

Document No.	DNCQF.QIDD.GD02
Issue No.	01
Effective Date	04/02/2020

SECTION A:	SECTION A: QUALIFICATION DETAILS														
QUALIFICATION	QUALIFICATION DEVELOPER (S) BOTSWANA ACCOUNTANCY COLLEGE														
TITLE Postgraduate Certificate in Infrastructure Finance (Project Finance)					QF LEVEL			8							
FIELD	Business, Commerce and Management Studies			_	SUB-FIELD Infrastructure finance			e.	CREDIT VALUE			65			
New Qualification				√ Review of Existing Qualification			alification								
SUB-FRAMEWOR	RK	Ge	eneral	Ed	lucat	ion		TV	ΕT			Higher I	Edu	ıcation	<b>V</b>
QUALIFICATIO Certificate I N TYPE		I		<i>II</i>		III	IV		V		Diploma		Bachel or		
	Bachelor Honours			S	Post Graduate Certificate			<b>√</b>	Post G Dip	Grad Iom					
	M				asters				Doctorate/ PhD						

#### RATIONALE AND PURPOSE OF THE QUALIFICATION

The government is trying to wean itself off from being the main source of fund for infrastructure development in the country. The government wants private investors and wealthy citizens to play a much larger role in this area. But to do so effectively, it is necessary that competencies in infrastructure investment are adequately developed among infrastructure personnel in the public and private sector. The qualification addresses this need by placing focus on infrastructure investments – exposing graduates to techniques in researching and identifying available infrastructure funding options and selecting the one that is cost effective. The qualification takes the issue further by developing graduate's competency and application 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 the various needs and requirements reported by the industry, while at the same time grounded in adequate theory (AFDB, African Economic Outlook 2018).

Infrastructure systems for transportation, utilities, and public works are essential for economic growth and have quickly developed into an emerging alternative asset class. Just as infrastructure development acts as a catalyst for economic growth, it is also changing the landscape for potential investors and the burgeoning field of infrastructure finance. An industry needs-assessment undertaken in 2019, (see Appendix 1), shows that advanced skill in infrastructure finance is required in Botswana's economy. The review also shows that the skills are needed to address the HRDC-identified gaps (HRDC, 2016) in skills where the country has produced a lot of skilled/qualified citizens at undergraduate level but the postgraduate level qualified stock of graduates is low



Document No.	DNCQF.QIDD.GD02
Issue No.	01
Effective Date	04/02/2020

## Purpose of the qualification

The purpose of the qualification is to produce graduates who have highly specialised knowledge, skills, and competencies to:

- Apply contemporary theories, principles, concepts, and practices of infrastructure finance to enhance project implementation.
- Review and critically evaluate specialized knowledge of infrastructure finance to be able to make expert recommendations on alternative courses of action that add value to stakeholders.
- 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)

Minimum entry requirement

- Bachelor's Degree NCQF Level 7 in the same or cognate field of study.
- Candidates who do not meet the above minimum entry requirements will be considered through Recognition of Prior Learning (RPL) and Credit Accumulation and Transfer (CAT) as specified in policies by the Education and Training Provider (ETP) in line with the National RPL and CAT policies.



Document No.	DNCQF.QIDD.GD02
Issue No.	01
Effective Date	04/02/2020

SECTION B QUALIFIC	ATION SPECIFICATION
GRADUATE PROFILE (LEARNING OUTCOMES)	ASSESSMENT CRITERIA
LO1: Demonstrate grounded knowledge and understanding of the fundamental of infrastructure finance.	<ul> <li>1.1 Employ key concepts in infrastructure finance, tools, theories and use these to make decisions in infrastructure finance and infrastructure management.</li> <li>1.2 Apply key financial controls to protect financial assets.</li> <li>1.3 Manage working capital in infrastructure finance projectS.</li> <li>1.4 Illustrate role budget plays in all aspects of an organisation infrastructure finance project management and make suggestions.</li> </ul>
LO2: Assess strategically infrastructure financing models against available financing options to achieve adequate financing of projects.	<ul> <li>2.1. Evaluate different infrastructure financing models in project financing.</li> <li>2.2. Recommend different funding options for infrastructure finance projects.</li> <li>2.3. Evaluate the key challenges facing different categories of stakeholders involved in infrastructure finance projects.</li> <li>2.4. Measure the risks associated with different financing options in infrastructure projects.</li> <li>2.5. Appraise different infrastructure projects, in the African context and elsewhere that worth financing and make recommendations.</li> <li>2.6 Review different Afrocentric infrastructure finance case studies and identify their pitfalls, key lessons, and make recommendations.</li> <li>2.7 Interpret information to financiers, finance experts and senior management in management forums</li> </ul>
LO3: Evaluate current legislations and policies relating to infrastructure finance for purposes of project planning and implementation.	<ul> <li>3.1 Appraise different legislative provision in the planning and implementation of infrastructure management projects.</li> <li>3.2 Evaluate key policies related to infrastructure finance in the Botswana context and their purposes, strengths and pitfalls in project planning and implementation.</li> <li>3.3 Conclude on infrastructure finance projects taking into account emerging policy issues in climate change (e.g. "Green infrastructure") to balance economic and environmental demands.</li> <li>3.4 Revise policy provisions relating to climate change and infrastructure development in the African context.</li> </ul>



Document No.	DNCQF.QIDD.GD02
Issue No.	01
Effective Date	04/02/2020

LO:4 Appraise project finance models in a	4.1 Compare different project finance models in term of their
specific context and undertake reporting.	relevance for a specific project and contexts.
	4.2 Assess different research designs and options to select
	an appropriate one that link to a project model.
	4.3 Perform situation analysis in order to understand the
	problems and the projects.
	4.4 Estimate baseline data for components of projects that
	have been financed and analyse and interpret the data
	collected.
	4.5 Interpret evaluation reports (written and orally) on a
	financial model that has been used in a project.



Document No.	DNCQF.QIDD.GD02
Issue No.	01
Effective Date	04/02/2020

SECTION C	QUALIFICATIO	N STRUCTURE			
Subjects/Courses/	MODULE TITLE	Relevant N	ICQF Level	Total Credits	
Modules/Units  COMPONENT		Level [7]	Level [8]		
FUNDAMENTAL					
COMPONENT	Introduction to Infrastructure management	10		10	
CORE	Infrastructure Investments		15	15	
COMPONENT	Organizational Models for Infrastructure Implementation		10	10	
	Infrastructure sectors and subsectors		10	10	
	Research Project in Finance		20	20	
	TOTAL CREDITS	10	55	65	
ELECTIVE/ OPTIONAL COMPONENT	N/A				

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

The qualification duration is 12 months, comprising of fundamental and core modules. There is fundamental module at level 7, and five modules being core at level 8. All the modules are compulsory. The credits distributed across the qualification are as follows: (level 7) = 10; (level 8) = 55. This gives a total credit of 65.

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



Document No.	DNCQF.QIDD.GD02
Issue No.	01
Effective Date	04/02/2020

#### ASSESSMENT ARRANGEMENTS

#### **Assessment arrangements:**

Formative and summative assessments will be used.

Formative assessment (Weighs more than Summative Assessment)

Will include continuous assignments that will collectively contribute to the final grade. Integrated assessment procedures to ensure that the purpose of the qualification is achieved.

Summative assessment (weighs less than Formative Assessment)

There shall be examinations that shall contribute to the final grade. Assessment will be in accordance with respective ETP's regulations and procedures.

## **MODERATION ARRANGEMENTS**

## **Moderation Arrangements**

There will be internal and external moderation for the qualification. Assessors and moderators must be BQA registered and accredited. Both internal and external moderation will be done in-line with the moderation policy of the Institution.

#### RECOGNITION OF PRIOR LEARNING

There shall be an award of the qualification using Institutional RPL Policy in line with the National RPL Policy.

### PROGRESSION PATHWAYS (LEARNING AND EMPLOYMENT)

#### Horizontal articulation

The qualification can articulate horizontally unto a

- Bachelor (Hons) in Finance; or
- Bachelor (Hons) in Risk Management (level 8).

#### **Vertical articulation**

The qualification can articulate vertically onto

- Master of Science in Risk Management.
- Master of Science in finance.
- Master of Science in Strategic Management (NCQF level 9).

### **Employment pathway**

For employment, graduates may take up opportunities in:

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



Document No.	DNCQF.QIDD.GD02
Issue No.	01
Effective Date	04/02/2020

#### **QUALIFICATION AWARD AND CERTIFICATION**

#### **QUALIFICATION AWARD:**

A learner must accumulate the minimum credit requirements of 65 credits as indicated in the rules of combination to be awarded the qualification.

#### **CERTIFICATION:**

The graduate shall be awarded with a **Postgraduate Certificate in Infrastructure Finance (Project Finance).** 

Final Exit Points	Award
Completion of 65 Credits	Postgraduate Certificate in Infrastructure Finance (Project
	Finance)

#### REGIONAL AND INTERNATIONAL COMPARABILITY

### Regional

No local 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. The other universities pitched their programme at master's level.

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 programme aims also benefited from the comparison.

#### **Similarities**

Core components of infrastructure finance sub-field (infrastructure management and infrastructure projects financing) are covered.

All the programmes are delivered at post graduate level.

The qualification compares well with the UCL in terms of entry requirement and module credits.

#### **Differences**

Non- technical modules are not part of the ETP qualification.

Two of these qualifications are pitched at level 9 but the ETP is at Level 8.



Document No.	DNCQF.QIDD.GD02
Issue No.	01
Effective Date	04/02/2020

They have research module that carries 60 credits but ETP research has 20 credits. The other qualification does not have a research module but is pitched at postgraduate.

### Regional

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

#### International

See Table 3 below. 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. The other universities pitched their programme at master's level.

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 programme aims also benefited from the comparison.

#### **Similarities**

Core components of infrastructure finance sub-field (infrastructure management and infrastructure projects financing) are covered.

All the programmes are delivered at post graduate level.

The qualification compares well with the UCL in terms of entry requirement and module credits.

#### **Differences**

Non- technical modules are not part of the ETP qualification.

Two of these qualifications are pitched at level 9 but the ETP is at Level 8.

They have research module that carries 60 credits, but ETP research has 20 credits. The other qualification does not have a research module but is pitched at postgraduate.

Table 3: Comparability matrix

COMPARISON FACTORS		INSTITUTION		
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	University College London (UK)	Brunel University London	London Business School	
Qualification	MSc Infrastructure Investment and Finance	MSc Project and Infrastructure Management	Short course (Post Graduate)	
NCQF Level	Level 9	Level 9	Not indicated	



Document No.	DNCQF.QIDD.GD02
Issue No.	01
Effective Date	04/02/2020

П	Domoino	Eundomontolo	Custoinable project	Crooting value through
	Domains covered and	Fundamentals and innovations	Sustainable project	Creating value through
	credits		Management (15 credits)	project finance
	Ciedits	in funding and	Quality management and	Project versus corporate finance
		finance (15	reliability (15 credits)	
		credits) Infrastructure	Risk and financial management	Financing, valuing, and
			(15 credits)	structuring large scale
		using a Special	Managing people and	projects
		Purpose Vehicle	organisation (15 credits)	Analysing project risks and rewards
		(15 credits) Economic	Infrastructure management (15 credits)	Optimally restructuring
		principles and	Research Methods and	projects in distress
		Policy (15 credits)	Professional Development (15	Public Private Partnerships
		Agency and	credits)	and Private Finance
		transaction costs	Geo Environment Management	Initiatives
		in infrastructure	for civil engineers (15 credits)	Project finance in emerging
		projects (15	Procurement and contract	markets
		credits)	Management (15 credits)	markete
		Risk Modelling	Project Dissertation (60 credits)	
		and asset	(or ordano)	
		management in		
		infrastructure		
		projects (15		
		credits)		
		Demand		
		forecasts,		
		business cases		
		and Appraisal		
		methods (15		
		credits)		
		Managing		
		infrastructure		
		projects and		
		progamme (15		
		credits)		
		Dissertation (60		
	NA : - :-	credits)	T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	Main Exit	The MSc has a	The Msc provides skills for the	By
	Outcomes	strong	engineering and construction	the end of the programme,
		commercial focus	sector.	you'll
		and provides		be able to successfully
		candidates with a well-balanced mix		forecast
		of economic and		and structure project finance transactions, and understand
		finance theory as		the factors that cause
		well as industry		projects to
		practice.		fail. You return to work with a
		practice.		set
				of practical skills and
				techniques
				gained through the
				examination of
╙		I		



Document No.	DNCQF.QIDD.GD02
Issue No.	01
Effective Date	04/02/2020

П				1 116 1 16
				real-life project finance
				scenarios.
				In addition, you acquire a
				strong
				network of contacts from the
				growing project finance
				industry.
	Award	Master of	Master of Science	Postgraduate Certificate
		Science		
	Entry	A minimum of an	A 2:2 (or above) UK Honours	Finance professionals and
	requirements	upper second-	degree, or equivalent	other professionals such as
		class Bachelor's	internationally recognised	Developers, lawyers etc.
		degree from a UK	qualification, in an engineering,	
		university in a	science or technology subject.	
		relevant subject	Other qualifications in a related	
		(including	subject, including but not limited	
		engineering,	to Civil; Mechanical;	
		mathematical-	Electrical/Electronic; Chemical;	
		based science,	Building Services Engineering	
		built environment,	Technology; Building	
		economics and	Technology; Architecture;	
		finance), or	Quantitative Surveying;	
		an overseas	Project/Construction	
		qualification of an	Management; Assessment	
		equivalent	Management will be considered	
		standard. In	on an individual basis.	
		exceptional	on an individual basis.	
		cases, a lesser		
		academic		
		qualification		
		combined with substantial		
		professional		
		experience and		
		demonstrable		
Ш		academic ability		
		will allow		
		acceptance onto		
		the programme.		
	DEVIEW DEDIOR			

# **REVIEW PERIOD**

The qualification will be reviewed every 5 years.