BQA NCQF QUALIFICATION TEMPLATE

SECTION A:	QUALIFICATION DETAILS			
QUALIFICATION DEVELOPER (S)	Madirelo Training and Testing Centre			
TITLE	Certificate V In Clothing Design and Technology		**NCQF LEVEL**	5
STRANDS (where applicable)	N/A			
FIELD	Manufacturing Engineering and Technology		**CREDIT VALUE**	120
SUB FIELD	Manufacturing And Processing			

New Qualification	√	Legacy Qualification		Renewal Qualification	
				Registration Code	

SUB-FRAMEWORK	General Education		TVET	√	Higher Education	

QUALIFICATION TYPE	Certificate	I	II	III	IV	V	√	Diploma	Bachelor	
	Bachelor Honours			Post Graduate Certificate				Post Graduate Diploma		
	Masters				Doctorate/ PhD					

RATIONALE AND PURPOSE OF THE QUALIFICATION

RATIONALE:

The Clothing industry is rapidly growing with new concepts for keeping clothing business alive globally. To survive in the industry new innovations are necessary to meet the demands for the market, a computer-aided design (CAD) system gives opportunity for mass customization in designing. The system enables one to create more styles, random changes, make new design, pattern generation, graded size pattern, marker creation and fabric cutting. By integrating the system

with the processes of garment sewing, test of fit and final adjustment, mass customization can be realized in the apparel industry.

The Human Resources Development Council Report (HRDC 2023) on Top Occupations in Demand therefore identifies the need for Textiles and Clothing Technicians in Botswana with experience in Patternmaking, pattern grading, marker making, fabric construction (textiles) and Computer Aided Designing (CAD).

The government of Botswana, through the Ministry of Trade and Industry, issued a Statutory Instrument under the Control of Goods, Prices and Other Charges Act of 2021 [Caps.43.08] on the restriction of importation of school uniforms and accessories like ties, hats and scarfs, as a way of giving local Clothing manufacturers a chance to produce and sell school uniforms locally. Patternmaking and Clothing designing technicians will therefore play a pivotal role in ensuring the production of quality garments for retailing.

In the education sector, Technical and Vocational Education and Training (TVET) Pitso Action Plan Implementation through HRDC, outlines the contribution of TVET to the development of the national economy particularly in the Textiles and Clothing sector and has proven that employment opportunities are abound. Hence, we aim to produce competent Technicians in Textiles and Clothing, to diversify the economy of the country in the Clothing manufacturing sector.

Certificate V In Clothing Design Technology NCQF Level 5, qualification is therefore developed to equip graduates with the necessary knowledge, skill, and competence to meet the demands of the advancing Textile industry in Botswana.

PURPOSE:

The purpose of the qualification is to equip graduates with broad technical knowledge, skills, and competence to:

1. Apply principles of design through proportions, details, and body shape to illustrate clothing from concept to product.
2. Study clothing design styles from designers to create a variety of patterns and garment details.
3. Perform sewing operations such as joining, reinforcing, and seaming to construct garments according to organizational standards.
4. Apply various textile techniques on fabric surfaces to create textures for clothing designing purposes.
5. Implement sustainable practices into clothing entrepreneurship, considering environmental stewardship and social responsibility, and develop strategies to communicate and market these efforts to stakeholders.

MINIMUM ENTRY REQUIREMENTS (including access and inclusion)

- Certificate IV, NCQF Level 4 (TVET/GE) or equivalent.

- There will be provision for RPL and CAT for entry according to the national RPL and CAT policy.

SECTION B	QUALIFICATION SPECIFICATION
GRADUATE PROFILE (LEARNING OUTCOMES)	**ASSESSMENT CRITERIA**
1. Create designs using drawing software for a specific clothing design project in line with details outlined in the job specification.	1.1 Select a drawing software that suits your preferences and skill level. 1.2 Collect inspiration from various sources such as fashion magazines, online platforms, or other designs. Create a mood board to help visualize and organize your ideas. 1.3 Sketch initial ideas start with rough sketches to get your ideas on paper to address key design elements. 1.4 Recreate your sketches using the drawing software to refine your design, ensuring that it meets all the specified requirements. 1.5 Annotate and add details mentioned in the job specification to help communicate certain elements of the design. 1.6 Refine your design, ensuring that it meets all the specified requirements paying attention to proportions, balance, and overall aesthetics.
2. Use CAD (Pattern system) software for digital production and grading of patterns, to be used for a specific	2.1 Prepare designs to be used for digital pattern manipulation and adaptation. 2.2 Select pattern system software that suits your preferences and skill level.

garment manufacturing project according to organizational standards.	2.3 Use pattern grading techniques to adjust existing patterns into another pattern with different sizes from the original pattern.
	2.4 Create pattern markers to be used as base for fabric cutting in the manufacture of garments according to job specification.
	2.5 Generate spread and cut plans for work order ensuring that it meets all the specified requirements.
	2.6 Print out markers on a plotter machine to maximize pattern throughput.
3. Apply design elements and principles to illustrate clothing designs for a specific design project, in line with job specification, best practice and Organizational standards.	3.1 Collect inspiration from various sources such as fashion magazines, online platforms, or other designs. Create a mood board to help visualize and organize your ideas.
	3.2 Create story and mood boards to help visualize and organize your ideas in line with customer needs.
	3.3 Sketch initial ideas starting with rough sketches to get your ideas on paper to address key design elements.
	3.4 Create contemporary designs with technical drawings using inspirational elements and principles in line with the stipulated design brief and specification.
	3.5 Refine your designs, ensuring that it meets all the specified requirements paying attention to proportions, balance, and overall aesthetics.
	3.6 Present final designs effectively on presentation boards, according to industry standards.
4. Demonstrate patternmaking and grading skills in production of flat	4.1 Examine job specification to determine tools and equipment to be used to create flat

patterns in accordance with job specification and organizational standards.	patterns faster and accurately for various designs. 4.2 Adapt flat pattern blocks into production patterns for various styles according to design specification and customer needs. 4.3 Create variety of patterns regard to garment details according to job specification. 4.4 Grade patterns components manually into different sizes according to industry standards. 4.5 Produce pattern markers to be used as templates for cutting processes in line with job specification and organizational requirements. 4.6 Perform quality control and checks on patterns to ascertain conformity to job specification
5. Apply operational techniques including laying and cutting processes to manufacture finished garments.	5.1 Examine the job specification to determine fabrics to be used, processes to be carried out, tools and equipment to be used. 5.2 Select fabrics, production patterns, tools and equipment to be used to carry out production processes in line with job specification and organizational requirements. 5.3 Lay, cut and prepare job for garment construction according to patterns/marker instructions. 5.4 Perform joining and finishing methods such as sewing, pressing and other related operations and quality check work for conformity to job specification using quality control standards. 5.5 Perform branding, packaging, and dispatch of finished garments according to organizational standards

6. Demonstrate skills in producing a range of garments for runway projects from concept to product according to design brief.	6.1 Interpret design brief and collect inspiration from various sources such as fashion magazines, online platforms, or other designs.
	6.2 Create story and mood boards to help visualize and organize ideas according to design brief.
	6.3 Sketch initial ideas starting with rough sketches to get ideas on paper and address key design elements in line with runways production standards.
	6.4 Refine your designs, ensuring that it meets all the specified requirements paying attention to proportions, balance, and overall aesthetics.
	6.5 Produce patterns and samples (toiles) for clothing designs used on runways shows according to specific design brief.
	6.6 Construct a range fashion clothing used for specific of runway garments for a specific runway project.
7. Apply textile technology to enhance aesthetic aspects of the fabric to be used for a specific project in line with job specification, practice standards and Organizational standards.	7.1 Consult with designers to determine suitable methods to adapt for textile production according to job specification.
	7.2 Explore different fabrics to be used to create innovative textile designs using dyeing and printing techniques.
	7.3 Develop digital textile designs using CAD in line with the stipulated design brief and specification.
	7.4 Create commercial textile products on different fabric types, using dyeing and printing techniques according to job specification.

	7.5 Perform quality control textile products to ascertain conformity to job specification.
8. Apply textiles processes and techniques to produce embroidered textiles designs in line with organizational standards.	8.1 Perform research on embroidery techniques through inspirations from various sources such as fashion magazines, online platforms, or other designs. 8.2 Develop digital embroidery designs using CAD in line with the stipulated design brief and specification. 8.1 Create innovative embroidery designs on different fabric types using creative raw material. 8.2 Perform quality control and checks on embroidered products to ascertain conformity to job specification.
9 Communicate effectively with stakeholders, communities, and team members, and understand the social and economic aspects of clothing manufacturing.	9.1 Demonstrate negotiation and communication skills prior to and during work-based learning. 9.2 Perform assigned fundamental and core skills throughout the duration of the work-based learning program. 9.3 Adhere to health and safety requirements at all times. 9.4 Demonstrate problem solving skills as when problems are encountered during the work process. 9.5 Contribute effectively to team work initiatives within the work environment.
10 Develop a comprehensive entrepreneurial design management plan, including a detailed clothing business plan with market analysis, financial projections, and risk assessment, while integrating sustainable practices to ensure environmental stewardship and social responsibility.	10.4 Identify an enterprise of interest to venture into and run it profitably. 11.4 Conduct a market survey to assess the viability of a clothing project. 12.4 Prepare a business plan for the chosen enterprise. 13.4 Conduct an internal and external factors viability assessment (SWOT) as well as a Risk assessment of the business understudy. 14.4 Prepare the financial projections

	(incomes andcash flow statements) for the business, determine the estimate total project costs and evaluate possible sources of finance.
	15.4 Prepare an implementation schedule for the business in the form of a Gantt chart

SECTION C	QUALIFICATION STRUCTURE			
COMPONENT	**TITLE**	**Credits Per Relevant NCQF Level**		**Total Credits**
		Level [ ]	Level [ ]	Level [5]	
FUNDAMENTAL COMPONENT *Subjects/ Courses/ Modules/Units*	Entrepreneurship II			11	11
CORE COMPONENT *Subjects/Courses/ Modules/Units*	Computer Aided Design (CAD) in Fashion			10	10
	Computer Aided Design (CAD) in Patternmaking			10	10
	Creative Design II			10	10
	Patternmaking II			10	10
	Garment Construction II			5	5
	Work based Learning			48	48

		Integrated Project			10	10

STRANDS/ SPECIALIZATION	*Subjects/ Courses/ Modules/Units*	*Credits Per Relevant NCQF Level*			*Total Credits*
		Level [ ]	*Level [ ]*	*Level [5]*	
	N/A				
Electives	Fabric Printing and Dyeing			6	6
	Surface Textiles			6	6

SUMMARY OF CREDIT DISTRIBUTION FOR EACH COMPONENT PER NCQF LEVEL	
TOTAL CREDITS PER NCQF LEVEL	
NCQF Level	*Credit Value*
NCQF Level 5	120
TOTAL CREDITS	*120*

Rules of Combination:

(Please Indicate combinations for the different constituent components of the qualification)

The qualification is made up of fundamentals, core components and electives.

A candidate is required to achieve the stipulated total of **120 credits** of which **11 credits** for fundamentals, **103 credits** inclusive of 48 credits for work based learning and **6 credits** for a chosen elective, to be awarded the qualification

ASSESSMENT ARRANGEMENTS

The weightings for the assessment will be as follows:

a)   Formative assessment

The weighting of formative assessment is 60% of the final assessment mark.

b)   Summative Assessment

The weighting of summative assessment is 40% of the final assessment mark.

Internal and external assessors perform assessments of the qualification. Both internal and external assessors are done in-line with the national assessment policy. Anyone assessing a learner against this qualification must be registered as an assessor from any relevant regulatory body.

MODERATION ARRANGEMENTS

Internal and external moderators perform assessments of the qualification. Both internal and external moderators are done in-line with the national assessment policy. Anyone moderating a learner against this qualification must be registered as an moderator from any relevant regulatory body

RECOGNITION OF PRIOR LEARNING

There shall be provision for award of the qualification through Recognition of Prior Learning (RPL) in accordance with institutional policies in line with the national RPL policy.

CREDIT ACCUMULATION AND TRANSFER

Credits Accumulated and Transfer will be administered in line with the national and institutional policy and will be administered towards the award of qualification.

PROGRESSION PATHWAYS (LEARNING AND EMPLOYMENT)

Learning Pathways.

Horizontal Articulation

Graduates of this qualification may consider pursuing related qualifications in the following:

- Certificate V in Pattern Design and Technology
- Certificate V in Fashion Design

Vertical Articulation

Graduates may progress to level 6:

- Diploma VI in Clothing Design and Technology
- Associated Degree in Fashion Design
- Diploma in Apparel and Fashion Technology (Patternmaking)

Employment Pathways.

On completion of the course the candidates can either get employed or become a self-employed entrepreneur in any one of the following fields;

- Run own Clothing Design business
- Sample maker in Clothing industry
- Assistant CAD Designer
- Patternmaker and Grader Technician
- Marker Markers Technician
- Quality controller / line supervisor in Clothing Industry.
- Textiles Technician

QUALIFICATION AWARD AND CERTIFICATION

Minimum standards of achievement for the award of the qualification

A candidate is required to achieve the stipulated total of 120 credits. 103 credits for core units inclusive of 48 credits for work-based learning, 11 credits for fundamentals and 6 credits for any chosen elective, to be awarded the qualification. Therefore, there is no provision for early exit from any qualification with a compensatory award.

Certification

Candidates meeting prescribed requirements will be awarded Certificate V in Clothing Design and Technology qualification, in accordance with standards prescribed for the award of the qualification and applicable policies.

SUMMARY OF REGIONAL AND INTERNATIONAL COMPARABILITY

A comparative analysis was taken to compare the relevance and standards implemented in the developed qualification of Certificate V in Clothing Design and Technology to qualifications offered regionally and internationally.

Similarities.

Regional qualifications – Higher Certificate in Fashion Design from Inscape Fashion Group in South Africa and- Certificate in Fashion Design from University of Manitoba, Ghana Campus compares well to international qualification- Certificate in Apparel and Fashion Technology of (Whitecliff

College, New Zealand) and Certificate in Fashion Design of (Academy of Art University, San Francisco U.S.A), as they have similar main exit outcomes which is to prepares graduates to develop competence in textile and clothing production. Additionally, the qualifications are structured for graduates to have global perspective on fashion retail and merchandising processes. Total credits for regional and international qualification is 120 credits which is similar to the developed qualification. Module titles are similar as graduates for regional and international will gain knowledge, skill and competence in art and design, textiles, pattern production and garment construction, fashion buying and merchandising.

These qualifications both have CAD in Fashion as core module, which graduates requires in this era of advancing digital technologies.

Assessment is done through practical work and portfolio. Work based learning is integrated as part of learning regionally and internationally to prepare graduates for the world of work.

The developed Certificate V in Clothing Design and Technology qualification is therefore designed to allow graduates entry into the job market by providing knowledge, skill and competence in Apparel manufacturing and Clothing designing. The three qualifications benchmarked against all carry the titles of Certificate in Fashion Design. Similarly, the developed qualification carries a similar title – Certificate V in Clothing Design and Technology, which refers to the same thing, since Fashion Design is a combination of design and technology (production).

Regional qualification and international qualifications are assessed through written examinations and practical, with main emphasis on portfolio building which is similar to assessment strategies for the developed qualification.

Differences

The differences observed when comparing regional and international qualifications above, is in naming of some modules, CAD module in developed qualification is in two parts (Design and Patternmaking), this will allow graduates to create digital patterns and be able to specify clothing designs in order to meet up with advancing technology requirements of local clothing manufacturing industries whereas regionally and internationally CAD module is for Fashion Design only.

Work based learning module title is Experiential learning at Inscape Education group and carries a total of 24 credits and for the developed qualification. The developed qualification has Work based learning which carries a total of 48 credits, meant give graduates more time to fully prepare for the world of work. Regional qualification of Inscape Education Group consists of fundamental components such Starting Your Own Business, Introduction to Fashion Planning and Professional Practice Management for Fashion and for developed qualification i fundamental component is Entrepreneurship. All the fundamental modules prepare graduates who aspire to become self-employed. Textiles modules Printing, dyeing and surface are included as electives components in developed qualification and as core components regionally and internationally. This is because currently there are no industrial Textiles production industries locally.

On successful completion of this qualification graduates can progress horizontally to Certificate V in Pattern Design and Technology and Certificate V in Fashion Design. For vertically articulation graduates may progress to a higher level of Diploma VI in Clothing Design and Technology, Associated Degree in Fashion Design and Diploma in Clothing Design and Textiles.

For Employment pathways graduates can become self-employed as fashion designers or be employed in Clothing manufacturing sectors as: sample maker, assistant CAD Designer, patternmaker, assistant patternmaker, quality controller / line supervisor and textiles technician.

Learning pathways of the proposed qualification therefore compares well with regional and international qualifications benchmarked on.

From the information it is evident that the proposed qualification compares favourably with the regional and international qualifications. Award for this qualification will be on successful completion of the programme.

REVIEW PERIOD

This qualification shall be reviewed every 5 years.

CODE (ID)			
REGISTRATION STATUS	**BQA DECISION NO.**	**REGISTRATION START DATE**	**REGISTRATION END DATE**
LAST DATE FOR ENROLMENT		**LAST DATE FOR ACHIEVEMENT**	

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