

SECTION A:				QUALIFICATION DETAILS														
QUALIFICATION DEVELOPER (S)				University of Botswana														
TITLE	<b>FLE</b> Doctor Of Philo				sophy in Architecture							NCQF Level				10		
STRANDS (where applicable)	None																	
FIELD	Physical Planning and Construction			Sub-Field			eld		F	Architecture			Credit Value				360	
New Qualification									Legacy Qualification				✓					
SUB- FRAMEWORK			Education						TVET			Higher Education			<b>✓</b>			
QUALIFICATI ON TYPE	Certificat I		1		<i>II</i>		<i>III</i>		IV	,	/	V		Diplo a	om		Bac helor	
Bachelor Ho							st Graduate Certificate				Post Graduate Diploma							
	Masters						Doctorate/ PhD				✓							
								V	V				/1					

#### RATIONALE AND PURPOSE OF THE QUALIFICATION

#### RATIONALE:

The qualification has been designed to respond to Botswana's social and economic needs in architecture and the built environment areas. It is aligned to the key strategic sectors of construction, built environment, science, and technology identified by the Human Resource Development Council, which requires a high workforce demand to transform Botswana into a knowledge-based and circular economy. Architecture has been highlighted as one of the top priority study areas by the Human Resource Development Council (HRDC). The key mandate of the qualification mandate is to produce researchers in various built environment fields. The qualification is in line with the Faculty of Engineering and Technology's vision of being the leading centre of excellence in engineering and the built environment in the world. The qualification contributes toward the strategic role of meeting the



country's development needs through advancing human resource development and developing research and innovation capacity. Furthermore, this qualification is commensurate with pillar number 3 of Vision 2036 which focuses on the production of sustainable environment, of which architecture plays a major role in the shaping sustainable spaces.

## PURPOSE: (itemise exit level outcomes)

The purpose of this qualification is to produce graduates with the most advanced knowledge, skills and competence to:

- 1. Develop and disseminate new knowledge in architecture and built environment research areas.
- 2. Produce new impactful and relevant knowledge in architecture which could inform policy.
- 3. Prepare graduates for professional research careers in academia, research, science, technology and innovation.
- 4. Contribute to highly qualified graduates with an understanding of qualities of space and the built environment in Botswana and beyond.
- 5. Develop valuable essential transferrable skills such as team players, problem-solvers, presentation and communication skills, analytical and critical skills.

## MINIMUM ENTRY REQUIREMENTS (including access and inclusion)

The standard requirements for entrance to the doctoral degree qualification shall be:

- Master's Degree, NCQF Level 9.
- Recognition of prior learning and credit accumulation and transfer shall be considered.
   RPL/CAT applicable in accordance with the ETP's policies.



SECTION B QUALIF	ICATION SPECIFICATION					
GRADUATE PROFILE (LEARNING OUTCOMES)	ASSESSMENT CRITERIA					
Conduct high level specialised and scholarly research in the field of architecture.	<ul> <li>1.1 Identify and define a research problem in the Architecture discipline.</li> <li>1.2 Identify and gather relevant data for the identified research problem.</li> <li>1.3 Apply advanced research skills of key disciplinary and multidisciplinary approaches relevant in the workplace.</li> <li>1.4 Design specialized basic and applied research questions.</li> </ul>					
2. Apply advanced specialist knowledge to solve complex and unpredictable problems in all sub-disciplines of Architecture.	<ul> <li>2.1 Identify and define an Architecture problem and associated variables.</li> <li>2.2 Identify and define appropriate methods and tools to solve complex Architecture problems.</li> <li>2.3 Apply innovative research solutions to real world Architecture problems.</li> <li>2.4 Develop appropriate data collection instruments to address complex Architecture problems through research.</li> <li>2.5 Apply appropriate data collection and sampling techniques, to collect data relevant to an identified problem.</li> <li>2.6 Critically analyse data using relevant data analysis techniques, to assess data for relevance, accuracy and applicability.</li> <li>2.7 Evaluate and validate solutions using different data analytical tools to justify the adopted and preferred solution to the problem.</li> </ul>					
3. Contribute to the development of knowledge and human resources in the field of architecture and the built environment.  Output  Description:	<ul> <li>3.1 Develop collaborations with fellow researchers and scholars, both locally and internationally.</li> <li>3.2 Identify the professional training needs in the Architecture industry.</li> <li>3.3 Design and deliver training programmes for continuous professional development.</li> <li>3.4 Disseminate original Architectural research results in appropriate forums such as journals, conferences, government agencies and interested communities.</li> </ul>					
Initiate and design research projects within the work environment.	<ul> <li>4.1 Identify opportunities for innovative solutions in the field.</li> <li>4.2 Design and propose viable research projects and activities within the work environment.</li> <li>4.3 Critically engage with research within Architecture and across a multidisciplinary environment.</li> </ul>					



- 5. Demonstrate ability to teach, train and share basic and advanced Architecture knowledge and skills that contribute to advancement of the Architecture profession and scholarship.
- 5.1 Communicate the value of research to relevant stakeholders.
- 5.2 Create opportunities and platforms to share research results.
- 5.3 Defend new knowledge in various platforms such as seminars and conferences.





SECTION C	QUALIFICATION STRUCTURE							
COMPONENT	TITLE	Credits Per	Total Credits					
		Level [ 9 ]	Level [ 10 ]	Level [ ]				
FUNDAMENTAL COMPONENT								
Subjects/ Courses/ Modules/Units								
CORE	Thesis		360		360			
COMPONENT Subjects/Courses/								
Modules/Units								
					1			
STRANDS/ SPECIALIZATION	Subjects/ Courses/ Modules/Units	Credits Per	Total Credits					
		Level [ 9]	Level [10 ]	Level [				
4	Not applicable	V V //						
1.		nne A	Hoor					
				l l y				
Electives	Not applicable							



SUMMARY OF CREDIT DISTRIBUTION FOR EACH COMPONENT PER NCQF LEVEL						
TOTAL CREDITS PER NCQF LEVEL						
NCQF Level	Credit Value					
10	360					
TOTAL CREDITS	360					

## Rules of Combination:

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

Core: Ph D Research Thesis - 360 credits at NCQF Level 10.

There are no electives for this qualification.





#### ASSESSMENT ARRANGEMENTS

All assessments, formative and summative, leading/contributing to the award of credits or qualifications should be based on learning outcomes and/or sub-outcomes.

**Examination of Coursework**: There will be TWO forms of assessments:

- (a) Formative assessment (proposal defense) will contribute 40% towards the award of the final standing.
- (b) Summative Assessment will contribute 60% to the final standing.

#### **MODERATION ARRANGEMENTS**

There shall be provision for internal and external moderation as a quality assurance measure. The assessment and moderation must be conducted by persons with a doctoral degree in architecture or related field.

## RECOGNITION OF PRIOR LEARNING

There shall be provision for award of credits through RPL in accordance with applicable ETP policy and relevant national-level policy and legislative framework.

#### CREDIT ACCUMULATION AND TRANSFER

There shall be provision for award of credits through CAT in accordance with applicable ETP policy and relevant national-level policy and legislative framework.

#### PROGRESSION PATHWAYS (LEARNING AND EMPLOYMENT)

Horizontal Articulation (related qualifications of a similar level (NCQF Level 10) that graduates may progress to):

- Doctor of Philosophy in Architecture
- Doctor of Philosophy in Urban Studies
- Doctor of Philosophy in Regional Science
- Doctor of Philosophy in Development Studies

Vertical Articulation (NCQF Level 10) qualifications to which the holder may progress to:

This is the highest educational qualification, but candidates can proceed to do: Postdoctoral in various fields in architecture.

## **Employment Pathways**

Architectural Researcher



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

## Minimum standards of achievement for the award of the qualification

To be awarded a Doctor of Philosophy in Architecture, a learner should have satisfied all exit learning outcomes and met the minimum credit requirements (360 credits), fundamental and core components as indicated in the qualification structure.

#### Certification

After satisfying all the requirements, a learner will be awarded a certificate bearing the title of Doctor of Philosophy in Architecture and transcript.

#### SUMMARY OF REGIONAL AND INTERNATIONAL COMPARABILITY

This qualification was compared to Doctor of Philosophy in Architecture regionally and internationally as follows:

**Title of Qualification** All qualifications are similar, Doctor of Philosophy in Architecture.

**NQF Level:** NQF level for all the qualifications are similar in the sense that they are all at the highest possible level of each respective framework for which minimum entry is a master's degree.

The NQF Levels are as follows: Australian (AQF) and the South African (NQF) both have Ph D at Level 10, which is similar to this qualification at NCQF Level 10. The levels are the highest in the respective frameworks and their entry level requirements are a Master Degree, which is similar to this qualification.

**Credit Value or Duration**. The duration is minimum of 2 years for Witwatersrand Ph D in Architecture, and 3 years for university of Manchester and RMIT. All qualifications can be offered under full time and part-time modes.

**Main Exit Outcome(s):** All the qualifications have their learning outcomes pitched at the highest frontier of specialised and scholarly Architectural research and innovation.

**Domains/Modules/ Courses/Subjects covered (Fundamental, core & electives):** All three qualifications are considered research- only, even though the RMIT has a small taught component of research methods modules to cater for candidates without sufficient research background..

**Assessment strategies and Weightings:** Assessment is done via 100% Thesis for WITS and Manchester while for RMIT the assessment is through a combination of Coursework and Thesis.



**Qualification rules and minimum Standards for the award of the qualification:** All qualifications require a thesis defence and an external examination. The thesis must be an original, coherent and consistent body of work which reflects the candidate's own efforts.

**Education and Employment Pathways:** Though with different credit levels due to different frameworks, both qualifications are the highest levels in their own countries. In terms of employment pathways, graduates mainly work as researchers and analysts in both public and private sector, as well as in academia.

## **CONCLUSION:**

Based on the comparisons above, these qualifications are similar.

REVIEW PERIOD	
5 YEARS	

## For Official Use Only:

CODE (ID)			
REGISTRATION STATUS	BQA DECISION NO.	REGISTRATION START DATE	REGISTRATION END DATE
D/	TC\/	/ARI/	
LAST DATE FOR ENROL	MENT	LAST DATE FOR ACH	IIEVEMENT
Que	alification	is Authori	Ty