 BOTSWANA Qualifications Authority	BQA NCQF QUALIFICATION TEMPLATE	Document No.	DNCQF.QIDD.G D02
		Issue No.	01
		Effective Date	04/02/2020

SECTION A: QUALIFICATION DETAILS														
<i>qualification developer (s)</i>				Botswana Accountancy College										
TITLE	Postgraduate Diploma in Infrastructure Finance								NCQF LEVEL		8			
FIELD	Business, Commerce and Management Studies			SUB-FIELD		Infrastructure Finance			CREDIT VALUE		120			
New Qualification								Review of Existing Qualification				✓		
SUB-FRAMEWORK		General Education					TVET				Higher Education		✓	
QUALIFICATION TYPE	Certificate	I		II		III		IV		V		Diploma	Bachelor or	
	Bachelor Honours				Post Graduate Certificate					Post Graduate Diploma			✓	
	Masters							Doctorate/ PhD						
RATIONALE AND PURPOSE OF THE QUALIFICATION														
<p>RATIONALE:</p> <p>A number of challenges relating to infrastructure in Botswana have been identify in the NPD 11. To curb those challenges, NPD11 speaks to more emphasis be placed on infrastructural development in various sectors of the economy that can increase the economy's production capacity and improve its global competitiveness (NDP 11).</p> <p>Poor infrastructure increases the cost of doing business. The large infrastructure development needs cannot go unattended and the government is obligated to ensure that public infrastructures are operational and are adequately financed. In Sub-Saharan Africa, national governments are the main single source of infrastructure financing, and that role is increasing (World Bank Africa Region, 2011).</p> <p>The Botswana government is trying to wean itself off from being the main source of funding for infrastructure development in the country. The government wants private investors and wealthy citizens to play a much larger role in this area. Addressing Botswana's infrastructure challenges will require sustained expenditure of some US\$785 million per year over the next decade, split fairly evenly between investment and operations and maintenance (World Bank Africa Region, 2011). More than half of the total relates to the power sector. Until 2008, the aggregated spending for the infrastructure sectors has been about US\$800 million per year, broadly in line with estimated needs. Nevertheless, due to resource allocation issues, the power sector faced a funding gap of US\$305 million per year, or about 3 percent of GDP – reflected in the power supply crisis</p>														


that erupted in 2008. It is striking that its relatively strong economy and attractive investment climate, Botswana has not succeeded in capturing as much private finance for infrastructure (as a percentage of GDP) as many of its neighbours have done under less favorable circumstances. The government has acted decisively to address efficiency issues such as under-allocation of resources, under-execution of infrastructure budgets, misalignment of tariffs and costs, among others. All of these point to weaknesses in managing infrastructure finance and financing.

The value of human capital development in infrastructure finance is recognized. In a recent needs' analysis survey conducted in Botswana, the demand for Postgraduate qualification in Infrastructure Finance was high as indicated by 81.3% of the respondents stated that it was in demand (BAC Needs Analysis, 2019). About 84.4 % of the respondents indicated that the qualification was also relevant to the human resources needs in Botswana (BAC Needs Analysis, 2019). Figure 1 and 2 show the trends in responses. The survey revealed that of importance in an infrastructure finance qualification is an understanding of contemporary (current theories, principles, concepts and practices of infrastructure finance; being able to critically analyze, independently review and evaluate specialized knowledge of infrastructure finance so as to be able to make expert recommendations on alternative courses of action that add value to stakeholders, being able to demonstrate mastery of the practice of infrastructure finance as an emerging profession and carry out basic research using the concepts, models and ideas of best practice in the field in a creative manner that synthesizes current knowledge and practice.

Having the trained human capital to lead and manage infrastructure related finance would boost investor confidence and improve resource utilization efficiency. The qualification addresses this need by placing focus on infrastructure investments – exposing learners to techniques in researching and identifying available infrastructure funding options and selecting the one that would be cost effective. The qualification takes the issue further by developing graduate's competency in areas of organizational models for infrastructure implementation. The intention being to address the skills gap in model identification which is cost effective for both the projects owner and the other stakeholders involved. When infrastructure practitioner gets involved in project, the element of dealing with finance is inevitable. The qualification is valuable and timely because it designed to address key needs and requirements as indicated above and reported by the industry, while at the same time grounded in adequate theory (AFDB, African Economic Outlook 2018). Botswana still need to develop its human capital competencies in infrastructure investment, regardless of public or private sector.

PURPOSE:

The qualification aims to provide the learners with a well-balanced mix of practice-based economic and financial theory as well as industry practice related to infrastructure finance. Specifically, the qualification purpose is to produce learners who can:

 BOTSWANA Qualifications Authority	BQA NCQF QUALIFICATION TEMPLATE	Document No.	DNCQF.QIDD.G D02
		Issue No.	01
		Effective Date	04/02/2020

- a) Apply highly specialized knowledge of contemporary theories, principles, concepts and practices of infrastructure finance to enhance project implementation
- b) Demonstrate mastery of professional practice to evaluate projects and make expert recommendations on alternative courses of action.
- c) Undertake basic research using the concepts, models and ideas of best practice in the field in a creative manner that synthesizes current knowledge and practice to achieve improved project delivery.


ENTRY REQUIREMENTS (including access and inclusion)

To be eligible for enrolment into the qualification, candidates should have the following minimum requirement:


- Bachelor degree, NCQF Level 7
- RPL and CAT are applicable and will be considered for entry for access and inclusion.

(Note: Please use Arial 11 font for completing the template)


SECTION B QUALIFICATION SPECIFICATION	
GRADUATE PROFILE (LEARNING OUTCOMES)	ASSESSMENT CRITERIA
LO1: Demonstrate highly specialized knowledge and understanding of the principles of infrastructure finance.	Associated assessment criteria for learning outcome #1 <ol style="list-style-type: none"> 1.1 Apply key concepts of infrastructure finance, its tools, theories when managing infrastructure projects. 1.2 Apply key financial controls to protect financial assets in an organisation. 1.3 Select and justify appropriate methods of managing working capital when implementing infrastructure finance projects. 1.4 Budget for all aspects of infrastructure finance project and management.
LO2: Strategically assess infrastructure financing models against available financing options to achieve adequate financing of projects.	<ol style="list-style-type: none"> 2.1 Assess and apply different infrastructure financing models in project financing. 2.2 Analyse and recommend different funding options for infrastructure finance projects. 2.3 Determine the key challenges facing different categories of stakeholders involved in infrastructure finance projects and how these may be mitigated in the development of the partnership.

 BOTSWANA Qualifications Authority	BQA NCQF QUALIFICATION TEMPLATE	Document No.	DNCQF.QIDD.G D02
		Issue No.	01
		Effective Date	04/02/2020

	<p>2.4 Assess and manage the risks associated with different financing options in infrastructure projects.</p> <p>2.5 Identify and assess different infrastructure projects, in the Botswana context and elsewhere that worth financing and make recommendations.</p> <p>2.6 Assess different Afrocentric infrastructure finance case studies and identify their pitfalls, key lessons, and make recommendations.</p> <p>2.7 Make presentations to financiers, finance experts and senior management in management forums</p>
LO3: Assess current legislations and policies relating to infrastructure finance for purposes of project planning and implementation.	<p>3.1 Apply different legislative provision in the planning and implementation of infrastructure management projects.</p> <p>3.2 Analyse key policies related to infrastructure finance in the Botswana context and their purposes, strengths and pitfalls in project planning and implementation.</p> <p>3.3 Plan infrastructure finance projects taking into account emerging policy issues in climate change (e.g. “Green infrastructure”) to balance economic and environmental demands.</p> <p>3.4 Critique and discuss policy provisions relating to climate change and infrastructure development in the African context.</p>
LO:4 Evaluate project finance models in a specific context and undertake reporting.	<p>4.1 Evaluate different project finance models in term of their relevance for a specific project and contexts.</p> <p>4.2 Analyse different research designs and options in order to select an appropriate one that link to a project model.</p> <p>4.3 Conduct situation analysis in order to understand the problems and the projects.</p> <p>4.4 Develop baseline data for components of projects that have been financed and analyse and interpret the data collected.</p> <p>4.5 Present evaluation reports (written and orally) on a financial model that has been used in a project.</p>
LO 5 Demonstrate highly specialized knowledge and skills in the process and	<p>5.1 Structure an infrastructure project finance covenant for a client or an organisation.</p>

 BOTSWANA Qualifications Authority	BQA NCQF QUALIFICATION TEMPLATE	Document No.	DNCQF.QIDD.G D02
		Issue No.	01
		Effective Date	04/02/2020

structuring of project finance and perform infrastructure project due diligence	5.2 Perform due diligence on infrastructure project finance covenant for a client or an organisation.
LO 6. Evaluate microeconomic, macroeconomic, and financial forces determining infrastructure investment for an organisation.	6.1 Analyse economic trends affecting global and local infrastructure investments. 6.2 Develop, Implement, and manage strategies for microeconomic and macroeconomic forces affecting infrastructure investment for an organisation.
LO 7 Critically evaluate procurement strategies and procedures for administering infrastructure contracts	7.1 Analyse procurement strategies suitable to an organisation's infrastructure investment opportunities. 7.2 Select, Implement, and monitor the appropriate procurement strategies to meet an organisation's infrastructure investment goals. 7.3 Undertake infrastructure investment by following contract law, project contracts and contractual procedures.
LO 8: Manage technical infrastructure risk for an organisation.	8.1 Develop a risk modelling framework for the impact of quantifiable probabilistic risks 8.2 Implement and monitor the risk modelling framework by exercising sound judgment in assessing and dealing with non probabilistic risks.
LO 9. Apply basic research methodologies when planning and conducting infrastructure finance related research	9.1 Identify appropriate research by utilizing relevant research principles. 9.2 Plan and undertake research individually or in a team. 9.3 Gather, analyse, integrate, and interpret information.

 BOTSWANA Qualifications Authority	BQA NCQF QUALIFICATION TEMPLATE	Document No.	DNCQF.QIDD.G D02
		Issue No.	01
		Effective Date	04/02/2020

SECTION C	QUALIFICATION STRUCTURE			
<i>Subjects/Courses/ Modules/Units</i> COMPONENT	MODULE TITLE	Relevant NCQF Level		Total Credits
		Level [7]	Level [8]	
FUNDAMENTAL COMPONENT				
	Introduction to Infrastructure management		8	10
CORE COMPONENT	Infrastructure Investments		8	15
	Organizational Models for Infrastructure Implementation		8	10
	Infrastructure sectors and subsectors		8	10
	Project Finance		8	15
	Economic principles and Policy		8	10
	Procurement and contract management		8	15
	Risk modelling and asset management in infrastructure projects		8	15
	Research project in infrastructure financing		8	20
	TOTAL CREDITS			120
ELECTIVE/ OPTIONAL COMPONENT	N/A			
Rules of Combination: (Please Indicate combinations for the different constituent components of the qualification)				
The rules of combination are:				
Fundamental components	Level 8		10 credits	
Core components	Level 8		110 credits	
Elective components	N/A			
Total			120 credits	

(Note: Please use Arial 11 font for completing the template)

ASSESSMENT AND MODERATION ARRANGEMENTS

Both formative and summative assessment form part of the qualification assessment methods. The assessment components and their weightings are: -

- Coursework assessment _100%

Formative: Examination/ Case studies. Summative: Class tests/Group projects/Individual or group assignments/ Portfolio of Evidence

Moderation Arrangements

There will be internal and external moderation for the qualification.

Assessment and moderation should be performed by suitably qualified individuals in the subject area.

Both internal and external moderation will be done in-line with the moderation policy of the Institution.

RECOGNITION OF PRIOR LEARNING

Provision is made for award of this qualification through recognition of prior learning (RPL), prior experience (RPE) and Credit Accumulation Transfer (CAT).

PROGRESSION PATHWAYS (LEARNING AND EMPLOYMENT)

Vertical articulation (NCQF level 9).

The qualification can articulate vertically onto:

Master of Science in a Risk Management.

Master of Science in Finance.

Master of Science in Strategic Management.

Horizontal articulation (NCQF Level 8)

The qualification can articulate horizontally unto:

Bachelor (Honours) in Finance.

Bachelor (Honours) in Risk Management

Employment pathway

For employment, graduates may take up opportunities in:

- Manager of Infrastructure finance division
- Infrastructure finance or project manager
- Infrastructure finance project consultant

QUALIFICATION AWARD AND CERTIFICATION

A learner must fulfil the rules of combination indicated above and must meet all the minimum credit requirement of 120 in order to be awarded the qualification.

The learner shall be awarded with a Postgraduate Diploma in Infrastructure Finance.

Final Exit Points	Award
Completion of 120 Credits	Postgraduate Diploma in Infrastructure Finance

REGIONAL AND INTERNATIONAL COMPARABILITY

This qualification is not available as a Post Graduate Diploma in Infrastructure Finance both regionally and internationally since it is multi-disciplinary in nature. Related qualifications include Postgraduate Diploma in Development Finance (NQF Level 8) offered by Stellenbosch University and

Rather Benchmarking was done with two qualifications related to infrastructure finance offered at level 9.

Regional

No regional institution of higher learning is offering this qualification at postgraduate level. The same applies to the SADC region.

International


University College London (UCL) offers MSc in Infrastructure Investment and Finance, and that qualification's content including economic principles and policies, risk modelling and asset management and demand forecasts shed significant light in the development of this qualification.

This qualification is thus benchmarked against the UCL's. It is also designed with industry needs in mind, professional associations, and practice specialists in Botswana to ensure that the necessary skills developed are relevant. The qualification compares well with the UCL in terms of entry requirement and module credits. The programme aims also benefited from the comparison.

REVIEW PERIOD


The qualification will be reviewed every 5 years.

(Note: Please use Arial 11 font for completing the template)

 BOTSWANA Qualifications Authority	BQA NCQF QUALIFICATION TEMPLATE	Document No.	DNCQF.QIDD.G D02
		Issue No.	01
		Effective Date	04/02/2020

Comparability Matrix

COMPARISON FACTORS	INSTITUTIONS		
	Stellenbosch University (South Africa)	University of Birmingham, UK	London Business School
Qualification	Postgraduate Diploma in Development Finance	Postgraduate Diploma in Development Finance and Economics	Project and Infrastructure Finance (Short course)
NCQF Level	Level 8 -120 Credits	Level 8 -180 Credits	Not stated
Domains covered	<p>Compulsory modules:</p> <ul style="list-style-type: none"> • Finance and Development in Africa. • Research Orientation. • Small Scale Enterprise Development and Finance. • Principles of Finance. • Monitoring and Evaluation of Development Projects. • Risk Management in Development Finance Institutions. <p>Elective modules (Learners are to choose 2 modules):</p> <ul style="list-style-type: none"> • Leadership in Development Finance. • Social Entrepreneurship. • Agricultural Finance. 	<p>Compulsory modules:</p> <ul style="list-style-type: none"> • Microeconomics (20). • Macroeconomics (30). • Econometrics with Development and Financial Applications (30). • Development Economic Theory (20). • Development Economic Policy (20). <p>Elective modules: One module must be selected from:</p> <ul style="list-style-type: none"> • International Trade Policy (20). • Economics of Financial Markets (20). 	<ul style="list-style-type: none"> • Infrastructure finance • Project versus corporate finance. • Finance, value and structure large- scale infrastructure projects. • Project risks and rewards. • Optimally restructure projects in distress. • Public-Private Partnerships (PPP) • Private finance initiatives (PFI). • Project finance in emerging markets.

 BOTSWANA Qualifications Authority	BQA NCQF QUALIFICATION TEMPLATE	Document No.	DNCQF.QIDD.G D02
		Issue No.	01
		Effective Date	04/02/2020

	<ul style="list-style-type: none"> • Mortgage and Housing Finance. • Public Private Partnership. 	<ul style="list-style-type: none"> • Political Economy and Economic Policy (20). • Risk, Uncertainty and Information (20). 	
Main Exit Outcomes	<ol style="list-style-type: none"> 1. Identify and analyse the critical factors in African economic development. 2. Identify researchable issues and describe a research problem within the field of development finance. 3. Demonstrate understanding of the dynamics of small enterprise inception and growth. 4. Analyse the financial health of a project or firm. 5. Identify tools to measure progress, questions and criteria for evaluations. 6. Identify risk within development finance institutions. 	Not stated.	<ol style="list-style-type: none"> 1. Gain the confidence to successfully navigate the entire project finance process - from initial agreement to completion. 2. Explore successful – and unsuccessful – examples of project and infrastructure finance. 3. Restructure projects in distress for optimal results, sharing insights with a global and highly talented cohort. 3. Explore project finance through real-world case studies, examining the latest industry techniques with world-leading faculty.