

## BQA NCQF QUALIFICATION TEMPLATE

SECTION A: QUALIFICATION DETAILS																
<b>QUALIFICATION DEVELOPER (S)</b>			BOITEKANELO COLLEGE													
<b>TITLE</b>		Bachelor of Science in Nutrition and Dietetics								<b>NCQF LEVEL</b>		8				
<b>STRANDS (where applicable)</b>		1. 2. 3. 4.														
<b>FIELD</b>		Health and Social Services			<b>SUB-FIELD</b>			Nutrition and Dietetics			<b>CREDIT VALUE</b>		610			
New Qualification					<input checked="" type="checkbox"/>		Legacy Qualification									
<b>SUB-FRAMEWORK</b>		General Education						TVET			Higher Education			<input checked="" type="checkbox"/>		
<b>QUALIFICATION TYPE</b>		Certificate	I	II	III	IV	V	Diploma	Bachelor							
		Bachelor Honours			<input checked="" type="checkbox"/>		Post Graduate Certificate					Post Graduate Diploma				
		Masters							Doctorate/ PhD							
Qualifications Authority																
<b>RATIONALE AND PURPOSE OF THE QUALIFICATION</b>																
<p><b>RATIONALE</b></p> <p>The Nutrition and Dietetics programme outcome is embedded in the Sustainable Development Goals 2 &amp; 3 which aim to promote healthy and sustainable diets and ensure food security globally (UN, 2015). The Botswana Multi-Sectoral Strategy for The Prevention And Control Of Non-Communicable Diseases (2018-2023) commits to continuously meet the needs of the people of Botswana in the prevention and control of non-communicable diseases (NCDs). In line with the NCD strategy, one of the priority areas of Botswana Ministry of Health and Wellness is to improve the quality of life of Botswana by preventing and managing non-communicable diseases which are primarily nutrition related lifestyle diseases, as well as malnutrition (BDSR, 2017). However, Botswana is experiencing a national shortage of nutrition professionals to serve in both the public and private health sectors. The shortage persists, despite the dietetic profession being considered an essential and scarce skill cadre according to the HRDC report</p>																

2019, which implies that a qualification in dietetics should be given the highest training and scholarship priorities. There is an increased focus on disease prevention and integrative healthcare. This requires that healthcare professionals work more inter-professionally as well as multi-sectoral.

According to UNICEF (2014) malnutrition remains unacceptably high and a significant contributor to deaths of children. Worldwide, malnutrition is associated, directly or indirectly, with 60% of all child deaths. Country-specific data for Botswana on the contribution of malnutrition to the burden of disease (BOD) is fast emerging, furthermore, available studies suggest that malnutrition also plays an important role in morbidity and mortality in Botswana. According to the Botswana Family Health Survey (CSO, 2009); it is reported that stunting, underweight, wasting and overweight prevalence among children less than five years stood at 31.4%, 13.5%, 7.2% and 10% respectively. Botswana also continues to record new HIV infections, with adolescents experiencing high rates of new infections. The relationship between poor nutrition status and HIV infection has been well established. Botswana like most developing countries in the world, faces a tripple burden of under- and over- nutrition and micronutrient deficiencies each of which relates to a unique pathology (Global Nutrition Report, 2022). There is increased rates of non-communicable diseases higher need for critical care services like traumas, burns, surgeries etc. all of which are areas that require services of dieticians (Botswana Health Family Survey: 2008). The shortage of dietitians has resulted in the under management of patients in need of dietetic intervention by this cadre.

The World Health Organization report in 2011 on Botswana for non-communicable diseases provides alarming rising trends. The monetary load on health care services is high and one of the most appropriate and cost-effective approaches are that dieticians provide good nutrition education and counselling on all levels of the community and health care. Failing to train dietitians in Botswana, the national shortage of qualified and competent dietitians will continue to exist and public and private programs that serve to address the health of the nation, fall short on delivery, as a result of diminished capacity in an area, considered as a scarce skill. Furthermore, data from the WHO indicates that Botswana is not addressing these challenges. One of the contributing factors is probably the lack of enough dietitians in the country.

### **PURPOSE:**

The purpose of this qualification is to equip graduates with highly specialized knowledge, skills and competencies to:

- Assess, plan and manage the implementation of all aspects of the field of Nutrition and Dietetics using a Problem-Solving Approach.
- Monitor and evaluate the nutrition care process to improve nutrition and health outcomes.
- Conduct research to address key issues that have a profound impact on the nutritional status, morbidity and mortality of the individuals and community.

### **MINIMUM ENTRY REQUIREMENTS (including access and inclusion)**

To be eligible for admissions for this qualification potential candidates must have:

1. Certificate IV, NCQF level 4 or equivalent, a C or better in Biology, Chemistry and Mathematics or BB Double Award a D or better in English

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2. Applicants who do not meet the minimum entry requirements with NCQF level 4 may qualify for entry through Recognition of Prior Learning (RPL) as per institution RPL policy OR any other related discipline with a minimum of 3 years work experience

<b>SECTION B QUALIFICATION SPECIFICATION</b>	
<b>GRADUATE PROFILE (LEARNING OUTCOMES)</b>	<b>ASSESSMENT CRITERIA</b>
1. Periodically evaluate effectiveness of nutrition and dietetics services to ensure quality and safe practice.	<ul style="list-style-type: none"> <li>• Design and implements quality improvement projects/ interventions to improve quality of service provision.</li> <li>• Maintain a proactive quality improvement approach by identifying indicators of performance for service and care provided.</li> <li>• Implement quality assurance systems and measures by developing and implementing various protocols.</li> <li>• Implement health and safety measures in the workplace to ensure safety of clients and self.</li> </ul>
2. Apply management principles in the delivery of nutrition and dietetics services	<ul style="list-style-type: none"> <li>• Implement and adhere to organizational policies and procedures.</li> <li>• Demonstrate leadership through the application of appropriate leadership styles and principles in the delivery of nutrition and dietetics services.</li> <li>• Adhere to the set performance management standards.</li> <li>• Integrate principles of financial management into practice.</li> <li>• Incorporate enterprise risk management strategies into practice.</li> <li>• Apply human resources management principles in the delivery of nutrition and dietetics services.</li> </ul>
3. Apply the science and art of food and nutrition in the provision of professional services in a food service system	<ul style="list-style-type: none"> <li>• Plan, analyse and evaluate menus in accordance with the objectives of the organisation.</li> </ul>

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	<ul style="list-style-type: none"> <li>• Implement quality systems in food production.</li> <li>• Incorporate quality improvement cycle into the food service systems.</li> </ul> <p>Develop, implement, monitor and evaluate food safety measures in the food services system.</p>
4.Practice client-focused, individualized, evidence-based nutrition and dietetics care	<ul style="list-style-type: none"> <li>• Develop, validate, or select appropriate screening tools for assessing the nutritional status of patients.</li> <li>• Assess nutritional status of individuals, identify a nutritional problem/risk, establish a nutritional diagnosis, develop, implement, monitor and evaluate appropriate intervention strategies in a logical and systematic manner.</li> <li>• Utilize documentation skills to communicate with other members of the healthcare team on the patient's nutritional care plan.</li> <li>• Demonstrate clinical reasoning skills and judgement in nutrition care process.</li> <li>• Develop, implement, and evaluate documentation of nutrition care process.</li> <li>• Maintain accurate, clear, concise and timely documentation in patient record.</li> </ul>
5.Provide appropriate nutritional services for community and population health promotion. promotion for population	<ul style="list-style-type: none"> <li>• Apply knowledge of epidemiology and determinants of health to improve health outcomes.</li> <li>• Apply the principles of public health and health care systems in development of community and population-based nutrition programs.</li> <li>• Promote nutrition health and disease prevention in communities.</li> <li>• Plan, develop, implement and evaluate community-based food and nutrition programmes / services.</li> </ul>

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<p>6.Uphold professionalism in the provision of competent, safe and ethical-legal professional practice.</p>	<ul style="list-style-type: none"> <li>• Adhere to standards of practice for nutritionists and dietitians.</li> <li>• Protect the confidentiality and security of information throughout collection, storage, use and dissemination.</li> <li>• Advocate for national and international legislative and regulatory issues or policies impacting the nutrition and dietetics profession.</li> </ul>
<p>7.Apply basic research methodology to provide evidence-based practice in Nutrition and Dietetics.</p>	<ul style="list-style-type: none"> <li>• Conduct research in an ethical manner.</li> <li>• Integrate scientific information and translate research into practice.</li> <li>• Participate in the development of food, nutrition and dietetic guidelines, policies and procedures based on current research evidence.</li> </ul> <p>Solve nutrition problems based on reliable and credible evidence.</p>
<p>8.Communicate accurate and relevant nutrition and dietetics information in the provision of health care services.</p>	<ul style="list-style-type: none"> <li>• Effectively determine the purpose of the information being gathered.</li> <li>• Apply effective communication processes and modes in the provision of professional services (verbal and non-verbal)</li> <li>• Identify and addresses communication barriers such as literacy issues, cultural issues, environment interruption, disability, and fear.</li> </ul> <p>Use appropriate information technology in communicating, managing and disseminating nutrition and dietetics information.</p>

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SECTION C		QUALIFICATION STRUCTURE				
COMPONENT	TITLE	Credits Per Relevant NCQF Level			Level [ 8 ]	Total Credits
		Level [ 5 ]	Level [ 6 ]	Level [ 7 ]		
<b>FUNDAMENTALS COMPONENT</b> <i>Subjects/Courses/ Modules/Units</i>	Chemistry I	10				10
	Chemistry II	10				10
	Communication and Study Skills	8				8
	Mathematics	8				8
	Introduction to computer application	8				8
	Health Economics		8			8
	Food Microbiology	12				12
	Anatomy and Physiology	12				12
	Introduction to Psychology		10			10
	Legal aspects of health care (Ethics & Professionalism)		8			8
	Introduction to pharmacology		10			10
	Entrepreneurship		8			8
	Pathophysiology		12			12

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	Introduction to Biostatistics			10		10
<b>CORE COMPONENT</b> <i>Subjects/Courses/ Modules/Units</i>	Fundamentals of food and nutrition	12				12
	Nutritional biochemistry		12			12
	Nutrition in the life cycle		12			12
	Nutritional status assessment		14			14
	Introduction to dietetics		12			12
	Meal management and food production	12				12
	Food science and technology		12			12
	Management principles (applied in food service)		12			12
	Therapeutic nutrition 1		16			16
	Advance nutrition and human metabolism			12		12
	Community nutrition I			12		12
	Food service system and delivery			12		12

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	Therapeutic nutrition II			16		16
	Quantity food production			16		16
	Medical nutrition therapy			16		16
	Community nutrition II			16		16
	Introduction to research methods			12		12
	Research proposal			16		16
	Therapeutic nutrition work integrated learning				132	132
	Community nutrition work integrated learning				40	40
	Food service work integrated learning				24	24
<b>STRANDS/ SPECIALIZATION</b>	Research project					30
		<b>Level [5]</b>	<b>Level [6]</b>	<b>Level [7]</b>	<b>Level [8]</b>	
<b>Electives</b>	Epidemiology		8			8
	Health Care Professionalism		8			8



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	Health Informatics		8			8
	Program Development		8			8
	Counselling in the workplace		8			8
	Sociology		8			8

### SUMMARY OF CREDIT DISTRIBUTION FOR EACH COMPONENT PER NCQF LEVEL

#### TOTAL CREDITS PER NCQF LEVEL

NCQF Level	Credit Value
5	92
6	154
7	168
8	196
<b>TOTAL CREDITS</b>	<b>610</b>

#### Rules of Combination:

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

Fundamental Components: 134

Core Components: 468

Electives: 8

**Total Credits: 610**

### **ASSESSMENT ARRANGEMENTS**

This will be assessed using formative at 50% and summative at 50%.

### **MODERATION ARRANGEMENTS**

The following shall apply for both internal and external moderation.

Internal moderation requirements and external moderation shall be carried out in accordance with ETP moderation policy and BQA requirements.

Professional registration and accreditation

All assessors and moderators must be registered and accredited with BQA

### **RECOGNITION OF PRIOR LEARNING**

RPL policies will be applicable in gaining credits towards graduation.

### **CREDIT ACCUMULATION AND TRANSFER**

CAT policies will be applicable in gaining credits towards graduation.

### **PROGRESSION PATHWAYS (LEARNING AND EMPLOYMENT)**

Learning Pathways

Horizontal Articulation (related qualifications of similar level that graduates may consider)

- Human Nutrition and Nutrition Science
- Health Promotion
- Public Health
- Food Science and Technology

Vertical Articulation (qualifications to which the holder may progress to)

Master's degree qualifications in dietetics/nutrition/public health (NCQF level 9)

Employment

The graduates of the Nutrition and Dietetics Program are prepared in such a way that, they can work as:

- Clinical/Therapeutic Dietitians
- Community dietitians

- Food Service Dietitians
- Food Service managers
- Consultants
- Sports Dietitian
- Entrepreneurs

### **QUALIFICATION AWARD AND CERTIFICATION**

Candidates must meet the minimum standards to be awarded the qualification.

For a learner to qualify for the award of Bachelor's degree in Nutrition and Dietetics Programme, they must have achieved a minimum of 610 credits according to the rules of combination. Successful candidates will be issued with a certificate indicating the award.

### **SUMMARY OF REGIONAL AND INTERNATIONAL COMPARABILITY**

#### **SIMILARITIES**

- **Northwest University** Bachelor's in Dietetics is in NCQF level 8 and has 576 credits. It also runs for 3 years with work integrated learning. There are 23 modules similar out of 35 modules of the N&D program for Boitekanelo College. The Learning outcomes are like N&D program also.
- **University Of Free State** Bachelor's in Dietetics is in NCQF level 8 and has 564 credits. It runs for 4 years with work integrated learning. There are 21 modules similar out of 35 modules of the N&D program for Boitekanelo College. The learning outcomes are also like the N&D program.
- **Uppsala University, Sweden** Bachelor's degree in Dietetics has 180 total credits and it runs for 3 years. There are 14 modules like the 35 modules for the N&D program. The learning outcomes are also similar.
- **Florida State University**, United Ste of America offering Bachelors of Dietetics for a duration of 4 years. There are 24 modules similar to the 35 modules for the N&D program.

#### **DIFFERENCES**

Not many differences were found in the programs for Nutrition and Dietetics Program.

- University of Free state has internship or work integrated learning not included in the program.
- The credit system in Uppsala university is different where study rate means that a week is equivalent to 1.5 credits and 30 credits is equivalent to one semester.
- Uppsala university also requires the learners to submit Bachelors Thesis at the end of the program in order to graduate.
- In Florida State University the requirement to graduate is to complete an ACEND accredited internship and also pass a national examination administered by the Commission on Dietetic Registration (CDR).

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Generally, the qualification compares well with other institutions in terms of Learning outcomes and modules offered which facilitates easy articulation to the learners.

### REVIEW PERIOD

The qualification will be reviewed every 5 years.

### For Official Use Only:

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

**BOTSWANA**  
Qualifications Authority