SECTION A:	QUALIFICATION DETAILS																	
QUALIFICATION DEVELOPER (S)	Gaborone University College of Law and Professional Studies																	
TITLE	Certificate V in Motor Vehicle Mechanics														NCQF LEVEL	5		
FIELD	Manufacturing, Engineering and Technology		SUB-FIELD		Motor Vehicle Mechanics										CREDIT VALUE	130		
New Qualification											Review of Existing Qualification							
SUB-FRAMEWORK	General Education				TVET				✓		Higher Education							
QUALIFICATION TYPE	Certificate	I		II		III		IV		V	✓	Diploma		Bachelor				
	Bachelor Honours			Post Graduate Certificate								Post Graduate Diploma						
	Masters							Doctorate/ PhD										

RATIONALE AND PURPOSE OF THE QUALIFICATION

RATIONALE:

The Human Resource Development Council (HRDC) December 2016 document titled **"Top Occupations in High Demand"** and subsequently March 2019 document titled **"Priority Skills (Current and Future),"** Motor Vehicle Mechanics is an occupation in high demand and will continue to be required for the foreseeable future, or at least up to the year 2028. Some of the identified top occupations in demand include Engineering Professionals with specific skills areas under Mechanical Engineering Technicians. They identified Mechanics falling under Top 20 Occupations and covering specializations such as Heavy Plant Mechanic, Hydraulics Mechanic, Diesel Mechanic and Auto Electricians, intended soft skill are Management, Teamwork, Supervisory, Health & Safety and Environment.

Most recently there is the Education and Training Strategy Sector Plan - 2015 -2020 (ETSSP) which reiterates the issues referred to above, but more importantly putting a lot of emphasis on production of work ready graduates in collaboration with private training providers

PURPOSE:

The purpose of the qualification is to produce graduates with broad technical knowledge to be able to**:**

i. Diagnose, test and correct engine faults.
ii. Apply basic theories of motor vehicle engineering in practice, Job-related skills, power plant, electrical system, transmission, final drive, braking system, front axle, steering, frame and chassis, lubricating systems, ignition systems, cooling systems, braking and transmission systems, Pneumatics, electronics.
iii. Apply health, safety, and security procedures on the workplace.

ENTRY REQUIREMENTS (including access and inclusion)

i. A minimum of Certificate IV, NCQF Level 4 (General Education or TVET) or equivalent

OR

ii. Recognition of Prior Learning (RPL)and Credit Accumulation and Transfer (CAT) will be used for access in line with the ETP's and national policies on RPL and CAT.

SECTION B	***QUALIFICATION SPECIFICATION***
GRADUATE PROFILE (LEARNING OUTCOMES)	***ASSESSMENT CRITERIA***
1. Remove and install automotive components.	1.1 Dismantle components in accordance with manufacturer specifications. 1.2 Assemble and clean components according to organisational requirements. 1.3 Determine when a component should be serviced or replaced. 1.4 Utilize tools and equipment in accordance with their manufacturer's design.
2. Communicate effectively with peers and supervisors in an automotive work context.	2.1 Adapt to the work environment to promote effective communication with peers. 2.2 Interpret a range of written and oral sources to ensure that work requirements are understood. 2.3 Communicate clearly with stakeholders at all levels.
3. Demonstrate correct use and maintenance of automotive workshop tools and equipment.	3.1 Select tools and equipment used according to manufacturer operating guidelines. 3.2 Apply organisational procedures to source and procure tools from suppliers 3.3 Identify faulty tools and take corrective action in accordance with workplace procedures.
4. Demonstrate understanding of health, safety, and security procedures at the workplace.	4.1 State the consequences of exposure and poor adherence to health and safety requirements as described in terms of the impact on people and the organization.

	4.2 Address workplace hazards and risks in accordance with workplace specific health and safety requirements. 4.3 Mitigate measures to deal with workplace hazards and risks in accordance with workplace specific health and safety requirements. 4.4 Implement safety and hygiene standards applicable to the industry and market.
5. Draw and interpret graphical diagrams.	5.1 Produce basic technical drawings. 5.2 Interpret two dimensional and three-dimensional drawings. 5.3 Translate basic technical drawings into Auto Cad.
6. Apply basic Information and Communications Technology Skills in real life environment.	6.1 Demonstrate basic understanding of computer hardware and software. 6.2 Search for information using internet. 6.3 Send and receive communication using a computer.
7. Apply mathematical calculations in motor vehicle maintenance trade	7.1 Measure and count using numbers. 7.2 Prepare material lists and quantities needed for motor vehicle maintenance job. 7.3 Apply simple percentages, fractions, and decimals. 7.4 Calculate money in Pula and Thebe (related to pay, deductions and prices).

SECTION C	***QUALIFICATION STRUCTURE***				
COMPONENT	***TITLE***	***Credits Per Relevant NCQF Level***			***Total*** ***(Per** Subject/ Course/ Module/ Units)*
		Level [5]	***Level [ ]***	***Level [ ]***	
FUNDAMENTAL COMPONENT *Subjects/ Courses/ Modules/Units*	Introduction to Computer	10			10
	Health and Safety at the Workplace	10			10
	Technical Drawing	10			10
	Entrepreneurship	10			10
CORE COMPONENT *Subjects/Courses/ Modules/Units*	Motor Vehicle Engineering Technology	15			15
	Motor Vehicle Components	10			10
	Workshop Tools and Machinery	15			15
	Motor Vehicle Maintenance	15			15
	Industrial Attachment	20			20
	Auto Electronics	15			15
ELECTIVE/ OPTIONAL COMPONENT	***NONE***				

Subjects/Courses/ Modules/Units					

SUMMARY OF CREDIT DISTRIBUTION FOR EACH COMPONENT PER NCQF LEVEL	
TOTAL CREDITS PER NCQF LEVEL	
NCQF Level	***Credit Value***
5	130
TOTAL CREDITS	130
Rules of Combination: ***(Please Indicate combinations for the different constituent components of the qualification)***	
Fundamental Component = 40 credits Core component = 90 credits Total = 130 credits	

ASSESSMENT ARRANGEMENTS
All assessment activities will be conducted by qualified assessors who are BQA registered and accredited. The assessment for this qualification shall comprise of both formative and summary assessments weighted according to institutional guidelines and policies. They are accounted for to monitor progress during the qualification and to determine competence of the learners at the end of the qualification. The formative assessment - 60% Summative assessment - 40%.
MODERATION ARRANGEMENTS
There shall be provision for internal and external moderation done by BQA registered and accredited Moderators.
RECOGNITION OF PRIOR LEARNING
There will be provision for award of the qualification through Recognition of Prior Learning (RPL) in accordance with ETP and national policies on RPL.
CREDIT ACCUMULATION AND TRANSFER
There will be provision for award of the qualification through Credit Accumulation and Transfer (CAT) in accordance with ETP and national policies on CAT.
PROGRESSION PATHWAYS (LEARNING AND EMPLOYMENT)
This qualification allows for both horizontal and vertical articulation. *Horizontal articulation* • Certificate V in Auto-Electrics • Certificate V in Mechanical Engineering.

Vertical articulation

- Diploma in Auto Electronics NCQF Level 6
- Diploma in Mechanical Engineering NCQF Level 6
- Diploma in Auto Mechanics NCQF Level 6

EMPLOYMENT PATHWAYS

Upon successful completion of this qualification learners have a great chance securing employment typically in positions such as;

- Auto-Electrician
- Workshop foreman

QUALIFICATION AWARD AND CERTIFICATION

Upon successful completion of 130 credits for this qualification the learner will be awarded the Certificate V in Motor Vehicle Mechanics with issuance of certificate and transcript.

REGIONAL AND INTERNATIONAL COMPARABILITY

Benchmarking was conducted against two qualifications: one regionally and one internationally as they were the only ones similar to the proposed qualification. The benchmarking looked at title of the qualification, entry requirements, modules offered, credit allocation and NQF level.

Matili Technical Training institute (Kenya)- Certificate in Motor Vehicle Mechanics.

Similarities and Differences

Both qualifications are at certificate level with similar entry requirements Kenya Certificate of Secondary Education is equivalent to NCQF Level 4). Other aspects such as exit outcomes, credit value and NQF level were not indicated. However, both qualifications share similar modules such as vehicle engineering, technical drawing, entrepreneurship, communication skills and information technology.

SAQA (South Africa)- Certificate in Motor Vehicle Systems. NQF Level 4 150 credits

Similarities and Differences

The SAQA qualification is at NQF Level 4, with credit value of 150. The entry requirement is NQF Level 3, therefore it is a lower qualification than the proposed one.

REVIEW PERIOD

The qualification will be reviewed every 5 years.