Social Factors

#### **Labour Shortage and Wage Inflation**

- 34. The labour shortage and the increased human resources costs thus caused are the major problems that the jewellery manufacturing industry faces. The reduction of fertility rate in China has directly reduced the supply of labour in the country. In addition, many workers and technicians in the Pearl River Delta region have switched to the service industries or returned to their hometowns for a variety of reasons in recent years, resulting in a severe shortage of workers. A high turnover rate will cause a serious shortage of labour supply and increase the human resources costs significantly.
- 35. Since the 1980s when the Mainland implemented open economic policies, many Hong Kong jewellery manufacturers have moved their labour-intensive production plants northwards to the Mainland as the wages in Hong Kong were high, which led to a reduction in the employment of local human resources and even negligence of training for workers and technicians. As a result, many young people have chosen not to engage in related work in the jewellery manufacturing industry after vocational training due to a lack of employment opportunities or optimism about the prospects of the industry. In other cases, they switched to other industries after working for several years.

#### Market Demand for High-Mix, Low-Volume

The economic and social environment is changing today and customers' demand for products and services has changed dramatically, which have virtually led to the vanishing of the environment for mass production. Consequently, customers are no longer satisfied with a limited choice of products, and require the manufacturers to make unique products that meet their personal aesthetic requirements. As a result, the demand for particular products and services has become unstable, and product demand has shifted from the "single, large volume" mode to the "high-mix, low-volume" mode.

37. The emerging demand modes of "high-mix, low-volume" and customization have already appeared in the jewellery retail and manufacturing industry, and are gradually phasing out uniform and standardized jewellery products, shortening the life cycle of jewellery products. In order to enhance flexibility and market responsiveness, many large jewellery manufacturers have increased the standardization of manufactured parts, and have introduced rapid prototyping technology in relation to the "high-mix, low-volume" characteristics of the market. Furthermore, they have made use of Laser Sintering technology (3-D printers) for precious metals to increase the flexibility of the enterprises at the source of industrial manufacturing.

#### **Technological Factors**

#### Raised Technology Management Requirements

38. Since the 1990s, the new knowledge-based economic development and the rapid advancement of economic globalization have caused profound changes to the global landscape and international competition models, as well as far-reaching impact on technology policies and technology management systems. Some Hong Kong jewellery manufacturers have introduced the ISO 9001 quality management system standard since the early 1990s. However, buyers are now even more stringent in their requirements. In addition to the ISO 9001 standard, they also require manufacturers to upgrade their asset management system to meet the requirements of the ISO 55000 standard, or establish a risk management framework for the enterprise that meets the ISO 31000 standard.

#### Global Trends of Materials and Manufacturing Technology

39. Global technological advancement is so rapid that materials science, material processing, machinery, robotic arms and automation, micromachining and nanotechnology, precision machining, information technology, computer-aided engineering analysis, and application of the Internet will directly affect the development of the manufacturing technology industry. These advanced technologies can also help jewellery manufacturers improve production efficiency and product quality, so as to cope with future challenges.

- 40. Advancement in materials science in recent years have brought about the development of many innovative products and manufacturing technologies. Selecting materials that meet the requirements of the products not only can improve the quality of the products, but also enable the products to complete the required missions within their predefined life cycle, which earns a good reputation for jewellery enterprises and promotes the development of environmental protection indirectly.
- 41. Today, the functions of some jewellery products are no longer limited to wearable accessories, but also combine the functionality of music player, health monitor, phone, digital entertainment system, USB data device, Bluetooth product, etc., thanks to the progress of the miniaturization and computerization of electronic technology. The future development of jewellery manufacturing technology includes the development of micromachining technology and new materials. The interaction between jewellery manufacturing technology, microtechnology and micro-machine technology has brought countless innovative technologies to the world of jewellery.
- 42. On the other hand, advanced and innovative manufacturing technology and equipment are going to alter the scale and scope of production of the jewellery industry, and even the mode of operation of the industry. The advancement of manufacturing technology can effectively lower production costs, enhance product quality and precision, and also eliminate part of the processing procedures, enabling mass production with materials that were previously difficult to process. Confronted with various challenges, Hong Kong jewellery manufacturers have always been looking for countermeasures and continuous improvement. In order to maintain a competitive edge, they have adopted the "differentiation" strategy flexibly to introduce advanced precision and automated production equipment in the product design and manufacturing processes, including computer-aided design and manufacturing (CAD/CAM) systems, rapid prototyping (RP) technology, computer numerical control (CNC) machine tools, 3-D printing technology, and metallic and

ceramic powder injection moulding (PIM) technology. They took a further step to integrate advanced production technology, such as electroforming technology, with crafting to further improve efficiency.

#### The Wide Use of the Internet

43. Hong Kong's telecommunication system is one of the most advanced systems in the world. Similar to other industries, the jewellery industry also benefits from the Internet service. The Internet has greatly influenced companies' marketing strategies. It enables customers to perform 24-hour online shopping and collect information on different styles and models of jewellery. Hong Kong jewellers need to learn more about online marketing knowledge and technology, and use the Internet as a tool for exploring the market. Companies can make use of this new platform to get in touch with millions of new customers, particularly those from the emerging markets. To stand out from competitors, enterprises have to understand the importance of customer relationship management. Hong Kong traders must fully understand market demand in order to attract and retain customers, while keeping an eye on the development of jewellery manufacturing technology with a view to producing multi-function jewellery products to cater for market demand.

#### Implications for the Industry from the Review of the Environment

44. Based on the scan in the political, economic, social and technological aspects, the present business environment brings opportunities and challenges to Hong Kong jewellers. The implications for their business development, manpower demand and the qualification framework for the jewellery industry are as follows:

Aspect of environment	Opportunities and challenges brought by the business environment	Implications
Political factors	With China's accession to the WTO, manufacturers enjoy treatments	Strengthen the acquisition of imported machinery for modernized

Aspect of environment	Opportunities and challenges brought by the business environment	Implications
	such as reduced tariffs for importing	production to enhance
	machinery and raw materials, and	competitiveness.
	simplified customs clearance	
	procedures for goods personnel.	
	Through CEPA, manufacturers	Increase the value-added ratio for
	enjoy zero tariffs for many products	processing products in Hong Kong
	and the opportunity to expand the	and make use of quality Hong Kong
	business in the Mainland in a	brands to enter the Mainland market.
	preferential way.	
	The Labour Contract Law of the	Strengthen automated production to
	People's Republic of China causes	replace labour-intensive processes.
	labour costs to rise and reduces the	
	flexibility of enterprises to mobilize	
	human resources.	
	The revised "Individual Visit	Provide diversified products to
	Scheme" still benefits the local	attract customers and satisfy their
	jewellery retail business to a certain	needs; strengthen the training of
	degree.	salespersons in Hong Kong to
		improve service quality.
	The "13th Five-Year Plan of the	Provide related support and
	People's Republic of China: Made	collaboration opportunities for
	in China 2025" encourages	mainland jewellery enterprises.
	enterprises to innovate in order to	
	promote industrial upgrading, and	
	to enhance product-design	
	capability and brand building.	

Aspect of environment	Opportunities and challenges brought by the business environment	Implications
	The development strategy of the	Strengthen the marketing in the
	Guangdong-Hong Kong-Macao	Mainland market and expand the
	Greater Bay Area will inevitably	jewellery industry in the Greater Bay
	accelerate the co-operation between	Area. Strengthening training for
	Hong Kong and the Mainland in	Hong Kong staff is also necessary to
	terms of finance, trade and tourism.	support the forthcoming expansion of
		domestic sales business.
		Meanwhile, better services for the
		mainland jewellery industry can also
		be provided to enable the upgrading
		and transformation of the industry.
	Regulations and codes will become	Improve the management system in
	the norms for testing and	accordance with the regulations and
	certification for Hong Kong	codes for jewellery retail in Hong
	jewellery retail stores when selling	Kong, testing/certification standards
	related jewellery products.	and requirements in the Mainland,
	Regulations and directives of the	and various international and
	Mainland will become the norms of	Mainland China's standards and
	the testing and certification industry	requirements on environmental
	of Hong Kong for the testing and	protection, quality control, safety and
	certification of jewellery materials	other areas; train adequate talents to
	imported and exported to the	cope with the operation of the
	Mainland.	system.
	The international import and export	
	regulations and directives have	
	tightened, and the requirements for	

Aspect of environment	Opportunities and challenges brought by the business environment	Implications		
	product safety, corporate			
	management systems, corporate			
	social responsibility and			
	environmental protection of various			
	local markets have become more			
	stringent.			
Economic	The rising wages of the mainland	Establish knowledge-based		
factors	labour, the appreciation of the	management bodies to assist		
	RMB and the shrinkage of bank	enterprises in building their own		
	loans will affect the overall	brands and entering high		
	operating costs of Hong Kong	value-added markets, while at the		
	manufacturers in setting up	same time relocating high		
	factories in the Mainland.	value-added and highly automated		
		processes back to Hong Kong.		
	The shrinkage of several important	Speed up the development of the		
	European and American markets	more stable Mainland market and		
	where Hong Kong jewellery is	explore emerging markets with stable		
	exported to has caused the	growth under the Belt and Road		
	traditional markets to decline; the	initiative.		
	economic globalization has also			
	triggered the global economic			
	crisis.			
	The volatility of market demand	Strengthen internal and external		
	has increased and frequent financial	information automation of the		
	crises have caused market demand	enterprise, and establish electronic		
	to fluctuate sharply. At the same	platforms and resource planning		

Aspect of environment	Opportunities and challenges brought by the business	Implications		
	environment			
	time, products are highly	systems to enhance the efficiency of		
	diversified and orders are	the production plans. Respond to		
	frequently revised. The operation	market changes promptly and set up		
	mode has changed from	related technical teams.		
	production-oriented to customer-			
	oriented.			
Social factors	There is a shortage of labour in the	Add automation equipment,		
	Mainland, which happens in many	strengthen the automation of the		
	regions. Wages have also risen	manufacturing processes and raise		
	significantly. The salary levels of	the ratio of human-machine		
	mid-level technical, administrative	collaborative production. Train		
	and management personnel are	automation professionals and		
	getting closer to those of the Hong	enhance the skill level of		
	Kong employees.	practitioners.		
	The northward movement of Hong	Strengthen training of apprentices		
	Kong jewellery factories has led to	and on-the-job training for staff to		
	a lack of employment opportunities	ensure that there are sufficient		
	in the industry. With the loss of	competent talents to meet the latest		
	inheritance of local jewellery	needs of the industry.		
	craftsmanship, technicians cannot			
	help jewellery manufacturers			
	develop new products effectively			
	due to insufficient techniques.			
	The "high-mix, low-volume"	Improve resource planning,		
	market demand is phasing out	implement lean production and		
	uniform and standardized jewellery	establish more flexible		

Chapter 1 – Preface

Aspect of environment	Opportunities and challenges brought by the business environment	Implications	
	products, shortening the products' life cycle and delivery time, which	manufacturing systems.	
	increase the pressure for Hong Kong jewellery manufacturers to survive.		
Technological factors <sup>3</sup>	With the raised requirements for technology management, testing, and certification, larger manufacturers and testing/certification organizations in the jewellery industry are required to upgrade their management systems and recognized qualifications to meet international standards.  Taking benefit of the rapid development of technology, the costs of various automated manufacturing equipment and computer-aided engineering software are much lower than earlier years, while at the same time, the functionality and efficiency have been greatly enhanced.	Comprehensively improve the management systems of jewellery enterprises, and the recognized qualifications of testing/certification organizations according to the requirements of international standards. Train talents responsible for system maintenance and examination to ensure the normal operation of the systems.  Improve the design and development of products with the use of application software, and upgrade the skills of related professionals to enable jewellery enterprises to design and manufacture products with advanced technology systematically.	

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 $<sup>^3</sup>$  Regarding the area of information technology, one may refer to the Specification of Competency Standards for Information and Communications Technology.

Chapter 1 - Preface

Aspect of	Opportunities and challenges	Implications		
environment	brought by the business			
	environment			
	New materials not only can provide	The introduction of new materials		
	new functions and improved	and their application technologies		
	performance to jewellery, but can	can help enterprises enter high		
	also enable the new materials to	value-added industries, and can also		
	undergo manufacturing processes in	enhance the functions of traditional		
	a way that can enhance economic	products to meet the requirements of		
	benefits.	modern mid- to high-end products.		
	Benefiting from the Internet, it is	Strengthen the training of		
	convenient to offer 24-hour online	practitioners on online marketing		
	shopping for customers and to	knowledge and techniques to explore		
	allow customers to collect	markets and improve customer		
	information on jewellery models.	management.		

#### Prospects for the Hong Kong Jewellery Industry

- The "Closer Economic Partnership Arrangement" signed between Hong Kong and the Mainland undoubtedly benefits the Hong Kong jewellery industry. After all, some jewellery products were originally subject to tariffs of up to 35% for sales in the mainland domestic market. The definition of "origin" is expected to be defined by the value added to products on certain ratio, which may be attractive to some existing renowned jewellery brands. For example, if the processing is carried out in Hong Kong, the products will become "Made in Hong Kong" to some extent and be entitled to zero-tariff treatment.
- 46. Even though the "Individual Visit Scheme" can bring positive sentiments to the Hong Kong market, the number of travellers from Europe, the United States, Japan and other places has not completely recovered. The debt crisis in Europe is not over. Fortunately, the jewellery market of the Mainland is currently in a stage of steady growth and is not yet

saturated. In addition, as the mainland residents have high savings, they will need to seek consumption opportunities. The Chinese government has implemented policies such as urbanizing the countryside and supporting the tertiary industry in recent years, and results are being yielded. Once the economy of the countryside starts to develop and becomes a well-off society, the prospects of the Hong Kong jewellery industry will be very optimistic.

- The Chinese government has implemented policies that encourage consumption, vastly stimulating the purchasing power of the people and the demand for imported goods, which has helped the sales of jewellery manufactured products to the mainland market to a certain extent. A few Hong Kong jewellers have expanded their retail network to the Mainland through franchising and cooperative arrangements, and have successfully established their brand image. According to a recent survey conducted by the Hong Kong Trade Development Council, Mainland consumers tend to choose Hong Kong brands before Mainland and foreign brands when buying low- to mid-end products and mid- to high-end products. There are two advantages for Hong Kong brands. First, Hong Kong brands have advanced management concepts, brand concepts and brand systems. Second, Hong Kong brands have dozens of years of experience in providing quality service, which is superior to Mainland brands.
- 48. In addition, to further reduce risks, many Chinese and Hong Kong jewellery enterprises have actively explored other overseas emerging markets in recent years. With regard to the uniqueness of different markets, Hong Kong-funded enterprises can extend their businesses from developed countries such as North America and Western Europe to developing emerging markets, strengthening the establishment of their network in different regions, so as to diversify risks in various markets. With the Mainland actively implementing the Belt and Road development strategy and encouraging enterprises to carry out various trade and investment activities in countries along the routes of the Belt and Road initiative, some Hong Kong jewellery enterprises also intend to explore relevant business opportunities in East Asia, including the Association of South East Asian Nations (ASEAN)

countries.

- 49. Hong Kong is the world's largest free port, with unique advantages in trading, and mature legal and logistics systems. The levels of research and development, design, management, marketing and service of Hong Kong jewellery industry are higher, while the Mainland possesses an ample room for market development, a comprehensive industrial system, a rich labour force and excellent workmanship. In the light of this, Hong Kong has been regarded by overseas investors as the gateway for entering the mainland market, and regarded by the mainland enterprises as the springboard for getting out and explore outside markets.
- 50. In the future, companies in the jewellery industry will invest more in the quality control and technology application in the production process, with a view to building their own brands in the long run through continuous improvement of product quality. As a result, the demand of the industry for talents in various fields, such as production, design, promotion, sales and management, will continue to increase.

#### Specification of Competency Standards

- 51. In view of the industry's current status and future development trend, it is imminent to formulate the Specification of Competency Standards (SCS) so as to provide a solid framework for training with unified course contents to enhance the industry's technical capability, competitiveness and quality of service.
- 52. The SCS consists of competency standards of different levels. Competency standards are benchmarks for the industry-specific knowledge, professional skills and soft skills required for performing different job functions of the industry. The functional areas and competency standards under SCS will be practical and competence-based. The SCS not only sets out the professional knowledge and skills required for today, but also takes into account factors such as the development trend of both the industry and the society.

- In the long run, the industry-recognized SCS will become the blueprint for training. It will not only ensure that training providers can meet the industry's present and future needs by offering training courses covering all the knowledge and skills required by the industry, but also provide employees with a clear set of learning pathways, so that they can draw up their own learning and career roadmaps. As such, the SCS will complement the full-scale implementation of the Qualifications Framework by the Government.
- 54. Upon completion of SCS-based programmes, trainees will possess skills that can be objectively measured. Such information may facilitate employers in identifying suitable talents; thus reducing possible losses incurred by unfit appointments, as well as shortening the new recruits' adaptation period and minimizing related costs.
- The Jewellery Industry Training Advisory Committee (ITAC), comprising representatives of employers, employees and professional bodies of the industry, has prepared a preliminary version of SCS for the industry with reference to its current status and development trend, as well as the standard and format adopted in the Mainland and overseas, with a view to providing employees with clear guidelines for devising their own learning and career roadmaps.

#### Chapter 2

#### **Qualifications Framework**

#### Hong Kong Qualifications Framework

- The Jewellery Industry Training Advisory Committee (ITAC) was set up in July 2005 to facilitate the implementation of the Hong Kong Qualifications Framework (QF) in the industry. The proposed QF is a voluntary system. It is a seven-level hierarchy that provides benchmarks for determining the level of complexity and difficulty of individual competencies. It is also used to order and support qualifications of different natures and titles. The QF has in place an independent quality assurance (QA) system that would enhance recognition and acceptance of the qualifications in the industry, irrespective of the mode and source of learning.
- 57. The Jewellery ITAC is responsible for the development of its industry-specific, task-based Specification of Competency Standards (SCS) for the identified core functional areas. The SCS, in the form of Units of Competencies (UoCs), provides not only quantitative and qualitative specifications on the competencies required for specific tasks, but also the integrated outcome standards required as well as information on the QF level and credit.
- 58. The SCS may be used to aid vocational curriculum designed by vocational education and training providers, or in-service employee development by HR personnel, or best practice recognition and qualifications by awarding bodies within the industry. SCS is the cornerstone to enhance workforce competitiveness and industry sustainability in the long run.
- 59. The QF aims to provide clear learning pathways for individuals to draw up their own roadmaps to obtain quality assured qualifications. Learners can either pursue a specific

#### **Chapter 2 – Qualifications Framework**

learning pathway to upgrade their skills in a particular area of specialization in a gradual and orderly manner (vertical development), or progress through traversing learning pathways to become multi-skilled (horizontal development). Through the full-scale implementation of the QF, we will foster a vocational environment and culture conducive to lifelong learning and continuing education in the industry. With the active participation of employers and employees as well as the wide acceptance of the industry, the QF will also encourage the development of quality training programmes by providers to meet the needs of the community and the industry.

#### **Qualifications Framework Levels**

- 60. The QF has seven levels, from level 1 to level 7, where level 1 is the lowest and level 7 the highest. The outcome characteristic of each level is depicted by a set of generic level descriptors (GLD) (Appendix 1). The GLD specifies for each QF level its generic complexity, demand and challenges in the four dimensions below:
  - a. Knowledge and intellectual skills;
  - b. Process;
  - c. Application, autonomy and accountability; and
  - d. Communications, IT skills and numeracy.

The UoCs (See Chapter 4) are benchmarked to the QF levels in accordance with the GLD. It is worth to note that competency elements in a UoC may fall in some or all of the GLD dimensions as what it naturally should be. The QF level assignment is essentially a holistic judgement on the unit's integrated outcome requirement.

QF levels are discrete. That is, there cannot be assignment of UoC in-between QF levels. Also, UoCs that may not fully match the characteristic requirement of one or more dimensions of a level would be "rounded" to the level below.

#### Chapter 3

#### **Competency Standards**

#### Major Functional Areas of the Jewellery Industry

62. As proposed by the Jewellery ITAC, the Specification of Competency Standards (SCS) of the industry may consist of the following major functional areas:

#### (i) <u>Design</u>

This functional area covers knowledge of basic jewellery design principles, jewellery drawing techniques, computer-aided design and computer prototyping production theories, industry-specific knowledge, information collection and application, use of jewellery materials and mould-making. Practitioners are also expected to know the aesthetic value and quality of jewellery workmanship, and be able to communicate with prototyping workers. They should also have some knowledge about the trends of the jewellery market and cultural development.

#### (ii) Logistics and Purchasing

This functional area involves knowledge of logistics management concept, procurement of general materials/diamonds and gemstones, shipments, warehouse keeping, inventory control and transportation, so as to shorten corporate operational cycle, thus satisfying customer needs and enhancing corporate economic returns.

#### (iii) Marketing and Promotion

This functional area involves knowledge of brand history, understanding of the concept of new products, and development and marketing of jewellery products. Practitioners should possess basic knowledge of elementary

#### **Chapter 3 – Competency Standards**

marketing strategy, marketing expansion and promotion, public relations and publicity, brand management, analysis and supervision.

#### (iv) Operational Management

This functional area covers knowledge of operational management, operational planning, and organization and control of jewellery factories as well as wholesale and retail companies, which are necessary for enhancing management efficiency and effectiveness. Regarding jewellery factories, practitioners should possess general knowledge of factory operation, including production management, administrative management, accounting and finance, logistics, human resources, training, etc. Regarding outlet operation, they are expected to possess general knowledge of operational management on a range of subjects including costing, human resources and training, logistics, marketing and promotion, commercial law, risk strategy, etc.

#### (v) <u>Production</u>

This functional area covers knowledge and skills related to the manufacturing of jewellery products and parts, manufacturing operations and manufacturing methods which are necessary for producing high quality jewellery. Practitioners should know the characteristics of various kinds of jewellery materials, production and manufacturing techniques/skills (including gold-casting, gemstone setting, wax moulding, moulding casting, electroplating, sandering, gemstone cutting/sandering, dyeing of pearls, string of beads, stone-sorting, electroforming, silver prototype trimming, mould trimming, recovery of materials, wax setting, jade carving, jewellery carving, recovery of gold refining, calculation of fineness, etc.), application of basic CAD/CAM technologies, awareness of

#### Chapter 3 - Competency Standards

occupational safety and health, knowledge of environmental protection, be able to provide assistance in organizing corporate training, etc.

#### (vi) Quality Management

This functional area covers quality inspection and management for jewellery manufacturing and retailing business. Practitioners should be able to distinguish between genuine and fake gemstones, ensure that the quality of jewellery products and the fineness of precious metals can meet customers' requirements and international standards, and be able to analyze and handle buyers' complaints on quality as well as provide assistance in corporate quality control and related training.

#### (vii) Research and Product Development

This functional area covers the technological innovations and research work on jewellery, including knowledge of product development, technological development as well as technical research of jewellery, production engineering, project management, etc.

#### (viii) Sales

This functional area covers the export (wholesale) and retailing business of jewellery. Practitioners are required to possess knowledge of sales management, inventory control and maintenance, customer relations and services, product display, customer information, after-sales services and security, so as to achieve high effectiveness in sales.

#### (ix) <u>Technology support</u>

This functional area covers the application of information technology, knowledge of metallurgy and jewellery production, as well as other

#### **Chapter 3 – Competency Standards**

technologies and techniques to create and develop new products or systems, having regard for the project objectives, environmental factors and relevant facilities of the enterprise, thus providing highly effective support to the marketing, operation, design and production of the jewellery industry.

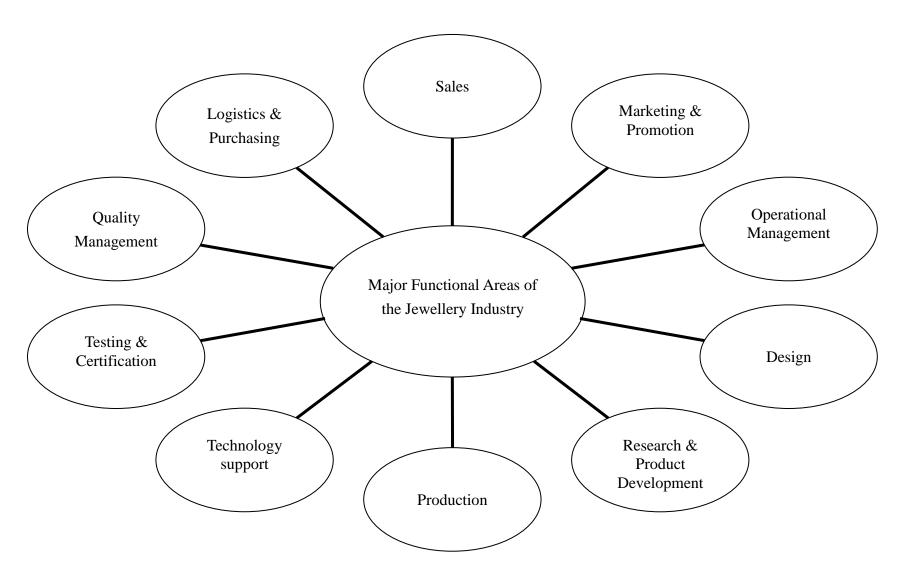
#### (x) Testing and Certification

This functional area covers the testing and certification services applicable in the jewellery industry. Testing covers the fineness of precious metals, the genuineness and grading of diamonds, the genuineness and quality of gemstones, the standard of Fei Cui (jadeite jade), etc. Internationally renowned gemstone identification laboratories can provide such kind of professional services. In addition, accredited laboratories recognised by the Hong Kong Accreditation Service (HKAS) in accordance with the international standard ISO/IEC 17025 and fulfilling the qualifications can also issue endorsed test reports and certificates bearing HKAS accreditation symbol for diamonds and Fei Cui (jadeite jade), thereby giving greater confidence to overseas customers and local consumers.

Please refer to Diagram 1 for further information.

Based on the generic level descriptors and the major functional areas, the Jewellery ITAC has formulated a "List of Competencies" for the industry. The list provides details of the training requirements of the industry in regard to the different competency levels and functional areas. It is designed to provide clear and unified guidelines for drawing up individual learning roadmaps. Learners may either pursue a specific learning pathway to upgrade their skills in a particular area of specialization in a gradual and orderly manner (vertical development), or progress along a number of learning pathways to become multi-skilled (horizontal development).

## **Functional Map of the Major Functional Areas**



#### **Chapter 3 – Competency Standards**

#### **Competency Standards**

64. Competency standards refer to the skills and knowledge required for a particular job function. They represent the industry benchmarks for the skills, knowledge and attributes required to perform competently in a particular job. Thus they are the most important part of the SCS.

#### **Units of Competencies**

65. The Jewellery ITAC has set out the competency standards for various job functions in the form of units of competencies, which describe the performance and standard required for each competency. Please refer to Chapter 4 for details.

Every "unit of competency" comprises eight basic items:

- 1. Title
- 2. Code
- 3. Range
- 4. Level
- 5. Credit
- 6. Competency
- 7. Assessment Criteria
- 8. Remarks

#### Recognition of Prior Learning

- A major concept of QF is that individuals may acquire knowledge and skills from their work experience, apart from attending formal training courses. People may, through the Recognition of Prior Learning (RPL) mechanism, obtain relevant qualifications if their experience, skills and knowledge gained in the workplace meet the competency standards set by the ITAC.
- 67. Since in-house training has long been the major training opportunity for employees of the jewellery industry, it is extremely difficult to determine whether such training has met the competency standards. Therefore, the ITAC will consult members of the industry to develop an appropriate RPL mechanism.

## Sales

Unit of Competency	<u>Code</u>	Level	<u>Credit</u>	Page No.
Identify jewellery products/parts	108815L1 (N1)	1	3	5-1
Implement the basic workflow of jewellery production	108816L1 (N1)	1	6	5-3
Understand the operation of the jewellery market	108817L1 (N2)	1	3	5-5
Receive customers	108818L1 (N3)	1	6	5-7
Employ basic knowledge of retail management	108819L2	2	6	5-9
Capable of using simple English to handle business communication with customers	108820L2 (N3)	2	9	5-11
Capable of using simple Putonghua to handle business communication with customers	108821L2 (N3)	2	9	5-12
Handle customers' general complaints	108822L2 (N3)	2	3	5-13
Guard against theft in jewellery outlets	108823L2 (N3)	2	6	5-15
Promote the sales of Fei Cui/jade products	108824L2 (N3)	2	9	5-16
Identify common gemstones	108825L2 (N4)	2	9	5-18
Identify basic jewellery manufacturing materials	108826L2 (N4)	2	6	5-20
Promote the sales of gold and silver jewellery products	108827L2	2	9	5-22
Show/display jewellery products	108828L3	3	6	5-24
Conduct value assessment and proper recovery of jewellery	108829L3	3	3	5-26
Capable of using complicated English to handle business communication with customers	108830L3 (N3)	3	9	5-28
Capable of using complicated Putonghua to handle business communication with customers	108831L3 (N3)	3	9	5-29
Communicate with staff in different departments of the organization	108832L4 (N5)	4	3	5-30
Implement supervisory management on retailing business	108833L4	4	9	5-31
Execute inventory control in retailing business	108834L4	4	9	5-33
Implement customer service management	108835L4	4	9	5-35
Assess sales status and formulate sales estimates	108836L5	5	9	5-37
Develop human resources and sales team management strategies	108837L6	6	9	5-39

#### Units of Competencies with remarks N1-N5 are also applicable to other functional areas.

#### Please refer to the following table for details:

Remark	Promotion and Marketing	Operational Management	Design	Research and Product Development	Production	Technology Support	Quality Management	Logistics and Purchasing	Testing and Certification
N1	✓	✓	✓	✓	✓		✓	✓	
N2	✓	✓	✓	✓					
N3	✓								
N4	✓	✓	✓	✓	✓	✓	✓	✓	✓
N5	✓	✓	✓	✓	✓	✓	✓	✓	

### **Marketing and Promotion**

<b>Unit of Competency</b>	<u>Code</u>	<u>Level</u>	<u>Credit</u>	Page No.
Understand the general situation of the jewellery market	108838L2	2	3	5-41
Master the market trend of jewellery products and relevant marketing skills	108839L3	3	9	5-43
Implement comprehensive marketing plans	108840L4	4	9	5-45
Assess comprehensive marketing plans and performance requirements	108841L5	5	9	5-46
Formulate comprehensive marketing strategies	108842L6	6	9	5-47
Formulate comprehensive strategies and related measures for exhibitions	108843L6	6	9	5-49
Formulate branding strategies for jewellery	108844L7	7	9	5-51

### **Operational Management**

Unit of Competency	Code	Level	<u>Credit</u>	Page No.
Apply occupational safety, labour and industry- related legislations	108845L1 (N1)	1	3	5-53
Apply inventory management on jewellery products/parts	108846L2 (N2)	2	6	5-55
Apply knowledge about import and export operation of jewellery products	108847L2 (N2)	2	9	5-57
Apply general occupational safety, health and environmental protection legislations	108848L2 (N1)	2	6	5-59
Know about the operational method of the corporation/organization	108849L3	3	6	5-61
Implement supervisory management and production control	108850L3	3	6	5-63
Handle orders for jewellery/parts	108851L3	3	6	5-64
Implement inventory control on jewellery products	108852L3	3	9	5-66
Apply cost accounting techniques	108853L3	3	9	5-68
Implement financial management	108854L4	4	9	5-70
Manage the daily operation of the organization/enterprise	108855L4	4	6	5-72
Know about business laws	108856L4	4	9	5-73
Know about the labour ordinances related to human resources management	108857L4	4	6	5-75
Formulate comprehensive operational management plans	108858L5	5	9	5-77
Formulate human resources management strategies	108859L5	5	9	5-79
Formulate financial management plans	108860L5	5	9	5-81
Formulate operational management plans and supervisory plans for the enterprise	108861L5	5	9	5-83
Know about the commercial laws of China	108862L5	5	6	5-85
Formulate strategies for skills development	108863L6	6	9	5-87
Formulate project management strategies	108864L6	6	9	5-89
Formulate outsourcing plans	108865L6	6	9	5-91
Formulate development strategies for the organization	108866L6	6	9	5-92
Formulate comprehensive procurement strategies and performance requirements	108867L6	6	9	5-94
Formulate risk management plans	108868L6	6	9	5-97
Effect innovative management	108869L6	6	9	5-99
Set the overall direction, ideology and strategy for the operational management of the jewellery organization	108870L7	7	9	5-101

#### Units of Competencies with remarks N1-N2 are also applicable to other functional areas.

#### Please refer to the following table for details:

Remark	Sales	Marketing & Promotion	Design	Research and Product Development	Production	Technology Support	Quality Management	Logistics and Purchasing	Testing and Certification
N1	✓	<b>✓</b>		✓	✓	✓	✓	<b>✓</b>	✓
N2								<b>✓</b>	

### Design

Unit of Competency	Code	Level	<u>Credit</u>	Page No.
Master basic patterns of jewellery and line- drawing techniques by hand	108871L1	1	6	5-103
Master basic jewellery design techniques	108872L2	2	6	5-105
Master the techniques for making small-scale prototypes of jewellery products	108873L2	2	3	5-107
Master basic 3-D hand-drawing techniques for jewellery products	108874L2	2	3	5-109
Know about the trend and development of jewellery design	108875L2	2	6	5-110
Master the basic techniques for drawing colour diagrams	108876L2	2	6	5-111
Know about computer-aided design software for jewellery products	108877L2	2	3	5-112
Understand the basic principle of jewellery design	108878L3	3	6	5-114
Know about jewellery design and the cultural trend	108879L3	3	6	5-116
Understand intellectual property	108880L3	3	3	5-118
Master the techniques of hand-drawn jewellery structural drawings	108881L3	3	6	5-119
Employ CAD techniques in the design of relatively simple jewellery	108882L3	3	3	5-120
Make basic jewellery display models	108883L3 (N1)	3	3	5-121
Present coloured drawings of jewellery by means of mixed media	108884L3	3	6	5-123
Understand the relationship between jewellery manufacturing and design	108885L3	3	6	5-125
Know about the general market situation of jewellery products	108886L3	3	3	5-126
Integrate and incorporate design techniques into jewellery design	108887L4	4	6	5-128
Incorporate cultural elements and design theories into jewellery design	108888L4	4	6	5-129
Employ hand-drawing techniques to present the appearance and structure of jewellery	108889L4	4	3	5-131
Apply CAD software in the design of relatively complex jewellery	108890L4	4	3	5-132
Use various kinds of jewellery materials in jewellery design	108891L4	4	3	5-133
Make relatively complex jewellery models	108892L4 (N1)	4	6	5-135
Master professional design knowledge of the jewellery industry	108893L4 (N1)	4	6	5-136
Master the market trend of the jewellery industry	108894L4	4	3	5-138
Present coloured drawings of jewellery by means of mixed media	108895L4	4	3	5-140

### Design

Unit of Competency	<u>Code</u>	Level	<u>Credit</u>	Page No.
Apply technological innovations of jewellery in jewellery design	108896L4	4	9	5-142
Analyze the market trend of the jewellery industry	108897L5	5	6	5-143
Master the trend of jewellery products and cultural development	108898L5	5	6	5-145
Show and explain jewellery design products to customers	108899L5	5	3	5-147
Apply diversified design theories to design jewellery	108900L5	5	6	5-148
Prepare proposals of jewellery design projects	108901L6	6	3	5-149
Master the cultural trend to develop new brand products	108902L6	6	6	5-150
Develop innovative jewellery design directions	108903L6	6	6	5-151
Master the new technology of jewellery and carry out innovative jewellery design	108904L6	6	9	5-152
Plan and design new jewellery brands	108905L7	7	9	5-154

### Units of Competencies with remark N1 are also applicable to other functional area. Please refer to the following table for details:

F	Remark	Sales	Marketing & Promotion	Management	Research and Product Development	Production	Technology Support	Quality Management	Logistics and Purchasing	Testing and Certification
	N1				✓					

### **Research and Product Development**

<b>Unit of Competency</b>	<u>Code</u>	Level	<u>Credit</u>	Page No.
Know about relevant technologies for the development of jewellery products	108906L2	2	6	5-155
Apply technologies related to jewellery products	108907L3	3	6	5-157
Know about the application of rapid prototyping techniques of jewellery	108908L3	3	6	5-159
Apply various kinds of jewellery processing techniques	108909L4 (N1)	4	3	5-161
Assess the application of innovative jewellery processing techniques	108910L5	5	3	5-163
Improve the appearance and structure of jewellery products	108911L5	5	3	5-165
Execute product development plans for jewellery	108912L5	5	6	5-166
Implement innovative research plans on jewellery	108913L6	6	6	5-168
Foster the progress of research and development of jewellery products	108914L6	6	3	5-169
Formulate product development plans for jewellery	108915L6	6	6	5-171
Formulate policies on innovative jewellery processing techniques	108916L6	6	3	5-173
Formulate overall and long-term strategies for product research and development of jewellery	108917L6	6	6	5-174
Lead and implement the development of innovative technological research projects	108918L7	7	3	5-175
Lead and implement the application of innovative jewellery processing techniques	108919L7	7	3	5-177

### Units of Competencies with remark N1 are also applicable to other functional area. Please refer to the following table for details:

Remark	Sales	Marketing & Promotion	Operational Management	Design	Production	Technology Support	 Logistics and Purchasing	•
N1					✓	<b>✓</b>		

#### **Production**

Unit of Competency	<u>Code</u>	Level	Credit	Page No.
Master basic metalsmithing techniques	108920L1	1	9	5-179
Master basic gemstone setting techniques	108921L1	1	3	5-181
Implement security measures for the jewellery industry	108922L2 (N1)	2	6	5-182
Carve wax models for jewellery products	108923L2	2	6	5-184
Master casting techniques	108924L2	2	9	5-185
Master wax setting and casting techniques for jewellery products	108925L2	2	3	5-187
Master jewellery polishing techniques	108926L2	2	3	5-189
Master jewellery electroplating techniques	108927L2	2	6	5-191
Master stone sorting techniques	108928L2	2	3	5-193
Master fine gold jewellery making techniques	108929L2	2	9	5-195
Master fine gold dragon and phoenix bangle/bangle/bracelet jewellery making techniques	108930L2	2	6	5-196
Master fine gold necklace/choker/neck accessory jewellery making techniques	108931L2	2	9	5-197
Master ring making techniques	108932L2	2	9	5-198
Master pendant/brooch making techniques	108933L2	2	6	5-199
Master earring making techniques	108934L2	2	6	5-200
Master bracelet/bangle making techniques	108935L2	2	6	5-201
Master necklace/choker/neck accessory making techniques	108936L2	2	9	5-202
Master trimming techniques	108937L2	2	6	5-203
Master grain setting (grain-raising setting and grain-pushing setting) techniques	108938L2	2	6	5-204
Master grain setting (pavé setting and micro setting) techniques	108939L2	2	6	5-205
Master rubbed setting/claw setting techniques	108940L2	2	6	5-206
Master channel setting/bezel setting techniques	108941L2	2	6	5-207
Master integrated gemstone setting techniques	108942L2	2	6	5-208
Master the techniques for cutting/polishing semi- precious gemstones (coloured gemstones)	108943L2	2	6	5-209
Master the techniques for cutting/polishing jade (Fei Cui/nephrite)	108944L2	2	6	5-211
Master the techniques for faceting/polishing diamonds	108945L2	2	6	5-213
Master the techniques for cutting/polishing faceted gemstones	108946L2	2	6	5-215
Carve wax models for jewellery articles/ornaments	108947L3	3	6	5-217

#### **Production**

<b>Unit of Competency</b>	<u>Code</u>	Level	Credit	Page No.
Apply CAD/CAM technology in jewellery manufacturing	108948L3 (N2)	3	6	5-218
Manufacture silver jewellery models (rings/pendants/brooches/earrings)	108949L3	3	9	5-219
Manufacture silver jewellery models (bracelets/bangles/necklaces/chokers/neck accessories)	108950L3	3	9	5-220
Master jewellery electroforming techniques	108951L3	3	9	5-221
Master the processing techniques for pearl jewellery	108952L3	3	9	5-223
Apply the techniques of faceting/polishing diamonds	108953L3	3	6	5-225
Apply the techniques of faceting/polishing semi- precious gemstones/coloured gemstones	108954L3	3	9	5-227
Master the techniques for carving semi-precious gemstones/coloured gemstones	108955L3	3	9	5-229
Master the techniques for carving jade (nephrite/jadeite/Fei Cui)	108956L3	3	6	5-231
Implement worksite/factory management	108957L4 (N3)	4	9	5-234
Employ computerized rapid prototyping techniques in the jewellery industry	108958L4 (N4)	4	9	5-236
Apply CAD technology in gemstone faceting/polishing	108959L4	4	6	5-237
Formulate worksite/factory management strategies and staff training plans	108960L5 (N3)	5	9	5-238
Assess comprehensive production management plans and performance requirements	108961L5 (N3)	5	9	5-240
Formulate production and performance requirements for jewellery products	108962L6 (N3)	6	9	5-242
Formulate plans to improve jewellery manufacturing techniques and technologies	108963L6 (N3)	6	9	5-244

### Units of Competencies with remarks N1-N4 are also applicable to other functional areas. Please refer to the following table for details:

Remark	Sales	Marketing & Promotion	Operational Management	Design	Research and Product Development	Technology Support	Managamant	Logistics and Purchasing	Testing and Certification
N1	✓	✓	✓	✓	✓	✓	✓	✓	✓
N2				✓		✓			
N3			✓						
N4				✓	✓				

### **Technology Support**

<b>Unit of Competency</b>	<u>Code</u>	Level	<u>Credit</u>	Page No.
Apply basic technological knowledge related to sales	108964L2 (N1)	2	3	5-246
Apply basic knowledge of sales strategy	108965L2 (N1)	2	3	5-248
Apply basic knowledge of management information systems	108966L2 (N2)	2	3	5-250
Apply basic knowledge of customer relationship management	108967L2 (N3)	2	3	5-251
Apply sales technology	108968L3 (N1)	3	3	5-253
Apply sales strategies	108969L3 (N1)	3	3	5-255
Use the customer relationship management system	108970L3 (N4)	3	3	5-257
Know about computer technologies and supporting techniques for jewellery	108971L3	3	6	5-259
Know about the technical support for jewellery manufacturing equipment	108972L3	3	3	5-261
Master the technological development of jewellery materials and production	108973L4 (N5)	4	6	5-263
Apply the supporting techniques of computer technology in the jewellery industry	108974L4	4	9	5-265
Apply supporting techniques to jewellery production machinery	108975L4	4	6	5-266
Use the management information system	108976L4 (N6)	4	3	5-267
Implement technological research plans for jewellery products	108977L5	5	6	5-269
Formulate technological research plans for jewellery products	108978L6	6	9	5-271
Formulate the corporate direction for developing the comprehensive technological support and research and development of jewellery	108979L7 (N7)	7	9	5-273

#### Units of Competencies with remarks N1-N7 are also applicable to other functional areas.

#### Please refer to the following table for details:

Remark	Sales	Marketing & Promotion	Operational Management	Design	Research and Product Development	Production	Quality Management	Logistics and Purchasing	Testing and Certification
N1	✓	✓	✓		✓				
N2			✓		✓	✓	✓	✓	
N3	✓	✓	✓						
N4	✓	✓	✓					✓	
N5					✓	✓			
N6	✓	✓	✓				✓	✓	✓
N7					✓				

### **Quality Management**

<b>Unit of Competency</b>	<u>Code</u>	Level	<u>Credit</u>	Page No.
Apply basic knowledge of quality control of jewellery products	108980L1	1	6	5-275
Apply quality inspection standards and use test equipment for jewellery/gemstones and parts	108981L2	2	6	5-277
Implement quality control of jewellery products	108982L2	2	6	5-279
Develop quality inspection reports and quality assurance schemes on jewellery/parts	108983L3 (N1)	3	6	5-281
Handle complaints from customers/buyers on the quality of jewellery products	108984L3	3	6	5-283
Retrieve materials/refine gold	108985L3	3	9	5-285
Analyze quality inspection reports on jewellery	108986L4 (N1)	4	6	5-287
Promote quality management culture	108987L4	4	6	5-288
Implement quality management and staff training for the entire factory	108988L4	4	6	5-290
Implement total quality management	108989L5	5	9	5-291
Formulate comprehensive quality management plans	108990L6	6	9	5-293

### Units of Competencies with remark N1 are also applicable to other functional area. Please refer to the following table for details:

Remark	Sales	Marketing & Promotion	Operational Management	Design	Research and Product Development	Production	Technology Support	Logistics and Purchasing	Testing and Certification
N1									✓

### **Logistics and Purchasing**

<b>Unit of Competency</b>	<u>Code</u>	Level	<u>Credit</u>	<u>Page No.</u>
Apply basic logistics methods in jewellery	108991L1	1	6	5-295
Know about the procurement of general jewellery products/parts	108992L2 (N1)	2	6	5-297
Know about the logistics and transportation of jewellery products	108993L2	2	6	5-298
Know about cross-border transportation between China and Hong Kong for jewellery products	108994L2	2	6	5-299
Implement the procurement of jewellery materials, gemstone products and parts	108995L3 (N1)	3	6	5-301
Implement the procurement of jewellery products for marketing purposes	108996L3 (N1)	3	9	5-303
Master the logistics management of jewellery and the relevant technologies	108997L3	3	9	5-305
Master the wholesale and distribution of inventory and transportation management of jewellery	108998L3	3	9	5-307
Implement logistics management of jewellery	108999L4 (N1)	4	6	5-309
Formulate procurement plans for jewellery materials, gemstone products and parts	109000L4 (N1)	4	6	5-311
Devise marketing plans for the procurement of jewellery products	109001L4 (N1)	4	6	5-313
Master the logistics support in the jewellery industry	109002L4	4	6	5-315
Formulate logistics management plans and supervisory plans on jewellery for the enterprise	109003L5	5	9	5-317
Formulate warehouse automation solutions	109004L6	6	9	5-319

### Units of Competencies with remark N1 are also applicable to other functional area. Please refer to the following table for details:

Remark	Sales	Marketing & Promotion	Operational Management	Design	Research and Product Development	Production	Technology Support	Quality Management	Testing and Certification
N1			✓						

### **Testing and Certification**

<b>Unit of Competency</b>	<u>Code</u>	Level	<u>Credit</u>	Page No.
Apply basic gemstone identification tools/equipment	109005L2	2	3	5-321
Know about precious metal testing methods and equipment	109006L3	3	6	5-322
Know about the basic testing of diamonds	109007L3	3	6	5-324
Know about the basic testing of gemstones	109008L3	3	9	5-326
Know about the testing of jade (including Fei Cui)	109009L3	3	6	5-328
Know about the testing and certification of jewellery products	109010L4	4	9	5-330
Identify common gemstones and their quality	109011L4	4	9	5-332
Handle and transport test samples	109012L4	4	3	5-334
Determine the testing methods	109013L4	4	3	5-335
Formulate procedures for handling the items and samples to be tested/identified	109014L5	5	3	5-337
Identify and analyze specific gemstones	109015L5	5	9	5-338
Identify and grade diamonds	109016L5	5	6	5-340
Identify and analyze jade (including Fei Cui)	109017L5	5	6	5-342
Identify and grade all kinds of pearls	109018L5	5	6	5-344
Develop a quality management system for the gemmological laboratory	109019L5	5	6	5-347
Monitor and review the implementation of the quality management system of the gemmological laboratories	109020L6	6	6	5-349
Formulate the ethics management policy and code of conduct for the gemmological laboratories	109021L6	6	6	5-351
Develop plans for staff training and talent development in gemmological laboratories	109022L6	6	6	5-353
Formulate total quality management strategies for gemmological laboratories	109023L7	7	9	5-355

Title	Identify jewellery products/parts
Code	108815L1
Range	This unit of competency is applicable to practitioners whose job duties include the sales, marketing, operation, design, product research, production, quality management and procurement of jewellery. Practitioners should be able to identify clearly the functions and structural characteristics of various types of precious/silver/artificial jewellery products/parts. They should be able to apply such knowledge in relevant job duties under supervision.
Level	1
Credit	3
Competency	Performance Requirements  1. Know about the types, functions and structural characteristics of jewellery products and parts  • Know about various kinds of jewellery products made of gold, diamond, jade/Fei Cui, gemstone and pearl, such as:  • Rings  • Brooches  • Pendants  • Necklace ornaments  • Earrings  • Bangles/Bracelets  • Dragon and phoenix bangles  • Necklaces/chokers/neck accessories  • Cuff-links  • Money-holders  • Buckles  • Key chains  • Tie-clips/pins  • Tongue-rings/Belly-rings  • Box-snaps of bracelets/necklaces  • Identify general and basic jewellery parts, such as:  • Ring shank  • Collet  • Gallery  • Pinstem  • Pendant bail  • Bolt ring  • S-split ring  • M-split ring  • Bar rut  • Ear clip  • Ear hook  • Three-knuckle hinge  • Wire loop  • Hook and slot catch  • Revolver catch  • Side-hook catch  • Box-snap  • Identify the types of ring shank, such as:

<b> </b>	
	<ul> <li>Convex spring</li> <li>Half round</li> <li>Twisted</li> <li>Knife edge</li> <li>Identify the types of collet, such as:</li> <li>Two/three/four/six claws</li> <li>Round claw</li> <li>Square claw</li> <li>Tiger claw</li> <li>Single claw</li> <li>Triangular claws</li> <li>Finger claw</li> <li>Side-hook claw</li> </ul>
	<ul> <li>Common claw</li> <li>Bazel</li> <li>Correctly identify jewellery products/parts and apply such knowledge in job duties such as production, design and procurement of jewellery under supervision</li> </ul>
	2. Identify jewellery products/parts and wear jewellery products correctly
	<ul> <li>Know about the correct way to wear various kinds of jewellery products, including their wearing methods, and capable of making simple illustration and demonstration to customers under supervision, such as:         <ul> <li>The box-snaps of various kinds of bracelets/necklaces and their hinging methods</li> <li>Position</li> <li>Comfortability</li> <li>The beauty of its appearance</li> </ul> </li> </ul>
	3. Professionalism
	<ul> <li>Ensure that accurate and reliable information on jewellery products/parts is provided to customers when performing job duties related to the jewellery industry</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to identify clearly the quality, function and characteristics of various kinds of jewellery products/parts, and to apply such knowledge in relevant job duties under supervision; and</li> <li>Know how to wear various kinds of jewellery products correctly and able to give simple illustration and demonstration to customers.</li> </ul>
Remark	

Title	Implement the basic workflow of jewellery production
Code	108816L1
Range	This unit of competency is applicable to practitioners whose job duties include the sales, marketing, operation, design, product research, production, quality management and procurement of jewellery. Practitioners should be able to understand clearly the basic workflow of jewellery production and apply such knowledge in relevant job duties under supervision.
Level	1
Credit	6
Competency	Performance Requirements  1. Understand the basic workflow of jewellery production  • Know about the basic workflow of manufacturing fine gold jewellery:  • Design (hand drawing, computer-aided drawing)  • Die-casting  • Mould trimming  • Fine gold casting  • Chiselling  • Repoussé  • Chasing  • Burnishing  • 2-D/3-D electroforming  • Know about the basic workflow of manufacturing karat gold/diamond jewellery:  • Mass production  • Design (hand drawing, computer-aided drawing)  • Prototyping  • Rapid prototyping technique  • Casting  • Mould trimming  • Stone-setting  • Polishing/electroplating  • 2-D/3-D electroforming  • Production by hand  • Design  • Casting  • Polishing/electroplating  • 2 Execute the basic workflow of jewellery production under supervision and can assist in performing relevant job duties such as sales, marketing, operation, design, product research, production, quality management and procurement of jewellery  3. Professionalism  • While performing job duties, implement the manufacturing process of jewellery production with a professional attitude, following the procedures set by the organization wholeheartedly
Assessment Criteria	The integrated outcome requirement of this unit of competency is:

	Able to understand the basic workflow of manufacturing pure gold and karat gold/diamond jewellery, and to correctly perform relevant job duties under supervision.
Remark	

Title	Understand the operation of the jewellery market
Code	108817L1
Range	This unit of competency is applicable to practitioners whose job duties include the sales, marketing, operation, design, product research, production, quality management and procurement of jewellery. Practitioners should understand the general situation of the jewellery market, so as to obtain relevant information, and be able to apply such knowledge in relevant job duties under supervision.
Level	1
Credit	3
Competency	Performance Requirements  1. Understand the jewellery market  • Understand Hong Kong's jewellery industry, including:  □ Its position, role and export value in the manufacturing industry  □ The number of jewellery manufacturing factories and the area distribution  □ The types of products (metal jewellery, stone-setting jewellery and jade/Fei Cui jewellery)  □ Distribution, demand and training of human resources  • Understand the major export markets of local jewellery, including:  □ The countries of major export markets  □ The demand for different kinds of jewellery in various export markets  □ The purchasing power and development potential of various export markets  □ The number of major overseas jewellery outlets (physical personal stores, online stores, large chain retail stores, large wholesale stores, specialty stores for branded jewellery, etc.), the area distribution and the sales products  • Understand the local market of Hong Kong jewellery, including:  □ The number of major local jewellery outlets, the area distribution and the sales products  □ The number of local jade markets, the area distribution and the sales products  □ The number of local artificial jewellery outlets, the area distribution and the sales products  □ The number of tourists visiting Hong Kong every year and their consumption figures in jewellery  □ Major and potential consumers (overseas tourists, Mainland travellers under the Individual Visit Scheme, local customers)  2. Understand the operation of the jewellery market  • Capable of understanding the operation of the jewellery market and perform duties related to the sales and marketing of the jewellery industry
	Professionalism     Ensure accurate and adequate information is obtained when analysing the jewellery market
Assessment Criteria	The integrated outcome requirement of this unit of competency is:  • Able to have a clear understanding of the general situation of the local jewellery market, and apply relevant data and information in job duties related to the sales, marketing,

	operation, design, product research, production, quality management and procurement of jewellery under supervision.
Remark	

Title	Receive customers
Code	108818L1
Range	This unit of competency is applicable to practitioners with job duties related to customer service or sales in the retail and marketing of jewellery. Practitioners should be capable of employing simple communication skills to receive customers according to the established procedures and standards of the organization, and understanding customers' requirements to facilitate transactions.
Level	1
Credit	6
Competency	Performance Requirements  1. Know about the basic knowledge of receiving customers
	<ul> <li>Know about the basic knowledge of receiving customers, including:         <ul> <li>The requirements and standards of the organization on personal grooming</li> <li>The procedures and standards of the organization on receiving customers</li> <li>Oral communication and interpersonal skills</li> </ul> </li> <li>Know about the psychological conditions of customers and their needs on jewellery products, including:         <ul> <li>Understand customers' preferences and needs on jewellery products through communication and observation</li> <li>Understand the range of jewellery products/after-sales services provided by the organization</li> <li>Understand the characteristics of various types of customers</li> </ul> </li> <li>Understand that a good attitude is required when receiving customers, including:         <ul> <li>Courtesy</li> <li>Meticulousness</li> <li>Patience</li> <li>Willingness to listen</li> <li>Sincerity</li> </ul> </li> </ul>
	<ul> <li>2. Receive customers</li> <li>Make sure one's personal grooming meets the established procedures of the organization</li> <li>Serve customers and introduce oneself according to the established procedures of the organization</li> <li>Employ effective communication skills, such as asking customers effective questions with the use of open questions and direct questions</li> <li>Respond professionally and politely to customer enquiries, and provide useful product information to customers</li> <li>Receive customers with the correct attitude, for example, provide services to customers in a friendly manner, thus giving them a good impression. Correct attitude of customer service include: <ul> <li>Courtesy</li> <li>Attentiveness</li> <li>Respect</li> <li>Enthusiasm</li> </ul> </li> <li>Maintain the image of the organization when receiving customers</li> <li>Maintain the relationship with customers and be able to collect their contact information according to the established procedures of the organization</li> </ul>

	<ul> <li>Professionalism</li> <li>Employ interpersonal communication skills to build and maintain quality customer service relationships</li> <li>Maintain the image of the organization when receiving customers according to the requirements of the organization</li> <li>Possess a customer-centric service attitude</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to employ simple communication skills to receive customers and handle customer enquiries politely and sincerely, so as to facilitate transactions and maintain the image of the organization; and</li> <li>Able to collect customers' contact information according to the policies and procedures of the organization.</li> </ul>
Remark	

Title	Employ basic knowledge of retail management
Code	108819L2
Range	This unit of competency is applicable to practitioners who work in jewellery retail outlets. Practitioners should be capable of mastering the basic knowledge of retail management and applying such knowledge in the retail work of the outlet under supervision.
Level	2
Credit	6
Competency	Performance Requirements  1. Understand the basic concept of retail management  Know about business management skills in running a shop, including:  Know about the mission and vision of the organization  Continual improvement in services, products and systems  Maintain good services and qualities  Know about shop management skills, such as preparation work before the shop opens  Software  Staff should be friendly and wear a smiling face  Tidy and comfortable shopping environment  Products should be displayed in an attractive and tidy manner  Good storage management skills  Hardware  Cashier  Product display facilities  Fire prevention and safety devices  Know about the business development plan of the organization, such as:  Human resources policy  Marketing policy  Establish/expand retail stores  Procurement/inventory planning  Establish the network of distributors and suppliers  Know about basic financial management skills, such as:  Utilization and management of resources  Proper allocation of resources  Know about basic personnel management skills, such as:  Recruitment and selection of talents  Training of talents  Planning, allocation and evaluation of work  Allocate manpower according to customer flow  Allocate manpower according to tustomer flow  Allocate manpower according to tustomer flow  Allocate manpower according to supplied products and the promotion period  Give encouragement to subordinates  Master information management skills, such as:  Effective utilization of information  Resolve difficulties and make decisions by exchanging information

	Know about the basic knowledge in retail management to assist the supervisor in performing retail management duties in the shop
	3. Professionalism
	<ul> <li>Handling basic business management duties in the shop of the organization in compliance with professional ethics</li> <li>Treat each of the team members in a fair and impartial manner when managing the retail team, bringing team spirit into play.</li> <li>Maintain an appropriate stock level of the store to meet the inventory management policy of the organization and prevent unnecessary product loss</li> </ul>
Assessment Criteria	The integrated outcome requirement of this unit of competency is:  • Able to master the basic knowledge in retail management to assist the supervisor in performing retail management duties in the shop.
Remark	

Title	Capable of using simple English to handle business communication with customers
Code	108820L2
Range	This unit of competency is applicable to practitioners who work in jewellery retail outlets or have related job duties. Practitioners should know and be capable of understanding basic English jewellery vocabulary and general marketing terminology. They should also be able to use simple English to handle business communication with customers.
Level	2
Credit	9
Competency	Performance Requirements  1. Understand basic English jewellery vocabulary and general marketing terminology  • Know about the English names of jewellery products/parts, such as:  • Jewellery products  • The peripheral products of jewellery  • Jewellery parts  • Jewellery manufacturing materials  • Types of gemstones  • Jewellery manufacturing skills/techniques  • The brand names of jewellery and their places of origin  • Know about the general marketing terminology and techniques of jewellery  2. Use simple English to handle business communication with customers  • Use simple English to communicate with customers  • Use simple English to communicate with customers  • Explain prices to customers  • Explain discounts, promotions and other offers to customers  • Introduce delivery services, return of goods, replacement of goods, warranty and maintenance services to customers  • Help customers select their favourite jewellery products  • Promote jewellery products  • Additional sales activities  3. Professionalism  • Use English to handle business communication with customers, so as to establish and
	<ul> <li>maintain quality sales services</li> <li>Ensure to provide customers with accurate jewellery-related English vocabulary</li> </ul>
Assessment Criteria	The integrated outcome requirement of this unit of competency is:
	<ul> <li>Able to understand the basic English vocabulary of jewellery and general marketing terminology, and use simple English to handle business communication with customers.</li> </ul>
Remark	

Title	Capable of using simple Putonghua to handle business communication with customers
Code	108821L2
Range	This unit of competency is applicable to practitioners who work in jewellery retail outlets or have related job duties. Practitioners should know and be capable of understanding basic Chinese jewellery vocabulary, Putonghua pronunciation and general marketing terminology. They should also be able to use simple Putonghua to handle business communication with customers.
Level	2
Credit	9
Competency	Performance Requirements  1. Understand basic Putonghua jewellery vocabulary and general marketing terminology
	<ul> <li>Know about the Chinese names of jewellery products/parts and their names used in the Mainland, such as:         <ul> <li>Jewellery products</li> <li>The peripheral products of jewellery</li> <li>Jewellery parts</li> <li>Jewellery manufacturing materials</li> <li>Types of gemstones</li> <li>Jewellery manufacturing skills/techniques</li> <li>The brand names of jewellery and their places of origin</li> </ul> </li> <li>Know about the general marketing terminology and techniques of jewellery</li> </ul>
	2. Use simple Putonghua to handle business communication with customers
	<ul> <li>Use simple Putonghua to communicate with customers         <ul> <li>Greet customers</li> <li>Explain prices to customers</li> <li>Explain discounts, promotions and other offers to customers</li> <li>Introduce delivery services, return of goods, replacement of goods, warranty and maintenance services to customers</li> <li>Help customers select their favourite jewellery products</li> <li>Promote jewellery products</li> <li>Additional sales activities</li> </ul> </li> </ul>
	3. Professionalism
	<ul> <li>Use Putonghua to handle business communication with customers, so as to establish and maintain quality sales services</li> <li>Ensure to provide customers with accurate jewellery-related Chinese vocabulary and Putonghua pronunciation</li> </ul>
Assessment Criteria	The integrated outcome requirement of this unit of competency is:
	<ul> <li>Able to understand the basic Chinese vocabulary of jewellery and general marketing terminology, and use simple Putonghua to handle business communication with customers.</li> </ul>
Remark	

Title	Handle customers' general complaints
Code	108822L2
Range	This unit of competency is applicable to practitioners responsible for duties related to customer service in the jewellery industry. Practitioners should have judgment and response capability. Under supervision, they should be capable of handling customers' general complaints effectively with the use of related techniques and procedures in accordance with the established procedures and guidelines of the organization, as well as carrying out follow-up work to ensure customer satisfaction.
Level	2
Credit	3
Competency	Performance Requirements  1. Know about the procedures of the organization for handling customers' complaints:  • Know about the established guidelines and procedures of the organization for handling customers' complaints:  • Understand quality customer service  • Understand the nature and causes of complaints  • The people authorized by the organization to settle customers' complaints and their authority  • The established procedures of the organization for settling complaints  • Procedures for referral of complaints  • Procedures for recording the steps and actions taken when settling complaints  • Understand the jewellery products and services of the organization  • Understand the regulations related to the retail industry, such as the interests of customers, consumer rights, etc.  • Possess good interpersonal and communication skills  • Understand the duties and responsibilities of the job  2. Handle general customers' complaints  • Capable of identifying, investigating and verifying the nature and causes of complaints according to the established procedures of the organization, including:  • Complaints on services or products  • The time of the situation or incident  • The location of the situation or incident  • The staff contacted at that time  • Other detailed information concerning the situation or incident  • Capable of determining the appropriate measures to settle the incident in accordance with the organization's policy, guidelines, rules, procedures and other relevant factors for consideration  • Capable of referring the cases to the appropriate person to settle if the condition so warrants  • Capable of making clear and accurate record of the steps and actions taken when settling the cases  • Provide appropriate solutions, such as compensation and apologies  • Ensure the customers are satisfied, such as follow up on the investigation progress and results  • Based on the complaint records, implement improvement plans appropriately if necessary, and conduct regular reviews to avoid similar incident

	3. Professionalism
	<ul> <li>Be polite, rational and empathetic, and able to listen carefully</li> <li>Employ interpersonal communication skills to build and maintain quality customer service relationships</li> <li>Take both the interests of the organization and the customers into account when dealing with customers' complaints, and strike a balance between the two</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to understand thoroughly the techniques and procedures for handling customers' complaints; and</li> <li>Effectively settle customers' general complaints under supervision according to the established guidelines of the organization.</li> </ul>
Remark	

Title	Guard against theft in jewellery outlets
Code	108823L2
Range	This unit of competency is applicable to practitioners who work in workplaces such as jewellery outlets, showrooms and exhibition halls. Practitioners should know about the security measures of the organization and relevant facilities necessary for the jewellery retail business, and be capable of effectively guarding against theft in jewellery outlets according to the security guidelines of the organization.
Level	2
Credit	6
Competency	Performance Requirements  1. Know about security measures for the jewellery retail business  • Know about the security measures for the jewellery retail business in areas covering:  • Shoplifting  • Employee theft  • Loss due to internal negligence  • Know about security installations, such as:  • Sensomatic system  • Infrared anti-theft system  • Demagnetizing board/Anti-theft label  • CCTV/Anti-theft mirror  • Online real-time monitoring and video recording  • Irremovable sticker/Company chop  • Empty box/Warning slogan  • Cipher alarm/Emergency alarm  • Plainclothes security guard
	<ul> <li>2. Guard against robbery/theft</li> <li>In accordance with the security guidelines of the organization: <ul> <li>Prevent shoplifting and employee theft</li> <li>Effectively guard against robbery/theft in jewellery outlets to prevent any losses</li> </ul> </li> <li>Regularly report to the superiors on the implementation of measures for the prevention of theft and propose suggestions for improvement</li> </ul> <li>3. Professionalism <ul> <li>With a professional attitude and taking the interests of the organization into account,</li> </ul> </li>
	properly display and store jewellery products and implement anti-theft measures, strictly following the security guidelines of the organization
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to implement the established measures of the organization for the prevention of theft; and</li> <li>Effectively guard against theft in jewellery outlets to safeguard the interests of the organization according to the security guidelines of the organization.</li> </ul>
Remark	

Title	Promote the sales of Fei Cui/jade products
Code	108824L2
Range	This unit of competency is applicable to practitioners with job duties related to sales in the retail and marketing of jewellery. Practitioners should know well about Fei Cui/jade products and the supporting services, and master the promotion and sales techniques of these products. They should also be capable of applying such knowledge in relevant job duties independently and appropriately to achieve sales.
Level	2
Credit	9
Competency	Performance Requirements  1. Know about Fei Cui/jade products
	Know about the Fei Cui/jade products and the supporting services     Fei Cui/Jade products     Various kinds of Fei Cui jewellery     Various kinds of Fei Cui/jade jewellery     The brands of Fei Cui/jade jewellery     The brands of Fei Cui/jade jewellery     The selling points of the design/pattern     Quality/Fineness     Function/Trend     Price     Supporting services     Maintenance     Testing and certification     Adding value to products     Recovery     Other facilitating measures     Payment method     Delivery     Other product promotion (physical store/online sales platform)  2. Promote the sales of Fei Cui/jade products     Know about customers' psychology in buying Fei Cui/jade products, including:     Types of customers     Customers' preferences     Apply promotion and sales techniques     Attract customers' attention     Arouse customers' attention     Arouse customers' interest     Stimulate consuming desires     Analyze the quality and advantages/disadvantages of competitors' products     Guide customers to buy     Apply knowledge of Fei Cui/jade to introduce Fei Cui/jade products and other supporting services to customers, including:     Provide value-added services (arrangement such as payment and delivery) to customers     Value-added services for customer management (contact, promotion, etc.)

	<ul> <li>Ensure that customers receive accurate and sufficient jewellery product information during the promotion and sales of the products</li> <li>Properly display and store Fei Cui/jade jewellery products in strict accordance with the security guidelines of the organization</li> <li>Employ interpersonal communication skills to build and maintain quality relationships between the organization and customers</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to know about Fei Cui/jade products and the supporting services; and</li> <li>Master the promotion and sales techniques of Fei Cui/jade products, and apply such techniques effectively to facilitate transactions.</li> </ul>
Remark	

Title	Identify common gemstones
Code	108825L2
Range	This unit of competency is applicable to practitioners with relevant job duties in the jewellery industry. Practitioners should know well about the types of gemstones commonly used in jewellery manufacturing.
Level	2
Credit	9
Assessment	Performance Requirements  1. Have basic knowledge of gemstone materials:  • Size, weight  • Hardness • Tenacity • Cleavage • Specific gravity (relative density) • Refraction and refractive index • Reflection and reflection effects • Colour • Dispersion  2. Know about the types of gemstone materials commonly used in general jewellery manufacturing • Identify the materials commonly used in general jewellery manufacturing: • Inorganic gemstones • Precious gemstones/Semi-precious gemstones, such as: • Diamond • Coloured gemstones • Ruby/sapphire • Emerald • Tourmaline, etc. • Jade • Jadeite • Nephrite • Others • Organic gemstones, such as: • Amber • Coral • Pearl, etc. • Artificial gemstone materials, such as: • Synthetic gemstones • Man-made gemstones • Composite gemstones • Composite gemstones • Reconstructed gemstones • Reconstructed gemstones • Reconstructed gemstones • Resident gemstones • Reconstructed gemstones • Resident gemstones • Reconstructed gemstones
Assessment Criteria	The integrated outcome requirements of this unit of competency are:
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	<ul> <li>Able to know about the gemstone materials commonly used in general jewellery manufacturing; and</li> <li>Able to ensure that accurate and reliable gemstone information is provided to customers.</li> </ul>
Remark	This unit of competency is written with reference to the following materials. Readers can study the relevant information according to their needs:-
	<ul> <li>Guobiao standards GB/T16553-2017 (Gems Testing);</li> <li>The English-Chinese and Chinese-English Dictionary of Gems and Jewelry by China University of Geosciences Press Co. Ltd.;</li> <li>Hong Kong Standard Testing Methods for Fei Cui 2016 by the Gemmological Association of Hong Kong; and</li> <li>Information from courses of The Gemmological Association of Great Britain (Gem-A), courses of The Gemological Institute of America (GIA), courses of The Swiss Gemmological Institute and courses of the Belgium International Gemological Institute, and information from the China National Gemstone Testing Center.</li> </ul>

Title	Identify basic jewellery manufacturing materials
Code	108826L2
Range	This unit of competency is applicable to practitioners whose job duties include the sales, marketing, operation, design, production, product development/technological research, quality management and procurement of jewellery. Practitioners should know well about the types of commonly used jewellery manufacturing materials and their characteristics. They should also be capable of applying these materials in relevant job duties under supervision.
Level	2
Credit	6
Competency	Performance Requirements  1. Know about the characteristics of jewellery manufacturing materials  • Know about the characteristics of common metal and non-metal materials  • General characteristics of precious/non-precious metal materials  • Specific gravity (relative density)  • Electrical conductivity  • Thermal conductivity  • Heat resistance  • Insulation  • Hardness  • Density  • Tensile strength  • Ductility (forgeability)  • Malleability  • Fusibility  • Brittleness  • Elasticity  • General characteristics of non-metal materials  • Weight  • Degree of softness/hardness  • Tenacity  • Electrical conductivity  • Combustibility  • Understand the testing methods of precious metal content  • Decomposition with a solution  • Touchstone method  • X-ray fluorescence spectrometry  • Fire assay  • Inductively coupled plasma spectrometry  2. Know about jewellery manufacturing materials (metal and non-metal materials)  • Know about the commonly used metal materials in different kinds of jewellery and their areas of application, such as:
	<ul> <li>Coloured metals</li> <li>Precious metals, including:         <ul> <li>Gold, platinum and silver</li> </ul> </li> <li>Basic metals, including:         <ul> <li>Copper, nickel, aluminium, lead, tin and zinc</li> </ul> </li> <li>Refractory metals, including:</li> </ul>

	<ul> <li>Titanium, platinum, palladium and rhodium</li> <li>Black metals         <ul> <li>Iron, iron alloy and steel</li> </ul> </li> <li>Know about the commonly used non-metal materials in different kinds of jewellery and their areas of application, such as:         <ul> <li>Natural organic materials, including: timber, bones, feathers, hair and stings</li> <li>Plastic and rubber products, including: acrylic, polypropylene, nylon, resin, organic silicone resin, neoprene rubber, polyurethane and thermoplastic polymers</li> <li>Other media, including: cement, slate, gypsum, pottery, porcelain, glass, paper, textiles, electronic components, etc.</li> </ul> </li> <li>3. Professionalism</li> <li>Capable of manufacturing jewellery using jewellery manufacturing materials and storing</li> </ul>
	jewellery manufacturing materials safely and effectively with a professional attitude and in accordance with the guidelines of the organization
Assessment Criteria	The integrated outcome requirement of this unit of competency is:  Able to know about the commonly used materials in jewellery manufacturing and apply these materials in job duties related to the sales, marketing, operation, design, production, products, quality management and procurement of jewellery under supervision.
Remark	

Title	Promote the sales of gold and silver jewellery products
Code	108827L2
Range	This unit of competency is applicable to practitioners with job duties related to sales in the retail and marketing of jewellery. Practitioners should know well about gold and silver jewellery products and the supporting services, and master the promotion and sales techniques of these products. They should also be capable of applying such knowledge in relevant job duties independently and appropriately to achieve sales.
Level	2
Credit	9
Competency	Performance Requirements  1. Know about the jewellery products  • Know about the jewellery products and the supporting services  • Jewellery products  • Fine gold/Karat gold jewellery  • Silver jewellery  • Precious metal jewellery, such as: platinum and palladium  • Branded jewellery  • The selling points of the design/pattern  • Quality/Fineness  • Function/Trend  • Price  • Supporting services  • Maintenance  • Product warranty  • Adding value to products  • Recovery  • Other supporting measures  • Payment method  • Delivery  • Other product promotion (physical store/online sales platform)  2. Promote and sell gold and silver jewellery products  • Know about customers' psychology in buying jewellery products, including:  • Types of customers'  • Customers' preferences  • Apply promotion and sales techniques  • Attract customers' attention  • Arouse customers' interest  • Stimulate consuming desires  • Analyze the quality and advantages/disadvantages of competitors' products  • Guide customers to buy
	<ul> <li>Apply knowledge on jewellery to introduce gold and silver jewellery products and other supporting services to customers, including:         <ul> <li>Provide value-added services (arrangement such as payment and delivery) to customers</li> <li>Value-added services for customer management (contact, promotion, etc.)</li> </ul> </li> </ul>

	3. Professionalism		
	<ul> <li>Ensure that customers receive accurate and sufficient jewellery product information during the promotion and sales of the products</li> <li>Properly display and store jewellery products in strict accordance with the security guidelines of the organization</li> <li>Employ interpersonal communication skills to build and maintain quality relationships between the organization and customers</li> </ul>		
Assessment	The integrated outcome requirements of this unit of competency are:		
Criteria	<ul> <li>Able to understand the basic knowledge of gold and silver jewellery products and the supporting services; and</li> <li>Master the promotion and sales techniques of gold jewellery products, and apply such techniques effectively in job duties related to the sales and marketing of jewellery, so as to facilitate transactions.</li> </ul>		
Remark			

Title	Show/display jewellery products
Code	108828L3
Range	This unit of competency is applicable to practitioners with job duties related to sales in general jewellery outlets/showrooms. Practitioners should be capable of mastering the skills for designing window display to effectively show/display precious/ornamental jewellery products independently, so as to achieve selling purposes.
Level	3
Credit	6
Competency	Performance Requirements 1. Understand the functions of window display and the skills for designing various kinds of display  • Know about product display  • Strategies of the organization for promoting and displaying/ showing products or Purposes of displaying products, such as increasing customer flow, promoting new products, stimulating consuming desires to facilitate transactions and thematic promotion  • Factors to consider when displaying products, including store image, store environment, store interior decoration, product characteristics, product type, seasonality, etc.  • Product display characteristics of competitors  • The use, characteristics and usage of various display tools, such as display racks and electronic photo frames  • Understand the legal requirements related to occupational safety and health  • Know about the functions of window display  • Attract people's attention  • Stimulate consuming desires  • Bring visual enjoyment to consumers  • A variety of art and visual communication in the design of window display  • The demand for commodities  • Know about the skills, effects and techniques for designing various kinds of display  • Highlight, scene, etc.  • Match commodities with the themes of window display  • The art of jewellery product arrangement  • Colour design  • Illumination  • Background decorations  • Know about various themes of window display  • Commercialized  • Livelihood (seasonal, activities, etc.)  • Personalized  • Livelihood (seasonal, activities, e

Assessment	<ul> <li>Prepare display racks for ornaments</li> <li>Prepare body figure models</li> <li>Prepare metal/timber/cloth/fibre/rope/net</li> <li>Start production process</li> <li>Strengthen the communication with the salespersons in the jewellery outlet and capable of giving appropriate instructions after making analysis and judgment, thus facilitating the preparation of the design sketch</li> <li>Strengthen the communication with display designers, management and customers</li> <li>Enhance the image of the organization and products through the design of the window display, so as to make a deep impression on customers of the organization</li> <li>Effectively show/display precious/ornamental jewellery to attract customers</li> <li>Professionalism</li> <li>Show/Display jewellery independently and effectively to attract customers and stimulate consuming desires, thereby increasing the sales of the jewellery outlets</li> <li>The integrated outcome requirements of this unit of competency are:</li> </ul>
Criteria	<ul> <li>Able to understand thoroughly the functions of window display and the skills for designing window display to effectively show/display precious/ornamental jewellery products in accordance with the image of the organization and consumer orientation so as to attract customers and achieve selling purposes; and</li> </ul>
	<ul> <li>Regularly review the effectiveness of the jewellery display programme, check the status of the displayed products and replace the products as needed.</li> </ul>
Remark	

Title	Conduct value assessment and proper recovery of jewellery	
Code	108829L3	
Range	This unit of competency is applicable to practitioners working in jewellery outlets, jewellery worksites or relevant workplaces. Practitioners must have the ability to make judgment and should be capable of understanding thoroughly the relevant legislations on Hong Kong jewellery products, the Charter of the industry's association and the checking procedure for jewellery when performing the duties of value assessment and recovery of jewellery. They should also be capable of performing such duties independently.	
Level	3	
Credit	3	
Competency	Performance Requirements  1. Know about value assessment and recovery of jewellery  • Know about the relevant legislations on Hong Kong jewellery products and the Charter of the industry's association, such as:  • The standard requirement of fineness  • The calculation method for international gold price and weight of gold  • Identify international hall mark and trade mark  • Understand the refining and fineness testing of precious metals (including gold, platinum and silver)  • Know about the testing procedure and the calculation method for recovery of jewellery  2. Conduct value assessment and recovery of jewellery  • Capable of explaining clearly to customers the value assessment of jewellery, the testing procedure and calculation method for recovery of jewellery (tests should only be conducted with customers' consent and authorization)  • Conduct value assessment of jewellery independently  • Use gold testing tools and Diamond Selector properly  • Examine the jewellery to see if it is genuine or fake  • Re-measure the weight of the jewellery  • Use advanced gold testing instruments (safe and do not damage the jewellery) to assess and examine the fineness of jewellery  • Recover according to the fineness and the recovery price of the day  • Calculate the price less "refining loss", welded joints, commission, etc.  • Finally print the testing report for checking by the customer  3. Professionalism  • Follow strictly the relevant legislations on Hong Kong jewellery products, the Charter of the industry's association and the checking procedure for jewellery when performing the	
	<ul> <li>duties of value assessment and recovery of jewellery</li> <li>Ensure that the provided information/data about the value assessment and calculation method for recovery is accurate</li> </ul>	
Assessment	The integrated outcome requirement of this unit of competency is:	
Criteria	<ul> <li>Able to understand thoroughly the relevant legislations on Hong Kong jewellery products, the Charter of the industry's association and the checking procedure of jewellery, and performing the duties of value assessment and recovery of jewellery independently.</li> </ul>	

Fι	unctional	∣Area -	Sales
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Remark		

Title	Capable of using complicated English to handle business communication with customers		
Code	108830L3		
Range	This unit of competency is applicable to practitioners working in jewellery outlets or relevant workplaces. Practitioners should be capable of understanding customers' requirements clearly and handling business communication with customers using complicated English, so as to perform relevant duties effectively.		
Level	3		
Credit	9		
Competency	Performance Requirements  1. Know about the frequently used English in the jewellery industry		
	<ul> <li>Know about the frequently used English in the jewellery industry, such as:         <ul> <li>Export/import trading</li> <li>Wholesale and retail businesses</li> <li>Manufacturing and quality check</li> </ul> </li> <li>Know about the English communication skills in the jewellery industry, such as:         <ul> <li>English communication skills in office</li> <li>English communication skills in showroom</li> <li>English communication skills in service station</li> <li>Online real-time English communication skills</li> </ul> </li> </ul>		
	2. Capable of using complicated English to handle business communication with customers		
	<ul> <li>Know how to communicate with customers in English skilfully, such as:         <ul> <li>Handle export/import trading of jewellery products</li> <li>Handle wholesale and retail businesses of jewellery products (physical store/online store)</li> <li>Handle manufacturing and quality check of jewellery products</li> </ul> </li> </ul>		
	3. Professionalism		
	<ul> <li>Use English to handle business communication with customers, so as to establish and maintain quality sales services</li> <li>Ensure to provide customers with accurate English vocabulary and information on jewellery products</li> <li>Maintain professional communication with customers and prevent any deceptive behaviours</li> </ul>		
Assessment Criteria	The integrated outcome requirement of this unit of competency is:		
	<ul> <li>Be proficient at the frequently used English in the jewellery industry when handling export/import trading, wholesale and retail businesses as well as manufacturing and quality check; also capable of using fluent English to handle effective business communication with customers so as to understand thoroughly the requirements of customers and perform relevant duties effectively.</li> </ul>		
Remark			

Range This work and performance The second This work and performance The second This work and performance The second This work and performance This work and the performan	is unit of competency is applicable to practitioners working in jewellery outlets or relevant rkplaces. Practitioners should be capable of understanding customers' requirements clearly d handling business communication with customers using complicated Putonghua, so as to rform relevant duties effectively.  In the frequents when the frequently used Putonghua in the jewellery industry  In the frequently used Putonghua in the jewellery industry, such as:  Export/import trading  Wholesale and retail businesses  Manufacturing and quality check  Know about the Putonghua communication skills in the jewellery industry, such as:  Putonghua communication skills in office
work and performance of the second se	rkplaces. Practitioners should be capable of understanding customers' requirements clearly d handling business communication with customers using complicated Putonghua, so as to rform relevant duties effectively.  rformance Requirements Know about the frequently used Putonghua in the jewellery industry  • Know about the frequently used Putonghua in the jewellery industry, such as:
Credit 9  Competency Perf	<ul> <li>Know about the frequently used Putonghua in the jewellery industry</li> <li>Know about the frequently used Putonghua in the jewellery industry, such as:         <ul> <li>Export/import trading</li> <li>Wholesale and retail businesses</li> <li>Manufacturing and quality check</li> </ul> </li> <li>Know about the Putonghua communication skills in the jewellery industry, such as:</li> </ul>
Competency Perf	<ul> <li>Know about the frequently used Putonghua in the jewellery industry</li> <li>Know about the frequently used Putonghua in the jewellery industry, such as:         <ul> <li>Export/import trading</li> <li>Wholesale and retail businesses</li> <li>Manufacturing and quality check</li> </ul> </li> <li>Know about the Putonghua communication skills in the jewellery industry, such as:</li> </ul>
	<ul> <li>Know about the frequently used Putonghua in the jewellery industry</li> <li>Know about the frequently used Putonghua in the jewellery industry, such as:         <ul> <li>Export/import trading</li> <li>Wholesale and retail businesses</li> <li>Manufacturing and quality check</li> </ul> </li> <li>Know about the Putonghua communication skills in the jewellery industry, such as:</li> </ul>
,	<ul> <li>Export/import trading</li> <li>Wholesale and retail businesses</li> <li>Manufacturing and quality check</li> <li>Know about the Putonghua communication skills in the jewellery industry, such as:</li> </ul>
	<ul> <li>Putonghua communication skills in showroom</li> <li>Putonghua communication skills in service station</li> <li>Online real-time Putonghua communication skills</li> </ul>
2. C	Capable of using complicated Putonghua to handle business communication with customers
	<ul> <li>Know how to communicate with customers in Putonghua skilfully, such as:         <ul> <li>Handle export/import trading of jewellery products</li> <li>Handle wholesale and retail businesses of jewellery products (physical store/online store)</li> <li>Handle manufacturing and quality check of jewellery products</li> </ul> </li> </ul>
3. P	Professionalism
	<ul> <li>Use Putonghua to handle business communication with customers, so as to establish and maintain quality sales services</li> <li>Ensure to provide customers with accurate Putonghua vocabulary and information on jewellery products</li> <li>Maintain professional communication with customers and prevent any deceptive behaviours</li> </ul>
	e integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Be proficient at the frequently used Putonghua in the jewellery industry when handling export/import trading, wholesale and retail businesses as well as manufacturing and quality check; also capable of using fluent Putonghua to handle effective business communication with customers so as to understand thoroughly the requirements of customers and perform relevant duties effectively.</li> </ul>
Remark	

Title	Communicate with staff in different departments of the organization	
Code	108832L4	
Range	This unit of competency is applicable to practitioners with relevant job duties in the jewellery industry. Practitioners should possess basic interpersonal communication skills. With a thorough understanding of the operational procedures of the organization, practitioners should be capable of employing various communication methods flexibly to effectively communicate with staff in different departments of the organization.	
Level	4	
Credit	3	
Competency	Performance Requirements  1. Know about basic communication skills	
	<ul> <li>Capable of understanding various basic communication methods and their application skills, as well as their differences and characteristics, such as:         <ul> <li>Fixed line telephone</li> <li>Mobile phone</li> <li>Fax</li> <li>Online applications, such as email, Facebook, Twitter and photo wall</li> <li>Mobile communication applications, such as WhatsApp and WeChat</li> </ul> </li> </ul>	
	<ul> <li>Memorandum</li> <li>Form</li> <li>Official document</li> <li>Capable of understanding the objectives, as well as the procedures, flow and skills of the meetings of the organization</li> </ul>	
	2. Apply communication skills	
	<ul> <li>Capable of flexibly employing various communication methods, such as memorandum, email, form and other web/online applications, to communicate in written form with staff in different departments of the organization by means of these channels</li> <li>Capable of flexibly employing meeting skills to take part in or conduct internal meetings to communicate with staff in different departments of the organization</li> </ul>	
	3. Professionalism	
	<ul> <li>Employ basic communication methods and their skills to establish and maintain good relationships with staff in different departments of the organization to enhance efficiency at work</li> </ul>	
Assessment	The integrated outcome requirement of this unit of competency is:	
Criteria	<ul> <li>Able to flexibly employ various communication methods and their skills to communicate with different staff in the organization to enhance efficiency at work.</li> </ul>	
Remark		

Title	Implement supervisory management on retailing business			
Code	108833L4			
Range	This unit of competency is applicable to practitioners responsible for supervisory management in jewellery outlets. Practitioners should be capable of employing the professional knowledge of supervisory management on retailing business to analyze, explore and decide the needs of the organization, so as to effectively implement supervisory management on retailing business and to give training and instructions to subordinate staff.			
Level	4			
Credit	9			
Competency	Performance Requirements  1. Understand the theory of supervisory management on retailing business  • Know about the duties of supervisory staff, including:  ○ Cultivate leadership capability  ○ Identify good salespersons  ○ Identify outstanding staff or inferior staff  ○ Set evaluation objectives  • Know about the importance of management by objective, including:  ○ Strengthen the control of performance appraisal  ○ Set objectives for staff  ○ Monitor staff performance/progress  ○ Adopt remedial measures for underperforming staff  • Master communication skills and interpersonal relationship skills, including:  ○ Understand the importance of communication  ○ Master communication methods, including written and non-written communication  ○ Understand communication barriers, such as different opinion, personal prejudice and unilateral communication  ○ Understand the factors contributing to successful communication, such as language, environment, listener/receiver and response  • Know about the modes of leadership, including:  ○ Directive/Authoritative  ○ Consultative  ○ Negotiative  ○ Negotiative  ○ Delegative  • Know about the purposes of disciplinary action:  ○ Maintain fairness  ○ Improve staff performance to help them meet the requirements of the organization  • Know about employee performance evaluation procedures and standards:  ○ Collect performance data, such as sales amounts and customer satisfaction with the services  ○ Feedback from superiors or subordinate staff  ○ Assess past performance			
	<ul> <li>Set mutually agreed performance targets</li> <li>Know about staff training:         <ul> <li>The purposes of staff training</li> <li>The modes of learning for adults</li> </ul> </li> </ul>			

	<ul> <li>The techniques of staff training</li> <li>The outcome of staff training</li> <li>Know about counselling services and support for staff, including:         <ul> <li>The purposes and advantages of providing counselling services to staff</li> <li>The role of the counsellor</li> <li>Counselling techniques</li> </ul> </li> <li>Know about the purposes of giving encouragement to staff:         <ul> <li>Facilitate staff to improve their performance</li> <li>Facilitate staff's dedication to work</li> </ul> </li> <li>Know about the contents of the equal opportunities and anti-discrimination ordinances</li> </ul>
	2. Implement supervisory management on retailing business
	Take disciplinary actions, including:  Verbal warning Written warning Termination of employment  Implement staff training, including: Identify learning areas Identify training methods Set training objectives Prepare teaching materials Select suitable location and time for training Review training results  Provide counselling services to staff, including: Effective communication with staff Conduct interviews to understand the causes of problem and give suggestions  Encourage staff effectively, including: Delegate authority to staff Let staff have vision of future prospect Give constructive opinions to staff and encourage them Give recognition to staff performance Provide staff with opportunities of personal development
	3. Professionalism
	<ul> <li>The performance of subordinate staff must be treated fairly and impartially</li> <li>Strictly adhere to the equal opportunities and anti-discrimination ordinances</li> <li>Ensure to maintain good communication with staff or staff bodies</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to employ the professional knowledge of supervisory management on retailing business to analyze, explore and decide the needs of the organization, and give training and instructions to subordinate staff; and</li> <li>Effectively implement supervisory management on retailing business.</li> </ul>
Remark	

Title	Execute inventory control in retailing business		
Code	108834L4		
Range	This unit of competency is applicable to practitioners responsible for goods management in jewellery outlets. Practitioners should be capable of planning, analyzing and judging, and employing the knowledge of inventory control in retailing business to submit and assess inventory information in accordance with the established policy regarding inventory control in retailing business of the organization, so as to effectively execute inventory control in retailing business for meeting customers' needs and reducing waste.		
Level	4		
Credit	9		
Competency	Performance Requirements  1. Understand the theory of inventory control in retailing business  • Master the inventory control of the organization, including:    Inventory control policy		

	<ul> <li>Set a safe inventory level for the stored goods</li> <li>Apply the first-come-first-out principle to govern the in and out of goods</li> <li>Perform stock-taking duty according to the established procedures, including:         <ul> <li>Count the quantity and value of the inventory on a regular basis</li> <li>Record the real balance of inventory</li> <li>Know about the quantity of inventory loss</li> </ul> </li> <li>Implement inventory policy, including:         <ul> <li>Assess customers' needs and customer flow</li> <li>Make forecast on sales volume</li> <li>Co-ordinate with the sales promotion plans of all relevant departments</li> <li>Monitor the receipt and delivery procedures of inventory of the store</li> <li>Make timely follow-up and report to the superior according to the company's guidelines (if the inventory of goods exceeds the inventory level)</li> <li>Determine the proportion of inventory to sales</li> </ul> </li> </ul>
	<ul> <li>Arrange replenishment of goods</li> <li>Estimate ordering cost and inventory cost</li> <li>Ordering stock level, such as: maximum value/minimum value</li> </ul> 3. Professionalism
	<ul> <li>Ensure that the inventory of the store can meet the needs of customers and prevent unnecessary loss</li> <li>Ensure that the inventory information/data provided is accurate</li> <li>Prevent any abuse or corrupt practices such as abusing or misappropriating the assets of the organization and theft</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to employ the knowledge of inventory control in retailing business to submit and assess inventory information, so as to effectively perform the duty of inventory control in retailing business, including: goods yard management, stock-taking, etc.; and</li> <li>Regularly review the inventory level of the jewellery outlet and make adjustments as needed to ensure that the inventory level of the outlet is appropriate and complies with the inventory control policy of the organization.</li> </ul>
Remark	

8835L4
his unit of competency is applicable to practitioners responsible for customer service anagement in jewellery outlets. Practitioners should be capable of planning, analyzing and diging, and effectively implementing customer service management in accordance with the tablished customer service plan of the organization to provide quality customer service to hance the image and retail business of the organization.
<ul> <li>erformance Requirements</li> <li>Understand the characteristics of customer service in the jewellery industry</li> <li>Understand the characteristics of customer service, such as:</li> <li>Direct service (face to face encounter)</li> </ul>
Receive customers  Receive customers  Handle customers' enquiry  Marketing process  Indirect service  It will affect customers' overall impression on the services provided  The environment/location of the outlet  The quality/price of goods  Understand customer service management in the jewellery industry  Customer expectation  Value-added services for customers  Customer satisfaction  Understand the cycling system of customer service, including:  Customer satisfaction → high business turnover → high profits → high returns on the part of the employees → high satisfaction of the employees → better service provided by the employees  Know about the six major elements of good services, including:  Capability (effectiveness and efficiency)  Knowledge (can answer customers' questions and help them solve their difficulties)  Self-respect (enthusiasm and dedication to work)  Image (let customers know your attitude in serving customers)  Courtesy (smile and listen to/receive customers attentively)  Work harder (surpass customers' expectation)  Understand the rules in the jewellery industry which customer service staff must follow, such as:  Codes of conduct and service  Concept of service ethics  Implement customer service management  Implement general customer service management in accordance with the standards and requirements on customer service of the organization, including:  Establish the scope, content and standards of customer service  Develop a set of guidelines for salespersons
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of the organization, such as to develop a set of standards for customer service and form a successful working team; and	t	
Employ interpersonal communication skills to build and maintain quality customer service relationships     Ensure to take into account the interests of both the organization and the customers when implementing customer service management strategies  Assessment Criteria  The integrated outcome requirements of this unit of competency are:  Able to implement customer service management effectively according to the guidelines of the organization, such as to develop a set of standards for customer service and form a successful working team; and		service promotion strategies  Provide standardized and consistent service to customers  Ensure that staff understand the organization's requirements, so as to enhance their sense of satisfaction  Implement customer service management plan  Customer service management operation  Customer service process combination  Customer service promotion and communication combination strategy  Analysis and handling of customer complaints  Electronic and web service strategy  Website database  Electronic customer service  Customer profile and information management  Manage employees' service attitude  Form a successful working team, including:  Organize staff to become team members  Appropriately assign team members to take up different positions  Let staff give full play of their skills  Establish mutual understanding and full co-operation within the team  Conduct regular reviews to rectify and improve the customer service
service relationships  • Ensure to take into account the interests of both the organization and the customers when implementing customer service management strategies  Assessment Criteria  • Able to implement customer service management effectively according to the guidelines of the organization, such as to develop a set of standards for customer service and form a successful working team; and		3. Professionalism
Able to implement customer service management effectively according to the guidelines of the organization, such as to develop a set of standards for customer service and form a successful working team; and		<ul> <li>service relationships</li> <li>Ensure to take into account the interests of both the organization and the customers</li> </ul>
Able to implement customer service management effectively according to the guidelines of the organization, such as to develop a set of standards for customer service and form a successful working team; and	Assessment	The integrated outcome requirements of this unit of competency are:
the organization.	Criteria	of the organization, such as to develop a set of standards for customer service and form a successful working team; and  • Provide quality services to customers, so as to enhance the image and retail business of
Remark	Remark	

Title	Assess sales status and formulate sales estimates
Code	108836L5
Range	This unit of competency is applicable to practitioners responsible for product promotion and inventory control in the jewellery industry. Practitioners should be capable of analyzing, assessing and integrating information, anticipating the achievable sales target within the specified timeframe by analyzing/evaluating the factors affecting the sales status, so as to formulate sales estimates.
Level	5
Credit	9
Competency	Performance Requirements  1. Understand sales status assessment and sales estimates  • Understand the importance of anticipating the sales performance to an organization, such as:  • Increase cash flow • Control inventory • Analyze sales patterns and trends • Have an in-depth understanding of target customers and products of the organization  • Understand the information needed for assessing the sales performance, including: • Past and current product sales reports • The sales data of the previous year • Previous sales data (two or five years) • Past and current product inventory records • Information about competitors, such as the business turnover • Retail market analysis • Customer survey • Past forecast reports • Understand the factors affecting the anticipation accuracy of the sales performance, including: • Organizational factors • Marketing strategy • Market survey • Market share • The number of outlets • Environmental factors • The area of the outlet • The maturity period of the outlet • The number of business days • Influential factors • Business seasonality • Political events • Policy changes, such as the impact of the Individual Visit Scheme of the Mainland • Income of consumers • Seasons and climate change • Changes in the economic environment (price fluctuation, consuming inclination, inflation/deflation) • Understand various estimation methods and techniques, such as:
	Understand the information needed for assessing the sales performance, including:  Past and current product sales reports  Previous sales data of the previous year  Previous sales data (two or five years)  Past and current product inventory records  Information about competitors, such as the business turnover  Retail market analysis  Customer survey  Past forecast reports  Understand the factors affecting the anticipation accuracy of the sales performance, including:  Organizational factors  Marketing strategy  Market survey  Market survey  Market share  The number of outlets  Environmental factors  The area of the outlet  The maturity period of the outlet  The number of business days  Influential factors  Business seasonality  Political events  Policy changes, such as the impact of the Individual Visit Scheme of th Mainland  Income of consumers  Seasons and climate change  Changes in the economic environment (price fluctuation, consuming

	<ul> <li>Market-factor index</li> <li>Chain ratio method</li> <li>Total market demand</li> </ul> <li>2. Formulate sales targets and estimates of jewellery products   <ul> <li>Plan the preliminary work for formulating the sales targets</li> <li>Determine the estimate period, such as short-term, medium-term and long-term</li> <li>Collect information, including internal and external</li> <li>Analyze factors that affect the estimation accuracy</li> </ul> </li> <li>Conduct sales estimation of the jewellery products       <ul> <li>Integrate and analyze the information collected to predict the operation, as well as development trend and impact, of the jewellery retail market</li> <li>Use quantitative and qualitative analysis techniques to anticipate the sales performance of the products of the organization</li> </ul> </li> <li>Discuss with the sales and marketing department to anticipate the achievable sales target</li> <ul> <li>Assess various costs and selling prices to calculate the expected profits</li> </ul> <li>Foresee the risks and return, such as foreign exchange risk</li> <li>Prepare reports of the products on the anticipated sales targets and related expenditure according to the established standards of the organization</li> <li>Regularly analyze and compare the discrepancy between the actual and anticipated sales performance and its causes, and record relevant information for future reference</li>
	<ul> <li>Ensure the accuracy and authenticity of the content of the report when anticipating the sales performance</li> <li>Ensure that the sales data/financial information provided is accurate</li> <li>Prevent any abuse or corrupt practices through budgeting and financial planning</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to make effective assessment of the sales performance of the jewellery products;</li> <li>Able to anticipate the achievable sales target within the specified timeframe to formulate sales estimates by assessing the factors affecting sales status; and</li> <li>Able to regularly analyze the discrepancy between sales estimates and actual sales performance and its causes, and adjust the sales plans as needed.</li> </ul>
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Title	Develop human resources and sales team management strategies
Code	108837L6
Range	This unit of competency is applicable to management responsible for developing human resources and sales strategies in the jewellery industry. Practitioners should be capable of critically reviewing, integrating and expanding, and handling complex planning, designing and management duties related to services, operations or processes. The competency can be applied to daily human resources and sales team management of various organizations in the jewellery industry. It can also be applied to making human resources and sales team decisions by management, such as recruitment and training, in the jewellery industry, so as to achieve the most effective work results of the practitioner and the team.
Level	6
Credit	9
Competency	Performance Requirements  1. Understand human resources and sales team management strategies  • Understand the organizational structure of the organization and the functions of each department  • Understand the overall operating principles and strategies of the organization  • Understand the technical and competency requirements of each post  • Understand the human resources policies of the organization, including:  • Recruitment  • Selection  • Training  • Understand the sales process of the jewellery industry and its characteristics, including:  • Roster system  • Overtime work  • Working on holidays  • Understand the sales structure and functions of the organization, including:  • Sales area  • Sales team  • Review and integrate human resources management strategies:  • Review and assess the organizational structure and functions of each department of the organization  • Assess the technical and competency requirements of each post  • Review and integrate sales team management strategies:  • Review and integrate sales team management strategies:  • Review and integrate sales team management strategies:  • Review and integrate sales team processes, including the roster system, overtime work and working on holidays arrangement  • Assess the established remuneration policy of the organization for sales staff, including the salary and commission system, sales team rewards, training methods of sales staff, etc.  • Handle performance appraisals and other issues:  • Analyze and assess various performance appraisal methods and their pros and cons  • Assess the mechanisms for resolving internal conflicts and procedures for making complaints and taking disciplinary actions  • Legal regulation related to human resources

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	<ul> <li>Analyze human resources strategies, including internal staff turnover and supply and demand information about the manpower market, according to the development plan of the organization</li> <li>Analyze and assess the impact of the development of human resources management of the organization, such as:         <ul> <li>Job classification</li> <li>Whether the number of positions needs to increase or decrease</li> </ul> </li> <li>Plan the model of the sales teams according to the human resources policy, such as:         <ul> <li>By region</li> <li>By team</li> </ul> </li> <li>Exercise analytical capability to plan and implement management strategies, such as recruiting sales staff, retaining employees, assigning jobs, internal training and promotion, and sales incentive schemes</li> <li>Write reports to explain to management the human resources strategies and implementation of the related plans</li> <li>Regularly analyze and review the performance with each sales team, and propose improvement suggestions to ensure that the sales targets set by the organization can be met</li> </ul>
	3. Professionalism
	Use professional knowledge and integrity to develop human resources and sales team management strategies, treating staff in a fair and impartial manner
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to develop human resources strategies in accordance with the development objectives and resources of the organization;</li> <li>Ensure that the human resources strategies developed match the business development of the organization and avoid the occurrence of brain drain and manpower shortage;</li> <li>Able to analyze and assess the demand for jewellery sales staff of the organization according to the sales, operation objectives and business development of the organization; and</li> <li>Able to develop appropriate jewellery sales staff management strategies, including recruitment, training, management and performance appraisal, in accordance with the human resources management policies of the organization.</li> </ul>
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Title	Understand the general situation of the jewellery market
Code	108838L2
Range	This unit of competency is applicable to practitioners with job duties related to promotion and marketing in the jewellery industry. Practitioners should be capable of understanding the general situation of the jewellery market and applying such knowledge to assist in the marketing and promotion of jewellery under supervision in the daily working environment.
Level	2
Credit	3
Competency	Performance Requirements  1. Understand general situation of the jewellery market  Know about the competitors in local jewellery market, such as:  Local brands and European and American brands, including:  Brand history  Brand concept  Selling points of the brand  Functions of the brand  Price positioning of the brand  Mainland and South-east Asia manufacturers  Know about the strengths of local jewellery market, such as:  Strong corporate leadership  The business hub of international jewellery  Latest and rich information on jewellery business  Diversified manpower resources  Good/Unique design  Equipped with advanced technology  Know about the weaknesses of local jewellery market, such as:  Slow response to the competition of increasingly short product cycle  Focus on the value of the materials of jewellery products and neglect product design  Neglect product development and the development of jewellery manufacturing techniques  Insufficient training to talents on jewellery craftsmanship  Know about the opportunities in local jewellery market, such as:  Spread trading districts and manufacture varied products to meet the needs of different customer groups  Jewellery can match with other products for sale  Know about the challenges that the local jewellery market faces with, such as:  The throat-cutting competition posed by competitors  The European and American manufacturers setting up factories in the Pearl River Delta Region  The Pearl River Delta Region provides craftsmen to compete with Hong Kong  Know about the latest development of local jewellery market, such as:  Computer-aided design  Computer-aided manufacturing  Rapid prototyping  Corporate resources scheme system  Cult-30 techniques in the marketing/promotion of products

	<ul> <li>2. Assist in the promotion work of the jewellery market</li> <li>Know about the general situation of the jewellery market, and know how to make preliminary analysis of market information under supervision, and assist in the marketing and promotion of the jewellery industry, including: <ul> <li>Jewellery distribution channels</li> <li>Price variation</li> </ul> </li> <li>3. Professionalism</li> </ul>
	<ul> <li>Ensure that customers receive accurate and sufficient information when conducting marketing related activities of jewellery</li> </ul>
Assessment Criteria	The integrated outcome requirement of this unit of competency is:  Capable of knowing about the general situation of local jewellery market to obtain relevant information, and applying such knowledge to assist in the marketing and promotion of jewellery products.
Remark	

Title	Master the market trend of jewellery products and relevant marketing skills
Code	108839L3
Range	This unit of competency is applicable to practitioners with job duties related to promotion and marketing in the jewellery industry. Practitioners should be capable of making judgments and analyzing the information related to the market trend of precious/ornamental jewellery. They should also be able to evaluate the market trend of general jewellery products, as well as effectively and independently employ brand strategies and relevant marketing skills to achieve the objectives of product promotion.
Level	3
Credit	9
Competency	Performance Requirements  1. Understand the jewellery market and its development trend  • Know about the jewellery market, including:  • The opportunities and threats brought to the organization by the macroscopic and microscopic marketing environment  • The concept of market segmentation:  • Understand the purpose of market segmentation and "position" the products  • Understand the basic variables of the market  • Understand market segmentation procedure, its basic strategies, etc.  • Know about consumers' buying pattern, types of consumers and how consumers make decisions  • Master the techniques of handling intaking goods and slow-moving goods  • Know about the development trend of jewellery products and relevant technical information  • Know how to analyze jewellery products, such as core products, real products and additional products  • Know about product development trends  • Assess product development trends  • Assess product development trends through various channels  2. Implement marketing plans for jewellery products  • Effectively implement marketing plans for jewellery products according to the objectives set by the organization, such as:  • Identify target consumers  • Develop marketing objectives and strategies  • Determine the essential points in marketing portfolio  • Implement brand strategies, such as:  • Increase brand awareness  • Increase sales channels  • Strengthen publicity and promotion activities  • Plan marketing strategies  • Organize exhibitions  • Set up online sales platforms  • Assess marketing results  • Manage and co-ordinate the marketing plans for jewellery products  • Apply information technology in marketing and sales, such as:  • Apply information technology in marketing and sales, such as:  • Apply information technology in marketing and sales, such as:  • Apply multimedia technology and software

	<ul> <li>Use multimedia peripheral products, including digital camera, digital camcorder, virtual reality/augmented reality, server, etc.</li> <li>E-commerce and the use of the Internet</li> </ul>
	3. Professionalism
	<ul> <li>Ensure that customers receive accurate and sufficient information when conducting marketing activities</li> <li>Protect the privacy interests of customers when collecting market research data</li> <li>Contents of advertisements or promotional activities cannot carry discriminatory wordings</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to analyze and assess the marketing trend of general jewellery products; and</li> <li>Employ marketing analysis, brand strategies and relevant marketing skills to effectively implement the marketing plans for jewellery products, so as to accomplish the promotion target set by the company.</li> </ul>
Remark	

Title	Implement comprehensive marketing plans
Code	108840L4
Range	This unit of competency is applicable to practitioners with job duties related to promotion and marketing in the jewellery industry. Practitioners should be capable of making careful analysis and judgments. They should also be able to employ marketing theory to explore market orientation, and make proper analysis and assessment of the latest market information, as well as effectively implement comprehensive marketing plans for jewellery products.
Level	4
Credit	9
Competency	Performance Requirements  1. Understand marketing theory and relevant laws  • Master market orientation theory, including:
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to suggest to management concrete marketing plans for jewellery products to meet the company's marketing development plans, business forecast and strategies; and</li> <li>Co-ordinate practical promotion duties according to the marketing plans, including determining the purpose of marketing and promotion, formulating promotion plans, etc.</li> </ul>
Remark	

Title	Assess comprehensive marketing plans and performance requirements
Code	108841L5
Range	This unit of competency is applicable to practitioners with job duties related to promotion and marketing in the jewellery industry. Practitioners should be capable of analyzing, judging and assessing. They should be able to conduct in-depth analysis of the comprehensive jewellery marketing plans (including brand strategies), assess the performance requirements, and submit relevant reports and data to management to adjust the marketing plans to cater to the market and use them as a reference to facilitate the development of future marketing direction of the enterprise.
Level	5
Credit	9
Assessment Criteria	Performance Requirements  1. Know about the situation of the jewellery market  • Know about the situation of the jewellery market, including:  • Local market, Mainland market, each target overseas market, etc.  • The development potential, marketing structure, current market orientation, market life cycle, etc. of each target market  2. Assess comprehensive marketing plans and performance requirements  • Assess the marketing plans, brand strategies and performance requirements of each target market in accordance with the objectives of the organization  • Understand the importance of collecting market information to the business development of jewellery companies  • Assess the comprehensive marketing plans according to the relevant performance requirements  • Assess and review the actual performance of the marketing strategies for the brand and propose optimization suggestions  • Submit relevant reports and data to management to adjust the marketing strategies to meet market demand  • Provide reference for the organization to develop future marketing strategies  3. Professionalism  • Ensure that customers receive accurate and sufficient information when developing marketing plans  The integrated outcome requirements of this unit of competency are:  • Able to assess the situations of all kinds of jewellery markets, such as local market, Mainland market and overseas market;
	<ul> <li>Assess the effectiveness of the comprehensive marketing plans (local market, Mainland market and overseas market, including brand strategies); and</li> <li>Submit reports and data to management about the assessment of the comprehensive marketing plans for the organization to develop future marketing strategies.</li> </ul>
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Title	Formulate comprehensive marketing strategies
Code	108842L6
Range	This unit of competency is applicable to practitioners responsible for formulating policies in the jewellery industry. Practitioners should be capable of critically analyzing and assessing the comprehensive marketing strategies (including brand strategies). They should be able to formulate systematic and innovative marketing strategies most suitable to the organization according to the comprehensive jewellery market development objectives (overseas and local) of the organization, so as to effectively establish and manage the brand, enhance the target markets' knowledge in the organization/enterprise and promote the sales of jewellery products for the organization/enterprise.
Level	6
Credit	9
Competency	Performance Requirements  1. Understand the entire operation concept of the marketing and sales system of the organization/enterprise  • Know about the entire operation concept and situation of the marketing and sales system of the organization/enterprise, and conduct in-depth analysis on different markets to determine the marketing methods, brand strategies and sales methods  • Know about the overall market (overseas and local markets) environment and factors of competition  • Know about the sales strategies of the franchise brands of the organization/enterprise  2. Formulate comprehensive marketing strategies  • Formulate effective comprehensive marketing strategies, such as:  • Capable of expanding the market and attract new customers apart from identifying target customers  • Master the methods of retaining existing customers and use relationship marketing/models to develop new sources of customers  • Develop marketing portfolios  • Develop various marketing portfolios, formulate budgets based on the financial situation of the organization and prioritize the marketing projects  • Know about the goals and objectives of the organization to build branded products  • Know about the various ways to build a brand and the types of brands, such as original brand, distribution, agency and brand acquisition  • Master the methods and media for brand marketing and their characteristics, such as:  • Online media (social media, the Internet, etc.)  • Traditional advertising (TV, newspapers, magazines, etc.)  • Shop window design, posters, product display design, etc.  • Know about the significance of exhibitions and determine the strategies of exhibitions held in markets inside/outside the territory  • Know about the importance of online sales platforms and build relevant platforms  • Assess marketing results  • Know about the results of and information about all marketing plans, so as to analyze and develop future marketing strategies  • Develop and manage the entire marketing strategies to ensure they are in harmony, a

	3. Professionalism
	<ul> <li>Ensure that customers receive accurate and sufficient information when developing marketing plans</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to formulate comprehensive marketing strategies for jewellery products according to the operational needs of the organization/enterprise to effectively establish and manage the brands, and enhance the target markets' knowledge in the organization/enterprise as well as the popularity of the organization/enterprise to promote the sales of jewellery products.</li> </ul>
Remark	

Title	Formulate comprehensive strategies and related measures for exhibitions
Code	108843L6
Range	This unit of competency is applicable to practitioners responsible for formulating policies in the jewellery industry. Practitioners should be capable of critically analyzing and assessing the effectiveness of exhibitions for marketing. They should also be able to communicate with management, customers, display designers, contractors and the organizer to analyze all kinds of information (including the design of the exhibition venue, products, venue facilities, customers' expectation, corporate image, etc.), so as to formulate comprehensive strategies and related measures for exhibitions, thus achieving the marketing purpose and enhancing the image of the organization.
Level	6
Credit	9
Competency	Performance Requirements  1. Know about exhibitions and their functions  • Know about the close relation between products and exhibition design, including:  • The importance of exhibitions to products  • Know about the design of the exhibition venue, such as:  • Architectural space  • Window display  • Environmental art  • Activities embodying vision transmission and multi-design arts  • Handle ergonomic and space design  • The art of product display  • Placement/Distribution techniques of promotional leaflets  • Know about the information on the venue to construct the design, including:  • Design with creative thinking  • The technique of graphic/3-D design  2. Formulate comprehensive strategies and related measures for exhibitions  • Master the designing process of the exhibition venue, including:  • Prepare creative design layouts, including floor plan, front view and side view  • Communicate with display designers, contractors and technicians of the organizer  • Effect tight time management and venue arrangement  • Monitor the designing progress of the exhibition venue  • Introduce the design concept to management and customers, including:  • Identify the preferences and requirements of management and customers  • Prepare design proposals  • Strengthen communication with display designers, management and customers  • Prepare company and product image through exhibitions, including:  • Give customers a vivid impression of the company  • Develop company brands and corporate image  3. Professionalism  • Ensure that customers receive accurate and sufficient information when developing marketing plans

	Properly display and store jewellery products in strict accordance with the security guidelines of the organization/exhibition venue
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to communicate with management, customers, display designers, contractors and the organizer to effectively formulate comprehensive strategies and related measures for jewellery exhibitions; and</li> <li>Lead relevant people to participate in the exhibitions and enhance company and product image through the exhibitions, so as to achieve marketing purpose.</li> </ul>
Remark	

Title	Formulate branding strategies for jewellery
Code	108844L7
Range	This unit of competency is applicable to decision-makers in the jewellery industry. In alignment with the overall operating objectives and sales strategies of the organization, practitioners should be capable of mastering the trend of jewellery design and proposing innovative and unique insights from a critical perspective, so as to position the new jewellery products. Practitioners should also be able to integrate specific knowledge of marketing and branding strategies, and make use of brand management strategies to effectively establish the brand image of the new jewellery products and achieve sales purposes.
Level	7
Credit	9
Competency	Performance Requirements  1. Know about buyers and brands  • Master the knowledge of branding strategies  □ Understand the importance of building a brand to the entire organization  □ Performance and profits  □ Development of other related businesses  □ Overall image of the organization  • Know about consumer orientation, including:  □ The impact of trends and culture on consumer behaviour  □ Changes in consumption pattern and the causes of the changes  □ Impact on the product design and price  • Understand the value and profundity of brands  • Understand thoroughly the brand history of international jewellery products, culture and trends  2. Formulate concrete plans to establish jewellery brands  • Communicate with overseas jewellery brand agents, including:  □ Formulate marketing plans for overseas jewellery brand agents  □ Formulate marketing plans for overseas jewellery brand agents  □ Formulate original jewellery branding strategies, including:  □ Formulate branding positioning and relevant strategies  □ Establish the image, value and positioning of the jewellery brands  □ Analyze the development trend of the retail market and the economic environment  □ Collect and analyze market information to determine the market share of the brands of the organization in the target market  □ Assess and analyze the attitudes and concepts of customers towards the product brands  □ Establish the quality of the products/services  □ Integrate operations, sales and product strategies  • Master brand management and marketing strategies, including:  □ Understand brand management methods  □ Establish sales channels for jewellery brands  • Understand brandings and relevant legislations on the intellectual property of products, including:  □ Know about the importance of intellectual property to brands  • Know about legal protection for relevant brands

	Branding strategy management     Ensure that establishing brands is the long-term objective of corporate development     Understand the core value of the brand itself     Consistently maintain the image and quality of brands     Monitor the suitability of the strategy during the implementation process     Rectify decision-making problems during the implementation process  3. Professionalism
	When formulating jewellery brand strategies, respect intellectual property rights and avoid infringements and violations of the relevant laws and regulations about branding
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to integrate specific knowledge of marketing and branding strategies to effectively formulate concrete plans to establish jewellery brands (original jewellery brands or jewellery brands introduced from overseas markets); and</li> <li>Establish brand management and marketing strategies to enhance the image and value of the brand itself.</li> </ul>
Remark	

Title	Apply occupational safety, labour and industry-related legislations
Code	108845L1
Range	This unit of competency is applicable to practitioners with relevant job duties in the jewellery industry. Practitioners should be capable of complying with and applying occupational safety, labour and relevant legislations to complete the jobs assigned by the supervisor when performing routine duties.
Level	1
Credit	3
Competency	Performance Requirements  1. Know about occupational safety, labour and relevant legislations  • Know about the basic safety legislation and rules for jewellery workplaces, such as:  Safe use of electricity
	Safe use of electricity Fire fighting installations, equipment and safety measures Basic first-aid knowledge Knowledge of office safety Factories and Industrial Undertakings Ordinance Know about the requirements of current occupational safety and health and environmental protection legislations, such as: Occupational Safety and Health Ordinance Water Pollution Control Ordinance, such as sewage discharge Material Safety Data Sheet (MSDS) Know about the Dangerous Goods Ordinance and other environmental protection ordinances Know about Employees' Compensation Ordinance, such as: Contracts for Employment Outside Hong Kong Ordinance Employees' Compensation Assistance Ordinance Protection of Wages on Insolvency Ordinance Know about the functions and related legislations of the Labour Department and other relevant statutory bodies, such as: Background and functions Know about the meaning and significance of Hong Kong's labour legislations to employees and employers, including: Promote occupational safety and health Foster a harmonious relationship between employees and employers Improve and protect the rights and benefits of employees and employers Employment Ordinance Mandatory Provident Fund Schemes Ordinance Personal Data (Privacy) Ordinance Sex Discrimination Ordinance Prevention of Bribery Ordinance Family Status Discrimination Ordinance Framily Status Discrimination Ordinance Frevention of Bribery Ordinance Know about the legal definition of the terms and conditions of employment contracts, including:  The definition of continuous contract of employment and the salary Paid leave, sick leave, compensation leave due to injury at work, maternity protection leave

	<ul> <li>Trade mark</li> <li>Patent</li> <li>Registered design</li> <li>Copyright</li> <li>Know about the Trade Descriptions Ordinance (Cap. 362) on jewellery products, such as:         <ul> <li>Trade Descriptions (Marking) (Gold and Gold Alloy) Order</li> <li>Trade Descriptions (Marking) (Platinum) Order</li> <li>Trade Descriptions (Definition of Diamond) Regulation</li> <li>Trade Descriptions (Definition of Fei Cui and Natural Fei Cui) Regulation</li> <li>The fineness standard of gold in each country</li> <li>Comply with the regulations of the industry's association, etc.</li> </ul> </li> <li>Apply the occupational safety and labour legislations</li> <li>Comply with the relevant legal requirements during the recruitment process and the termination of employment contracts</li> <li>Comply with the requirements of the Employment Ordinance</li> <li>Contribute on time and at a rate in compliance with the Mandatory Provident Fund Schemes Ordinance</li> </ul>
	<ul> <li>Comply with and apply the labour and industry-related legislations to protect the rights and benefits of employees and employers in job areas related to the jewellery industry</li> <li>Comply with the requirements of the occupational safety and environmental protection legislations to complete jobs when performing routine duties</li> </ul>
	3. Professionalism
	<ul> <li>Comply with the occupational safety and health and environmental protection legislations related to the jewellery industry to carry out sales, marketing, operation and management, production and other related work for jewellery products</li> <li>Apply the labour legislations to conduct work related to personnel management in the jewellery industry</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to know about the occupational safety legislations, environmental protection legislations, intellectual property ordinances and Trade Descriptions Ordinance applicable to the jewellery industry, and apply such knowledge in various daily work in the jewellery industry in compliance with the related legal requirements; and</li> <li>Understand Hong Kong's labour laws and related regulations, and comply with the related legal requirements in the recruitment process and the handling of daily personnel management to protect the interests of both the employees and employers.</li> </ul>

Title	Apply inventory management on jewellery products/parts
Code	108846L2
Range	This unit of competency is applicable to practitioners responsible for operational management in the jewellery industry. Practitioners should be capable of applying the knowledge of inventory management on jewellery products/parts to assist the supervisor in performing the duty of inventory management on jewellery products/parts. They should also be able to fulfil the logistics and procurement duties to achieve the objectives of inventory management of the organization.
Level	2
Credit	6
Competency	Performance Requirements  1. Understand the basic principles of inventory management on jewellery products/parts  • Know about the basic principles of inventory management on jewellery products/parts, including:  • The role of inventory management  • The objectives of inventory management  • The purpose of inventory management  • Know about the just-in-time management of jewellery products/parts  • The philosophy of zero inventory  • The circumstances of just-in-time inventory management  • The advantages of just-in-time inventory management  • Inventory management and new knowledge  • Manual or electronic inventory tracking system  • Cloud inventory technology and system  • Know about the inventory management policies of the organization, such as:  • Stock-taking system  • Policy on inventory control  • Maximum and minimum inventory requirements for different categories of products  • Processing guidelines/procedures for insufficient and excess inventory  • Target inventory of the store  • Know about the relation between organizational structure and inventory management on Different inventory control structures  • Duties and objectives  • Inventory valuation  2. Implement inventory management on jewellery products/parts  • Assist the supervisor in performing the duty of inventory management on jewellery products/parts  • Assist the supervisor in performing the duty of inventory management on jewellery products/parts  • Assist the supervisor in performing the duty of inventory management on jewellery products/parts  • Assist the supervisor in performing the duty of inventory management on jewellery products/parts  • Assist the supervisor in performing the duty of inventory management skills  • Understand inventory holding period by week  • Successfully reduce the inventory ratio by applying inventory management skills  • Understand the practical measures for reducing inventory holding  • Regularly review the effectiveness and timeliness of the current inventory or products/parts exceeds the target index of inve

	<ul> <li>Professionalism</li> <li>Prevent any practices involving misappropriating assets of the organization and theft with a professional attitude</li> <li>Ensure that the inventory information/data provided is accurate</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to master the knowledge of inventory management on jewellery products/parts; and</li> <li>Assist the supervisor in performing the duty of inventory management on jewellery products/parts, and tie in with the logistics and procurement duties to achieve the objectives of inventory management of the organization.</li> </ul>
Remark	

Title	Apply knowledge about import and export operation of jewellery products
Code	108847L2
Range	This unit of competency is applicable to practitioners responsible for operational management in the jewellery industry. Practitioners should be able to master the knowledge of import and export operation of jewellery products in regular working environment under instruction, and to apply such knowledge in job duties related to operational management, logistics and procurement of jewellery.
Level	2
Credit	9
Competency	Performance Requirements  1. Know about the import and export operation of jewellery products
	Know about the general trading terminology, such as:  Free Carrier, Free Along Side and Free On Board  Cost and Freight, Cost, Insurance and Freight, Carriage Paid to and Carriage and Insurance Paid to  Delivered at Frontier, Delivered Ex Ship, Delivered Ex Quay, Delivered Duty Unpaid and Delivered Duty Paid  Ex Works  Know about different modes of trading, such as:  Processing trade Import and export Entrepot trade  Know about import and export documents, taxation and procedures for customs clearance  Know about Hong Kong, Mainland and international conventions, regulations and laws  Know about Hong Kong, Mainland and international import and export regulations  Master import and export arrangements, such as:  Free On Board Cost, Insurance and Freight Bill of Lading Master different payment methods  Buyer buying on credit Collection  Letter of credit Basic payment vouchers (draft, commercial invoice, sea/land/ air freights bill of lading)  Know about the classification of goods and documents required by customs Understand customs clearance procedures, customs certificates and trans-customs arrangements  Master the guidelines and procedures of the organization to handle import and export of goods, such as:  Verify information Package goods Arrange transportation  Know about various types of cargo insurance and their policies, such as:  The types of cargo insurance

	<ul> <li>Various types of insurance policies</li> <li>Coverage</li> <li>Cargo claim procedures and rules</li> <li>Wire transfer and letter of credit, such as inspection arrangement notice and policy</li> </ul>
	2. Master the import and export operation of jewellery products
	<ul> <li>Identify the types of jewellery being processed</li> <li>Determine the international regulations and permits required to ship the goods</li> <li>Arrange the completion of documents required for shipment</li> <li>Ensure to submit the completed documents to the relevant departments according to the procedures of the organization</li> <li>Calculate the expenses involved in the import and export of goods</li> <li>Master the requirements of customs clearance and determine the most suitable cargo service and insurance</li> <li>Provide documents required by customs and complete the required procedures</li> <li>Monitor the time required for transportation and co-ordinate with different parties to ensure that the goods arrive at the intended destination as scheduled</li> <li>In the event of serious shortage of imported and exported goods or a quality problem happens, arrange a claims adjuster for goods inspection</li> </ul>
	3. Professionalism
	<ul> <li>Ensure that products are properly delivered to designated customers on time</li> <li>Comply with the legal requirements for logistics, customs and bonded goods when executing import and export of goods</li> <li>Conduct work related to import and export operation in accordance with relevant legislations (e.g. commercial laws, the Import and Export Ordinance, etc.)</li> </ul>
Assessment Criteria	The integrated outcome requirements of this unit of competency are:
	<ul> <li>Able to understand thoroughly the import and export operation of jewellery products; and</li> <li>Apply such knowledge in regular working environment under instruction and co-ordinate with different parties to ensure that the goods arrive at the intended destination as scheduled.</li> </ul>
Remark	

Title	Apply general occupational safety, health and environmental protection legislations
Code	108848L2
Range	This unit of competency is applicable to practitioners working in the manufacturing department in the jewellery industry. Practitioners should be capable of observing relevant occupational safety, health and environmental protection legislations in daily routine work, and assisting in jewellery manufacturing or related work.
Level	2
Credit	6
Competency	Performance Requirements  1. Know about occupational safety, health and environmental protection legislations  • Know about the occupational safety, health and environmental protection legislations commonly used in jewellery manufacturing workplaces, such as:  • Factories and Industrial Undertakings Ordinance  • Factories and Industrial Undertakings (Electricity) Regulations  • Factories and Industrial Undertakings (Confined Spaces) Regulation
	<ul> <li>Occupational Safety and Health Ordinance</li> <li>Fire Prevention/Fire Alarm Ordinance</li> <li>Know about the environmental protection legislations commonly used in China/Hong Kong, such as:         <ul> <li>Air Pollution Control Ordinance</li> <li>Noise Control Ordinance</li> <li>Waste Disposal Ordinance</li> <li>Water Pollution Control Ordinance</li> <li>Ozone Layer Protection Ordinance</li> <li>Dumping At Sea Ordinance</li> <li>Environmental Impact Assessment Ordinance</li> <li>Dangerous Goods Ordinance and other environmental protection ordinances</li> </ul> </li> <li>Know about information such as the insurance policies of the employees provided by the organization, the insurance underwriter and the medical service provider</li> </ul>
	<ul> <li>Apply occupational health, safety and environmental protection legislations</li> <li>Under the jewellery manufacturing environment (e.g. factories), understand the legal requirements on occupational safety, health and environmental protection involved in the operations of the departments and positions, and assist in jewellery manufacturing or related work, such as:         <ul> <li>Safety and security facilities</li> <li>Coverage of computer network</li> <li>Appropriate warning signs</li> </ul> </li> <li>Possess occupational safety, health and environmental protection concepts in daily work to match with the safe work policies of the organization</li> <li>Observe the regulations and guidelines on occupational safety and health to work safely, so as to protect the safety of oneself and the others</li> </ul>
	3. Professionalism
	Observe the safety guidelines and codes of practice of the occupational safety, health and environmental protection legislations to assist in jewellery manufacturing or related work

Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to apply and refer to the related occupational safety, health and environmental protection ordinances in daily work; and</li> <li>Comply with the requirements of the ordinances to assist in jewellery manufacturing or related work in a safe manner.</li> </ul>
Remark	

Know about the operational method of the corporation/organization
08849L3
This unit of competency is applicable to practitioners responsible for operational management in the jewellery industry. Practitioners should be capable of understanding the daily operational method of the corporation/organization, so as to assist the supervisor in implementing corporate/organizational operational management and co-ordinate the work among different departments.
3
Performance Requirements  Know about the structure of the corporation/organization and its daily operational method  Know about the vision and mission of the corporation/organization  Know about the functions of operational management, such as:  Operational strategy plans Organization  Leadership Control Decision-making  Know about the departments under the structure of the corporation/organization and their interrelationships, such as:  Finance department Operational department Design department Product development department Product development department Procurement department Procurement department Procurement department Procurement department Conditional strategy plans  Chassist in the implementation of operational management in the corporation/organization in the market, such as: Retail (B to C business and B to B business) Understand the operational concepts of the corporation/organization in the market in the operational concepts of the corporation/organization are reflected in the specific planning and implementation Senior managers must put the new concepts Ensure that the operational operational management in the corporation/organization must reflect the requirements of the concepts into action personally Staff assessment and reward systems of the corporation/organization must reflect the requirements of the concepts in difficult times Understand the marketing channels and market strategies of the corporation/organization must reflect the requirements of the concepts in difficult times Understand the management culture within the corporation/organization  Master the management system for jewellery knowledge Assist the supervisor in implementing operational management in the corporation/organization and co-ordinate the work among different departments
The control of the co

	Employ information technology to effectively assist the supervisor in monitoring the workflow of each department
	3. Professionalism
	Ensure that the operational model/policy of the corporation/organization can meet the latest development of the market
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to understand the operational management method of the corporation/organization, and assist the supervisor in implementing corporate/organizational operational management and co-ordinate the work among different departments, so as to effectively monitor the workflow of each department.</li> </ul>
Remark	

Title	Implement supervisory management and production control
Code	108850L3
Range	This unit of competency is applicable to practitioners responsible for production management in the jewellery industry. Practitioners should be capable of co-ordinating the production workflow of jewellery manufacturing and the allocation of human resources, and effectively implementing supervisory management and production control under anticipated and regular circumstances.
Level	3
Credit	6
Competency	Performance Requirements  1. Understand concepts of production management and control
	<ul> <li>Know about the definition of production planning and control</li> <li>Understand the production planning and production cost analysis of jewellery products, such as predicting productivity</li> <li>Understand the daily operations and marketing plans of the organization</li> <li>Understand inventory control</li> <li>Understand the system of production workflow</li> <li>Master the co-ordination between production workflow and allocation of human resources</li> <li>Understand the material requirements and manufacturing resources</li> <li>Master the production workflow of different jewellery products and parts</li> </ul> 2. Supervise and manage staff and production control
	<ul> <li>Possess training knowledge and strengthen staff's communication power</li> <li>Monitor and train subordinate staff to enhance their production techniques and production efficiency</li> <li>Build team spirit</li> <li>Establish a reward and punishment system to encourage staff and cultivate their motivation and sense of responsibility</li> <li>Master supervisory management techniques</li> <li>Plan and arrange staff to receive training on supervisory and management techniques</li> <li>Manage and control the material flow for manufacturing jewellery products and parts under anticipated and regular circumstances according to the requirements of the orders</li> <li>Professionalism</li> <li>Implement supervisory management and production control of jewellery products in compliance with the safety guidelines and code of practice of the Occupational Safety and Health Ordinance</li> </ul>
Assessment Criteria	The integrated outcome requirements of this unit of competency are:  • Able to co-ordinate the production workflow of jewellery manufacturing and the allocation of human resources, so as to master production management and production control under ordinated and regular pireumeters and
	<ul><li>under anticipated and regular circumstances; and</li><li>Effectively implement supervisory management to enhance production efficiency.</li></ul>
Remark	

Title	Handle orders for jewellery/parts
Code	108851L3
Range	This unit of competency is applicable to practitioners responsible for operational management in the jewellery industry. Practitioners should be capable of understanding thoroughly the organization's procedure in handling orders and co-ordinating with the work of logistics and procurement, so as to handle the orders for jewellery/parts independently and effectively.
Level	3
Credit	6
Competency	Performance Requirements  1. Know about the types of jewellery/parts and the organization's authority in handling orders  • Know how to identify various kinds of jewellery products/parts made of gold, diamond, jade and pearl  • Understand the organization's authority or regulations in handling orders for jewellery  • Sales representatives are responsible for approving vouchers of a certain amount  • The manager of the sales department is responsible for approving and verifying
	vouchers over a certain amount but not more than a certain amount  o The managing director is responsible for approving and verifying vouchers over a certain amount  2. Handle orders for jewellery/parts
	<ul> <li>Independently and effectively handle orders for jewellery/parts</li> <li>Know about the channels for receiving quotations and customers' purchase orders, including:         <ul> <li>Phone</li> <li>Fax</li> <li>Email</li> </ul> </li> </ul>
	<ul> <li>Mobile apps, such as WhatsApp and WeChat</li> <li>Receive quotations and customers' purchase orders, including:</li> <li>Fill in the order forms/order records</li> <li>Identify if the ordered products belong to new products, renewed products or standard products</li> </ul>
	<ul> <li>Assess contracts, including:         <ul> <li>Contact customers to gather information on the requirement and specification of the products</li> <li>Make classification, including samples of the organization, samples from customers or the organization's amended samples on customers' requests</li> <li>Check whether the date of delivery and the quantity for delivery can meet customers' requirements</li> <li>Contact the manufacturing department or design department to discuss matters concerning production or amendment of samples</li> <li>Calculate and approve the selling price</li> <li>Inform customers of the selling price and the expected date of delivery</li> <li>Issue letter of confirmation for orders to be signed by consultant upon customers' consent as a kind of formal acknowledgement</li> </ul> </li> </ul>
	<ul> <li>Confirm orders, including:</li> <li>Check the letter of confirmation for orders</li> </ul>

	<ul> <li>Compile the product serial number</li> <li>Begin the approving process</li> <li>Issue the manufacturing order to the manufacturing department</li> <li>Effectively complete relevant procurement documents, including:         <ul> <li>Filing</li> <li>Rectify customers' procurement document</li> <li>Obtain customers' written approval</li> <li>Issue new letter of confirmation for order to be signed by consultant as a kind of formal acknowledgement</li> </ul> </li> <li>3. Professionalism</li> </ul>
	<ul> <li>Do not process or modify the orders irregularly without authorization</li> <li>Ensure that the order for jewellery/parts is processed before the deadline</li> </ul>
Assessment Criteria	The integrated outcome requirement of this unit of competency is:
	<ul> <li>Able to understand customers' requirements in the orders for jewellery, independently handle such orders according to the organization's procedure for handling orders and effectively complete the relevant procurement documents.</li> </ul>
Remark	

Title	Implement inventory control on jewellery products
Code	108852L3
Range	This unit of competency is applicable to practitioners responsible for operational management in the jewellery industry. Practitioners should be able to understand thoroughly and master the process and technique of inventory control on jewellery products. They should also be capable of independently and effectively implementing inventory control on jewellery products under various anticipated and regular circumstances.
Level	3
Credit	9
Competency	Performance Requirements  1. Understand the technique of inventory control  • Understand the technique of inventory control, such as:  ○ The basic functions of a warehouse
	<ul> <li>The technique of traditional inventory control</li> <li>The technique of modern inventory control</li> <li>Warehouse efficiency and performance assessment</li> <li>Know about the just-in-time management of jewellery products/parts</li> <li>The philosophy of zero inventory</li> <li>The circumstances of just-in-time inventory management</li> <li>The advantages of just-in-time inventory management</li> <li>Master inventory control with just-in-time management</li> </ul>
	<ul> <li>2. Implement inventory control on jewellery products</li> <li>Implement inventory control on jewellery products under various anticipated and regular</li> </ul>
	circumstances  Set up different warehouses  Gold warehouse  Stone warehouse  Completed product warehouse  Chemical product warehouse  Implement the procedure of inventory control  Gold warehouse  Receive gold materials and parts (conduct quality check on incoming materials)
	<ul> <li>Distribute gold materials (in accordance with estimated gold consumption record, gold dispatch form, separate work orders, and receipt and dispatch orders of gold materials)</li> <li>Allocate the jewellery parts (in accordance with separate work orders, and receipt and dispatch orders of gold materials)</li> <li>Stock-taking (according to the warehouse assessment record)</li> <li>Stone warehouse</li> <li>Receive stone materials (conduct quality check on incoming materials)</li> <li>Distribute stone materials (in accordance with goods output record and stone sorting card)</li> <li>Stock-taking (according to the warehouse assessment record)</li> <li>Completed product warehouse</li> </ul>

	Receive completed products (conduct quality check on completed products)     Distribute completed products to sales representatives (manage goods labelling, document filing and goods output record)     Stock-taking (according to the warehouse assessment record)     Chemical goods warehouse     Receive chemical goods (conduct quality check on incoming goods)     Store chemical goods (manage goods labelling and store the goods by category)     Stock-taking (according to the warehouse assessment record)     Monitor the process of inventory control on jewellery products  3. Professionalism     Prevent any abuse or corrupt practices involving abusing/misappropriating assets of the organization and theft with a professional attitude     Ensure that the inventory information/data provided is accurate
Assessment Criteria	The integrated outcome requirement of this unit of competency is:
	<ul> <li>Able to employ the technique of inventory control to independently and effectively implement inventory control on jewellery products under various anticipated and regular circumstances.</li> </ul>
Remark	

Title	Apply cost accounting techniques
Code	108853L3
Range	This unit of competency is applicable to practitioners responsible for operational management or related work in the jewellery industry. Practitioners should be capable of mastering cost accounting theory and employing the techniques to independently perform cost accounting duties in the jewellery industry according to the requirements of the organization.
Level	3
Credit	9
Credit  Competency  Performance Requirements 1. Understand basic cost accounting to the significance and form the relationship between financial accounting to the cost account to the cost of quality to the significance of quality to the importance of cost to the importance of cost to the importance of cost understand the definition to the cost of quality to the importance of cost understand the definition to the cost account to the cost accoun	Performance Requirements  1. Understand basic cost accounting theory  • Understand basic cost accounting theory, including:  ○ The significance and functions of cost accounting  ○ The relationship between cost accounting, management accounting and financial accounting  ○ The cost accounting system  • Understand the classification of costs, including:  ○ The basic concept of costs  ○ The characteristics of different industries and their differences  ○ The preparation of profit and loss statements  • Understand the cost of quality, including:  ○ The significance of quality  ○ The importance of cost of quality  ○ Understand the definitions of total cost method and variable cost method  2. Apply industry-related cost accounting techniques  • Independently perform cost accounting duties in the jewellery industry  ○ Calculate cost, including:  • Raw materials, wages and cost of goods sold  • Cost estimation  • Regression analysis  • Cost sharing  • Cost sharing  • Cost sharing among service departments  ○ Analyze cost, quantity and profits, including:  • Break-even analysis
	<ul> <li>Calculate total cost and variable cost, including:</li> <li>Prepare profit and loss statements by using the total cost method and variable cost method</li> <li>Assess the impact of changes in inventory level on profit and loss</li> </ul>
	3. Professionalism
	<ul> <li>Ensure that the financial information/data provided is accurate</li> <li>Prevent any abuse or corrupt practices through financial management</li> </ul>

Assessment Criteria	Able to master the knowledge of accounting and employ the techniques to independently perform accounting duties in the jewellery industry in accordance with the organization's requirements, such as cost calculation, cost analysis, quantity and profit.
Remark	

Title	Implement financial management
Code	108854L4
Range	This unit of competency is applicable to finance management responsible for operational management or related work in the jewellery industry. Practitioners should be capable of effectively implementing the financial management plan according to the organization's policy or instructions to control the expenditure and formulate the budget. They should also be able to submit and assess information/data related to costs, expenditure and profits, so as to enhance the economic performance of the outlet/organization.
Level	4
Credit	9
Competency	Performance Requirements  1. Understand the financial management  • Know about the accounting principles of limited liability companies  • Understand the organization's internal audit theory and procedure  • Understand the concept of financial management in the jewellery industry, such as:  • Information on the prices of jewellery materials, gemstone products and parts, their market demand, etc.  • Calculation method of value assessment and recovery of gold  • International calculation method of the weight of gold  • International gold price and foreign exchange knowledge  • Risk management concepts, including:  • System and non-system risks  • Relationship between risk and expected risk  • Understand the tax policy related to jewellery retailing business set by the government  • Master the application of information technology in budgeting and financial management  2. Implement industry-related financial management according to the policy or instructions of the organization to compile comprehensive financial statements, including:  • Comprehensive balance sheets  • Comprehensive balance sheets  • Comprehensive profit and loss statements  • Gross profit  • Net profit  • Narginal profit  • Cost of goods  • Daily operating expenses  • Percentages of expenditure  • Comprehensive cash flow statements  • Control expenditure, such as:  • Staff salary expense  • Material/Production/Inventory loss  • Outlet/Points of Sale/Exhibitions and daily expenses of the organization  • Prepare financial data and budget, such as:  • Set budget for the outlet/points of sale/exhibitions/organization  • Set budget for the outlet/points of sale/exhibitions/organization  • Set budget according to the business turnover and expenditure of the previous year  • Set annual business turnover reports

	<ul> <li>Current business turnover</li> <li>Estimated future business turnover</li> <li>Comparison of the business turnover with the previous ones</li> <li>Comparison of the actual business turnover with the estimated one</li> <li>Conduct regular reviews based on the actual situations to update the business targets and estimated expenditure</li> <li>Apply information technology in financial management</li> </ul> 3. Professionalism
	<ul> <li>Ensure that the financial information/data provided is accurate</li> <li>Prevent any abuse or corrupt practices through financial management and budgeting</li> </ul>
Assessment Criteria	The integrated outcome requirement of this unit of competency is:  • Able to master the organization's accounting, financial budget and internal audit to effectively execute the organization's financial management plan according to its policy or instructions, so as to enhance the economic performance of the outlet/organization.
Remark	

Title	Manage the daily operation of the organization/enterprise
Code	108855L4
Range	This unit of competency is applicable to management responsible for operational management or related work in the jewellery industry. Practitioners should have extensive understanding on the culture and structure of the organization/enterprise, so as to manage the established daily operational workflow of the organization.
Level	4
Credit	6
Competency	Performance Requirements  1. Understand the development history and process of the organization/enterprise
	<ul> <li>Understand the development history and process of the organization/enterprise, including:         <ul> <li>The value of the organization/enterprise</li> <li>The vision and mission of the organization/enterprise</li> <li>The theory and operational modes of the organization/enterprise</li> <li>The future development trend of the organization/enterprise</li> <li>Monitor the daily operational workflow of the organization/enterprise, including:</li></ul></li></ul>
	2. Manage the daily operation of the organization/enterprise
	<ul> <li>Master the functions of operational management, such as operational strategy plans, organization, leadership, control and decision-making</li> <li>Master the management of jewellery knowledge</li> <li>Plan, co-ordinate and decide the daily operation of the organization/enterprise</li> <li>Master management methods</li> <li>Establish management culture to meet the development and reform of the organization/enterprise</li> <li>Effectively employ information technology to enhance the efficiency and effectiveness of the management of the organization/enterprise</li> <li>Master risk management techniques</li> </ul>
	3. Professionalism
	Ensure that the daily operation of the organization/enterprise can meet the latest development
Assessment Criteria	The integrated outcome requirement of this unit of competency is:
	<ul> <li>Able to employ the relevant professional knowledge of operational management to effectively perform the daily operational management duty in the organization/enterprise, so as to enhance the competitiveness of the organization/enterprise.</li> </ul>
Remark	

Title	Know about business laws
Code	108856L4
Range	This unit of competency is applicable to management responsible for operational management or related work in the jewellery industry. Practitioners should know about the business laws of Hong Kong and the Mainland, and be capable of applying such knowledge in job duties related to the operational management of the organization to protect the interests of the company.
Level	4
Credit	9
Competency	Performance Requirements  1. Know about business laws  • Understand the legal system of Hong Kong, including:  ○ Identify and analyze whether the client has entered into a legal binding contract  ○ Know about the reasons for a contract to be invalid and the compensation for breach of contract
	<ul> <li>Apply the Sale of Goods Ordinance and compare the rights and obligations of both the buyer and the seller</li> <li>Understand the nature of the Trade Descriptions Ordinance and its application in the industry</li> <li>Understand the nature of agency and its application in the commercial society</li> <li>Know the laws related to tort and the principles for claiming damages</li> <li>Know about the pros and cons of different business models and their modes of operation</li> <li>Know about the conditions and procedures of filing petitions for individual bankruptcy and liquidation of limited companies</li> <li>Understand the legal meaning of the laws of guarantee and their provisions</li> <li>Understand the law of contract, foreign investment law and company law of the Mainland, and compare the major differences and similarities between the business laws of the Mainland and Hong Kong</li> </ul>
	2. Apply general business laws in the organization's daily operation  • Understand the following business laws and apply them in the organization's daily operation  • The legal system of Hong Kong  • Intellectual property laws  • Law of contract  • Sale of Goods Ordinance  • Law of agency  • Law of tort  • Business organization law  • Bankruptcy and liquidation laws  • Law of guarantee  • Essentials of the business laws of Mainland China
	Strictly abide by the business laws to protect the rights and interests of the organization in the daily operation of the organization

Assessment Criteria	The integrated outcome requirements of this unit of competency are:  Able to understand the legal system of Hong Kong; and  Perform the duty of operational management in the organization in accordance with the business laws of Hong Kong to protect the interests of the organization.
Remark	

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Title	Know about the labour ordinances related to human resources management
Code	108857L4
Range	This unit of competency is applicable to management responsible for operational management or related work in the jewellery industry. Practitioners should understand the labour ordinances related to human resources management and be capable of giving clear instructions and supervision to staff, so as to effectively perform duties related to human resources management.
Level	4
Credit	6
Competency	Performance Requirements  1. Know about the labour ordinances related to human resources management
	Know about the ordinances related to employment relationship and the related statutory bodies, such as:     Labour Department of Hong Kong and related ordinances

	<ul> <li>Paid leave, sick leave, compensation leave due to injury at work, and calculation of maternity leave and eligibility for application</li> <li>Job transfer arrangement</li> <li>Summary dismissal</li> <li>Calculation of severance payment and long service payment, and the qualification for receiving such payment</li> <li>Termination of employment contract</li> <li>Mandatory Provident Fund contributions</li> <li>Understand the significance and importance of signing a written employment contract</li> <li>Handling general labour disputes with the Labour Relations Division in accordance with relevant laws and regulations</li> <li>Handle work accidents properly in accordance with the laws and regulations</li> <li>Professionalism</li> <li>Comply with and apply labour ordinances related to human resources management to perform human resources management duties in the jewellery industry</li> </ul>
Assessment Criteria	The integrated outcome requirement of this unit of competency is:  • Able to have a thorough understanding of the labour ordinances related to human resources management, and give clear instructions and supervision to staff, ensuring their behaviours comply with the requirements of the ordinances.
Remark	

Formulate comprehensive operational management plans 108858L5
108858L5
This unit of competency is applicable to practitioners responsible for operational management in the jewellery industry. Practitioners should be capable of planning and designing, and critically analyzing and evaluating the organization's operational situation and objectives. They should also be able to formulate effective comprehensive operational management plans in a business environment which is in continual pursuit of operational efficiency.
5
9
Performance Requirements  1. Understand the operational situation and objectives of the jewellery industry
<ul> <li>Know about the market situation of the jewellery industry as well as the operational situation and objectives of the organization, including:         <ul> <li>The business areas and objectives of jewellery items</li> <li>The income and expenditure of jewellery items and the profit level</li> </ul> </li> <li>Know about the production, trade, and types and values of the sources of goods in different regions</li> <li>Know about the services provided by competitors and their market share</li> <li>Know about the politics, economy and culture of the sales territories</li> <li>Master proper logistics arrangement, the loss of human resources, and the effectiveness of the operational system, quality control and risk management, as well as sub-standard operational management or irregularities and their significance, etc.</li> </ul>
2. Formulate comprehensive operational management plans
<ul> <li>Make use of relevant data and information on internal/external operating environment factors to formulate operational management plans on reasonable grounds and review the loopholes existing in the current operational management system; conduct thorough investigation into sub-standard operational performance and make critical analysis, evaluation, integration, elaboration and judgment on the information obtained, so as to improve the current operational management system</li> <li>Formulate comprehensive operational management plans in a business environment which is in continual pursuit of operational efficiency</li> <li>Assess the future development trend and review the current operational management system to cope with changes in the organization's comprehensive policy</li> </ul>
3. Professionalism
Ensure that the operational management plans of the organization can meet the latest development
The integrated outcome requirements of this unit of competency are:
<ul> <li>Able to know about the market status of the jewellery industry and the operational situation and objectives of the organization, and obtain relevant information and make analysis, so as to formulate effective comprehensive operational management plans on reasonable grounds in a business environment which is in continual pursuit of operational efficiency;</li> <li>Objectively rectify, evaluate and improve the current operational management system when problems arise; and</li> </ul>

	Assess the future development trend and initiate evaluation on the current operational management system, so as to cope with changes in the organization's policy.
Remark	

Title	Formulate human resources management strategies
Code	108859L5
Range	This unit of competency is applicable to senior management personnel responsible for duties related to operational management in the jewellery industry. Practitioners should be capable of mastering the knowledge of human resources management and formulating human resources management strategies by analyzing and assessing the human resources market and the information on the organization's internal demand.
Level	5
Credit	9
Competency	Performance Requirements  1. Know about human resources management  • Understand the planning of human resources, including:
	<ul> <li>Develop an information system on human resources to meet the organization's objectives</li> <li>Recruit and select staff</li> <li>Conduct recruitment interviews</li> <li>Understand payment policy management, including:         <ul> <li>Payment policy</li> <li>Performance assessment method</li> <li>Relevant labour ordinances</li> </ul> </li> <li>Understand staff performance assessment methods and staff training, such as:         <ul> <li>Formal and informal assessment methods</li> <li>Formal and informal training methods</li> </ul> </li> <li>Understand staff relations, including:         <ul> <li>The mechanism of settling internal conflicts</li> <li>Complaints of dissatisfaction and disciplinary procedures</li> </ul> </li> <li>Understand the operational guidelines and strategies of the organization/enterprise</li> <li>Understand the short-term, medium-term and long-term development plans and directions of the organization/enterprise</li> </ul>
	<ul> <li>2. Formulate human resources management strategies</li> <li>Analyze the human resources condition in each department of the organization and the market supply situation, including: <ul> <li>Relevant statistics on human resources</li> <li>The market demand for the required human resources</li> <li>The price for retaining workforce, etc.</li> </ul> </li> <li>Formulate human resources strategies to meet the operational development of the organization, such as: <ul> <li>Recruitment strategies</li> <li>Retaining workforce strategies</li> <li>Internal training mechanism and strategies</li> <li>The promotion ladder, terms of reference as well as the payment and welfare system for each rank of the organization</li> </ul> </li> <li>Job assignment mechanism <ul> <li>Assign work based on employees' personality/expertise</li> <li>Manage staff allocation of the organization/enterprise</li> </ul> </li> <li>Team spirit</li> </ul>

	<ul> <li>Balance between active management measures and suppressive management measures</li> <li>Avoid intangible waste of human resources</li> <li>Increase employees' sense of belonging</li> <li>Performance assessment plan</li> <li>Develop an assessment method</li> <li>Establish objective management</li> <li>Manage staff</li> </ul> 3. Professionalism
	<ul> <li>Comply with the code of practice on human resources management under the Personal Data (Privacy) Ordinance</li> <li>Comply with the code of practice on employment under the equal opportunities ordinances by fulfilling the regulations of the ordinances about sex, disability and family status discrimination during the employment process, so as to avoid violation of these ordinances</li> </ul>
Assessment Criteria	The integrated outcome requirement of this unit of competency is:     Able to analyze and assess the human resources condition of the organization and the market supply situation to formulate effective human resources management strategies in accordance with the demand of the organization to foster organizational development.
Remark	

Title	Formulate financial management plans
Code	108860L5
Range	This unit of competency is applicable to senior management personnel responsible for duties related to operational management in the jewellery industry. Practitioners should be capable of analyzing various kinds of financial management problems of the organization in a business environment with possibility of changes. They should also be able to formulate financial management plans by means of relevant information/data such as cost, expenditure and profit, enabling the organization to achieve maximum economic return.
Level	5
Credit	9
Competency	Performance Requirements  1. Understand financial management strategies  • Understand the theory and strategies of financial management, such as:  • The objectives of financial management  • The functions of the monetary market  • Understand the analysis of financial reports, including:  • The balance sheet  • The profit and loss statements  • The cash flow statements and ratio analysis  • The forecasting statements  • Understand capital budgeting, such as:  • Principles of investment  • Net present value method  • Discounted payback period method  • Internal rate of return  • Profitability index  • Operational cash flow  • Understand the calculation of project cash flow, including:  • Relevant cash flow  • Understand risk and return  • System risk and non-system risk  • The relation between risk and expected return (Capital Asset Pricing Model - CAPM)  • The risk in foreign exchange  • Understand the taxation policies of the local and foreign governments regarding the jewellery industry  • Understand the application of information technology  2. Formulate relevant financial management plans for the jewellery industry  • Analyze financial statements accurately  • Formulate the coject risk and return management strategies  • Implement financial planning, such as:  • Control the business cycle and cash flow

	Master cash budgeting  Formulate the management strategy of operating capital, such as:  Control cash income and expenses  Control inventory  Draw up credit policy and analysis  Compile business turnover reports, such as:  Current business turnover  Estimated future business turnover with the previous ones  Comparison of the business turnover with the estimated one  Comparison of the actual business turnover with the estimated one  Conduct regular reviews based on the actual situations  Update the business targets and estimated expenditure  Draw up risk management plans  Formulate plans to apply information technology in financial management  Prevent any abuse or corrupt practices through financial management with a professional attitude
	professional attitude     Ensure that the financial information/data provided is accurate
Assessment Criteria	The integrated outcome requirement of this unit of competency is:
	<ul> <li>Able to employ financial management knowledge in a business environment with possibility of changes to tie in with the actual operational situation of the jewellery organization, so as to effectively draw up relevant financial management plans for the industry.</li> </ul>
Remark	

Title	Formulate operational management plans and supervisory plans for the enterprise
Code	108861L5
Range	This unit of competency is applicable to senior management personnel responsible for duties related to operational management in the jewellery industry. Practitioners should be capable of analyzing the effectiveness of the enterprise's framework based on information about the internal performance, and formulating operational management plans and supervisory plans for the enterprise.
Level	5
Credit	9
Competency	Performance Requirements  1. Know about the functions of operational management for the enterprise
	<ul> <li>Understand the functions of operational management for the enterprise, such as:         <ul> <li>Plan, co-ordinate and determine the daily operation of the enterprise</li> <li>Master management control methods</li> <li>Develop governance culture</li> <li>Enhance productivity and efficiency of corporate management</li> <li>Improve the corporate framework</li> <li>Update the corporate system to tie in with modernized management</li> </ul> </li> </ul>
	2. Formulate operational management plans and supervisory plans on jewellery
	<ul> <li>Formulate performance indicators and requirements for the jewellery enterprise, such as:         <ul> <li>Establish performance indicators for each department</li> <li>Assess the performance requirements of every job type in each department</li> <li>Establish the performance requirements of staff in each department</li> <li>Establish the terms of reference of staff in each department</li> <li>Appoint suitable staff to take up relevant positions</li> </ul> </li> <li>Formulate operational management duties of the jewellery organization         <ul> <li>Collect and analyze data and information on internal/external operating environment factors</li> <li>Analyze the strengths, weaknesses, opportunities and threats of the organization</li> <li>Formulate operational management solutions and plans suitable for the development of the organization based on the specific situations of the organization and the market</li> <li>Assess the future development trend and review the current operational management system to cope with changes in the organization's comprehensive policy</li> </ul> </li> <li>Formulate operational plans, management framework and workflow for each department/the entire enterprise to achieve the established performance indicators</li> <li>Administer reasonable allocation of resources to help achieve the performance indicators</li> <li>Establish supervisory mechanisms to ensure effective implementation of operational plans</li> <li>Develop performance requirements of operational management, including:         <ul> <li>Evaluate the effectiveness of the operational management plans</li> <li>Adjust the operational management plans to meet the development need of the enterprise</li> </ul> </li> </ul>

	3. Professionalism
	<ul> <li>Ensure that the operational management plans and supervisory plans of the organization can meet the latest development</li> <li>Prevent any abuse/misappropriation of assets of the organization, corrupt practices, fraud, extravagance and waste, etc. in activities involved in operational management plans and supervisory plans</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to analyze the effectiveness of the enterprise's framework and formulate effective operational management plans and supervisory plans for the jewellery enterprise to meet its development need.</li> </ul>
Remark	

Title	Know about the commercial laws of China	
Code	108862L5	
Range	This unit of competency is applicable to senior management personnel responsible for duties related to operational management in the jewellery industry. Practitioners should know the laws of China and the operational system of commercial trade. They should also understand the legal system and commercial legislation in China, and be capable of applying such knowledge to facilitate corporate development.	
Level	5	
Credit	6	
Competency	Performance Requirements  1. Know about the commercial laws of China	
	<ul> <li>Know about the legal and judicial systems of China, such as:         <ul> <li>The PRC legal system and the legal institutions at central and local levels</li> <li>The structure of courts and the trial system</li> <li>The legal profession and the judicial system of the Mainland</li> </ul> </li> <li>Know about the laws on foreign investment, such as:         <ul> <li>Sino-foreign equity joint ventures</li> <li>Sino-foreign cooperative joint ventures</li> <li>Franchises</li> <li>Foreign-owned enterprises, etc.</li> </ul> </li> <li>Know about the business institutions in the Mainland, such as:         <ul> <li>Sole proprietor operations</li> <li>Partnership enterprises</li> <li>Companies of limited liability</li> <li>Limited companies</li> </ul> </li> <li>Know about the commercial laws of the Mainland, including:         <ul> <li>The development process of commercial laws</li> <li>The law of contract</li> </ul> </li> <li>Know about the banking systems of China, such as:         <ul> <li>The PRC banking system</li> <li>The state-owned commercial banks and their problems</li> </ul> </li> <li>Apply the commercial laws of China</li> <li>Apply the commercial laws of China in the daily operation of China-Hong Kong trade and China-Hong Kong joint ventures in a business environment with possibility of changes</li> </ul>	
	<ul> <li>Protect and safeguard the enterprise's legitimate rights in the Mainland</li> <li>3. Professionalism</li> </ul>	
	Comply with the commercial laws of China in the daily operation to protect the rights of the organization	
Assessment	The integrated outcome requirement of this unit of competency is:	
Criteria	<ul> <li>Able to understand the laws of China and the operational system of commercial trade in a business environment with possibility of changes, and apply such knowledge in the daily operational management of China-Hong Kong trade and China-Hong Kong joint ventures, so as to protect and safeguard the enterprise's legitimate rights in the Mainland.</li> </ul>	

Fι	inctional Area - Operational	Management	

Remark				
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Title	Formulate strategies for skills development	
Code	108863L6	
Range	This unit of competency is applicable to practitioners responsible for formulating strategies in the work related to operational management in the jewellery industry. Practitioners should be capable of making critical analysis and assessment, and conducting research on staff training and skills development in accordance with the development objectives of the enterprise, so as to formulate innovative and systematic strategies for skills development.	
Level	6	
Credit	9	
Competency	Performance Requirements  1. Understand training and skills development  • Know about the importance of training and skills development to the enterprise, such as:  • The relation between training and development and human resources management  • The contribution of training and development to the enterprise  • Know about learning theories, including:  • Learning processes and styles  • Leering curves and motives  • Learning directions/objectives  • Master theories on training  • Pre-employment/On-the-job training  • Adult education and training  • Analyze training needs  • Design and run training courses  • Assess the effectiveness of training  • Regularly review the training courses  • Know about the recognition of professional qualifications for the jewellery industry by the government/professional organizations  • Know about the qualifications and training requirements recognized by organizations in	
	<ul> <li>the jewellery industry</li> <li>2. Formulate strategies for skills development</li> <li>According to the development trend of the jewellery industry, evaluate the manpower and skills requirements for the foreseeable future to determine the organization's training and development direction</li> <li>Analyze the disparities between the skills of the current staff and the expected skills requirements, and determine the required training programs, candidates and priorities</li> <li>Develop appropriate training models in response to the special requirements of different departments, internal training capabilities and supply of training markets</li> <li>Prepare training budgets to ensure that there are sufficient training resources to meet the needs</li> <li>Evaluate the effectiveness of the staff training and determine whether staff acquire the expected knowledge and skills through the training</li> <li>Regularly review the effectiveness of the organization's staff training system and policies</li> <li>Regularly report the status of the staff training to the superiors and propose suggestions for improving the staff training development programs</li> </ul>	

	3. Professionalism
	<ul> <li>Ensure that the skills development programs can enhance the quality of the staff, and meet the needs of the organization and the development trend of the industry</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to apply the knowledge of training and skills development to conduct research on staff training and skills development in accordance with the development objectives of the enterprise, so as to formulate innovative and systematic strategies for skills development to meet the enterprise's future development.</li> </ul>
Remark	

Title	Formulate project management strategies	
Code	108864L6	
Range	This unit of competency is applicable to practitioners responsible for formulating strategies in the work related to operational management in the jewellery industry. Practitioners should be capable of making critical analysis and assessment, and employing the knowledge and methods of project management to develop systematic and consistent project management models, so as to formulate project management strategies to meet the long-term development of the organization/enterprise.	
Level	6	
Credit	9	
Competency	Performance Requirements  1. Know about project plans  Now about project plans, including: Projects and project management The relation between design and production The plans and range of projects, as well as integrated management Quality assurance system, production operation and record  Know about management methods, including: The methods and procedures for project planning and control Project schedules Analyze, allocate and alleviate resources The behavioural aspects of project management The network proportion of Program Evaluation and Review Technique (PERT) and Critical Path Method (CPM)  Know about human resources management projects, including: Understand management processes Organize project teams Recruitment, selection and participation of the project teams Coccupational safety, health and welfare, as well as industrial partnership  2. Formulate project management strategies Employ the knowledge and methods of project plans and management to formulate project management strategies for the organization Solve the existing project management procedures Analyze project management procedures Analyze project personnel Understand organizational changes Develop the vision of the direction of the project strategies and lead all the staff of the organization to carry out the implementation effectively  3. Professionalism Prevent any abuse/misappropriation of assets of the organization, corrupt practices, fraud, waste of resources, etc. in activities involved in project management	
Assessment Criteria	The integrated outcome requirement of this unit of competency is:	

	Able to employ the knowledge and methods of project plans and management to develop systematic and consistent project management models, and effectively formulate project management strategies to meet organizational development.
Remark	

Title	Formulate outsourcing plans	
Code	108865L6	
Range	This unit of competency is applicable to practitioners responsible for formulating strategies in the work related to operational management in the jewellery industry. Practitioners should be capable of making critical analysis and assessment, and formulating outsourcing plans under complicated situations, including employing professional knowledge to assess the feasibility of outsourcing and formulating the content/format of outsourcing contracts. Practitioners should also take responsibility of and monitor the relevant policy to enhance the economic efficiency of the enterprise.	
Level	6	
Credit	9	
Competency	Performance Requirements  1. Know about outsourcing  • Know about outsourcing, including:  o The pros and cons, as well as the costs and risks of outsourcing  o The latest technological development and opportunity for outsourcing	
	<ul> <li>Assess the feasibility of outsourcing, including: <ul> <li>Assess the core competencies of the organization</li> <li>Assess the reputation and moral integrity of the outsourcing organization</li> <li>Conduct studies on the feasibility of outsourcing</li> <li>Identify the operating procedures/projects possible for outsourcing</li> <li>Assess various feasibility proposals</li> </ul> </li> <li>Formulate the content/format of outsourcing contracts, including: <ul> <li>Understand the contents and liabilities of the contract</li> <li>Pay attention to the detailed rules and regulations of the contract, such as: <ul> <li>Time of delivery</li> <li>Quality check</li> <li>Compensation</li> </ul> </li> <li>Assess and review the outsourcing plans under complicated situations, including: <ul> <li>Supervise and manage contractors' performance</li> <li>Review the implementation of the outsourcing plans</li> </ul> </li> <li>Reduce the operational cost of the enterprise through outsourcing plans</li> <li>Know about the relevant laws and regulations imposed by the government and regulatory bodies on outsourcing</li> </ul> </li> <li>3. Professionalism</li> <li>Monitor the contractors with a professional attitude and do not allow any corrupt practices or fraud from happening</li> </ul>	
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to design research methods to assess the feasibility of outsourcing; and</li> <li>Formulate the content/format of outsourcing contracts under complicated situations, and take responsibility of and monitor the relevant policy to enhance the enterprise's economic efficiency.</li> </ul>	

Title	Formulate development strategies for the organization	
Code	108866L6	
Range	This unit of competency is applicable to practitioners responsible for formulating strategies in the work related to operational management in the jewellery industry. Practitioners should be capable of making critical analysis and assessment, and applying analysis and innovative skills. Practitioners should also be able to fully master the development trend of the industry, and formulate the development direction and feasible development strategies for the organization in accordance with the established vision and mission, and business strategies and plans of the organization.	
Level	6	
Credit	9	
Competency	Performance Requirements  1. Understand the environment of the society/industry and the strength of the organization  • Know about the environment of the society and the industry, including:  • The development trend of the society and the jewellery industry  • The impact of relevant international plans, especially the ordinances related to the World Trade Organization (WTO) and the State Environmental Protection Administration (SEPA), on the industry  • Master the socioeconomic information  • Know about the production, trade, and types and values of the sources of goods of products related to jewellery in different regions  • Know about the status of competitors, including the products/services provided, their levels and the market share  • Know about the strategies and strength of the organization, including:  • The importance of developing and implementing strategies to achieve the objectives of the organization  • The structure and culture of the organization  • Know about the product characteristics and sales targets of the organization, and the advantages of the organization in manufacturing technology and operational management  • Use internal questionnaires and compare with the benchmark level of the industry to analyze the strength of the organization's management system and operational model, including:  • Operational management  • Occupational safety, health and environmental management  • Product development management  • Financial management  • Risk management  • Know about the regulations and restrictions imposed by the law and the regulatory bodies on the jewellery industry  • Know about the resources needed to implement the development strategies of the organization  2. Formulate development strategies for the organization	

	Accurately define the actual objectives, corporate mission, vision and core values to be
	<ul> <li>Accurately define the actual objectives, corporate mission, vision and core values to be achieved in the development of the strategies for the organization</li> </ul>
	Acquire support from the decision-makers of the organization's management to develop the relevant strategies
	<ul> <li>Accurately calculate the financial resources, human resources and other resources that can be used to develop the strategies of the organization</li> </ul>
	<ul> <li>After careful consideration, employ creative techniques to formulate the development strategies for the organization, with the following factors fully considered during the</li> </ul>
	process: <ul> <li>Assess the future trends in a forward-looking manner</li> <li>Review the existing operational management development system to cope with</li> </ul>
	changes in the organization's comprehensive policy
	<ul> <li>Analyze the strengths, weaknesses, opportunities and threats of the organization</li> <li>Formulate the long-term, medium-term and short-term corporate development strategies</li> </ul>
	<ul> <li>Manage the policy set by senior management</li> </ul>
	<ul> <li>Similar strategies of other competition organizations</li> <li>Expectations of the society and customers for the organization</li> </ul>
	<ul> <li>Expectations of the society and customers for the organization</li> <li>Analyze the funds and other resources required for each strategy</li> </ul>
	<ul> <li>Assess and quantify the results brought by the strategies</li> </ul>
	Assess the impact of implementing the relevant strategies
	Devise strategic assessment and control mechanisms
	3. Professionalism
	<ul> <li>Ensure that the development strategies formulated by the organization can meet the latest development</li> </ul>
	Ensure strict compliance with relevant local laws and restrictions during the strategy formulating process
	<ul> <li>Ensure that strategies formulated can prevent any abuse or corrupt practices such as abusing/misappropriating the assets of the organization and theft</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to analyze thoroughly and integrate different kinds of information, including the environment of the society/industry and the strength of the enterprise/organization, so as to compile a report on the topic of "Formulate development direction and strategy for the jewellery organization".</li> </ul>
Remark	

Title	Formulate comprehensive procurement strategies and performance requirements
Code	108867L6
Range	This unit of competency is applicable to practitioners responsible for formulating strategies in the work related to operational management in the jewellery industry. Practitioners should be capable of making critical analysis and judgment. They should also be able to analyze the jewellery market and the new information about procurement, and assess the procurement resources and efficiency of the organization, so as to formulate comprehensive procurement strategies and performance requirements to meet the business development of the organization while reducing excess inventory and achieving the maximum return on investment.
Level	6
Credit	9
Competency	Performance Requirements  1. Know about the formulation of procurement strategies  • Know about the functions and responsibilities of the procurement department of the organization  • Know about procurement strategies and their importance to the profitability of the organization  • Master procurement knowledge, such as:  • Supplier relationship management  • Total quality management  • Risk management  • Global procurement  • Environmental procurement  • Supplier development  • Know about the concept of jewellery categories, including:  • Consumer decision tree  • Sales space and resource allocation  • Roles and strategies of products  • Know about the application of the five rights principle  • The right supplier  • The right quantity  • The right quality  • The right quality  • The right quality  • The right time  • Know about the importance of payment method and capital flow to procurement strategies  • Master the steps of the procurement cycle  • Know about market demand and supply and its relation with the comprehensive procurement strategies  • Know about market demand and supply and selling markets of jewellery materials  • Master new information on the jewellery market and its relation with the comprehensive procurement strategies
	<ul> <li>Know about the laws and the legal requirements related to procurement in the operating territories</li> <li>Formulate comprehensive procurement strategies and performance requirements</li> </ul>
	Conduct analysis related to procurement, including:

#### Functional Area - Operational Management

- Analyze the organization's procurement process and conduct benchmarking analysis in the industry to determine its effectiveness, such as:
  - Impact on operating needs
  - Supplier relationship
  - Procurement criteria/specifications
  - Comprehensive inventory management model
- Analyze the standard of a supplier based on the passing rate of the incoming materials and the on-time rate
- Analyze the status of the surrounding supply market and examine the possibility and applicability of cross-regional or even global procurement
- Analyze the sales and inventory records of retail products to ensure adequate supply without overstocking
- Conduct SWOT analysis and competitive analysis to strengthen the competitiveness of the jewellery products in the outlets (e.g. promotions, pricing and locations), so that the sales of goods can outperform competitors
- Formulate comprehensive procurement strategies, including:
  - Determine the procurement strategies in order to support the organization's overall business, such as:
    - Economical procurement
    - Environmental procurement
    - Centralized procurement
    - Fair trade
    - Specific quality management requirements
  - o Find suitable new procurement methods, such as electronic procurement
  - Formulate new procurement strategies according to the organization's business strategies, the "five rights" procurement criteria and the legal requirements, and confirm the support of manpower, financial and other resources
  - Establish the comprehensive inventory management model, the monitoring method and performance requirements
- Formulate procurement strategy performance requirements
  - Formulate key performance indicators for the procurement strategies to measure the effectiveness of the procurement process
  - Formulate a proper procurement system and measure, and review the procurement strategies to prevent abuse of power or corrupt practices
- Monitor and control the implementation of the comprehensive procurement strategies and the performance requirements
- · Regularly review and improve the procurement strategies

#### 3. Professionalism

- Ensure that the procurement strategies are in the interests of the organization
- Comply with the legal requirements and professional ethics related to procurement when formulating procurement strategies, with the prerequisite that the interests of the organization will not be harmed

### Assessment Criteria

The integrated outcome requirements of this unit of competency are:

- Able to analyze and assess the jewellery market and the new information about procurement despite the lack of complete or consistent data/information, and plan and manage procurement plans, so as to effectively formulate comprehensive procurement strategies and performance requirements to meet organizational development;
- Formulate key performance indicators for the procurement strategies to measure the effectiveness of the procurement process; and

	Formulate a proper procurement system and measure, and review the procurement strategies to prevent corrupt practices such as seeking personal gains.
Remark	

Title	Formulate risk management plans
Code	108868L6
Range	This unit of competency is applicable to practitioners responsible for formulating strategies in the work related to operational management in the jewellery industry. Practitioners should be capable of making critical analysis and judgment, and mastering extensive information under a daily business environment with possibility of changes to formulate risk management plans for different work areas of the organization with risk management knowledge and techniques.
Level	6
Credit	9
Competency	Performance Requirements  1. Know about the scope and source of risks
	Know about the source of risks, such as:     Natural disaster     Politics     Fire     Accident     Burglary     Quality of internal management     Labour disputes     Know about the scope of operations and daily operation of the enterprise     Know about the risk management theory, including:     Avoid risks     Prevent loss     Minimize loss     Transfer risks     Retain risks     Retain risks     Retain risks     Inventory loss     Inventory loss     Inventory loss     Inventory loss     Inventory loss     Computer operational system failure     Loss of special talents     Computer operational system failure     Loss/Theft of important record and information     Corporate reputation damages  Know about common risk-related legislation, such as:     Factories and Industrial Undertakings (Clectricity) Regulations     Factories and Industrial Undertakings (Confined Spaces) Regulation     Occupational Safety and Health Ordinance     Fire Prevention/Fire Alarm Ordinance     Master contemporary risk management modes, including:     Ways of handling crisis     Post-crisis risk management strategies  Master the assessment of risks, including:     Importance of the degree of loss     Risk measurement

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	<ul> <li>Master the ways of controlling risks, including:         <ul> <li>Importance of risk control</li> <li>Pre-assessment of risks</li> <li>Pre-incident risk control and post-incident financial compensation</li> </ul> </li> <li>Master the business strategies of the organization</li> </ul>
	2. Formulate risk management plans
	<ul> <li>Master the characteristics of different work areas of the organization and apply risk management knowledge and techniques to formulate risk management plans, including:         <ul> <li>Set up risk management committee</li> <li>Formulate risk monitoring plans</li> <li>Analyze risk management tools</li> <li>Review the mechanism</li> </ul> </li> <li>Assess the advantages and disadvantages of different risk control plans</li> </ul>
	<ul> <li>Analyze the risk level of tangible assets such as property, inventory and facility, and choose the most desirable asset assurance plans for the organization</li> </ul>
	Discuss the daily operational needs with insurance intermediaries or insurance
	<ul> <li>companies to formulate suitable and effective risk transfer plans</li> <li>Discuss the daily operational needs with other relevant departments to formulate suitable and effective risk management plans, such as monitoring and reviewing:         <ul> <li>The human resources policy, such as training policy, promotion and employment conditions to reduce the risk of talent loss</li> <li>The policy of daily operational management and equipment to reduce the operational facility risk, such as unstable operation of computer systems or equipment</li> <li>The daily operations and monitoring systems, such as the security system,</li> </ul> </li> </ul>
	receipt and delivery of inventory and record system to reduce the inventory loss risk due to burglary  The public relations strategy of the organization to reduce the risk of corporate reputation  The customer credit management strategy to reduce the default risk of the organization  Formulate the organizational management system and relevant indicators as well as allocate suitable resources to implement the risk management plans
	<ul> <li>Professionalism</li> <li>Formulate protective measures to minimize the disruption to the business and</li> </ul>
	<ul> <li>operations of the organization (Mainland factory) due to disasters and incidents, thereby reducing the risk of the organization (e.g. insurance policy)</li> <li>When implementing risk management, the overall interests of the organization, customers and business partners must be taken into account</li> </ul>
	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to integrate various kinds of information in a daily business environment with possibility of changes to formulate risk management plans or strategies for different areas of business of the enterprise, so as to reduce risks; and</li> <li>Co-ordinate the resources of the organization to facilitate the implementation of various risk management strategies.</li> </ul>
Remark	

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108869L6
This unit of competency is applicable to practitioners responsible for formulating strategies in the work related to operational management in the jewellery industry. Practitioners should be capable of making critical analysis and assessment, and applying analysis, innovative and leadership skills. They should also be capable of effecting innovative management when performing management duties, enabling the organization to develop innovative corporate thinking to break through the habitual practice and current limitations, making significant and innovative contribution to the organization.
6
9
Performance Requirements  1. Know about innovative management  Know about innovative management  Creative and innovative Creative process Improvement and innovation Know about disruptive innovation, i.e. the process of developing new products or services to replace existing products or services  Know about incremental innovation, i.e. improving existing products or services in a series of small steps  Master the knowledge of innovative management, including: Product innovation Process innovation System innovation Now about innovative methods, standards and work, such as: "Theory of Inventive Problem Solving" Bla44 (GDP, Local Standard of Guangdong Province) Effect innovative management for the enterprise from a professional perspective and give creative feedback Establish an innovative management model suitable to the enterprise  Effect innovative management  Identify areas where innovation can be strengthened, such as: Technological innovation Process innovation Business model innovation Product Innovation Product Innovation Service innovation Creative leadership Creative leadership Creative leadership Creative leadership Lead the organization to effect innovative management through a comprehensive understanding of the jewellery industry and the ability to look ahead

	<ul> <li>Creative coaching</li> <li>Creative leadership</li> <li>Encourage the development of innovative products by discovering, recruiting and rewarding creative employees</li> <li>Develop innovative decision-making and support to cultivate an innovative culture</li> <li>Employ innovative reasoning and analytical skills to solve current and future challenges</li> <li>Analyze the macroscopic environment and predict the long-term development trend to establish innovative jewellery development strategies</li> <li>Develop the vision for the direction of the innovative strategies and lead everyone of the organization to move forward</li> <li>Professionalism</li> <li>Ensure the innovative strategies of the organization can cope with the latest development trend</li> <li>Comply with local laws to protect the rights and benefits of the organization</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to master the management theory and lead the organization to effect innovative management through a comprehensive understanding of the jewellery industry and the ability to look ahead; stimulate creativity at individual and team level, and convert it into applicable ideas, so as to effectively implement innovative management, bringing about innovative reforms and future development to the organization.</li> </ul>
Remark	

Title	Set the overall direction, ideology and strategy for the operational management of the jewellery organization
Code	108870L7
Range	This unit of competency is applicable to decision-makers responsible for operational management in the jewellery industry. Practitioners should be capable of conducting analysis, reorganization, assessment and integration of data from various aspects. They should be able to master the complicated factors of changes in the jewellery industry, such as changes in the market, technology and price. They should also be able to employ innovative operational strategies to set the overall direction, ideology and strategy for the operational management of the organization, so as to lead the organization or industry to make breakthroughs that carry profound impact, thus maintaining the industry's leading position.
Level	7
Credit	9
Competency	Performance Requirements  1. Know about the market trend of the jewellery industry
	Know about the jewellery industry and the organization's operations and objectives, including:     Business areas and objectives     Income and expenditure status, and profit     Sensitivity to the market trend of the jewellery industry     Possess unique and creative ideas on jewellery products, and have leadership competency     Know about the production, trade, and types and values of the sources of goods in different regions     Know about the services provided by competitors and their market share     Know about the politics, economy and culture of the sales territories     Master proper logistics arrangement, the loss of human resources, and the effectiveness of the operational system, quality control and risk management, as well as sub-standard operational management or irregularities and their significance, etc.  2. Set the overall direction, ideology and strategy for operational management     Collect data and information on internal/external business environment factors, such as:

	<ul> <li>Assess the future trends in a forward-looking manner and review the current operational management system to cope with changes in the organization's comprehensive policy, so as to lead the corporate culture and establish the future direction of the organization</li> <li>Professionalism</li> </ul>
	<ul> <li>Ensure that the overall strategy/direction of the organization can meet the latest development</li> <li>Promote the long-term development of the organization when setting the overall operational management strategy</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to master the complicated factors of changes in the jewellery industry, such as changes in the market, technology and price, so as to set the strategies for the operation management of the organization effectively with unique creative ideas;</li> <li>Assess the future trends in a forward-looking manner and review the current operational management system proactively to accommodate changes in the organization's reforms; and</li> <li>Possess the ability to organize, lead, control and make decisions, leading the organization or the industry to make breakthroughs that carry profound impact, so as to embrace changes in the industry.</li> </ul>
Remark	

Title	Master basic patterns of jewellery and line-drawing techniques by hand
Code	108871L1
Range	This unit of competency is applicable to practitioners working in the jewellery design department of the jewellery industry. Practitioners should be capable of handling routine design work. They should also be able to understand the application and variation of different line forms as well as their relations with the conceptual design of the products, and draw the patterns of the appearance of jewellery under supervision.
Level	1
Credit	6
Competency	
	<ul> <li>Make use of various kinds of hand-drawing tools and lines to cope with different forms of patterns (geometrical, organic and mixed), and draw plane jewellery design under supervision, such as:         <ul> <li>Rings</li> <li>Earrings</li> <li>Pendants</li> <li>Necklaces</li> <li>Bracelets, etc.</li> </ul> </li> <li>Learn the drawing techniques to illustrate 3-D shapes, such as:         <ul> <li>3-D figures of rings</li> <li>3-D figures of necklaces</li> </ul> </li> </ul>
	3. Professionalism
	<ul> <li>Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights</li> </ul>

Assessment Criteria	The integrated outcome requirement of this unit of competency is:  • Able to identify the patterns of different kinds of jewellery, and use various kinds of hand-drawing tools and lines to make simple drawings of jewellery design under supervision.
Remark	

Title	Master basic jewellery design techniques
Code	108872L2
Range	This unit of competency is applicable to practitioners working in the jewellery design department of the jewellery industry. Practitioners should be capable of working in a familiar environment under supervision. They should be able to master the design of various jewellery patterns and their classification, and produce simple drawing patterns for basic jewellery design under instruction.
Level	2
Credit	6
Competency	Performance Requirements  1. Understand basic design principles and design workflow  • Know about basic design principles, such as:  ○ Point, line and plane and their relationships  ○ The variation, impact and effect of techniques such as enlargement, reduction, axis, repetition, radiation and rhythm on point, line and plane  • Know about hand-drawn sketches, such as:  ○ Know about the application of sketches in the development process of jewellery products  ○ Know about the types of sketches, such as:  ○ Outline sketch  ○ Concept drawing  • Perspective drawing (perspective drawing method)  • Projection drawing  • Structural drawing  • Structural drawing  • Sectional drawing  • Know about the steps and procedure of each basic design workflow, such as:  ○ Project briefing  ○ Research and analysis  ○ Determine the design direction and design criteria  ○ Design concept and idea generalization  ○ Design development  ○ Design finalization  ○ Design finalization  ○ Design realization  2. Master basic drawing and design techniques  • Use lines to outline the pattern of the product  ○ Draw the content of the product  ○ Use shades and metallic reflections to give a three-dimensional effect  ○ Use exture to express the tactile quality of a surface  ○ Perspective drawing (perspective drawing method)  • Master the workflow of the basic design principles and employ fundamental drawing techniques to assist the supervisor in performing various design duties  3. Professionalism

	<ul> <li>Respect intellectual property and avoid plagiarism when assisting in design-related duties, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirement of this unit of competency is:</li> <li>Able to employ various kinds of basic drawing techniques to produce basic jewellery design patterns under instruction, and present the appearance, texture and size of the jewellery.</li> </ul>
Remark	

Title	Master the techniques for making small-scale prototypes of jewellery products
Code	108873L2
Range	This unit of competency is applicable to practitioners working in the jewellery design department of the jewellery industry. Practitioners should be capable of working in a familiar environment under supervision. They should be able to use simple materials to make prototypes of jewellery products, and/or draw 2-D and 3-D diagrams of jewellery models with 3-D computer software under instruction for the purposes of design reference and trial test.
Level	2
Credit	3
Competency	Performance Requirements  1. Know about the instruments, materials and characteristics of mould-making for jewellery  • Know about the functions of various kinds of mould-making instruments, such as:  • Rulers  • Steel rulers  • Scissors  • Cutters  • Slab  • Pottery instruments  • Know about the characteristics of various kinds of mould-making materials (e.g. clay, paper and paper boards), such as:  • Malleability  • Foldability  • Elasticity  • Know about the manufacturing characteristics of materials and instruments, such as:  • The characteristics of materials  • Disposition of instruments  • Durability of materials  • Moulding methods  • Preserving methods
Assessment	2. Make simple moulds  • Use various kinds of moulding instruments such as paper and clay to make simple prototypes of jewellery products. Moulding techniques such as:  • Addition • Reduction • Separation • Combination  3. Professionalism  • Following the requirements of the organization, code of practice and safety guidelines, carry out the work related to making jewellery prototypes with a professional attitude  The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to use basic moulding instruments and materials to make simple moulds to present the prototype, surface texture or colour of the design. This mould can assist designers to understand the external structure of the product in the course of design development and realization.</li> </ul>

Functional Area - Design
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Remark	

Title	Master basic 3-D hand-drawing techniques for jewellery products
Code	108874L2
Range	This unit of competency is applicable to practitioners working in the jewellery design department of the jewellery industry. Practitioners should be capable of working in a familiar environment under supervision. They should be able to employ hand-drawing techniques to present the 3-D patterns of jewellery products.
Level	2
Credit	3
Competency	Performance Requirements  1. Know about the perspective principles and the techniques of altering 3-D space  • Know about perspective and projection  • Know about the following two perspective principles:  • One-point perspective  • Two-point perspective  • Know what a vanishing point, eye line, vision and cone are, as well as their interrelationships  • Know about the drawing techniques and structure of one-point and two-point perspective  • Know about the composition of the golden section, such as:  • Various proportions  • Composition of rectangles  • Composition of triangles  • Composition of triangles  • Composition of ovals  • Know about the techniques of altering 3-D space, such as:  • Addition and subtraction  • Distortion  • Enlargement  • Reduction  • Radiation  2. Bring out the 3-D effect of jewellery patterns  • Employ the technique of basic 3-D structure and the line frame in one-point or two-point perspective to present the external design of jewellery products and their spatial relationships; create variations by using methods such as addition, subtraction, distortion, enlargement, reduction and radiation to present different 3-D patterns, visual
	<ul> <li>effects, sizes of design products, their spatial relationships, etc.</li> <li>Master the use of perspective and projection to present the 3-D effect of jewellery patterns</li> </ul>
	3. Professionalism
	<ul> <li>Respect intellectual property and avoid plagiarism when assisting in design-related duties, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to employ hand-drawing techniques to draw simple 3-D jewellery design patterns, and present the 3-D effect, space and size of the design products under instruction.</li> </ul>
Remark	<u> </u>

Title	Know about the trend and development of jewellery design
Code	108875L2
Range	This unit of competency is applicable to practitioners working in the jewellery design department of the jewellery industry. Practitioners should be capable of working in a familiar environment under supervision. They should know about the trend of jewellery design and the design characteristics in different periods, as well as the design features of contemporary design, so as to assist the supervisor in adopting a new direction for jewellery design.
Level	2
Credit	6
Assessment Criteria	Performance Requirements  1. Understand the relation between art and design  • Know about the history of art so as to understand the development process from the beginning of human history to modern aesthetics  • Know about each process, the development and the transformation in the history of art, such as:  • The Stone Age  • The Middle Ages  • The Renaissance  • The Rococo Period  • The Industrial Revolution Period  • The Modern Times  • The Postmodern Period  • Know about the difference between design and art  • Know about the common points in design and art  2. Design jewellery  • Master the trend and development of art and jewellery design, and know about the development of jewellery against the background of each period, so as to enhance the appreciation ability, cultivate the aesthetic concept and assist the supervisor in adopting a new direction for jewellery design  3. Professionalism  • Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights  The integrated outcome requirement of this unit of competency is:  • Able to understand the trend of jewellery design and the design characteristics in each period, as well as the design features of contemporary design, and identify the impact of external factors on art and the trend of jewellery design, so as to assist the supervisor in
	adopting a new direction for jewellery design.
Remark	

This unit of competency is applicable to practitioners working in the jewellery design department of the jewellery industry. Practitioners should be capable of working in a familiar environment under supervision. They should be able to employ the techniques for drawing colour diagrams to present the exterior design of jewellery.  Level 2  Credit 6  Competency Performance Requirements  1. Know about multi-media colouring materials and tools as well as colour theories  • Know about multi-media colouring materials and tools as well as their characteristics on Materials, such as: black ink pen, pastel, poster colour, water colour, colour pencil and colour ink  • Characteristics, such as: transparency, coverage and effect  • Tools, such as: various kinds of drawing pens, rapidograph, blade ruling pen, painting dish, various kinds of paper and drawing rulers  • Know about basic colour theories to bring out the characteristics and visual effects of colour, such as:  • Luminosity  • Chrominance  • Chroma  2. Employ basic techniques for drawing colour diagrams, such as:  • Colour-mixing technique  • Colour effect  • Master different techniques for drawing colour diagrams, such as:  • Colour effect  • Master the techniques of presenting different metal external appearances using colour diagrams, such as:  • Flat surface  • Concave surface  • Linear surface  • Linear surface  • Make use of the effects of multi-media colouring materials, tools and hue to present the exterior design of jewellery under instruction  • Know how to handle the colour and luminosity of the design product  3. Professionalism  • Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights  Assessment  The integrated outcome requirement of this unit of competency is:  • Able to make use of various multi-media materials and tools to present the exte	Title	Master the basic techniques for drawing colour diagrams
of the jewellery industry. Practitioners should be capable of working in a familiar environment under supervision. They should be able to employ the techniques for drawing colour diagrams to present the exterior design of jewellery.  Level 2  Credit 6  Competency Performance Requirements  1. Know about multi-media colouring materials and tools as well as colour theories  • Know about multi-media colouring materials and tools as well as their characteristics on Materials, such as: black ink pen, pastel, poster colour, water colour, colour pencil and colour ink  • Characteristics, such as: transparency, coverage and effect  • Tools, such as: various kinds of drawing pens, rapidograph, blade ruling pen, painting dish, various kinds of paper and drawing rulers  • Know about basic colour theories to bring out the characteristics and visual effects of colour, such as:  • Luminosity  • Chromiance  • Chroma  2. Employ basic techniques for drawing colour diagrams  • Master different techniques for drawing colour diagrams, such as:  • Colour-mixing technique  • Colour effect  • Master the techniques of presenting different metal external appearances using colour diagrams, such as:  • Flat surface  • Concave surface  • Concave surface  • Concave surface  • Cylindrical surface  • Linear surface  • Cylindrical surface  • Linear surface  • Cylindrical surface  • Linear surface  • Make use of the effects of multi-media colouring materials, tools and hue to present the exterior design of jewellery under instruction  • Know how to handle the colour and luminosity of the design product  Assessment  Criteria  The integrated outcome requirement of this unit of competency is:  • Able to make use of various multi-media materials and tools to present the exterior design, pattern and colour of jewellery under instruction.	Code	108876L2
Performance Requirements  1. Know about multi-media colouring materials and tools as well as colour theories  • Know about multi-media colouring materials and tools as well as their characteristics  • Materials, such as: black ink pen, pastel, poster colour, water colour, pencil and colour ink  • Characteristics, such as: transparency, coverage and effect  • Tools, such as: various kinds of drawing pens, rapidograph, blade ruling pen, painting dish, various kinds of paper and drawing rulers  • Know about basic colour theories to bring out the characteristics and visual effects of colour, such as:  • Luminosity • Chrominance • Chroma  2. Employ basic techniques for drawing colour diagrams  • Master different techniques for drawing colour diagrams, such as:  • Colour-mixing technique • Coating technique • Colour effect  • Master the techniques of presenting different metal external appearances using colour diagrams, such as:  • Flat surface • Convex surface • Make use of the effects of multi-media colouring materials, tools and hue to present the exterior design of jewellery under instruction • Know how to handle the colour and luminosity of the design product  3. Professionalism  • Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights  Assessment  Criteria  The integrated outcome requirement of this unit of competency is:  • Able to make use of various multi-media materials and tools to present the exterior design, pattern and colour of jewellery under instruction.	Range	of the jewellery industry. Practitioners should be capable of working in a familiar environment under supervision. They should be able to employ the techniques for drawing colour diagrams to
Performance Requirements  1. Know about multi-media colouring materials and tools as well as colour theories  • Know about multi-media colouring materials and tools as well as their characteristics  • Materials, such as: black ink pen, pastel, poster colour, water colour, pencil and colour ink  • Characteristics, such as: transparency, coverage and effect  • Tools, such as: various kinds of drawing pens, rapidograph, blade ruling pen, painting dish, various kinds of paper and drawing rulers  • Know about basic colour theories to bring out the characteristics and visual effects of colour, such as:  • Luminosity  • Chrominance  • Chroma  2. Employ basic techniques for drawing colour diagrams  • Master different techniques for drawing colour diagrams, such as:  • Colour-mixing technique  • Colour flect  • Master the techniques of presenting different metal external appearances using colour diagrams, such as:  • Flat surface  • Concave surface  • Concave surface  • Concave surface  • Cylindrical surface  • Linear surface  • Linear surface  • Make use of the effects of multi-media colouring materials, tools and hue to present the exterior design of jewellery under instruction  • Know how to handle the colour and luminosity of the design product  3. Professionalism  • Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights  The integrated outcome requirement of this unit of competency is:  • Able to make use of various multi-media materials and tools to present the exterior design, pattern and colour of jewellery under instruction.	Level	2
1. Know about multi-media colouring materials and tools as well as their characteristics  Naterials, such as: black ink pen, pastel, poster colour, water colour, colour pencil and colour ink  Characteristics, such as: transparency, coverage and effect Tools, such as: various kinds of drawing pens, rapidograph, blade ruling pen, painting dish, various kinds of paper and drawing rulers  Know about basic colour theories to bring out the characteristics and visual effects of colour, such as:  Luminosity Chrominance Chroma  2. Employ basic techniques for drawing colour diagrams  Master different techniques for drawing colour diagrams, such as: Colour-mixing technique Colour	Credit	6
Able to make use of various multi-media materials and tools to present the exterior design, pattern and colour of jewellery under instruction.	Competency	Performance Requirements  1. Know about multi-media colouring materials and tools as well as colour theories  • Know about multi-media colouring materials and tools as well as their characteristics  • Materials, such as: black ink pen, pastel, poster colour, water colour, colour pencil and colour ink  • Characteristics, such as: transparency, coverage and effect  • Tools, such as: various kinds of drawing pens, rapidograph, blade ruling pen, painting dish, various kinds of paper and drawing rulers  • Know about basic colour theories to bring out the characteristics and visual effects of colour, such as:  • Luminosity  • Chrominance  • Chroma  2. Employ basic techniques for drawing colour diagrams  • Master different techniques for drawing colour diagrams, such as:  • Colour-mixing technique  • Colour effect  • Master the techniques of presenting different metal external appearances using colour diagrams, such as:  • Flat surface  • Convex surface  • Convex surface  • Convex surface  • Concave surface  • Concave surface  • Linear surface  • Make use of the effects of multi-media colouring materials, tools and hue to present the exterior design of jewellery under instruction  • Know how to handle the colour and luminosity of the design product  3. Professionalism  • Respect intellectual property and avoid plagiarism, preventing individuals and the
Remark	Assessment Criteria	Able to make use of various multi-media materials and tools to present the exterior
	Remark	

Title	Know about computer-aided design software for jewellery products
Code	108877L2
Range	This unit of competency is applicable to practitioners working in the jewellery design department of the jewellery industry. Practitioners should be capable of working in a familiar environment under supervision. They should be able to apply computer-aided software to design jewellery products.
Level	2
Credit	3
Competency	Performance Requirements  1. Understand the principles of computer drawing  • Know about various computer drawing principles, such as:  • Bitmap graphics and vector graphics in 2-D design  • Differences between surface design, mesh design and solid design in 3-D design  • Know about various computer drawing tools and their applications, such as:  • Pen tools  • Morphing  • Path management  • Copy and paste  • Know about the photo-realistic images produced by software, such as:  • Virtual reality  • Augmented reality  • Mixed reality  • Know about different types of output files and manage the output files with numerical control machining and rapid prototyping  2. Apply computer-aided software in the design of jewellery  • Effectively apply and operate various computer graphics design software to draw, build and modify 2-D lines and graphics  • Effectively apply and operate various computer graphics design software to draw, build and modify 3-D wireframe models, surface models and solid models  • Know about the image effect of virtual reality photos produced by computer software to produce virtual reality photos and images under instruction  • Know about different types of output files and manage them under instruction  • Know about different types of output files and manage them under instruction  • Know about different types of output files and manage them under instruction  • Rospect intellectual property and avoid plagiarism when assisting in jewellery design duties, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to know about the principles of applying computer-aided software in the design of jewellery; and</li> <li>Assist in designing and drawing the basic external appearance of jewellery, producing virtual reality photos, and managing file output under instruction.</li> </ul>

Functional Area - Design	
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Remark	

Title	Understand the basic principle of jewellery design
Code	108878L3
Range	This unit of competency is applicable to practitioners working in the jewellery design department of the jewellery industry. Practitioners should be capable of mastering the basic principle of jewellery design, assisting the designer in collecting information on jewellery design according to the demand of the customer or company, and preparing the jewellery design sketch that suits the style and taste of the customer.
Level	3
Credit	6
Competency	Performance Requirements  1. Understand the interrelationships between basic design thinking methods and techniques, ergonomics and design workflow  • Know about various kinds of design thinking methods, such as:  • Brainstorming  • Mind mapping  • Tree diagram  • Lateral thinking  • Six Ws method  • Six Thinking Hats  • User-centred design  • Contextual interview  • Focus group  • Parallel design  • Role model  • Prototype  • Example  • Know about the allocation of time and resources of each design workflow, as well as the way to handle and apply it  • Know about the relationship between ergonomics and different parts of the body, including:  • How the accessory can make the user feel comfortable  • How the merchandize can match with the human body  • Size and weight  • The proportion of the merchandize and its relation with the human body  • Know about different ways to wear jewellery, including:  • Ear accessories
	<ul> <li>Hand accessories</li> <li>Neck accessories</li> <li>Head accessories</li> <li>Know about the meaning, taste and message delivered by the design:         <ul> <li>Establish the meaning of the design</li> <li>Make use of explanatory diagrams clearly</li> <li>Strengthen the design perception of the audience</li> </ul> </li> </ul>
	2. Assist the designer to design jewellery
	Master design thinking methods and match with ergonomics to assist the designer in collecting information on jewellery design according to the demand of the customer or

	company, and prepare the jewellery design sketch that suits the style and taste of the customer
	3. Professionalism
	<ul> <li>Respect intellectual property and avoid plagiarism when performing design-related duties, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to master various kinds of design thinking methods, design elements and design theories, and match with ergonomics to assist the designer in collecting information on jewellery design according to the demand of the customer or company, as well as to establish the meaning of the design to prepare the jewellery design sketch that suits the style and taste of the customer and make use of explanatory diagrams clearly.</li> </ul>
Remark	

Title	Know about jewellery design and the cultural trend
Code	108879L3
Range	This unit of competency is applicable to practitioners working in the jewellery design department of the jewellery industry. Practitioners should be capable of understanding the cultural trend and development of jewellery design, and mastering the market needs and customer psychology through information collection, so as to incorporate cultural elements into the design to enhance the uniqueness of the products to meet market requirements.
Level	3
Credit	6
Competency	Performance Requirements  1. Know about the trend and cultural development of jewellery design  • Know about the cultural development of jewellery design and the cultural changes from the beginning of human history to the post-modern period, the cultural changes during each period of time and their interrelationships, as well as the impact of each period on art and design  • The impact of changes in art during the Renaissance on design  • The impact of Art Nouveau on the development process of jewellery design during the twentieth century  • The impact of war on design and living  • The development process from the Industrial Revolution to modern society  • The impact on the industry brought by technological advancement of post-modern society  • Know about the trend and development direction of jewellery design  • Know about the jewellery products of the peers in the jewellery industry to understand the creation trend of products  • Know about various kinds of technology to make breakthroughs in the technology aspect  • Know about the external factors affecting the development trend of jewellery design and analyze their impact on the development of jewellery design, such as:  • Political factors  • Economic factors  • Social factor  • Technological factors  • Know about customers' psychology on the trend of jewellery design, such as:  • Know about the trend of jewellery products  • Know about the trend of jewellery products  • Know about the needs on product design in connection with the consumption patterns of different regions, such as:  • Consumption patterns of different regions  • Consumption patterns of different regions
	2. Master the culture and development trend of jewellery design  • Integrate information on the jewellery design trend and master the relevant trend, including:  ○ Collect the trend, new information and development directions of jewellery products of different regions

	<ul> <li>Integrating information and matching the advantages of the organization, establish the development direction of the product series of the organization to meet market needs</li> <li>Make use of the knowledge on design and art development trend to determine the style and direction of jewellery design creatively to enhance the uniqueness of the products</li> <li>Professionalism</li> <li>Respect intellectual property and avoid plagiarism when performing design-related duties, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights</li> </ul>
Assessment Criteria	The integrated outcome requirement of this unit of competency is:
Cinteria	<ul> <li>Able to master the culture and development trend of jewellery design, as well as customer psychology, so as to incorporate various kinds of cultural elements and design characteristics in jewellery design to enhance the uniqueness of the products.</li> </ul>
Remark	

Title	Understand intellectual property
Code	108880L3
Range	This unit of competency is applicable to practitioners working in the jewellery design department of the jewellery industry. Practitioners should be capable of understanding the importance of intellectual property of jewellery design and relevant ordinances. They should also respect the creative industries, and avoid plagiarism and infringement of intellectual property rights.
Level	3
Credit	3
Competency	Performance Requirements  1. Understand the classification and characteristics of intellectual property  • Know about the major aspects of intellectual property, such as:  ○ Copyright  ○ Registered Designs
	<ul> <li>Registered Designs</li> <li>Design Patents</li> <li>Know about the ordinances related to intellectual property, such as:         <ul> <li>Trade Marks Ordinance and Trade Marks Rules</li> <li>Patents Ordinance</li> <li>Registered Designs Ordinance and Registered Designs Rules</li> <li>Copyright Ordinance</li> <li>Prevention of Copyright Piracy Ordinance</li> </ul> </li> <li>Know about the characteristics and coverage of each aspect of intellectual property, such as:         <ul> <li>Design registration only covers the external appearance of the product</li> <li>Design patents refer to innovative technology invention, including registration of machinery and all kinds of innovative treatments</li> </ul> </li> </ul>
	<ul> <li>2. Master the coverage of intellectual property</li> <li>Able to identify the classification and coverage of various kinds of intellectual property</li> <li>Able to respect intellectual property to prevent plagiarism, so as to avoid individuals and the company to fall into the trap of infringement</li> <li>3. Professionalism</li> </ul>
	Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights
Assessment Criteria	The integrated outcome requirements of this unit of competency are:
	<ul> <li>Able to know about the ordinances related to intellectual property of jewellery design; and</li> <li>Avoid plagiarism or infringement of intellectual property rights when performing jewellery design.</li> </ul>
Remark	

Range This unit of competency is applicable to practitioners working in the jewellery design department of the jewellery industry. Practitioners should be capable of using hand-drawn jewellery structural drawings to clearly present the structures of jewellery when sketching the designs, so as to facilitate discussion and illustrate the characteristics of the designs.  Level 3  Credit 6  Competency Performance Requirements 1. Understand the techniques of hand-drawn jewellery structural drawings and drawing theories • Know about the techniques of hand-drawn structural drawings, such as: using framework to construct a structural drawing to present a sense of space • Know how to use the techniques of "addition" and "reduction" to alter the structural drawings, thus achieving the effects of enlargement, reduction, extension, etc. • Know about the structural theories and production techniques of various kinds of drawings, such as:  • Perspective view • Projection view • 1st projection • Elevated view • 1sprojection is and the structures of the entire composition, such as: • The catch structures of the entire composition, such as: • The catch structures of the entire composition, such as: • The catch structures of the entire composition, such as: • The catch structures of the fittings and catches of pendants and brooches • Use structural drawings to present the structures of the entire composition and structures of the pittings and catches of pendants and brooches • Use structural drawings to present the pseullery designs, illustrating the sense of space, composition and structures of the products • Use various kinds of tools and materials to present the structures of the jewellery designs, illustrating the sense of space, composition and structures of the products • Use various kinds of tools and materials to present the structures of the jewellery designs; and enganization from falling into the trap of infringement of intellectual property rights  The integrated outcome requirements of this unit of competency are: •	Title	Master the techniques of hand-drawn jewellery structural drawings
of the jewellery industry. Practitioners should be capable of using hand-drawn jewellery structural drawings to clearly present the structures of jewellery when sketching the designs, so as to facilitate discussion and illustrate the characteristics of the designs.  Level 3  Credit 6  Competency Performance Requirements 1. Understand the techniques of hand-drawn jewellery structural drawings and drawing theories • Know about the techniques of hand-drawn structural drawings, such as: using framework to construct a structural drawing to present a sense of space • Know how to use the techniques of "addition" and "reduction" to alter the structural drawings, thus achieving the effects of enlargement, reduction, extension, etc. • Know about the structural theories and production techniques of various kinds of drawings, such as:  • Perspective view • Projection view • Ist projection • Elevated view • Ist projection • Elevated view • Explored view • Explored view • Explored view • Use structural drawings to present the structures of jewellery, the relation between various units and the structures of the entire composition, such as:  • The catch structures of bracelets/necklaces • Functions and structures of the entire composition, such as:  • The catch structures of bracelets/necklaces • Use structural drawings to present the jewellery designs, illustrating the sense of space, composition and structures of the products • Use various kinds of tools and materials to present the structures of the jewellery  3. Professionalism • Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights  Assessment Criteria  The integrated outcome requirements of this unit of competency are:  • Able to use hand-drawn structural drawings to present the sense of space and characteristics of the jewellery designs; and  • Use hand-drawn structural drawings to discuss and illustrate the characteristics of the designs and structures o	Code	108881L3
Credit 6 Competency Performance Requirements 1. Understand the techniques of hand-drawn jewellery structural drawings and drawing theories  • Know about the techniques of hand-drawn structural drawings, such as: using framework to construct a structural drawing to present a sense of space  • Know how to use the techniques of "addition" and "reduction" to alter the structural drawings, thus achieving the effects of enlargement, reduction, extension, etc.  • Know about the structural theories and production techniques of various kinds of drawings, such as:  • Perspective view  • Projection • 3rd projection • 3rd projection • 3rd projection • 2 Elevated view • Explored view • Explored view • Explored view • Cross-section drawing  2. Present jewellery design sketches  • Use structural drawings to present the structures of jewellery, the relation between various units and the structures of the entire composition, such as:  • The catch structures of the fittings and catches of pendants and brooches • Use structural drawings to present the jewellery designs, illustrating the sense of space, composition and structures of the products • Use various kinds of tools and materials to present the structures of the jewellery  3. Professionalism  • Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights  The integrated outcome requirements of this unit of competency are:  • Able to use hand-drawn structural drawings to present the sense of space and characteristics of the jewellery designs; and  • Use hand-drawn structural drawings to discuss and illustrate the characteristics of the designs and structures of the jewellery.	Range	of the jewellery industry. Practitioners should be capable of using hand-drawn jewellery structural drawings to clearly present the structures of jewellery when sketching the designs, so
Competency  Performance Requirements 1. Understand the techniques of hand-drawn jewellery structural drawings and drawing theories  Know about the techniques of hand-drawn structural drawings, such as: using framework to construct a structural drawing to present a sense of space  Know how to use the techniques of 'addition' and 'reduction' to alter the structural drawings, thus achieving the effects of enlargement, reduction, extension, etc.  Know about the structural theories and production techniques of various kinds of drawings, such as:  Perspective view Projection view 1st projection Elevated view Isometric view Explored view Cross-section drawing  Present jewellery design sketches  Use structural drawings to present the structures of jewellery, the relation between various units and the structures of the entire composition, such as:  The catch structures of bracelets/necklaces Functions and structures of the fittings and catches of pendants and brooches Use structural drawings to present the jewellery designs, illustrating the sense of space, composition and structures of the products Use various kinds of tools and materials to present the structures of the jewellery  Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights  The integrated outcome requirements of this unit of competency are: Able to use hand-drawn structural drawings to present the sense of space and characteristics of the jewellery designs; and Use hand-drawn structural drawings to discuss and illustrate the characteristics of the designs and structures of the jewellery.	Level	3
1. Understand the techniques of hand-drawn jewellery structural drawings and drawing theories  • Know about the techniques of hand-drawn structural drawings, such as: using framework to construct a structural drawing to present a sense of space  • Know how to use the techniques of "addition" and "reduction" to alter the structural drawings, thus achieving the effects of enlargement, reduction, extension, etc.  • Know about the structural theories and production techniques of various kinds of drawings, such as:  • Perspective view  • Perspective view  • Projection view  • 1st projection  • 3rd projection  • 3rd projection  • Elevated view  • Explored view  • Explored view  • Cross-section drawing  2. Present jewellery design sketches  • Use structural drawings to present the structures of jewellery, the relation between various units and the structures of the entire composition, such as:  • The catch structures of bracelets/necklaces  • Functions and structures of the fittings and catches of pendants and brooches  • Use structural drawings to present the jewellery designs, illustrating the sense of space, composition and structures of the products  • Use various kinds of tools and materials to present the structures of the jewellery  3. Professionalism  • Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights  Assessment Criteria  The integrated outcome requirements of this unit of competency are:  • Able to use hand-drawn structural drawings to present the sense of space and characteristics of the jewellery designs; and  • Use hand-drawn structural drawings to discuss and illustrate the characteristics of the designs and structures of the jewellery.	Credit	6
framework to construct a structural drawing to present a sense of space  Know how to use the techniques of "addition" and "reduction", extension, etc.  Know about the structural theories and production techniques of various kinds of drawings, such as:  Perspective view Projection view 1st projection Blevated view Isometric view Explored view Cross-section drawing  Persent jewellery design sketches  Use structural drawings to present the structures of jewellery, the relation between various units and the structures of the entire composition, such as:  The catch structures of bracelets/necklaces Functions and structures of the fittings and catches of pendants and brooches Use structural drawings to present the jewellery designs, illustrating the sense of space, composition and structures of the products Use various kinds of tools and materials to present the structures of the jewellery  Professionalism Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights  The integrated outcome requirements of this unit of competency are: Able to use hand-drawn structural drawings to present the sense of space and characteristics of the jewellery designs; and Use hand-drawn structural drawings to discuss and illustrate the characteristics of the designs and structures of the jewellery.	Competency	1. Understand the techniques of hand-drawn jewellery structural drawings and drawing theories
Use structural drawings to present the structures of jewellery, the relation between various units and the structures of the entire composition, such as:		framework to construct a structural drawing to present a sense of space  • Know how to use the techniques of "addition" and "reduction" to alter the structural drawings, thus achieving the effects of enlargement, reduction, extension, etc.  • Know about the structural theories and production techniques of various kinds of drawings, such as:  • Perspective view  • Projection view  • 1st projection  • 3rd projection  • Elevated view  • Isometric view  • Explored view
various units and the structures of the entire composition, such as:  The catch structures of bracelets/necklaces Functions and structures of the fittings and catches of pendants and brooches  Use structural drawings to present the jewellery designs, illustrating the sense of space, composition and structures of the products Use various kinds of tools and materials to present the structures of the jewellery  3. Professionalism Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights  The integrated outcome requirements of this unit of competency are: Able to use hand-drawn structural drawings to present the sense of space and characteristics of the jewellery designs; and Use hand-drawn structural drawings to discuss and illustrate the characteristics of the designs and structures of the jewellery.		2. Present jewellery design sketches
Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights  Assessment Criteria  The integrated outcome requirements of this unit of competency are:  Able to use hand-drawn structural drawings to present the sense of space and characteristics of the jewellery designs; and  Use hand-drawn structural drawings to discuss and illustrate the characteristics of the designs and structures of the jewellery.		various units and the structures of the entire composition, such as:  o The catch structures of bracelets/necklaces o Functions and structures of the fittings and catches of pendants and brooches  • Use structural drawings to present the jewellery designs, illustrating the sense of space, composition and structures of the products
Assessment Criteria  The integrated outcome requirements of this unit of competency are:  Able to use hand-drawn structural drawings to present the sense of space and characteristics of the jewellery designs; and  Use hand-drawn structural drawings to discuss and illustrate the characteristics of the designs and structures of the jewellery.		3. Professionalism
<ul> <li>Able to use hand-drawn structural drawings to present the sense of space and characteristics of the jewellery designs; and</li> <li>Use hand-drawn structural drawings to discuss and illustrate the characteristics of the designs and structures of the jewellery.</li> </ul>		
<ul> <li>Able to use hand-drawn structural drawings to present the sense of space and characteristics of the jewellery designs; and</li> <li>Use hand-drawn structural drawings to discuss and illustrate the characteristics of the designs and structures of the jewellery.</li> </ul>		The integrated outcome requirements of this unit of competency are:
Remark		<ul> <li>characteristics of the jewellery designs; and</li> <li>Use hand-drawn structural drawings to discuss and illustrate the characteristics of the</li> </ul>
<u> </u>	Remark	

Title	Employ CAD techniques in the design of relatively simple jewellery
Code	108882L3
Range	This unit of competency is applicable to practitioners working in the jewellery design department of the jewellery industry. Practitioners should be capable of designing relatively simple jewellery patterns with the aid of computer software related to jewellery design.
Level	3
Credit	3
Competency	Performance Requirements 1. Understand the workflow of computer-aided design (CAD)
	<ul> <li>Understand the workflow of CAD, and master the drawing of sketches and its application</li> <li>Know how to use the parametric method in solid drawing</li> <li>Know how to produce and handle the components of jewellery</li> <li>Know how to prepare engineering drawings</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>
	2. Apply CAD
	<ul> <li>Use CAD software to design relatively simple jewellery patterns</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> <li>Use engineering drawings to facilitate jewellery manufacturing</li> <li>Use virtual reality, augmented reality and mixed reality to present the finished drawings and use photo-realistic images to facilitate communication</li> <li>Know about the application of the latest 3-D printing technology and demonstrate the effects</li> <li>Use data from output files to work with numerical control machining</li> <li>Use rapid prototypes and engineering analysis to facilitate jewellery manufacturing</li> </ul>
	3. Professionalism
	<ul> <li>Respect intellectual property and avoid plagiarism when designing jewellery, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights</li> </ul>
Assessment Criteria	The integrated outcome requirements of this unit of competency are:
	<ul> <li>Able to apply computer software to facilitate the design of relatively simple jewellery, such as rings, earrings and pendants; and</li> <li>Produce and output computerized model drawings, and apply such knowledge in jewellery manufacturing and present the drawings.</li> </ul>
Remark	

Title	Make basic jewellery display models
Code	108883L3
Range	This unit of competency is applicable to practitioners working in the jewellery design department of the jewellery industry. Practitioners should be capable of mastering various kinds of materials for making jewellery models and their functions. They should also be able to make simple jewellery display models out of basic materials independently.
Level	3
Credit	3
Competency	Performance Requirements  1. Know about various kinds of materials for making jewellery models  Know about various kinds of tools for making models, such as:  Ruler  Steel ruler  Cutter  Scraper  Slab  Pottery instruments  Know about the basic materials for making jewellery models, such as:  Paper  Clay  Gypsum  PVC plate  Resin  Iron  Copper or wire  Know about the characteristics and flexibility of the basic materials for making jewellery models, such as:  Characteristics of materials:  iron/copper/wire can be used to create the framework or external shape with high durability and long-lasting effect but the production is time-consuming  paper can be used to create 3-D relief within a short period of time and with high flexibility, but it is not durable and cannot fully demonstrate the material characteristics of the product  Disposition of tools  Durability of materials  Moulding methods  Preserving methods  Preserving methods  Show the external design of the jewellery  Refine the appearance, colour and texture in detail  Bring out the characteristics, colour and texture of the design product
	Bring out the characteristics, colour and texture of the design product     Professionalism

	<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, perform duties related to making basic jewellery display models with a professional attitude</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirement of this unit of competency is:</li> <li>Able to use simple materials to make jewellery models to bring out the shapes and features of the products, so as to accomplish the external design of the jewellery.</li> </ul>
Remark	

Title	Present coloured drawings of jewellery by means of mixed media
Code	108884L3
Range	This unit of competency is applicable to practitioners working in the jewellery design department of the jewellery industry. Practitioners should be capable of mastering the application of mixed media materials and independently presenting the coloured drawings and characteristics of jewellery design by means of mixed media.
Level	3
Credit	6
Competency	Performance Requirements  1. Understand the application, colour theories and effects of mixed media materials  • Know about the range of materials covered in mixed media  • Types of colouring materials, such as:  • Black pen  • Pastel  • Poster colour  • Water colour  • Colour pencil  • Colour ink  • Marker  • Characteristics of the colouring materials, such as:  • Transparency  • Coverage  • Effects  • Techniques and special effects  • Various kinds of paper and their characteristics  • Various kinds of tools and drawing rulers  • Various kinds of coatings and their effects  • Master the application and techniques of various kinds of mixed media  • Know how to match with one another between mixed media  • Know how to match with one another between mixed media  • Make use of suitable colour and texture to create different touch of feel, such as:  • Metal  • Gemstone  • Wood/Plastic  • Animal skin  • Make use of the luminosity, hue and chroma of colours to bring out different colour effects, such as:  • Contrast  • Harmony  • Companion colour  • Brightness value  • The characteristics of colour effects with the same luminosity as well as their differences  • Basic colour matching, such as:  • Hue effect  • Tone effect  • Make use of different materials to create background effects

	<ul> <li>Produce the coloured drawings of jewellery design by means of mixed media, and bring out the characteristics, texture, materials and touch of feel of the external design of the products</li> </ul>
	3. Professionalism
	<ul> <li>Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights</li> </ul>
Assessment Criteria	The integrated outcome requirement of this unit of competency is:  • Able to bring out the characteristics, materials, colour and texture of the external design of the jewellery independently by means of mixed media and colour matching, so as to facilitate discussion and introduce new design.
Remark	

Title	Understand the relationship between jewellery manufacturing and design
Code	108885L3
Range	This unit of competency is applicable to practitioners working in the jewellery design department of the jewellery industry. Practitioners should be capable of understanding the manufacturing process of jewellery and tying it in with the design process of jewellery products, so as to achieve higher cost effectiveness.
Level	3
Credit	6
Competency	Performance Requirements 1. Understand the matching between the jewellery manufacturing process and design drawings
	<ul> <li>Know about the basic manufacturing procedures of hand-made jewellery and the interrelationships between the work procedures, such as:         <ul> <li>Gold casting</li> <li>Gems setting</li> <li>Polishing/Electroplating</li> </ul> </li> <li>Know about the basic batch manufacturing procedures of jewellery and the interrelationships between the work procedures, such as:         <ul> <li>Wax/Silver model making</li> <li>Lost wax casting</li> <li>Jewellery trimming</li> <li>Gems setting</li> <li>Polishing/Electroplating</li> </ul> </li> </ul>
	2. Make use of the knowledge of the manufacturing process to facilitate jewellery design
	Take into account the manufacturing process when designing jewellery products, so as to avoid problems due to a mismatch between the design and the manufacturing process, resulting in increased production costs
	3. Professionalism
	<ul> <li>Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights</li> </ul>
Assessment Criteria	The integrated outcome requirement of this unit of competency is:
	<ul> <li>Able to understand the manufacturing processes of jewellery so as to apply such knowledge in jewellery design to tie in with the production, thus enhancing cost effectiveness.</li> </ul>
Remark	

Title	Know about the general market situation of jewellery products
Code	108886L3
Range	This unit of competency is applicable to practitioners working in the jewellery design department of the jewellery industry. Practitioners should be capable of understanding the general market situation of jewellery products and applying such knowledge in jewellery design.
Level	3
Credit	3
Competency	Performance Requirements  1. Know about the general market situation of jewellery products  • Know about the local and export markets of Hong Kong's jewellery  • The position, role, sales value, etc. in the retail industry  • The status, role, export value, etc. in the export trade  • Types of products (fine gold jewellery, stone-setting jewellery and jade/Fei Cui jewellery)  • Agency and distribution of major jewellery brands  • Know about the major export markets of Hong Kong's jewellery  • Countries of major export markets  • Demand in the export markets  • Demand in the export markets  • Purchasing power and development potential of export markets and their characteristics in design  • Know about the local and foreign competitors of Hong Kong's jewellery market and their characteristics in design  • Know about the strengths and weaknesses of Hong Kong's jewellery industry, and the challenge that the jewellery market faces  • Know about the latest development of Hong Kong's jewellery industry, such as:  • Computer-aided design  • Computer aided engineering analysis  • Computer aided engineering analysis  • Computer aided engineering analysis  • Computer numerical control processing technology  • Automated production technology  • Robotic arm technology  • Robotic arm technology  • Application of materials science  • Multimedia marketing and promotion  • Technology marketing technology  • Application of materials science  • Multimedia marketing and promotion  • Technology marketing techniques  2. Design jewellery in accordance with market demand  • Design jewellery in accordance with market demand  • Design jewellery according to the needs of target customers. The design should be different from and better than that of the competitors to gain an edge in competition  • Focus on Hong Kong's jewellery industry, the strengths and weaknesses of the organization, the market opportunity and the challenge that the market faces, so as to assist the organization in developing jewellery products with market potential

	Respect intellectual property and avoid plagiarism when assisting in design-related duties, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights
Assessment Criteria	The integrated outcome requirement of this unit of competency is:  • Able to understand the general market situation of jewellery products, design jewellery products to satisfy the market needs, and assist the organization to develop jewellery products with market potential.
Remark	

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Title	Integrate and incorporate design techniques into jewellery design
Code	108887L4
Range	This unit of competency is applicable to designers working in the jewellery design department of the jewellery industry. Practitioners should master various basic jewellery design concepts/theories, drawings and techniques. They should also be capable of integrating various kinds of design techniques and incorporating them into jewellery design independently.
Level	4
Credit	6
Competency	Performance Requirements 1. Understand the design process of jewellery
Assessment	Understand thoroughly the time control and co-ordination for each design process.  Design processes include: Project briefing Know about project objectives and determine project themes Conduct research and analysis to objectively identify the products' design directions, target customers, market positioning, etc. Design criteria. This is to determine the requirements or index of the product design Provide design concept and idea generalization Design development. This is to provide more options for the design products Design finalization. This is to determine the ultimate direction of the design Design realization Master the time and resource allocation of the design processes as well as the handling and adjustment of the project details  2. Master the integration of various kinds of related design techniques and incorporation of them into jewellery design  Make use of marketing research information to determine the jewellery products' design directions, marketing objectives, customer groups, pricing, resource utilization, marketing channels, etc. Integrate the knowledge of design, theory, marketing, engineering, production management and technology application, and incorporate them into jewellery design, enabling the jewellery products to have higher competitiveness and better fulfil consumers' needs, thus achieving better sales performance and cost effectiveness  3. Professionalism  Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights  The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to integrate various kinds of design techniques and incorporate them into jewellery design, and matching with the design process, determine the design directions, target customers and market positioning of the jewellery products, so as to achieve better sales performance and cost effectiveness.</li> </ul>
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Title	Incorporate cultural elements and design theories into jewellery design
Code	108888L4
Range	This unit of competency is applicable to designers working in the jewellery design department of the jewellery industry. Practitioners should be capable of making careful analysis and judgment, and incorporating design theories and cultural design theories into the process of jewellery design, so as to enhance the profundity of the jewellery products and increase their market value.
Level	4
Credit	6
Competency	Performance Requirements  1. Understand the interrelationship between cultural development and design  • Know about the relationship between jewellery design and culture, the development of the history of design and the directions of design trends  • Know about the impact of political factors, social phenomena and social development on each design trend, and the evolution of the design trend from the 19th century to the 20th century, such as:  • The design products of the Art Nouvear and Art Deco periods focus on decorative and gorgeous appearance, exquisite workmanship and the use of high quality materials, emphasizing the identity, status and taste of the wearer  • The design products of the Modern Design period emphasize functional purposes, simple appearance and the capture of lots of ideas from life or political concepts  • Know about various kinds of basic design theories, such as:  • Product language  • Product semiotics  • Sustainable design  • Designer experience  • Design for fun  • Ergonomic design  • Know the skills and methods of obtaining and analyzing information, and select useful information for market analysis. Understand the characteristics and preferences of the market, and obtain information through diversified channels, such as:  • Read reports, books and magazines on consumer behaviour  • Analyze user behaviours  • Compare products  • Analyze market share  • Market forecasting  • Understand the changes in the design theories during cultural transition and their relation with consumers, and that consumers' needs for consumer goods lead to changes in the design trends  • Understand thoroughly the interrelationships between cultural trends, politics, economics, society and technological development

	<ul> <li>Incorporate cultural elements and design theories into jewellery design, and make use of market analysis flexibly to enhance the distinctiveness of the jewellery products that can resonate with users, so as to give products positioning value in the market</li> </ul>
	3. Professionalism
	<ul> <li>Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights</li> </ul>
Assessment Criteria	The integrated outcome requirement of this unit of competency is:     Able to integrate culture and design elements, and incorporate them into jewellery design to enhance the profundity of the jewellery products and give products positioning value in the market.
Remark	value in the market.

Title	Employ hand-drawing techniques to present the appearance and structure of jewellery
Code	108889L4
Range	This unit of competency is applicable to designers working in the jewellery design department of the jewellery industry. Practitioners should be capable of making careful analysis and judgment. They should also be able to master hand-drawing techniques to present the appearance and structure of jewellery, and handle drawings independently.
Level	4
Credit	3
Competency	Performance Requirements  1. Know about the hand-drawing techniques of jewellery
	<ul> <li>Know about hand-drawing techniques, be able to freely employ the patterns of line forms, and master the perspective theory and various kinds of drawing techniques</li> <li>Master hand-drawing techniques to present different textures, such as:         <ul> <li>Metal</li> <li>Gemstone</li> <li>Wood/Plastic</li> <li>Animal skin</li> </ul> </li> </ul>
	Employ hand-drawing techniques to present the exterior design and structure of jewellery
	<ul> <li>Employ hand-drawing techniques to present the exterior design and structure of jewellery, such as patterns, materials, stones and surface treatment, and be able to handle drawings independently as well as communicate with other departments of the organization by using design drawings or introduce new design to customers to promote the products</li> </ul>
	3. Professionalism
	<ul> <li>Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to master hand-drawing techniques to handle drawings independently, and employ multiple drawing techniques to present the appearance and structure of jewellery as well as incorporate new elements and changes into the design; and</li> <li>Communicate with other departments of the organization by means of design drawings, or introduce design drawings to customers.</li> </ul>
Remark	

Title	Apply CAD software in the design of relatively complex jewellery
Code	108890L4
Range	This unit of competency is applicable to designers working in the jewellery design department of the jewellery industry. Practitioners should be capable of making careful analysis and judgment. They should also be able to apply computer-aided design (CAD) software to design relatively complex jewellery independently, such as complex necklace design and rings, and interface with a variety of numerical control machining and rapid prototyping technology.
Level	4
Credit	3
Competency	Performance Requirements 1. Know about CAD software
	<ul> <li>Master the concepts of applying CAD software to design relatively complex jewellery drawings</li> <li>Know about the differences between 2-D and 3-D CAD drawings, and their conversion factors and display effects</li> <li>Master different interfaces and the conversion of files, such as Initial Graphics Exchange Specification (IGES) and STereoLithography (STL)</li> </ul>
	2. Employ CAD technology
	<ul> <li>Employ CAD technology to design the patterns and produce demonstration drawings of relatively complex jewellery, such as complex necklace design and rings</li> <li>Employ the conversion between 2-D and 3-D designs</li> <li>Use different interfaces and file processing to output and convert files for different numerical control machining or rapid prototype making</li> <li>Know about how the output files of numerical control machining and rapid prototyping work with different types of 3-D printing technology and 3-D printer models</li> </ul>
	3. Professionalism
	<ul> <li>Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights</li> </ul>
Assessment Criteria	The integrated outcome requirements of this unit of competency are:
	<ul> <li>Able to correctly apply CAD techniques to design relatively complex jewellery, such as making the jewellery set, analyzing the structure of the design and studying the production feasibility; and</li> <li>Use different interfaces, such as IGES, to convert between 2-D and 3-D designs, as well as master the conversion and output of different files to match with various kinds of numerical control machining and rapid prototype making.</li> </ul>
Remark	

Title	Use various kinds of jewellery materials in jewellery design
Code	108891L4
Range	This unit of competency is applicable to designers working in the jewellery design department of the jewellery industry. Practitioners should be capable of making careful analysis and judgment. They should also be able to match different jewellery and materials independently, and apply such knowledge in jewellery design.
Level	4
Credit	3
Competency	Performance Requirements  1. Know about the different materials, shapes and characteristics of jewellery/jade  • Know about the different cuts of precious gemstones and semi-precious gemstones/ coloured gemstones/jade, such as:  □ Diamonds (brilliant-cut, princess-cut)  □ Semi-precious gemstones/coloured gemstones (faceted, oval)  □ Ruby and sapphire (faceted, oval/star)  □ Emerald (emerald-cut, oval)  □ Jade/Fei Cui/Jade motif ornaments  • Know about the characteristics of different kinds of precious gemstones and semi-precious gemstones/coloured gemstones/jade to facilitate the design of jewellery, such as:  □ Hardness  □ Tenacity  □ Cleavage  □ Colour  □ Dispersion  □ Various shapes  □ Maintenance and treatment  • Know about the shapes and characteristics of metal/non-metal materials used in jewellery design, such as:  □ Non-ferrous metals  □ Ferrous metals  □ Ferrous metals  □ Natural organic materials  □ Plastic and rubber products  2. Disposition of jewellery and materials  • Make use of the cuts, shapes and characteristics of various kinds of precious gemstones and semi-precious gemstones/coloured gemstones/jade:  □ To design various kinds of jewellery  □ To enhance the aesthetic perception and value  • Make use of various materials to design jewellery, such as leather strings, pendants and ornaments  3. Professionalism  • Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights
Assessment Criteria	The integrated outcome requirements of this unit of competency are:

	<ul> <li>Able to master the shapes and characteristics of various kinds of precious gemstones and semi-precious gemstones/coloured gemstones/jade/Fei Cui, as well as metals/non-metals; and</li> <li>Select and make use of different kinds of jewellery and materials independently to design various kinds of jewellery patterns.</li> </ul>
Remark	

Title	Make relatively complex jewellery models
Code	108892L4
Range	This unit of competency is applicable to designers working in the jewellery design department of the jewellery industry. Practitioners should be capable of making careful analysis and judgment, and using various materials to make relatively complex jewellery prototypes independently.
Level	4
Credit	6
Competency	Performance Requirements  1. Know about the techniques of making jewellery prototypes and models
	<ul> <li>Know about the use of various tools for making jewellery wax models, including carving knife, wax knife, wax file, wax needle file, wax grinding stone, wax mould axis, small crayon and wax welding machine</li> <li>Know about the craftsmanship, styling techniques and technologies of various jewellery wax models, such as mastering:         <ul> <li>Carving techniques</li> <li>Filing techniques</li> <li>Piercing techniques</li> <li>Polishing techniques</li> <li>Hollow chiselling techniques</li> <li>Pellet shaping techniques</li> <li>Bending techniques</li> <li>Welding techniques</li> <li>Wax dropping techniques</li> <li>Know about the functions of other kinds of materials for making jewellery metal models, such as metal plates, metal wires and metal strips</li> <li>Know about various kinds of basic goldsmithing skills</li> </ul> </li> </ul>
	2. Make relatively complex jewellery models and prototypes
	<ul> <li>Produce 3-D jewellery models and make use of the texture of the jewellery plus gemstones or materials that meet the size and shape of the design to fully display the design characteristics, such as the appearance, structure, materials and surface treatment of the jewellery; and present the wax/metal models equivalent to the real objects</li> </ul>
	3. Professionalism
	<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, perform duties related to making relatively complex jewellery display models with a professional attitude</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to make relatively complex jewellery models independently to display the features, texture and colours of the external design; and</li> <li>Make jewellery wax/metal models that can reflect the characteristics of the real objects so that the jewellery models can be used for displaying, discussing business matters and communicating with customers.</li> </ul>
Remark	

Title	Master professional design knowledge of the jewellery industry
Code	108893L4
Range	This unit of competency is applicable to designers working in the jewellery design department of the jewellery industry. Practitioners should be capable of making careful analysis and judgment, and mastering professional design knowledge to handle daily jewellery design duties independently.
Level	4
Credit	6
Competency	Performance Requirements  1. Know about the professional design knowledge of the jewellery industry  • Know about the professional ethics in design, such as:  • Confidentiality  • The spirit of contract  • Integrity and respect  • Safeguard intellectual property  • Know about the intellectual property ordinances of Hong Kong, China and major overseas markets, including:  • Coverage  • Practical application  • Application procedure  • Legal responsibility  • Understand the jewellery industry and market trend  2. Apply professional design knowledge of the jewellery industry  • Observe professional ethics when performing design duties, such as:  • Keep the design and invention of the organization and customers confidential  • Utilize company resources effectively when performing design duties  • Finish the job within the estimated timeframe and resources to match with the organization's product research and development plans  • Safeguard intellectual property  • Assist the organization and customers in safeguarding the intellectual property of the new design during the process of jewellery product research and development  • Check the registered jewellery design patents and existing jewellery products in the market to prevent the new design from infringing intellectual property or developing products similar to existing products in the market  • Immediately alert the organization and customers of any innovative design and invention, and assist in making registration in the appropriate country or making patent registration to safeguard the interests of the organization and customers  • Apply knowledge of the industry and market in product design  • Design new jewellery products to meet the current and future development of the jewellery industry and market tend  • Apply newly developed techniques in the jewellery industry during the design process to meet market demand

	Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to apply professional knowledge of jewellery design and newly developed technologies and techniques in the design or research and development of jewellery products; and</li> <li>Safeguard intellectual property and demonstrate professional integrity during the design of jewellery products.</li> </ul>
Remark	

Title	Master the market trend of the jewellery industry
Code	108894L4
Range	This unit of competency is applicable to designers working in the jewellery design department of the jewellery industry. Practitioners should be capable of making careful analysis and judgment. They should be able to conduct analysis independently based on the available information, so as to master the market trend of the jewellery industry and apply such knowledge in jewellery design.
Level	4
Credit	3
Competency	Performance Requirements  1. Know about the market information about the jewellery industry
	Possess basic marketing knowledge, such as: Changes in the demand and supply of the jewellery market Characteristics and needs of target customers as well as market segmentation The location of the marketing gap and the market positioning of the organization The rise and decline of various kinds of products in the jewellery market The product life cycles of the organization's product lines Consumer behaviour, such as:  Type of customers Consuming psychology Decision-making mode Purchasing process Master market research methods for jewellery products Know about the basic methods to obtain and analyze market information, so as to master the content of the marketing plans  Use newly developed technologies, such as big data and artificial intelligence, to analyze market information, so as to master the changes and development trend of the jewellery market
	2. Master the market trend of the jewellery industry and design products that can meet market demand
	<ul> <li>Design distinctive and creative jewellery products focusing on current and anticipated needs of target customers in accordance with the organization's established market positioning</li> <li>Help develop potential product lines to replace the declining products in accordance with the anticipated market trend and the organization's product development direction</li> </ul>
	3. Professionalism
	Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to apply basic marketing knowledge in jewellery design, and master the changes of the jewellery market and its development trend to design products that can meet market demand; and</li> <li>Use newly developed technologies to analyze market information, so as to master the changes and development trend of the jewellery market.</li> </ul>

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Remark	

Title Present coloured drawings of jewellery by means of mixed media  Code 108895L4  Range This unit of competency is applicable to designers working in the jewellery design department of the jewellery industry. Practitioners should be capable of making careful analysis and judgment, and presenting the jewellery design as well as the characteristics and style of the design by means of mixed media independently.  Level 4  Credit 3  Competency Performance Requirements 1. Know about the materials of mixed media and their effects, and understand the importance of intellectual property in jewellery design  • Know about the materials covered in mixed media  • The types and characteristics of colouring materials, such as:  • Black pen  • Pastel  • Poster colour  • Water colour  • Colour pencil  • Colour ink  • Various kinds of paper and their characteristics  • Various kinds of paper and their characteristics  • Various kinds of drawing rulers and instruments  • Know about the materials for creating different textures, such as:  • Metal  • Gemstone  • Wood  • Plastic  • Animal skin  • Know about the various colour effects produced by the luminosity of colour  • Understand intellectual property and do not copy other people's works when presenting coloured drawings of jewellery by means of mixed media  2. Present the style and sentiment of jewellery design by means of mixed media  • Produce the coloured drawings of the jewellery by means of mixed media  • Produce the coloured drawings of the jewellery by means of mixed media  • Produce usuable lighting and shadowing effect  • Effectively bring out the style and sentiment of the product  • Integrate and apply diversified media flexibly  • Diregaret and apply diversified media flexibly  • Design out the texture of the jewellery tem  • Use different materials to set the background  • Produce suitable lighting and shadowing effect  • Effectively bring out the style and sentiment of the product  • Find the angles that can present the aesthetics of various jewellery  The inte		-
This unit of competency is applicable to designers working in the jewellery design department of the jewellery industry. Practitioners should be capable of making careful analysis and judgment, and presenting the jewellery design as well as the characteristics and style of the design by means of mixed media independently.  Level 4  Credit 3  Competency Performance Requirements 1. Know about the materials of mixed media and their effects, and understand the importance of intellectual property in jewellery design  Know about the materials covered in mixed media The types and characteristics of colouring materials, such as: Black pen Pastel Poster colour Colour pencil Colour pencil Colour pencil Colour ink Metal Gemstone Wood Plastic Animal skin Know about the materials for creating different textures, such as:  Understand intellectual property and do not copy other people's works when presenting coloured drawings of jewellery by means of mixed media  Produce the coloured drawings of the jewellery by means of mixed media  Produce the coloured drawings of the jewellery by means of mixed media Produce the coloured drawings of the jewellery by means of mixed media Produce the texture of the jewellery time Bring out the texture of the jewell	Title	Present coloured drawings of jewellery by means of mixed media
the jewellery industry. Practitioners should be capable of making careful analysis and judgment, and presenting the jewellery design as well as the characteristics and style of the design by means of mixed media independently.  Level 4  Credit 3  Competency Performance Requirements 1. Know about the materials of mixed media and their effects, and understand the importance of intellectual property in jewellery design  • Know about the materials covered in mixed media  • The types and characteristics of colouring materials, such as:  • Black pen  • Pastel  • Poster colour  • Water colour  • Colour pencil  • Colour ink  • Various kinds of paper and their characteristics  • Various kinds of paper and their characteristics of coloured drawings of paper and instruments  • Various kinds of paper and their characteristics of coloured drawings of	Code	108895L4
Credit 3  Competency Performance Requirements 1. Know about the materials of mixed media and their effects, and understand the importance of intellectual property in jewellery design  • Know about the materials covered in mixed media  • The types and characteristics of colouring materials, such as:  • Black pen  • Pastel  • Poster colour  • Water colour  • Colour pencil  • Colour ink  • Various kinds of paper and their characteristics  • Various kinds of drawing rulers and instruments  • Know about the materials for creating different textures, such as:  • Metal  • Gemstone  • Wood  • Plastic  • Animal skin  • Know about the various colour effects produced by the luminosity of colour  • Understand intellectual property and do not copy other people's works when presenting coloured drawings of jewellery by means of mixed media  2. Present the style and sentiment of jewellery design by means of mixed media  • Produce the coloured drawings of the jewellery by means of mixed media  • Produce the coloured drawings of the jewellery by means of mixed media, and present the appearance, features, materials, texture, style and sentiment of the jewellery  • Integrate and apply diversified media flexibly  • Bring out the texture of the jewellery item  • Use different materials to set the background  • Produce suitable lighting and shadowing effect  • Effectively bring out the style and sentiment of the product  • Find the angles that can present the aesthetics of various jewellery  3. Professionalism  • Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights  Assessment	Range	the jewellery industry. Practitioners should be capable of making careful analysis and judgment, and presenting the jewellery design as well as the characteristics and style of the design by
Competency Performance Requirements 1. Know about the materials of mixed media and their effects, and understand the importance of intellectual property in jewellery design  • Know about the materials covered in mixed media  • The types and characteristics of colouring materials, such as:  • Black pen  • Pastel  • Poster colour  • Colour pencil  • Colour pencil  • Colour ink  • Various kinds of paper and their characteristics  • Various kinds of frawing rulers and instruments  • Know about the materials for creating different textures, such as:  • Metal  • Gemstone  • Wood  • Plastic  • Animal skin  • Know about the various colour effects produced by the luminosity of colour  • Understand intellectual property and do not copy other people's works when presenting coloured drawings of jewellery by means of mixed media  2. Present the style and sentiment of jewellery design by means of mixed media  • Produce the coloured drawings of the jewellery by means of mixed media, and present the appearance, features, materials, texture, style and sentiment of the jewellery  • Integrate and apply diversified media flexibly  • Bring out the texture of the jewellery item  • Use different materials to set the background  • Produce suitable lighting and shadowing effect  • Effectively bring out the style and sentiment of the product  • Find the angles that can present the aesthetics of various jewellery  3. Professionalism  • Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights  Assessment	Level	4
1. Know about the materials of mixed media and their effects, and understand the importance of intellectual property in jewellery design  Now about the materials covered in mixed media  The types and characteristics of colouring materials, such as:  Black pen Pastel Poster colour Colour pencil Colour pencil Colour pink O Various kinds of paper and their characteristics Various kinds of drawing rulers and instruments Know about the materials for creating different textures, such as: Metal Gemstone Wood Plastic Animal skin Know about the various colour effects produced by the luminosity of colour Understand intellectual property and do not copy other people's works when presenting coloured drawings of jewellery by means of mixed media  Produce the coloured drawings of the jewellery by means of mixed media  Produce the coloured drawings of the jewellery by means of mixed media Produce the textures, materials, texture, style and sentiment of the jewellery Integrate and apply diversified media flexibly Bring out the texture of the jewellery item Use different materials to set the background Produce suitable lighting and shadowing effect Effectively bring out the style and sentiment of the product Effectively bring out the style and sentiment of the product Find the angles that can present the aesthetics of various jewellery  Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights  Assessment  The integrated outcome requirement of this unit of competency is:	Credit	3
The types and characteristics of colouring materials, such as:  Black pen Pastel Poster colour Water colour Colour pencil Colour ink Various kinds of paper and their characteristics Various kinds of paper and instruments Know about the materials for creating different textures, such as: Metal Gemstone Wood Plastic Animal skin Know about the various colour effects produced by the luminosity of colour Understand intellectual property and do not copy other people's works when presenting coloured drawings of jewellery by means of mixed media  Produce the style and sentiment of jewellery design by means of mixed media  Produce the coloured drawings of the jewellery by means of mixed media Produce the coloured drawings of the jewellery by means of mixed media, and present the appearance, features, materials, texture, style and sentiment of the jewellery Integrate and apply diversified media flexibly Bring out the texture of the jewellery item Use different materials to set the background Produce suitable lighting and shadowing effect Effectively bring out the style and sentiment of the product Effectively bring out the style and sentiment of the product Find the angles that can present the aesthetics of various jewellery  Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights  Assessment The integrated outcome requirement of this unit of competency is:	Competency	1. Know about the materials of mixed media and their effects, and understand the importance of
		<ul> <li>The types and characteristics of colouring materials, such as:         <ul> <li>Black pen</li> <li>Pastel</li> <li>Poster colour</li> <li>Water colour</li> <li>Colour pencil</li> <li>Colour skinds of paper and their characteristics</li> <li>Various kinds of paper and instruments</li> <li>Know about the materials for creating different textures, such as:</li></ul></li></ul>

	Able to use mixed media for drawing independently, bringing out the style and sentiment of the jewellery in the best angle, so as to facilitate discussion and introduce the new design.
Remark	

Title	Apply technological innovations of jewellery in jewellery design
Code	108896L4
Range	This unit of competency is applicable to designers working in the jewellery design department of the jewellery industry. Practitioners should be capable of making careful analysis and judgment, and using technological innovations of jewellery to design jewellery and make jewellery prototypes and models.
Level	4
Credit	9
Competency	Performance Requirements  1. Know about the technological innovations that can facilitate jewellery design and understand the importance of intellectual property in jewellery design
	<ul> <li>Know about various kinds of new technologies applied in jewellery design, such as:         <ul> <li>3-D computer-aided design and computer-aided drawing (CAD) software</li> <li>Computer numerical control (CNC) machining technology</li> <li>Rapid prototyping (RP) technology</li> <li>Solid modeling software</li> <li>3-D scanning technology</li> <li>Other technologies, including: virtual reality, augmented reality, mixed reality, big data, etc.</li> </ul> </li> <li>Understand intellectual property and do not copy other people's works when using technological innovations to design jewellery</li> </ul>
	2. Apply technological innovations in design workflow
	<ul> <li>Master the operation methods of various kinds of technological innovations</li> <li>Use various kinds of software to design jewellery and apply the image data of the design to various modeling equipment to make models</li> <li>Make use of high-tech production technology to design jewellery, so as to enhance the quality and market value of the products</li> </ul>
	3. Professionalism
	<ul> <li>Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights</li> </ul>
Assessment Criteria	The integrated outcome requirements of this unit of competency are:
	<ul> <li>Able to use 3-D software in jewellery design workflow; and</li> <li>Use technological innovations of jewellery to make jewellery prototypes and models, so as to speed up the manufacturing process of design products and enhance the quality and market value of the products.</li> </ul>
Remark	

Title	Analyze the market trend of the jewellery industry
Code	108897L5
Range	This unit of competency is applicable to senior designers working in the jewellery design department of the jewellery industry. Practitioners should be capable of making careful analysis and judgment, and collecting relevant information on the jewellery market independently to analyze the market trends of the industry. They should also be able to improve or create innovative design in accordance with the development trends of the market and apply such knowledge in production, so as to enhance competitiveness in the market.
Level	5
Credit	6
Competency	Performance Requirements  1. Understand the collection and analysis of jewellery market information  • Know the different channels for collecting information and data on the jewellery market, and organize and arrange them, such as:  • Consumer/Customer survey • Focus group • Market information • Industry news • Statistical information of the Census and Statistics Department • Research/Investigation related to the jewellery industry • Know about the development and market trends of the local, mainland and foreign jewellery industry  • Know about different market analysis tools and techniques, such as:  • SWOT (Strengths, Weaknesses, Opportunities and Threats) Analysis • Parameter Estimation by Sequential Testing • Marketing Segmentation • Marketing Segmentation • Marketing Position Map • Scenario Building • Causal Analysis • Know about different forecasting techniques, such as: • Object-oriented software development • Forecasting • Model building • Proposal planning  2. Analyze the development trends of the jewellery market and apply such knowledge in design and production  • Master the trends of the jewellery market, including: • Identify information required by the objectives and scope • Conduct SWOT analysis for the organization to identify factors for improvement • Use statistical data and market information to analyze the development trends of the market and the industry • Analyze existing and potential competitors, including features and quality of their products and services, in order to identify potential opportunities or threats • Forecast future development of the market and the industry • Make in-depth use of technology, such as big data and artificial intelligence, to analyze the market information, so as to understand the changes and trends in the jewellery market

	<ul> <li>Aiming at current and new target consumers, design and produce jewellery products according to the target marketing position and scenario building to meet their needs, so as to lead the market trend</li> <li>Help draw up design project proposals according to the information on market analysis</li> <li>3. Professionalism</li> </ul>
	Objectively and accurately analyze the statistical data of the market and related market information without any bias
Assessment Criteria	Able to collect relevant information on the jewellery market independently and make systematic analysis to forecast the market trends, master the development trends of the market, improve or create innovative design, and apply such knowledge in production to enhance competitiveness in the market.
Remark	

Title	Master the trend of jewellery products and cultural development
Code	108898L5
Range	This unit of competency is applicable to senior designers working in the jewellery design department of the jewellery industry. Practitioners should be capable of making careful analysis and judgment. They should also be able to master the trend of jewellery products and cultural development, and apply such knowledge in design and production, in order to keep the design up-to-date and enhance its competitiveness.
Level	5
Credit	6
Competency	Performance Requirements  1. Understand the trend of jewellery products and cultural development
	<ul> <li>Understand the trend of jewellery products, the cultural development and the development direction, such as:         <ul> <li>Consumers' special tastes of living, likes and dislikes, and changes</li> <li>Characteristics and direction of the latest trend, so as to incorporate the spirit of the times into the design, keeping the design up-to-date, thus enhancing the products' sustainability and competitiveness in the market</li> <li>Understand thoroughly the life aspects that affect the trend of jewellery products, such as social phenomena and current affairs, and master their interrelationships and changes, and incorporate trendy elements into the design, thus enhancing the spirit of the times and sustainability of the products</li> <li>Living habits</li> <li>Architecture</li> <li>Technological development</li> </ul> </li> <li>Understand thoroughly various design theories, their application methods and their interrelationships to enhance the profundity of the products, and make use of the distinctiveness of the products in marketing</li> </ul>
	<ul> <li>2. Make use of the trend of jewellery products and cultural development in jewellery design</li> <li>Integrate information on the trend of jewellery products and master its development directions, including: <ul> <li>Collect the trend, new information and development direction of jewellery products of different regions</li> <li>Integrating information, coupled with the advantages of the organization, establish the development direction of the product series of the organization to meet market needs</li> </ul> </li> <li>Make use of the trend and cultural development to develop the new design direction of jewellery and to develop markets for new products, so that the products can be more distinctive to attract customers and bring new concepts to market planning</li> </ul> <li>3. Professionalism <ul> <li>Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights</li> </ul> </li>
Assessment Criteria	The integrated outcome requirement of this unit of competency is:

	<ul> <li>Able to master the trend and cultural development to develop the new design direction of jewellery products and to develop new markets, so as to enhance the competitiveness of the company.</li> </ul>
Remark	

Title	Show and explain jewellery design products to customers
Code	108899L5
Range	This unit of competency is applicable to designers working in the jewellery design department of the jewellery industry. Practitioners should be capable of making presentation, expression and persuasion. They should be able to give detailed explanation to customers about the patterns, merits and characteristics of the design of the jewellery products to achieve the objective of promoting jewellery products.
Level	5
Credit	3
Competency	Performance Requirements 1. Understand product presentation techniques
	<ul> <li>Know about product presentation techniques         <ul> <li>Master the time control of the product presentation</li> <li>Explain to customers the reasons for choosing the product and specify the market value of the product</li> <li>Product content, such as:</li></ul></li></ul>
	<ul> <li>Show and explain jewellery design products to customers</li> <li>Employ product presentation techniques, such as storytelling, to show and explain jewellery design products to customers, so as to clearly present the merits, colours and characteristics of the external design of the products</li> <li>Show and explain jewellery products with persuasiveness</li> </ul>
	3. Professionalism
	<ul> <li>Ensure that customers receive accurate and sufficient information when presenting and explaining the jewellery design products to customers</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to give a detailed explanation and presentation to customers about the merits, characteristics and attractiveness of the jewellery products to achieve promotion effect.</li> </ul>
Remark	

Title	Apply diversified design theories to design jewellery
Code	108900L5
Range	This unit of competency is applicable to senior designers working in the jewellery design department of the jewellery industry. Practitioners should be capable of making careful analysis and judgment. They should be able to apply diversified design theories to design jewellery independently, thus enhancing the products' distinctiveness and competitiveness.
Level	5
Credit	6
Competency	Performance Requirements 1. Understand the diversified design theories
	Master various kinds of design theories, such as:  Product language – understand how the characteristics of product appearance can communicate with the users, as if a kind of communicative language  Product semiotic – product appearance will bring about feeling, such as the use of metallic and multi-functional materials gives users a sense of high technology  Sustainable design – the design product should fully manifest the characteristics of the product itself  Designer experience – give users a sense of participation in the design  Theories such as design semantic and their relations with the development of design culture. Make use of specific terminologies to determine design methods and product functionalities  Design for emotion – the objective of design is to arouse the emotion of the user Design for fun – the design product lets the user have fun  Ergonomic design  Design thinking
	Integrate and apply diversified design theories, incorporating the knowledge of project management, marketing, mechanical engineering, manufacturing management, culture and gemmology, and applying their interrelationships to jewellery design
	3. Professionalism
	Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights
Assessment Criteria	The integrated outcome requirement of this unit of competency is:
	<ul> <li>Able to apply and integrate diversified design theories, and incorporate such knowledge into jewellery design to give products character, thus enhancing their distinctiveness and facilitating sales.</li> </ul>
Remark	

Title	Prepare proposals of jewellery design projects
Code	108901L6
Range	This unit of competency is applicable to decision-makers responsible for design projects who work in the jewellery design department of the jewellery industry. Practitioners should be capable of making analysis, reorganization, evaluation and integration of information from all aspects. They should be able to independently prepare proposals of jewellery design projects in report form to meet the organization's comprehensive strategies for commercial products.
Level	6
Credit	3
Assessment Criteria	Performance Requirements  1. Know about the reports of jewellery design projects  • Know about the content of the reports of jewellery design projects, such as:  • Target customers  • Market segmentation and positioning  • Market value  • Selling points of the products  • Capital and return  • Product development and marketing schedule  2. Prepare proposals of jewellery design projects  • Make use of the information on market analysis to master the market and cultural trends, so as to identify the target customers and market positioning as well as to devise product development plans with market value and selling points  • Give detailed explanation on the analysis and proposals in report form, including:  • Allocation of capital and other resources  • Return forecast  • Product development  • Marketing schedule  • Prepare project proposals in a professional manner, so that management and investors can have a correct understanding of the development potential of the projects for making investment decisions  3. Professionalism  • Advocate originality, respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights  The integrated outcome requirement of this unit of competency is:  • Able to independently prepare proposals of jewellery design projects, so that management and investors can clearly understand the development potential of the projects, and investors can be convinced to invest in the projects.
Remark	
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Title	Master the cultural trend to develop new brand products
Code	108902L6
Range	This unit of competency is applicable to decision-makers responsible for design projects who work in the jewellery design department of the jewellery industry. Practitioners should be capable of making analysis, reorganization, assessment and integration of information from all aspects. They should be able to master the cultural trend of jewellery and apply creative development skills to develop new brand products that meet market demand.
Level	6
Credit	6
Competency	Performance Requirements  1. Understand the trends and cultural directions  • Understand thoroughly the origin and directions of trends and culture, such as:  • Living habits
	<ul> <li>Unexpected events</li> <li>Fashion trends and politics</li> <li>Their significance and changes</li> <li>Know about brands and their classification, such as: <ul> <li>Trademark brand</li> <li>Product brand</li> <li>Company brand</li> <li>Their value and application</li> </ul> </li> <li>Know about brand development techniques, such as: <ul> <li>Market positioning</li> <li>Customer groups</li> <li>Product image</li> <li>Quality</li> <li>Points of sale</li> <li>Various kinds of product development techniques</li> <li>Webcasts</li> </ul> </li> </ul>
	<ul> <li>Develop new brand products for jewellery</li> <li>Employ product development techniques to meet the trends and cultural directions for development of new brand products, so as to create and master the trends, and create market value for the products</li> <li>Employ intellectual property ordinances to protect the brand trademark, the patent of design, etc.</li> </ul>
	3. Professionalism
	<ul> <li>Advocate originality, respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	Able to master the trends and cultural directions to develop new brand products to meet market demand, and create markets for the new brand products.
Remark	

Title	Develop innovative jewellery design directions
Code	108903L6
Range	This unit of competency is applicable to decision-makers responsible for jewellery design projects in the jewellery industry. Practitioners should be capable of making analysis, reorganization, assessment and integration of information from all aspects. They should be able to take the initiative to develop innovative jewellery projects to enhance product competitiveness.
Level	6
Credit	6
Competency	Performance Requirements  1. Know about design theories and innovative design techniques of jewellery  • Understand thoroughly the design theories of various kinds of jewellery, such as:  • Product language  • Product semiotics  • Sustainable design  • Designer experience  • Design for emotion  • Design for fun  • Ergonomic design  • Design thinking  • Understand the feasibility plans and directions of innovative design, such as innovative invention of new materials, innovative application of existing materials, new technology, new design and new market positioning, and develop new products with creativity  • Understand market surveys and research, and have actual understanding of market research instruments; conduct meticulous analysis of information to suggest effective research methods  • Master each design workflow  2. Develop new projects  • Conduct market surveys and research, and have actual understanding of market research instruments; obtain useful data to give design directions and set the requirements  • Implement design workflow as well as control time and resources in a flexible manner  • Tie in with innovative design technology, innovative materials and innovative design to develop new projects and new markets to enhance business flexibility
	Professionalism     Advocate originality, respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to incorporate development and research methods into innovative design to develop new directions for jewellery design, and determine the market direction and positioning for the products.</li> </ul>

Title	Master the new technology of jewellery and carry out innovative jewellery design
Code	108904L6
Range	This unit of competency is applicable to senior designers working in the jewellery design department of the jewellery industry. Practitioners should be capable of making careful analysis and judgment. They should be able to master the knowledge and operation of the new technology for jewellery manufacturing/production, and conduct research and development of innovative jewellery design.
Level	6
Credit	9
Competency	Performance Requirements 1. Understand the relationship between new technology and design, and the importance of intellectual property in jewellery design  • Understand thoroughly the new technologies used in jewellery design and manufacturing/production, such as:  o 3-D computer-aided drawing and design Computer numerical control (CNC) machining technology Computer rapid prototyping technology 3-D precious metal printing and sintering technology Laser cutting and laser welding Materials science (e.g. ceramic materials, polymers, metal alloys, carbon fibres and composite materials)  Know about the operation of the new technologies, such as: Create 3-D computer drawings Use automatic cutting machines to cut the required materials through the control of computer data, and know about its limitations Know about the arrangement methods and operation techniques of prototype drawings to produce rapid prototyping models Laser cutting and laser welding technology, as well as the characteristics and reactions of various materials that can be joined or cut The deployment, co-ordination and selection of computer-aided design, computer numerical control, rapid prototyping technology, laser cutting and laser welding The operation of 3-D scanners Understand thoroughly the design process and know about the points to note when developing new products Understand intellectual property and do not copy other people's works when using new technology to design jewellery  Apply new technology to carry out innovative jewellery design Apply in-depth expertise in innovative technology to carry out innovative jewellery design and produce prototypes for the next production process, so as to enhance the quality and market value of the design and finished products
	3. Professionalism
	Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights

Assessment Criteria	The integrated outcome requirement of this unit of competency is:
	<ul> <li>Able to master the knowledge and operation of the new technology for jewellery manufacturing/production, and conduct research and development of innovative jewellery design, so as to enhance the quality and market value of the design or products.</li> </ul>
Remark	

Title	Plan and design new jewellery brands
Code	108905L7
Range	This unit of competency is applicable to decision-makers responsible for design projects who work in the jewellery design department of the jewellery industry. Practitioners should be capable of making analysis, reorganization, assessment and integration of information from all aspects. They should be able to lead the team to plan and design new jewellery brands in accordance with the organization's overall objectives and business strategies by applying expertise in brand-building strategies and brand management decision-making.
Level	7
Credit	9
Assessment Criteria	<ul> <li>Performance Requirements</li> <li>1. Know about the established objectives and strategies of the organization</li> <li>Know about the distinctiveness of the organization's jewellery brands and their differences with similar products</li> <li>Know about the market and brand positioning of the current jewellery products of the organization and the competitors, as well as the market forecasts and cultural trends</li> <li>Know about the knowledge related to brand sales</li> <li>Master the skills for planning and designing new jewellery brands</li> <li>Establish the positioning of new jewellery brands in accordance with the organization's objectives and strategies, future markets and trends</li> <li>Establish the brand development strategies for original jewellery products in accordance with the organization's product research and development plans</li> <li>Establish inter-related brand characteristics, design and publicity plans according to the branding strategies and positioning</li> <li>Develop brand management and marketing strategies</li> <li>Employ intellectual property ordinances of brands and related products to protect the brands' trademarks, patents of design, etc.</li> <li>3. Professionalism</li> <li>Respect intellectual property and avoid infringement of intellectual property rights when planning and designing new jewellery brands</li> <li>The integrated outcome requirement of this unit of competency is:</li> <li>Able to plan and design new jewellery brands in accordance with the organization's overall objectives and business strategies, and protect the brands' trademarks and</li> </ul>
	patents of design.
Remark	

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	Performance Requirements 1. Understand relevant technologies for product development	
	<ul> <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> <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> <li>Computer-aided design (CAD)</li> <li>Computer-aided manufacturing (CAM)</li> </ul> </li> <li>Collect information and analyze supplementary technology         <ul> <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> <li>Studying at the college</li> <li>Obtain information from books and online search</li> </ul> </li> <li>Apply product development technology</li> <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> <li>Professionalism</li> <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 assistion in product</li></ul>	
Assessment Criteria	The integrated outcome requirement of this unit of competency is:  • 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.	

Remark				
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Title	Apply technologies related to jewellery products	
Code	108907L3	
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 judgment. They should be able to master the modern technologies related to the development of jewellery products and their application methods, so as to facilitate product development or refine job duties related to information collection, analysis and testing.	
Level	3	
Credit	6	
Competency	Performance Requirements  1. Know about the technologies related to the development of jewellery products	
	<ul> <li>Know about the modern technologies related to the development of jewellery products and their application methods</li> </ul>	
	2. Apply technologies related to the development of jewellery products	
	Employ relevant technologies to facilitate the development of jewellery products or refine job duties related to information collection, analysis and testing	
	3. Professionalism	
	<ul> <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	The integrated outcome requirement of this unit of competency is:	
Criteria	<ul> <li>Able to master the technologies related to the development of jewellery products, such as materials technology, manufacturing technology and supplementary technologies for</li> </ul>	

	product research and development, so as to facilitate jewellery product development or refine job duties related to information collection, analysis and testing.
Remark	

Title	Know about the application of rapid prototyping techniques of jewellery	
Code	108908L3	
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 judgment. They should be able to use computer-aided 3-D design software to create computer drawings of jewellery and handle prototypes by operating the rapid prototyping machine.	
Level	3	
Credit	6	
Competency	Performance Requirements  1. Understand the rapid prototyping theory	
	<ul> <li>Know about the theories of rapid prototyping techniques of jewellery <ul> <li>Sterolithography apparatus (SLA) technique</li> <li>Selective laser melting (SLM) technique</li> <li>3-D printing (3DP) technique</li> <li>Digital light processing (DLP) technique</li> </ul> </li> <li>Know about the precision and format requirements of the files of rapid prototyping machines, including: <ul> <li>STL</li> <li>SLC</li> <li>DXF</li> <li>CNC</li> <li>OBJ</li> <li>AMF</li> <li>3MF</li> </ul> </li> <li>Know how to convert various image files to the desired format and how to operate the related conversion program</li> <li>Know how to maintain and troubleshoot rapid prototyping machines</li> </ul>	
	<ul> <li>Operate the rapid prototyping machine</li> <li>Operate the rapid prototyping machine to carry out basic operations, such as: <ul> <li>Turn on/off the system</li> <li>Read image files and save files</li> <li>Format conversion</li> </ul> </li> <li>Adjust the parameters of the 3-D computer models, such as: <ul> <li>Precision, density</li> <li>Stratified distance</li> </ul> </li> <li>Review, adjust and control the work environment required for carrying out the rapid prototyping process</li> <li>Master the post-processing treatment of the prototyping process</li> <li>Conduct routine maintenance and inspection of the prototyping machine, solve common operational problems of the rapid prototyping machine, and replace materials consumed</li> </ul>	
	Professionalism     Considering thoroughly the safety, risk, productivity, quality, environmental protection, cost and other factors, use rapid prototyping technology to produce the prototypes to	

Assessment Criteria	The integrated outcome requirements of this unit of competency are:
	<ul> <li>Able to handle all kinds of data of computer rapid prototyping, including file format conversion and 3-D model parameter adjustment; and</li> <li>Operate the rapid prototyping machine to produce suitable prototypes.</li> </ul>
Remark	

Title	Apply various kinds of jewellery processing techniques	
Code	108909L4	
Range	This unit of competency is applicable to practitioners who work in jewellery companies or worksites. They should be capable of mastering various kinds of jewellery processing techniques independently, and making product prototypes according to the design requirements to serve as a reference for product development.	
Level	4	
Credit	3	
Competency	Performance Requirements  1. Know about the techniques of forming, assembling and processing in the later stage of manufacturing, and relevant international safety standards and intellectual property	
	Know about the forming techniques of jewellery products     The forming methods of metal plates/bars, such as:     Sawing and jabbing     Hammering     Bending     Forging     Prototype making     Handmade/computer wax prototype     Handmade sliver prototype     Rapid prototyping     Jewellery casting methods     Cuttlebone casting     Low melting point alloy casting     Centrifugal lost wax casting     Vacuum lost wax casting     Vacuum lost wax casting     Vacuum lost wax casting     Ne leather     Plastic     Cloth  Know about the assembling techniques of jewellery products     The assembling methods of various kinds of metal pieces, such as:     Interlocking     Snap-fit     Snap ring     Retaining ring     Welding     The setting methods of various kinds of gemstones, such as:     Prong setting     Bazel setting     Pavé/Micropavé setting     Channel setting     Micro setting     The assembling methods of other materials, such as:     Wood     Plastic     Cloth	

	<ul> <li>Know about the techniques and work procedures in the later stage of jewellery manufacturing, such as:         <ul> <li>Engraving</li> <li>Etching</li> <li>Sandblasting</li> <li>Sanding/Polishing</li> <li>Electroplating</li> <li>Dyeing</li> </ul> </li> <li>Know about the relevant international safety standards for jewellery processing techniques and the importance of intellectual property</li> <li>Apply jewellery processing techniques</li> </ul>
	<ul> <li>Employ various kinds of jewellery processing techniques proficiently to make product prototypes according to the design requirements to serve as a reference for product development</li> <li>Know about the standard requirements of various kinds of processing techniques, and monitor and ensure that the prototypes for product development meet the standard requirements</li> </ul>
	3. Professionalism
	<ul> <li>Ensure that the jewellery materials/prototypes/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	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to master various kinds of jewellery processing techniques independently, and make product prototypes according to the design requirements to serve as a reference for product development; and</li> <li>Monitor and ensure that the prototypes for product development meet the standard requirements.</li> </ul>
Remark	

Title	Assess the application of innovative jewellery processing techniques	
Code	108910L5	
Range	This unit of competency is applicable to management responsible for research and product development in the jewellery industry. Practitioners should be capable of making analysis and judgment. They should be able to supervise subordinate staff to conduct assessments on the application of innovative jewellery processing techniques, so as to enhance the effectiveness of jewellery processing.	
Level	5	
Credit	3	
Competency	Performance Requirements  1. Know about the development of processing techniques	
	Master the needs, latest development and future trends of relevant jewellery processing techniques, such as:  Materials science Materials processing Mechanical tools Robot arms and automation Micromachining and nanotechnology Precision machining Information technology Computer-aided engineering analysis  Assess and introduce processing techniques  Assess processing techniques, such as: Collect and analyze information and conduct tests Assess the effectiveness of the innovative jewellery processing techniques, and its contribution to product research and development Assess the possibility of application in the organization Compile relevant assessment reports and make suggestions Introduce innovative jewellery processing techniques applicable to the organization according to the assessment results and company policies, so as to enhance the effectiveness of jewellery processing  Professionalism Giving primary consideration to the interests of the organization, conduct fair assessments in an impartial manner on the processing techniques provided by different suppliers  Respect intellectual property and avoid plagiarism, preventing individuals and the	
	<ul> <li>Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights when introducing innovative processing techniques</li> </ul>	
Assessment	The integrated outcome requirements of this unit of competency are:	
Criteria	<ul> <li>Able to assess the effectiveness of innovative jewellery processing techniques, compile relevant assessment reports and proposals, and introduce techniques applicable to the company in accordance with the company policies; and</li> <li>Conduct fair assessments on the processing techniques provided by different suppliers to enhance the effectiveness of jewellery processing.</li> </ul>	

Functional Area - Research and Product Development
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Remark				
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Title	Improve the appearance and structure of jewellery products		
Code	108911L5		
Range	This unit of competency is applicable to management responsible for research and product development in the jewellery industry. Practitioners should be capable of making analysis and judgment, and improving the appearance and structure of jewellery products to enhance their competitiveness.		
Level	5		
Credit	3		
Competency	Performance Requirements 1. Understand the research or testing methods for jewellery products		
	<ul> <li>Understand the research or testing methods for jewellery products, so as to review the appearance and structure of the current products of the organization, such as:         <ul> <li>Use information technology to collect customers' requirements on the appearance of the products</li> <li>Study in depth the functions and applications of the materials currently used through testing</li> <li>Review and analyze the production and processing techniques using the SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis</li> </ul> </li> <li>Improve the appearance and structure of jewellery products         <ul> <li>Employ appropriate research and testing methods for jewellery products to review the current products of the organization, so as to identify the weaknesses in the appearance and structure of the jewellery products and the room for improvement</li> <li>Find suitable ways to improve the weaknesses in the appearance and structure of the products, such as:</li></ul></li></ul>		
	3. Professionalism		
	<ul> <li>Ensure that the improved jewellery products 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 improving jewellery products</li> </ul>		
Assessment	The integrated outcome requirements of this unit of competency are:		
Criteria	<ul> <li>Able to identify the weaknesses in the appearance and structure of the current jewellery products and make improvement to enhance the competitiveness of the products; and</li> <li>Protect the intellectual property rights of the improved jewellery products to safeguard the interests of the organization.</li> </ul>		
Remark			

Title	Execute product development plans for jewellery	
Code	108912L5	
Range	This unit of competency is applicable to management responsible for research and product development in the jewellery industry. Practitioners should be capable of making analysis and judgment. They should be able to effectively execute the established jewellery product development plans of the organization by using the SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis and industry culture analysis to tie in with the development of the organization.	
Level	5	
Credit	6	
Competency	Performance Requirements  1. Know about product development plans  • Understand the product development plans for various kinds of products and the workflow, such as:  • Set schedules  • Allocate workforce and resources  • Communicate and co-ordinate with relevant departments  • Make systematic evaluation on the plans  2. Execute product development plans  • Effectively execute the established jewellery product development plans of the organization  • Set schedules  • Set schedules  • Set schedules for developing various kinds of projects in accordance with the established development plans of the organization/department  • Allocate resources  • Allocate resources to achieve the anticipated targets of product development, such as:  • Manpower  • Equipment  • Capital  • Communicate and co-ordinate with relevant departments to assist in the implementation of product development projects  • The departments participating in product development, such as design department, marketing department and manufacturing department  • External organizations, such as product accreditation organizations and intellectual property organizations  • Conduct evaluation  • Systematically evaluate the progress and effectiveness of the product development plans and make suggestions for improvement  • Collect information and conduct relevant analysis on the design of the jewellery products in the factory, and the characteristics, uses and manufacturing processes of the commonly used materials/parts, such as:	
	<ul> <li>SWOT analysis</li> <li>Innovative industry culture analysis</li> <li>Compare the design, aesthetics, quality, material durability, technicality and market price of jewellery products of different regions, and explore the direction and feasibility of research and development projects, including:</li> </ul>	

	<ul> <li>Related domestic and overseas technical support</li> <li>Costs of research and development, and production</li> <li>Product sales prospects</li> <li>Product after-sales service strategy</li> <li>Market response to new products</li> <li>Systematically evaluate the progress and effectiveness of the product development plans, and make suggestions for improvement</li> <li>Professionalism</li> <li>Ensure that the developed jewellery products 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 developing jewellery products</li> </ul>
Assessment Criteria	The integrated outcome requirements of this unit of competency are:
Cinteria	<ul> <li>Able to effectively execute the established jewellery product development plans of the organization to tie in with the development of the organization; and</li> <li>Evaluate the established jewellery product development plans of the organization and make suggestions for improvement.</li> </ul>
Remark	

Title	Implement innovative research plans on jewellery
Code	108913L6
Range	This unit of competency is applicable to managers responsible for research and product development in the jewellery industry. Practitioners should be capable of making analysis, assessment and judgment. They should be able to independently perform various kinds of innovative research, development and knowledge transfer duties about jewellery products/techniques, or lead subordinate staff to perform such duties.
Level	6
Credit	6
Competency	Performance Requirements  1. Understand the innovative topical research methods  • Know about various kinds of innovative topical research methods, such as:  • Develop topical research projects  • Conduct innovative topical research  • Implement the plans according to the research results  2. Implement innovative research plans on jewellery  • Employ highly specific techniques/academic skills to design and apply research methods, so as to perform various kinds of product research and development duties  • Handle extremely complex product research to make sound and solid judgment and give
	innovative feedback despite the lack of complete or consistent data and information  Research on innovative manufacturing techniques  Research Background  The choice of technical innovation in manufacturing  The characteristic of the capability of technical integration  Innovative knowledge transfer and organizational strategies  Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights when
A	developing jewellery products
Assessment Criteria	<ul> <li>The integrated outcome requirement of this unit of competency is:</li> <li>Able to independently handle extremely complex product research and make sound and solid judgment as well as give innovative feedback despite the lack of complete or consistent data and information, or lead subordinate staff to perform such duties.</li> </ul>
Remark	

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Title	Foster the progress of research and development of jewellery products
Code	108914L6
Range	This unit of competency is applicable to practitioners who work in workplaces related to the jewellery industry. Practitioners should be capable of establishing research and development culture in the enterprise, so as to motivate the enterprise to engage in research and development of jewellery products, as well as to understand the human capital pricing mechanism, venture capital system and financing support, thus fostering the progress of product research and development.
Level	6
Credit	3
Competency	Performance Requirements  1. Master the keys to foster research and development of jewellery products
	<ul> <li>Master the keys to foster research and development of jewellery products, such as know about the significance of research and development of jewellery products to the development of the company, know how to fight for resources, monitor and encourage product research and development, and monitor the protection of intellectual property</li> </ul>
	2. Foster the progress of research and development of jewellery products
	<ul> <li>Know about the significance of research and development of jewellery products</li> <li>Explain to the enterprise's managerial staff and relevant departments the significance and urgency of research and development of jewellery products to the enterprise by establishing the core culture in the enterprise</li> <li>Allocate resources appropriately to meet the need of product research and development, and fight for external resources, such as manpower, equipment and capital, to foster product research and development</li> <li>Formulate strategies to monitor and encourage product research and development to rectify projects that cannot meet the target, and reward staff with contribution to product research and development, so as to further foster product research and development</li> <li>Respect intellectual property and incorporate the protection of intellectual property into the policy of product research and development, and establish appropriate monitoring mechanisms</li> <li>The human capital pricing mechanism in the growing high-tech enterprise</li> <li>The human capital pricing method of the entrepreneur</li> <li>Evaluation of the motivation and efficiency of stock options</li> <li>The venture capital system and financing support in the growing high-tech enterprise</li> <li>The role of investment in the growing high-tech enterprises</li> <li>Analysis of China's current financing system for high-tech enterprises</li> </ul>
	<ul> <li>Ensure that the products meet international standards, the product quality meets customers' requirements, and the staff have a clear understanding of the requirements of quality management</li> <li>Implement comprehensive quality management to ensure that the product quality meets customers' requirements and international standards, so as to enhance the production efficiency and economic benefits of the organization.</li> </ul>

Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to apply product research and development of jewellery strategically, making it the foundation of corporate development;</li> <li>Incorporate product research and development of jewellery into the development direction of the company, formulate relevant policies and principles to allocate resources, and fight for external resources to foster product research and development; and</li> <li>Establish appropriate monitoring and reward mechanisms, and protect intellectual property.</li> </ul>
Remark	

Title	Formulate product development plans for jewellery
Code	108915L6
Range	This unit of competency is applicable to policy makers responsible for research and product development in the jewellery industry. Practitioners should be capable of making analysis, assessment and judgment. They should be able to formulate jewellery product development plans according to the future development direction of the organization.
Level	6
Credit	6
Competency	Performance Requirements 1. Understand the long-term and short-term product development plans
	<ul> <li>Understand the comprehensive strategy for the research and development of jewellery products to formulate long-term (the following three years) and short-term (the following six months) development plans</li> <li>Understand the current state of the global economy and its trend</li> <li>Understand the global development trend of new technology</li> <li>Master the current status of competitors in jewellery production and their development trend</li> <li>Understand the preferences and needs of customers for jewellery products</li> <li>Understand the current status of suppliers of jewellery production materials and their future development</li> <li>Evaluate the capability of the organization to conduct product research and development</li> <li>Formulate product development plans for jewellery</li> <li>Understand the target direction for the research and development of jewellery products, and formulate long-term and short-term development plans</li> <li>Formulate the jewellery product development projects and estimate the completion dates</li> <li>Effectively allocate resources according to the importance and priority of each product development project to tie in with the comprehensive strategy of product development, including:         <ul> <li>Manpower</li> <li>Machinery/Equipment</li> <li>Capital</li> </ul> </li> <li>Systematically review the progress and effectiveness of the product development plans, so as to make suitable rectification</li> </ul>
	3. Professionalism
	<ul> <li>Ensure that the developed jewellery materials/techniques/finished products 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 developing jewellery products</li> </ul>
Assessment Criteria	The integrated outcome requirements of this unit of competency are:
	Able to formulate product development plans for jewellery according to the future development direction of the organization; and

	Review the progress and effectiveness of the product development plans formulated for jewellery and make suggestions for improvement.
Remark	

Title	Formulate policies on innovative jewellery processing techniques
Code	108916L6
Range	This unit of competency is applicable to policy makers responsible for research and product development in the jewellery industry. Practitioners should be capable of making analysis, assessment and judgment. They should be able to formulate policies on the development of innovative jewellery processing techniques, including the introduction of new techniques from the outside or the development of new techniques by the organization. They should also be able to apply such techniques in jewellery manufacturing to bring about revolutionary development to the manufacturing techniques of the organization.
Level	6
Credit	3
Competency	Performance Requirements  1. Know about jewellery processing techniques  • Know about jewellery processing techniques  • Know about the importance of developing innovative jewellery processing techniques and explain to the relevant departments about the policies on innovative processing techniques
	<ul> <li>2. Formulate policies on the development of jewellery processing techniques</li> <li>Formulate policies on the development of jewellery processing techniques, including the introduction of new techniques from the outside or the development of new techniques by the organization</li> <li>Master allocation of resources to effectively allocate resources according to the importance and priority of each innovative processing technique project, so as to determine the progress of the processing techniques, rectify the techniques that fail to meet the objectives and review their effectiveness</li> <li>Master the knowledge creation, knowledge transfer and competition mechanism during the growth of the organization</li> <li>Know about the patent system and policies on the innovative processing techniques of the organization</li> <li>Ensure that the innovative processing techniques 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 developing processing techniques</li> </ul>
Assessment Criteria	The integrated outcome requirement of this unit of competency is:     Able to formulate policies on innovative jewellery processing techniques, including the introduction of new techniques from the outside or the development of new techniques by the organization, and review the effectiveness of the new techniques to the enterprise.
Remark	

Range This unit of competency is applicable to managers responsible for research and product development in the jewellery industry. Practitioners should be capable of making analysis, assessment and judgment. They should be able to formulate overall and long-term strategies for product research and development of jewellery, enabling the enterprise to break through habitual practices and current limitations, so as to bring about reform and development to the enterprise, thus maintaining its leading position in the industry.  Level 6  Credit 6  Competency Performance Requirements 1. Know about the importance of product research and development to organizational development, such as:  Research ideas and methods Research ideas and methods Research framework and major content  2. Formulate overall and long-term strategies for product research and development of jewellery  In accordance with the overall and long-term objectives and strategies of the organization, review the current product research and development strategies to see if they meet the present and future development of the organization Fully master relevant research and analysis methods, such as:  SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis  Product life cycle Market and product positioning Market share and growth chart (Boston Consulting Group matrix)  User experience study Opportunities and threats as well as market gap Formulate product research and development strategies in various aspects according to the results of the evaluation and studies, including: Research and development direction Goals and action plans  3. Professionalism Ensure that the overall and long-term strategies for product research and development of jewellery formulated meet the development of the organization and enhance the production efficiency and economic benefits of the organization and enhance the production efficiency and economic benefits of the organization and enhance the production efficiency and economic benefits of the organization and enhance th	Title	Formulate overall and long-term strategies for product research and development of jewellery
development in the jewellery industry. Practitioners should be capable of making analysis, assessment and judgment. They should be able to formulate overall and long-term strategies for product research and development of jewellery, enabling the enterprise to break through habitual practices and current limitations, so as to bring about reform and development to the enterprise, thus maintaining its leading position in the industry.  Level 6  Credit 6  Credit 6  Competency Performance Requirements  1. Know about the importance of product research and development to organizational development, such as:  Research ideas and methods Research ideas and methods Research framework and major content  2. Formulate overall and long-term strategies for product research and development of jewellery  In accordance with the overall and long-term objectives and strategies of the organization, review the current product research and development strategies to see if they meet the present and future development of the organization  Fully master relevant research and analysis methods, such as:  SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis  Product life cycle  Market and product positioning  Market share and growth chart (Boston Consulting Group matrix)  User experience study  Opportunities and threats as well as market gap  Formulate product research and development strategies in various aspects according to the results of the evaluation and studies, including:  Research and development direction  Gaals and action plans  3. Professionalism  Ensure that the overall and long-term strategies for product research and development of jewellery formulated evelopment to organization and enhance the production efficiency and economic benefits of the organization and enhance the production efficiency and economic benefits of the organization and enhance the organization or the industry to make breakthroughs that carry a profound impact, thus bringing about reform and development to the organization.	Code	108917L6
Credit 6 Competency Performance Requirements 1. Know about the importance of product research and development to organizational development, such as:  Research ideas and methods Research framework and major content  2. Formulate overall and long-term strategies for product research and development of jewellery  In accordance with the overall and long-term objectives and strategies of the organization, review the current product research and development strategies to see if they meet the present and future development of the organization  Fully master relevant research and analysis methods, such as: SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis Product life cycle Market and product positioning Market share and growth chart (Boston Consulting Group matrix) User experience study Opportunities and threats as well as market gap Formulate product research and development strategies in various aspects according to the results of the evaluation and studies, including: Research and development direction Goals and action plans  3. Professionalism Ensure that the overall and long-term strategies for product research and development of jewellery formulated meet the development of the organization and enhance the production efficiency and economic benefits of the organization and enhance the production efficiency and economic benefits of the organization and enhance the production efficiency and economic benefits of the organization and enhance the production efficiency and economic benefits of the organization and enhance the organizational development, and effectively formulate overall and long-term strategies for the research and development of product research and development objectives of the organization under unforeseen circumstances; and Lead the organization or the industry to make breakthroughs that carry a profound impact, thus bringing about reform and development to the organization.	Range	development in the jewellery industry. Practitioners should be capable of making analysis, assessment and judgment. They should be able to formulate overall and long-term strategies for product research and development of jewellery, enabling the enterprise to break through habitual practices and current limitations, so as to bring about reform and development to the
Performance Requirements  1. Know about the importance of product research and development  • Know about the importance of product research and development to organizational development, such as:  • Research ideas and methods • Research framework and major content  2. Formulate overall and long-term strategies for product research and development of jewellery  • In accordance with the overall and long-term objectives and strategies of the organization, review the current product research and development strategies to see if they meet the present and future development of the organization  • Fully master relevant research and analysis methods, such as:  • SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis  • Product life cycle  • Market and product positioning  • Market share and growth chart (Boston Consulting Group matrix)  • User experience study  • Opportunities and threats as well as market gap  • Formulate product research and development strategies in various aspects according to the results of the evaluation and studies, including:  • Research and development direction  • Goals and action plans  3. Professionalism  • Ensure that the overall and long-term strategies for product research and development of jewellery formulated meet the development of the organization and enhance the production efficiency and economic benefits of the organization and enhance the production efficiency and economic benefits of the organization and enhance the organization and evelopment, and effectively formulate overall and long-term strategies for the research and development of jewellery in accordance with the development objectives of the organization under unforeseen circumstances; and  • Lead the organization or the industry to make breakthroughs that carry a profound impact, thus bringing about reform and development to the organization.	Level	6
1. Know about the importance of product research and development  • Know about the importance of product research and development to organizational development, such as:  • Research ideas and methods • Research framework and major content  2. Formulate overall and long-term strategies for product research and development of jewellery  • In accordance with the overall and long-term objectives and strategies of the organization, review the current product research and development strategies to see if they meet the present and future development of the organization  • Fully master relevant research and analysis methods, such as:  • SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis  • Product life cycle  • Market and product positioning  • Market share and growth chart (Boston Consulting Group matrix)  • User experience study  • Opportunities and threats as well as market gap  • Formulate product research and development strategies in various aspects according to the results of the evaluation and studies, including:  • Research and development direction  • Goals and action plans  3. Professionalism  • Ensure that the overall and long-term strategies for product research and development of jewellery formulated meet the development of the organization and enhance the production efficiency and economic benefits of the organization and enhance the production efficiency and economic benefits of the organization and enhance the organizational development, and effectively formulate overall and long-term strategies for the research and development of jewellery in accordance with the development objectives of the organization under unforeseen circumstances; and  • Lead the organization or the industry to make breakthroughs that carry a profound impact, thus bringing about reform and development to the organization.	Credit	6
In accordance with the overall and long-term objectives and strategies of the organization, review the current product research and development strategies to see if they meet the present and future development of the organization  Fully master relevant research and analysis methods, such as:  SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis  Product life cycle  Market and product positioning  Market share and growth chart (Boston Consulting Group matrix)  User experience study  Opportunities and threats as well as market gap  Formulate product research and development strategies in various aspects according to the results of the evaluation and studies, including:  Research and development direction  Goals and action plans  Professionalism  Ensure that the overall and long-term strategies for product research and development of jewellery formulated meet the development of the organization and enhance the production efficiency and economic benefits of the organization  Assessment  Criteria  The integrated outcome requirements of this unit of competency are:  Able to understand the importance of product research and development to organizational development, and effectively formulate overall and long-term strategies for the research and development of jewellery in accordance with the development objectives of the organization under unforeseen circumstances; and  Lead the organization or the industry to make breakthroughs that carry a profound impact, thus bringing about reform and development to the organization.	Competency	Know about the importance of product research and development     Know about the importance of product research and development to organizational development, such as:
organization, review the current product research and development strategies to see if they meet the present and future development of the organization  • Fully master relevant research and analysis methods, such as:  SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis  Product life cycle  Market and product positioning  Market share and growth chart (Boston Consulting Group matrix)  User experience study  Opportunities and threats as well as market gap  Formulate product research and development strategies in various aspects according to the results of the evaluation and studies, including:  Research and development direction  Goals and action plans  3. Professionalism  Ensure that the overall and long-term strategies for product research and development of jewellery formulated meet the development of the organization and enhance the production efficiency and economic benefits of the organization  Assessment  Criteria  The integrated outcome requirements of this unit of competency are:  Able to understand the importance of product research and development to organizational development, and effectively formulate overall and long-term strategies for the research and development of jewellery in accordance with the development objectives of the organization under unforeseen circumstances; and  Lead the organization or the industry to make breakthroughs that carry a profound impact, thus bringing about reform and development to the organization.		2. Formulate overall and long-term strategies for product research and development of jewellery
Ensure that the overall and long-term strategies for product research and development of jewellery formulated meet the development of the organization and enhance the production efficiency and economic benefits of the organization  Assessment Criteria  The integrated outcome requirements of this unit of competency are:  Able to understand the importance of product research and development to organizational development, and effectively formulate overall and long-term strategies for the research and development of jewellery in accordance with the development objectives of the organization under unforeseen circumstances; and  Lead the organization or the industry to make breakthroughs that carry a profound impact, thus bringing about reform and development to the organization.		organization, review the current product research and development strategies to see if they meet the present and future development of the organization  • Fully master relevant research and analysis methods, such as:  SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis  Product life cycle  Market and product positioning  Market share and growth chart (Boston Consulting Group matrix)  User experience study  Opportunities and threats as well as market gap  Formulate product research and development strategies in various aspects according to the results of the evaluation and studies, including:  Research and development direction  Goals and action plans
of jewellery formulated meet the development of the organization and enhance the production efficiency and economic benefits of the organization  Assessment Criteria  The integrated outcome requirements of this unit of competency are:  Able to understand the importance of product research and development to organizational development, and effectively formulate overall and long-term strategies for the research and development of jewellery in accordance with the development objectives of the organization under unforeseen circumstances; and  Lead the organization or the industry to make breakthroughs that carry a profound impact, thus bringing about reform and development to the organization.		
<ul> <li>Able to understand the importance of product research and development to organizational development, and effectively formulate overall and long-term strategies for the research and development of jewellery in accordance with the development objectives of the organization under unforeseen circumstances; and</li> <li>Lead the organization or the industry to make breakthroughs that carry a profound impact, thus bringing about reform and development to the organization.</li> </ul>		of jewellery formulated meet the development of the organization and enhance the
<ul> <li>Able to understand the importance of product research and development to organizational development, and effectively formulate overall and long-term strategies for the research and development of jewellery in accordance with the development objectives of the organization under unforeseen circumstances; and</li> <li>Lead the organization or the industry to make breakthroughs that carry a profound impact, thus bringing about reform and development to the organization.</li> </ul>	Assessment	The integrated outcome requirements of this unit of competency are:
Remark	Спіепа	organizational development, and effectively formulate overall and long-term strategies for the research and development of jewellery in accordance with the development objectives of the organization under unforeseen circumstances; and  • Lead the organization or the industry to make breakthroughs that carry a profound
	Remark	

Title	Lead and implement the development of innovative technological research projects
Code	108918L7
Range	This unit of competency is applicable to decision-makers responsible for research and product development in the jewellery industry. Practitioners should be capable of making analysis, assessment and judgment. They should be able to lead and implement technological research projects related to innovative technology used in the jewellery industry, and bring about innovation. Incorporating with the innovation capability evaluation, they should be able to lead the enterprise and/or the industry to make breakthroughs that carry a profound impact.
Level	7
Credit	3
Competency	Performance Requirements  1. Know about innovative technological research projects  • Fully understand the contribution of innovative technological research to the jewellery industry  2. Lead and implement innovative technological research projects  • Lead and implement innovative technological research projects for the jewellery industry  • Develop innovative technological research projects  • Explore potential technological research projects  • Prepare proposals on technological research projects  • Lead and implement innovative technological research projects  • Co-ordinate the allocation of resources according to the needs of the technological research projects  • Communicate with the internal departments/staff participating in the projects and outside organizations, so as to co-ordinate the workflow and progress of the technological research projects  • Conduct an overall review on the development of the innovative technological research projects  • Conduct an overall review on the progress and effectiveness of each technological research project and make rectification  • Master intellectual property ordinances to safeguard the achievements of the technological research projects  • Incorporate the innovation capability evaluation and analysis  • The innovation capability evaluation  • The basic model of innovation capability  • Analysis of advantages and disadvantages of incorporating innovation capability evaluation  3. Professionalism  • Prevent any abuse/misappropriation of assets of the organization, corrupt practices, fraud extravagance and waste, etc. in activities involved in the implementation of
	<ul> <li>Prevent any abuse/misappropriation of assets of the organization, corrupt practices, fraud, extravagance and waste, etc. in activities involved in the implementation of innovative technological research projects</li> <li>Ensure that the innovative technological research policies of the organization meet the latest development</li> </ul>
Assessment Criteria	The integrated outcome requirements of this unit of competency are:

	<ul> <li>Able to lead and implement the development of innovative technological research projects for the jewellery industry; and</li> <li>Conduct an overall review on the development of each innovative technological research project and safeguard the achievements of the technological research projects, thus leading the organization and/or the industry to break through its current limitations or habitual practices, so as to make a significant and innovative contribution to the organization/industry.</li> </ul>
Remark	

Title	Lead and implement the application of innovative jewellery processing techniques
Code	108919L7
Range	This unit of competency is applicable to decision-makers responsible for research and product development in the jewellery industry. Practitioners should be capable of making analysis, assessment and judgment. They should be able to lead the organization to develop innovative jewellery processing techniques with a comprehensive understanding of the industry and the ability to look forwards. They should also be able to lead and implement the application of these innovative jewellery processing techniques, enabling the organization or the industry to go beyond existing technical limitations and make breakthroughs that carry a profound impact on jewellery processing techniques.
Level	7
Credit	3
Competency	Performance Requirements  1. Understand projects on innovative jewellery processing techniques  • Know about the workflow, requirements, modes and important points when implementing different projects on innovative jewellery processing techniques  2. Lead and implement projects on innovative jewellery processing techniques  • Lead and implement projects on innovative jewellery processing techniques  • Develop projects on innovative jewellery processing techniques  • Explore potential and practical projects on innovative processing techniques  • Prepare relevant proposals  • Lead and implement projects on innovative processing techniques  • Co-ordinate the allocation of resources according to project needs  • Communicate with the internal departments/staff participating in the projects and outside organizations, so as to co-ordinate the workflow and progress of the projects on innovative processing techniques  • Conduct an overall review on the effectiveness of the projects on innovative processing techniques  • Conduct an overall and systematic review on the progress and effectiveness of each project on innovative processing techniques on a regular basis, and make rectification  • Master the technical innovation model  • Technical innovation overview  • Features of innovation overview  • Features of innovation  • Constraints on technical innovation  • Understand intellectual property ordinances to safeguard the achievements of the projects on innovative processing techniques  3. Professionalism  • Prevent any abuse/misappropriation of assets of the organization, corrupt practices, fraud, extravagance and waste, etc. in activities involved in the implementation of
	projects on innovative jewellery processing techniques  • Ensure that the policies on innovative jewellery processing techniques of the organization meet the latest development

Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to lead and implement projects on innovative jewellery processing techniques; and</li> <li>Conduct an overall review on each project on innovative processing techniques, and lead the organization/industry to make breakthroughs that carry a profound impact and to go beyond existing limitations of the organization/industry, thus bringing about new development or reform to the organization/industry.</li> </ul>
Remark	

Title	Master basic metalsmithing techniques
Code	108920L1
Range	This unit of competency is applicable to practitioners working in the goldsmithing department of jewellery manufacturing organizations. Practitioners should be capable of using various kinds of goldsmithing tools and equipment safely, and mastering basic metalworking techniques, to make simple jewellery under supervision in the daily working environment.
Level	1
Credit	9
Competency	Performance Requirements  1. Understand precious metals and the safe use of goldsmithing equipment  • Know about the characteristics of precious metals, such as:  • Fine gold  • Karat gold  • Platinum  • Palladium  • Fine silver, sterling silver  • Know about the methods to prevent precious metals from wear and tear  • Know how to use goldsmithing tools and equipment safely  • Know about basic metalworking techniques  2. Master basic metalworking techniques  • Know about goldsmithing tools and equipment, and master the techniques of using them  • Workbench  • Flexible shaft machines and burr  • Measuring and planning tools  • Sawing, shearing and holding tools  • Hammer, anvil, ring mandrel and similar tools  • Filing and grinding tools  • Welding tools, welding pad and welding clamp  • Rolling mill  • Draw bench  • Master basic metalsmithing techniques  • Sawing techniques  • Sawing techniques  • Metal bending techniques  • Metal bending techniques  • Metal bending techniques  • Metal sheet and wire milling techniques  • Metal sheet and resizing techniques  • Metal sheet and resizing techniques  • Jewellery welding techniques  • Jewellery welding techniques  • Following the requirements of the organization, code of practice and safety guidelines, make simple jewellery with a professional attitude
Assessment Criteria	The integrated outcome requirement of this unit of competency is:

	Able to use various kinds of goldsmithing tools and equipment safely, and master basic metalsmithing techniques to make simple jewellery under supervision.
Remark	

This unit of competency is applicable to practitioners working in the jewellery setting department of jewellery manufacturing organizations. Practitioners should be capable of using various kinds of gemstone setting tools and equipment safely, and mastering basic gemstone setting techniques to carry out simple gemstone setting under supervision in the daily working environment.  Level 1  Credit 3  Competency Performance Requirements 1. Know about the safe operation of inflammable liquid    Know about the safe operation of inflammable liquid    Know about the safe operation methods of a torch    Know about the safe operation methods of a torch    Know about the hardness and cleavage of gemstones    Know about the hardness and cleavage of gemstones    Know about the relation between gemstones and collets    The level of stone surface    The reasons for loose/broken stones    Know about the proper use of gemstone setting tools and equipment    Know about the proper use of gemstone setting tools and equipment    Know about the proper use of gemstone setting tools and equipment    Know about the new technical knowledge related to gemstone setting, such as the pneumatic gemstone setting system    2. Master basic gemstone setting techniques    Secures workpieces onto the sealing-wax    Master the techniques for grinding steel pins/gravers    Master the use of self-made tools    Master the use of steel nails    3. Professionalism    Following the requirements of the organization, code of practice and safety guidelines, make simple jewellery settings with a professional attitude    Assessment    The integrated outcome requirement of this unit of competency is:    Able to use various kinds of gemstone setting tools and equipment safely, and master basic gemstone setting techniques to carry out simple gemstone setting under supervision.	Title	Master basic gemstone setting techniques
of jewellery manufacturing organizations. Practitioners should be capable of using various kinds of gemstone setting tools and equipment safely, and mastering basic gemstone setting techniques to carry out simple gemstone setting under supervision in the daily working environment.  Level 1  Dredit 3  Competency Performance Requirements 1. Know about the safe operation of inflammable liquid	Code	108921L1
Performance Requirements	Range	techniques to carry out simple gemstone setting under supervision in the daily working
Performance Requirements  1. Know about gemstone setting and occupational safety  • Know about the safe operation of inflammable liquid  • Know about the safe operation methods of a torch  • Know about the safe operation methods of a torch  • Know about the hardness and cleavage of gemstones  • Know about the cut and proportion of gemstones  • Know about the relation between gemstones and collets  • The level of stone surface  • The level of stone surface  • The reasons for loose/broken stones  • Know about the proper use of gemstone setting tools and equipment  • Know about the new technical knowledge related to gemstone setting, such as the pneumatic gemstone setting system  2. Master basic gemstone setting techniques  • Secures workpieces onto the sealing-wax  • Master the techniques for grinding steel pins/gravers  • Master the use of self-made tools  • Master the use of steel nails  3. Professionalism  • Following the requirements of the organization, code of practice and safety guidelines, make simple jewellery settings with a professional attitude  Assessment Criteria  The integrated outcome requirement of this unit of competency is:  • Able to use various kinds of gemstone setting tools and equipment safely, and master basic gemstone setting techniques to carry out simple gemstone setting under supervision.	Level	1
1. Know about gemstone setting and occupational safety  Know about the safe operation of inflammable liquid  Know about the safe operation methods of a torch  Know about various gemstone setting methods  Know about the hardness and cleavage of gemstones  Know about the cut and proportion of gemstones  Know about the relation between gemstones and collets  The tight fitting of collets  The level of stone surface  The reasons for loose/broken stones  Know about the proper use of gemstone setting tools and equipment  Know about the proper use of gemstone setting tools and equipment  Know about the new technical knowledge related to gemstone setting, such as the pneumatic gemstone setting system  2. Master basic gemstone setting techniques  Secures workpieces onto the sealing-wax  Master the techniques for grinding steel pins/gravers  Master basic engraving techniques on metal surfaces  Master the use of self-made tools  Master the use of steel nails  3. Professionalism  Following the requirements of the organization, code of practice and safety guidelines, make simple jewellery settings with a professional attitude  Assessment Criteria  The integrated outcome requirement of this unit of competency is:  Able to use various kinds of gemstone setting tools and equipment safely, and master basic gemstone setting techniques to carry out simple gemstone setting under supervision.	Credit	3
Assessment Criteria  The integrated outcome requirement of this unit of competency is:  • Able to use various kinds of gemstone setting tools and equipment safely, and master basic gemstone setting techniques to carry out simple gemstone setting under supervision.	Componently	<ul> <li>1. Know about gemstone setting and occupational safety</li> <li>Know about the safe operation of inflammable liquid</li> <li>Know about the safe operation methods of a torch</li> <li>Know about various gemstone setting methods</li> <li>Know about the hardness and cleavage of gemstones</li> <li>Know about the cut and proportion of gemstones</li> <li>Know about the relation between gemstones and collets <ul> <li>The tight fitting of collets</li> <li>The level of stone surface</li> <li>The reasons for loose/broken stones</li> </ul> </li> <li>Know about the proper use of gemstone setting tools and equipment</li> <li>Know about the safe operation methods of simple goldsmithing tools and equipment</li> <li>Know about the new technical knowledge related to gemstone setting, such as the pneumatic gemstone setting system</li> </ul> <li>2. Master basic gemstone setting techniques <ul> <li>Secures workpieces onto the sealing-wax</li> <li>Master the techniques for grinding steel pins/gravers</li> <li>Master the use of self-made tools</li> <li>Master the use of steel nails</li> </ul> </li> <li>3. Professionalism <ul> <li>Following the requirements of the organization, code of practice and safety guidelines,</li> </ul> </li>
Able to use various kinds of gemstone setting tools and equipment safely, and master basic gemstone setting techniques to carry out simple gemstone setting under supervision.	Assessment Criteria	
Remark		Able to use various kinds of gemstone setting tools and equipment safely, and master basic gemstone setting techniques to carry out simple gemstone setting under
	Remark	

Title	Implement security measures for the jewellery industry
Code	108922L2
Range	This unit of competency is applicable to practitioners responsible for security matters in the jewellery industry. Practitioners should be capable of making analysis and judgment, and implementing plans. They should be able to implement security measures according to the security procedures and arrangements of the outlets of the organization, so as to avoid loss of goods/property and protect the interests of the organization.
Level	2
Credit	6
Competency	Performance Requirements  1. Understand the security system of the jewellery industry  • Know about the safety measures for the jewellery industry in areas covering:
	<ul> <li>Robbery/Theft</li> <li>Fire</li> <li>Electricity failure</li> <li>Know about the security measures, procedures and arrangements of the organization</li> <li>Know about the security installations for the jewellery industry, including:         <ul> <li>Infrared anti-theft system</li> <li>Radio frequency identification system</li> <li>Sensomatic system</li> <li>Demagnetizing boards/Anti-theft labels</li> <li>CCTV/Anti-theft mirrors</li> <li>Irremovable stickers/Company chop</li> <li>Empty boxes/Warning slogans</li> <li>Cipher alarm/Emergency alarm</li> <li>Plainclothes security guards</li> </ul> </li> <li>Know about the laws and codes of the government and regulatory bodies on the control of security of retail outlets, and other relevant guidelines</li> </ul>
	2. Implement security measures for the jewellery industry  • Strictly follow the laws and regulations of the government when implementing store security procedures, such as:  • Observe the privacy ordinances when checking the handbags of employees/customers  • Fire safety ordinances should be taken into account when placing security equipment, for example, escape doors should not be locked  • Implement security measures for the jewellery industry by strictly following the established procedures, code of practice, methods and safety regulations, including:  • Ways to prevent employee theft  • Implement security measures at the entrances/exits of the outlet, including:  • Verify the identity of incomers  • Collect, analyze and handle security information  • Handle robbery/theft cases  • Handle electricity failure  • Always monitor the execution of the security measures to identify potential security vulnerabilities

	<ul> <li>Regularly report the monitoring results to the superior and propose suggestions for improvement</li> <li>Communicate with employees at all levels in response to security issues through effective channels</li> <li>Co-operate and liaise with outside parties, such as security companies and the Police Force, to understand the laws and codes of the government and regulatory bodies on the control of security of jewellery retail outlets, and other relevant guidelines</li> <li>Professionalism</li> <li>Following the laws and codes of the government and regulatory bodies on the control of security of the organization when implementing the security measures in the organization</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to implement the security measures in accordance with the security guidelines, procedures and arrangements of the organization; and</li> <li>Reflect the potential vulnerabilities in security to the superior and propose suggestions for optimization in the implementation of the security measures.</li> </ul>
Remark	

Title	Carve wax models for jewellery products
Code	108923L2
Range	This unit of competency is applicable to practitioners working in the jewellery wax model department of jewellery manufacturing organizations. Practitioners should understand clearly the principle of wax model carving and the characteristics of wax. They should be capable of employing carving techniques to carve different kinds of wax models to cope with the casting workflow according to the design sketch under instruction in the daily working environment.
Level	2
Credit	6
Competency	Performance Requirements  1. Understand the principle of wax model carving  • Master the techniques of constructing the 3-D structural design from a 2-D graphic design sketch  • Know about the characteristics of various kinds of wax  • Know about the structures of jewellery and the assembly of parts  • Know about mould trimming techniques  • Estimate the extent of material shrinkage from vulcanizing  • Master the demand and distribution of sprues  2. Wax model carving for jewellery products  • Master the weight of the finished jewellery products  • Master the structures of collets and their relationship with the gemstone  • Master the operation of wax carving tools, such as:  • Carving tools  • Basic goldsmithing tools and equipment
	<ul> <li>Vernier callipers and inside callipers</li> <li>Electric wax welder</li> <li>Professionalism</li> <li>Following the requirements of the organization, code of practice and safety guidelines,</li> </ul>
Accoccmont	carve wax models for jewellery products with a professional attitude  The integrated outcome requirement of this unit of competency is:
Assessment Criteria	<ul> <li>The integrated outcome requirement of this unit of competency is:</li> <li>Able to use various wax carving tools and equipment safely, and employ carving techniques to carve different kinds of wax models to cope with the casting workflow according to the design sketch under instruction.</li> </ul>
Remark	

Title	Master casting techniques
Code	108924L2
Range	This unit of competency is applicable to practitioners working in the jewellery casting department of jewellery manufacturing organizations. Practitioners should be capable of mastering the workflow of lost wax casting and operating relevant equipment to duplicate various kinds of precious metal castings from wax prototypes to meet the production workflow.
Level	2
Credit	9
Competency	Performance Requirements  1. Know about the procedure of lost wax casting  • Mould packing, vulcanizing and rubber mould cutting  ○ Know about the characteristics and application of various kinds of rubber vulcanizing methods, and distinguish these methods  ○ Know about the application/safe use of various tools, equipment and machines required for vulcanizing/rubber mould cutting  ○ Know about the various processes, techniques and tricks for vulcanizing/rubber mould cutting  • Wax injection, wax mould trimming and treeing  ○ Know about the characteristics and application of various kinds of wax injection methods, and distinguish these methods  ○ Know about the application/safe use of various tools, equipment and machines required for wax injection/wax mould trimming/treeing  ○ Know about the arrangements of workpieces for treeing  ○ Know about the various processes, techniques and tricks for wax injection/wax mould trimming/treeing  • Investment production  ○ Know about the characteristics and application of various kinds of invested materials, and distinguish them  ○ Know about the principle of vacuum treatment for investing  ○ Know about the principle of vacuum treatment for investing  ○ Know about the application/safe use of various tools, equipment and machines required for investment production  ○ Know about the various processes, techniques and tricks for investing/injection moulding  • De-waxing and burnout processes  ○ Know about the application/safe use of various tools, equipment and machines required for the de-waxing/burnout processes  ○ Know about the application/safe use of various tools, equipment and machines required for the de-waxing/burnout processes  • Casting  ○ Know about the application/safe use of various tools, equipment and machines required for casting  ○ Know about the application/safe use of various tools, equipment and machines required for casting  ○ Know about the application/safe use of various tools, equipment and machines required for casting

	<ul> <li>Master the mould packing technique</li> <li>Master the vulcanizing technique</li> <li>Master the rubber mould cutting technique</li> <li>Master the wax injection technique</li> <li>Master the wax mould trimming technique</li> <li>Master the treeing technique</li> <li>Master the investing technique</li> <li>Master the de-waxing and burnout process technique</li> <li>Master the casting technique</li> <li>Master the technique for removal of casting powder and sprue, and the pickling technique</li> <li>Master the technique for handling porosity/blemishes on the casting products</li> </ul> 3. Professionalism <ul> <li>Following the requirements of the organization, code of practice and safety guidelines, carry out casting for jewellery products with a professional attitude</li> </ul>
Assessment Criteria	The integrated outcome requirement of this unit of competency is:  • Able to use various wax carving tools and equipment safely, and employ carving techniques to carve different kinds of wax models to cope with the casting workflow
Remark	according to the design sketch under instruction.

Title	Master wax setting and casting techniques for jewellery products
Code	108925L2
Range	This unit of competency is applicable to practitioners working in the jewellery casting department of jewellery manufacturing organizations. Practitioners should be capable of mastering the techniques of setting gemstones on wax models before casting. They should also be able to duplicate various kinds of jewellery castings by following the workflow of lost wax casting and operating relevant equipment, so as to meet the production workflow.
Level	2
Credit	3
Credit	Performance Requirements  1. Know about wax setting and casting techniques  • Know about the advantages of wax setting and casting techniques  • Save time and increase productivity  Reduce labour costs  Reduce loss of metal  Only simple tools are required for wax setting, so as to reduce the use of other tools and thus reduce costs  The design can be reinvented as some jewellery design can only be created through wax setting  Know about the tools and equipment required for wax setting  Gemstone measuring tools  Wax head stone setter tools  Stone setting machine with temperature control  Vacuum thermal micro wax setting machine  Know about the process of wax setting and casting  Wax model making  Gemstone setting preparation  Inspect the gemstones/wax models  Place the gemstones  Place the gemstones  Wax mould trimming  Investing  De-waxing and burnout process  Casting  Mould cooling and removal  Know about the requirements on gemstones/jewellery alloys for wax setting and casting  Know about common problems and solutions in wax setting and casting
	Master wax setting techniques     Master the tools/equipment required for basic wax setting     Master wax setting techniques, such as for:

	<ul> <li>Master jewellery casting techniques to perform wax setting and casting</li> <li>Master the solutions to common problems in wax setting and casting</li> </ul>
	3. Professionalism
	<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, carry out wax setting and casting with a professional attitude</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to master major wax setting techniques, such as for prong setting, pavé setting, channel setting and bar setting; and</li> <li>Duplicate various kinds of jewellery castings by following the workflow of lost wax casting and operating relevant equipment, so as to meet the production workflow.</li> </ul>
Remark	

Title	Master jewellery polishing techniques
Code	108926L2
Range	This unit of competency is applicable to practitioners working in the jewellery polishing/electroplating department of jewellery manufacturing organizations. Practitioners should be capable of operating polishing equipment and instruments, and mastering the relevant techniques to polish the rough surface of jewellery to make it smooth and shiny according to the code of practice and safety regulations under instruction.
Level	2
Credit	3
Competency	Performance Requirements  1. Know about polishing machineries and occupational safety  • Know how to protect the respiratory system and know about the industrial safety of jewellery polishing  • Protection of the respiratory system  • Causes and prevention of silicosis  • Pay attention to potential hazards in the work processes and working environment  • Formulate and list the safety regulations appropriately and clearly  • Know about polishing equipment and its safe operation  • Electric polisher  • Lapping machine  • Flexible shaft machine  • Rolling mill  • Vibratory polishing machine  • Mould polishing machine  • Magnetic polishing machine  • Sandblaster  • Know about the application of polishing wheels, bristle brushes and lapping plates  • The classification and functions of different kinds of bristle brushes, felt points/wheels and lapping plates  • The order in using the polishing brushes, wheels and lapping plates  • Know about the application of polishing wax  • The grinding functions of various kinds of polishing wax  • The grinding functions of various kinds of polishing wax  • The auxiliary wax for different metals  • Know about the mechanical polishing process  2. Master jewellery polishing  • Operate lapping/polishing machines safely  • Polish fine gold jewellery according to the normal procedure, including:  • Rub with pressure with the steel burnisher  • Polish karat gold jewellery according to the normal procedure, including:  • Thread polishing  • Brushing

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	<ul> <li>Buffing with the long-haired brush</li> <li>Buffing with the medium-haired brush</li> <li>Buffing with the short-haired brush</li> <li>Polishing with felt buffing wheel</li> <li>Polishing with yellow buffing wheel</li> <li>Polishing with the white buffing wheel</li> <li>Polishing the sides/inner side of the holes/inner side of the ring</li> <li>Polishing with cloth buffing wheel</li> <li>Perform mechanical polishing according to the normal procedure</li> <li>Sprue removal</li> <li>Buffing with steel wheel</li> <li>Buffing with sand wheel</li> <li>Shaping</li> <li>Polishing with beads</li> <li>Barrel, tumble-polishing</li> <li>Polising with felt wheel buff</li> <li>Polishing with sand buffing wheel</li> <li>Magnetic polishing</li> <li>Buffing with walnut shell abrasive powder</li> <li>De-waxing</li> </ul>
	<ul> <li>Professionalism</li> <li>Following the requirements of the organization, code of practice and safety guidelines, carry out jewellery polishing with a professional attitude</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to make use of the polishing equipment and instruments to polish the surface of the jewellery under instruction in accordance with the organization's code of practice and safety regulations, so that the surface will become smooth and shiny, thus fulfilling the requirement of the organization or the customer; and</li> <li>Repair notable flaws during the polishing process while taking into account the physical characteristics of gemstones and avoid damaging the gemstones.</li> </ul>
Remark	

Title	Master jewellery electroplating techniques
Code	108927L2
Range	This unit of competency is applicable to practitioners working in the jewellery polishing/electroplating department of jewellery manufacturing organizations. Practitioners should be capable of operating electroplating equipment and preparing electroplating solutions in accordance with the organization's code of practice and safety regulations under instruction, and electroplating a precious metal coating of different lustre and colour onto the surface of jewellery after polishing.
Level	2
Credit	6
Competency	Performance Requirements  1. Know about electroplating operation  • Know about various electroplating processes, including:  • Electroplating to produce a yellow colour (karat gold (yellow/white)/rose gold)  • Electroplating to produce a white colour (rhodium electroplating)  • Pen-plating to fix defects  • Know about the legislation related to electroplating  • Drainage and environmental protection legislation  • Disposal of chemical wastes legislation  • Know about the safe operation of chemical drugs  • Know about the refining method for the degreasers/precious metal electroplating solutions  • Know about the solutions to electroplating defects  2. Jewellery electroplating  • The treatment of jewellery prior to electroplating  • De-waxing  • Bombing and polishing, and degreasing (tear degreasing)  • Steam rinsing  • Treatment before/after electroplating colours separately  • Apply oil (nail polish) to the surface of the jewellery that needs to have different colours  • Tie the jewellery and hang it to a rack for drying with a thin copper wire  • Degrease by soaking in acetone after electroplating  • Prepare electroplating solutions  • Replenish gold potassium cyanide  • Add chemical drugs  • Control the temperature/concentration of the gold electroplating solutions  • Install electroplating equipment  • Magnetic tumbler (with heating function)  • Ultrasonic cleaner  • Steam rinser  • Glass beaker  • Rectifier  • Electrode/Titanium mesh  • Conduct electroplating  • Master the thickness of the electroplated layer

	<ul> <li>Master the techniques for electroplating yellow and white colours separately</li> <li>Handle the precious metal electroplating solutions/chemical drugs in accordance with the legislation related to electroplating</li> </ul>
	3. Professionalism
	<ul> <li>Carry out jewellery electroplating safely in accordance with the Dangerous Goods         Ordinance and relevant environmental protection ordinances, as well as the safety         guidelines and codes of practice specified in the legislation relevant to the electroplating         industry</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to operate electroplating equipment and prepare electroplating solutions in accordance with the organization's code of practice and safety regulations under instruction, and electroplate a precious metal coating of different lustre/colour with a specific thickness onto the surface of jewellery after polishing; understand the legislation relevant to the electroplating industry, and operate the electroplating equipment and handle the chemical drugs safely.</li> </ul>
Remark	

Title	Master stone sorting techniques
Code	108928L2
Range	This unit of competency is applicable to practitioners with relevant job duties in the jewellery industry. Practitioners should be capable of performing stone screening duties according to the specification, quality, quantity and weight of the diamonds/gemstones under instruction. They should also know how to sort the stones by workpiece or by design sketch in accordance with the requirements of the organization or customers' orders, and keep records of relevant information.
Level	2
Credit	3
Competency	Performance Requirements  1. Know about the screening of diamonds/gemstones and the requirements of stone sorting  • Know about the classes of specification for diamonds/gemstones  • Colour  • Clarity  • Size  • Cut  • Stones being intact (ruptured stones)  • Know about the requirements of stone sieves  • Know about the requirements of stone sorting for different gemstone settings  • Know about the requirements of stone sorting based on the lustre, texture, thickness and quantity of the stones  • Know about the colour order, matching and supplements of coloured stones  2. Perform stone sorting duties and keep records of relevant information  • Operate stone sorting instruments correctly, such as 10x loupe, diamond measurement gauge, electronic stone scale, fluorescent lamp, diamond tweezers, stone sieves and callipers  • Master the stone sorting method  • Inspect if the stone has flaws, fractures and ruptures  • Inspect if the colour and clarity of the stones match  • Match the cut and specification of gemstones with the metal or wax collets  • Keep the storage record according to the surplus stone materials  • Master the receipt and delivery record of the stone setting department  • The record of stone setting by workpiece  • Handle the record of surplus stones and broken stones  3. Professionalism  • Adhere to professional ethics, and do not attempt any misappropriation of assets of the organization and theft  • Ensure that the information of the records provided is accurate
Assessment Criteria	The integrated outcome requirements of this unit of competency are:  • Able to perform screening duties of diamonds/gemstones and stone sorting by workpiece or by design sketch under instruction in accordance with the requirements of the organization or the customers' orders; and

	Make accurate records of the receipt and delivery information of stone sorting, including clerical or computer information.
Remark	This unit of competency is written in accordance with the "Hong Kong Jewellery Manufacturing Industry ISO 9001 Quality Management System Reference Manual - Work Instructions Sample".

Range This unit of competency is applicable to practitioners working in the fine gold jewellery production department of jewellery manufacturing organizations. Practitioners should be capable of mastering fine gold goldsmithing techniques, and making various common jewellery pieces using fine gold materials according to the organization's or customers' specifications.  Level 2  Credit 9  Competency Performance Requirements  1. Know about the making of fine gold jewellery  • Know about the purity and characteristics of fine gold  • Know about the categories of fine gold goldsmithing tools/equipment  • Know about the safe use of fine gold goldsmithing tools/equipment  • Know about the structure/hinges/findings of jewellery and their making procedures  2. Master fine gold jewellery making, including rings, pendants, brooches, earrings, bracelets/necklaces, etc.  • Master the operation of metal melting equipment and the related techniques  • Master the weight requirement of jewellery  • Master the techniques of making fine gold jewellery, such as:  • Metal melting techniques, making jewellery with seamless welding joints  • Using the characteristics of ductility of fine gold to make jewellery  • Master the techniques of making tools  3. Professionalism  • Following the requirements of the organization, code of practice and safety guidelines, carry out fine gold jewellery production with a professional attitude  Assessment Criteria  The integrated outcome requirement of this unit of competency is:  • Able to master fine gold goldsmithing techniques to make various common jewellery pieces, such as rings, pendants, brooches, earrings and bracelets/necklaces using fine gold materials according to the organization's or customers' specifications under instruction.	Title	Master fine gold jewellery making techniques
production department of jewellery manufacturing organizations. Practitioners should be capable of mastering fine gold goldsmithing techniques, and making various common jewellery pieces using fine gold materials according to the organization's or customers' specifications.  Level 2  Credit 9  Competency Performance Requirements 1. Know about the making of fine gold jewellery  • Know about the purity and characteristics of fine gold  • Know about the structure/binges/findings of jewellery and their making procedures  2. Master fine gold jewellery making techniques  • Master basic fine gold jewellery making, including rings, pendants, brooches, earrings, bracelets/necklaces, etc.  • Master the operation of metal melting equipment and the related techniques  • Master the weight requirement of jewellery  • Master the techniques of making fine gold jewellery, such as:  • Metal melting techniques, making jewellery with seamless welding joints  • Using the characteristics of ductility of fine gold to make jewellery  • Master the techniques of making tools  3. Professionalism  • Following the requirements of the organization, code of practice and safety guidelines, carry out fine gold jewellery production with a professional attitude  Assessment Criteria  The integrated outcome requirement of this unit of competency is:  • Able to master fine gold goldsmithing techniques to make various common jewellery pieces, such as rings, pendants, brooches, earrings and bracelets/necklaces using fine gold materials according to the organization's or customers' specifications under instruction.	Code	108929L2
Credit 9  Competency Performance Requirements  1. Know about the making of fine gold jewellery  • Know about the purity and characteristics of fine gold  • Know about the categories of fine gold jewellery  • Know about the safe use of fine gold goldsmithing tools/equipment  • Know about the structure/hinges/findings of jewellery and their making procedures  2. Master fine gold jewellery making techniques  • Master basic fine gold jewellery making, including rings, pendants, brooches, earrings, bracelets/necklaces, etc.  • Master the operation of metal melting equipment and the related techniques  • Master the weight requirement of jewellery  • Master the techniques of making fine gold jewellery, such as:  • Metal melting techniques, making jewellery with seamless welding joints  • Using the characteristics of ductility of fine gold to make jewellery  • Master the techniques of making tools  3. Professionalism  • Following the requirements of the organization, code of practice and safety guidelines, carry out fine gold jewellery production with a professional attitude  Assessment Criteria  The integrated outcome requirement of this unit of competency is:  • Able to master fine gold goldsmithing techniques to make various common jewellery pieces, such as rings, pendants, brooches, earrings and bracelets/necklaces using fine gold materials according to the organization's or customers' specifications under instruction.	Range	production department of jewellery manufacturing organizations. Practitioners should be capable of mastering fine gold goldsmithing techniques, and making various common jewellery
Performance Requirements  1. Know about the making of fine gold jewellery  • Know about the purity and characteristics of fine gold  • Know about the categories of fine gold jewellery  • Know about the safe use of fine gold goldsmithing tools/equipment  • Know about the structure/hinges/findings of jewellery and their making procedures  2. Master fine gold jewellery making techniques  • Master basic fine gold jewellery making, including rings, pendants, brooches, earrings, bracelets/necklaces, etc.  • Master the operation of metal melting equipment and the related techniques  • Master the weight requirement of jewellery  • Master the techniques of making fine gold jewellery, such as:  • Metal melting techniques, making jewellery with seamless welding joints  • Using the characteristics of ductility of fine gold to make jewellery  • Master the techniques of making tools  3. Professionalism  • Following the requirements of the organization, code of practice and safety guidelines, carry out fine gold jewellery production with a professional attitude  Assessment  Criteria  The integrated outcome requirement of this unit of competency is:  • Able to master fine gold goldsmithing techniques to make various common jewellery pieces, such as rings, pendants, brooches, earrings and bracelets/necklaces using fine gold materials according to the organization's or customers' specifications under instruction.	Level	2
1. Know about the making of fine gold jewellery  • Know about the purity and characteristics of fine gold  • Know about the categories of fine gold jewellery  • Know about the safe use of fine gold goldsmithing tools/equipment  • Know about the structure/hinges/findings of jewellery and their making procedures  2. Master fine gold jewellery making techniques  • Master basic fine gold jewellery making, including rings, pendants, brooches, earrings, bracelets/necklaces, etc.  • Master the operation of metal melting equipment and the related techniques  • Master the weight requirement of jewellery  • Master the techniques of making fine gold jewellery, such as:  • Metal melting techniques, making jewellery with seamless welding joints  • Using the characteristics of ductility of fine gold to make jewellery  • Master the techniques of making tools  3. Professionalism  • Following the requirements of the organization, code of practice and safety guidelines, carry out fine gold jewellery production with a professional attitude  Assessment  Criteria  The integrated outcome requirement of this unit of competency is:  • Able to master fine gold goldsmithing techniques to make various common jewellery pieces, such as rings, pendants, brooches, earrings and bracelets/necklaces using fine gold materials according to the organization's or customers' specifications under instruction.	Credit	9
Know about the categories of fine gold jewellery     Know about the safe use of fine gold goldsmithing tools/equipment     Know about the structure/hinges/findings of jewellery and their making procedures  2. Master fine gold jewellery making techniques     Master basic fine gold jewellery making, including rings, pendants, brooches, earrings, bracelets/necklaces, etc.     Master the operation of metal melting equipment and the related techniques     Master the techniques of making fine gold jewellery, such as:     Master the techniques of making fine gold jewellery with seamless welding joints     Using the characteristics of ductility of fine gold to make jewellery     Master the techniques of making tools  3. Professionalism     Following the requirements of the organization, code of practice and safety guidelines, carry out fine gold jewellery production with a professional attitude  Assessment Criteria  The integrated outcome requirement of this unit of competency is:     Able to master fine gold goldsmithing techniques to make various common jewellery pieces, such as rings, pendants, brooches, earrings and bracelets/necklaces using fine gold materials according to the organization's or customers' specifications under instruction.	Competency	Know about the making of fine gold jewellery
Master basic fine gold jewellery making, including rings, pendants, brooches, earrings, bracelets/necklaces, etc.     Master the operation of metal melting equipment and the related techniques     Master the weight requirement of jewellery     Master the techniques of making fine gold jewellery, such as:		<ul> <li>Know about the categories of fine gold jewellery</li> <li>Know about the safe use of fine gold goldsmithing tools/equipment</li> </ul>
bracelets/necklaces, etc.  Master the operation of metal melting equipment and the related techniques  Master the weight requirement of jewellery  Master the techniques of making fine gold jewellery, such as:  Metal melting techniques, making jewellery with seamless welding joints  Using the characteristics of ductility of fine gold to make jewellery  Master the techniques of making tools  Pollowing the requirements of the organization, code of practice and safety guidelines, carry out fine gold jewellery production with a professional attitude  The integrated outcome requirement of this unit of competency is:  Able to master fine gold goldsmithing techniques to make various common jewellery pieces, such as rings, pendants, brooches, earrings and bracelets/necklaces using fine gold materials according to the organization's or customers' specifications under instruction.		2. Master fine gold jewellery making techniques
<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, carry out fine gold jewellery production with a professional attitude</li> <li>Assessment Criteria</li> <li>Able to master fine gold goldsmithing techniques to make various common jewellery pieces, such as rings, pendants, brooches, earrings and bracelets/necklaces using fine gold materials according to the organization's or customers' specifications under instruction.</li> </ul>		<ul> <li>bracelets/necklaces, etc.</li> <li>Master the operation of metal melting equipment and the related techniques</li> <li>Master the weight requirement of jewellery</li> <li>Master the techniques of making fine gold jewellery, such as:         <ul> <li>Metal melting techniques, making jewellery with seamless welding joints</li> <li>Using the characteristics of ductility of fine gold to make jewellery</li> </ul> </li> </ul>
Assessment Criteria  The integrated outcome requirement of this unit of competency is:  Able to master fine gold goldsmithing techniques to make various common jewellery pieces, such as rings, pendants, brooches, earrings and bracelets/necklaces using fine gold materials according to the organization's or customers' specifications under instruction.		3. Professionalism
Able to master fine gold goldsmithing techniques to make various common jewellery pieces, such as rings, pendants, brooches, earrings and bracelets/necklaces using fine gold materials according to the organization's or customers' specifications under instruction.		
Able to master fine gold goldsmithing techniques to make various common jewellery pieces, such as rings, pendants, brooches, earrings and bracelets/necklaces using fine gold materials according to the organization's or customers' specifications under instruction.		The integrated outcome requirement of this unit of competency is:
Remark		pieces, such as rings, pendants, brooches, earrings and bracelets/necklaces using fine gold materials according to the organization's or customers' specifications under
	Remark	

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Title	Master fine gold dragon and phoenix bangle/bangle/bracelet jewellery making techniques
Code	108930L2
Range	This unit of competency is applicable to practitioners working in the fine gold jewellery production department of jewellery manufacturing organizations. Practitioners should be capable of mastering fine gold goldsmithing techniques and making series of dragon and phoenix bangle/bangle/bracelet jewellery pieces using fine gold materials according to the standards and the organization's or customers' specifications.
Level	2
Credit	6
Competency	Performance Requirements  1. Know about fine gold dragon and phoenix bangles/bangles/bracelets
	<ul> <li>Know about the purity and characteristics of fine gold</li> <li>Know about fine gold dragon and phoenix bangle/bangle/bracelet jewellery</li> <li>Know about the safe use of tools/equipment for making fine gold jewellery</li> <li>Know about the structure/hinges/findings of jewellery and their making procedures, including: <ul> <li>S split ring</li> <li>Jewellery catch</li> <li>Box snap</li> <li>Side-hook catch</li> </ul> </li> <li>Understand the information about the drawings on the order forms</li> </ul>
	2. Master the techniques for making fine gold dragon and phoenix bangles/bangles/bracelets
	<ul> <li>Master the techniques for making general fine gold jewellery</li> <li>Master the weight requirement of jewellery</li> <li>Master chiselling, repoussé, chasing and burnishing techniques</li> <li>Understand the structure/hinges/findings of jewellery and their making procedures</li> <li>3. Professionalism</li> </ul>
	Following the requirements of the organization, code of practice and safety guidelines, carry out fine gold jewellery production with a professional attitude
Assessment Criteria	The integrated outcome requirement of this unit of competency is:
	<ul> <li>Able to master fine gold goldsmithing techniques and make series of jewellery pieces, including dragon and phoenix bangles/bangles/bracelets, using fine gold materials according to the standards and the organization's or customers' specifications under instruction.</li> </ul>
Remark	
	1

Title	Master fine gold necklace/choker/neck accessory jewellery making techniques
Code	108931L2
Range	This unit of competency is applicable to practitioners working in the fine gold jewellery production department of jewellery manufacturing organizations. Practitioners should be capable of mastering fine gold goldsmithing techniques and making series of jewellery pieces including necklaces/chokers/neck accessories using fine gold materials according to the standards and the organization's or customers' specifications.
Level	2
Credit	9
Assessment Criteria	Performance Requirements  1. Know about fine gold necklaces/chokers/neck accessories  Know about the purity and characteristics of fine gold Know about the categories of fine gold necklaces/chokers/neck accessories Know about the safe use of tools/equipment for making fine gold jewellery Know about the structure/hinges/findings of jewellery and their making procedures, including: S split ring, W split ring Jewellery catch Box snap Side-hook catch Understand the information about the drawings on the order forms  2. Master the techniques for making fine gold necklaces/chokers/neck accessories  Master the techniques for making general fine gold jewellery Master the weight requirement of jewellery Master chiselling, repoussé, chasing and burnishing techniques Understand the structure/hinges/findings of jewellery and their making procedures  3. Professionalism Following the requirements of the organization, code of practice and safety guidelines, carry out fine gold jewellery production with a professional attitude  The integrated outcome requirement of this unit of competency is: Able to master fine gold goldsmithing techniques and make series of jewellery pieces, including and burnishing techniques and make series of jewellery pieces, including and burnishing techniques and make series of jewellery pieces, including and burnishing techniques and make series of jewellery pieces, including and burnishing techniques and make series of jewellery pieces, including and burnishing techniques and make series of jewellery pieces, including and burnishing techniques and make series of jewellery pieces, including and burnishing techniques and make series of jewellery pieces, including and burnishing techniques and make series of jewellery pieces, including and burnishing techniques and make series of jewellery bieces, including and burnishing techniques and make series of jewellery bieces, including and burnishing techniques and make series of jewellery bieces, including and burnishing techniques and make series of jewellery
	including necklaces/chokers/neck accessories, using fine gold materials according to the standards and the organization's or customers' specifications under instruction.
Remark	
<u> </u>	

Title	Master ring making techniques
Code	108932L2
Range	This unit of competency is applicable to practitioners working in the goldsmithing department of jewellery manufacturing organizations. Practitioners should be capable of mastering K-gold (karat gold) goldsmithing techniques and making various common jewellery using precious metal materials according to the organization's or customers' specifications.
Level	2
Credit	9
Competency	Performance Requirements  1. Know about K-gold jewellery making  • Know about the fineness and characteristics of K-gold and various precious metals  • Know about the categories of K-gold rings, such as:  • Band rings  • Convex spring rings  • Half round rings  • Square rings  • Signet rings  • Solitaire rings  • Cluster rings  • Cocktail rings  • Know about the safe use of K-gold goldsmithing tools/equipment  • Know about the structure of rings and their making procedures  • Understand the information about the drawings on the order forms  • Know how to prevent loss of precious metals  2. Master ring making techniques  • Master the making of rings
	<ul> <li>Master the making of mounts for setting the gemstones (collets)</li> <li>Master the assembly of common findings</li> <li>Master the control of material loss during production</li> </ul>
	3. Professionalism
	<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, carry out K-gold ring production with a professional attitude</li> </ul>
Assessment Criteria	The integrated outcome requirement of this unit of competency is:
	<ul> <li>Able to master the making of K-gold jewellery and the operation of relevant equipment, and make various rings with K-gold goldsmithing techniques using precious metal materials according to the organization's or customers' specifications under instruction.</li> </ul>
Remark	

Title	Master pendant/brooch making techniques
Code	108933L2
Range	This unit of competency is applicable to practitioners working in the production department of jewellery manufacturing organizations. Practitioners should be capable of mastering K-gold (karat gold) goldsmithing techniques and making various pendants/brooches using precious metal materials according to the standards and the organization's or customers' specifications.
Level	2
Credit	6
Competency	Performance Requirements  1. Know about K-gold jewellery making
	<ul> <li>Know about the fineness and characteristics of K-gold and various precious metals</li> <li>Know about the categories of K-gold pendants/brooches</li> <li>Know about the safe use of K-gold goldsmithing tools/equipment</li> <li>Know about the structure/findings of pendants/brooches and their making procedures, including: <ul> <li>Pendant bail</li> <li>Bolt ring</li> <li>Pinstem</li> <li>Hook and slot catch</li> <li>Revolver catch</li> </ul> </li> <li>Understand the information about the drawings on the order forms</li> </ul>
	<ul> <li>Master pendant/brooch making techniques</li> <li>Master the making of K-gold jewellery, such as pendants and brooches</li> <li>Master the making of mounts for setting the gemstones (collets)</li> <li>Master the assembly of common findings</li> <li>Know about the structure/findings of jewellery and master their making techniques</li> </ul>
	3. Professionalism
	<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, carry out K-gold jewellery production with a professional attitude</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to master the making of K-gold jewellery and the operation of relevant equipment, and make various pendants/brooches with K-gold goldsmithing techniques using precious metal materials according to the specifications under instruction.</li> </ul>
Remark	

Code 108934L2  Range This unit of competency is applicable to practitioners working in the production department of jewellery manufacturing organizations. Practitioners should be capable of mastering K-gold (karat gold) goldsmithing techniques and making various earrings using precious metal materials according to the standards and the organization's or customers' specifications.  Level 2  Credit 6  Competency Performance Requirements 1. Know about K-gold jewellery making
jewellery manufacturing organizations. Practitioners should be capable of mastering K-gold (karat gold) goldsmithing techniques and making various earrings using precious metal materials according to the standards and the organization's or customers' specifications.  Level 2  Credit 6  Competency Performance Requirements
Credit 6 Competency Performance Requirements
Competency Performance Requirements
<ul> <li>Know about the fineness and characteristics of K-gold and various precious metals</li> <li>Know about the categories of K-gold earrings</li> <li>Know about the safe use of K-gold goldsmithing tools/equipment</li> <li>Know about the structure/findings of earrings and their making procedures, including:         <ul> <li>Ear nut</li> <li>Ear clip</li> <li>Ear hook</li> </ul> </li> <li>Understand the information about the drawings on the order forms</li> </ul>
2. Master earring making techniques
<ul> <li>Master the making of K-gold jewellery, such as earrings</li> <li>Master the making of mounts for setting the gemstones (collets)</li> <li>Master the assembly of common findings</li> <li>Know about the structure/findings of jewellery and master their making techniques</li> </ul>
3. Professionalism
<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, carry out K-gold jewellery production with a professional attitude</li> </ul>
Assessment The integrated outcome requirement of this unit of competency is:
Able to master the making of K-gold jewellery and the operation of relevant equipment, and make various earrings with K-gold goldsmithing techniques using precious metal materials according to the specifications under instruction.
Remark

Title	Master bracelet/bangle making techniques
Code	108935L2
Range	This unit of competency is applicable to practitioners working in the production department of jewellery manufacturing organizations. Practitioners should be capable of mastering K-gold (karat gold) goldsmithing techniques and making various bracelets/bangles using precious metal materials according to the standards and the organization's or customers' specifications.
Level	2
Credit	6
Competency	Performance Requirements  1. Know about K-gold jewellery making
	<ul> <li>Know about the fineness and characteristics of K-gold and various precious metals</li> <li>Know about the categories of K-gold bracelets/bangles</li> <li>Know about the safe use of K-gold goldsmithing tools/equipment</li> <li>Know about the structure/hinges/findings of bracelets/bangles and their making procedures, including:         <ul> <li>Jewellery catch</li> <li>Box snap</li> <li>Side-hook catch</li> </ul> </li> <li>Understand the information about the drawings on the order forms</li> </ul>
	2. Master bracelet/bangle making techniques
	<ul> <li>Master the making of K-gold jewellery, such as bracelets/bangles</li> <li>Master the making of mounts for setting the gemstones (collets)</li> <li>Master the assembly of common findings</li> <li>Know about the structure/hinges/findings of jewellery and master their making procedures</li> </ul>
	3. Professionalism
	<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, carry out K-gold jewellery production with a professional attitude</li> </ul>
Assessment Criteria	The integrated outcome requirement of this unit of competency is:
	<ul> <li>Able to master the making of K-gold jewellery and the operation of relevant equipment, and make various bracelets/bangles with K-gold goldsmithing techniques using precious metal materials according to the specifications under instruction.</li> </ul>
Remark	

Title	Master necklace/choker/neck accessory making techniques
Code	108936L2
Range	This unit of competency is applicable to practitioners working in the production department of jewellery manufacturing organizations. Practitioners should be capable of mastering K-gold (karat gold) goldsmithing techniques and making various necklaces/chokers/neck accessories using precious metal materials according to the standards and the organization's or customers' specifications.
Level	2
Credit	9
Competency	Performance Requirements  1. Know about K-gold jewellery making
	<ul> <li>Know about the fineness and characteristics of K-gold and various precious metals</li> <li>Know about the categories of K-gold necklaces/chokers/neck accessories</li> <li>Know about the safe use of K-gold goldsmithing tools/equipment</li> <li>Know about the structure/hinges/findings of jewellery and their making procedures, including:         <ul> <li>Jewellery catch</li> <li>Box snap</li> <li>Side-hook catch</li> </ul> </li> <li>Understand the information about the drawings on the order forms</li> </ul>
	2. Master necklace/choker/neck accessory making techniques
	<ul> <li>Master the making of K-gold jewellery, such as necklaces/chokers/neck accessories</li> <li>Master the making of mounts for setting the gemstones (collets)</li> <li>Master the assembly of common findings</li> <li>Know about the structure/hinges/findings of jewellery and master their making procedures</li> </ul>
	3. Professionalism
	<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, carry out K-gold jewellery production with a professional attitude</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to master the making of K-gold jewellery and the operation of relevant equipment, and make various necklaces/chokers/neck accessories with K-gold goldsmithing techniques using precious metal materials according to the specifications under instruction.</li> </ul>
Remark	

Title	Master trimming techniques
Code	108937L2
Range	This unit of competency is applicable to practitioners working in the goldsmithing department of jewellery manufacturing organizations. Practitioners should be capable of performing trimming and basic repair tasks by applying common goldsmithing tools/equipment and techniques according to the organization's requirements under instruction.
Level	2
Credit	6
Competency	Performance Requirements  1. Know about trimming  • Know about the fineness and characteristics of fine gold, K-gold (karat gold) and various precious metals
	<ul> <li>Know about the safe use of fine gold/K-gold goldsmithing tools/equipment</li> <li>Know about various jewellery trimming processes, methods and requirements, including: <ul> <li>Rectifying</li> <li>Spur cutting</li> <li>Setting</li> <li>Assembling</li> <li>Soldering to form the shapes/pins/revolver catches</li> <li>Processing box-snaps</li> <li>Modifying snaps/shapes</li> <li>Preparing the alum solution</li> <li>Trimming bracelets/bangles/rings</li> <li>Sand-papering</li> <li>Brushing</li> </ul> </li> <li>Know about the methods to prevent the wastage of precious metals</li> <li>Know about the basic techniques for repairing the flaws on metal surfaces</li> <li>Use burs to remove porosity</li> <li>Know about the laser welding repairing technique</li> </ul>
	2. Master trimming techniques
	<ul> <li>Master various types of trimming for jewellery and their craftsmanship, including rings, pendants, brooches, earrings, bracelets/necklaces and bangles</li> <li>Perform simple repair tasks under instruction</li> <li>Master the control of material loss during trimming</li> </ul>
	3. Professionalism
	<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, carry out trimming and basic repair tasks with a professional attitude</li> </ul>
Assessment Criteria	The integrated outcome requirement of this unit of competency is:
	<ul> <li>Able to perform trimming and basic repair tasks by applying common goldsmithing tools/equipment and techniques according to the organization's requirements under instruction.</li> </ul>
Remark	

	<u> </u>
Title	Master grain setting (grain-raising setting and grain-pushing setting) techniques
Code	108938L2
Range	This unit of competency is applicable to practitioners working in the jewellery setting department of jewellery manufacturing organizations. Practitioners should be capable of mastering gemstone setting techniques and employing grain setting techniques to secure various types and cuts of gemstones onto the mounts of jewellery according to the standards and the organization's or customers' specifications.
Level	2
Credit	6
Competency	Performance Requirements  1. Know about grain setting procedures and methods
	Know about various types of grain setting     Grain-raising setting     Grain-pushing setting     Know about grain setting procedures and methods     Securing the jewellery (sealing-wax/stone-setting vise)     Measuring the stone size     Drilling holes     Sitting the stone onto the hole     Setting the grains     Rounding the grains     Rounding the grains     Trimming     Know about the grain setting tools and the proper ways to use them  2. Master grain setting techniques     Master grain-raising setting techniques     Master grain-pushing setting techniques     Master milligraining techniques     Master milligraining techniques     Master milligraining techniques
Assessment Criteria	<ul> <li>The integrated outcome requirement of this unit of competency is:</li> <li>Able to master basic gemstone setting techniques and employ grain setting techniques to secure various types and cuts of precious stones onto the mounts of jewellery according to the organization's or customers' specifications under instruction.</li> </ul>
Remark	3 3
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Title	Master grain setting (pavé setting and micro setting) techniques
Code	108939L2
Range	This unit of competency is applicable to practitioners working in the jewellery setting department of jewellery manufacturing organizations. Practitioners should be capable of mastering gemstone setting techniques and employing grain setting techniques to secure various types and cuts of gemstones onto the mounts of jewellery according to the standards and the organization's or customers' specifications.
Level	2
Credit	6
Competency	Performance Requirements  1. Know about grain setting procedures and methods
	<ul> <li>Know about various types of grain setting         <ul> <li>Pavé setting</li> <li>Micro setting</li> </ul> </li> <li>Know about grain setting procedures and methods         <ul> <li>Securing the jewellery (sealing-wax/stone-setting vise)</li> <li>Measuring the stone size</li> <li>Drilling holes</li> <li>Sitting the stone onto the hole</li> <li>Setting the grains</li> <li>Rounding the grains</li> <li>Trimming</li> </ul> </li> <li>Know about the grain setting/micro setting tools and the proper ways to use them</li> <li>Master grain setting techniques         <ul> <li>Master pavé setting techniques</li> <li>Master micro setting techniques</li> <li>Master milligraining techniques</li> </ul> </li> <li>Following the requirements of the organization, code of practice and safety guidelines, carry out gemstone setting with a professional attitude</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirement of this unit of competency is:</li> <li>Able to master basic gemstone setting techniques and employ grain setting techniques to secure various types and cuts of precious stones onto the mounts of jewellery</li> </ul>
	according to the organization's or customers' specifications under instruction.
Remark	

Title	Master rubbed setting/claw setting techniques
Code	108940L2
Range	This unit of competency is applicable to practitioners working in the jewellery setting department of jewellery manufacturing organizations. Practitioners should be capable of mastering gemstone setting techniques and employing rubbed setting/claw setting techniques to secure various types and cuts of gemstones onto the mounts of jewellery according to the standards and the organization's or customers' specifications.
Level	2
Credit	6
Competency	Performance Requirements  1. Know about rubbed setting/claw setting
	<ul> <li>Know about the differences between rubbed setting and claw setting, and their characteristics</li> <li>Know about the procedures and methods of rubbed setting/claw setting</li> <li>Know about the rubbed setting/claw setting tools and the proper ways to use them</li> <li>Master various precious stone setting techniques</li> <li>Master rubbed setting techniques</li> <li>Master claw setting techniques</li> </ul>
	3. Professionalism
	<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, carry out gemstone setting with a professional attitude</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to master basic gemstone setting techniques and employ rubbed setting/claw setting techniques to secure various types and cuts of precious stones onto the mounts of jewellery according to the organization's or customers' specifications under instruction.</li> </ul>
Remark	

Title	Master channel setting/bezel setting techniques
Code	108941L2
Range	This unit of competency is applicable to practitioners working in the jewellery setting department of jewellery manufacturing organizations. Practitioners should be capable of mastering gemstone setting techniques and employing channel setting/bezel setting techniques to secure various types and cuts of gemstones onto the mounts of jewellery according to the standards and the organization's or customers' specifications.
Level	2
Credit	6
Competency	Performance Requirements  1. Know about channel setting/bezel setting
	<ul> <li>Know about the differences between channel setting and bezel setting, and their characteristics</li> <li>Know about the procedures and methods of channel setting/bezel setting</li> <li>Know about the channel setting/bezel setting tools and the proper ways to use them</li> </ul>
	Master various precious stone setting techniques
	<ul><li>Master channel setting techniques</li><li>Master bezel setting techniques</li></ul>
	3. Professionalism
	Following the requirements of the organization, code of practice and safety guidelines, carry out gemstone setting with a professional attitude
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to master basic gemstone setting techniques and employ channel setting/bezel setting techniques to secure various types and cuts of precious stones onto the mounts of jewellery according to the organization's or customers' specifications under instruction.</li> </ul>
Remark	

Title	Master integrated gemstone setting techniques
Code	108942L2
Range	This unit of competency is applicable to practitioners working in the jewellery setting department of jewellery manufacturing organizations. Practitioners should be capable of mastering gemstone setting techniques and employing integrated gemstone setting techniques to secure various types and cuts of gemstones onto the mounts of jewellery according to the standards and the organization's or customers' specifications.
Level	2
Credit	6
Assessment	Performance Requirements  1. Know about various gemstone settings  • Understand the differences between various gemstone settings and their characteristics  • Grain setting (grain-raising setting, grain-pushing setting and pavé setting)  • Micro setting  • Rubbed setting  • Claw setting  • Channel setting  • Invisible setting  • Invisible setting  • Know about the procedures and methods of various gemstone settings  • Know about the special tools for various gemstone setting techniques and the proper ways to use them  2. Master integrated gemstone setting techniques  • Master integrated gemstone setting techniques to secure various types and cuts of precious stones onto the mounts of a single workpiece  3. Professionalism  • Follow the safety guidelines and codes of practice of the occupational safety, health and environmental protection legislations to carry out gemstone setting  The integrated outcome requirement of this unit of competency is:
Criteria	Able to master basic gemstone setting techniques and employ grain setting/micro setting/rubbed setting/claw setting/channel setting/bezel setting/invisible setting techniques to secure various types and cuts of precious stones onto the mounts of jewellery according to the organization's or customers' specifications.
Remark	

Title	Master the techniques for cutting/polishing semi-precious gemstones (coloured gemstones)
Code	108943L2
Range	This unit of competency is applicable to practitioners working in the semi-precious gemstone (coloured gemstone) cutting/polishing department of jewellery manufacturing organizations. Practitioners should be capable of mastering the operation of various relevant tools and equipment, and applying basic techniques for cutting/polishing basic semi-precious gemstones (coloured gemstones) under instruction.
Level	2
Credit	6
Competency	Performance Requirements  1. Know about the operation of basic tools/equipment for cutting/polishing semi-precious gemstones/coloured gemstones and the relevant occupational safety  • Know about the basic physical properties of semi-precious gemstones/coloured gemstones  • Know about the basic cuts of semi-precious gemstones/coloured gemstones, including:  • Cabochon/flat: round, heart-shaped, oval, teardrop-shaped, equilateral triangle/trilliant, olive-shaped, square/baguette, etc.  • Bead: round bead, oval bead, square/baguette bead, barrel-shaped bead, tube bead, triangular prism bead, etc.  • Irregular shapes  • Know about the industrial safety of cutting/polishing semi-precious gemstones/coloured gemstones  • Know about the protection of the respiratory system  • Know about the protection of the respiratory system  • Know about the causes and prevention of silicosis  • Pay attention to potential hazards in the work processes and working environment  • Formulate and list the safety regulations appropriately and clearly  • Know about the functions, operation and safe operation of the tools/equipment for cutting/polishing semi-precious gemstones/coloured gemstones, including:  • Gemstone cutting machine (slices)  • Small cutting machine (granules)  • Grinder  • Flexible shaft machine/grinding file for polishing motifs  • Sander  • Vibratory polishing machine  • Bead chain polishing machine  • Bead chain polishing machine  • Bead chain polishing machine  • Know about the procedures for cutting/polishing semi-precious gemstones/coloured gemstones, including:  • Sawing  • Granulating  • Grinding  • Lapping  • Polishing  • Waxing  • Drilling

	2. Master the techniques for cutting/polishing semi-precious gemstones/coloured gemstones
	<ul> <li>Master the use of basic equipment for cutting/polishing semi-precious gemstones/ coloured gemstones</li> </ul>
	<ul> <li>Master various surface polishing methods and the application of surface polishing materials, including:         <ul> <li>Sanding</li> <li>Polishing</li> <li>Tumbling</li> <li>Vibratory polishing</li> </ul> </li> <li>Master the procedures for cutting/polishing semi-precious gemstones (coloured gemstones)</li> </ul>
	3. Professionalism
	<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, cut/polish semi-precious gemstones/coloured gemstones by using various relevant tools and equipment properly and safely with a professional attitude</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to use various gemstone cutting/polishing tools and equipment safely, and master basic techniques for cutting/polishing basic semi-precious gemstones/coloured gemstones under instruction.</li> </ul>
Remark	This unit of competency is written with reference to the 21st Century Higher Education Jewelry Professional Planning Material Gem Processing Techniques (21世紀高等教育珠寶首飾類專業規劃教材《寶石加工工藝學》) by China University of Geosciences Press Co. Ltd.

Title	Master the techniques for cutting/polishing jade (Fei Cui/nephrite)
Code	108944L2
Range	This unit of competency is applicable to practitioners working in the jade (Fei Cui/nephrite) cutting/polishing department of jewellery manufacturing organizations. Practitioners should be capable of mastering the operation of various relevant tools and equipment, and applying basic techniques for cutting/polishing jade (Fei Cui/nephrite) under instruction.
Level	2
Credit	6
Competency	Performance Requirements  1. Know about the operation of basic tools/equipment for cutting/polishing jade and the relevant occupational safety  • Know about the basic physical properties of jade (Fei Cui/nephrite)  • Know about the basic cuts of jade (Fei Cui/nephrite), including:  • Cabochon/flat: round, heart-shaped, oval, teardrop-shaped, equilateral triangle/ftrilliant, olive-shaped, square/baguette, etc.  • Bead: round bead, abacus bead, oval bead, square/baguette bead, barrel-shaped bead, tube bead, triangular prism bead, etc.  • Ring: convex spring ing, saddle ring, thumb ring, etc.  • Bangle: cylindrical bangle, convex spring bangle, etc.  • Irregular shapes  • Know about the industrial safety of cutting/polishing jade  • Know about the industrial safety of cutting/polishing jade  • Know about the causes and prevention of silicosis  • Pay attention to potential hazards in the work processes and working environment  • Formulate and list the safety regulations appropriately and clearly  • Know about the functions and safe operation of the tools/equipment for cutting/polishing jade, including:  • Jade cutting machine (slices)  • Small cutting machine (granules)  • Grinder  • Surface grinder  • Bangle making machine  • Jade bangle grinding machine  • Jade bangle grinding machine  • Sander  • Vibratory polishing machine  • Bead polishing machine  • Bead polishing machine  • Bead chain polishing machine  • Utrasonic drilling machine  • Know about the procedures for cutting/polishing jade, including:  • Sawing  • Granulating  • Grinding  • Lapping  • Polishing  • Drilling

	Master the basic techniques for cutting/polishing jade
	<ul> <li>Master the use of basic equipment for cutting/polishing jade</li> <li>Master the application of various grinding and polishing materials         <ul> <li>Sanding</li> <li>Polishing</li> <li>Tumbling</li> </ul> </li> <li>Master the procedures for cutting/polishing jade</li> </ul>
	3. Professionalism
	<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, cut/polish jade by using various relevant tools and equipment properly and safely with a professional attitude</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	Able to use various jade cutting/polishing tools and equipment safely, and master basic techniques for cutting/polishing basic jade jewellery series under instruction.
Remark	This unit of competency is written with reference to Practical Gem Processing Techniques (實用 寶石加工技法) by Chemical Industry Press Co. Ltd.

Title	Master the techniques for faceting/polishing diamonds
Code	108945L2
Range	This unit of competency is applicable to practitioners working in the diamond faceting/polishing department of jewellery manufacturing organizations. Practitioners should be capable of operating various diamond faceting/polishing tools and equipment under instruction to perform precision diamond faceting/polishing work.
Level	2
Credit	6
Competency	Performance Requirements  1. Know about the operation of basic tools and equipment for faceting/polishing diamond materials and the relevant occupational safety  • Know about the basic optical and physical properties of diamonds  • Know about the common cuts and facets of diamonds, such as:  • Round brilliant  • Marquise  • Pear  • Square/baguette  • Trapeze  • Emerald  • Scissors  • Mixed cuts  • Know about the industrial safety of faceting/polishing diamonds  • Know about the protection of the respiratory system  • Know about the causes and prevention of silicosis  • Pay attention to potential hazards in the work processes and working environment  • Formulate and list the safety regulations appropriately and clearly  • Know about the functions, operation and safe operation of the tools/equipment for faceting/polishing diamonds, including:  • Precision diamond cutting machine  • Diamond girdle polishing machine  • Cutting lap  • Emerald hand faceting grinder holder  • Transfer jig/Dop stick  • Know about the basic procedures for faceting/polishing diamonds, including:  • Marking  • Sawing  • Applying the dopping compound  • Lapping  • Sanding  • Polishing  2. Master the techniques for faceting/polishing diamonds
	<ul> <li>Master the use of basic equipment for faceting/polishing diamonds</li> <li>Master the application of various grinding and polishing materials</li> <li>Master the procedures for faceting/polishing diamonds</li> </ul>

	3. Professionalism
	<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, facet/polish diamonds by using various relevant tools and equipment properly and safely with a professional attitude</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to operate faceting/polishing tools and equipment safely to perform precision diamond faceting/polishing work.</li> </ul>
Remark	This unit of competency is written with reference to Gem Processing Techniques (寶石加工工藝學) by China University of Geosciences Press Co. Ltd.

Title	Master the techniques for cutting/polishing faceted gemstones
Code	108946L2
Range	This unit of competency is applicable to practitioners working in the faceted gemstone cutting/polishing department of jewellery manufacturing organizations. Practitioners should be capable of operating various cutting/polishing tools and equipment under instruction to perform basic precision faceted gemstone cutting/polishing work.
Level	2
Credit	6
Competency	Performance Requirements  1. Know about the operation of basic tools and equipment for cutting/polishing faceted gemstones and the relevant occupational safety
	Know about the basic optical and physical properties of faceted gemstones     Know about the common cuts and facets of faceted gemstones, including:

	<ul> <li>Crown facet blocking</li> <li>Crown facet polishing</li> <li>Reversing the gemstone</li> <li>Removing the dopping compound and cleaning</li> <li>Pavilion facet blocking</li> <li>Pavilion facet polishing</li> <li>Removing the dopping compound and cleaning</li> </ul>
	2. Master the techniques for cutting/polishing faceted gemstones
	<ul> <li>Master the use of basic equipment for cutting/polishing faceted gemstones</li> <li>Master various polishing methods and the application of polishing materials, including:         <ul> <li>Polishing agent</li> <li>Diamond powder abrasive</li> <li>Corundum powder</li> <li>Tin oxide powder</li> <li>Iron oxide powder</li> <li>Iron oxide powder</li> <li>Zinc oxide powder</li> <li>Liquid polishing compound</li> </ul> </li> <li>3. Professionalism</li> </ul>
	<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, cut/polish faceted gemstones by using various relevant tools and equipment properly and safely with a professional attitude</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	Able to use various gemstone cutting/polishing tools and equipment safely, and master basic techniques for cutting/polishing basic faceted gemstones under instruction.
Remark	This unit of competency is written with reference to the Jewelry Professional Planning Material "Gem Processing Techniques" (珠寶首飾類專業規劃教材《寶石加工工藝學》) by China University of Geosciences Press Co. Ltd.

Title	Carve wax models for jewellery articles/ornaments
Code	108947L3
Range	This unit of competency is applicable to practitioners working in the jewellery wax model carving department of jewellery manufacturing organizations. Practitioners should be capable of mastering the relationship between wax models and electroforming manufacturing. They should also be capable of analyzing the information on the design sketch and customers' requirements independently, so as to effectively perform wax model carving for carved jewellery articles/ornaments and to produce wax moulds used for manufacturing electroformed precious metal articles/ornaments.
Level	3
Credit	6
Competency	Performance Requirements  1. Understand the principles of wax model carving for electroformed and carved jewellery articles/ornaments  • Know about the processing procedures and requirements of electroforming techniques  • Know about the information on the design sketch and customers' requirements
	<ul> <li>Know about the types of jewellery articles/ornaments made from wax models, including:         <ul> <li>Portraits</li> <li>Animals and livestock</li> <li>Flowers and trees</li> <li>Cartoon figurines</li> <li>Chinese zodiac</li> <li>Mascots</li> </ul> </li> <li>Master the techniques for constructing a 3-D structural design from a graphic layout design</li> </ul>
	2. Wax model carving for carved jewellery articles/ornaments
	<ul> <li>Master the techniques for wax model carving</li> <li>Control the size and weight of products</li> <li>Master the techniques for duplicating wax moulds         <ul> <li>The treatment of condensed silicon plastic</li> <li>The operation of vacuum wax injection</li> <li>Wax mould trimming and hall mark treatment</li> </ul> </li> </ul>
	3. Professionalism
	<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, perform wax model carving for carved jewellery articles/ornaments with a professional attitude</li> </ul>
Assessment Criteria	The integrated outcome requirements of this unit of competency are:
	<ul> <li>Able to analyze the information on the design sketch and customers' requirements independently and employ proficient techniques to construct the 3-D design of carved jewellery articles/ornaments for wax model carving, including: portraits, animals, cartoon figurines, Chinese zodiac, mascots, etc.; and</li> <li>Take into account the manufacturing quality and results of electroforming processing procedures.</li> </ul>

Title	Apply CAD/CAM technology in jewellery manufacturing
Code	108948L3
Range	This unit of competency is applicable to practitioners working in the jewellery computer model production and design department of jewellery manufacturing organizations. Practitioners should be capable of making careful analysis and judgments. They should be able to make analysis independently according to the information contained in the hand-drawn design sketch, and draw computerized design for jewellery by using CAD (computer-aided design) software to tie in with the manufacturing procedure, thus fulfilling the requirements of design display and rapid prototyping.
Level	3
Credit	6
Competency	Performance Requirements  1. Understand the structure of jewellery and the requirements of design sketches  • Know about the concept, characteristics and requirements of design sketches  • Master the construction of 3-D patterns for jewellery  • Know about the basic structure of jewellery  • The stone-setting methods and their presentation in drawing  • The hinges/findings of jewellery and their application  2. Master the operation of CAD software  • Master 2-D/3-D prototyping methods  • Master the use of the database in the CAD software  • Determine the sizes and measurements of jewellery and the ring sizes  • Master the thickness of jewellery and 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  3. Professionalism  • Respect intellectual property and avoid plagiarism, preventing individuals and the organization from falling into the trap of infringement of intellectual property rights
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able 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 software; and</li> <li>Match with the manufacturing operations to effectively fulfil the requirements of design display and rapid prototyping.</li> </ul>
Remark	

Title	Manufacture silver jewellery models (rings/pendants/brooches/earrings)
Code	108949L3
Range	This unit of competency is applicable to practitioners working in the goldsmithing department of jewellery manufacturing organizations. Practitioners should be capable of making judgment and employing goldsmithing techniques to make various silver models for vulcanizing purposes according to the requirements of the design sketches under instruction. They should also be able to analyze and assess manufacturing operations from the production perspective, so as to enhance the cost effectiveness of production.
Level	3
Credit	9
Assessment Criteria	Performance Requirements  1. Understand the production theory of silver jewellery models  • Master the techniques for constructing the 3-D structural design from the sketch of graphic design  • Know about the structure of jewellery and the assembly of components, such as:  • Ring shank  • Pendant bail  • Brooch pinstem  • Ear nut, ear clip and ear hook of earrings  • Know about the casting workflow  • Know about jewellery trimming techniques  • Estimate the shrinkage from vulcanizing and casting  • Know the requirements and distribution of sprues  2. Manufacture silver jewellery models  • Master the quality/weight of the materials used for the jewellery products  • Master the structure of collets and its relationship with the gemstones  • Master exquisite gold casting techniques and make various kinds of silver jewellery models to match with the casting workflow  • Master the preparation work prior to manufacturing silver jewellery models  3. Professionalism  • Following the requirements of the organization, code of practice and safety guidelines, manufacture silver jewellery models with a professional attitude  • Make various kinds of silver jewellery models with goldsmithing techniques strictly according to the requirements of the design sketches of the organization or customers  The integrated outcome requirements of this unit of competency are:  • Able to employ goldsmithing techniques to make various kinds of silver models of ring/pendant/brooch/earring jewellery series according to the requirements of the design sketches to meet the casting workflow, and analyze and assess the manufacturing operations from the production perspective; and  • Control the weight of gold used in the finished jewellery products to enhance the cost
Remark	effectiveness of production.

Code 10 Range TI	Manufacture silver jewellery models (bracelets/bangles/necklaces/chokers/neck accessories)  08950L3  This unit of competency is applicable to practitioners working in the goldsmithing department of ewellery manufacturing organizations. Practitioners should be capable of making judgment and employing goldsmithing techniques to make various silver models for vulcanizing purposes according to the requirements of the design sketches under instruction. They should also be
Range Ti	This unit of competency is applicable to practitioners working in the goldsmithing department of ewellery manufacturing organizations. Practitioners should be capable of making judgment and employing goldsmithing techniques to make various silver models for vulcanizing purposes
je	ewellery manufacturing organizations. Practitioners should be capable of making judgment and employing goldsmithing techniques to make various silver models for vulcanizing purposes
at at	able to analyze and assess manufacturing operations from the production perspective, so as to enhance the cost effectiveness of production.
Level 3	3
Credit 9	
2.	Performance Requirements  Understand the production theory of silver jewellery models  Master the techniques for constructing the 3-D structural design from the sketch of graphic design  Know about the structure of jewellery and the assembly of components, such as:  S-split ring and M-split ring Jewellery catch Box-snap Side-hook catch  Know about the casting workflow Know about jewellery trimming techniques Estimate the shrinkage from vulcanizing and casting Know the requirements and distribution of sprues  Manufacture jewellery silver models  Master the quality/weight of the materials used for the jewellery products Master the structure of the collets and its relationship with the gemstones Master exquisite gold casting techniques and make various kinds of silver jewellery models to match with the casting workflow Master the preparation work prior to manufacturing silver jewellery models  Professionalism  Following the requirements of the organization, code of practice and safety guidelines, manufacture silver jewellery models with a professional attitude Make various kinds of silver jewellery models with goldsmithing techniques strictly according to the requirements of the design sketches of the organization or customers  The integrated outcome requirements of this unit of competency are: Able to employ goldsmithing techniques to make various kinds of silver models of bracelet/bangle/necklace/choker/neck accessory jewellery series according to the requirements of the design sketches to meet the casting workflow, and analyze and assess the manufacturing operations from the production perspective; and
	<ul> <li>Control the weight of gold used in the finished jewellery products to enhance the cost effectiveness of production.</li> </ul>
Remark	

Title	Master jewellery electroforming techniques
Code	108951L3
Range	This unit of competency is applicable to practitioners working in the electroforming department of jewellery manufacturing organizations. Practitioners should be capable of mastering the use of electroforming equipment and the preparation of electroforming solutions. They should be able to independently operate electroforming equipment safely to complete electroforming processes for precious metals (fine gold/pure silver/karat gold) in accordance with the relevant legislations, operational guidelines and safety guidelines on electroforming. The products include hollow display items and ornaments.
Level	3
Credit	9
Competency	Performance Requirements  1. Understand the electroforming operation  • Know about the procedure of the electroforming process  • Wax model production  • Carving model  • Mould duplication and cutting  • Wax injection  • Mould trimming  • Electroforming hollow models  • Installing hangers  • Applying silver solution/conductive coating  • Making pre-drilled holes  • Preparation before electroforming  • Surface treatment  • Trimming and sand-papering  • De-waxing and removing the silver solution  • Applying an acid solution  • Heating in the oven  • Sandblasting  • Polishing  • Polishing  • Soaking in a protective solution  • Know how to solve the problem of electroforming defects  • Know the relevant legislations on electroforming  • Drainage and environmental protection ordinances  • Disposal of chemical waste ordinances  • Know how to use chemical drugs safely  • Know the recovery treatment of electroforming solutions of precious metals  2. Control the electroforming effects  • Master the techniques for electroforming hollow items and the surface treatment  • Control the electroformed layer  • The weight of the finished product, which is directly affected by the thickness of the electroformed layer  • The surface of the electroformed layer  • The surface of the electroformed layer  • The impact of the duration of electroforming

	<ul> <li>The impact of the temperature of the electroforming solution on the electroformed item</li> <li>The control of the current and voltage</li> <li>Prepare the electroforming solutions         <ul> <li>Replenish gold potassium cyanide</li> <li>Add chemical drugs</li> </ul> </li> <li>Recover the electroforming solutions of precious metals/chemical drugs according to the relevant legislations on electroforming</li> <li>Professionalism</li> <li>Following the safety guidelines and codes of practice of the Dangerous Goods Ordinance and environmental protection ordinances, and other relevant legislations on electroforming, carry out jewellery electroforming safely</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to understand thoroughly the safety guidelines and operational guidelines to independently operate electroforming equipment safely so as to complete electroforming processes for precious metals (fine gold/pure silver/karat gold) for products including hollow display items and ornaments; and</li> <li>Understand the relevant legislations on electroforming so as to use the chemical drugs and prepare the electroforming solutions safely.</li> </ul>
Remark	

Title	Master the processing techniques for pearl jewellery
Code	108952L3
Range	This unit of competency is applicable to practitioners engaged in the wholesale/retail of pearls in the jewellery industry. Practitioners should master the knowledge of pearls, and be capable of screening and processing the supplied pearls according to their quality requirements independently, as well as stringing them in chains as semi-manufactured products or to reserve for other processing purposes.
Level	3
Credit	9
Competency	Performance Requirements  1. Understand the classification and quality requirements of pearls  • Know about pearls and gemmology  • Know about the types of pearls and their origin  • Natural pearl  • Deaded cultured pearls  • Cultured seawater pearls  • Cultured freshwater pearls  • Cultured pearls with shells  • Mabe pearls  • Cultured pearls with shells  • Mabe pearls  • Species of cultured pearls  • Freshwater pearls  • Freshwater pearls  • South Sea pearls  • Tahitian pearls  • Shapes and colours of pearls  • Weight measurement of pearls, including:  • Kan  • Kilogram  • Dao  • Momme  • Hong Kong mace (tsin)  • Gram  • Grain  • Know about the optimization treatment of pearls  • Now about the optimization treatment of pearls  • Dyeing  • Irradiation treatment  • Lustre optimization  • Craft grade  • Craft grade  • Colour  • Lustre

	<ul> <li>Shape</li> <li>Diameter</li> <li>Blemish</li> <li>Surface perfection</li> <li>Nacre thickness</li> <li>Master the use of special pearl sieves to differentiate the sizes of pearls</li> <li>Master the perforation of pearls</li> <li>Master the stringing of pearl chains</li> <li>Master the application of adhesive glue to secure pearls on pearl bases</li> <li>Professionalism</li> <li>Following the requirements of the organization, code of practice and safety guidelines, carry out pearl jewellery processing with a professional attitude</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to master the screening and classification of pearls; and</li> <li>Master the processing techniques for pearl jewellery, including the stringing of pearl chains, the setting of pearl bases and the perforation of pearls.</li> </ul>
Remark	This unit of competency is written with reference to the following materials. Readers can study the relevant information according to their needs:  • Guobiao standards GB/T18781-2008 (Cultured pearl grading) and  • The English-Chinese and Chinese-English Dictionary of Gems and Jewelry by China University of Geosciences Press Co. Ltd.

Title	Apply the techniques of faceting/polishing diamonds
Code	108953L3
Range	This unit of competency is applicable to practitioners working in the diamond faceting/polishing department of jewellery manufacturing organizations. Practitioners should be capable of making judgments and understanding the characteristics of diamonds and rough diamonds. They should also master the operation of diamond faceting/polishing tools and equipment to facet and polish diamond materials after careful analysis and assessment, so as to achieve the highest brilliancy by obtaining the best cutting angles/proportion and perfect facets.
Level	3
Credit	6
Competency	Performance Requirements  1. Understand the principles of diamond faceting/polishing  • Understand diamond cuts and respective requirements  o Single-facet cuts  • Point cut  • Table cut  o Round brilliant cut  o Fancy cuts  • Oval cut  • Marquise cut  • Pear cut  • Heart cut  • Princess cut  • Radiant cut  • Emerald cut  • Cushion cut  o Modern diamond cuts  • Flower cuts  • Fire-Rose cut  • Sunflower cut  • Marigold cut  • Zinnia cut  • Dahlia cut  • Lily cut  • Lucky star cut  • Cupid cut (Hearts & Arrows)  • Understand the angles and proportion of diamond facets  • Consider the characteristics of rough diamonds to design their cuts  o Cut  o Cleavage  o Colour  o Carat (the unit of weight for diamonds)  • Know about the new technical knowledge related to diamond faceting/polishing  2. Master and apply diamond faceting/polishing procedures and techniques  o Designing rough stones

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	Designing diamonds with perfect crystals Designing diamonds with distorted crystals Designing diamonds with inclusion Designing diamonds with uneven colours  Marking Inspecting rough diamond Marking lines Cutting rough stones Cutting rough stones Cleaving Sawing Laser cutting Grinding Sanding Polishing Master diamond facet trimming/repairing techniques  3. Professionalism Following the requirements of the organization, code of practice and safety guidelines, facet/polish diamonds with the proper and safe use of various relevant tools and equipment with a professional attitude
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to master the characteristics of rough diamonds and apply faceting/polishing techniques to perform perfect faceting and polishing on diamond materials so as to strengthen the internal reflection and refraction of the diamonds to meet the standards of the cut specifications; and</li> <li>Consider the requirements on quality, colour, cleavage and optical properties of the stones when performing diamond faceting/polishing, so as to achieve the highest brilliancy by obtaining the best cutting angles/proportion and perfect facets.</li> </ul>
Remark	This unit of competency is written with reference to the 21st Century Higher Education Jewelry Professional Planning Material "Gem Processing Techniques" (21世紀高等教育珠寶首飾類專業規劃教材《寶石加工工藝學》) by China University of Geosciences Press Co. Ltd.

Title	Apply the techniques of faceting/polishing semi-precious gemstones/coloured gemstones
Code	108954L3
Range	This unit of competency is applicable to practitioners working in the gemstone faceting/polishing department of jewellery manufacturing organizations. Practitioners should be capable of making judgments and understanding the characteristics of semi-precious gemstones/coloured gemstones and rough gemstones. They should also master the operation of gemstone faceting/polishing tools and equipment to facet and polish gemstone materials after careful analysis and assessment, so as to achieve the highest brilliancy by obtaining the best cutting angles/proportion and perfect facets.
Level	3
Credit	9
Competency	Performance Requirements  1. Understand the principles of semi-precious gemstone/coloured gemstone faceting/polishing
	Understand gemstone cuts and respective requirements Faceted cut  Brilliant cut Rose cut Mixed cut Cabochon Bead cut Free-form cut Barroque stone Understand the angles and proportion of semi-precious gemstone/coloured gemstone facets Consider the characteristics of rough semi-precious gemstones/coloured gemstones to design their cuts Gemstone species Transparency Cut Cleavage Colour Carat (the unit of weight for gemstones) Know about the new technical knowledge related to gemstone faceting/polishing  Master and apply semi-precious gemstone/coloured gemstone faceting/polishing procedures and techniques Master gemstone faceting/polishing procedures and techniques Marking Separating Mould trimming Attaching to the dop stick Prototyping Faceting and polishing Removing from the dop stick Cleaning Removing from the dop stick Cleaning

	<ul> <li>Gemstone with cabochon cuts</li> <li>Separating</li> <li>Marking</li> <li>Mould trimming</li> <li>Attaching to the dop stick</li> <li>Grinding</li> <li>Sanding</li> <li>Polishing</li> <li>Removing from the dop stick</li> <li>Cleaning</li> <li>Polishing the bottom side</li> </ul>
	<ul> <li>Waxing</li> <li>Master gemstone facet trimming/repairing techniques</li> <li>Professionalism</li> </ul>
	Following the requirements of the organization, code of practice and safety guidelines, facet/polish semi-precious gemstones/coloured gemstones with the proper and safe use of various relevant tools and equipment with a professional attitude
Assessment Criteria	<ul> <li>Able to master the characteristics of rough semi-precious gemstones/coloured gemstones and apply faceting/polishing techniques to perform perfect faceting and polishing on semi-precious gemstone/coloured gemstone materials so as to strengthen the internal reflection and refraction of the gemstones to meet the standards of the cut specifications; and</li> <li>Consider the requirements on quality, colour, cleavage and optical properties of the stones when performing semi-precious gemstone/coloured gemstone faceting/polishing, so as to achieve the highest brilliancy by obtaining the best facets.</li> </ul>
Remark	This unit of competency is written with reference to the Jewelry Professional Planning Material "Gem Processing Techniques" (珠寶首飾類專業規劃教材《寶石加工工藝學》) by China University of Geosciences Press Co. Ltd.
	This unit of competency is written with reference to Practical Gem Processing Techniques (實用實石加工技法) by Chemical Industry Press Co. Ltd.

Title	Master the techniques for carving semi-precious gemstones/coloured gemstones
Code	108955L3
Range	This unit of competency is applicable to practitioners working in the gemstone faceting/polishing/carving department of jewellery manufacturing organizations. Practitioners should be capable of making judgments and understanding the characteristics of semi-precious gemstones/coloured gemstones. They should be able to apply various gemstone carving tools and equipment to carve gemstones according to the instructions of the organization or the orders of the customers after careful analysis and assessment.
Level	3
Credit	9
Competency	Performance Requirements  1. Know about semi-precious gemstone/coloured gemstone carving  • Know about the common semi-precious gemstone/coloured gemstone materials used for carving and their physical properties, such as:  • Chalcedony • Agate • Lapis lazuli • Turquoise • Malachite • Dushan jade • Serpentine • Rhodonite • Natural glass • Stones for making stamps, such as:  • Shoushan stone (Pagodite (Larderite)) • Qingtian stone • Jixue stone (Oriental jasper) • Changhua stone • Balin stone • Ink stone • Ink stone • Coral • Amber • Shell • Know about the basic forms of semi-precious gemstone/coloured gemstone carving, including motifs/ornaments, stamps, characters, figurines, landscapes, flowers/leaves, fishes/beasts, etc. • Understand the functions, operation and safe operation of tools/equipment for carving semi-precious gemstones/coloured gemstones • Understand the procedures for carving semi-precious gemstones/coloured gemstones • Understand the procedures for carving semi-precious gemstones/coloured gemstones • Know about the new technical knowledge related to semi-precious gemstone/coloured gemstone carving, such as:  • Ultrasonic jade/gemstone carving machine • CNC (computer numerical control) laser cutting machine • CNC milling machine
	Master the use of equipment for carving semi-precious gemstones/coloured gemstones

	Master the procedures and techniques for carving semi-precious gemstones/coloured gemstones, including:
	<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, carve semi-precious gemstones/coloured gemstones with the proper and safe use of various faceting/polishing/carving tools and equipment with a professional attitude</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to use various gemstone carving tools and equipment safely to carve and polish semi-precious gemstone/coloured gemstone materials according to the instructions of the organization or the orders of the customers, including motifs and ornaments; and</li> <li>Take into account the quality, texture, and optical and physical properties of stone materials to meet the requirements of the 3-D designs.</li> </ul>
Remark	This unit of competency is written with reference to the following materials. Readers can study the relevant information according to their needs:-  Guobiao standards GB/T16553-2017 (Gems Testing); The English-Chinese and Chinese-English Dictionary of Gems and Jewelry by China University of Geosciences Press Co. Ltd.; and Practical Gem Processing Techniques (實用寶石加工技法) by Chemical Industry Press Co. Ltd.

Master the techniques for carving jade (nephrite/jadeite/Fei Cui)
108956L3
This unit of competency is applicable to practitioners working as a jade craftsman. Practitioners should be capable of making aesthetic judgments. They should be able to use various jade carving tools and equipment safely to design and process carved jade according to the instructions of the organization or the orders of the customers.
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Performance Requirements  1. Know about jade carving      Know about the physical properties of jade      Know about jade carving, including:
<ul> <li>Hollow carving</li> <li>Chain carving</li> <li>Making use of the natural colours of jade to carve out desirable patterns</li> <li>Know about the categorization of jade carving themes, including:         <ul> <li>Jade utensils</li> <li>Jade characters</li> <li>Jade flowers and birds</li> <li>Jade animals</li> </ul> </li> <li>Understand the functions, operation and safe operation of jade carving tools/equipment, including:         <ul> <li>Cutting equipment</li> <li>Jade cutting machine (slices)</li> <li>Small cutting machine (granules)</li> </ul> </li> </ul>

#### Functional Area - Production

- Horizontal axis jade carving machine
- Multi-function hand jade carving machine/grinding file
- Flexible shaft machine/grinding file for polishing motifs
- Know about the new technical knowledge related to jade carving, such as:
  - Ultrasonic jade carving machine
  - o CNC (computer numerical control) laser cutting machine
  - o CNC milling machine
- Know about the industrial safety of jade carving, such as the causes and prevention of silicosis

#### 2. Master jade carving techniques

- Master the use of jade carving tools/equipment
- Master the application of various grinding and polishing materials
- Master the jade carving procedures and techniques
  - o Jade assessment
    - Learning about the jade and evaluate its price
    - Assessing the features and flaws of the jade and determining how to remove/conceal the flaws before carving.
  - o Design
    - Theme design
    - Appearance design
    - Composition
    - Colour design
    - Excellent use of materials
    - Modifying at the right time
    - Recovering the waste
  - Polishing techniques
    - Rough design
    - Material cutting
    - Modifying the design
    - Working on the rough stone
      - Carving
      - Cutting
      - Hooking out
      - Scooping out
      - Engraving
      - Grinding the critical parts roughly
      - Grinding a large surface area
      - Deep grinding to enhance the finess
      - Drilling
    - Fine design
    - Fine processes
      - Scribing the fine part of designs/patterns
      - Tuking in
      - Removing
      - Excavating several layers inside and outside the jade
      - Rubbing down
      - Trimming off
  - Polishing techniques
    - Grinding for smoothness
    - Rubbing for shine
  - Post-processing

	<ul> <li>Cleaning</li> <li>Waxing or oiling</li> <li>Wiping</li> <li>Decoration processes</li> <li>Producing a base</li> <li>Giving the jade a matching box</li> <li>Embellishment</li> <li>Master how to create a unique style</li> <li>Professionalism</li> <li>Following the requirements of the organization, code of practice and safety guidelines, carve jade with the proper and safe use of various faceting/polishing tools and equipment with a professional attitude</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to use various jade carving tools and equipment safely to carve and polish jade materials according to the instructions of the organization or the orders of the customers, including motifs and ornaments; and</li> <li>Take into account the quality, texture, and optical and physical properties of stone materials to meet the requirements of the 3-D designs.</li> </ul>
Remark	This unit of competency is written with reference to the Higher Education Gems and Materials Processing Techniques Series Teaching Materials - Jade Carving Design and Processing (高等學校寶石及材料工藝學系列教材-玉雕造型設計與加工) by China University of Geosciences Press Co Ltd

Title	Implement worksite/factory management
Code	108957L4
Range	This unit of competency is applicable to worksite/factory managers of jewellery manufacturing organizations. Practitioners should be capable of making careful analysis and judgments. They should be able to apply professional knowledge of production management to effectively perform such duties independently in accordance with the relevant occupational safety and environmental protection ordinances.
Level	4
Credit	9
Competency	Performance Requirements  1. Know about production management and occupational safety in jewellery manufacturing worksites/factories  • Know about the management system of the organization  • Know about basic jewellery manufacturing/production techniques  • Know about production management of jewellery, such as:  • Production material management  • Quality control  • Production time management  • Production effectiveness  • Know about the requirements of the relevant occupational safety and environmental protection ordinances  • Know about the maintenance methods of the equipment in the factories  • Know how to use clamps  • Know about the application of semi-automated and fully automated manufacturing worksite equipment, such as radio frequency identification technology  • Understand the concept of systematic maintenance and its implementation methods, such as total productive maintenance
	<ul> <li>2. Manage worksites/factories</li> <li>Implement daily operational management in jewellery manufacturing worksites/factories</li> <li>Execute jewellery production plans, and determine the requirements of production volumes, costs, quality and delivery time, such as: <ul> <li>Master production schedule</li> <li>Material requirements planning</li> </ul> </li> <li>Settle non-routine problems arising in the departmental operation</li> <li>Design workflow and provide a safe working environment in accordance with the relevant ordinances</li> <li>Devise appropriate guidelines for the operation of manufacturing equipment and for handling chemical products and heat to avoid accidents</li> <li>Report and assess production performance, and make use of the relevant information for the arrangement of staff training</li> </ul> <li>3. Professionalism <ul> <li>Comply with the safety guidelines and codes of practice of the Occupational Safety and Health Ordinance and relevant environmental protection ordinances to implement worksite/factory management</li> </ul> </li>

Assessment Criteria	The integrated outcome requirement of this unit of competency is:     Able to employ professional knowledge of jewellery production management to manage various departments in worksites/factories in accordance with the relevant occupational safety and environmental protection ordinances to maintain production effectiveness.
Remark	

Title	Employ computerized rapid prototyping techniques in the jewellery industry
Code	108958L4
Range	This unit of competency is applicable to practitioners working in the computerized rapid prototyping or design department of jewellery manufacturing organizations. Practitioners should be capable of making careful analysis and judgments. They should be able to employ computerized rapid prototyping techniques 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 techniques in product development.
Level	4
Credit	9
Competency	Performance Requirements  1. Understand the processing methods in jewellery manufacturing  • Know about the jewellery manufacturing techniques  o Manual wax prototype carving o Manual silver prototyping o Casting o Mould trimming/goldsmithing o Gemstone setting o Grinding/electroplating o Electroforming  2. Employ computerized rapid prototyping techniques  • Master the advantages of employing computerized prototyping techniques o Meet the requirements of high precision products o Enhance the quality of casting pieces and improve the variation in the thickness of the cross section of the casting mould o Reduce the time needed for each manufacturing process • Co-ordinate the duties of production and development in each department o Integrate machine prototyping techniques and manual prototyping techniques o Meet the gemstone setting requirements of the stone-setting department Enhance the quality of casting pieces o Master the vulcanizing method and casting method of rapid prototyping o Communicate with the staff in the design department to tie in with the development of innovative design patterns  3. Professionalism • Following the requirements of the organization, code of practice and safety guidelines, carry out computerized jewellery rapid prototyping with a professional attitude
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to apply rapid prototyping techniques to enhance the quality and production effectiveness of jewellery products; and</li> <li>Analyze and assess the strengths and weaknesses of applying computerized rapid prototyping techniques in the jewellery industry, so as to co-ordinate the manufacturing</li> </ul>
	techniques in each department to complement the deficiencies in both machine prototyping and manual prototyping techniques.

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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
Assessment Criteria	Performance Requirements  1. Know about CAD support for diamond/gemstone faceting/polishing  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 GemCad Rough stone colour grading instrument Diamond/Gemstone proportion determination system Girdle identifier reading instrument Hearts and Arrows magnifier  2. Apply CAD in cutting and polishing faceted gemstones 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  3. Professionalism 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  The integrated outcome requirement of this unit of competency is: 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
Remark	the organization.
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Title	Formulate worksite/factory management strategies and staff training plans
Code	108960L5
Range	This unit of competency is applicable to worksite/factory managers of jewellery manufacturing organizations. Practitioners should be capable of making careful analysis and judgments. They should be able to master the manufacturing operation and operational management of jewellery worksites/factories to formulate worksite/factory management plans and staff training plans independently, so as to achieve better performance outcome and production effectiveness.
Level	5
Credit	9
Competency	Performance Requirements  1. Know about production plans and management  • Know about the operating principles and strategies of the organization  • Know about the short-, medium- and long-term development plans and directions of the organization  • Know about production management, such as:  • Production management, such as:  • Production ime management  • Quality control  • Production effectiveness  • Know about the requirements of the relevant occupational safety and environmental protection ordinances  • Know about the maintenance methods of the tools, instruments, equipment and machinery in the worksites/factories  • Know about the application of semi-automated and fully automated manufacturing worksite equipment  • Understand the concept of systematic maintenance and its implementation methods, such as:  • Total productive maintenance  • Know about the financial management of worksites/factories  • Master the human resource management of worksites/factories  • Master the human resource management of worksites/factories  • Human resource planning  • Compensation policy  • Employee performance evaluation methods and training  2. Formulate worksite/factory departmental management plans and staff training plans  • Master the daily operational management in the departments of jewellery worksites/factories  • Design workflow, formulate working guidelines and provide a safe working environment according to the relevant legislation, so as to give clear instructions for staff to follow and provide appropriate staff training  • Master the production plans, and determine the requirements of production volumes, costs, quality and delivery time, such as:  • Master production schedule  • Material requirements planning  • Establish effective inter-departmental communication and co-ordination mechanisms to ensure the costs, quality and delivery time can meet the requirements of the organization  • Utilize departmental resources flexibly to ensure smooth operation in each department

	<ul> <li>Formulate staff training plans in accordance with the development of the department, including:         <ul> <li>On-the-job training methods and theory</li> <li>Adult education and training theory</li> </ul> </li> </ul>
	3. Professionalism
	<ul> <li>Prevent any abuse of power or corrupt practices through worksite/factory management</li> <li>Following the requirements of the organization, code of practice and safety guidelines, carry out worksite/factory management with a professional attitude</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to master the manufacturing operation and operational management of the worksites/factories to formulate worksite/factory management strategies, so as to maintain effective production outcome; and</li> <li>Formulate staff training plans according to the development of the department, and lead the subordinate staff to give full play of their strengths to achieve better performance outcome.</li> </ul>
Remark	

Title	Assess comprehensive production management plans and performance requirements
Code	108961L5
Range	This unit of competency is applicable to worksite/factory managers of jewellery manufacturing organizations. Practitioners should be capable of making careful analysis and judgments. They should be able to master the information and data about the organization's production management, inventory control and manufacturing operation, and to review, analyze, assess and integrate such information, so as to effectively examine the factors affecting production efficiency and to assess the comprehensive production management plans and performance requirements, as well as to conduct regular evaluations.
Level	5
Credit	9
Competency	Performance Requirements  1. Understand the concept of production management of jewellery products  • Know about the production plans and production cost analysis of jewellery products, such as forecast production capacity  • Know about the organization of the production work so that the production system can meet the requirements of the established production plans  • Know about the daily operations and sales plans of the organization  • Understand the inventory control of jewellery products, such as:  • Economic order quantity (EOQ)  • ABC classification method  • Master the control of manufacturing of jewellery products, such as:  • Single-piece sequencing  • Single-piece sequencing  • Single-piece processing sequencing  • Master the material requirements and manufacturing resources, including:  • Material requirements planning (MRP), such as:  • Material requirements planning (MRPII), such as:  • Material consumption reduction  • Production cost  • Production cost  • Production cycle  • Improving the competitiveness and production efficiency of the organization  2. Assess the comprehensive production management plans and performance requirements for jewellery products  • Effectively assess the comprehensive production management plans for jewellery products, including:  • Effectively assess the comprehensive production management plans for jewellery products, including:  • Effectiveness  • Inventory management plans and performance requirements, including:  • Evaluate the management plans and performance requirements, including:  • Effectiveness  • Quality  • Cost

	<ul> <li>Delivery date</li> <li>Production/product safety</li> <li>Rectify the management plans to meet the development needs of the enterprise</li> </ul>
	3. Professionalism
	<ul> <li>Effectively examine the factors affecting production efficiency and assess the comprehensive production management plans and performance requirements to enhance the effectiveness of jewellery production of the organization, and conduct evaluations regularly</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to master and analyze the information on the organization's production management, inventory control and manufacturing operation; and</li> <li>Evaluate and rectify the relevant plans and requirements regularly to meet the development needs of the enterprise.</li> </ul>
Remark	

Title	Formulate production and performance requirements for jewellery products
Code	108962L6
Range	This unit of competency is applicable to practitioners responsible for formulating policies in jewellery manufacturing organizations. Practitioners should be capable of making careful analysis and judgments. They should be able to evaluate and analyze the data and information provided by the manufacturing department to examine the factors affecting production efficiency, so as to effectively formulate production and performance requirements for jewellery products.
Level	6
Credit	9
Competency	Performance Requirements  1. Know about the concept of production efficiency in jewellery worksites  • Know about production management  • Apply product management techniques to develop plans for producing a single or a series of products  • Apply product management techniques to develop plans for transforming resources (both tangible and intangible) to products  • Know about the reasons and factors affecting production efficiency in jewellery worksites  • Co-ordination between departments  • Allocation of human resources  • On-time supply from the procuring department  • The request of the sales department for information provided by customers  • The marketing strategies and performance of the organization  • Know about the directions for improving/enhancing production efficiency, including:  • Workshop (production line)  • Manufacturing department  • The entire factory  2. Formulate performance requirements for the jewellery manufacturing department  • Formulate production and performance requirements for the manufacturing department  • Formulate production and performance requirements for different positions  • Establish monitoring mechanisms  • Compare the current performance requirements with the predetermined performance requirements  • Develop plans to improve or enhance performance requirements  • Prevent any abuse of power or corrupt practices through the formulation and management of production requirements for different positions  • Ensure the jewellery production requirements formulated can meet the development of the organization, and improve the production efficiency and economic benefits of the organization
Assessment Criteria	The integrated outcome requirements of this unit of competency are:  • Able to evaluate and analyze the data and information provided by the manufacturing department to examine the factors affecting production efficiency, so as to effectively formulate production requirements for jewellery products; and

	Effectively formulate production performance requirements and improvement plans for jewellery products.
Remark	

Title	Formulate plans to improve jewellery manufacturing techniques and technologies
Code	108963L6
Range	This unit of competency is applicable to senior management and decision-making personnel in jewellery manufacturing organizations. Practitioners should be capable of making careful analysis and judgments. They should be able to master jewellery manufacturing techniques and technologies to review, assess and analyze the current jewellery manufacturing techniques, so as to effectively formulate plans to improve jewellery manufacturing techniques and technologies.
Level	6
Credit	9
Competency	Performance Requirements  1. Know about jewellery manufacturing techniques and technologies  • Understand and identify problems of manufacturing techniques encountered by the industry  • Know about the industry's new technologies for improving production quality  • Know about the impact of new technologies/manufacturing techniques on improving jewellery quality and on the organization  • Apply new technologies/manufacturing techniques of other industries to improve the production quality in jewellery manufacturing  • Integrate the specific manufacturing techniques of jewellery and master the information on the latest technological development to develop new knowledge in jewellery manufacturing techniques and technologies  • Identify ways to improve jewellery manufacturing techniques and technologies  • Identify ways to improve manufacturing techniques, such as:  ○ Compare different kinds of jewellery manufacturing techniques  ○ Assess the feasibility of implementing different kinds of jewellery manufacturing techniques in the organization  • Introduce advanced/automated machinery and equipment, such as:  ○ Collect information on advanced/automated machinery and equipment on throduce advanced/automated machinery and equipment to enhance production efficiency and quality  • Assess and establish the technological level of production of the factory, such as:  ○ Assess jewellery manufacturing technologies in the Mainland and overseas  ○ Introduce advanced technologies from overseas  • Develop an overall roadmap on the development of the jewellery manufacturing technologies and techniques of the organization to enhance the competitiveness of the organization  • Participate in the industry's technological seminars and activities regularly  • Take the improvement of jewellery manufacturing techniques as a project subject to continual research and regular reviews  ○ Design and apply suitable research methods  ○ Effectively allocate and utilize research resources

	Improve the production efficiency and product quality of jewellery manufacturing by enhancing the jewellery manufacturing techniques
Assessment Criteria	The integrated outcome requirement of this unit of competency is:
	<ul> <li>Able to master jewellery manufacturing techniques and technologies to review, assess and analyze the current jewellery manufacturing techniques; to assess the feasibility of implementing different kinds of jewellery manufacturing techniques in the organization, so as to effectively formulate plans to improve jewellery manufacturing techniques and technologies to meet the organization's development direction.</li> </ul>
Remark	

Title	Apply basic technological knowledge related to sales
Code	108964L2
Range	This unit of competency is applicable to practitioners working in the jewellery industry with job duties related to sales (including jewellery retail outlets and wholesale/export), marketing, operation management and technology support. Under clear instruction, practitioners should be capable of using information technology (IT) equipment/systems and data entry systems properly at the workplaces, and performing sales duties in accordance with the established work procedures of the organization and the guidelines of the instrument manufacturers.
Level	2
Credit	3
Competency	Performance Requirements  1. Know about the IT equipment/systems related to the retail industry and export-related duties  Know about the IT equipment/systems used by the organization, including their functions, features, support, proper operation and routine maintenance methods  Know about the policies of the organization regarding IT equipment/systems  Know about the importance of using IT equipment/systems properly, such as:  Accurate inventory records  Proper outlet and system security  Avoid human errors  Know about the reasonable collection and handling methods of personal privacy under Hong Kong laws  Know about the functions, support, features and operation of the IT equipment/systems commonly used in the retail industry and export-related work, such as:  Cash register  Barcode scanner/Card reader  Radio frequency identification system  Sales and inventory system of the store (such as point of sale)  Fineness testing instrument for the metal on the jewellery  Weight measuring instrument for diamonds and gemstones  Professional digital camera for shooting jewellery  Know about the Occupational Safety and Health Ordinance and special requirements in relation to the use of special function IT equipment/systems  2. Operate IT equipment/systems in retail outlets  Use the relevant IT equipment/systems properly in daily work to finish the assigned duties accurately and complete the transaction quickly and securely according to the established policies of the organization and the guidelines of the instrument manufacturers, such as:  Using various hardware, including barcode scanner/card reader and radio frequency identification system  Using intranet and data transfer system  Data backup  Data backup  Data collection  Using communication applications on smartphones, including WhatsApp, WeChat, etc.  Using payment systems, including Alipay, PayPal, VISA, MasterCard, etc.

	<ul> <li>working guidelines; when serious problems occur, report to the superior immediately and seek technical support</li> <li>Provide appropriate assistance to the professional technicians during the maintenance of IT equipment/systems</li> <li>Strictly adhere to the established procedures and guidelines of the organization, and use the IT equipment/systems properly</li> <li>Observe professional ethics when collecting customer data, and carry out reasonable and legitimate personal data collection</li> <li>When dealing with data, ensure that employees use the company's operational data properly and prevent any deletion and modification of information, or any misconduct such as employee/outsider theft, and know how to store the data properly</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to use various IT equipment/systems properly in accordance with the established procedures of the organization and the guidelines of the instrument manufacturers; and</li> <li>Carry out simple IT equipment/system repair work according to the working guidelines, and know how to report to the superior immediately and seek technical support from professionals when serious problems occur.</li> </ul>
Remark	

Title	Apply basic knowledge of sales strategy
Code	108965L2
Range	This unit of competency is applicable to practitioners working in the jewellery industry with job duties related to sales (including jewellery retail outlets and wholesale/export), marketing, operation management, product development and technology support. In the daily working environment, practitioners should have basic knowledge of sales strategy and be capable of applying such knowledge to assist in the sales and marketing of jewellery under instruction, so as to achieve sales targets.
Level	2
Credit	3
Competency	Performance Requirements  1. Understand the basic knowledge of sales strategy  • Knowledge of sales strategy  • Definition of strategy: short-term and long-term thinking, preparing for the strategy, and developing the future  • Analysis of the status of the organization: knowing about the current status and customers of the organization  • Analysis of competitors: evaluating the skills and capabilities of the staff, and summarizing the status analysis  • Strategy planning: segmenting the processes, defining the goals, determining the competitive advantages, selecting the strategic priorities, and integrating the strategies  • Strategy execution: prioritizing the adjustment of strategy, planning the adjustment of strategy, assessing the risks, reviewing the operational objectives, and monitoring the performance  • Changes in sales strategy  • The formation of competitive marketing strategy: factors determining the market segmentation, and analysis of the competition patterns  • Market demand and market segmentation: estimating the market demand, demand types and marketing, market segments and niche markets, and development positioning  • Product strategy: classification of products, components of products, content and purposes of new product development, process of new product development, product life cycle, and commodity portfolio management and strategy  • Pricing strategy: price structure, determining factors of retail prices, price competitiveness and non-price competitiveness, pricing strategy, price management methods, discount and rebate systems, strategy selection for price reduction, and profit and loss estimation  • Channel strategy: nature and functions of marketing channels, types and characteristics of marketing channels, design factors of the channels, diversity of the channels, and future trend of retail channels  • Analyze consumer behaviours  • Factors affecting consumer behaviours  • Types of purchase decision behaviours  • Stages of the purchase decision process

	<ul> <li>Types of customers and the ways to deal with them</li> <li>Customer purchase patterns and response methods</li> <li>SWOT (strengths, weaknesses, opportunities, and threats) analysis for analyzing the strategy planning</li> <li>The significance of SWOT analysis</li> <li>The principles of SWOT analysis</li> <li>The application of SWOT analysis</li> </ul>
	3. Professionalism
	<ul> <li>Understand the basic knowledge of sales strategy and the considerations for the use of the sales strategy by the marketing department of the organization</li> <li>Under supervision, apply the basic knowledge of sales strategy to assist in the sales and marketing of jewellery to achieve the sales targets</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to take into account the basic considerations of the sales strategy and understand the analysis methods for the use of the sales strategy by the marketing department of the enterprise in accordance with the business environment and established profit requirements of the company.</li> </ul>
Remark	

Title	Apply basic knowledge of management information systems
Code	108966L2
Range	This unit of competency is applicable to practitioners working in the jewellery industry with job duties related to operation management, product development, production, technical support, quality management, logistics and procurement. In the daily working environment, practitioners should have basic knowledge of management information systems and the operation of information system software, so as to obtain the required data under instruction to assist the organization to predict the future and make decisions.
Level	2
Credit	3
Competency	Performance Requirements  1. Understand the knowledge related to management information systems.  • The software/hardware related to management information systems, including:  • Modules related to management information systems, such as e-commerce and market development, financial statements and operation statements  • Point-of-sale systems  • Mobile apps  • Technological development trends of information management, such as the Internet of Things and radio-frequency identification (RFID) systems  2. Understand the technology related to management information systems  • Understand the application of management information systems, such as:  • Financial statements and analysis  • Operation statements and analysis  • Decommerce  • Marketing trends and future development  • Market development trends of e-commerce and online stores
Assessment	<ul> <li>3. Professionalism</li> <li>Strictly adhere to the established procedures and guidelines of the organization, and use the IT equipment/systems properly</li> <li>Observe professional ethics when collecting and using customer data, and carry out reasonable and legitimate personal data collection</li> <li>The integrated outcome requirements of this unit of competency are:</li> </ul>
Criteria	<ul> <li>Able to correctly understand the significance and differences of various technical equipment of management information systems, software and systems;</li> <li>Have a preliminary understanding about the relationship of IT equipment, systems and software with work and company development according to the job requirements; and</li> <li>Keep up to date with the knowledge and application of the latest technology.</li> </ul>
Remark	

Title	Apply basic knowledge of customer relationship management
Code	108967L2
Range	This unit of competency is applicable to practitioners responsible for customer relationship management in the jewellery industry. In the daily working environment, practitioners should have basic knowledge of the management of relationships with customers, so as to understand the purchasing needs of customers under instruction. They should also be able to provide suitable information to assist customers in selecting the right products and introduce new products/services of the organization to the customers. The above arrangements should be systematized to meet the marketing purposes of the organization.
Level	2
Credit	3
Competency	Performance Requirements  1. Understand the basic knowledge of customer relationship management  • Know about the benefits of customer relationship management  • Store and manage customer/member details in an organized manner  • Strengthen the communication with customers and respond to customers' requests promptly  • Effectively study the purchase cycles and preferences of customers to organize targeted campaigns  • Management can use market analysis to determine the marketing strategies to meet market demands  • Significantly improve customer service levels and satisfaction  • Understand the basic knowledge of customer relationship management  • Key functions of customer relationship management, including:  • Customer management  • Member management  • Customer relationship management mails  • Email templates  • Email records  • Customer enquiries  • Customer follow-up action lists  • Sales records  • Contact records  • Contact records  • Customer category management  • Bonus point calculation  • Gift records  • Preferences analysis  • Figure out the relationship between customer data and customer behaviours  • Conduct statistical cross analysis  • Figure out the relationship between customer data and customer data, such as the Personal Data (Privacy) Ordinance  • Know about various customer relationship management, such as:  • Data storage  • Data storage  • Data storage

	<ul> <li>Computer telephony integration system</li> <li>The Internet</li> <li>Apply the customer relationship management system</li> </ul>
	Understand the basic knowledge of the management of relationships with customers, and, under instruction, use the relevant customer relationship management software adopted by the organization to manage customer relationships in accordance with the established procedures and code of practice of the organization.
	3. Professionalism
	<ul> <li>Communicate with customers in a professional manner to prevent any deceptive conduct</li> <li>Keep up with the latest legislation on information, privacy and information security to ensure the provided information does not violate the relevant privacy ordinances</li> <li>Provide customers with useful information about privacy rights and information security so as to help them prevent their identity from being stolen by the others</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to use the customer relationship management system to build relationships with customers, understand their needs and help them choose the right products; and</li> <li>Collect customer information in accordance with the policies and procedures of the organization.</li> </ul>
Remark	

Title	Apply sales technology
Code	108968L3
Range	This unit of competency is applicable to practitioners working in the jewellery industry with job duties related to sales (including jewellery retail outlets and wholesale/export), marketing, operation management and technology support. Practitioners should be capable of making careful analysis and judgments, and using the information technology (IT) equipment/systems and data entry systems properly at the workplaces to perform sales duties in accordance with the established work procedures of the organization and guidelines of the instrument manufacturers, so as to enhance the performance of the outlets.
Level	3
Credit	3
Competency	Performance Requirements  1. Know about IT equipment/systems related to the sales/marketing of jewellery  • Know about the use of IT equipment/systems in marketing expansion, such as:  ○ Point-of-sale information  ○ Application of radio frequency identification system in sales  ○ Augmented reality functions  ○ Application of smartphone software  ○ Search engine marketing, such as:  ■ Search keyword advertising  ■ Marketing by search optimization  • Know about retail technology, such as:  ○ Differences between traditional marketing and online marketing  ○ E-commerce business models  • Know about the use of cloud business services and e-commerce in conjunction with cloud computing systems  2. Use IT equipment/systems related to the sales/marketing of jewellery to enhance the sales
	<ul> <li>Master the inventory and sales of goods</li> <li>Provide customers with timely product information</li> <li>Analyze sales data to develop the steps of the sales plans</li> <li>Analyze the market forecast</li> <li>3. Professionalism</li> <li>Strictly adhere to the established procedures and guidelines of the organization, and use the IT equipment/systems properly</li> <li>Observe professional ethics when collecting customer data, and carry out reasonable and legitimate personal data collection</li> <li>When dealing with data, ensure that employees use the company's operational data properly and prevent any deletion and modification of information, or any misconduct such as employee/outsider theft, and know how to store the data properly</li> </ul>
Assessment Criteria	The integrated outcome requirements of this unit of competency are:  • Able to use various IT equipment/systems and software properly in accordance with the established procedures of the organization and the guidelines of the instrument manufacturers;

	<ul> <li>Carry out simple repair work on IT equipment/systems and software according to the working guidelines, and know how to report to the superior immediately and seek technical support from professionals when serious problems occur; and</li> <li>Keep up to date with the knowledge and application of the latest technology, such as payment methods, online communication and information security.</li> </ul>
Remark	

Title	Apply sales strategies
Code	108969L3
Range	This unit of competency is applicable to practitioners working in the jewellery industry with job duties related to sales (including jewellery retail outlets and wholesale/export), marketing, operation management, product development and technology support. Practitioners should be capable of making careful analysis and judgments, and using sales strategies to determine the target market based on factors such as external market development opportunities and internal human resources and capital resources of the organization, so as to develop the best sales strategies, and implement and control them effectively to achieve sales targets.
Level	3
Credit	3
Competency	Performance Requirements  1. Know about the scope of application of the sales strategies  • Concepts of jewellery marketing  ○ Characteristics of marketing ○ Basic conditions of marketing ○ Relationship with customers • Looking for customers • Determining customers • Determining customers • Guided shopping leading to transactions • Know about the characteristics and current status of the jewellery market from statistical reports • Look for methods to improve the company's operating conditions • Know how to use strategies to improve the company's operating conditions • Marketing strategies of e-commerce ○ The online market ○ The usage of online marketing strategies ○ The strategic interaction of online marketing strategies • The impact of e-commerce on traditional businesses ○ Know about the traditional jewellery marketing methods ○ Know about the ways to complement traditional jewellery marketing methods with e-commerce  2. Apply sales strategies  • Apply SWOT (strengths, weaknesses, opportunities and threats) analysis on the strategies, including its meaning, principles and application to solve the following: ○ Planning of small and medium-sized retail businesses  • Develop the policies and strategies of the business operation • Develop methods for promoting the business operation • Planned long-term operation  • Sustainable operation of small and medium-sized enterprises • The difficulty of doing business in the retail industry • Ways to sterngthen the store management capability • Ways to sterngthen the store management capability • Ways to use sales strategies to increase the long-term benefits • Survey on the lifestyles of netizens

	<ul> <li>Commodity policy in use</li> <li>Ways to use sales strategies to increase sales channels</li> </ul>
	3. Professionalism
	<ul> <li>Know about the application methods of sales strategies and the considerations of the marketing department of the organization for applying the sales strategies</li> <li>Know about the use of sales strategies to improve the long-term benefits and increase sales channels of small and medium-sized retail businesses</li> </ul>
Assessment Criteria	Able to use sales strategies and analysis to improve the long-term benefits and increase sales channels in the marketing department of the enterprise in accordance with the business environment and the established profit requirements of the company, so as to achieve the ultimate profit targets through effective implementation and control.
Remark	

Title	Use the customer relationship management system
Code	108970L3
Range	This unit of competency is applicable to practitioners responsible for customer relationship management in the jewellery industry. Practitioners should have basic understanding of customer relationship management and be capable of mastering the techniques of using the relevant system to have effective interaction with customers independently in accordance with the established procedures and code of practice of the organization, so as to enhance communication and respond to customer requests promptly, with the aim of improving the customer service level and customer satisfaction to achieve the marketing purposes of the company.
Level	3
Credit	3
Competency	Performance Requirements  1. Know about the customer relationship management system  • Know about the categories of functions of the customer relationship management system, including:  • Operational  • Marketing automation  • Customer service automation  • Customer service automation  • Online analysis tool  • Reporting system  • Collaborative  • E-mail management  • Online customer service  • Telephone customer service  • Understand the areas of application of the customer relationship management system, including:  • Marketing  • Sales  • Service  • Know about the ordinances related to information security and privacy  2. Use the customer relationship management system  • Master the use of the customer relationship management system and manage customer relationships independently using the relevant system in accordance with the established procedures and code of practice of the organization, including:  • Establishe relationships with new customers and maintain relationships with existing customers  • Communicate with various departments such as sales, marketing, promotion, planning and human resources  • Optimize all business segments to reduce customer loss and company costs in every segment  • Collect customer information for cross-selling  • Analyze marketing data and provide customer distribution data  • Improve control capabilities, such as:

	<ul> <li>Real-time update of order status, and reminder for payment and abnormal invoice tracking</li> <li>Product review tracking to improve optimization capability</li> <li>Know about the security measures of the customer relationship management system, including:         <ul> <li>Access rights setting</li> <li>Automatic data backup</li> <li>Security control for access by remote branches</li> </ul> </li> </ul>
	3. Professionalism
	<ul> <li>Communicate with customers in a professional manner to prevent any deceptive conduct</li> <li>Keep up with the legislation on privacy and information security to ensure the provided information does not violate the relevant privacy ordinances</li> <li>Provide customers with useful information about privacy rights and information security so as to help them prevent their identity from being stolen by the others</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to master the use of the customer relationship management system to have effective interaction with customers independently, so as to enhance communication and respond to customer requests promptly, with the aim of improving the customer service level and customer satisfaction to achieve the marketing purposes of the company.</li> </ul>
Remark	

Title	Know about computer technologies and supporting techniques for jewellery
Code	108971L3
Range	This unit of competency is applicable to practitioners working in the research and development department of jewellery organizations. Practitioners should be capable of making careful analysis and judgments. They should be able to understand various kinds of computer technologies and supporting techniques for jewellery, so as to obtain information on the industry's latest computer technologies for analysis and application purposes, and provide supporting services to industry-related computer technologies or software.
Level	3
Credit	6
Competency	Performance Requirements  1. Know about computer technologies for jewellery  • Know about the commonly used computer systems in the jewellery industry, including:  • Computer-aided industrial design (CAID)  • Computer-aided design (CAD)  • Computer-aided manufacturing (CAM)  • E-commerce  • Know about the development trend of computer technologies for jewellery, such as:  • E-marketing  • Web-enabled 3-D interactive marketing and commerce system  • 3-D scanning system and reverse engineering  • Understand the use of 3-D printing technology  • Know about the uses of display effect technologies, such as:  • Virtual reality  • Augmented reality  • Mixed reality  • Mixed reality  • Know about the latest functions in drawing and rendering effects of 3-D jewellery design software, such as:  • JewelCAD, JewelCAD Pro  • Rhino or Rhnio3D, Rhinoceros, RhinoGold  • Matrix  • 3Design  • Solidworks  • Unigraphics NX  • Pro/Engineer or Pro E  2. Apply computer technologies and supporting techniques for jewellery  • Master and apply the commonly used computer systems and software as well as computer technologies and supporting techniques in the jewellery industry
	Avoid plagiarism when collecting information on the industry's latest computer technologies to prevent individuals and the organization from falling into the trap of infringement of intellectual property rights
Assessment Criteria	The integrated outcome requirements of this unit of competency are:

	<ul> <li>Able to understand the industry-related computer systems and their relationships with corporate/organizational operation; and</li> <li>Obtain information on the industry's latest computer technologies, so as to provide supporting services to various kinds of computer techniques or software in the jewellery industry.</li> </ul>
Remark	

Title	Know about the technical support for jewellery manufacturing equipment
Code	108972L3
Range	This unit of competency is applicable to practitioners working in the production department of jewellery manufacturing organizations. Practitioners should be capable of making careful analysis and judgments. They should be able to master the structure and operation of jewellery manufacturing equipment, and independently conduct maintenance for general equipment as well as contact suppliers to provide further technical support for the manufacturing equipment.
Level	3
Credit	3
Competency	Performance Requirements  1. Know about the structure and operation of jewellery manufacturing equipment
	Know about the structure and operation of commonly used jewellery manufacturing equipment, such as those used in die-casting, mould trimming, stone-setting and electroplating, as well as the relevant machinery, parts and tools  Know about the design and operation of clamps and accessories  Know about the structure and operation of relevant electronic manufacturing equipment, parts and tools, such as:  Computerized rapid prototyping machine Computerized faceting machine Computerized faceting machine High frequency casting machine Mnow about the application of electronic manufacturing equipment and relevant computer-aided software, such as: The Internet of Things Radio frequency identification system Big data Artificial intelligence technology Robotic arm Know about the maintenance and repair procedures for the manufacturing equipment in the jewellery factory and the relevant technology Know about the after-sales support services provided by the manufacturers of the various kinds of manufacturing equipment  Provide support for the jewellery manufacturing equipment  Master the differences between traditional jewellery manufacturing equipment and electronic manufacturing equipment  Comparison of pros and cons Application and effect Development and improvement Photography and testing the equipment Fill in the equipment maintenance record Maintain contact with every operator of the manufacturing equipment for providing technical support at all times  Professionalism

	<ul> <li>Ensure that the content, data and information provided are accurate</li> <li>Take into account the overall interests of the organization, manufacturers and business partners when providing support for the jewellery manufacturing equipment</li> </ul>
Assessment Criteria	Able to understand the structure and operation of the manufacturing equipment in the jewellery production department to independently perform general maintenance of the equipment as well as contact suppliers to provide further technical support for the manufacturing equipment.
Remark	

Title	Master the technological development of jewellery materials and production
Code	108973L4
Range	This unit of competency is applicable to practitioners working in the production department of jewellery manufacturing organizations. Practitioners should be capable of making careful analysis and judgments. They should be able to master the relation between the use of jewellery materials and production technology. They should also be able to select and apply appropriate technology to jewellery product development and production after careful analysis.
Level	4
Credit	6
Competency	Performance Requirements  1. Know about the technology related to jewellery production  • Know about the channels to obtain, analyze and process technological information related to jewellery  • Master the development trend of the jewellery market  • Know about the materials, equipment and standards commonly used in jewellery production, such as:  • Material properties  • Surface treatment  • Electroplating equipment  • Safety standards of the finished products  2. Master the technological development of jewellery materials and production  • Select and apply appropriate technology in each product development process of jewellery according to the development trend of relevant technology, the conditions of the organization and customers' demands:  • Introduce newly developed and improved materials to improve or develop new products  • Know about the quality and uses of the newly developed materials  • Test the reliability of the newly developed materials  • Test the reliability of the newly developed materials  • Implement improved or newly developed production technology to improve product quality and enhance cost effectiveness  • Select appropriate investigation and survey technology to obtain accurate market information, so as to understand user needs (including the psychological index which has gained weight in recent years)  • Master the acceptance of the market on the jewellery or accessories made with the newly developed materials  • Appearance  • Health and safety (skin allergies/irritation)  • Stability  • Master the supplementary technology of product research and development Introduce appropriate supplementary technology according to the needs of the organization, such as computer-aided design, analysis and tests, to shorten the
	product development cycle and improve product quality  3. Professionalism
	Ensure the jewellery materials/finished products/technologies developed meet international safety standards

	Avoid plagiarism when developing products to prevent individuals and the organization from falling into the trap of infringement of intellectual property rights
Assessment Criteria	The integrated outcome requirement of this unit of competency is:
	<ul> <li>Able to master the technological development relevant to product development of jewellery, and select new technology to meet organizational development after careful analysis, so as to enhance the effectiveness in performing the duty of jewellery product development and manufacturing.</li> </ul>
Remark	

Title	Apply the supporting techniques of computer technology in the jewellery industry
Code	108974L4
Range	This unit of competency is applicable to practitioners working in the relevant department of the jewellery industry. Practitioners should be capable of making careful analysis and judgments. They should be able to master the information on the latest supporting techniques of computer technology in the jewellery industry, and apply the techniques suitable to be employed and developed in the organization after analysis, so as to achieve effective management and production to enhance economic efficiency.
Level	4
Credit	9
Competency	Performance Requirements  1. Know about the commonly used computer systems and software in the jewellery industry  • Know about the characteristics, strengths and weaknesses of the commonly used computer systems in the jewellery industry, including:  • Computer-aided industrial design (CAID)  • Computer-aided design (CAD)  • Computer-aided manufacturing (CAM)  • E-commerce  • Master the latest computer systems, software and supporting techniques in the jewellery industry  • Understand the relation between technological support and corporate operation, such as:  • Compatibility of equipment  • Cost effectiveness  • Meeting with the production workflow  2. Apply the supporting techniques of computer technology in the jewellery industry  • Apply the supporting techniques of computer technology to support the operation and production in the jewellery industry, so as to enhance economic efficiency, such as:  • Establish databases and build parts libraries  • Obtain data and information through technological information to facilitate job duties such as design, product development, production management, quality management, operational management and marketing  • Monitor the performance of computer systems at every level
	Avoid plagiarism when collecting information on the latest computer technology in the industry to prevent individuals and the organization from falling into the trap of infringement of intellectual property rights
Assessment Criteria	The integrated outcome requirements of this unit of competency are:  • Able to master the supporting techniques of computer technology in the jewellery industry, and apply the techniques suitable to be employed and developed in the organization after analysis, so as to provide effective technological support to the operation of the organization; and  • Effectively monitor the operation of computer systems at every level.
Remark	

Title	Apply supporting techniques to jewellery production machinery
Code	108975L4
Range	This unit of competency is applicable to practitioners working in the production department of jewellery manufacturing organizations. Practitioners should be capable of making careful analysis and judgments. They should be able to master various kinds of supporting techniques to jewellery production machinery to meet the requirements of each department, and use different information technology software and machinery maintenance techniques to provide support for jewellery production machinery after analysis.
Level	4
Credit	6
Competency	Performance Requirements  1. Know about the supporting techniques for jewellery production machinery
	<ul> <li>Know about the supporting techniques for the commonly used production machinery/electronic production machinery in the jewellery industry</li> <li>Know about electronic production machinery and relevant computer-aided software</li> <li>Know about the development of new disciplines related to production in the jewellery industry, such as artificial intelligence technology and robotic arm</li> <li>Know about the workflow of different departments of jewellery worksites/factories</li> <li>Know about the safety knowledge of electrical engineering/machinery</li> </ul>
	2. Apply supporting techniques to jewellery production machinery
	<ul> <li>Inspect general jewellery production machinery and determine the necessary supporting techniques</li> <li>Master the information on various kinds of after-sales supporting techniques/services provided by the manufacturers of production machinery</li> <li>Make use of information technology software to collect         <ul> <li>Information on the new maintenance service providers</li> <li>Information on the new machinery, equipment, technology and technological development, and the suppliers/manufacturers</li> </ul> </li> <li>Develop repair, inspection and maintenance records</li> <li>Control expenditure on maintenance</li> </ul>
	3. Professionalism
	<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, provide support for jewellery production machinery with a professional attitude</li> </ul>
Assessment Criteria	The integrated outcome requirements of this unit of competency are:
	<ul> <li>Able to know about the operation of the production machinery in various departments of jewellery worksites/factories, and use various technological software and maintenance techniques to meet the requirements of the departments; and</li> <li>Provide support for jewellery production machinery in a safe manner according to the occupational safety guidelines.</li> </ul>
Remark	

Title	Use the management information system
Code	108976L4
Range	This unit of competency is applicable to practitioners working in the relevant department of jewellery manufacturing organizations. Practitioners should be capable of making careful analysis and judgments. They should be able to make use of the software and techniques involved in the management information system independently to obtain the required data for analysis in accordance with the established goals of the organization and the environmental needs, so as to assist the organization in making decisions and ultimately achieving the development goals.
Level	4
Credit	3
Competency	Performance Requirements  1. Understand the knowledge and legislation involved in the management information system  • Understand the application of the management information system and the related hardware and software at work, such as:  • Modules related to the management information system, such as e-commerce and market development, financial statements, and operation statements  • Point-of-sale systems  • Mobile apps, such as customer relationship management (CRM) and enterprise resource planning (ERP)  • Technology development for information management, such as the Internet of Things and radio frequency identification system  • Process control, such as data theft prevention, computer virus prevention and maintaining traceability  • Know about the concepts of big data  • Know about the relationship between the business of the organization and computerization  • Know about the relevant legislation on online commercial activities  2. Apply the techniques involved in the management information system  • Apply the techniques involved in the management information system  • Analysis of e-commerce and market development, data analysis and data mining  • Analysis of the strength of the company by the financial statements, such as:  • Financial statements  • Profit and loss statements  • Profit and loss statements  • Balance sheet  • Basic requirements for financial analysis  • Analysis of the operation statements, such as:  • Business goal management  • Sales information analysis  • Process management reports  • Business indicator reports  • Quarterly calculation of leave application by the human resources department  3. Professionalism
	3. Professionalism

	Strictly comply with the legal regulations and restrictions on the relevant online commercial activities
Assessment Criteria	The integrated outcome requirements of this unit of competency are:
	<ul> <li>Able to use the various equipment, software and systems of the management information system technology properly; and</li> <li>Know how to use information technology equipment, systems and software, and understand the relationship between work and organizational development in accordance with the job requirements</li> </ul>
Remark	

Title	Implement technological research plans for jewellery products
Code	108977L5
Range	This unit of competency is applicable to practitioners responsible for technological research and development of jewellery in the jewellery industry. Practitioners should be capable of making careful analysis and judgments. They should be able to master, analyze, assess and integrate the available information on the technological research plans, so as to effectively implement such plans.
Level	5
Credit	6
Competency	Performance Requirements  1. Know about the technological research plans for jewellery products  Understand the concepts of technological research for jewellery products Understand the concepts of technological research for jewellery products Understand the technological research projects and the workflow  Scheduling Manpower and material allocation Communication and co-ordination with relevant departments Systematic review of the plans  Master the information on the technological research projects of jewellery products, for example, collecting and analyzing the properties, uses and manufacturing processes of the commonly used materials for the design of the jewellery products in the factory to conduct research and development of materials for making jewellery  2. Implement the technological research plans for jewellery products  Implement the technological research projects for jewellery products according to the established objectives Understand the objectives and expected outcome of the technological research projects Formulate and implement research methods for the technological research projects Estimate and control the utilization of resources and submit reports, including manpower, equipment, capital, etc. Prepare the schedule, and follow and control the progress of joint projects on technological research Establish close contact with the relevant internal departments/external organizations for communication and co-ordination Systematically review the progress and effectiveness of the technological
	research plans, and make suggestions for improvement  3. Professionalism  • Avoid plagiarism when implementing technological research plans for jewellery products to prevent individuals and the organization from falling into the trap of infringement of intellectual property rights
Assessment Criteria	The integrated outcome requirements of this unit of competency are:

	<ul> <li>Able to master, analyze, assess and integrate the available information on the technological research plans for jewellery products, so as to effectively implement such plans to meet the development of the organization; and</li> <li>Review the established technological research plans for jewellery products of the organization and make suggestions for improvement.</li> </ul>
Remark	

Title	Formulate technological research plans for jewellery products
Code	108978L6
Range	This unit of competency is applicable to decision-makers responsible for technological research and development of jewellery in the jewellery industry. Practitioners should be capable of making careful analysis and judgments. They should be able to conduct topical research on jewellery products or related subjects in accordance with the direction of future technological development. They should also be able to evaluate and integrate the research results to develop the research into scientific research and development projects, so as to ultimately achieve the industrial function of jewellery products. This unit of competency is applicable to industry-related duties such as design, product development, production, repair and maintenance, operational management, quality management, marketing and sales, and environmental protection.
Level	6
Credit	9
Competency	Performance Requirements  1. Know about the innovative ideas and concepts of technological research plans for jewellery products  • Know about the concepts and innovative ideas of the technological research and development projects for the jewellery industry  • Understand the overall technological support for jewellery products and the development of the areas of research and development to obtain relevant data to support the innovative ideas and concepts of the technological research and development projects  • Convert the innovative ideas and concepts into scientific research and development projects, so as to ultimately achieve the industrial function of jewellery products  • Formulate the technological research plans for jewellery products  • Formulate the technological research plans for jewellery products  • Formulate new strategies to cope with the transformation of new technologies  • Master the development of future technology and establish the development direction  • Set objectives and standards for the technological research plans  • Allocate resources according to the needs of the technological research plans  • Design and apply suitable research methods  • Lead subordinate staff to conduct research, employ advanced technology or carry out relevant specialized activities  • Write technological research reports on jewellery  • Set the standards for the projects and conduct regular evaluation  • Establish the jewellery industry as a high value-added industry  • Develop innovative technological research plans to drive sustainable development in the industry  • Technological research projects can ultimately be recognised and employed by the industry

	<ul> <li>Avoid plagiarism when formulating technological research plans for jewellery products to prevent individuals and the organization from falling into the trap of infringement of intellectual property rights</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to formulate technological research plans for jewellery products according to the direction of future technological development; and</li> </ul>
	<ul> <li>Convert the innovative ideas and concepts of jewellery products into scientific research projects, so as to ultimately achieve the industrial function of jewellery products.</li> </ul>
Remark	

Title	Formulate the corporate direction for developing the comprehensive technological support and research and development of jewellery
Code	108979L7
Range	This unit of competency is applicable to decision-makers responsible for technological research and development of jewellery in the jewellery industry. Practitioners should be capable of making careful analysis and judgments. They should be able to effectively formulate the corporate direction for developing the comprehensive technological support and research and development of jewellery in accordance with the direction, philosophy and strategy of the overall operational management of the organization. They should also be able to summarize and integrate the new technologies and technological support within the industry or in other fields to develop new technologies and professional innovative ideas, so as to improve the quality of industry-related projects, making innovative contributions to the technological support as well as research and development in the jewellery industry.
Level	7
Credit	9
Competency	Performance Requirements  1. Know about the development of the comprehensive technological support and the research and development of jewellery  • Know about the development of pewellery  • Rosess specific knowledge in interdisciplinary areas beyond the jewellery industry, and know about its relation with technological research of jewellery  2. Formulate the overall direction for developing the comprehensive technological support and research and development of jewellery  • Make use of new technology to improve the overall operational quality and provide support to the operation of the organization  • Introduce advanced technology from the Mainland/overseas to enhance production efficiency and quality  • Develop the direction and goals for technological support as well as research and development  • Develop joint technological research projects with other institutions  • Develop relationships with academic institutions in the area of technological research  • Strengthen the co-operation with technological research organizations in Hong Kong, in the Mainland and overseas  • Develop joint technological research projects  • Develop joint technological research projects  • Develop joint technological research projects  • Develop in technological research projects  • Summarize and integrate the new technological research projects  • Summarize and integrate the new technological support and research and development in the jewellery industry, targeting at making significant contributions to the industry  • Have thorough and extensive industry-specific and interdisciplinary knowledge, and master the research methods and apply such knowledge in the industry to lead the development direction of technological support and research and development direction of technologic

	Settle problems encountered by the industry through creative and innovative methods and be able to prove the contrary
	3. Professionalism
	<ul> <li>Avoid plagiarism when formulating the overall direction for technological support and research and development of jewellery to prevent individuals and the organization from falling into the trap of infringement of intellectual property rights</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to formulate the comprehensive strategy of the organization for developing the technological support and research and development of jewellery products; and</li> <li>Lead the technological research projects of jewellery products with innovative research methods to improve the quality of the jewellery products, making significant contributions to the industry.</li> </ul>
Remark	

Title	Apply basic knowledge of quality control of jewellery products
Code	108980L1
Range	This unit of competency is applicable to practitioners responsible for duties related to quality management of jewellery products. Practitioners should be capable of understanding the basic concept of quality control of jewellery and performing routine duties of quality control of jewellery products under instruction.
Level	1
Credit	6
Competency	Performance Requirements  1. Know about the basic concept of quality control of jewellery  • Know about the ISO 9001 quality management system, such as:  • Quality management system  • Control the operational procedure of the organization  • Control the work instruction  • Control the quality/engineering documents  • Control the requirements of international/national quality inspection standards  • Control the procedure appropriateness  • Control the procedure appropriateness  • Control the computer information  • Know about the quality manual  • Management duties  • Management assessment  Resource management  • Training control  • Perform demand analysis on all aspects  • Define the training goals for the organization  • Know about the training resources required  • Acquire/Allocate the required resources  • Design training courses, for example, developing a single or complete course according to the needs of the organization  • Prepare training materials  • Provide training courses  • Warehouse management  • Product realization  • Assess and revise contracts  • Control suppliers  • Material/Parts procurement contracts  • Design and development  • Prototyping  • Die-casting  • Mould trimming  • Stone sorting  • Gem setting  • Polishing/Electroplating  • Control labelling and tracing of products  • Inspect, measure and test instruments

	<ul> <li>Maintenance of equipment</li> <li>Transportation, storage, packaging, protection and delivery</li> <li>Know about the laws and regulations applicable to jewellery products, such as Hong Kong's Marking Order &amp; Definition Regulation for Gold Alloy Articles</li> <li>Apply basic knowledge of quality control of jewellery</li> </ul>
	Perform the routine duties of quality control of jewellery products under instruction, including:  Quality control of supplied materials Quality control during the manufacturing processes Quality control of the finished products Quality control of sub-standard products Rectification and prevention actions Customer complaints and return of goods Internal quality assessment Survey on customer satisfaction
	3. Professionalism
	<ul> <li>Ensure the product quality meets customer requirements and international standards to improve the product quality of the organization</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to understand the basic concept of quality control of jewellery and apply such knowledge in relevant job duties in the jewellery industry; and</li> <li>Perform the routine duties of quality control of jewellery products under instruction in compliance with the requirements of the ISO 9001 quality management system guidelines.</li> </ul>
Remark	

Title	Apply quality inspection standards and use test equipment for jewellery/gemstones and parts
Code	108981L2
Range	This unit of competency is applicable to practitioners working in jewellery factories/worksites or responsible for duties related to quality management of jewellery products. Practitioners should be capable of understanding the workflow of jewellery manufacturing and the quality inspection standards, and using test equipment properly to conduct quality inspection in accordance with the code of practice under instruction.
Level	2
Credit	6
Competency	Performance Requirements  1. Understand the requirements of quality management of jewellery products  • Know about each procedure in the workflow of jewellery manufacturing  • Know about the requirements, monitoring points and quality index in each procedure
	Know about the requirements of quality inspection standards for gold jewellery products, such as:
	Correct use of commonly used metal identification equipment, such as:         Standard electronic scale         Gold testing stone         X-ray gold tester      Correct use of commonly used gemstone identification equipment, such as:         10X lens         Dichroscope         Chelsea colour filters         Polariscope         Refractometer         Spectroscope         Ultraviolet long wave and short wave

	<ul> <li>Infrared spectrometer</li> <li>Determine the existing verification/certified marks of the test equipment for jewellery/gemstones and parts</li> <li>Perform regular calibration, repair and maintenance of test instruments and equipment</li> <li>Conduct quality inspection under instruction</li> </ul> 3. Professionalism
	<ul> <li>Keep up to date with the new knowledge and requirements of quality inspection standards, and learn to use the latest product testing equipment constantly</li> <li>Ensure product quality meets customer requirements and international standards</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to understand thoroughly the workflow of jewellery manufacturing and the requirements of quality inspection; and</li> <li>Use test equipment properly and conduct quality inspection for jewellery products/parts under instruction.</li> </ul>
Remark	

Title	Implement quality control of jewellery products
Code	108982L2
Range	This unit of competency is applicable to practitioners responsible for duties related to quality management of jewellery products. Practitioners should be capable of understanding thoroughly the workflow and division of labour of jewellery manufacturing, monitoring points and quality index. They should be able to effectively assist in the implementation of quality control of jewellery under instruction, so as to achieve low cost and high quality results.
Level	2
Credit	6
Competency	Performance Requirements  1. Understand the workflow and division of labour of jewellery manufacturing
	Know about the workflow and division of labour of jewellery manufacturing, monitoring points and quality index, such as:     The monitoring points in each stage of the procedure     The targets of quality management, such as:     The target completion date of each stage of the procedure     The caution line for irregular items, accident rate, production efficiency, etc.     Refer to the performance levels specified in documents such as customers' ordering contracts, code of practice, international standards and ISO 9001 quality management system for the performance indicators of each stage of the manufacturing workflow  2. Conduct quality control of jewellery products     Assist in conducting quality control of jewellery products under instruction, such as:     Quality management of supplied materials     Quality management during the manufacturing process     Quality control of the finished products     Quality control of sub-standard products     Monitoring the completion dates     Quality control of sub-standard products     Monitoring the completion dates     Qustomer complaints and return of goods     Internal quality assessment      According to the quality control management system, determine the appropriate methods to measure:     Quality, such as percentage decrease in sub-standard conditions and percentage decrease in the time for rectification     Cost, such as percentage increase in inventory turnover and percentage decrease in data exchange     Flexibility, such as percentage increase in the time for setting up (manufacturing machines) and percentage increase in the use of common materials (metals, gemstones, etc.) per product     Reliability, such as percentage increase in on-time delivery     Innovation, such as percentage increase in on-time delivery     Innovation, such as percentage increase in seles revenue from new products and percentage increase in new patent licenses      Rectification and preventive actions, including:     Detect problems on product quality or look into the reasons

	<ul> <li>Control rectification actions</li> <li>Conduct corresponding preventive actions</li> <li>Review the effect of the rectification actions regularly</li> <li>Prepare improvement plans according to the records of rectification and preventive actions</li> </ul>
	3. Professionalism
	<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, perform duties related to quality control in the jewellery industry with a professional attitude</li> <li>Ensure the product quality meets customer requirements and international standards to</li> </ul>
	improve the production and economic efficiency of the organization through implementation of comprehensive quality control
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to understand thoroughly the workflow and division of labour of jewellery manufacturing, monitoring points and quality index, and to assist in the monitoring work during the manufacturing process, so as to implement effective quality control of jewellery products under instruction.</li> </ul>
Remark	

Title	Develop quality inspection reports and quality assurance schemes on jewellery/parts
Code	108983L3
Range	This unit of competency is applicable to practitioners responsible for duties related to quality management of jewellery products. Practitioners should be capable of making analysis and judgments. They should be able to understand the content of the quality inspection reports on jewellery/parts, and compile quality inspection reports and formulate quality assurance schemes independently after obtaining, organizing, analyzing and assessing the information on quality inspection.
Level	3
Credit	6
Competency	Performance Requirements  1. Understand the quality inspection reports on jewellery/parts  • Know about the pros and cons of sampling inspection  • Know about the pros and cons of one hundred percent inspection  • Know about the implementation of quality inspection in the organization  • Understand the importance of complete quality inspection reports and their content  2. Develop quality inspection reports and quality assurance schemes  • Compile quality inspection reports on jewellery/parts, such as:  o Know about relevant testing methods  Know how to read test data  Do not doubt the data/test results and remain steadfast in the position for making judgments  Compile quality inspection reports on jewellery/parts with the use of proper report structure and writing style in accordance with the pass/fail data  Report the quality inspection results to the superiors of the same department or the management of the organization  • Formulate quality assurance schemes on jewellery/parts, such as:  Set quality assurance standards and requirements of skills  Determine the responsibility of the person conducting quality assurance  Allocate resources for implementing quality assurance  Determine the code of practice for quality assurance  Determine the quality monitoring points for jewellery manufacturing operations  Determine the methods of quality inspection and the items to be tested  Rectify measures for deviation in quality  Internal quality inspection  Formulate document filing plans  Formulate quality inspection  Formulate ocument filing plans  Adjust the implementation plans based on the resource allocation of quality assurance and communicate effectively with the quality inspectors participating in the process, such as:  • All cost requirements  • The needs of quality management personnel, such as the number of staff required and the training needs of staff  • Facilities, equipment, material supply and reference standards
	<ul> <li>Formulate document filing plans</li> <li>Formulate quality assessment plans</li> <li>Adjust the implementation plans based on the resource allocation of quality assurance and communicate effectively with the quality inspectors participating in the process, such as:         <ul> <li>All cost requirements</li> <li>The needs of quality management personnel, such as the number of staff required and the training needs of staff</li> </ul> </li> </ul>

	<ul> <li>Ensure the accuracy and timeliness of the content and data of the quality inspection reports</li> <li>Complying with the code of ethical conduct, prepare the financial reports with integrity and prevent fraudulent conduct</li> <li>Exercise appropriate judgments and adjustments on resource allocation with professional knowledge and behaviours to develop quality assurance plans</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to compile quality inspection reports on jewellery/parts independently after obtaining and analyzing the information on quality inspection; and</li> <li>Formulate quality assurance schemes on jewellery/parts for the organization to ensure the quality of the jewellery products of the organization meet the required standards.</li> </ul>
Remark	

h	
Title	Handle complaints from customers/buyers on the quality of jewellery products
Code	108984L3
Range	This unit of competency is applicable to practitioners responsible for duties related to quality management of jewellery products. Practitioners should be capable of making judgments and responses. They should be able to follow up complaints from customers/buyers on the quality of jewellery products effectively according to the organization's internal guidelines, handle the complaints properly and make evaluation to ensure customer satisfaction.
Level	3
Credit	6
Competency	Performance Requirements 1. Know about the organization's procedures for handling complaints from customers/buyers on product quality
	Know about the organization's guidelines, procedures and code of practice for handling complaints from customers/buyers on product quality     Know about the nature and causes of complaints     The persons authorized by the organization to settle complaints from customers/buyers and their authority     The organization's procedures for referring cases to be settled by suitable persons     The organization's procedures for recording the steps and actions taken when settling complaints  2. Handle complaints from customers/buyers on the quality of jewellery products     Conduct proper investigation into the complaints from customers/buyers on product quality according to the organization's internal guidelines and analyze the cases. Duties include:

	<ul> <li>3. Professionalism</li> <li>Handle complaints in a polite and professional manner</li> <li>Ensure that the problems on product quality raised by customers are dealt with in a way that satisfies the customers</li> <li>Enhance the efficiency and quality of customer service by improving the problems on product quality that customers complain about</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to effectively handle complaints from customers/buyers on the quality of jewellery products; and</li> <li>Draw up a record and solution regarding customers' complaints on product quality independently for reporting to senior management.</li> </ul>
Remark	

Title Retr	rieve materials/refine gold
Code 1089	985L3
retrie capa	s unit of competency is applicable to practitioners working in the precious metal eving/gold refining department/laboratory in the jewellery industry. Practitioners should be able of making analysis. They should be able to retrieve and refine the consumed precious als lost during the daily manufacturing operations in jewellery manufacturing worksites.
Level 3	
Credit 9	
1. Kr	Formance Requirements inow about precious metal retrieving and refining  Know about the definition and causes of gold loss  Colour deviation Refining loss  Loss during jewellery making Residue Air diffusion Maintenance loss Other types of loss Quality deviation of raw materials Quality deviation of raw materials Casting/melting crucibles Casting/melting crucibles Casting gypsum, waste residue and wastewater Discarded and consumed materials after grinding and polishing Know about the retrieval and treatment of waste products with debris, gold shreds and dust mixed up in jewellery manufacturing worksites, including: Rubbish on the floor Rubbish on the floor Precipitants in the washing basins Dust/Sewage Know about the retrieval and treatment of cyanide solutions, including: Bombing solutions Electroplating solutions Electroplating solutions Know about environmental protection methods, such as treatment of nitrogen oxides and recycling methods, as well as the Hong Kong Dangerous Goods Ordinance and environmental protection ordinances  Kaster metal retrieving and gold refining Recycle worksite waste according to established treatment methods Master the removal of impurity substances before gold refining Applying magnetic iron Gold washing method Gold sand Gold solution Gold sand Gold solution Gold sand Casting Forming

	Master the retrieving and refining methods in worksites, including:
	3. Professionalism
	<ul> <li>Strictly comply with the safety guidelines and codes of practice of the Dangerous Goods Ordinance and Hong Kong's environmental protection ordinances when working on retrieving materials/refining gold</li> <li>Adhere to professional ethics to carry out material retrieving/gold refining, and prevent any abuse or corrupt practices such as abusing or misappropriating the assets of the organization and theft</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to retrieve/refine the precious metals lost during daily manufacturing operations in jewellery manufacturing worksites according to the working procedures and relevant legislations, including the rubbish, and discarded and consumed items found in factories; and</li> <li>Give clear safety instruction to subordinate staff, and effectively retrieve and refine precious metals.</li> </ul>
Remark	

Title	Analyze quality inspection reports on jewellery
Code	108986L4
Range	This unit of competency is applicable to managers responsible for duties related to quality management of jewellery products. Practitioners should be capable of making analysis and judgments. They should be able to analyze the quality inspection reports on jewellery products/parts meticulously and make improvement.
Level	4
Credit	6
Competency	Performance Requirements  1. Know about quality inspection reports on jewellery, including:  • Types • Specific purposes • Understanding of quality specifications  2. Analyze quality inspection reports on jewellery products/parts • Know how to analyze quality inspection reports on jewellery products/parts, so as to master the level of product quality, including:  • Master the skills and methods for analyzing quality inspection reports • Analyze data from quality inspection reports to improve the quality of the frontend finished products  • Maintain and enhance the reliability of quality with the aid of quality inspection reports  • Make suggestions for improvement to management of the organization regarding the quality conditions and problems, including:  • Judgments of good/bad  • Analysis with doubts  • Feedback
	3. Professionalism
	<ul> <li>Ensure that the quality of jewellery products meets customer requirements and relevant standards</li> </ul>
Assessment Criteria	The integrated outcome requirement of this unit of competency is:     Able to analyze the quality inspection reports on jewellery products/parts, review each working procedure of the manufacturing workflow, quantify the quality management situation and problems, and make suggestions for improvement on relevant problems.
Remark	

Title	Promote quality management culture
Code	108987L4
Range	This unit of competency is applicable to managers responsible for duties related to quality management of jewellery products. Practitioners should possess analytical, interpersonal communication, leadership and motivational skills. They should be capable of establishing a quality management culture as the organization's objective, leading the work group of quality management to promote and cultivate the quality management culture by means of creative and non-routine activities, as well as handling suggestions for quality improvement in all aspects.
Level	4
Credit	6
Competency	Performance Requirements  1. Master knowledge of quality management and promotion skills  • Know about the organization's current quality management concepts and systems, and the target requirements and policies of jewellery quality  • Know about the concepts of quality management  • Know about the importance of organizational culture in promoting quality management  • Master the manufacturing processes of products, characteristics of practitioners and organizational culture to promote quality management culture and training  • Know about the resources available inside and outside the organization  • Know about the application of quality tools, such as:  • Quality circle  • Poka-yoke (mistake-proofing/fool-proofing)  • Tree diagram  2. Lead the work group of quality management to promote quality management culture  • Establish a quality management culture as the organization's objective  • Analyze the composition, communication channels and cohesiveness of employees at all levels of the organization  • Organize and lead the work group of quality management, such as:  • Select promotion methods/activities suitable for employees at different levels, such as:  • Quizzes  • Visits  • Seminars  • Review the effectiveness of various quality management promotion activities and continue to improve  • Implement in-service training for understanding the quality management culture across the organization  • Form a quality monitoring group by junior staff to cultivate quality management culture at the junior level  • Establish and strengthen communication channels to effectively collect suggestions for quality improvement in all aspects, which are reported to management according to the communication mechanism after handling and analysis
	<ul> <li>the junior level</li> <li>Establish and strengthen communication channels to effectively collect suggestions for quality improvement in all aspects, which are reported to management according to the communication mechanism after handling and analysis</li> </ul>

Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to establish a quality management culture as the organization's objective, and lead the work group of quality management to promote the quality management culture; and</li> <li>Prepare a proposal for the organization on how to promote quality management culture.</li> </ul>
Remark	

Title	Implement quality management and staff training for the entire factory
Code	108988L4
Range	This unit of competency is applicable to practitioners working in jewellery factories/worksites. Practitioners should be capable of mastering the organization's standards of quality inspection for jewellery products, and developing quality management plans and staff training programmes. They should also be able to implement quality management for the entire factory and organize staff training courses, so as to enhance staff's awareness of quality management.
Level	4
Credit	6
Competency	Performance Requirements  1. Know about the quality management plans for the entire factory
	<ul> <li>Be familiar with the quality management plans for the entire factory and each department</li> <li>Know about the standards and range of the quality management and quality assurance series of jewellery products</li> <li>Contact each department in the factory and hold regular meetings on the quality management of jewellery products, so that each department can report quality management problems and search for solutions</li> <li>Make suggestions to help each department form project teams similar to quality inspection circles, so as to facilitate the implementation of quality management plans for the entire factory, thus expanding the level and support of quality management</li> <li>Train staff in the quality management department</li> <li>Develop basic quality management courses or training projects to enhance staff's awareness of quality management, such as:         <ul> <li>Master the standards and range of the ISO 9001 quality management and quality assurance series</li> <li>Promote quality management culture</li> <li>Promote and encourage staff to evaluate and improve the performance of the manufacturing operations regularly</li> <li>Develop quality management training courses</li> <li>Prepare quality manuals and make timely revisions to the quality standards</li> <li>Review and improve quality management courses regularly to enhance the effectiveness of the staff training and the skills of the staff</li> </ul> </li> </ul>
	3. Professionalism
	<ul> <li>Ensure that staff have a clear understanding of the international standards for quality management</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to employ the knowledge of quality management, master the organization's standards of quality inspection for jewellery products, and develop quality management and staff training plans to effectively implement quality management for the entire factory; and</li> <li>Effectively implement training programmes for the staff responsible for quality management.</li> </ul>
Remark	

Title	Implement total quality management
Code	108989L5
Range	This unit of competency is applicable to managers responsible for duties related to quality management of jewellery products. Practitioners should be capable of performing the duty of total quality management, and mastering the operational strategy and quality management culture of the organization, so as to enhance the organization's production and economic efficiency.
Level	5
Credit	9
Competency	Performance Requirements  1. Know about total quality management  • Understand the principles of total quality management, such as:  • The core values and modes of total quality management  • The modes of quality management of organizations with remarkable performance  • Understand the concept of quality management cycle in the jewellery industry, such as:  • The quality requirements, as well as the standard and methods of quality inspection of each manufacturing process in the jewellery industry  • Understand the concept of quality management cycle in the jewellery industry  • Understand the concept of quality management of jewellery products  • New about the latest development in quality management of jewellery products  • New quality management methods and related quality accreditation  • New technology for quality management  • Know about the economic efficiency of quality management to the enterprise, such as:  • Classify and analyze the quality cost  • Implement the quality cost system  • Master the economic value of the loyalty of customers and employees  • Make use of the knowledge of total quality management to implement total quality management, such as:  • Develop quality targets and quality inspection plans  • Implement the content of the quality inspection plans  • Review and analyze the results of quality inspection, including the effectiveness of the plans and the causes of failure  • Develop quality improvement plans according to the results of quality inspection  • Continue to improve the quality management system through learning and training, including:  • Continually improve the quality management system of the organization by acquiring quality management methods and delegate authority to the employees, and continually improve the quality management system

	Ensure that the total quality management developed meets the development of the organization, and can enhance the production and economic efficiency of the organization
Assessment Criteria	The integrated outcome requirements of this unit of competency are:  • Able to effectively employ total quality management methods to implement total quality management for the organization; and  • Lead subordinate staff to continually improve the quality management system.
Remark	

Title	Formulate comprehensive quality management plans
Code	108990L6
Range	This unit of competency is applicable to decision-makers responsible for formulating plans for quality management of jewellery products. Practitioners should be capable of making critical analysis and assessment, and applying innovative techniques. They should be able to master the knowledge of the latest quality management system and make critical analysis, integration, elaboration and judgments to develop new quality management concepts and strategies that are applicable to the enterprise and meet international requirements. They should also be able to formulate comprehensive quality management plans for the enterprise to meet the organizational development.
Level	6
Credit	9
Competency	Performance Requirements  1. Know about the quality management system and the latest development in quality management  • Know about the quality management system, such as:  Common quality management problems  General principles of ISO 9001  Requirements of ISO 9001  Master the eight quality management principles of the International Organization for Standardization  Process management modes for jewellery products  Management duties  Resource management  Product realization  New quality management in quality management, such as:  New quality management methods and related quality accreditation  New technology for quality management  Knowledge management  Formulate comprehensive quality management plans  Formulate internal quality inspection plans, including:  Analyze quality inspection reports  Evaluate the management system  Effect continual improvement  Formulate quality procedures  Compile quality manuals  Implement the quality management plans and strategies for the enterprise, such as:  Analyze the operational strategies of each department of the enterprise (such as sales, marketing, operational management, design, production, product research and development, quality management and logistics/procurement), and integrate, develop and determine the current quality management methods of the enterprise to tie in with the organization's comprehensive strategies of the enterprise to tie in with the organization's comprehensive strategies

	Professionalism     Master the knowledge and information on the latest development in quality management     Ensure that the comprehensive quality management plans developed meet the development of the organization, and can enhance the production and economic efficiency of the organization
Assessment Criteria	The integrated outcome requirement of this unit of competency is:     Able to formulate comprehensive quality management plans according to the quality management system and the new development in quality management to meet the organizational development.
Remark	

Title	Apply basic logistics methods in jewellery
Code	108991L1
Range	This unit of competency is applicable to practitioners responsible for duties related to logistics and procurement in the jewellery industry. Practitioners should be capable of understanding the basic logistics methods of jewellery and applying such knowledge to handle duties related to the logistics and procurement of jewellery under supervision.
Level	1
Credit	6
Competency	Performance Requirements  1. Understand basic logistics methods of jewellery  • Know about the operations and procedures of the logistics department, such as:  • Receiving goods • Packaging/Mounting • Storage of goods • Know about logistics and shipping documents to identify general logistics documents, such as:  • Logistics and trade related codes and terms in the industry • Basic terms in loading/unloading operations • Names of the countries, areas and ports • Abbreviations and terms used in freight documents • Names and abbreviations of currencies and weights and measurements of different countries • Expression of international time • Identify general logistics documents, such as: • Receiving notes • Air transportation/Shipping documents • Packaging documents • Electronic documents • Electronic documents • Labelling of dangerous goods • Know about general reorganizing and packaging procedures, such as: • Prepare packaging materials and goods • Assembling and packaging • Quality check • Operate various kinds of packaging tools/machinery • The specific packaging requirements by the customs of the Mainland/overseas countries • Know about the general operation of goods storage, such as:  • Know about the general operation of goods storage, such as: • Labelling • Classification • Stock-taking • Regulations governing warehouse management • Know about the transportation to and fro overseas countries/the Mainland, including: • The connection of land, sea and air transportation • Different kinds of jewellery
	Employ basic logistics methods to perform logistics duties of jewellery under supervision

	<ul> <li>Handle logistics and trade documents, such as:         <ul> <li>Consignment orders</li> <li>Goods loading lists</li> <li>Bills of lading</li> <li>Shipping orders</li> <li>Air transportation bills (master/copy)</li> <li>Shipping instructions</li> </ul> </li> <li>Use terms in logistics and shipping appropriately to communicate with logistics service providers effectively, such as:         <ul> <li>Enquire the details of logistics arrangements</li> <li>Receive and send information</li> </ul> </li> <li>Communicate effectively with colleagues within the organization</li> <li>Properly keep all kinds of logistics and shipping documents</li> <li>Properly reorganize and package jewellery for transportation purpose</li> </ul>
	3. Professionalism
	<ul> <li>Comply with the legal requirements for logistics, warehousing, customs clearance and bonded goods to handle logistics and shipping documents</li> <li>Strictly adhere to professional ethics to handle simple general logistics work in the organization</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to understand the basic methods, documents, terms, codes and abbreviations related to logistics; and</li> <li>Apply basic knowledge of logistics when performing the logistics duty of jewellery under supervision.</li> </ul>
Remark	

Title	Know about the procurement of general jewellery products/parts
Code	108992L2
Range	This unit of competency is applicable to practitioners responsible for duties related to operational management, logistics and procurement in the jewellery industry. In the daily working environment, practitioners should be capable of understanding the basic knowledge of purchasing general jewellery products/parts, and applying such knowledge in duties related to the operational management and procurement of jewellery under instruction to meet the production and sales needs.
Level	2
Credit	6
Assessment Criteria	Performance Requirements  1. Understand the procurement concepts of jewellery products/parts  • Know about procurement concepts, including:  • Procurement definition and knowledge  • Objective factors affecting procurement  • The demand for purchasing suitable goods  • Know about the characteristics of the materials to be purchased, and the quality requirements, proper channels and methods for purchasing the materials, including:  • Gold materials, casting alloys and parts  • Stone materials  • Manufacturing tools and materials  • Manufacturing facilities, test equipment and other materials  2. Purchase general jewellery products/parts  • Anticipate the demand of materials and determine the quantity of procurement according to the demand  • Collect and organize supplier information  • Select suitable suppliers according to the guidelines given by the organization  • Calculate suitable prices and employ simple price negotiation techniques  • Supply agreements of the suppliers  • Determine the issue dates of order forms according to the time needed for delivery and the dates the materials are needed  3. Professionalism  • Prevent any abuse or corrupt practices such as abusing or misappropriating the assets of the organization and theft with a professional attitude when carrying out jewellery product procurement to protect the interests of the organization  • Maintain a good partnership with suppliers  The integrated outcome requirements of this unit of competency are:  • Able to understand the basic knowledge of purchasing general jewellery products/parts according to the procurement guidelines given by the organization to meet the production/sales
	needs.
Remark	

Title	Know about the logistics and transportation of jewellery products
Code	108993L2
Range	This unit of competency is applicable to practitioners responsible for duties related to logistics and procurement in the jewellery industry. Practitioners should be capable of understanding the basic operation modes of logistics and transportation, and applying such knowledge in the daily logistics and transportation of jewellery products under instruction.
Level	2
Credit	6
Competency	Performance Requirements 1. Understand the operation modes of logistics and transportation of jewellery products
	Know about the system and structure of logistics and transportation, such as:
	3. Professionalism
	Follow the logistics procedures and requirements of the organization to properly perform the daily logistics and transportation duties for jewellery products
Assessment Criteria	The integrated outcome requirement of this unit of competency is:
	<ul> <li>Able to understand thoroughly the operation modes of logistics and transportation of jewellery products, and perform relevant logistics and transportation duties under instruction.</li> </ul>
Remark	

Title	Know about cross-border transportation between China and Hong Kong for jewellery products
Code	108994L2
Range	This unit of competency is applicable to practitioners responsible for duties related to logistics and procurement in the jewellery industry. Practitioners should be capable of understanding the procedures of cross-border transportation between China and Hong Kong for jewellery products, and applying such knowledge in the daily logistics and transportation between China and Hong Kong in the jewellery industry under instruction.
Level	2
Credit	6
Competency	Performance Requirements  1. Know about cross-border transportation between China and Hong Kong for jewellery products  • Know about the Pearl River Delta Region, including:  • Geographical situation  • The national and local management authorities  • General situation of the organization  • Know about the transportation flow between Guangdong and Hong Kong, including:  • Import and export procedures  • Trade and freight transportation documents  • Tax filling and insurance procedures  • Customs declaration procedures of import and export goods  • Customs declaration procedures of import and export goods under the bonded system  • Customs declaration procedures for transit, trans-shipment, through transport and customs transfer  • Customs clearance procedures for dutiable commodities and controlled goods  • Types and arrangements of customs declaration documents  • Inspection methods used by the customs authority, such as spot check and appearance examination  • The clearance procedures between the ports of Guangdong and Hong Kong  • Know about cross-border transportation, such as:  • The traffic legislation in the Mainland  • The discrepancy between Guangdong and Hong Kong in handling traffic accidents  • Ways to prevent mechanical failure during long-distance transportation  • Arrange the routes and time of the transportation, including alternative routes in case of emergencies  2. Master the operations of cross-border transportation between China and Hong Kong for jewellery products  • Communicate with logistics service providers on various transportation arrangements to know about the prices, time, insurance, features and restrictions of different transportation arrangements  • Communicate with colleagues within the organization to collect shipment conditions and requirements  • Arrange appropriate transportation arrangements and documents for different shipment conditions

	<ul> <li>Master the procedures of cross-border transportation between China and Hong Kong for jewellery products to perform relevant logistics duties under instruction, such as:         <ul> <li>Implement the unit loading concept</li> <li>Handle freight operations</li> <li>Distinguish the categories and characteristics of goods</li> <li>Prepare adequate and appropriate customs declaration documents</li> <li>Ensure that the goods are declared to the relevant authorities within time limit when importing and exporting goods in accordance with the structure of the local customs</li> <li>Handle damaged containers and the sealing of containers</li> <li>Make online appointments to check the seized goods</li> <li>Properly store the customs clearance documents</li> <li>Monitor the inspection of goods by the customs and record any damages</li> </ul> </li> <li>Professionalism</li> <li>Comply with the legal requirements on logistics and transportation, warehousing, customs, bonded goods, etc., and implement daily cross-border transportation between China and Hong Kong for jewellery products</li> </ul>
	<ul> <li>Prevent any abuse or corrupt practices such as abusing or misappropriating the assets of the organization and theft</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to know about the operations and procedures of cross-border transportation between China and Hong Kong for jewellery products, and perform relevant duties of cross-border transportation between China and Hong Kong under instruction.</li> </ul>
Remark	

Title	Implement the procurement of jewellery materials, gemstone products and parts
Code	108995L3
Range	This unit of competency is applicable to practitioners responsible for duties related to operational management, logistics and procurement in the jewellery industry. Practitioners should possess organizational and assessment capabilities. They should be capable of understanding the procurement procedures of jewellery, and analyzing the information and quotations provided by suppliers independently. They should also be able to effectively implement the procurement of jewellery materials, gemstone products and parts according to the needs of the organization.
Level	3
Credit	6
Competency	Performance Requirements  1. Master the procurement of jewellery materials, gemstone products and parts
	Know about the functions and responsibilities of the procurement department of the organization     Know about the procurement guidelines of the organization     Know about the workflow of internal procurement of the organization and the relevant procedures     Know about the procurement concepts, including:         Basic procurement knowledge         Objective factors affecting procurement         The demand for purchasing suitable goods     Master the methods for handling procurement documents     Master the latest information on the prices and market demand of jewellery materials, gemstone products and parts     Know about the organization's quality requirements and standards for different types of materials, gemstone products and parts     Master the methods for handling procurement documents  2. Purchase jewellery materials, gemstone products and parts     Implement the procurement of jewellery materials, gemstone products and parts     according to the organization's procurement procedures     Gather and organize the information provided by suppliers, such as:         Material suppliers         Manufacturing contractors         Service providers      Material purchasing and monitoring, such as:         Gather quotation information to make comparison and analysis         Perform procurement duties according to the manufacturing and/or sales targets set by the organization          Check to receive the goods according to the requirements of the order forms or the specifications listed in the contracts         Record the actual delivery time and quality of the goods, and report to management Implement general inventory management for jewellery materials, gemstone products and parts, such as:         Gather various kinds of storage information         Implement the organization's storage and retrieval mechanism for general materials and the relevant procedures

	<ul> <li>Cloud inventory management and procedures for organizing the storage and retrieval records as well as reports for general materials</li> </ul>
	3. Professionalism
	<ul> <li>Strictly abide by the established procurement procedures and procurement authority of the organization to safeguard the interests of the organization</li> <li>Prevent any abuse or corrupt practices such as abusing or misappropriating the assets of the organization and theft</li> <li>Ensure that the stocks match the inventory records and the inventory records are not irregularly processed or modified</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	<ul> <li>Able to understand thoroughly the procurement procedures for jewellery materials, gemstone products and parts as well as organize and assess the information and quotations provided by suppliers independently; effectively implement the procurement of jewellery materials, gemstone products and parts, and keep appropriate inventory records according to the organization's manufacturing and/or sales targets.</li> </ul>
Remark	

Title	Implement the procurement of jewellery products for marketing purposes
Code	108996L3
Range	This unit of competency is applicable to practitioners responsible for duties related to logistics and procurement in the jewellery industry. Practitioners should be capable of making careful analysis and judgments. They should be able to collect and analyze relevant information on the jewellery market, and effectively implement the procurement of jewellery products for marketing purposes independently.
Level	3
Credit	9
Competency	Performance Requirements  1. Know about the local market for Hong Kong jewellery and the types of customers  • Know about the local market for Hong Kong jewellery and the types of customers, including:  • Best-selling jewellery products  • The trend of jewellery products  • The trend of the local lifestyle  • The favourite designs of major and potential consumers  • Know about customers' purchase desire  • Know about the customer base of the purchasing customers  2. Purchase jewellery products for marketing purposes  • Implement the procurement of jewellery products for marketing purposes, such as:  • Collect relevant information on various kinds of suppliers, including:  • Jewellery product suppliers  • Manufacturing contractors  • Service providers  • Implement the organization's mechanism and procedures for purchasing jewellery products  • Collect quotation information  • Implement general inventory management of jewellery products, such as:  • Collect information on various kinds of warehouses  • Implement the mechanism and procedures of the organization for storing and retrieving jewellery products  • Organize the records and reports on the storage and retrieval of jewellery products  • Manage inventory records on the cloud
	3. Professionalism  • Prevent any abuse or corrupt practices such as abusing or misappropriating the assets of the organization and theft with an honest and professional attitude  • Ensure that the stocks match the inventory records and the inventory records are not irregularly processed or modified
Assessment Criteria	The integrated outcome requirements of this unit of competency are:  • Able to collect relevant information on the jewellery market independently to make careful analysis and judgments, and implement the procurement of jewellery products for marketing purposes; and

	•	Implement general inventory management on jewellery products.
Remark		

Title	Master the logistics management of jewellery and the relevant technologies
Code	108997L3
Range	This unit of competency is applicable to practitioners responsible for duties related to logistics and procurement in the jewellery industry. Practitioners should possess a certain level of information technology operation skills. They should be capable of mastering the knowledge of logistics management of jewellery, and employing relevant information technology to collect, process and integrate the information related to the process of logistics management independently.
Level	3
Credit	9
Competency	Performance Requirements  1. Know about the basic concepts of logistics management  • Know about logistics management, including:  o The purposes and definition of logistics  o Compare the latest modes and traditional modes of logistics  o Understand the theories of logistics management, including:  • Checking and receipt of materials  • Supply chain  • Transportation of materials  • Storage of materials  • The processes of supply, production, circulation, distribution, retail and consumption, and their interrelationships  o The concepts of macro and micro logistics  o Internal logistics, production logistics, supply logistics, marketing logistics and recovery logistics  o Compare the characteristics of different transportation modes, and their pros and cons  • Understand the current development of logistics in Hong Kong  2. Master logistics management and related technologies  • Master and apply logistics technologies when performing the duty of logistics management  o Master information technologies, such as:  • Bar code technology  • Data technology  • Data technology  • Data technology  • QR code  • Electronic ordering system  • Electronic data exchange  • Warehouse information system  • Automatic identification system  • Automatic storage/retrieval system  • Automatic storage/retrieval system  • Automatic tracking system  • Automatic storage/retrieval system  • Automatic storage/retrieval system  • Automatic racking system  • Automatic racking system  • Automatic racking system  • Automatic racking system  • Automatic of the Internet  • Examples of e-trade  • Prospects of e-trade

	Master third-party logistics, such as:
	<ul> <li>The definition of third-party logistics</li> </ul>
	<ul> <li>The positioning of third-party logistics companies</li> <li>Master the checking and receipt of general materials, such as:         <ul> <li>Understand the specifications and standards of various kinds of materials</li> <li>Analyze, check and receive general materials according to the requirements of the orders or the specifications listed in the contracts</li> </ul> </li> <li>Master the logistics management of jewellery products, such as:         <ul> <li>Develop the supply chain of logistics</li> <li>Implement the process of logistics services</li> <li>Implement the transportation and storage of materials</li> <li>Review and manage inventory security</li> <li>Handle logistics documents of freight transportation</li> </ul> </li> </ul>
	3. Professionalism
	<ul> <li>Safeguard the overall interests of the clients and business partners of the organization when implementing logistics management and technology</li> <li>Ensure that the inventory information/data provided is accurate</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to understand thoroughly the concepts of logistics management of jewellery; and</li> <li>Employ information technologies related to logistics to collect, process and integrate relevant information, and apply such technologies in logistics management.</li> </ul>
Remark	

Title	Master the wholesale and distribution of inventory and transportation management of jewellery
Code	108998L3
Range	This unit of competency is applicable to practitioners responsible for duties related to logistics and procurement in the jewellery industry. Practitioners should be capable of making judgments, and mastering the relevant information on the wholesale and distribution of inventory and transportation of jewellery. They should also be able to organize and assess the information independently.
Level	3
Credit	9
Competency	Performance Requirements 1. Understand the inventory management
	Understand the important points and purposes of inventory management, including a clear understanding of the relationship between cost, inventory composition/level and profit  Know about the inventory control system of the organization, such as:  Basic inventory information Control inventory level Re-purchasement decision Inventory monitoring technology, such as:  Electronic scanning Bar code/QR code Electronic item monitoring label Radio frequency identification system Inventory report Know about the flow of transportation and allocation/transportation of goods The concept of supply chain The transportation flow and the transportation system  2. Master the wholesale and distribution of inventory and transportation management of jewellery  Control the inventory level and types of inventory Identify basic commodities Identify the grouping of commodities Formulate the control of inventory level Analyze inventory and marketing, including: Review the best-selling and poorest-selling products Review the grouping of goods and its relationship with sales Manage replenishment of goods and goods output Manage replenishment of goods and goods output Manage replenishment of goods Formulate the inventory plans, such as: The best grouping of inventory The best inventory level The best source of goods  Master the identification of inventory and bar code system Identify problematic inventory Understand the causes of the problems Formulate solutions to solve the problems Understand the bar code/QR code system

	<ul> <li>Develop code names</li> <li>Storage of goods         <ul> <li>Positioning storage</li> <li>Shifting storage</li> <li>Storage place (supplier and distribution warehouses)</li> </ul> </li> <li>Allocation and transportation of goods         <ul> <li>Master the transportation flow and the transportation system</li> <li>Master transportation management, for example, the storage place should match the transportation method and transportation time</li> <li>Assembly of goods</li> <li>Transportation of goods</li> <li>Insurance of goods</li> </ul> </li> <li>Professionalism</li> </ul>
	<ul> <li>Implement the wholesale and transportation management of jewellery in accordance with the requirements and standards of the organization</li> <li>The orders must not be irregularly processed or modified</li> <li>Prevent any abuse or corrupt practices such as abusing or misappropriating the assets of the organization and theft</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to master the information related to the wholesale and distribution of inventory and transportation of jewellery, and organize and assess the information independently; and</li> <li>Master the knowledge of the wholesale and distribution as well as the transportation management of jewellery, and apply such knowledge in relevant management duties.</li> </ul>
Remark	

Title	Implement logistics management of jewellery
Code	108999L4
Range	This unit of competency is applicable to practitioners responsible for duties related to logistics and procurement in the jewellery industry. Practitioners should be capable of making careful analysis and judgments. They should be able to apply the knowledge of logistics management of jewellery to effectively implement the logistics management of jewellery.
Level	4
Credit	6
Credit	Performance Requirements  1. Understand the theories of logistics management of jewellery and the legal requirements related to logistics  • Understand the theories of logistics management of jewellery, including material checking and receiving, supply chain, material transportation and material storage  • Understand the processes of supply, production, distribution, retail and consumption, and their interrelationships  • Understand macro and micro logistics  • Understand the internal logistics, production logistics, supply logistics and recovery logistics  • Know about the legal requirements on logistics and transportation, warehousing, customs, bonded goods, etc.  2. Implement logistics management of jewellery  • Check and receive general materials, such as:  • Know about the specifications and standards of various kinds of materials  • Analyze, check and receive general materials according to the requirements of the orders or the specifications listed in the contracts  • Implement logistics management of jewellery, such as:  • Develop the supply chain of logistics  • Understand the processes of supply, production, circulation, distribution, retail and consumption, and their interrelationships  • Develop the transportation and storage systems for materials  • Transportation  • Storage  • Packaging  • Protection  • Security  • Insurance  • Delivery  • Develop the logistics information system
	<ul> <li>Develop the system to handle logistics documents of freight transportation</li> <li>3. Professionalism</li> </ul>
	<ul> <li>Safeguard the overall interests of the clients and business partners of the organization when implementing logistics management of jewellery</li> <li>Ensure that the inventory information/data provided is accurate</li> <li>Comply with the legal requirements on logistics and transportation, warehousing, customs, bonded goods, etc.</li> </ul>

Assessment Criteria	The integrated outcome requirements of this unit of competency are:  • Able to master the knowledge of logistics management of jewellery to effectively
	<ul> <li>implement logistics management of jewellery; and</li> <li>Develop effective transportation, storage and information systems for materials.</li> </ul>
Remark	

<b>I</b>	
Title	Formulate procurement plans for jewellery materials, gemstone products and parts
Code	109000L4
Range	This unit of competency is applicable to managers responsible for duties related to operational management, logistics and procurement in the jewellery industry. Practitioners should be capable of making careful analysis and judgments. They should be able to analyze and assess the market trend, customers' needs and suppliers' information when performing operational management duties, so as to formulate procurement plans for jewellery materials, gemstone products and parts as well as to control the inventory level effectively.
Level	4
Credit	6
Competency	Performance Requirements  1. Understand the relevant knowledge regarding procurement plans for jewellery materials, gemstone products and parts  • Know about the market trend of jewellery products, including:  • Best-selling products  • Core products  • Supplementary products  • Know about the trend of the price of materials, including:  • The trend of gold price and stone price  • Customers' needs  • Know about the reading methods and related electronic systems of bills of materials, and their applications  • Know about the analytical methods for developing material requirement plans and the application of the relevant information, including:  • Production schedule  • Stock on hand  • Lead time  • Sales order quantities and due dates  • Purchase order quantities and due dates  • Purchase order quantities and due dates  • Purchase order quantities and sefty stock requirements  • Know about the cost of inventory, such as:  • Material cost  • Ordering cost  • Storage cost  • Out-of-stock cost  • Know about the just-in-time inventory management, including:  • The concept of zero inventory  • The circumstances and concept of just-in-time inventory management  2. Formulate procurement plans for jewellery materials, gemstone products and parts  • Separate the finished products into materials that need to be purchased according to the bills of materials, and calculate the quantities of materials required  • Use various suitable tools to estimate the appropriate order quantities, such as economic order quantities  • Select suitable suppliers of jewellery materials, gemstone products and parts, including:  • Assess their abilities in supplying materials as well as the prices and quality of the materials  • Estimate the lead time required for the supply of each material

	<ul> <li>Develop assessment records</li> <li>Compile a list of suppliers</li> <li>Develop order schedules, such as seasonal and non-seasonal</li> <li>Conduct regular reviews and assessments</li> <li>Monitor the internal inventory system, including:         <ul> <li>Inventory period</li> <li>Inventory level (ensure that the inventory level is higher than the minimum requirement)</li> <li>Inventory utilization rate</li> </ul> </li> </ul>
	3. Professionalism
	<ul> <li>Safeguard the overall interests of the organization, clients and business partners when purchasing jewellery materials, gemstone products and parts</li> <li>Ensure that the material requirement information provided is accurate</li> <li>Do not process or modify the purchase orders irregularly without authorization</li> </ul>
Assessment Criteria	The integrated outcome requirements of this unit of competency are:
	<ul> <li>Able to analyze and assess the market trend of jewellery products, customers' needs and suppliers' information to formulate procurement plans for jewellery materials, gemstone products and parts; and</li> <li>Effectively control the inventory level of jewellery materials, gemstone products and parts.</li> </ul>
Remark	

Title	Devise marketing plans for the procurement of jewellery products
Code	109001L4
Range	This unit of competency is applicable to managers responsible for duties related to operational management, logistics and procurement in the jewellery industry. Practitioners should be capable of making careful analysis and judgments. They should be able to analyze the trends of the local and export sales markets of jewellery products, devise marketing plans for the procurement of jewellery products, and effectively control the inventory level.
Level	4
Credit	6
Competency	Performance Requirements  1. Know about the local and export sales markets of jewellery products
	<ul> <li>Know about the development trend of the jewellery market, such as:         <ul> <li>Best-selling products</li> <li>Lifestyle and cultural trends</li> <li>Customers' consumption patterns</li> <li>Know about the styles of international jewellery brands</li> <li>Know about the styles of Chinese/local jewellery brands</li> <li>The development of the jewellery industry in different ages and periods</li> </ul> </li> </ul>
1	2. Devise marketing plans for the procurement of jewellery products
	<ul> <li>Select suitable suppliers of jewellery products, such as:         <ul> <li>Assess suppliers' ability, including the lead time, quality, service and price</li> <li>Master the suppliers' detailed background and information for regular review and re-assessment</li> </ul> </li> <li>Analyze the effectiveness of existing procurement procedures of the organization and make continuous improvements, such as the impact of existing procedures on the operation, supplier relationship management methods, procurement guidelines and application of electronic procurement systems</li> <li>Integrate the ability of the suppliers and the internal needs of the organization to develop procurement guidelines, and ensure that all relevant staff understand the instructions and choose the appropriate procurement method</li> <li>Monitor the internal inventory system, including:         <ul> <li>Inventory period</li> <li>Inventory level (whether it is lower than the minimum inventory level)</li> </ul> </li> </ul>
	3. Professionalism
	<ul> <li>Maintain a good partnership with suppliers</li> <li>Prevent any abuse or corrupt practices such as abusing or misappropriating the assets of the organization and theft</li> <li>Finish processing the purchase orders for jewellery products/parts before the deadlines</li> </ul>
Assessment Criteria	The integrated outcome requirements of this unit of competency are:
	<ul> <li>Able to analyze the trends of the local and export sales markets of jewellery products, and make meticulous analysis and assessment in accordance with the information on the suppliers and internal inventory level to effectively devise marketing plans for the procurement of jewellery products; and</li> </ul>

	Effectively control the inventory level of the jewellery products for sale.
Remark	

Title	Master the logistics support in the jewellery industry
Code	109002L4
Range	This unit of competency is applicable to practitioners responsible for logistics support in the jewellery industry. Practitioners should be capable of making critical analysis and judgments. They should be able to determine the support required for the retail/wholesale/export units and arrange appropriate resources to ensure that the goods are delivered to the customers accurately.
Level	4
Credit	6
Competency	Performance Requirements  1. Know about logistics support
	<ul> <li>Master the processes and procedures of logistics support of the organization</li> <li>Know about the service pledge of the logistics department</li> <li>Know about the importance of efficient logistics management to the jewellery business</li> <li>Know about various logistics legislations or standards, such as:         <ul> <li>International Organization for Standardization (ISO)</li> <li>Road and rail regulations</li> <li>International Maritime Dangerous Goods (IMDG) Code</li> <li>Occupational health and safety</li> <li>Customs ordinances</li> <li>Import and export licences</li> <li>Taxes and tariffs</li> </ul> </li> <li>Know about the organization's logistics facilities for the jewellery business</li> </ul>
	2. Master the logistics support services
	<ul> <li>Determine the needs of the customers for logistics support</li> <li>Analyze the logistics support modes and skills suitable for respective business units</li> <li>Develop the support plans, as well as the support services and resources provided, with the retail/wholesale/export units, including:         <ul> <li>Transport vehicles</li> <li>Manpower</li> <li>Delivery schedules</li> <li>Delivery documents</li> <li>Other related measures</li> </ul> </li> <li>Implement and monitor logistics support activities</li> <li>Review the effectiveness of the logistics support with the retail/wholesale/export units regularly, and adjust the support plans when necessary for greater effectiveness</li> </ul>
	3. Professionalism
	<ul> <li>Comply with the ordinances related to freight logistics when providing logistics support services</li> <li>Prevent any abuse or corrupt practices such as abusing or misappropriating the assets of the organization and theft</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to determine the logistics needs of each retail/wholesale/export unit in order to provide support; and</li> </ul>

	Implement, monitor and review the logistics support plans to achieve the best goods delivery solutions.
Remark	

Title	Formulate logistics management plans and supervisory plans on jewellery for the enterprise
Code	109003L5
Range	This unit of competency is applicable to senior management and decision-makers responsible for duties related to the logistics and procurement of jewellery. Practitioners should be capable of making analysis, judgments and assessment. They should be able to master the specific knowledge of logistics management for the jewellery industry, and formulate logistics management plans and supervisory plans to further improve the effectiveness of the operation of the enterprise's logistics management.
Level	5
Credit	9
Competency	Performance Requirements  1. Master the knowledge of logistics management of jewellery  • Master the knowledge of logistics supply chain • Master the relevant knowledge of developing the logistics needs assessment • Understand the relevant legislation on the import of jewellery in different regions • Understand the requirements on logistics, transportation, warehousing, customs and bonded goods in different regions • Understand the relationship between the logistics management and the daily operation of the enterprise  2. Formulate logistics management plans and supervisory plans on jewellery for the enterprise  • Formulate logistics management plans and assessment plans on jewellery for the enterprise  • Develop and control production plans • Develop quality management • Formulate e-sourcing plans  • Formulate supervisory management plans • Develop the code of conduct • Devise methods to encourage staff to improve performance • Implement staff training • Understand the relationship between staff's sense of belonging and the organization • Develop staff's problem-solving ability • Develop staff's creative thinking skills  3. Professionalism • Comply with the legal requirements related to logistics and transportation, warehousing, customs and bonded goods • Adhere to the principle of fairness and impartiality when dealing with staff assessment to
	<ul> <li>avoid causing dissatisfaction.</li> <li>Build team spirit to foster staff's sense of belonging and stimulate their motivation to work</li> </ul>
Assessment Criteria	The integrated outcome requirements of this unit of competency are:
Ontona	Able to master the specific knowledge of logistics management of jewellery; and

	Formulate logistics management plans and supervisory plans suitable for the development of the organization, so as to improve the effectiveness of the logistics management and enhance the economic efficiency of the enterprise.
Remark	

Title	Formulate warehouse automation solutions
Code	109004L6
Range	This unit of competency is applicable to practitioners responsible for formulating policies for the logistics and procurement of jewellery. Practitioners should be capable of making critical analysis and judgments. They should be able to master the specific knowledge of logistics management and inventory control of jewellery, and formulate warehouse automation solutions so as to enhance the efficiency of warehouse operations.
Level	6
Credit	9
Competency	1. Know about warehouse automation
	<ul> <li>Know about the overall business strategy of the organization</li> <li>Know about the principles of warehouse management</li> <li>Know about the electronic inventory identification and management systems of the organization, such as: <ul> <li>Radio frequency identification system</li> <li>Bar code</li> </ul> </li> <li>Know about the concepts of warehouse automation</li> <li>Know about the various stages of warehouse automation, such as: <ul> <li>Transfer automation</li> <li>Storage automation</li> <li>Integrated warehouse automation</li> </ul> </li> <li>Know about the characteristics, performance and limitations of various warehouse automation equipment, such as: <ul> <li>Automatic order picking systems</li> <li>Robotic arms</li> <li>Carousels</li> <li>Automated storage and retrieval systems</li> <li>Retrieval systems</li> </ul> </li> <li>Have an in-depth understanding of the warehouse operations</li> </ul> <li>2. Formulate warehouse automation solutions</li>
	<ul> <li>Analyze the current situation of the warehouse to assess the feasibility of warehouse automation</li> <li>Analyze the possibility of integrating the organization's electronic inventory identification and management systems with a warehouse automation system</li> <li>Develop suitable warehouse automation solutions to build a smart warehouse, such as:         <ul> <li>Local process automation</li> <li>Integrated warehouse automation modules</li> </ul> </li> <li>Conduct gap analysis and effectiveness analysis on different automation solutions and make recommendations to management</li> <li>Select the appropriate supplier to build the warehouse automation system and carry out relevant work on the warehouse automation system</li> <li>Evaluate and set the maintenance schedules of the warehouse automation system to</li> </ul>
	<ul> <li>ensure the effective operation of the relevant equipment and instruments</li> <li>Arrange suitable training to ensure that all relevant staff can operate the warehouse automation system</li> </ul>

	<ul> <li>Establish appropriate communication channels to collect staff's opinions on the warehouse automation system, review the effectiveness of the current system and make suggestions for improvement to management</li> </ul>
	3. Professionalism
	<ul> <li>Prevent any abuse or corrupt practices such as abusing or misappropriating the assets of the organization and theft.</li> <li>Ensure that the inventory information provided is accurate.</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to develop appropriate warehouse automation solutions according to the business development of the organization; and</li> <li>Collect and analyze different opinions to propose feasible improvements to the optimization plans.</li> </ul>
Remark	

Title	Apply basic gemstone identification tools/equipment
Code	109005L2
Range	This unit of competency is applicable to practitioners who work in gemmological laboratories and those with related duties in the jewellery industry. This unit of competency is applied in the routine work environments related to gemstone identification. Practitioners should be capable of understanding the basic gemstone identification tools/equipment, and their operating principles, performance and functions, so as to correctly apply the tools/equipment to carry out preliminary tests and related work under instruction.
Level	2
Credit	3
Competency	Performance Requirements  1. Know about basic gemstone identification tools/equipment, such as:  Fluorescent lamp  10X lens  Pen flashlight  Measuring callipers/steel ruler  Handheld spectroscope  Gemstone cloth  Gemstone forceps  Electronic balance  Know about the operating principles, performance, functions and advantages/disadvantages of basic gemstone identification equipment  Apply basic gemstone testing/identification equipment to carry out preliminary tests  Determine the existing calibration/certified mark of the gemstone testing equipment  Ascertain the basic principles, performance, functions, and advantages/disadvantages of the gemstone testing equipment  Apply the basic gemstone testing equipment properly to carry out preliminary tests  Professionalism  Able to follow the practitioners' company requirements, code of practice and safety guidelines to apply the basic gemstone identification tools/equipment to perform preliminary tests and related duties effectively and precisely in a professional attitude.
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to clearly identify various basic gemstone identification equipment, and their operating principles, performance and functions; and</li> <li>Correctly apply the testing equipment to carry out preliminary tests and related work under guidance.</li> </ul>
Remark	This unit of competency is written with reference to the following materials. Readers can study the relevant information according to their needs:-  • Information from courses of The Gemmological Association of Great Britain (Gem-A), courses of The Gemological Institute of America (GIA), courses of The Swiss Gemmological Institute and courses of the International Gemological Institute, and information from the China National Gemstone Testing Center, etc.

Title	Know about precious metal testing methods and equipment
Code	109006L3
Range	This unit of competency is applicable to practitioners who work in gemmological laboratories and those with related duties in the jewellery industry. This unit of competency is applied in the routine work environment relating to testing and identification. Practitioners should be able to use simple testing equipment properly to carry out preliminary tests under instruction.
Level	3
Credit	6
Competency	Performance Requirements  1. Know about precious metal testing methods
	Know about precious metal testing process     Receive the goods     Identify and record     Test     Enter data and print the report     Ship and record     Ship and record     Know about the attributes of precious metals and their alloys     Know about the testing methods for the content of precious metals and their alloys, such as:     Touchstone method     Fire assay     X-ray fluorescence spectrometry     Inductively coupled plasma spectrometry     Inductively coupled plasma spectrometry     Now about the advantages and disadvantages of various precious metal testing methods  2. Use precious metal testing equipment to carry out preliminary tests     Determine the functions of the testing equipment     Properly use the precious metal testing equipment, such as:     Standard electronic balance     Touchstone     X-ray gold detector     Determine the existing calibration of the testing equipment     Master the testing process of precious metals     Master the testing procedure of precious metals     Sampling     Testing     Determining the testing method     Reviewing the test results     Completing the test
	Able to follow the practitioners' company requirements, code of practice and safety guidelines to use suitable equipment to test precious metal products in a professional attitude.

Assessment Criteria	The integrated outcome requirements of this unit of competency are:  Able to clearly identify the characteristics of precious metal materials; and Properly use the testing equipment to carry out preliminary tests for precious metal products under instruction.
Remark	This unit of competency is written with reference to the following materials. Readers can study the relevant information according to their needs:-
	<ul> <li>The English-Chinese and Chinese-English Dictionary of Gems and Jewelry published by China University of Geosciences Press Co. Ltd.; andWork guidelines of their relevant gemmological laboratories.</li> </ul>

Title	Know about the basic testing of diamonds
Code	109007L3
Range	This unit of competency is applicable to practitioners who work in jewellery gemmological laboratories and those with related duties in the jewellery industry. This unit of competency is applied in the routine work environments relating to diamond identification. Practitioners should have a basic understanding of the identification of diamonds and be capable of operating simple diamond identification equipment properly under instruction.
Level	3
Credit	6
Competency	Performance Requirements  1. Know about diamond materials
Assessment	Know about diamond materials, including:
Assessment Criteria	The integrated outcome requirements of this unit of competency are:

	<ul> <li>Able to understand diamond materials clearly; and</li> <li>Properly operate simple diamond identification equipment under instruction.</li> </ul>
Remark	This unit of competency is written with reference to the following materials. Readers can study the relevant information according to their needs:-
	<ul> <li>The English-Chinese and Chinese-English Dictionary of Gems and Jewelry published by China University of Geosciences Press Co. Ltd.; and</li> <li>Courses of The Gemmological Association of Great Britain (Gem-A), courses of The Gemological Institute of America (GIA), courses of The Swiss Gemmological Institute, courses of the International Gemological Institute, etc.</li> </ul>

Title	Know about the basic testing of gemstones
Code	109008L3
Range	This unit of competency is applicable to practitioners who work in gemmological laboratories and those with related duties in the jewellery industry. This unit of competency is applied in routine work environments relating to gemstone testing. Practitioners should have a basic understanding of the characteristics of gemstone materials and the various gemstone materials on the market, and be capable of operating the more commonly used gemstone identification equipment properly under instruction.
Level	3
Credit	9
Competency	Performance Requirements  1. Know about the characteristics of gemstone materials  • Gemstone materials  • The nature of gemstones  • Crystalline materials  • Durability of gemstone materials  • Hardness  • Tenacity  • Stability  • Durability  • Specific gravity (relative density)  The nature of light  Refraction  Reflection and optical reflection effects  Colour  Plane polarized light  Non-visible radiation and energy  Optical magnification (observing the characteristics of the surface and inclusions)  • Know about the gemstone materials in the market  Inorganic gemstones such as:  Precious gemstones/Semi-precious gemstones  Plamonds  Coloured gemstones  Ruby/Sapphire;  Emerald;  Tourmaline, etc.  Organic gemstones such as:  Amber;  Coral;  Pearl, etc.  Artificial gemstones  Artificial stones  Composite stones  Reconstructed stones  Imitation gem materials  Jewellery materials with special optical effects

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	<ul><li>Treated gem materials</li><li>Master the use of basic gemstone testing equipment</li></ul>
	Know about the categories of the more commonly used gemstone testing equipment, such as:
	<ul> <li>Able to follow the requirements of the organizations, code of practice and safety guidelines and to use testing equipment to carry out tests on gemstones effectively in a professional attitude</li> <li>Learn to use the latest gemstone identification/testing equipment constantly</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to clearly analyze the types and characteristics of gemstones; and</li> <li>Properly use the gemstone testing equipment to carry out tests for gemstone products under instruction.</li> </ul>
Remark	This unit of competency is written with reference to the following materials. Readers can study the relevant information according to their needs:-
	<ul> <li>Guobiao standards GB/T16552-2017 (Gems - Nomenclature);</li> <li>The English-Chinese and Chinese-English Dictionary of Gems and Jewelry published by China University of Geosciences Press Co. Ltd.; and</li> <li>Courses of The Gemmological Association of Great Britain (Gem-A), courses of The Gemological Institute of America (GIA), courses of The Swiss Gemmological Institute, courses of the International Gemological Institute, etc.</li> </ul>

Titlo	Know about the testing of iede (including Eq. Cui)
Title	Know about the testing of jade (including Fei Cui)
Code	109009L3
Range	This unit of competency is applicable to practitioners who work in gemmological laboratories and those with related duties in the jewellery industry. This unit of competency is applied in related routine work environments. Practitioners should have a basic understanding of various types of jade (including Fei Cui) and their analysis and are capable of using testing/identification equipment and tools properly to obtain accurate data and information under instruction.
Level	3
Credit	6
Competency	Performance Requirements  1. Know about the various types of jade (including Fei Cui)
	Know about jade identification processes     Receipt identification and record     Photograph     Jade (including Fei Cui) testing procedure     Enter data and print the certificate     Review, endorse and issue the certificate     Laminate and trim     Ship and record      Know about the basic properties of jade (including Fei Cui)     Classification of jade (including Fei Cui) by type and quality     Differences between natural jade (including Fei Cui) and chemically treated jade (Types B, B + C and C)     The primary colours and secondary colours of jade (including Fei Cui)     Types of raw materials and their colours, types and quality     Origins of jade (including Fei Cui)  2. Use jade (including Fei Cui) testing/identification equipment to obtain accurate data and information  Master the correct use of jade (including Fei Cui) testing equipment  Master the basic data for testing jade (including Fei Cui), including:     Shape and cuts     Size (mm)     Weight (g)     Transparency     Colour     Polariscope     Refractive index     Specific gravity (relative density)     Ultraviolet fluorescence     Chelsea colour filters     Visible light absorption spectrum     Magnifying glass/microscope     Infrared spectrum  Determine the existing calibration/certified mark of the jade (including Fei Cui) testing equipment

	3. Professionalism
	<ul> <li>Following the requirements of the organization, code of practice and safety guidelines, able to use equipment to obtain accurate data and information effectively in a professional attitude</li> <li>Acquire new knowledge of jade (including Fei Cui)</li> <li>Use jade (including Fei Cui) testing equipment professionally</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to have a preliminary understanding/analysis of various types of jade (including Fei Cui), such as natural jade (including Fei Cui) (Type A) and chemically treated jade (Types B, B + C and C); and</li> <li>Operate jade (including Fei Cui) testing equipment to obtain detailed and accurate data and information effectively under instruction.</li> </ul>
Remark	The identification process, basic properties and the required basic data of jade (including Fei Cui) are written with reference to the Hong Kong Standard Testing Methods for Fei Cui 2016 published by the Gemmological Association of Hong Kong

the jewellery industry. This unit of competency is applied in related work environments. Practitioners should clearly understand that there are different testing/certification methods are processes for different precious metal and gemstone products and are capable of carrying ou preliminary tests independently and properly with simple testing equipment.  Level 4  Credit 9  Competency Performance Requirements  1. Know about certification services and accreditation requirements of jewellery products  • Analyze the accreditation requirements for properly and safely handling items and product samples to be tested/certified  • Know that there are different testing/certification methods for different precious metal and gemstone products  • Know about the types of samples and the sampling processes  • Conduct in-depth assessment of the types and properties of the samples to be tested, such as:  • Jewellery product/part  • Ring shank  • Collet  • Snap  • Welding joint/casting alloy, etc.  • Use the sampling concept to determine the sampling process  • Distinguish and determine the various sampling methods and explain their use samples, including:  • Receipt identification and recording jewellery products/gemstone samples, including:  • Receipt identification and record  • Photograph  • Product testing procedure  • Enter data and print the certificate  • Review, endorse and issue the certification equipment	Title	Know about the testing and certification of jewellery products
the jewellery industry. This unit of competency is applied in related work environments. Practitioners should clearly understand that there are different testing/certification methods ar processes for different precious metal and gemstone products and are capable of carrying ou preliminary tests independently and properly with simple testing equipment.  Level 4  Credit 9  Competency Performance Requirements  1. Know about certification services and accreditation requirements of jewellery products  • Analyze the accreditation requirements for properly and safely handling items and product samples to be tested/certified  • Know that there are different testing/certification methods for different precious metal and gemstone products  • Know about the types of samples and the sampling processes  • Conduct in-depth assessment of the types and properties of the samples to be tested, such as:  • Jewellery product/part  • Ring shank  • Collet  • Snap  • Welding joint/casting alloy, etc.  • Use the sampling concept to determine the sampling process  • Distinguish and determine the various sampling methods and explain their use Know about the process for receiving and recording jewellery products/gemstone samples, including:  • Receipt identification and record  • Photograph  • Product testing procedure  • Enter data and print the certificate  • Review, endorse and issue the certificate  • Ship and record  2. Conduct tests with jewellery product testing/certification equipment  • Determine the testing equipment required to be used for jewellery product certification  • Correctly test the colour of the product by using the suitable precious metal testing	Code	109010L4
Competency Performance Requirements 1. Know about certification services and accreditation requirements of jewellery products  • Analyze the accreditation requirements for properly and safely handling items and product samples to be tested/certified  • Know that there are different testing/certification methods for different precious metal and gemstone products  • Know about the types of samples and the sampling processes  • Conduct in-depth assessment of the types and properties of the samples to be tested, such as:  • Jewellery product/part  • Ring shank  • Collet  • Snap  • Welding joint/casting alloy, etc.  • Use the sampling concept to determine the sampling process  • Distinguish and determine the various sampling methods and explain their use  • Know about the process for receiving and recording jewellery products/gemstone samples, including:  • Receipt identification and record  • Photograph  • Product testing procedure  • Enter data and print the certificate  • Review, endorse and issue the certificate  • Ship and record  2. Conduct tests with jewellery product testing/certification equipment  • Determine the testing equipment required to be used for jewellery product certification  • Correctly test the colour of the product by using the suitable precious metal testing	Range	Practitioners should clearly understand that there are different testing/certification methods and processes for different precious metal and gemstone products and are capable of carrying out
Performance Requirements  1. Know about certification services and accreditation requirements of jewellery products  • Analyze the accreditation requirements for properly and safely handling items and product samples to be tested/certified  • Know that there are different testing/certification methods for different precious metal and gemstone products  • Know about the types of samples and the sampling processes  • Conduct in-depth assessment of the types and properties of the samples to be tested, such as:  • Jewellery product/part  • Ring shank  • Collet  • Snap  • Welding joint/casting alloy, etc.  • Use the sampling concept to determine the sampling process  • Distinguish and determine the various sampling methods and explain their use  • Know about the process for receiving and recording jewellery products/gemstone samples, including:  • Receipt identification and record  • Photograph  • Product testing procedure  • Enter data and print the certificate  • Review, endorse and issue the certificate  • Ship and record  2. Conduct tests with jewellery product testing/certification equipment  • Determine the testing equipment required to be used for jewellery product certification  • Correctly test the colour of the product by using the suitable precious metal testing	Level	4
1. Know about certification services and accreditation requirements of jewellery products  Analyze the accreditation requirements for properly and safely handling items and product samples to be tested/certified  Know that there are different testing/certification methods for different precious metal and gemstone products  Know about the types of samples and the sampling processes  Conduct in-depth assessment of the types and properties of the samples to be tested, such as:  Jewellery product/part  Ring shank  Collet  Snap  Welding joint/casting alloy, etc.  Use the sampling concept to determine the sampling process  Distinguish and determine the various sampling methods and explain their use  Know about the process for receiving and recording jewellery products/gemstone samples, including:  Receipt identification and record  Photograph  Product testing procedure  Enter data and print the certificate  Review, endorse and issue the certification equipment  Enter data sit pewellery product testing/certification equipment  Determine the testing equipment required to be used for jewellery product certification  Correctly test the colour of the product by using the suitable precious metal testing	Credit	9
<ul> <li>Correctly test the gemstone assembled on the product by using the suitable gemstone testing method and related testing equipment</li> <li>Know about the online verification system service for jewellery products</li> </ul> 3. Professionalism	Competency	1. Know about certification services and accreditation requirements of jewellery products  Analyze the accreditation requirements for properly and safely handling items and product samples to be tested/certified  Know that there are different testing/certification methods for different precious metal and gemstone products  Know about the types of samples and the sampling processes  Conduct in-depth assessment of the types and properties of the samples to be tested, such as:  Jewellery product/part  Ring shank  Collet  Snap  Welding joint/casting alloy, etc.  Use the sampling concept to determine the sampling process  Distinguish and determine the various sampling methods and explain their uses  Know about the process for receiving and recording jewellery products/gemstone samples, including:  Receipt identification and record  Photograph  Product testing procedure  Enter data and print the certificate  Review, endorse and issue the certificate  Ship and record  Conduct tests with jewellery product testing/certification equipment  Determine the testing equipment required to be used for jewellery product certification  Correctly test the colour of the product by using the suitable precious metal testing method and related testing equipment  Correctly test the gemstone assembled on the product by using the suitable gemstone testing method and related testing equipment  Know about the online verification system service for jewellery products  Professionalism  Comply with the code of conduct of the laboratory to ensure the integrity, fairness and

	<ul> <li>Ensure that the selected sampling method meets the sampling needs required by the customer or relevant standards; and</li> <li>Able to correctly use testing equipment to perform testing/certification services for jewellery products independently</li> </ul>
Remark	

Title	Identify common gemstones and their quality
Code	109011L4
Range	This unit of competency is applicable to practitioners who work in gemmological laboratories and those with related duties in the jewellery industry. Practitioners should be capable of conducting analysis, assessment and integration of data. They should also be able to distinguish gemstones, know their identification methods and use relevant identification equipment properly to obtain data and information for application in the related work in the jewellery industry.
Level	4
Credit	9
Competency	Performance Requirements  1. Know about the categories and properties of gemstones
	Know about the categories of gemstones and their properties, such as:     The nature of gemstone materials     Structures and properties of gemstones     Colours in gemstone materials (colouring elements)     Advanced physical and optical testing of gemstones     Inorganic gemstone materials, such as:     Precious/Semi-precious gemstones     Inoimonds     Coloured gemstones     Inoured ge
	Master the functions of basic gemstone testing equipment     Use relevant gemstone testing equipment properly to obtain data and information, such as:
	Learn to use up-to-date gemstone identification/testing equipment constantly
Assessment Criteria	The integrated outcome requirements of this unit of competency are:

	<ul> <li>Able to distinguish the gemstones commonly used in jewellery manufacturing and understand their basic identification methods; and</li> <li>Use identification equipment and tools properly to obtain data and information.</li> </ul>
Remark	This unit of competency is written with reference to the following materials. Readers can study the relevant information according to their needs:-
	<ul> <li>Guobiao standards GB/T16553-2017 (Gems Testing);</li> <li>The English-Chinese and Chinese-English Dictionary of Gems and Jewelry published by China University of Geosciences Press Co. Ltd.; and</li> <li>Courses of The Gemmological Association of Great Britain (Gem-A), courses of The Gemological Institute of America (GIA), courses of The Swiss Gemmological Institute, courses of the International Gemological Institute, etc.</li> </ul>

Title	Handle and transport test samples
Code	109012L4
Range	This unit of competency is applicable to practitioners who work in gemmological laboratories. Practitioners should have knowledge of loading/unloading and transporting samples in accordance with the established procedures to ensure that the handling/transportation of samples will not affect the results of the subsequent tests.
Level	4
Credit	3
Competency	Performance Requirements  1. Know about loading/unloading and transporting jewellery products/gemstone samples
	<ul> <li>Describe the significance of effective communication between customers and gemmological laboratories</li> <li>Describe the need for proper and timely delivery</li> <li>Describe the need for maintaining the equipment used in loading/unloading and transporting products/gemstone samples</li> </ul>
	2. Master the loading/unloading and transportation of jewellery products/gemstone samples
	<ul> <li>Meet the requirements of the laboratories when transporting the collected products/gemstone samples</li> <li>Alert staff of the gemmological laboratories of any special needs specified in the documents of the relevant products/gemstone samples</li> <li>Fill in the necessary documents at the pick-up point</li> <li>Place the product/gemstone sample in the specific transportation container and seal the container properly</li> <li>Maintain the condition of the transportation container</li> <li>Unseal the container for testing</li> <li>Deliver the products/gemstone samples to customers in accordance with the standard operating procedures</li> <li>Record the details of the delivery of products/gemstone samples in the relevant section of the Chain of Custody form to report any incidents to the supervisor, including: <ul> <li>Maintain traceability</li> <li>Security</li> </ul> </li> </ul>
	3. Professionalism
	Ensure the safety and traceability of the product samples
Assessment Criteria	The integrated outcome requirement of this unit of competency is:
	<ul> <li>Select and use appropriate techniques and equipment to process, label and transport the selected samples according to the nature and characteristics of the jewellery products/gemstone samples.</li> </ul>
Remark	

Title	Determine the testing methods
Code	109013L4
Range	This unit of competency is applicable to practitioners who work in gemmological laboratories in the jewellery industry. This unit of competency is applied in related work environments. Under instruction, practitioners should be capable of determining the required data/information, and suitable testing equipment and techniques, so as to determine the established standard testing methods for testing/identification.
Level	4
Credit	3
Competency	Performance Requirements  1. Determine the testing methods and confirm the elements required
	Determine the type and amount of data/information required  Make use of statistics to assess and determine the methods, including related tests:  Principle Concept Accreditation requirements Traceability Results  Ensure that the calibration of the testing instrument/equipment meets the relevant standards, such as: Touchstone method (non-destructive), X-ray fluorescence spectrometry (non-destructive) Fire assay (consumptive and destructive) Inductively coupled plasma spectrometry (consumptive and destructive) Confirm that the uncertainty level of the testing method is within the acceptable range  Determine the testing methods Ensure that the testing method is authorized by the relevant supervisor Confirm the procedures of the testing method, including: Conduct literature/data search on the background of the gemstone/precious metal to be tested Start, set/optimize, calibrate and operate the related testing instrument/equipment according to the manufacturer's specifications Prepare the test sample and standards for confirmation
	<ul> <li>Conduct the test according to the confirmed method</li> <li>Record the entire testing procedure in detail</li> <li>Write the test report</li> </ul>
	3. Professionalism
	<ul> <li>Maintain the security and confidentiality of all customer/organization data and test data during the process</li> <li>Regularly review the code of conduct of the gemmological laboratories to maintain the impartiality, confidentiality and integrity of the practitioners of the laboratories</li> </ul>
Assessment	The integrated outcome requirement of this unit of competency is:
Criteria	Able to determine the required data/information, and the suitable testing equipment and techniques, so as to determine the established standard testing methods.

Functional Area - Testing and Certification	
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Remark	Remark					
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Title	Formulate procedures for handling the items and samples to be tested/identified		
Code	109014L5		
Range	This unit of competency is applicable to practitioners responsible for formulating strategies in gemmological laboratories in the jewellery industry. Application of this competency requires practitioners' analytical and judgmental skills. They should be able to properly and safely handle the testing/identification items and jewellery products/gemstone samples by analyzing the requirements of international standards and recording the processes when formulating the procedures in the laboratories.		
Level	5		
Credit	3		
Competency	Performance Requirements  1. Know about the procedures for handling testing/identification items and jewellery products/gemstone samples		
	<ul> <li>Apply the concept of determining, recording and documenting the handling of testing/identification items and products/gemstone samples</li> <li>Analyze the accreditation requirements for handling the testing/ identification items and products/gemstone samples properly and safely</li> <li>Explain the receipt/delivery of products/gemstone samples and record the process</li> <li>Determine the appropriate measures to avoid degradation, loss and damage of testing/identification items and products/gemstone samples</li> </ul>		
	2. Master the procedures of handling testing/identification items and products/gemstone samples		
	<ul> <li>Compile the procedures for handling testing/identification items and products/gemstone samples</li> <li>Compile the procedures for controlling and cleaning up damaged materials</li> <li>Describe in detail the maintenance requirements for the equipment used in handling the testing/identification items and products/gemstone samples</li> <li>Promote the importance of the handling procedures of products/gemstone samples and items to relevant staff</li> </ul>		
	3. Professionalism		
	<ul> <li>Ensure that the established procedures for handling testing/identification items and products/gemstone samples meet the requirements of relevant international standards</li> </ul>		
Assessment	The integrated outcome requirement of this unit of competency is:		
Criteria	<ul> <li>Formulate procedures that meet the requirements of relevant international standards in gemmological laboratories to properly and safely handle the testing/identification items and products/gemstone samples.</li> </ul>		
Remark			
	1		

Title	Identify and analyze specific gemstones
Code	109015L5
Range	This unit of competency is applicable to gemmologists working in gemmological laboratories in the jewellery industry. Practitioners should be capable of conducting analysis, assessment and integration of data. They should be able to analyze the characteristics of specific gemstones and understand their identification methods and use precision testing equipment to identify different kinds of gemstones effectively, independently and properly.
Level	5
Credit	9
Competency	Performance Requirements  1. Analyze the characteristics of specific gemstones  • Inorganic gemstones  • Organic gemstones  • Artificial gemstones  • Imitation gem materials and composite stones, such as:  • Imitation gem materials (e.g. glass and plastic)  • Composite stones  • Reconstructed stones (e.g. pressed amber)  • Doublets and triplets (e.g. opal)  • Treated gemstone materials  • Colouring, foiling and coating  • Dyeing  • Impregnation and filling  • Laser treatment  • Heat treatment and diffusion  • Radiation and heat treatment  • High pressure and high temperature treatment  2. Identify specific gemstones  • Master the methods for analyzing the characteristics of specific gemstones and the identification methods  • Master the functions of basic gemstone testing equipment  • Use precision gemstone testing equipment properly to conduct gemstone tests  3. Professionalism  • Following the requirements of the organization, code of practice and safety guidelines, use testing equipment to conduct tests on specific gemstones and effectively in a
	professional attitude  • Learn to use the latest gemstone identification/testing equipment constantly
Assessment Criteria	The integrated outcome requirements of this unit of competency are:  • Able to analyze the characteristics of specific gemstones and understand their basic identification methods; and  • Use identification equipment and tools properly to obtain data and information.
Remark	This unit of competency is written with reference to the following materials. Readers can study the relevant information according to their needs:-

- Guobiao standards GB/T16552-2017 (Gems Nomenclature);
- The English-Chinese and Chinese-English Dictionary of Gems and Jewelry published by China University of Geosciences Press Co. Ltd.; and
- Courses of The Gemmological Association of Great Britain (Gem-A), courses of The Gemological Institute of America (GIA), courses of The Swiss Gemmological Institute, courses of the International Gemological Institute, etc.

Title	Identify and grade diamonds		
Code	109016L5		
Range	This unit of competency is applicable to gemmologists working in gemmological laboratories in the jewellery industry. Practitioners should be capable of conducting analysis, judgment and assessment. They should have a wide range of knowledge of diamonds and expertise in diamond identification, and be able to use professional precision identification equipment to obtain and master detailed and accurate data and information, so as to effectively and independently perform diamond identification work to identify and grade diamonds after careful analysis.		
Level	5		
Credit	6		
Competency	Performance Requirements  1. Analyze the categories and characteristics of diamonds		
	Analyze the categories and characteristics of diamonds, including: Conditions for diamond formation The origin of diamonds and their formation mechanism Distinction between natural diamonds, synthetic gem-quality diamonds and diamond simulants Treated diamonds and their characteristics Master the development and modern trends of diamond cuts Master the 4C grading standard Master the trend of the diamond market  2. Identify and grade diamonds Operate precision diamond identification equipment to perform diamond identification and grading duties effectively in accordance with the "Standard Methods for Testing Diamond for Hong Kong" developed by the Gemological Association of Hong Kong, including:  Authenticity identification Measurement of weight Colour grading Testing for fluorescence Clarity grading Shape and cutting style Proportion and finish grading Cut grading Master the functions of diamond testing equipment Use relevant gemstone testing equipment to test gemstones properly Fourier-transform infrared spectrometer DiamondSureTM (Diamond spectrometer) Diamond diluminator Diamond screening device Raman spectrometer Synthetic diamond testing device Assess and grade diamonds effectively and accurately according to the international and national diamond grading standards Diamond 4Cs Carat weight		

	<ul> <li>Colour grade</li> <li>Clarity grade</li> <li>Cut grade</li> </ul>
	<ul> <li>Omply with the code of conduct of the gemmological laboratories to ensure the integrity and confidentiality of the test data and information</li> <li>Keep up to date with and constantly learn the latest knowledge of diamond and the use of relevant identification equipment</li> </ul>
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to have in-depth understanding/analysis of various kinds of diamonds, such as natural diamonds, synthetic gem-quality diamonds and their simulants; and</li> <li>Operate precision identification equipment to obtain detailed and accurate data and information, so as to effectively carry out diamond identification duties to asses and grade diamonds after careful analysis.</li> </ul>
Remark	<ul> <li>This unit of competency is written with reference to the following materials. Readers can study the relevant information according to their needs:-</li> <li>Guobiao standards GB/T16554-2017 (Diamond grading);</li> <li>"Standard Methods for Testing Diamond for Hong Kong" developed by the Gemological Association of Hong Kong; and</li> <li>Courses of The Gemmological Association of Great Britain (Gem-A), courses of The Gemological Institute of America (GIA), courses of The Swiss Gemmological Institute, courses of the International Gemological Institute, etc.</li> </ul>

Title	Identify and analyze jade (including Fei Cui)	
Code	109017L5	
Range	This unit of competency is applicable to gemmologists working in gemmological laboratories in the jewellery industry. Practitioners should be capable of conducting analysis, judgment and assessment. They should have a wide range of knowledge of all kinds of jade (including Fei Cui) and be able to analyze them as well as to use identification equipment to obtain detailed and accurate data and information, so as to perform jade (including Fei Cui) identification work on jade (including Fei Cui) effectively and independently after careful analysis.	
Level	5	
Credit	6	
Competency	Performance Requirements  1. Analyze the categories and characteristics of jade (including Fei Cui)  • Analyze the categories and characteristics of jade (including Fei Cui), including:  • Know about the categories, quality, etc. of jade (including Fei Cui)  • Know about the classification of Fei Cui  • Fei Cui, Jadeite jade  • Fei Cui, Momphacite  • Fei Cui, Kosmochlor  • Distinguish between natural jade (including Fei Cui) and chemically treated jade (including Fei Cui) (Types B, C and B + C)  • The difference between the primary colours and secondary colours of jade (including Fei Cui)  • Jadeite and nephrite  • Jade-like minerals  • Know about the categories of raw materials and their colours, types and quality  • Origins of jade (including Fei Cui) and their characteristics  • Artificial treatment methods of jade and its characteristics after treatment  • Know about jade grading standards, such as:  • Colour  • Transparency  • Texture  • Clarity  • Cut	
	<ul> <li>2. Identify all kinds of jade (including Fei Cui)</li> <li>Operate the precision jade (including Fei Cui) identification equipment to perform jade (including Fei Cui) identification duties effectively</li> <li>With reference to relevant standard test methods and procedures to distinguish jade (including Fei Cui) and its imitations <ul> <li>Receive the sample</li> <li>Master the basic data of the sample, including:</li> <li>Shape and cut</li> <li>Dimensions (mm) and weight (g)</li> <li>Transparency and colour</li> <li>Surface and internal characteristics (microscope) and visual analysis</li> <li>Use relevant testing and identification methods to distinguish whether the sample is natural Fei Cui or treated Fei Cui (imitations), including:</li> <li>Refractive index</li> </ul> </li> </ul>	

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	<ul> <li>Specific gravity (relative density)</li> <li>Colour and fluorescence intensity</li> <li>Use relevant identification methods to distinguish whether the sample is natural Fei Cui or treated Fei Cui, including:         <ul> <li>Colours observed under CCF</li> <li>Visible light absorption spectrum</li> <li>Infrared spectrum of the test sample</li> </ul> </li> <li>Determine the classification of Fei Cui, including:         <ul> <li>Fei Cui without dyeing, chemical treatment and resin impregnation (Type A)</li> <li>Fei Cui with chemical treatment and resin impregnation (Type B)</li> <li>Fei Cui with dyeing (Type C)</li> <li>Fei Cui with chemical treatment, resin impregnation and dyeing (Type B+C)</li> </ul> </li> <li>Use infrared spectrum fingerprinting to test natural Fei Cui, record and check the infrared fingerprint spectra of test samples to further distinguish natural Fei Cui and treated Fei Cui</li> <li>Determine the existing calibration/certified mark of the jade (including Fei Cui) identification equipment</li> <li>Install, maintain, repair and optimize the testing instruments/equipment, and check their calibration status to meet testing requirements</li> </ul>
	3. Professionalism
	<ul> <li>Comply with the code of conduct of the gemmological laboratories to ensure the integrity and confidentiality of the test data and information</li> <li>Keep up to date with and constantly learn the latest knowledge of jade (including Fei Cui) and the use of relevant identification equipment</li> </ul>
Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to have an in-depth understanding/analysis of all kinds of jade (including Fei Cui), such as natural jade (including Fei Cui) (Type A), treated jade (including Fei Cui) (Type B, C and B+C) and imitations; and</li> <li>Operate precision identification equipment to obtain detailed and accurate data and information, so as to effectively perform jade (including Fei Cui) identification duties to assess and identify jade (including Fei Cui) after careful analysis.</li> </ul>
Remark	This unit of competency is written with reference to the following materials. Readers can study the relevant information according to their needs:-
	<ul> <li>Guobiao standards GB/T16553-2017 (Gems Testing); and</li> <li>Hong Kong Standard Testing Methods for Fei Cui 2016 by the Gemmological Association of Hong Kong</li> </ul>

Title	Identify and grade all kinds of pearls		
Code	109018L5		
Range	This unit of competency is applicable to gemmologists working in gemmological laboratories in the jewellery industry. Practitioners should be capable of conducting analysis, judgment and assessment. They should have a wide range of knowledge of pearls and expertise in pearl identification, and be able to use precision identification equipment to obtain and master detailed and accurate data and information so as to effectively perform pearl identification work to identify and grade pearls after careful analysis.		
Level	5		
Credit	6		
Competency	Performance Requirements  1. Analyze the categories and characteristics of pearls  • Analyze the categories and characteristics of pearls  • The origin and formation of pearls  • Basic properties of pearls  • Chemical composition  • Internal structure  • Features of the surface  • Colour  • Lustre  • Cleavage  • Mohs hardness  • Density  • Other properties  • Low resistance to acid/heat  • Poor radiation resistance  • Cultured pearls  • Cultured pearls  • Cultured pearls without insertion of nucleus  • Cultured pearls with insertion of nucleus  • Cultured pearls with insertion of nucleus  • Cultured pearls with shells  • Biiwa pearls  • Cultured pearls with shells  • Biister pearl  • Mabe pearls  • Combined pearls  • Imitation pearls  • Plastic pearls  • Glass pearls  • Glass pearls  • Akoya pearls  • Treshwater pearls  • Akoya pearls  • Treshwater pearls  • Treshwater pearls  • Akoya pearls  • Treshwater pearls  • Tahitian pearls  • Methods of treating pearls and their characteristics		

#### Functional Area - Testing and Certification

- Dyeing
- Irradiation treatment
- Lustre enhancement
- Methods of imitating pearls and their characteristics
- Master the history and prevailing trends of various types of pearls
- Know about the national and international grading standards on the quality of natural/cultured pearls
- Master the trend of the pearl market and prices

#### 2. Identify and grade all kinds of pearls

- Operate precision gemstone/pearl identification equipment to effectively perform various types of pearl identification duties
- Use pearl identification methods to distinguish between natural and cultured pearls, and between enhanced pearls and imitation pearls
  - Transmission method (illumination transmission)
  - o 10x magnifying glass to observe the drill holes
  - o Other methods, such as:
    - Endoscopy
    - X-ray photography
    - X-ray diffraction
    - X-ray fluorescence
- Effectively and accurately assess and grade pearls based on the national grading standards on the quality of natural/saltwater cultured /freshwater cultured pearls
  - Grade
    - Jewellery grade
    - Craft grade
  - o Colour
  - Lustre
  - Shape
  - o Diameter
  - Blemish
  - Surface perfection
  - Nacre thickness

#### 3. Professionalism

- Following the relevant ISO/HOKLAS codes, use equipment to identify all kinds of pearls
  effectively and accurately, record the data clearly, and assess and grade all kinds of
  pearls
- Comply with the code of conduct of the gemmological laboratories to ensure the integrity and confidentiality of the test data and information
- Keep up to date with and constantly learn the latest knowledge of pearls and the use of relevant identification equipment

### Assessment Criteria

The integrated outcome requirements of this unit of competency are:

- Able to have an in-depth understanding/analysis of all kinds of pearls, such as natural pearls, cultured pearls and imitation pearls; and
- Operate precision identification equipment to obtain detailed and accurate data and information so as to effectively carry out pearl identification duties to asses and grade pearls after careful analysis.

Remark	This unit of competency is written with reference to the following materials. Readers can study the relevant information according to their needs:-
	<ul> <li>Guobiao standards GB/T18781-2008 (Cultured pearl grading); and</li> <li>Courses of The Gemmological Association of Great Britain (Gem-A), courses of The Gemological Institute of America (GIA), courses of The Swiss Gemmological Institute, courses of the Belgium International Gemological Institute, information from the China National Gemstone Testing Center, etc.</li> </ul>

Title	Develop a quality management system for the gemmological laboratory					
Code	109019L5					
Range	This unit of competency is applicable to practitioners responsible for formulating policies in gemmological laboratories in the jewellery industry. Practitioners should be capable of mastering the requirements of relevant international standards and accreditation schemes of local laboratories. They should also be able to develop and design a quality management system in accordance with the operational needs of the gemmological laboratories.					
Level	5					
Credit	6					
Competency	Performance Requirements  1. Know about quality management systems and their implementation requirements					
	Know about the quality management systems of gemmological laboratories     The Hong Kong Laboratory Accreditation Scheme (HOKLAS)     ISO/IEC17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories, and HOKLAS Supplementary Criteria No. 39 about the management and technical requirements     Hong Kong Accreditation Service-accredited laboratories for testing of jadeite jade and diamond     Determine the activity scope of the gemmological laboratories     Determine the objectives of the quality management system of the gemmological laboratories     Determine the resource requirements during implementation     Know about the latest development in quality management of gemmological laboratories     Relevant international quality management certifications for gemmological laboratories     Knowledge management     Selevant international quality management certifications for gemmological laboratories     Knowledge management     Document control     Examination requirements     Plan the quality management system for the gemmological laboratories  Plan the quality management system that matches the activity scope of the gemmological laboratories, including:     Document control     Examination requirements     Facilities, equipment, material supply, reference standards     Customer service and complaint handling     Control of irregularities     Corrective, improvement and preventive measures     Record control     Internal management examination/external review     Confirmation of testing and calibration methods     Sampling, loading/unloading and calibration results     Report relevant results  Pevelop plans and procedures for implementing the quality management system of the gemmological laboratories, including:     Objectives and missions     Responsibilities of the staff, needs, number of staff required, training needs of the staff, etc. of the gemmological laboratories     Set a schedule and work according to it					

	<ul> <li>Financial estimates and resource requirements</li> <li>Benchmarks or performance indicators</li> </ul>			
	3. Professionalism			
	<ul> <li>Ensure that the quality management system is suitable, and fits the scale and scope of the gemmological laboratories</li> <li>Establish measures to ensure that all staff of the gemmological laboratories understand and implement the plan of the quality management system</li> </ul>			
Assessment	The integrated outcome requirements of this unit of competency are:			
Criteria	<ul> <li>Able to master the requirements of relevant international standards and accreditation schemes of local laboratories, and develop a quality management system in accordance with the operational needs of the gemmological laboratories; and</li> <li>Determine the activity scope of the gemmological laboratories in accordance with the requirements of the organizations' quality management policy, and develop the plans and procedures for implementing the quality management system.</li> </ul>			
Remark				

Title	Monitor and review the implementation of the quality management system of the gemmological laboratories					
Code	109020L6					
Range	This unit of competency is applicable to practitioners responsible for formulating policies in gemmological laboratories in the jewellery industry. Practitioners should be capable of continuously monitoring and rigorously reviewing the implementation of the quality management system for testing/calibration by evaluating the performance of the gemmological laboratories, so as to derive appropriate improvement recommendations.					
Level	6					
Credit	6					
Competency	Performance Requirements  1. Know about the objectives of the quality management system of the gemmological laboratories and the key performance indicators of the management system					
	Determine the quality management system of the gemmological laboratories, including:  Operation of the quality management system  Quality control structure  Management objectives  Management policy  Communication mechanism  Operation and co-ordination processes with different organizations/departments  Develop the key performance indicators for the implementation of the quality management system of the gemmological laboratories  Review various quality assurance documentation records, including:  Document management  Records of improvement plans and measures  Analyze/review the relevant staff involved in the operation of the gemmological laboratories, including:  Roles  Duties  Check current capabilities  Improvement areas  Training advice					
	<ul> <li>2. Monitor and review the implementation of the quality management system of the gemmological laboratories</li> <li>Review the objectives and content of the actual implementation of the quality control</li> </ul>					
	<ul> <li>Review the quality assurance manual and work instructions of the testing/identification workplace and revise as appropriate</li> <li>Strictly review the performance and assess the implementation and operation of the quality management system</li> <li>Review, analyze and improve the quality management system, including:         <ul> <li>Review the effectiveness of the system and the factors that cause insufficiency</li> <li>Based on the results of the quality review, conduct a detailed analysis to develop an improvement plan for the quality management system</li> </ul> </li> </ul>					

	<ul> <li>Collect opinions from relevant staff and make recommendations on the improvement measures of the quality management system according to one's level of responsibility and work procedures</li> <li>Launch and monitor plans for staff training and skills development related to the quality management system and continuous improvement</li> <li>Professionalism</li> </ul>				
	<ul> <li>Ensure that the quality management system of the gemmological laboratories is monitored and reviewed regularly and effectively, so as to improve the operation of the laboratories continuously</li> </ul>				
Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>Able to monitor and rigorously review the implementation of the quality management system of the gemmological laboratories in the testing/calibration activities within the scope of work; and</li> <li>Able to recommend the improvement measures and launch of the quality processes to improve the performance of individuals and teams in their work areas.</li> </ul>				
Remark					

Title	Formulate the ethics management policy and code of conduct for the gemmological laboratories					
Code	109021L6					
Range	This unit of competency is applicable to practitioners responsible for formulating policies in gemmological laboratories in the jewellery industry. Practitioners should be capable of formulating the ethics management policy and code of conduct by critically examining the industry standards and requirements related to quality assurance and integrity of services provided by testing and certification bodies, so as to implement, monitor and evaluate the ethics management policy in the organization.					
Level	6					
Credit	6					
Competency	provided by testing and certification bodies, so as to implement, monitor and evaluate the ethics management policy in the organization.  6  6					

Assessment	The integrated outcome requirements of this unit of competency are:
Criteria	<ul> <li>Able to formulate the ethics management policy by critically examining industry standards and requirements on the quality assurance and integrity of corporate services; and</li> <li>Develop guidelines for the implementation, monitoring and evaluation of the ethics management policy in the organization.</li> </ul>
Remark	

Title	Develop plans for staff training and talent development in gemmological laboratories					
Code	109022L6					
Range	This unit of competency is applicable to practitioners responsible for formulating policies in gemmological laboratories in the jewellery industry. Practitioners should be capable of developing plans for staff training and talent development by analyzing the development objectives and carefully judging the resources of the organization, so as to improve the skills and knowledge of staff.					
Level	6					
Credit	6					
Competency	Performance Requirements  1. Possess knowledge of staff training and talent development  Know about the organizational structure of the organization and the functions of each department  Director Quality manager Technical manager Chief gemmologist  Gemstone testing department  Laboratory manager Senior gemmologist Ge					

<ul> <li>e. Analyze the functions and characteristics of the organization/department</li> <li>2. Develop plans for staff training and talent development in gemmological laboratories</li> <li>e. Assess the current level of work capacity of staff according to the needs of each job function of the organization/department</li> <li>e. Analyze the discrepancy between the current capacity and the expected capacity of staff, determine the required training programs, candidates and priorities according to the trend of the testing and certification industry, and assess in depth the human resources and skills requirements in the foreseeable future</li> <li>e. Develop staff training programs/plans according to the organization's internal succession/promotion plan or brain drain</li> <li>e. Select the appropriate training model according to the specific requirements of variou job functions of the organization/department, the internal training capability and the supply of the training market</li> <li>e. Ensure that there are sufficient training resources to meet the development needs of staff</li> <li>e. Ensure that there are enough staff in the department to maintain normal operations during the training period</li> <li>e. Evaluate the effectiveness of the staff training programs and determine whether staff can acquire the expected skills and knowledge through the training</li> <li>e. Regularly review the effectiveness of the staff training system and policy of the organization</li> <li>e. Regularly report the staff training status to management and propose suggestions for improving the staff training and talent development plans</li> <li>3. Professionalism</li> <li>e. Ensure that the staff training and development plans can enhance the quality of staff, and meet the needs of the organization and the development trends of the industry</li> </ul>	S
Assessment The integrated outcome requirement of this unit of competency is:	
<ul> <li>Able to develop staff training and development plans according to the development objectives and resources of the organization, so as to provide useful training on skills and knowledge to staff and enhance their quality, as well as to promote the business development of the gemmological laboratories.</li> </ul>	
Remark	

Title	Formulate total quality management strategies for gemmological laboratories					
Code	109023L7					
Range	This unit of competency is applicable to practitioners responsible for managing the gemmological laboratories in the jewellery industry. Practitioners should be capable of formulating operational strategies for the organization and leading the staff of the organization carry out total quality management duties and to enhance the productivity and economic efficiency of the organization.					
Level	7					
Credit	9					
Competency	Performance Requirements  1. From a critical perspective, demonstrate the knowledge of total quality management and the understanding of the related concepts  • Understand the principles of total quality management  □ The core values and modes of total quality management  □ The modes of quality management of organizations with remarkable performances  • Master the concept of quality management cycle of the testing and certification industry  □ The quality assurance requirements as well as the standard and method of quality checking for each testing/identification process  □ Understand the concept of quality management cycle - "Plan-Do-Check-Act"  • Analyze and evaluate the economic efficiency of total quality management brought to the organization  □ Classify and analyze the quality assurance cost  Evaluate the quality assurance cost system  □ Master the economic value of the loyalty of customers and employees  2. Develop and implement total quality management  • Make use of the professional knowledge of total quality management to implement total quality management  □ Set quality assurance targets for the existing and newly developed service projects, and develop measures and quality control plans, such as:  □ Gemstone reference sample management  □ Advanced testing equipment /technology/calibration  □ Geological source determination of gemstones  □ Testing/identification reports and certifications, etc.  □ Implement the contents of the quality control plans, and lead employees to implement measures and solve complex problems  □ Review and analyze the results of quality control, including the effectiveness of the plans and the causes of failure  □ Develop quality improvement plans according to the results of quality checking  □ Continue to improve the quality management system through learning and training, including:  ■ Acquire quality management skills so as to continually improve the					

	Professionalism     Implement total quality management and make every effort to ensure that the service quality meets customer demand and international standards in a professional attitude
Assessment Criteria	The integrated outcome requirement of this unit of competency is:  • Able to master total quality management and lead employees to implement it with a view to improving the service quality of the gemmological laboratories and enhancing the economic efficiency of the organization.
Remark	

OF	Generic Level Descriptors (revised version)			
QF Level	Knowledge and Intellectual Skills	Processes	Autonomy and Accountability	Communication, ICT and Numeracy
1	<ul> <li>Demonstrate and/or work with basic general and foundation knowledge in a narrow range of areas of a field of work or study</li> <li>Use basic intellectual skills in familiar, personal and/or everyday contexts</li> <li>Employ recall and demonstrate comprehension of facts with dependency on ideas of others</li> <li>Receive and pass on information</li> </ul>	<ul> <li>Perform a limited range of tasks of a routine and repetitive nature in defined and highly structured contexts</li> <li>Use, under supervision or prompting, basic tools and materials</li> <li>Apply learnt responses to solve problems</li> <li>Take some account, with prompting, of identified consequences of actions</li> </ul>	<ul> <li>Carry out directed activity under close supervision</li> <li>Rely entirely on external monitoring of quantity and quality of own output</li> <li>Interact with others to complete tasks</li> </ul>	<ul> <li>Use a limited range of simple skills with assistance in familiar, routine contexts</li> <li>Produce and respond to a limited range of simple, written and oral communications and take some part in discussions on straightforward subjects</li> <li>Carry out a limited range of simple tasks to process data and access information</li> <li>Use a limited range of simple and familiar numerical and graphical data</li> </ul>

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2	<ul> <li>Demonstrate and/or work with basic factual or operational knowledge in a selected number of areas of a field of work or study</li> <li>Use a range of intellectual skills in familiar, personal and/or everyday contexts</li> <li>Make comparisons with some evaluation and interpret available information</li> </ul>	<ul> <li>Perform a range of tasks in predictable and structured contexts</li> <li>Apply basic tools and materials to complete routine processes</li> <li>Use rehearsed stages for solving problems</li> <li>Take account of the identified consequences of actions</li> </ul>	<ul> <li>Undertake directed activity with a degree of autonomy</li> <li>Accept defined responsibility for quantity and quality of own output subject to external quality checking</li> <li>Co-ordinate with others to achieve common goals</li> </ul>	<ul> <li>Use a range of routine skills with some assistance in familiar, routine contexts</li> <li>Identify the main points and ideas from documents and reproduce them in other contexts</li> <li>Produce and respond to a specified range of written and oral communications and take an active part in discussions on identified topics</li> <li>Carry out a defined range of tasks to process data and access information</li> <li>Use a range of familiar numerical and graphical data</li> </ul>

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3	<ul> <li>Demonstrate and/or work with broad operational and theoretical knowledge of a field of work or study</li> <li>Use a broad range of intellectual skills in familiar but sometimes unfamiliar contexts</li> <li>Access, organise and evaluate information independently and draw reasoned conclusions</li> </ul>	<ul> <li>Perform a broad range of tasks in a variety of familiar and some unfamiliar contexts using a known range of technical skills</li> <li>Employ a range of responses to well defined, but sometimes unfamiliar or unpredictable problems</li> <li>Make generalisations and predictions in familiar contexts</li> </ul>	<ul> <li>Carry out self-directed activity with guidance/evaluation</li> <li>Accept responsibility for quantity and quality of own output and comply with prevailing practice</li> <li>Accept clearly defined but limited responsibility for the quantity and quality of the output of others</li> <li>Adapt own behaviour when working with others</li> </ul>	<ul> <li>Use a wide range of largely routine and well-practiced skills in familiar and some unfamiliar contexts</li> <li>Produce and respond to detailed and complex written and oral communication and make presentations to an audience using suitable structure and style</li> <li>Use a wide range of standard ICT applications to obtain, process and combine information</li> <li>Use a wide range of numerical and graphical data to support work or study</li> </ul>

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4	<ul> <li>Demonstrate and/or work with a broad knowledge base with some specialised knowledge of a field of work or study</li> <li>Use a wide range of largely routine and some specialised intellectual skills related to a subject/discipline/sector</li> <li>Present and evaluate information, using it to inform future actions</li> </ul>	<ul> <li>Perform skilled tasks requiring some discretion and creativity in a range of contexts</li> <li>Carry out routine lines of enquiry to address professional level issues and problems</li> <li>Exercise appropriate judgement in planning, selecting or presenting information, methods or resources</li> </ul>	<ul> <li>Undertake self-directed and some supervisory activity</li> <li>Operate within broad general guidelines and meet specified quality standards</li> <li>Take responsibility for the nature and quantity of own output</li> <li>Undertake a supervisory role, accepting some responsibility for the quantity and quality of the output of others including compliance with prevailing practice</li> <li>Contribute to group performance</li> </ul>	<ul> <li>Use a wide range of routine and some advanced skills associated with a subject/discipline/sector in both familiar and some new contexts</li> <li>Synthesise, organise and present information coherently to convey complex ideas in well-structured form</li> <li>Use a wide range of standard ICT applications to support and enhance work</li> <li>Use and evaluate numerical and graphical data to measure progress and achieve goals and/or targets</li> </ul>	

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5	<ul> <li>Demonstrate and/or work with in-depth specialised technical or theoretical knowledge of a field of work or study</li> <li>Use a wide range of specialised intellectual skills in support of established practices in a subject/discipline/ sector</li> <li>Critically analyse, evaluate and/or synthesise concepts, information and issues drawn from a wide range of sources to generate ideas</li> </ul>	<ul> <li>Apply knowledge and skills in a range of technical, professional or management activities</li> <li>Identify and analyse both routine and abstract technical/ professional problems and issues, and formulate evidence-based responses</li> <li>Exercise appropriate judgement in planning, design, technical and/or management functions related to products, services, operations or processes</li> </ul>	<ul> <li>Accept responsibility and accountability, within broad parameters, for determining and achieving personal and/or group outcomes</li> <li>Work under the mentoring of senior qualified practitioners</li> <li>Deal with ethical issues, seeking guidance of others where appropriate</li> </ul>	<ul> <li>Use some advanced and specialised skills in support of established practices in a subject/discipline/ sector</li> <li>Participate constructively in group discussions and make formal and informal presentations to a range of audiences on standard/mainstream topics in a subject/discipline/sector</li> <li>Use some advanced features of ICT applications to support and enhance work</li> <li>Interpret, use and evaluate numerical and graphical data to set and achieve goals/targets</li> </ul>

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6	<ul> <li>Demonstrate command of a systematic, coherent body of knowledge, some of which is at the forefront of a field of study or professional practice</li> <li>Utilise highly specialised technical, research or scholastic skills across an area of study</li> <li>Critically review, consolidate and extend knowledge, skills, practices and thinking in a subject/discipline/sector</li> </ul>	<ul> <li>Apply knowledge and skills in a broad range of specialised technical, professional or management activities</li> <li>Utilise diagnostic and creative skills to carry out complex planning, design, technical and/or management functions related to products, services, operations or processes, including resourcing and evaluation</li> <li>Design and apply appropriate methodologies to conduct research and/or advanced technical or professional activity</li> <li>Critically evaluate new information, concepts and evidence from a range of sources and develop creative responses to routine and abstract professional problems and issues</li> <li>Deal with complex issues and make informed judgements in the absence of complete or consistent data/information</li> </ul>	<ul> <li>Exercise significant autonomy in determining and achieving personal and/or group outcomes</li> <li>Accept accountability in decision making relating to the achievement of outcomes</li> <li>Demonstrate leadership and make an identifiable contribution to change and development</li> <li>Deal with complex ethical and professional issues</li> </ul>	<ul> <li>Use advanced and specialised skills to support academic and professional work in a subject/discipline/sector</li> <li>Communicate, using appropriate methods, to a range of audiences including peers, senior colleagues and specialists</li> <li>Use advanced features of ICT applications to support and enhance work and identify refinements and/or new requirements to increase effectiveness</li> <li>Undertake critical evaluations of numerical and graphical data in support of decision-making</li> </ul>	

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7	<ul> <li>Demonstrate a critical overview of a substantial body of knowledge and its related theories and concepts at the forefront of a field of study or professional practice, including an evaluative understanding of its broad relationship with other disciplines</li> <li>Make a significant and original contribution to a specialised field of inquiry, or to broader interdisciplinary relationships</li> <li>Identify, conceptualise and offer original and creative insights into new, complex and abstract ideas and information</li> </ul>	<ul> <li>Apply knowledge and skills in a broad range of complex activities in highly specialised technical, professional or management contexts</li> <li>Demonstrate command of research and methodological issues and engage in critical dialogue</li> <li>Produce creative and original responses to problems and issues in the context of new circumstances</li> <li>Deal with very complex and/or new issues and make informed judgements in the absence of complete or consistent data/information</li> </ul>	<ul> <li>Assume a high degree of autonomy, with full accountability for own work, and significant responsibility for others</li> <li>Demonstrate leadership and originality in responding to new and unforeseen circumstances and accept accountability in related decision making</li> <li>Deal with very complex ethical and professional issues</li> </ul>	<ul> <li>Use advanced and specialised skills to support academic and professional work that is at the forefront of a subject/discipline/ sector</li> <li>Strategically use communication skills, at the standard of published academic work and/or critical dialogue, adapting content and purpose to a range of audiences and contexts</li> <li>Use advanced features of ICT applications and specify requirements in anticipation of future needs</li> <li>Undertake critical evaluations of numerical and graphical data and employ such data extensively in support of the creation of new knowledge and innovative practice</li> </ul>	