QUALIFICATION SPECIFICATION SECTION A						
QUALIFICATION DEVELOPER	Limkokwing University of Creative Technology					
TITLE	Certificate V in Jewellery Design and Manufacture		**NCQF LEVEL**		5	
FIELD	Manufacturing, Engineering and Technology		**SUB-FIELD**		Jewellery Fabrication	
NEW QUALIFICATION	✓	REVIEW OF EXISTING QUALIFICATION				
SUB-FRAMEWORK	General Education		TVET	✓	Higher Education	
QUALIFICATION TYPE	Certificate	✓	Diploma		Bachelor	
	Bachelor Honours		Master		Doctor	
CREDIT VALUE					**130**	

1.0 RATIONALE AND PURPOSE OF THE QUALIFICATION

Rationale

Jewellery or jewelry is a creative art and process of creating decorative items worn for personal adornment. These items include rings, necklaces, bracelets, earrings and other products made from metals, gemstones and other materials. Traditionally jewelry was made from metals and gemstones, however other material has been included in the jewelry manufacturing and ornamentation. For the African diamond producing countries, beneficiation is not optional, not a passing whim motivated by political correctness, but an imperative, an essential and critical part of their macroeconomic policy designed to uplift their economies to provide education and jobs and healthcare for their people and to make poverty history (The future of Diamond Beneficiation in Botswana: European Centre for Development Policy Management Discussion Paper, No. 142 - March 2013, pg.5).

Botswana is one of the countries blessed with mineral resources and has help it to improve its economic outlook over years. With a population of just 2.25 million (2016) Botswana has continued to more dependent on minerals, especially on diamond revenues. Diamond revenues account for 76% of Botswana's export revenue, 45% of government revenue, and 33% of gross domestic product (GDP), according to diamondfacts.org. The government has sensibly used its diamond income for the betterment of the country, and at $6,788, Botswana's per capita GDP is now among the highest in Africa. The country recognized that its reserves would **eventually be depleted**, and that it needed to make efforts to sustain the positive impact from diamonds in its economy. In 2010, Botswana renegotiated its mining and marketing contract with De Beers, which lead to monumental change for both parties, and the diamond industry. A major outcome of the changes was that De Beers moved its sorting, marketing and Sight-holder operations from its London headquarters to Gaborone, the capital city of the country, in 2013.

The government recognized that moving the Sight-holder operations to the country would still mean that its diamonds would be sold to foreign companies and exported from the country for **manufacturing**

abroad. Therefore, it required some diamonds to be sold to local companies in an effort to develop its own **cutting and polishing industry**. Approximately 20 Botswana Sights were made available to companies that built manufacturing factories and employed and trained local workers. Almost all these manufacturers existed Sight-holders that established operations in Botswana in order to get access to additional supplies of rough diamonds. This led to the development of the Diamond Technology Park, a sprawling compound nearby the country's international airport.

The need to acquire a hands-on and practical oriented Vocational qualification like jewelry design and manufacturing has been demonstrated and shown through various policies of education, economy diversification plans, Botswana development visions, such as vision 2016, and other policies, for example: According to a report titled "**2002 A frameworks for a long-term vision for Botswana** "The importance of technical training must be stressed throughout the education system. A more difficult task is however to emphasize the importance of technical skills to the Economy, and to upgrade the status of those who are employed in technical jobs.

The Jewelry design and manufacturing which completes the diamond processing cycle has been a missing factor in Botswana's quest to benefits from the diamond industry. To transform its Economy from Resource (mainly minerals such as diamond) base to knowledge base economy and diversify the economy, Botswana has come up with strategies such as Vision 2036, which states that, Botswana will be a high-income Country, with an export-led economy underpinned by diversified, inclusive and sustainable growth driven high levels of productivity.

Although diamonds have been sustaining the economy of Botswana, since independence, diamonds will not last forever; hence there is also needed to develop jewellery from other materials. This sector of jewellery design from non-diamond has been in existence in Botswana, it just lacked innovation and marketing which this certificate has also incorporated.

Purpose

The purpose of this qualification is to produce learners;

- Who have the technical skills and ability to create, integrate, and communicate jewellery ideas to clients
- Who are able to demonstrate the skills, knowledge and understanding in the conceptualization, design and development of unique jewellery pieces
- Who can assess materials, develop aesthetic skills and work around craftsmanship skills required to make exquisite jewellery design
- Who are grounded in the application of technology, creativity and innovation in jewellery making
- Who are creative and versatile to make a positive impact in the jewellery industry
- Who are capable of conducting basic research in order to develop jewellery design briefs

2.0 ENTRY REQUIREMENTS (including access and inclusion)

The qualification in jewellery design in manufacturing allows fair and equal entry requirements for leaners from a wide spectrum of learning. The qualification admits learners from any design field regardless of their age, gender, disability or learning difficulty.

- **Normal Requirements**

- Certificate IV, NCQF level 4 (General Education or TVET) or equivalent
- Certificate III, NCQF level 3 (General Education or TVET) with Recognition of Prior Learning equivalent to at least 40 credits at NCQF level 4.

- **CAT and RPL**

- CAT and RPL will be applicable for entry and inclusion

3.0 QUALIFICATION SPECIFICATION	**SECTION B**
GRADUATE PROFILE (LEARNING OUTCOMES)	**ASSESSMENT CRITERIA**
3.1 Use Jewellery design principles and techniques to create jewellery products	3.1.1 Define jewellery design 3.1.2 Describe jewellery design elements and principles 3.1.3 Interpret jewellery design 'creative brief' 3.1.4 Produce jewellery design drawings 3.1.5 Read orthogonal drawings for jewellery designing 3.1.6 Interpret jewellery drawings for production purposes 3.1.7 Explore concept development in jewellery design, including technical, innovative and creative strategies 3.1.8 Identify appropriate design solutions and draw sketches for best jewels. 3.1.9 Apply jewellery processing techniques to make jewelry products
3.2 Analyse contemporary and ancient history of Jewellery	3.2.1 Describe historical background of jewellery 3.2.2 Analyse historical and contemporary jewellery trends 3.2.3 Use published research and historical knowledge and developments to create new jewels 3.2.4 Identify major changes that have taken place in the jewellery industry 3.2.5 Assess the influence of Botswana's traditional jewellery in contemporary jewellery
3.3 Use a range of computer applications such as MS Word, Excel, PowerPoint, Outlook and Computer Aided Design (CAD) for Jewellery Design	3.3.1 Identify the Desktop Elements 3.3.2 Log-in to a computer system using log-in credentials 3.3.3 Explore the Basic Features of Windows 3.3.4 Explore Computer Menus and Toolbars 3.3.5 Open an existing Word, excel and power point document and perform basic text generation 3.3.6 Open a web browser application 3.3.7 Type Universal Resource Locator (URL) into address bar to open websites 3.3.8 Navigate around websites, using links to open web pages and resources available in website 3.3.9 Add websites of interest to bookmarks 3.3.10 Download files available on the website, saving them in desired locations 3.3.11 Create an e-mail account in a free mail host, Gmail.

	3.3.12 Draft, read inbox and send e-mail 3.3.13 Define computer aided design (CAD) in jewellery designing terms 3.3.14 Discuss the importance of CAD in jewellery design 3.3.15 Describe computer aided design techniques used for jewellery design 3.3.16 Render jewellery items using the software 3.3.17 Import and export CAD files for manufacturing purposes
3.4 Demonstrate basic application of photography for effective jewellery design	3.4.1 Describe the fundamentals of photography in jewellery design 3.4.2 Operate specified lighting equipment for the purposes of image capture 3.4.3 Create a selection of images to a defined brief within a studio environment 3.4.4 Prepare shooting plan for use shooting objects 3.4.5 Analyze photographic works of art both verbally and in writing 3.4.6 Explain the socio-economic impact of photography in a contextualized environment. 3.4.7 Produce creative, aesthetic and persuasive images for advertising purposes
3.5 Participate in Forecasting jewellery trends.	3.5.1 Define trend forecasting in jewellery making terms 3.5.2 Discuss the importance forecasting in jewellery business 3.5.3 Employ current jewellery trends to forecast future trends. 3.5.4 Analyse the principles of fashion forecasting and trends 3.5.5 Illustrate the correlation between trend research, product development and buying jewellery products
3.6 Employ knowledge of marketing in Jewellery Design	3.6.1 Define marketing in relation to Jewellery Design 3.6.2 Discuss the importance of marketing skills in Jewellery Design 3.6.3 Describe the basic marketing concepts in Jewellery designing 3.6.4 Discuss the elements of the marketing environment for any organization 3.6.5 Explain how jewellery companies create customer-driven marketing strategies. 3.6.6 Design marketing material production including posters, flyers, e-newsletters and more. 3.6.7 Evaluate market conditions and consumer needs when forming marketing strategies 3.6.8 Examine in detail the 4Ps marketing Mix – Product, Place, Price, and Promotion in jewellery business

3.7 Apply the different communication handling mechanisms in jewellery	3.7.1 Define communication in jewellery terms 3.7.2 Explain the process of communication and its effect on giving and receiving information. 3.7.3 Apply effective communication skills in a variety of public and interpersonal settings. 3.7.4 Utilize time management techniques to create a study schedule and manage procrastination. 3.7.5 Utilize a variety of resources for information and research. 3.7.6 Apply critical thinking skills to analyze, interpret, and evaluate course content and information
3.8 Apply basic first aid procedures	3.8.1 Define first aid 3.8.2 Discuss the importance of first aid 3.8.3 Identify the nature and severity of the injuries 3.8.4 Conduct basic first aid exercise 3.8.5 Administer first aid to a casualty 3.8.6 Provide appropriate first aid for minor injuries 3.8.7 Prevent the escalation of the illness or injury 3.8.8 Promote recovery

4.0 QUALIFICATION STRUCTURE **SECTION C**

	Title	Level	Credits
FUNDAMENTAL COMPONENT Subjects / Units / Modules /Courses	Basic Communication	5	10
	End User Computing	5	10
CORE COMPONENT Subjects / Units / Modules /Courses	Introductions to First Aid	5	10
	History of Jewellery	5	10
	Basic Quality Control	4	10
	Technical drafting	5	10
	Computer Aided Design	5	10
	Jewellery Workshop	5	22
	Trend forecasting	5	10
	Jewellery Economics	6	10
	Germ materials and processes	6	10
ELECTIVE COMPONENT Subjects / Units / Modules /Courses	Jewellery Photography		
	Jewellery marketing	5	8
		Total	**130**

The table below shows module distribution in relation to fundamental, core and elective components. Students are to choose 1 module out of 2 electives. The total number of credits required for a student to graduate in this qualification is 130 credits.

Module Classification	Module status	Total number of modules	Total number of Credits	Credit Percentages
Fundamental Component	Compulsory	2	20	15.4%
Core Component	Compulsory	10	102	78.5%
Elective Component	Students choose 1 out of 2 modules	2	8	6.1%
Totals		**14**	**130**	**100%**

5.0 RULES OF COMBINATIONS, CREDIT DISTRIBUTION (WHERE APPLICABLE):

Minimum NCQF Credit Level	NCQF Descriptor Level Credit Composition Rule	Qualification credit distribution
120	• **Level 4** (10 credits) • **Level 5** (100 credits) • **Level 6** (20 credits)	130

6.0 ASSESSMENTS ARRANGEMENTS AND MODERATION

6.1 Assessment arrangements

The qualification will encompass both formative and summative assessment, which will be designed by assessors who are BQA registered and accredited.

Formative assessments for practical modules can include activities such as;

- Lab demonstrations
- Lab exercises

And Formative assessments for theoretical modules can include;

- Practice presentations
- Peer/self-assessment

While Summative assessment can include Individual and group projects.

The weightings for the assessments will be as follows;

Assessment Method	Weight
Formative Assessments	60
Summative Assessments	40

6.2 Moderation arrangements

There will be internal and external moderation undertaken by moderators registered and accredited by BQA. All processes and procedures will be in line with NCQF requirements. This will be conducted in reference to the institution's moderation policy and procedures.

Moderation of assessment takes place at the key stages of the assessment process, i.e., design of tasks and marking of assignments (including consideration of results).

6.2.1 Internal Moderation

Moderation: Design of Assessments Moderation at assessment design stage. The principal aspects considered at this stage are a review of:

Compatibility of assessments with learning outcomes
Over-arching approach to assessment
Assessment criteria
Marking schemes
Model answers
Consistency with NCQF level
Suitability of tasks, questions, etc.

Moderation at the design stage is undertaken by all lecturers teaching the various modules in the qualification.

Moderation: Marking of Assessments. Moderation at marked assessments stage: The key activities of moderation process at the marking stage include:

Sampling of marked assessments
Additional marking of borderlines and fails
Double marking of dissertations, major projects/designs or presentations
Adjudication by another marker where there are significant differences between the marks given by two or more assessors
Evaluation of consistency where multiple staff members have contributed to the marking
Consideration of special circumstances, which may have affected the performance of a group of students.
Overview of the approach to considering the special circumstances of individual students

6.2.2 External Moderation

The key activities of the external moderation process include:

Sampling of marked assessments, assignments, tests, projects and dissertations
Compatibility of assessments with learning outcomes
Scrutiny of borderline and fail cases
Evaluation of consistency where multiple staff members have contributed to the marking

Consideration of special circumstances which may have affected the performance of a group of students
Overview of the approach to considering the special circumstances of individual students

7.0 RECOGNITION OF PRIOR LEARNING (if applicable)

Prospective students who attained a qualification and awarded recognition by BQA registered institution shall be evaluated to determine its equivalence within the NCQF through recorded interviews, inspection of transcript or oral and practical test to determine the applicant's level of knowledge, skill and competence acquisition for admission and exemptions on this qualification.

7.1 Level 4 certificates in Jewellery Design or Gemstone study related courses are automatically recognized as prior learning.

7.2 Relevant industry experience and informal learning will be considered as prior learning after being measured against specified prescribed learning outcomes

8.0 PROGRESSION PATHWAYS (LEARNING AND EMPLOYMENT)

This qualification is designed to facilitate vertical, horizontal and diagonal progression both locally and internationally.

8.1 Horizontal Progression

Students may progress horizontally between qualifications if they meet the minimum requirements for admission to the target qualification. Other comparable qualification to this certificate includes,

- Certificate v in gemology
- Certificate v in diamond cutting and sorting
- Certificate v in Mineral Quality Checker/Quality Control
- Certificate v in Diamond sorting, cutting and Grading
- Certificate v in Stone setting and Polishing
- Certificate v in Jewellery making

8.2 Vertical progression

Students graduated from this qualification may progress to the following;

- Diploma in Jewellery design
- Diploma in diamond cutting and sorting
- Diploma in Metalwork and Jewellery
- Diploma in Diamond Grading
- Diploma in Jewellery making

8.3 Diagonal Progression

Students may progress diagonally between qualifications by presenting a completed Qualification or credits towards a qualification in a similar study area and must meet the minimum requirements for admission to the target qualification, which they will often do by virtue of the credits obtained towards an equivalent qualification.

8.4 Employment Pathways

Other than progressing academically Graduates of the course may find employment in a range of public and private organisations for the following posts:

- Assistant Jewellery Designer
- Jewellery Merchandiser
- Assistant Jewellery manufacturer
- Casting technician
- Jewellery Sales Representative
- Gemstone Appraiser
- Jewellery Setter
- Engraver
- Jewellery Historian
- Grading Assistant
- Quality Checker/Quality Control Executive

9.0 QUALIFICATION AWARD AND CERTIFICATION

9.1 To qualify for qualification award and certification, a students must

- Attain a minimum of 130 credits overall, including a maximum of 10 credits at Level 4.
- Complete satisfactorily any additional and specified requirements of the qualification.
- Have official verification that he/she has covered and passed all the modules

10.0 REGIONAL AND INTERNATIONAL COMPARABILITY

Overall remarks on benchmarking are derived by considering the similarities, differences, approaches and trends in jewellery design and manufacturing at certificate level from the institutions mentioned below. Key parameters considered for bench marking are highlighted in the table below:

1. SGB Mining and Minerals and SAQA (South Africa)
2. New Zealand Qualification Authority (New Zealand)
3. Lorenzo de' Medici – The Italian International Institute (Italy)

Table 1: Benchmark Summary

Criteria	SGB Mining and Minerals and SAQA (South Africa)	New Zealand Qualification Authority (New Zealand)	Lorenzo de' Medici – The Italian International Institute (Italy)
Title	Further Education and Training Certificate: Jewellery Designing	New Zealand Certificate in Jewellery (Level 4)	Certificate in Jewelry Design
Level	4	4	None
Duration	3 years	1 year	1 year
Credits	146	60	60
Structure	• Jewellery Making • Jewellery and Technical Drawing • Materials and Processes • Computer Fundamentals in Jewellery • Materials and Science • Jewellery Illustration, Computer Application in Jewellery • Design Studies • Computer Aided Design in Jewellery • Introduction To Gemology • Technical Communications	• Creative Arts • Visual Arts and Crafts • Jewellery Making	• History of Jewels and Their Symbolism • Jewelry Design I • Jewelry Making I • Metals in Jewelry Making • Wax Carving and Casting Techniques I • Gemology • Jewelry Design II • Jewelry Making II • Stone Setting I • Trend Forecasting
Learning outcomes	• Communicate and solve problems in the jewellery design process. • Adhere to the Occupational Health and Safety requirements. • Identify and grade a gemstone for buying and selling within the jewellery industry.	• Apply basic technical skills for the construction of jewellery. • Use processes to develop ideas for the production of jewellery. • Apply knowledge in the history of art, craft, and design to explore and compare a range of jewellery designs.	• Stimulate individual learning and skills development • Channel their creative inspiration through the manual skills acquired

	• Draw and design jewellery using various design processes and techniques.	• Reflect on the qualities of personal practice to refine and improve work. • Demonstrate safe work practices and an understanding of relevant health, ethical, cultural, and legal issues. • Apply problem-solving skills in the production of jewellery items.	

SIMILARITIES

The following are noted similarities:

- Modules taught in the qualifications are almost similar.
- The number of modules offered for the qualification is almost the same.
- The certificates graduates also progress to diploma or degree level and the modules covered are exempted.
- Qualification offers specialization modules intended for significant technological advancement and competitive edge over other employees in the design field.

BENCHMARKING DIFFERENCES

Key differences are noted in the following areas

- The credits for modules are different due to frameworks employed.
- Level of certificate on one qualification not indicated.

TRENDS IN ONE YEAR JEWELLERY DESIGN QUALIFICATION

The qualification provides learners with strong foundation in jewellery skills and knowledge, including a variety of workshop machining skills necessary for jewellery manufacturing. Learners are fully equipped with basic knowledge of the latest design software skills required to meet the demands and practical requirements of jewellery and gemstone processing. The general trend noted is that many universities, colleges and other institutions of jewellery design are embarking on short training qualifications/courses, which empower learners with practical skills in jewellery design and making including precious stone technology.

REVIEW PERIOD

Every 5 years