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		Issue No.	01
		Effective Date	04/02/2020

NSECTION A: QUALIFICATION DETAILS														
QUALIFICATION DEVELOPER (S)		University of Botswana												
TITLE	Bachelor of Pharmacy (Honours)										NCQF LEVEL	8		
FIELD	Health and Social Services				SUB-FIELD		Pharmacy			CREDIT VALUE	766			
New Qualification					<input checked="" type="checkbox"/>		Review of Existing Qualification							
SUB-FRAMEWORK		General Education			<input type="checkbox"/>		TVET			<input type="checkbox"/>		Higher Education		<input checked="" type="checkbox"/>
QUALIFICATION TYPE	Certificate	I	II	III	IV	V	Diploma		Bachelor					
	Bachelor Honours			<input checked="" type="checkbox"/>	Post Graduate Certificate			Post Graduate Diploma						
	Masters					<input type="checkbox"/>		Doctorate/ PhD						
RATIONALE AND PURPOSE OF THE QUALIFICATION														
<p>RATIONALE:</p> <p>The pharmacy programme was established in response to the shortage of pharmacists in the country as evidenced by:</p> <p>Inclusion in the list of technical and soft skills for the top occupations in demand in Botswana. (Table 4): Priority Skills (Current and Future) (<i>Human Resource Development Council of Botswana (HRDC) Report</i>).</p> <p>Also, in 2008, pharmacists were included in a list of professionals considered to be scarce in the country and were in listed second on the “Top Occupations in Demand-priority areas” document (HRDC, 2016).</p> <p>Graduates of this program are therefore guaranteed employment in view of the needs both in government and</p>														

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the private sectors in Botswana, regionally and internationally.


Pharmacists and specialists are required to achieve the national and international strategies/interventions aimed at improving the lives of the population. Such strategies include the Sustainable Development Goals which commit to end the epidemics of AIDS, tuberculosis, malaria and other communicable diseases by 2030; the Botswana National Development Plan (NDP) 11 which aims to eliminate malaria and reduce HIV and tuberculosis-related mortality.

The World Health Organization Non Communicable Disease Botswana Country Profile for 2018 estimates that non-communicable diseases (NCD), which include hypertension, diabetes, cancers and other, account for almost 50% of all deaths in Botswana. The incidence of and mortality associated with NCDs is increasing globally including Botswana. Therefore, in response to the increasing burden, the Ministry of Health and Wellness (MoHW) established a Botswana National Multisectoral Strategy for the Prevention and Control of Non-Communicable to comprehensively address the NCDs. The NDP 11 also mandates the availability of at least 85% of vital and essential medicines.

To achieve the above goals, robust pharmaceutical services have to be available to ensure access to safe and effective quality medicines and also to optimize the patients' outcomes through promotion of rational use of medicines and medical devices, selecting and recommending medicines, applying pharmaceutical care and medication therapy management concepts to implement, monitor and evaluate medicine therapy.

Pharmacists also participate in research, development and testing of pharmaceutical and medical products. The Pharmaceutical services implement the Botswana National Health Policy with the slogan "Towards a Healthier Botswana" through the Botswana National Drug Policy (BNDP) (www.moh.gov.bw/Publications/policies/revised_national_health_policy).

The BNDP is implemented through the Medicines and Related Substances Act, 2013) and Regulations of December 2019 which provide for medicines regulation, control from the manufacture, distribution and dispensing to the use of medicines in the country. Safe and effective quality medicines, vaccines and medical devices are required for health promotion, disease prevention and for curative purposes in both human and animals. Pharmacists participate in health promotion and educate the communities about medicines and disease

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prevention.

The pharmacy profession plays an important role in the multidisciplinary provision of health care and in implementing the National Medicines Policy. The profession has expanded considerably in the past decades. Pharmacists play a pivotal role in the continuous access and appropriate use of safe and cost-effective quality medicines, complimentary/alternative medicines and medical devices. In addition, pharmacists are responsible for regulation, licensing, manufacturing, assuring quality and safety, procurement, storage, distribution and dispensing of medicines and medical devices and provision of pharmaceutical health care services. Availability and rational use of medicines and medical devices is essential for prevention and treatment of medical conditions but also for reduction of morbidity, mortality and costs associated with diseases, medication errors and/or adverse events of medicines.

Globally, there is a serious shortage of pharmacists, which is worse in developing countries. In 1994, WHO reported that the average ratio of pharmacists to population was around 1:2300 in developed countries, while in developing countries, the average was estimated to be less than 1:100 000 (WHO,1994). In 2006, the situation had not changed much because it was reported that more than 80% of the Commonwealth countries still had less than 1 pharmacist per 100 000 population (WHO,2006). Botswana is not spared from the critical shortage of pharmacists.

In 2013, there were 385 pharmacists registered with Botswana Health Professions Council and only 44% were citizens (BHPC database, accessed February, 2014). In order to provide optimal pharmaceutical services, World Health Organization recommends a ratio of 1 pharmacist per 2000 population (Azhar et al, 2009) which translates into at least 1000 pharmacists for Botswana population of just over 2 million. The Ministry of Health alone projected that pharmacy units/institutions under public sector alone requires 300 pharmacists by 2018. (Personal Communication – Deputy Director, Clinical Services, October, 2013). The pharmacy programme is a direct response to the request by the Ministry to accelerate output of pharmacists including upgrading of pharmacy technicians.

The critical shortage of pharmacists has resulted in (1) increased risk of drugs/medicines stock outs of vital and essential medicines and medical devices; (2) medicines procured from outside the country not speedily tested for safety, quality and effectiveness, (3) regulation of pharmacy premises and medical products compromised, (4) inadequate number of pharmacy technicians being trained due to shortage of pharmacy lecturers; (5) the role

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of medicine dispensing at most public health facilities in Botswana being shifted to nurses who were not adequately prepared to perform the duties of pharmacists. Therefore, a locally established programme will result in increased output of pharmacists and address some of these gaps in health care delivery in the country.

In 2012, the then Ministry of Health requested the University of Botswana to establish a Pharmacy Programme to reduce shortage of the cadre and also the cost associated with training (Correspondence, 2012). The Government of Botswana has been sending qualifying citizens to train abroad with considerable costs to the country. The costs of training one pharmacist is estimated to be P200, 000-00 at the University of Botswana while elsewhere, it was estimated to be P 0.5 – 1.5 million (2013) and upon completion of studies, some of the trained pharmacists opt to stay in the countries of training. Localization of training of doctors, medical laboratory scientists, nurses, and environmental health practitioners has started to bear fruit. Now, Botswana have increased access to quality programmes at a significantly lower cost to the country with increased retention.


The proposed programme emphasizes clinical pharmacy practice but the learners will also be adequately prepared to function in other pharmacy settings such as industrial pharmacy including manufacturing of medicines.

Pharmacists are deployed in various settings of pharmacy in private and public sectors. Pharmacists may work in industrial pharmacy (manufacturing and distribution of medicines), medicines regulation institutions, quality testing and control laboratories, medical stores, community and hospital pharmacies, medicine information and toxicology centers, training and research institutions and health financing/managed care organizations.

PURPOSE:

The principal purpose of the B. Pharm programme is to develop expertise and produce graduates who can:

- Provide optimal pharmaceutical care and services to the patients, families and caregivers to attain desired patient and health outcomes.
- Risk stratify patients to prioritize and optimize intervention to be provided during patient care provision.
- Critically select and recommend appropriate, cost-effective and safe quality medicines and medical devices when caring for patients to ensure access including through therapeutic substitution, optimal outcomes and

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prevention of adverse effects of medicines.


- Manufacture, test, procure and distribute quality, safe and effective medicines
- Effectively regulate medicines and medical devices to ensure efficacy, safety and quality
- Initiate and conduct meaningful research to discover, modify medicines and/or improve patients and population outcomes and also to inform policy development and review.
- Conduct medicine utilization reviews to determine rationale use of medicines and recommend appropriate interventions


The qualification also aims to equip the learners with the knowledge and skills to function in any pharmacy setting but with emphasis in the clinical practice locally, regionally and globally.

ENTRY REQUIREMENTS (including access and inclusion)


- Certificate IV, NCQF Level 4 (Botswana General Certificate of Secondary Education (BGCSE or equivalent) plus one year of Bachelor of Science with passes in Mathematics and Sciences.
- Recognition of Prior Learning (RPL) and Credit Accumulation and Transfer (CAT) will be applicable for access and inclusion into this qualification.
- RPL and CAT will be applied on case-by-case basis according to the policy of the individual Education Training Provider (ETP). Such policy shall be aligned to the National RPL Policy.

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SECTION B QUALIFICATION SPECIFICATION	
GRADUATE PROFILE (LEARNING OUTCOMES)	ASSESSMENT CRITERIA
<p>1. Demonstrate highly specialized knowledge and understanding of pharmaceutical concepts and principles.</p> 	<p>1.1. Identify stakeholders as part of multi-disciplinary team to collaborate with in the provision of pharmaceutical services to patients.</p> <p>1.2. Utilize the knowledge of the effects of medicines on the body (pharmacokinetics) and the effects of body on medicines (pharmacodynamics) when developing treatment plans or protocols and guidelines to optimize the outcomes of patients.</p> <p>1.3. Utilize and operate instruments and equipment when manufacturing, extemporaneously compounding or testing medicines to assure efficacy, quality and safety in manufacturing plants, hospitals or community pharmacies and pharmaceutical laboratories.</p> <p>1.4. Validate the tools and equipment used in pharmaceutical activities such as testing medicine and medical supplies for quality and safety.</p> <p>1.5. Engage in accurate pharmaceutical calculations and the applications during the provision of pharmaceutical care services.</p>
<p>2. Critically select appropriate, safe, cost-effective quality medicines, medical supplies and medical devices for procurement, dispensing or for</p>	<p>2.1. Select and procure safe, cost-effective quality medicines, medical supplies and medical devices from various suppliers to distribute to health facilities (hospitals, clinics, general practitioners) and community pharmacies</p>

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<p>inclusion into the formulary and treatment guidelines.</p>	<p>following supply chain and logistics management guidelines and in accordance to the Medicines and Related Substances Act.</p> <p>2.2. Select safe, cost-effective quality medicines, medical supplies and medical devices to dispense to patients according to the Medicines and Related Substances Act and Good Dispensing Practice Standards.</p> <p>2.3. Select safe, cost-effective quality medicines, medical supplies and medical devices to include in the formularies and treatment guidelines/protocols for use in the health facilities or nationally.</p>
<p>3. Utilize pharmaceutical care (PC) and medication therapy management (MTM) principles to select, prepare, dispense, evaluate and promote rational use of medicines and medical devices and optimize outcomes as per the good dispensing practice standards and Medicines and Related Substances Act.</p>	<p>3.1. Apply pharmaceutical services concepts/strategies such a pharmaceutical care, medication therapy management (MTM) principles to manage patients' diseases and medicines at various pharmaceutical settings, including health facilities, community pharmacy, hospice, long-term care institution, and managed care organizations.</p> <p>3.2. Critically assess patients' diseases, diagnosis, prescriptions and non-prescription medicines for appropriateness in management of various conditions.</p> <p>3.3. Effectively and efficiently recommend appropriate, safe and cost-effective medicines and medical devices in the management of diseases/conditions in patients of all ages in both ambulatory care and inpatient settings.</p> <p>3.4. Proactively detect medication-related problems and implement sound interventions to solve medication-related problems and optimize therapeutic outcomes.</p> <p>3.5. Initiate plans to monitor and evaluate patients' health</p>

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	<p>outcomes in both ambulatory care and inpatient settings and intervene accordingly.</p> <p>3.6. Apply evidence-based medication use strategies to enhance patients' and population's health outcomes.</p>
<p>4. Design, manufacture and compound effective, safe and quality medicines in small and large scale following Good Manufacturing and Compounding Practice Standards, and according to the Medicines and Related Substances Act.</p>	<p>4.1. Identify sources of and select or design compounds that meet the health needs of patients and the population to determine the manufacturing processes to follow.</p> <p>4.2. Manufacture and compounds medicines that meet the health needs of patients and the population following Good Manufacturing Practices/Standards and Medicines and Related Substances Act in manufacturing plants or other authorized entities.</p> <p>4.3. Test and analyze medicines and medical devices for safety, effectiveness and quality in manufacturing plants and laboratories.</p> <p>4.4. Compound the extemporaneous products following Good Compounding Practice Standards to meet the needs of patients in health facilities.</p>
<p>5. Regulate, inspect and audit pharmacy premises for licensure, evaluate medicines and medical devices for compliance with the Good Manufacturing Practice and to the Medicines and Related Substances Act.</p>	<p>5.1. Critically review dossiers of applications of medicines and medical devices for efficacy, safety and quality in order to register them for use in the country.</p> <p>5.2. Efficiently inspect pharmaceutical premises (manufacturing plants, wholesales, community pharmacies and hospital pharmacies) for compliance with Good Manufacturing Practice Standards and according to the Medicines and Related Substances Act.</p>

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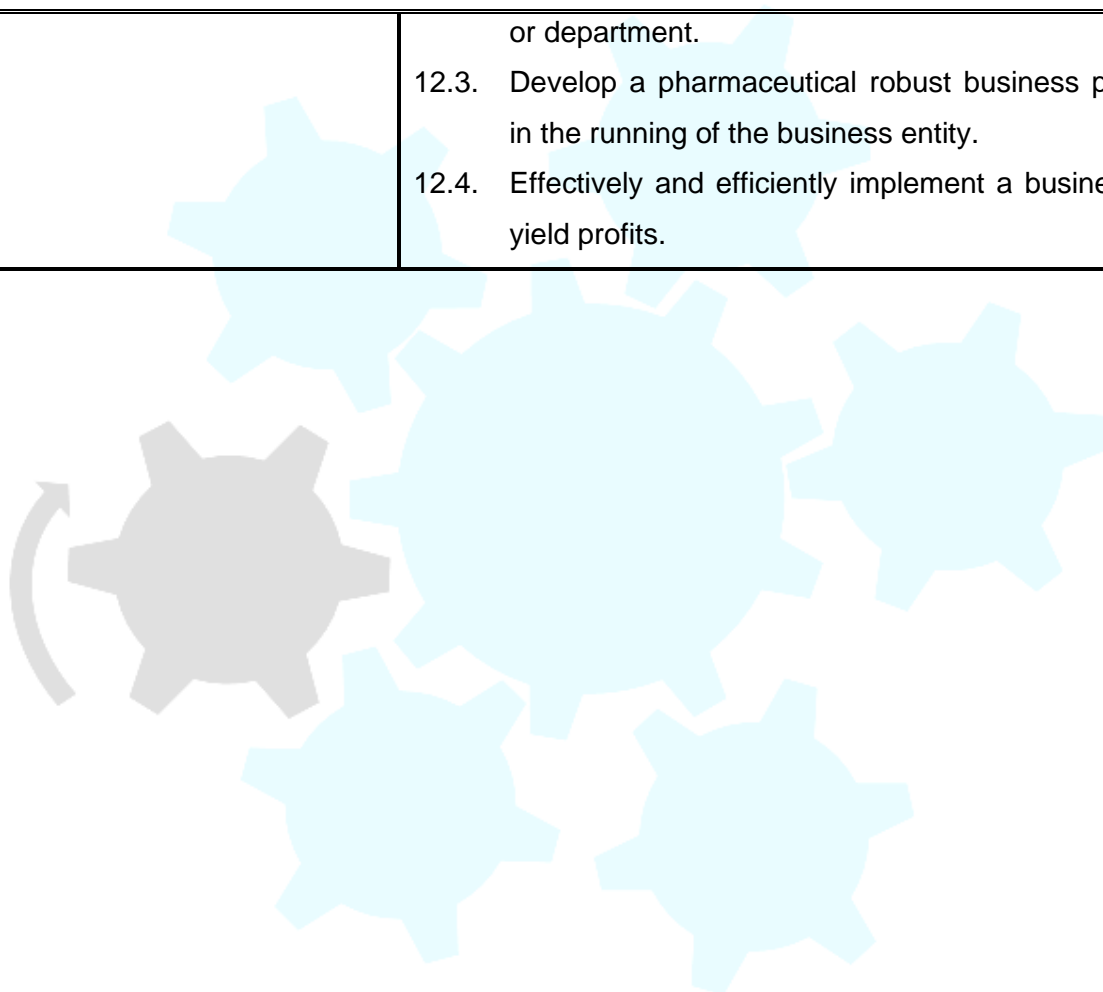
6. Participate in development of cost-effective health, economics and pharmaceutical policy.	6.1. Develop and/or review of health policies and protocols based on evidence based data and information. 6.2. Design health benefits for health plans and recommend cost-effective health financing models for hospitals and medical aid schemes.
7. Promote and deliver quality and sustainable preventative primary and public health care services.	7.1. Design innovative health prevention strategies for educating clients and community. 7.2. Coordinate/organize outreach programmes targeting provision of pharmaceutical activities and screening services to promote healthy lifestyles.
8. Conduct cutting-edge research that improve pharmaceutical services, patient care outcomes and influence the development/review of policies.	8.1. Synthesize information/data to identify pharmaceutical and health services' needs. 8.2. Formulate innovative research proposal to address identified needs. 8.3. Collaborate with other health care providers and/or engage relevant stakeholders to conduct research that complies with ethical standards. 8.4. Execute the project, analyze, interpret the findings and make appropriate conclusions and recommendations. 8.5. Disseminate the research findings using various methods to a diverse audience. 8.6. Utilize research findings to improve health outcomes and pharmaceutical services and/or inform policy or therapeutic outcomes change.
9. Plan and organize activities to achieve efficiency in delivery of	9.1. Identify and deploy resources effectively, efficiently and timely to achieve/execute planned initiatives and tasks in


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health and pharmaceutical services.	<p>any setting.</p> <p>9.2. Prioritize and sequence tasks or projects to be carried out in any setting.</p> <p>9.3. Apply time management skills to ensure work is completed according to set deadlines.</p>
10. Communicate and collaborate effectively with other health care providers, clients and stakeholders using appropriate methods and techniques.	<p>10.1. Demonstrate professional conduct in offering services and when collaborating with colleagues and stakeholders.</p> <p>10.2. Utilize appropriately written, verbal and non-verbal communication formats/methods and language to disseminate to targeted audience.</p> <p>10.3. Interpret stipulated instructions and requirements in order to deliver the required services.</p>
11. Conduct medicine utilization reviews and audits and analysis to determine rationale use of medicines and recommend appropriate interventions.	<p>11.1. Identify triggers for prioritization of medication processes for medicine utilization evaluation.</p> <p>11.2. Analyze medication use practices for defined areas to assess for variations and choose appropriate methods of communicating variations with the different teams' members.</p> <p>11.3. Effectively collaborate with members of the multidisciplinary team to determine appropriate interventions to address medicine use variations.</p> <p>11.4. Effectively implement and monitor plans to improve drug use practices</p>
12. Apply advanced knowledge and entrepreneurial skills in planning and operating the business entities or organizations.	<p>12.1. Conduct market analysis/survey for establishing the business entity.</p> <p>12.2. Identify required resources (personnel, equipment, furniture and IT support) to run a business or organization</p>


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	<p>or department.</p> <p>12.3. Develop a pharmaceutical robust business plan to guide in the running of the business entity.</p> <p>12.4. Effectively and efficiently implement a business plan and yield profits.</p>
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SECTION C		QUALIFICATION STRUCTURE				
COMPONENT	TITLE	Credits Per Relevant NCQF Level				Total (Per Subject/ Course/ Module/ Units)
		Level [5]	Level [6]	Level [7]	Level [8]	
FUNDAMENTAL COMPONENT Subjects/ Courses/ Modules/Units	Principles of Biology	12				12
	Introductory Mathematics I	12				12
	General Chemistry I	14				14
	Geometrical Optics and Mechanics	14				14
	Introduction to Communication and Academic Literacy Skills for Health Sciences	11				11
	Computer Skills Fundamentals I	10				10
	Diversity of Plants and Animals	14				14
	Introductory Mathematics II	13				13

 BOTSWANA Qualifications Authority	BQA NCQF QUALIFICATION TEMPLATE	Document No.	DNCQF.QIDD.GD02
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	General Chemistry II	14				14
	Electricity, Magnetism and Elements of Modern Physics	14				14
	Health Communication	12				12
	Computer Skills Fundamentals II	10				10
	Cell Biology		12			12
	Genetics		12			12
	Human Anatomy		12			12
	Human Physiology		12			12
	Structure and Survey of Functional Groups		10			10
	Organic Chemistry Lab I		14			14
CORE COMPONENT <i>Subjects/ Courses/ Modules/Units</i>	Pharmaceutical Chemistry		14			14
	Pharmacy Practice I Pharmacy Practice II		24			24
	Pharmaceutics and Dosage forms I		14			14
	Pharmacognosy		14			14
	Pharmaceutical Microbiology		14			14
	Medicinal Chemistry I		14			14
	Practicum – Hospital and Clinics I		12			12

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	Practicum – Central Medical Stores and National Quality Control Laboratory I		12		12
	Pharmaceutics and Dosage Forms II and III			40	40
	Pharmacy Practice III			14	14
	Pharmaceutical Analysis			14	14
	Pathophysiology I			10	10
	Medicinal Chemistry II			14	14
	Pharmacology I, II and III			30	30
	Pharmacotherapeutics I			15	15
	Biopharmaceutics and Pharmacokinetics			10	10
	Pathophysiology II			10	10
	Pharmacy Law, Ethics and Regulatory Practice			10	10
	Practicum – Managed Care Organization			12	12
	Practicum – Manufacturing Plant and Wholesale			12	12
	Non-Prescription Medicines, Complementary & Alternative Medicines			10	10
	Pharmacotherapeutics II			28	28

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	and III				
	Clinical Pharmacokinetics			14	14
	Pharmaceutical Technology and Biotechnology			14	14
	Introduction to Biostatistics			14	14
	Research Methods Proposal Writing			17	17
	Practicum – Hospital and Clinical Pharmacy Community Pharmacy, Pharmaceutical Wholesale and Regulatory Authority			60	60
	Medicine Information & Toxicology			10	10
	Pharmacovigilance and Veterinary Medicines			10	10
	Pharmacy Management, Leadership and Entrepreneurship			10	10
	Pharmacy Research Project			12	12
ELECTIVE/ OPTIONAL COMPONENT	Applied Pharmaceutical Analysis			12	12
	Applied Pharmacognosy			12	12

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Subjects/ Courses/ Modules/Units	and Phytochemistry					
	Health Informatics			12		12
	Epidemiology			12		12
	Control of Communicable Diseases			12		12

SUMMARY OF CREDIT DISTRIBUTION FOR EACH COMPONENT PER NCQF LEVEL

TOTAL CREDITS PER NCQF LEVEL


NCQF Level	Credit Value
5	150
6	190
7	296
8	130
TOTAL CREDITS	766

Rules of Combination:

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

Summary

Fundamentals	Level 5	150 Credits
Core	Level 6	190 Credits
Core	Level 7	296 credits

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Core	Level 8	130 credits
Electives	Level 7	36
Total		766 Credits
All fundamental and core components are compulsory. A learner has to choose 3 electives worth a total of 36 credits.		

ASSESSMENT ARRANGEMENTS

Assessment

All assessments, formative and summative, leading/contributing to the award of credits or a qualification are based on learning outcomes and/or sub-outcomes.


- Unless specified otherwise, the continuous assessment (CA) mark shall constitute 50% and the final examination mark 50% of the overall assessment for the course.
- Candidates may undergo assessment including written, practical and simulated projects.
- Assessment must be done by suitably qualified assessors registered and accredited by a recognized professional body or authority.

MODERATION ARRANGEMENTS

This qualification must be moderated internally and externally. Moderation shall be done by a suitably qualified person(s) with qualification in Pharmacy and registered with BQA as moderator or recognized by an professional body.

RECOGNITION OF PRIOR LEARNING

There is provision for award of credits through Recognition of Prior Learning (RPL) as per the provider policies in line with national RPL Policy.

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CREDIT ACCUMULATION AND TRANSFER

A learner may transfer academic credits towards award of this qualification as may be determined by the provider in line with the relevant policies.

PROGRESSION PATHWAYS (LEARNING AND EMPLOYMENT)

Completion of a Bachelor Honours Degree meets the requirement for vertical progression and admission to a Master's Degree in the same or a cognate discipline.

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

Bachelor of Science (Honours) in Pharmaceutical Sciences

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

Master of Science in Pharmaceutics

Master of Science in Pharmaceutical Chemistry

Master of Science in Medicinal Chemistry

Master of Science in Pharmaceutical Sciences

Master of Science in Pharmaceutical Biotechnology

Master of Science in. Pharmaceutical Analysis

Master of Science in Nuclear Pharmacy

Master of Science in Regulatory Affairs

Master of Pharmacology

Master of Pharmacy Practice

Master of Pharmacy Ambulatory Care


Master of Medicine Information and Toxicology

Master of Clinical Pharmacy

Master of Health Informatics

Master of Public Health

Master of Science in Pharmacoeconomics

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Master of Science in Pharmacoepidemiology

Professional Specialization through Residency Programme in

Master of Public Health

Master of Pharmacoepidemiology

Master of Pharmacoeconomics

Master of Health economics


Employment pathways

Bachelor of Pharmacy honours degree holders may work as:

- Hospital and/or clinical pharmacist
- Pharmaceutical pharmacist
- Quality Control Pharmacist
- Quality Assurance Pharmacist
- Regulatory Pharmacist
- Pharmacovigilance Specialist
- National Medicines Quality Testing and Control Laboratory Analysts
- Product Developers
- Pharmaceutical Benefit Manager
- Medicine Information and Toxicology Center Specialist
- Consulting Pharmacists

QUALIFICATION AWARD AND CERTIFICATION

To be awarded a Bachelor of Pharmacy (Honours) degree, a learner should have completed a minimum of 766 Credits and satisfy the rules of combinations stated in the qualification structure summary.


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REGIONAL AND INTERNATIONAL COMPARABILITY

This qualification was compared with the following:

1. Rhodes University (South Africa) Bachelor of Pharmacy. The course is offered to candidate in possession of a Senior Certificate with Matriculation Exemption or equivalent NQF Level 4 qualification. The matriculation is equivalent to the Bachelor of Science Year 1 or A' Levels, therefore the entry requirements are similar. The qualification at Rhodes University is four years after matriculation and this qualification is four years after B. Sc. Year 1 or A' Levels, showing that the duration of the two qualifications are similar. The learning outcomes are similar and comparable for both qualifications. The main subject areas are Pharmacy Practice, Pharmaceutical Chemistry, Pharmaceutics and Pharmacology and Pharmacotherapeutics and are comparable to what is covered in this qualification and the main domains and the duration of the courses are also similar except that for this qualification, Pharmaceutical Chemistry and Medicinal Chemistry are taken as separate courses Pharmacotherapeutics courses are two semesters longer in this qualification. The qualification is worth a minimum of 480 credits and equips the learners with the knowledge, skills and competencies relevant for various settings of pharmacy including clinical, hospital, community, industrial (manufacturing and wholesale) and key ideas to run a pharmaceutical or related business. The same aspects are covered in in this qualification. In addition, this qualification appears to have more experiential attachments compared to the one at Rhodes University.
2. Nelson Mandela University, RSA, Bachelor of Pharmacy. The programme is offered to candidates in possession of a Senior Certificate with Matriculation Exemption or equivalent NQF Level 4 qualification. The matriculation is equivalent to the Bachelor of Science Year 1 or A-levels for this qualification. The learning outcomes are similar and comparable to those stipulated in this qualification. The main subject areas are Pharmacology and applied therapeutics, Pharmaceutical chemistry, Pharmaceutics, and Pharmacy practice are also comparable to what is covered in this qualification. This qualification appears to have more experiential attachments compared to the one at Nelson Mandela University.

In order to register as a pharmacist with the South African Pharmacy Council, after obtaining the B

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Pharm degree, students must successfully complete one year internship and one year's compulsory community service. Similarly, the learners are expected to complete one year's internship upon successful completion of this qualification. However, they are not required to do one year of community service.

The qualification generally compares well with all the qualifications evaluated since the exit outcomes cover similar scope and depth and are aligned to exit-level descriptors typical of this level and type of qualification as done within the region and beyond. Also, the main areas are similar in type and duration.

- University of Otago, New Zealand Bachelor of Pharmacy is level 7 with 480 credits while Bachelor of Pharmacy Honors is level 8 and 510 credits. The learning outcomes were not found. To register and practice as a pharmacist in New Zealand, following a four-year University programme leading to a Bachelor of Pharmacy (B. Pharm) degree, one has to undertake 52 weeks of trainee internship at approved pharmaceutical establishments. The course content covers Pharmacy, Biochemistry, Drug Delivery Systems, Human Disease, Microbiology, Pharmaceutical Chemistry, Pharmacology, Pharmacy Practice, Physiology. While some of the courses are similar to those covered in this qualification, it is not easy to compare the qualifications head-to-head because the learning outcomes, the main subject areas are not included.

REVIEW PERIOD

Every 5 year-cycle