

www.qcto.org.za

Page 1 of 55

256 Glyn Street, Hatfield, Pretoria, 0083 Private Bag X278, Pretoria, 0001 +27 12 003 1800

# OCCUPATIONAL SKILLS PROGRAMME CURRICULUM DOCUMENT

# IN LINE WITH THE OQSF POLICY (2021) OCCUPATIONAL QUALIFICATION TYPE (NOMENCLATURE)

QUALIFICATION/PART- QUALIFICATION/SKILLS PROGRAMME	SKILLS PROGRAMME ID	TITLE (DESCRI	PTOR) NQF LEVEL		CREDITS
Skills Programme	SP-240207	Small Domestic Appliance Repairer		3	45
CURRICULUM CODE	900332-000-00-00				
PARTNER DETAILS	ORGANISATION NAME	WEBSITE ADDRESS	TELEPHONE NUMBER		LOGO
QUALITY PARTNER - DEVELOPMENT	Energy and Water SETA	https://ewset a.org.za	+27 11 274-47	700	EW SETA  Creating a Sustainable Tomorrow – Today
QUALITY PARTNER – ASSESSMENT	N/A	N/A	N/A		N/A

DESIGNATION	NAME AND SURNAME	SIGNATURE	DATE
SUBJECT MATTER	Schalk WB Walters	SWB Walters	27 December
EXPERT (SME)			2023
QUALITY PARTNER			04 December
REPRESENTATIVE	Lesha Singh	L. Singh	2023

#### Contents

SECT	ION 1: CURRICULUM SUMMARY	. 4
1.1 0	ccupational Information:	. 4
1.2 Cı	urriculum Information:	. 4
Total	number of credits 33	. 5
1.4 Er	ntry Requirements:	. 5
1.5 Re	ecognition of Prior Learning (RPL):	. 5
1.6 Qı	uality Partner for Assessment:	. 6
1.7 Lis	st of Qualification(s)/Part- Qualification(s)/Skills Programme(s) Related to this Curriculum	. 6
	ION 2: OCCUPATIONAL/SPECIALISATION/PART-QUALIFICATION/SKILLS BRAMME PROFILE	.7
2.1 Pu	ırpose:	. 7
2.2 Ta	asks:	. 7
2.3 O	ccupational Task Details:	. 7
3 Kno	wledge Module Specifications:	. 9
	00332-000-00-KM-01, Health, and safety related to the refrigeration repair environment, NQ 2, Credits 2	
3.2 90	00332-000-00-KM-02, Internet of Things and smart appliances, NQF Level 2 Credits 1	14
3.3 90	00332-000-00-KM-03, Drawings, NQF Level 2, Credits 1	18
3.4 90	00332-000-00-KM-04, Basics of Electrical and Electronics, NQF Level 2, Credits 2	22
3.5 90	00332-000-00-KM-05, Customer Relation Management, NQF Level 3, Credits 2	25
	00332-000-00-KM-06, Interpersonal Skill and emotional intelligence, NQF Level 2, Credits 1	
3.7 90	00332-000-00-KM-07, Green Solar Energy, Solar Power and Hybrid, NQF Level 3, Credits 1	1
3.8 90	00332-000-00-KM-08, Field service report writing, NQF Level 3, Credits 1	36
4 Prad	ctical Skill Module (PM) Specifications:	39
4.1	900332-000-00-PM-01, Developing manual dexterity, NQF Level 2, Credits 4	40
4.2 small	900332-000-00-PM-02, Consult client or refer to work order to establish nature of a defect domestic appliance, NQF Level 2, Credits 1	
4.3 28	900332-000-00-PM-03, Repair a variety of small domestic appliances, NQF Level 3, Credit 49	ts
6 POS	SSIBLE SEQUENCING AND INTEGRATION	55

©Copyright: QCTO

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page 3 of 55

#### SECTION 1: CURRICULUM SUMMARY

#### 1.1 Occupational Information:

#### 1.1.1 Associated, Organising Framework for Occupations (OFO) Occupational Code and Title

#### 642601: Electrical Equipment Mechanic

# 1.1.2 Occupation/Specialisation/Part-Qualification/Skills Programme Type, Title, NQF Level, Credits and Curriculum Code, addressed by this Curriculum.

TYPE	TITLE	NQF LEVEL	CREDITS	CURRICULUM CODE
Skills Programme	Small Domestic Appliance Repairer	3	45	900332-000-00-00

#### 1.1.3 Alternative titles used by industry:

#### None

#### 1.2 Curriculum Information:

#### 1.2.2 Articulation for Skills Programmes

(a) Work Opportunities:

Qualified learners would be employable in the domestic appliances repair industry as:

- Small Domestic Appliance Repairer
- Small Domestic Appliance Technical Advisor
- Small Domestic Appliance parts Salesperson

#### (b) Learning Opportunities:

Qualified learners may further their studies by enrolling in plumbing, electrical and related skills programmes, and qualifications, subject to meeting their minimum entry requirement.

#### 1.3.1 Knowledge/Theory Modules:

900332-000-00-KM-01, Health, safety related to the small domestic appliance repair environment, NQF Level 2, Credits 2

900332-000-00-KM-02, Internet of Things and smart appliances, NQF Level 3, Credits 1

900332-000-00-KM-03, Drawings, NQF Level 3, Credits 1

900332-000-00-KM-04, Basics of Electrical and Electronics, NQF Level 3, Credits 2

900332-000-00-KM-05, Customer Relation Management, NQF Level 3, Credits 2

900332-000-00-KM-06, Interpersonal Skill, Emotional Intelligence NQF Level 2, Credits 1

900332-000-00-KM-07, Green Solar Energy, Solar Power and Hybrid, NQF Level 3, Credits-1

900332-000-00-KM-08, Field service report writing, NQF Level 3, Credits 2

Total number of credits: 12

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page 4 of 55

#### 1.3.2 Practical Skills Modules:

900332-000-00-PM-01, Developing manual dexterity, NQF Level 2, Credits 4

900332-000-00-PM-02, Consult client or refer to work order to establish nature of a defect small domestic appliance, NQF Level 2, Credits 1

900332-000-00-PM-03, Repair a variety of small domestic appliances, NQF Level 3, Credits 28

#### Total number of credits 33

#### 1.4 Entry Requirements:

NQF Level 2 with Mathematical Literacy

# 1.5 Recognition of Prior Learning (RPL):

#### 1.5.1 RPL for Access:

Learners may use the RPL process to gain access to training opportunities for a programme of learning, qualification, part-qualification, or skills programme if they do not meet the formal, minimum entry requirements for admission. RPL assessment provides an alternative access route into a programme of learning, qualification, part-qualification, or skills programme.

Such an RPL assessment may be developed, moderated, and conducted by the accredited Skills Development Provider which offers that specific qualification/part qualification/skills programme. Such an assessment must ensure that the learner is able to display the equivalent level of competencies required for access, based on the NQF level descriptors.

#### 1.5.2 RPL for Exemption:

For exemption from modules through RPL, learners who have gained the stipulated competencies of the modules of a programme of learning, qualification, part-qualification or skills programme through any means of formal, informal or non-formal learning and/or work experience, may be awarded credits towards relevant modules, and gaps identified for training, which is then concluded.

#### 1.5.3 RPL for awarding credits:

Learners who have gained the stipulated competencies of the modules of a programme of learning, qualification, part-qualification or skills programme through any means of formal, informal or non-formal learning and/or work experience, may be awarded credits towards relevant modules, and gaps identified for training, which is then concluded.

A valid Statement of Results is required for admission to the EISA in which confirmation of achievement is provided that all internal assessment criteria for all modules in the related curriculum document have been achieved.

©Copyright: QCTO Page **5** of **55** 

For a Skills Programme, the accredited Skills Development Provider (SDP) must ensure all modular competency requirements are met prior to the FISA and keep record of such evidence.

Upon successful completion of the EISA/FISA, RPL learners will be issued with the QCTO certificate for the qualification, part-qualification or skills programme. Quality Partners are responsible for ensuring the RPL mechanism and process for qualifications and part-qualification is approved by the QCTO.

#### 1.6 Quality Partner for Assessment:

N/A

# 1.7 List of Qualification(s)/Part- Qualification(s)/Skills Programme(s) Related to this Curriculum.

- Skills Programme: Major Kitchen Appliance Repairer
- Skills Programme: Small Domestic Appliance Repairer

# SECTION 2: OCCUPATIONAL/SPECIALISATION/PART-QUALIFICATION/SKILLS PROGRAMME PROFILE

#### 2.1 Purpose:

The purpose of this skills programme is to prepare a learner to function as a Small Domestic Appliance Repairer.

Small Domestic Appliance Repairer repairs appliances such as but not limited to Kettles, Irons, Food Processors, Mixers, Hand Mixers, Toasters, Hair Dryers, Ironing Machines, Tabletop Stoves, Air Fryers, Slow Cookers, Induction plate, Induction Milk Frother, Juicers, Blenders, Pressure Cookers, Bread Machines, Coffee Machines, Electric Heaters, Electric Fans, Vacuum Cleaners, and Microwave Ovens.

A qualified learner will be able to:

- Establish nature of Small Domestic Appliances malfunction
- Test and repair defective Small Domestic Appliances

**Note 2**: Training should include at least five of the following products but are not limited to these: Tabletop Stoves, Food Processors, Mixers, Air Fryers, Coffee Machines, and Vacuum Cleaners

#### 2.2 Tasks:

LINKS TO ELO
Conduct fault finding on a small domestic
appliance by applying knowledge of applicable
legislation and related technology.
Maintain small domestic appliance according to
applicable legislation, maintenance, and related
technology.

#### 2.3 Occupational Task Details:

#### 2.3.1 Task 1

Establish nature of a Small Domestic Appliance malfunction

(a) Unique Product or Service:

Fault on a defective Small Domestic Appliance isolated.

(b) Responsibilities:

Consult client or refer to work order to establish nature of a defect small domestic appliance.

(c) Contexts:

Processes and procedures to establish nature of a defect small domestic appliance.

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page **7** of **55** 

#### 2.3.2 Task 2

Test and repair a defective Small Domestic Appliance.

(a) Unique Product or Service:

Repaired small domestic appliances.

(b) Responsibilities:

Developing manual dexterity.

Repair a variety of small domestic appliances.

(c) Contexts:

Processes and procedures to repair a variety of small domestic appliances.

©Copyright: QCTO Page 8 of 55

#### SECTION 3: CURRICULUM COMPONENT SPECIFICATIONS

#### 3 Knowledge Module Specifications:

NB: MODE OF DELIVERY e.g. face-to-face/contact, online, e-learning, mobile training unit, blended, distance, etc

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
900332-000-00-KM-01	Health, and safety related to the refrigeration repair environment	2	2	Face-to-face, online, e- learning, mobile training unit,
900332-000-00-KM-02	Internet of Things and smart appliances	3	1	blended, distance.
900332-000-00-KM-03	Drawings	3	1	
900332-000-00-KM-04	Basics of Electrical and Electronics	3	2	
900332-000-00-KM-05	Customer Relation Management	3	2	
900332-000-00-KM-06	Interpersonal Skill, Emotional Intelligence	2	1	
900332-000-00-KM-07	Green Solar Energy, Solar Power, and Hybrid	3	2	
900332-000-00-KM-08	Field service report writing	3	1	

#### **Detailing Knowledge Module (KM) contents**

# 3.1 900332-000-00-KM-01, Health, and safety related to the refrigeration repair environment, NQF Level 2, Credits 2

NB: Add title level and Credits above

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
900332-000-00-KM-01	Health, and safety related to the refrigeration repair environment	NQF Level 2	Credits 2	Face-to-face, online, e- learning, mobile training unit, blended, distance.

#### 3.1.1 Module Details:

#### (a) Purpose of Knowledge Module:

The main focus of the learning in this knowledge module is to foster a safe and healthy occupational environment. Occupational Health and Safety (OHS) also protects the general public who may be affected by the occupational environment.

(b) List of Knowledge Topics:

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page 9 of 55

TOPIC CODE	TOPIC TITLE	% OF TIME TO BE SPENT
KM-01-KT01	Interpretation of National Safety Legislation (OHS Act & Construction Regulations Montreal protocol and amendments, pressure equipment regulation)	52
KM-01-KT02	General workshop safety (OHS Act)	48

# (c) Detailing each topic listed above into topic elements:

KM-01-KT01 Interpretation of National Safety Legislation (OHS Act & Construction Regulations Montreal protocol and amendments, pressure equipment regulation) 52%			
TOPIC ELEMENT	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT	
KT0101	Compliant to mandatory HSE requirements (OHS Act) and quality standards.	16	
KT0102	Interpretation of relevant sections of the Occupational Health and Safety Act.	18	
KT0103	Environmental protection Legislation and compliance (Montreal protocol and amendments)	17	
KT0104	Interpretation of the Construction Regulations relevant to the installation of a domestic appliance.	15	
KT0105	Pressure equipment Regulations.	18	
KT0106	Relevant SANS including, but not limited to SANS 10147 and 10142	16	

# Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0101	Explain the interpretation of relevant sections of the Occupational Health and Safety Act	14
IAC0102	Explain the interpretation of the Construction Regulations	16
IAC0103	Identify and explain the possible hazards and risks within the workplace.	14
IAC0104	Explain possible causes of accidents and incidents within a work environment and ways in which these can be mitigated to protect oneself and co-workers.	14
IAC0105	Explain the procedure to be followed with regard to the reporting of incidents and accidents.	15
IAC0106	Explain requirements of Pressure Equipment Regulations and the relevant SANS.	13

©Copyright: QCTO Page 10 of

IAC0107	Explain the relevance of Ozone depletion and Global	14
	warming to refrigeration.	

KM-01-KT02 General workshop safety (OHS Act) 48%			
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT	
KT0201	Compliant to mandatory HSE requirements (OHS Act) and quality standards.	14	
KT0202	Safety rules and procedures.	12	
KT0203	Emergency procedures.	11	
KT0204	Emergency exit and assembly points.	12	
KT0205	First aid stations and procedures.	11	
KT0206	PPE and housekeeping.	14	
KT0207	Colour codes and safety signage	15	
KT0208	Fire Prevention	11	

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0201	Explain the evacuation procedures making use of a scenario	16
IAC0202	Explain with reasons the importance of emergency drills and the consequences of not adhering to such.	18
IAC0203	Identify and explain the interpretation of safety signs and colour coding systems.	17
IAC0204	Explain reasons for demarcation in work areas.	15
IAC0205	Identify the correct PPE to use in the workplace and give reasons for utilising PPE.	18
IAC0206	Discuss the importance of maintaining good house-keeping practices in a workplace.	16

©Copyright: QCTO **55** Page **11** of

#### 3.1.2 Criteria for accreditation

Requirements, against which Skills Development Providers (SDP) and Assessment Centres, will be accredited, as listed below.

#### **Physical Requirements:**

nyolean requirement				
SKILLS DEVELOPMENT PROVIDER (SDP)				
EQUIPMENT & TOOLS	<ul> <li>Physical training facilities (or if using a hybrid or e-learning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant</li> <li>All learning materials, lesson plans, workbooks, assessment guides to cover the related topics</li> <li>Tools and standards for internal assessment</li> <li>Record keeping systems to capture learner data and issue a statement of results</li> </ul>			
CONSUMABLES	None			

	ASSESSMENT CENTRE
EQUIPMENT & TOOLS	<ul> <li>Physical assessment facilities (or if using a hybrid or elearning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant</li> <li>All assessment instruments to cover the related topics</li> <li>Tools and standards for internal assessment</li> <li>Record keeping systems to capture learner data and issue a statement of results</li> </ul>
CONSUMABLES	None

#### **Human Resource Requirements:**

SKILLS DEVELOPMENT PROVIDER (SDP)			
QUALIFICATIONS & EXPERIENCE Requirement of facilitator (SME):			
NQF 4 in an industry related trade qualification with			
3 years' experience in the domestic appliance repairing			
	environment		
FACILITATOR/LEARNER RATIO Facilitator/learner ratio 1 to maximum 24			

ASSESSMENT CENTRE			
QUALIFICATIONS & EXPERIENCE   Requirement of facilitator (SME):			
NQF 4 in an industry related trade qualification with			
	3 years' experience in the domestic appliance repairing		
	environment		

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page 12 of

### Legal Requirements:

#### SKILLS DEVELOPMENT PROVIDER (SDP)

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report
- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

#### **ASSESSMENT CENTRE**

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report
- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

#### 3.1.3 Exemptions

None

©Copyright: QCTO Page 13 of

# 3.2 900332-000-00-KM-02, Internet of Things and smart appliances, NQF Level 2 Credits 1

NB: Add title level and Credits above

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
900332-000-00-KM-02	Internet of Things and smart appliances	NQF Level 2	Credits 1	Face-to-face, online, e- learning, mobile training unit, blended, distance.

#### 3.2.1 Module Details:

#### (a) Purpose of Knowledge Module:

The main focus of the learning in this knowledge module is to describes physical objects (or groups of such objects) with sensors, processing ability, software and other technologies that connect and exchange data with other devices and systems over the Internet or other communications networks.

#### (b) List of Knowledge Topics:

TOPIC CODE	TOPIC TITLE	% OF TIME TO BE SPENT
KM-02-KT01	Understanding Internet Of Things (IoT)	31
KM-02-KT02	Guide and Troubleshooting IoT devices	33
KM-02-KT03	IoT Operation Principle and Software Understanding	36

#### (c) Detailing each topic listed above into topic elements:

KM-02-KT01 Unde	KM-02-KT01 Understanding Internet of Things (IoT) %		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT	
KT0101	Basics of Internet Of Things (IoT) Connectivity Data Collection and Analysis Remote Control Automation Energy Efficiency Improved User Experience Interoperability Security and Privacy Cost and Maintenance Environmental Impact	80	
KT0102	How is it Implemented and Software Setup	20	

#### Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO
		BE SPENT

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page **14** of

IAC0101	Fault Finding and Troubleshooting Guide	52
IAC0102	Mapping of Internet of Things (IoT)	48

KM-02-KT02 Guide and Troubleshooting IoT devices %		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0201	Check Connectivity:	6
KT0202	Power Supply:	7
KT0203	App and Firmware Updates:	8
KT0204	Reset the Device:	7
KT0205	Network Issues:	8
KT0206	Device Placement:	7
KT0207	Authentication and Account Issues:	8
KT0208	Device-Specific Troubleshooting:	6
KT0209	Check for Error Messages:	7
KT0210	Internet Service Provider (ISP):	8
KT0211	Firewalls and Network Security:	7
KT0212	Interoperability:	6
KT0213	Factory Reset as a Last Resort:	7
KT0214	Contact Customer Support:	8
KT0215	Privacy and Security:	6

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0201	Discuss typical IoT troubleshooting options	100

KM-02-KT03 IoT Operation Principle and Software Understanding%		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0301	IoT Operation Principle o Sensing and Data Collection o Data Processing o Connectivity o Data Transmission o Cloud Platforms o User Interfaces o Security and Authentication o Over-the-Air (OTA) Updates o Power Management o Interoperability	52
KT0302	Software operating process  o Embedded Software  o Firmware.  o Cloud Software  o User Interfaces  o Security Software  o OTA Update Software  o APIs and Integration  o Data Processing and Analysis	48

©Copyright: QCTO **55** Page **15** of

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0301	Discuss IoT operation principles	52
IAC0302	Discuss IoT software principles	48

#### 3.2.2 Criteria for accreditation

Requirements, against which Skills Development Providers (SDP) and Assessment Centres, will be accredited, as listed below.

# Physical Requirements:

Priysical Requirements:				
SKILLS DEVELOPMENT PROVIDER (SDP)				
EQUIPMENT & TOOLS	<ul> <li>Physical training facilities (or if using a hybrid or e-learning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant</li> <li>All learning materials, lesson plans, workbooks, assessment guides to cover the related topics</li> <li>Tools and standards for internal assessment</li> <li>Record keeping systems to capture learner data and issue a statement of results</li> </ul>			
CONSUMABLES	None			

	ASSESSMENT CENTRE	
EQUIPMENT & TOOLS	<ul> <li>Physical assessment facilities (or if using a hybrid or elearning model – software or internet platform) conducive hosting the number of learners comfortably and safely for the duration of this module</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant</li> <li>All assessment instruments to cover the related topics</li> <li>Tools and standards for internal assessment</li> <li>Record keeping systems to capture learner data and issue a statement of results</li> </ul>	or
CONSUMABLES	None	

# Human Resource Requirements:

Thamair too at to quit official.		
SKILLS DEVELOPMENT PROVIDER (SDP)		
QUALIFICATIONS & EXPERIENCE Requirement of facilitator (SME):		
NQF 4 in an industry related trade qualification with the second control of the sec		
3 years' experience in the domestic appliance repairing		
environment		

©Copyright: QCTO Page **16** of

FACILITATOR/LEARNER RATIO	Facilitator/learner ratio 1 to maximum 24

ASSESSMENT CENTRE		
QUALIFICATIONS & EXPERIENCE   Requirement of facilitator (SME):		
NQF 4 in an industry related trade qualification with 3 years' experience in the domestic appliance repairing environment		
FACILITATOR/LEARNER RATIO	Assessor/learner ratio 1 to maximum 24	

#### Legal Requirements:

#### SKILLS DEVELOPMENT PROVIDER (SDP)

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report
- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

#### ASSESSMENT CENTRE

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report
- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

#### 3.2.3 Exemptions

None

©Copyright: QCTO Page 17 of

# 3.3 900332-000-00-KM-03, Drawings, NQF Level 2, Credits 1

#### NB: Add title level and Credits above

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
900332-000-00-KM-03	Drawings	NQF Level 2	Credits 1	Face-to-face, online, e- learning, mobile training unit, blended, distance.

#### 3.3.1 Module Details:

# (a) Purpose of Knowledge Module:

The main focus of the learning in this knowledge module is to understand that electrical working drawing consists of lines, symbols, dimensions, and notations to accurately convey an engineering's design to the workers, who install the electrical system on the job.

#### (b) List of Knowledge Topics:

TOPIC CODE	TOPIC TITLE	% OF TIME TO BE SPENT
KM-03-KT01	Basic electrical diagram,	31
KM-03-KT02	Circuit diagram Understanding	33
KM-03-KT03	Isometric and Orthographic Drawings	36

#### (c) Detailing each topic listed above into topic elements:

KM-03-KT01 Basic electrical diagram %		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0101	Power supply	31
KT0102	Switch	33
KT0103	Load	36

#### Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0101	Read the circuit diagram and fault-finding steps	100

KM-03-KT02 Circuit diagram Understanding %		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0201	Direct on-line (DOL)	8
	Power circuit	
	Control circuit	
KT0202	Components and Symbols:	9
KT0203	Power Sources:	7

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page 18 of

KT0204	Wires and Connections:	9
KT0205	Ground Symbol:	8
KT0206	Switches:	6
KT0207	Light Emitting Diodes (LEDs):	7
KT0208	Labels and Values:	8
KT0209	Connections and Junctions:	7
KT0210	Direction of Current:	6
KT0211	Series and Parallel Connections:	8
KT0212	Component Placement:	9
KT0213	Circuit Loops:	8
KT0214	Circuit Notation:	8

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0201	Identify components in an electric circuit	100

KM-03-KT03 Isometric and Orthographic Drawings %			
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT	
KT0301	Develop 2-Dimensional to 3-Dimensional	25	
KT0302	Develop 3-Dimensional to 2-Dimensional	26	
KT0303	Reading measurements	26	
KT0304	Transferring measurements	23	

# Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0301	Transfer measurements from a 3-Dimensional drawing to a 2-Dimensional drawing	100

©Copyright: QCTO Page 19 of

#### 3.3.2 Criteria for accreditation

Requirements, against which Skills Development Providers (SDP) and Assessment Centres, will be accredited, as listed below.

#### Physical Requirements:

i nysicai Nequirements.		
SKILLS DEVELOPMENT PROVIDER (SDP)		
EQUIPMENT & TOOLS	<ul> <li>Physical training facilities (or if using a hybrid or e-learning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant</li> <li>All learning materials, lesson plans, workbooks, assessment guides to cover the related topics</li> <li>Tools and standards for internal assessment</li> <li>Record keeping systems to capture learner data and issue a statement of results</li> </ul>	
CONSUMABLES	None	

ASSESSMENT CENTRE		
EQUIPMENT & TOOLS	<ul> <li>Physical assessment facilities (or if using a hybrid or elearning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant</li> <li>All assessment instruments to cover the related topics</li> <li>Tools and standards for internal assessment</li> <li>Record keeping systems to capture learner data and issue a statement of results</li> </ul>	
CONSUMABLES	None	

#### Human Resource Requirements:

SKILLS DEVELOPMENT PROVIDER (SDP)		
QUALIFICATIONS & EXPERIENCE   Requirement of facilitator (SME):		
NQF 4 in an industry related trade qualification with		
3 years' experience in the domestic appliance repairing		
environment		
FACILITATOR/LEARNER RATIO Facilitator/learner ratio 1 to maximum 24		

ASSESSMENT CENTRE				
QUALIFICATIONS & EXPERIENCE Requirement of facilitator (SME):				
NQF 4 in an industry related trade qualification with				
3 years' experience in the domestic appliance repairing				
	environment			

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page 20 of

#### Legal Requirements:

#### SKILLS DEVELOPMENT PROVIDER (SDP)

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report
- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

#### **ASSESSMENT CENTRE**

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report
- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

#### 3.3.3 Exemptions

None

©Copyright: QCTO Page 21 of

# 3.4 900332-000-00-KM-04, Basics of Electrical and Electronics, NQF Level 2, Credits 2

NB: Add title level and Credits above

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
900332-000-00-KM-04	Basics of Electrical and Electronics	NQF Level 2	Credits 2	Face-to-face, online, e- learning, mobile training unit, blended, distance.

#### 3.4.1 Module Details:

#### (a) Purpose of Knowledge Module:

The main focus of the learning in this knowledge module is to identify a number of basic concepts that form the foundations of electrical, electronics and technology. Electrical current, voltage, resistance, capacitance, and inductance are a few of the basic elements of electronics.

### (b) List of Knowledge Topics:

TOPIC CODE	TOPIC TITLE	% OF TIME TO BE SPENT
KM-04-KT01	Principles of electricity	52
KM-04-KT02	Basics of Electrical Safety	48

#### (c) Detailing each topic listed above into topic elements:

KM-04-KT01 Principles of electricity %			
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT	
KT0101	Direct current power supply	16	
KT0102	Alternating current power supply	18	
KT0103	Frequency	17	
KT0104	Single Phase	15	
KT0105	Three phase	18	
KT0106	Ohm's law	16	
KT0107	Series and parallel circuits	16	

#### Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0101	Identify components in a basic electric circuit	100

KM-04-KT02 Basics of Electrical Safety %		
TOPIC ELEMENT	TOPIC ELEMENT TITLE	% OF TIME TO
CODE		BE SPENT
KT0201	Causes of electrical fire	20
KT0202	Water and electricity	22

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page 22 of

KT0203	Overload	20
KT0204	Electrocution	18
KT0205	Using electric safe tools and portable electric equipment.	20

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0201	The causes of an electric fire	31
IAC0202	Causes electric shock	33
IAC0203	Safety criteria for the safe usage of portable electric equipment and tools	36

#### 3.4.2 Criteria for accreditation

Requirements, against which Skills Development Providers (SDP) and Assessment Centres, will be accredited, as listed below.

# Physical Requirements:

Pnysicai Requirements:				
	SKILLS DEVELOPMENT PROVIDER (SDP)			
EQUIPMENT & TOOLS	<ul> <li>Physical training facilities (or if using a hybrid or e-learning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant</li> <li>All learning materials, lesson plans, workbooks, assessment guides to cover the related topics</li> <li>Tools and standards for internal assessment</li> <li>Record keeping systems to capture learner data and issue a statement of results</li> </ul>			
CONSUMABLES	None			

	ASSESSMENT CENTRE
EQUIPMENT & TOOLS	<ul> <li>Physical assessment facilities (or if using a hybrid or elearning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant</li> <li>All assessment instruments to cover the related topics</li> <li>Tools and standards for internal assessment</li> <li>Record keeping systems to capture learner data and issue a statement of results</li> </ul>
CONSUMABLES	None

©Copyright: QCTO Page 23 of

#### **Human Resource Requirements:**

SKILLS DEVELOPMENT PROVIDER (SDP)		
QUALIFICATIONS & EXPERIENCE Requirement of facilitator (SME):		
	<ul> <li>NQF 4 in an industry related trade qualification with 3 years' experience in the domestic appliance repairing environment</li> </ul>	
FACILITATOR/LEARNER RATIO Facilitator/learner ratio 1 to maximum 24		

ASSESSMENT CENTRE		
QUALIFICATIONS & EXPERIENCE   Requirement of facilitator (SME):		
NQF 4 in an industry related trade qualification w		
3 years' experience in the domestic appliance repairing		
	environment	
FACILITATOR/LEARNER RATIO	Assessor/learner ratio 1 to maximum 24	

#### Legal Requirements:

#### SKILLS DEVELOPMENT PROVIDER (SDP)

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report
- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

#### ASSESSMENT CENTRE

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report
- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

# 3.4.3 Exemptions

None

©Copyright: QCTO Page 24 of

# 3.5 900332-000-00-KM-05, Customer Relation Management, NQF Level 3, Credits 2

NB: Add title level and Credits above

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
900332-000-00-KM-05	Customer Relation Management	3	2	Face-to-face, online, e- learning, mobile training unit, blended, distance.

#### 3.5.1 Module Details:

# (a) Purpose of Knowledge Module:

The main focus of the learning in this knowledge module is to develop cordial customer relation attributes.

# (b) List of Knowledge Topics:

TOPIC CODE	TOPIC TITLE	% OF TIME TO BE SPENT
KM-05-KT01	Understanding the client	50
KM-05-KT02	Customer service and ethical conduct	50

# (c) Detailing each topic listed above into topic elements:

KM-05-KT01 Understanding the client %		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0101	Engaging with customer	25
KT0102	Effective communication	26
KT0103	Professional approach to business	26
KT0104	Conflict resolution	23

#### Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0101	Given a client interaction scenario, identify poor and successful performance.	30
IAC0102	Role-play a client interaction.	70

KM-05-KT02 Customer Service and ethical conduct %		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0201	After care	20
KT0202	Product knowledge	22
KT0203	Active listening skills	20
KT0204	Service quality	18
KT0205	Service standards	20

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page 25 of

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0201	Given a scenario or video clip of a service action the learner must be able to list positive and negative responses.	100

#### 3.5.2 Criteria for accreditation

Requirements, against which Skills Development Providers (SDP) and Assessment Centres, will be accredited, as listed below.

#### Physical Requirements:

rnysicai Requirements.	
	SKILLS DEVELOPMENT PROVIDER (SDP)
EQUIPMENT & TOOLS	<ul> <li>Physical training facilities (or if using a hybrid or e-learning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant</li> <li>All learning materials, lesson plans, workbooks, assessment guides to cover the related topics</li> <li>Tools and standards for internal assessment</li> <li>Record keeping systems to capture learner data and issue a statement of results</li> </ul>
CONSUMABLES	None

ASSESSMENT CENTRE				
EQUIPMENT & TOOLS	<ul> <li>Physical assessment facilities (or if using a hybrid or elearning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant</li> <li>All assessment instruments to cover the related topics</li> <li>Tools and standards for internal assessment</li> <li>Record keeping systems to capture learner data and issue a statement of results</li> </ul>			
CONSUMABLES	None			

# Human Resource Requirements:

SKILLS DEVELOPMENT PROVIDER (SDP)			
QUALIFICATIONS & EXPERIENCE Requirement of facilitator (SME):			
	<ul> <li>NQF 4 in an industry related trade qualification with</li> </ul>		
3 years' experience in the domestic appliance repairing			
	environment		
FACILITATOR/LEARNER RATIO	Facilitator/learner ratio 1 to maximum 24		

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page **26** of

ASSESSMENT CENTRE			
QUALIFICATIONS & EXPERIENCE Requirement of facilitator (SME):			
	<ul> <li>NQF 4 in an industry related trade qualification with</li> </ul>		
3 years' experience in the domestic appliance repairing			
	environment		
FACILITATOR/LEARNER RATIO	Assessor/learner ratio 1 to maximum 24		

#### Legal Requirements:

#### SKILLS DEVELOPMENT PROVIDER (SDP)

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report
- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

#### **ASSESSMENT CENTRE**

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report
- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

#### 3.5.3 Exemptions

None

©Copyright: QCTO Page 27 of

# 3.6 900332-000-00-KM-06, Interpersonal Skill and emotional intelligence, NQF Level 2, Credits 1

NB: Add title level and Credits above

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
900332-000-00-KM-06	Interpersonal skill and emotional intelligence	NQF Level 2	Credits 1	Face-to-face, online, e- learning, mobile training unit, blended, distance.

#### 3.6.1 Module Details:

#### (a) Purpose of Knowledge Module:

The main focus of the learning in this knowledge module is to help delegates develop effective and polished interpersonal skills. It helps the delegate develop the skills required of liaising and networking with stakeholders. It helps delegates develop the skills which enable them to establish effective relationships. It also focuses on minimizing interpersonal conflict. Lastly it enables delegates to develop effective teams.

#### (b) List of Knowledge Topics:

TOPIC CODE	TOPIC TITLE	% OF TIME TO BE SPENT
KM-06-KT01	Liaising and networking with internal and external stakeholders	31
KM-06-KT02	Devising and applying a strategy to establish constructive relationships with team members	33
KM-06-KT03	Identifying and minimizing personal conflict in a unit	36

#### (c) Detailing each topic listed above into topic elements:

KM-06-KT01 Liaise and network with internal and external stakeholders%			
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT	
KT0101	Establishing Relationships	16	
KT0102	Keep Managers Informed	18	
KT0103	Consult with Managers in a Unit	17	
KT0104	Promote Constructive Relationships and Interaction	15	
KT0105	Raise Concerns of the Quality of Work	18	
KT0106	Present Information to the Manager	16	

#### Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0101	Given a scenario learners must participate in a roleplay to create network with external stakeholders.	100

©Copyright: QCTO Page 28 of

KM-06-KT02 Devise and apply a strategy to establish constructive relationships with team members			
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT	
KT0201	Giving and receiving feedback	16	
KT0202	Open and closed communication climates	18	
KT0203	Listening Skills	17	
KT0204	Communicating assertively	15	
KT0205	Demonstrating behaviour that is direct, appropriate and respectful	18	
KT0206	Transactional Analysis	16	
KT0207	Showing appreciation	16	

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0201	Given a scenario learner must participate in a roleplay to forge a work team.	100

KM-06-KT03 Identify and minimize personal conflict in a unit %			
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT	
KT0301	Developing Relationships with Team Members	25	
KT0302	Develop a Strategy through a Consultative Process	26	
KT0303	Identify and Use Opportunities for Team Member Discussions	26	
KT0304	Offer Feedback and Advice to Team Members	23	

# Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0301	Given a scenario learners must participate in a roleplay to resolve a conflict.	100

#### 3.6.2 Criteria for accreditation

Requirements, against which Skills Development Providers (SDP) and Assessment Centres, will be accredited, as listed below.

#### Physical Requirements:

SKILLS DEVELOPMENT PROVIDER (SDP)			
EQUIPMENT & TOOLS	<ul> <li>Physical training facilities (or if using a hybrid or e-learning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant</li> </ul>		

	<ul> <li>All learning materials, lesson plans, workbooks, assessment guides to cover the related topics</li> <li>Tools and standards for internal assessment</li> <li>Record keeping systems to capture learner data and issue a statement of results</li> </ul>
CONSUMABLES	None

	ASSESSMENT CENTRE
EQUIPMENT & TOOLS	<ul> <li>Physical assessment facilities (or if using a hybrid or elearning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module.</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant.</li> <li>All assessment instruments to cover the related topics.</li> <li>Tools and standards for internal assessment</li> <li>Record keeping systems to capture learner data and issue a statement of results</li> </ul>
CONSUMABLES	None

#### Human Resource Requirements:

SKILLS DEVELOPMENT PROVIDER (SDP)		
QUALIFICATIONS & EXPERIENCE   Requirement of facilitator (SME):		
NQF 4 in an industry related trade qualification with		
3 years' experience in the domestic appliance repairing		
environment		
FACILITATOR/LEARNER RATIO Facilitator/learner ratio 1 to maximum 24		

ASSESSMENT CENTRE		
QUALIFICATIONS & EXPERIENCE   Requirement of facilitator (SME):		
	<ul> <li>NQF 4 in an industry related trade qualification with 3 years' experience in the domestic appliance repairing environment</li> </ul>	
FACILITATOR/LEARNER RATIO	Assessor/learner ratio 1 to maximum 24	

# Legal Requirements:

# SKILLS DEVELOPMENT PROVIDER (SDP)

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report
- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

		ASSESSMENT CENTRE
•	CIPC registered entity	
•	SARS Tax compliance pin	

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page **30** of

- Compliant and current health and safety audit report
  Relevant labour legislation visible in facility or on platform (as required by current legislation)
  • POPI policy

# 3.6.3 Exemptions

None

©Copyright: QCTO Page 31 of

# 3.7 900332-000-00-KM-07, Green Solar Energy, Solar Power and Hybrid, NQF Level 3, Credits 1

NB: Add title level and Credits above

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
900332-000-00-KM-07	Green Solar Energy, Solar Power, and Hybrid	NQF Level 3	Credits 1	Face-to-face, online, e- learning, mobile training unit, blended, distance.

#### 3.7.1 Module Details:

(a) Purpose of Knowledge Module:

The purpose of this module is to introduce the learner to green energy and its origin.

(b) List of Knowledge Topics:

TOPIC CODE	TOPIC TITLE	% OF TIME TO BE SPENT
KM-07-KT01	Distinction between Green Solar Energy, Solar Power and Hybrid	40
KM-07-KT02	Advantages and disadvantages of the respective Green Solar Energy	60

(c) Detailing each topic listed above into topic elements:

KM-07-KT01 Distinction between Green Solar Energy, Solar Power and Hybrid 40%		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0101	Green Solar Energy Definition Key Characteristics	31
KT0102	Solar Power Definition Key Characteristics	33
KT0103	Hybrid (Solar) Systems Definition Key Characteristics	36

Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0101	Differentiate between Green Solar Energy, Solar Power, and Hybrid (Solar) Systems	100

KM-07-KT02 Advantages and disadvantages of Green Solar Energy 60%

TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0201	Advantages: Renewable and Sustainable Environmentally Friendly Reduced Energy Costs Energy Independence Low Operating Costs Scalability Off-Grid Capabilities Net Metering Silent Operation Long Lifespan Technological Advancements Grid Stability Energy Storage Integration Job Creation	50
KT0202	Disadvantages Intermittent Energy Source Upfront Costs Geographical Limitations Land Use Environmental Impact Energy Storage Costs Aesthetic Concerns Installation Challenges Energy Conversion Efficiency Initial Carbon Footprint	50

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0201	Describe the advantages and disadvantages of green	100
	solar energy	

#### 3.7.2 Criteria for accreditation

Requirements, against which Skills Development Providers (SDP) and Assessment Centres, will be accredited, as listed below.

# Physical Requirements:

i nyoloai nequiremento.			
SKILLS DEVELOPMENT PROVIDER (SDP)			
EQUIPMENT & TOOLS	<ul> <li>Physical training facilities (or if using a hybrid or e-learning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module.</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant.</li> <li>All learning materials, lesson plans, workbooks, assessment guides to cover the related topics.</li> </ul>		

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page 33 of

	<ul> <li>Tools and standards for internal assessment</li> <li>Record keeping systems to capture learner data and issue a statement of results</li> </ul>
CONSUMABLES	None

ASSESSMENT CENTRE				
EQUIPMENT & TOOLS	<ul> <li>Physical assessment facilities (or if using a hybrid or elearning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module.</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant.</li> <li>All assessment instruments to cover the related topics.</li> <li>Tools and standards for internal assessment</li> <li>Record keeping systems to capture learner data and issue a statement of results</li> </ul>			
CONSUMABLES	None			

#### **Human Resource Requirements:**

SKILLS DEVELOPMENT PROVIDER (SDP)			
QUALIFICATIONS & EXPERIENCE	Requirement of facilitator (SME):		
NQF 4 in an industry related trade qualification     years' experience in the domestic appliance repair     environment			
FACILITATOR/LEARNER RATIO			

ASSESSMENT CENTRE			
QUALIFICATIONS & EXPERIENCE   Requirement of facilitator (SME):			
	<ul> <li>NQF 4 in an industry related trade qualification with 3 years' experience in the domestic appliance repairing environment</li> </ul>		
FACILITATOR/LEARNER RATIO Assessor/learner ratio 1 to maximum 24			

#### Legal Requirements:

# SKILLS DEVELOPMENT PROVIDER (SDP)

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report
- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

#### ASSESSMENT CENTRE

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page **34** of

- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

# 3.7.3 Exemptions

None

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page **35** of

# 3.8 900332-000-00-KM-08, Field service report writing, NQF Level 3, Credits 1

NB: Add title level and Credits above

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
900332-000-00-KM-08	Field service report writing	3	1	Face-to-face, online, e- learning, mobile training unit, blended, distance.

#### 3.8.1 Module Details:

# (a) Purpose of Knowledge Module:

The purpose of this module is developing technical writing skills and accurately provide reports on the work that was carried out.

# (b) List of Knowledge Topics:

TOPIC CODE	TOPIC TITLE	% OF TIME TO BE SPENT
KM-08-KT01	Interpretation of the job card	50
KM-08-KT02	Construction of a field service report	50

#### (c) Detailing each topic listed above into topic elements:

KM-08-KT01 Interpretation of the job card		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0101	Confirm reported or perceived problem.	30
KT0102	Recommend a course of action.      Tools and equipment.     Spare parts.     Transport.     Time allocation.	60

# Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0101	Given a job card a course of action is compiled.	

KM-08-KT02 Construction of a field service report		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0201	Understand the Purpose	6
KT0202	Identify the Audience	7
KT0203	Create an Outline	8
KT0204	Write a Clear Title and Abstract	7
KT0205	Introduction	8

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page **36** of

KT0206	Methods or Approach	7
KT0207	Results	8
KT0208	Discussion	6
KT0209	Conclusions:	7
KT0210	Recommendations (if applicable)	8
KT0211	Proofread and Edit	7
KT0212	Formatting and Presentation	6
KT0213	Review and Feedback	7
KT0214	Finalise the Report	8
KT0215	Distribution and Sharing	6

## Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0201	Compile a field service report based on the project in module 900332-000-00-PM-01, Developing manual dexterity.	100

#### 3.8.2 Criteria for accreditation

Requirements, against which Skills Development Providers (SDP) and Assessment Centres, will be accredited, as listed below.

## Physical Requirements:

r nysicai Nequirements.	
	SKILLS DEVELOPMENT PROVIDER (SDP)
EQUIPMENT & TOOLS	<ul> <li>Physical training facilities (or if using a hybrid or e-learning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module.</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant.</li> <li>All learning materials, lesson plans, workbooks, assessment guides to cover the related topics.</li> <li>Tools and standards for internal assessment</li> <li>Record keeping systems to capture learner data and issue a statement of results</li> </ul>
CONSUMABLES	All consumables required for provision of this module

ASSESSMENT CENTRE	
EQUIPMENT & TOOLS	Physical assessment facilities (or if using a hybrid or e-learning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module.  Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant.  All assessment instruments to cover the related topics.  Tools and standards for internal assessment

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page 37 of

	Record keeping systems to capture learner data and issue a statement of results
CONSUMABLES	All consumables required for assessment of this module

Traman Resource Regardinents.		
SKILLS DEVELOPMENT PROVIDER (SDP)		
QUALIFICATIONS & EXPERIENCE Requirement of facilitator (SME):		
NQF 4 in an industry related trade qualification w		
3 years' experience in the domestic appliance repairing		
	environment	
FACILITATOR/LEARNER RATIO Facilitator/learner ratio 1 to maximum 24		

ASSESSMENT CENTRE		
QUALIFICATIONS & EXPERIENCE Requirement of facilitator (SME):		
NQF 4 in an industry related trade qualification with 3 years' experience in the domestic appliance repairing environment		
FACILITATOR/LEARNER RATIO	Assessor/learner ratio 1 to maximum 24	

## Legal Requirements:

### SKILLS DEVELOPMENT PROVIDER (SDP)

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report
- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

#### **ASSESSMENT CENTRE**

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report
- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

#### 3.8.3 Exemptions

None

©Copyright: QCTO Page 38 of

# 4 Practical Skill Module (PM) Specifications:

NB: MODE OF DELIVERY e.g. Face-to-face, Online or Blended/contact, online, e-learning, mobile training unit, blended, distance, etc

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
900332-000-00-PM-01	Developing manual dexterity	2	4	Face-to-face
900332-000-00-PM-02	Consult client or refer to work order to establish nature of a defect small domestic appliance	2	1	Face-to-face
900332-000-00-PM-03	Repair a variety of small domestic appliances	3	28	Face-to-face

©Copyright: QCTO Page **39** of

# 4.1 900332-000-00-PM-01, Developing manual dexterity, NQF Level 2, Credits 4

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
900332-000-00-PM-01	Developing manual dexterity	2	4	Face-to-face

#### 4.1.1. Module Details

#### (a) Purpose of the Practical Skills Module:

The main focus of the learning in this practical module is to develop manual dexterity when using a variety of tools and equipment as applicable to the refrigeration environment. Learners will be exposed to using power and hand tools. Working on steel and masonry. Working with copper and PVC pipes

The learner will be required to make a trade related project(s) to demonstrate their manual dexterity.

#### (b) List of Practical Skill Activities:

PRACTICAL SKILL CODE	ACTIVITY TITLE
PM-01-PS01	Workshop OHS
PM-01-PS02	Basic Tools and equipment
PM-01-PS03	Using Tools

#### (c) Scope of each Practical Skill Activity:

PM-01-PS01 Workshop OHS	
PRACTICAL SKILL ACTIVITY	SCOPE OUTLINE:
Given the workshop layout I	earners must be able to:
PRACTICAL SKILL	PRACTICAL SKILL ACTIVITY ELEMENTS
ACTIVITY ELEMENT	
CODES	
PA0101	Explain workshop rules
PA0102	Demonstrate dealing with injuries
PA0103	Demonstrate dealing with emergencies

#### Applied Knowledge that underpins the Practical Skill Activity

APPLIED KNOWLEDGE CODE	APPLIED KNOWLEDGE
AK0101	Applicable OHS regulations.
AK0102	Workshop housekeeping rules.

Internal Assessment Criteria (IAC) for the Practical Skill Activity

©Copyright: QCTO Page **40** of

IAC CODE	IAC DESCRIPTION
ICA0101	Workshop housekeeping rules are explained
ICA0102	Workshop emergency procedures are explained

PM-01-PS02 Basic Tools and equipment		
PRACTICAL SKILL ACTIVITY SCOPE OUTLINE:		
Given a set of applicable too	Given a set of applicable tools the learner must be able to:	
PRACTICAL SKILL	PRACTICAL SKILL ACTIVITY ELEMENTS	
ACTIVITY ELEMENT		
CODES		
PA0201	Maintain and store Hand tools and instruments (30%)	
PA0202	Maintain and store Power tools (20%)	
PA0203	Maintain and store Trade related specific tools and instruments	
	(30%)	
PA0204	Maintain and store Workshop tools including the porta pak (20%)	
PA0205	Maintain and store a Flaring kit.	

# Applied Knowledge that underpins the Practical Skill Activity

APPLIED KNOWLEDGE CODE	APPLIED KNOWLEDGE
AK0201	Maintenance and storing of tools and equipment.

# Internal Assessment Criteria (IAC) for the Practical Skill Activity

IAC CODE	IAC DESCRIPTION
ICA0201	Storage and maintenance of workshop tools and equipment are
	explained and demonstrated.

PM-01-PS03 Using Tools		
PRACTICAL SKILL ACTIVITY SCOPE OUTLINE:		
Given a project, material and tools the learner must be able to:		
PRACTICAL SKILL ACTIVITY ELEMENT CODES	PRACTICAL SKILL ACTIVITY ELEMENTS	
PA0301	Use a file	
PA0302	Use a hammer	
PA0303	Drill a hole in metal	
PA0304	Drill a hole in masonry	
PA0305	Shape Metal	
PA0306	Attaching items to a surface	
PA0307	Connect dissimilar copper pipes.	
PA0308	Bend copper pipes.	
PA0309	Swage copper pipes.	
PA0310	Cut PVC pipes.	
PA0311	Join PVC pipes.	

Applied Knowledge that underpins the Practical Skill Activity

©Copyright: QCTO Page **41** of

APPLIED KNOWLEDGE CODE	APPLIED KNOWLEDGE
AK0301	Identification and usage of various hand tools (includes but not limited to: electrical screw drivers, combination spanners, combination pliers, side cutters, long nose pliers, flat nose pliers, round nose pliers, water pump pliers, adjustable wrenches spanners, wire strippers, cable cutters, Allen key, hammers, spirit level, torque wrench, scribers, engineering blue, callipers.)
AK0302	Identification, usage, and maintenance of power tools
AK0303	Workshop tools and equipment
AK0304	Possible consequences related to incorrect usage, maintenance, and storage of tools.

# Internal Assessment Criteria (IAC) for the Practical Skill Activity

IAC CODE	IAC DESCRIPTION
ICA0301	Project is evaluated against the set design.
ICA0302	Tolerances are within specified specifications.
ICA0303	Depth of brazing penetration is within tolerance.

#### 4.1.2. Criteria for accreditation

Requirements, against which Skills Development Providers (SDP) and Assessment Centres, will be accredited, as listed below.

## Physical Requirements:

Physical Requirements:		
SKILLS DEVELOPMENT PROVIDER (SDP)		
EQUIPMENT & TOOLS	<ul> <li>Physical training facilities (or if using a hybrid or e-learning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module.</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant.</li> <li>All learning materials, lesson plans, workbooks, assessment guides to cover the related topics.</li> <li>Record keeping systems to capture learner data and issue a statement of results.</li> <li>List of Tools <ul> <li>Files</li> <li>Hammers</li> <li>Metal drill bits</li> <li>Electric drill</li> <li>Metal saw</li> <li>Screw drivers</li> <li>Pipe bender.</li> <li>Copper pipe cutter</li> <li>Swage equipment.</li> <li>PVC pipe cutter.</li> </ul> </li> </ul>	
CONSUMABLES	PVC Pipes and related accessories	

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page **42** of

Copper pipe and related accessories.  Metal rod.
Screws and plugs.

	ASSESSMENT CENTRE	
EQUIPMENT & TOOLS	<ul> <li>Physical assessment facilities (or if using a hybrid or elearning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module.</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant.</li> <li>All assessment instruments to cover the related topics.</li> <li>Record keeping systems to capture learner data and issue a statement of results.</li> <li>List of Tools <ul> <li>Files</li> <li>Hammers</li> <li>Metal drill bits</li> <li>Electric drill</li> <li>Metal saw</li> <li>Screw drivers</li> <li>Pipe bender.</li> <li>Copper pipe cutter</li> <li>Swage equipment.</li> <li>PVC pipe cutter.</li> </ul> </li> </ul>	
CONSUMABLES	PVC Pipes and related accessories	
	Copper pipe and related accessories.	
	Metal rod.	
	Screws and plugs.	

SKILLS DEVELOPMENT PROVIDER (SDP)	
QUALIFICATIONS & EXPERIENCE	Requirement of facilitator (SME):
	<ul> <li>NQF 4 in an industry related trade qualification with</li> </ul>
	3 years' experience in the domestic appliance repairing
	environment
FACILITATOR/LEARNER RATIO	Facilitator/learner ratio 1 to maximum 12

	ASSESSMENT CENTRE
QUALIFICATIONS & EXPERIENCE	Requirement of facilitator (SME):
	<ul> <li>NQF 4 in an industry related trade qualification with 3 years' experience in the domestic appliance repairing</li> </ul>
	environment
FACILITATOR/LEARNER RATIO	Assessor/learner ratio 1 to maximum 4

# Legal Requirements:

I	SKILLS DEVELOPMENT PROVIDER (SDP)

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO **55** Page 43 of

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report
- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

#### ASSESSMENT CENTRE

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report
- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

## 4.1.3 Exemptions

None

©Copyright: QCTO Page **44** of

# 4.2 900332-000-00-PM-02, Consult client or refer to work order to establish nature of a defect small domestic appliance, NQF Level 2, Credits 1

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
900332-000-00-PM-02	Consult client or refer to work order to establish nature of a defect small domestic appliance	2	1	Face-to-face

#### 4.2.1. Module Details

#### (a) Purpose of the Practical Skills Module:

The purpose of this practical module is to develop the ability to interpret a verbal or written explanation of a malfunctioning product into a possible cause and fault.

#### (b) List of Practical Skill Activities:

PRACTICAL SKILL CODE	ACTIVITY TITLE
PM-02-PS01	Introduction to the client.
PM-02-PS02	Access the product.

#### (c) Scope of each Practical Skill Activity:

PM-02-PS01 Introduction to the client			
PRACTICAL SKILL ACTIVITY SCOPE OUTLINE:			
Given a job card of a malfur	Given a job card of a malfunctioning small appliance the learner must be able to:		
PRACTICAL SKILL	PRACTICAL SKILL ACTIVITY ELEMENTS		
ACTIVITY ELEMENT			
CODES			
PA0101	Arrange an appointment with the client.		
PA0102	Confirm appointment with client.		
PA0103	Follow dress code prescriptions.		
PA0104	Identifying oneself to the client.		
PA0105	Get entry instructions from client to access the product.		
PA0106	Listing skills.		

#### Applied Knowledge that underpins the Practical Skill Activity

APPLIED KNOWLEDGE	APPLIED KNOWLEDGE
CODE	
AK0101	Company policy and procedures
AK0102	Code of business ethics.

#### Internal Assessment Criteria (IAC) for the Practical Skill Activity

IAC CODE	IAC DESCRIPTION	
ICA0101	Listening diagnostically.	
ICA0102	Professional presentation.	

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page **45** of

ICA0103	Product knowledge.
---------	--------------------

PM-02-PS02 Access the product			
PRACTICAL SKILL ACTIVITY SCOPE OUTLINE:			
Given a faulty small applian	Given a faulty small appliance the learner must be able to:		
PRACTICAL SKILL	PRACTICAL SKILL ACTIVITY ELEMENTS		
ACTIVITY ELEMENT			
CODES			
PA0201	Get information from the client.		
PA0202	Check power supply.		
PA0203	Perform a service test in accordance with manufacturer's		
	specifications.		
PA0204	Localise the perceived fault.		
PA0205	Report the possible consequences of the fault.		
PA0206	Get permission to continue with the repair.		

# Applied Knowledge that underpins the Practical Skill Activity

APPLIED KNOWLEDGE CODE	APPLIED KNOWLEDGE
AK0201	The operational cycle of the product.
AK0202	Basic mechanical and electric knowledge of the product.

## Internal Assessment Criteria (IAC) for the Practical Skill Activity

IAC CODE	IAC DESCRIPTION
ICA0201	Their ability to use the manufacturer's manual.
ICA0202	Product knowledge is demonstrated.

#### 4.2.2. Criteria for accreditation

Requirements, against which Skills Development Providers (SDP) and Assessment Centres, will be accredited, as listed below.

#### Physical Requirements:

SKILLS DEVELOPMENT PROVIDER (SDP)		
EQUIPMENT & TOOLS	<ul> <li>Physical training facilities (or if using a hybrid or e-learning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant</li> <li>All learning materials, lesson plans, workbooks, assessment guides to cover the related topics</li> <li>Record keeping systems to capture learner data and issue a statement of results</li> <li>List of tools</li> <li>Relevant hand tools (includes but not limited to: electrical screw drivers, combination spanners, combination pliers,</li> </ul>	

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page **46** of

	<ul> <li>side cutters, long nose pliers, flat nose pliers, round nose pliers, water pump pliers, adjustable wrenches spanners, wire strippers, cable cutters, Allen key, hammers, spirit level, torque wrench, scribers, engineering blue, callipers.)</li> <li>Relevant instruments (instruments include but are not limited to, vernier calliper, inside and outside calliper, micrometers, rulers, torque wrench, etc.)</li> <li>Relevant trade related specific tools and instruments (includes but not limited to:, thermometers, multimeter, clamp-on meter, etc.)</li> <li>Relevant power tools (includes but not limited to: drills, press drills, nibblers, electric sheers, pedestal grinders, jig saw, etc.)</li> </ul>
CONSUMABLES	None.

	ASSESSMENT CENTRE
EQUIPMENT & TOOLS	<ul> <li>Physical assessment facilities (or if using a hybrid or elearning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant</li> <li>All assessment instruments to cover the related topics</li> <li>Record keeping systems to capture learner data and issue a statement of results</li> <li>List of tools</li> <li>Relevant hand tools (includes but not limited to: electrical screw drivers, combination spanners, combination pliers, side cutters, long nose pliers, flat nose pliers, round nose pliers, water pump pliers, adjustable wrenches spanners, wire strippers, cable cutters, Allen key, hammers, spirit level, torque wrench, scribers, engineering blue, callipers.)</li> <li>Relevant instruments (instruments include but are not limited to, vernier calliper, inside and outside calliper, micrometers, rulers, torque wrench, etc.)</li> <li>Relevant trade related specific tools and instruments (includes but not limited to: thermometers, multimeter, clamp-on meter, etc.)</li> <li>Relevant power tools (includes but not limited to: drills, press drills, nibblers, electric sheers, pedestal grinders, jig saw, etc.)</li> </ul>
CONSUMABLES	None

SKILLS DEVELOPMENT PROVIDER (SDP)		
QUALIFICATIONS & EXPERIENCE	Requirement of facilitator (SME):	
	<ul> <li>NQF 4 in an industry related trade qualification with 3 years' experience in the domestic appliance repairing environment</li> </ul>	
	environment	
FACILITATOR/LEARNER RATIO	Facilitator/learner ratio 1 to maximum 12	

©Copyright: QCTO **55** Page **47** of

ASSESSMENT CENTRE		
QUALIFICATIONS & EXPERIENCE   Requirement of facilitator (SME):		
	<ul> <li>NQF 4 in an industry related trade qualification with 3 years' experience in the domestic appliance repairing environment</li> </ul>	
FACILITATOR/LEARNER RATIO	Assessor/learner ratio 1 to maximum 4	

## Legal Requirements:

#### SKILLS DEVELOPMENT PROVIDER (SDP)

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report
- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

## ASSESSMENT CENTRE

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report
- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

## 4.2.3 Exemptions

None

©Copyright: QCTO Page **48** of

# 4.3 900332-000-00-PM-03, Repair a variety of small domestic appliances, NQF Level 3, Credits 28

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
900332-000-00-PM-03	Repair a variety of small domestic appliances	3	28	Face-to-face

#### 4.3.1. Module Details

#### (a) Purpose of the Practical Skills Module:

The main focus of the learning in this practical module is to develop fault finding skills, using the manufacturer's manual, and repairing a variety of malfunctioning small domestic appliances. At least one cycle (approximately 5 credits) must be completed in a training environment. The remainder of the credits should be concluded in the workplace to enhance brand specific skills and knowledge.

#### (b) List of Practical Skill Activities:

PRACTICAL SKILL CODE	ACTIVITY TITLE	
PM-03-PS01	Disassemble a small domestic appliance in accordance with the	
	manufacturer's maintenance manual	
PM-03-PS02	Determine the root cause of the malfunction	
PM-03-PS03	Repair or replace components and sub-components	
PM-03-PS04	Reassemble	
PM-03-PS05	Conduct a functional test	

#### (c) Scope of each Practical Skill Activity:

PM-03-PS01 Disassemble a small domestic appliance in accordance with the manufacturer's maintenance manual			
PRACTICAL SKILL ACTIV	PRACTICAL SKILL ACTIVITY SCOPE OUTLINE:		
PRACTICAL SKILL ACTIVITY ELEMENT CODES	PRACTICAL SKILL ACTIVITY ELEMENTS		
PA0101	Plan for the repair		
PA0102	Take necessary precaution to avoid damage to the environment and the product		
PA0103	Select the correct tools		
PA0104	Confirm the fault reported against the job card		
PA0105	Assess and test the small appliance.		
PA0106	Plan action		
PA0107	Remove the related panels		

#### Applied Knowledge that underpins the Practical Skill Activity

APPLIED KNOWLEDGE	APPLIED KNOWLEDGE
CODE	

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page **49** of

AK0101	The basic physics of small domestic appliances
AK0102	Health and safety aspects.
AK0103	Thermodynamics
AK0104	Basic principles of operation

## Internal Assessment Criteria (IAC) for the Practical Skill Activity

IAC CODE	IAC DESCRIPTION
ICA0101	Risk assessment is performed
ICA0102	Relevant PPE is determined by the risk assessment for the task
	and site requirements is selected
ICA0103	Appropriate tools are selected according to the requirement
ICA0104	Safety, health and environmental (SHE) requirements are applied
ICA0105	Preliminary material/consumable list is compiled

PM-03-PS02 Determine the root cause of the malfunction			
PRACTICAL SKILL ACTIVITY SCOPE OUTLINE:			
Given a malfunctioning sma	Given a malfunctioning small appliance and product manual the learner must be able to:		
PRACTICAL SKILL	PRACTICAL SKILL ACTIVITY ELEMENTS		
ACTIVITY ELEMENT			
CODES			
PA0201	Check functionality of subassemblies		
PA0202	Check electrical connections		
PA0203	Check for physical damage		

# Applied Knowledge that underpins the Practical Skill Activity

APPLIED KNOWLEDGE CODE	APPLIED KNOWLEDGE
AK0201	The basic physics of small domestic appliances
AK0202	Health and safety aspects.
AK0203	Thermodynamics
AK0204	Basic principles of operation

# Internal Assessment Criteria (IAC) for the Practical Skill Activity

IAC DESCRIPTION
Risk assessment is performed, and safe working procedures
followed as per the manufacturer's manual
Correct tools are used to disassemble the sub system and
components
Disassembly procedures are correctly followed
Measuring instruments are used to test parts/ components
and sub systems
Readings obtained are recorded and interpreted correctly

PM-03-PS03 Repair or replace components and sub-components		
PRACTICAL SKILL ACTIVITY SCOPE OUTLINE:		
Given a faulty small appliance and repair manual the learner must be able to		

©Copyright: QCTO Page **50** of

PRACTICAL SKILL ACTIVITY ELEMENT CODES	PRACTICAL SKILL ACTIVITY ELEMENTS
PA0301	Consult the maintenance manual
PA0302	Follow the instructions as given in the manual
PA0303	Conduct a functional test
PA0304	If found not to be functional, continue consulting the manual.
PA0305	If found to be functional, reassemble the system.

# Applied Knowledge that underpins the Practical Skill Activity

APPLIED KNOWLEDGE CODE	APPLIED KNOWLEDGE
AK0301	The basic physics of small domestic appliances
AK0302	Health and safety aspects.
AK0303	Thermodynamics
AK0304	Basic principles of operation

# Internal Assessment Criteria (IAC) for the Practical Skill Activity

IAC CODE	IAC DESCRIPTION
ICA0301	Faulty components are correctly identified and replaced
ICA0302	Reassembly procedures are followed as per the manufacturer's specifications
ICA0303	Findings are recorded

PM-03-PS04 Reassemble in accordance with the manufacturer's maintenance manual			
PRACTICAL SKILL ACTIVITY SCOPE OUTLINE:			
Given a repaired small appliance and repair manual the learner must be able to:			
PRACTICAL SKILL ACTIVITY ELEMENTS ACTIVITY ELEMENT CODES			
PA0401	Make sure that all tools, loose components, and waste are removed.		
PA0402	Replace panels and fasten with original fasteners unless a fastener is damaged.		
PA0403	Energise the system		
PA0404	Conduct a functional test		
PA0405	Recommission the system		
PA0406	Sign off the job card.		

# Applied Knowledge that underpins the Practical Skill Activity

APPLIED KNOWLEDGE CODE	APPLIED KNOWLEDGE
AK0401	The basic physics of small domestic appliances
AK0402	Health and safety aspects.
AK0403	Thermodynamics
AK0404	Basic principles of operation

©Copyright: QCTO Page **51** of

## Internal Assessment Criteria (IAC) for the Practical Skill Activity

IAC CODE	IAC DESCRIPTION
ICA0401	Components are fitted and tested for functionality before
	reassembly
ICA0402	Reassembly procedures are correctly followed according to
	manufacturer's manual
ICA0403	Panels are correctly fitted, and fasteners securely tightened
ICA0404	Housekeeping is performed upon completion of the task
ICA0405	System is tested for functionality and readings recorded
ICA0406	Job card is correctly signed off

#### 4.3.2. Criteria for accreditation

Requirements, against which Skills Development Providers (SDP) and Assessment Centres, will be accredited, as listed below.

# Physical Requirements:

Physical Requirements:				
SKILLS DEVELOPMENT PROVIDER (SDP)				
EQUIPMENT & TOOLS	<ul> <li>Physical training facilities (or if using a hybrid or e-learning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module.</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant.</li> <li>All learning materials, lesson plans, workbooks, assessment guides to cover the related topics.</li> <li>Record keeping systems to capture learner data and issue a statement of results.</li> <li>List of Tools</li> <li>Relevant hand tools (includes but not limited to: electrical screw drivers, combination spanners, combination pliers, side cutters, long nose pliers, flat nose pliers, round nose pliers, water pump pliers, adjustable wrenches spanners, wire strippers, cable cutters, Allen key, hammers, spirit level, torque wrench, scribers, engineering blue, callipers.)</li> <li>Relevant instruments (instruments include but are not limited to, vernier calliper, inside and outside calliper, micrometers, rulers, torque wrench, etc.)</li> <li>Relevant trade related specific tools and instruments (includes but not limited to:, thermometers, multimeter, clamp-on meter, etc.)</li> <li>Relevant power tools (includes but not limited to: drills, press drills, nibblers, electric sheers, pedestal grinders, jig saw, etc.)</li> <li>Relevant workshop tools and equipment (includes but not limited to: vacuum</li> </ul>			
CONSUMABLES	None			

#### **ASSESSMENT CENTRE**

©Copyright: QCTO Page 52 of

EQUIPMENT & TOOLS	<ul> <li>Physical assessment facilities (or if using a hybrid or elearning model – software or internet platform) conducive to hosting the number of learners comfortably and safely for the duration of this module.</li> <li>Facilities that meet the minimum requirements for the comfort of learners (ablutions, hand washing facilities, sheltered from the elements etc.) if relevant.</li> <li>All assessment instruments to cover the related topics.</li> <li>Record keeping systems to capture learner data and issue a statement of results.</li> <li>List of Tools</li> <li>Relevant hand tools (includes but not limited to: electrical screw drivers, combination spanners, combination pliers, side cutters, long nose pliers, flat nose pliers, round nose pliers, water pump pliers, adjustable wrenches spanners, wire strippers, cable cutters, Allen key, hammers, spirit level, torque wrench, scribers, engineering blue, callipers.)</li> <li>Relevant instruments (instruments include but are not limited to, vernier calliper, inside and outside calliper, micrometers, rulers, torque wrench, etc.)</li> <li>Relevant trade related specific tools and instruments (includes but not limited to:, thermometers, multimeter, clamp-on meter, etc.)</li> <li>Relevant power tools (includes but not limited to: drills, press drills, nibblers, electric sheers, pedestal grinders, jig saw, etc.)</li> </ul>
CONSUMABLES	None

SKILLS DEVELOPMENT PROVIDER (SDP)			
QUALIFICATIONS & EXPERIENCE   Requirement of facilitator (SME):			
NQF 4 in an industry related trade qualification with			
	3 years' experience in the domestic appliance repairing		
	environment		
FACILITATOR/LEARNER RATIO Facilitator/learner ratio 1 to maximum 12			

ASSESSMENT CENTRE				
QUALIFICATIONS & EXPERIENCE Requirement of facilitator (SME):				
NQF 4 in an industry related trade qualification v				
	3 years' experience in the domestic appliance repairing			
	environment			
FACILITATOR/LEARNER RATIO	Assessor/learner ratio 1 to maximum 4			

#### Legal Requirements:

## SKILLS DEVELOPMENT PROVIDER (SDP)

- CIPC registered entity
- SARS Tax compliance pin
- Compliant and current health and safety audit report
- Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

©Copyright: QCTO Page 53 of

## ASSESSMENT CENTRE

- CIPC registered entity SARS Tax compliance pin
- Compliant and current health and safety audit report
  Relevant labour legislation visible in facility or on platform (as required by current legislation)
- POPI policy

# 4.3.3 Exemptions

None

SP Curr Small Domestic Appliance Repairer 3 45

©Copyright: QCTO Page 54 of

## **6 POSSIBLE SEQUENCING AND INTEGRATION**

Listing and order of modules in the sequence in which these modules will follow each other during delivery/implementation. This allows for integration of KM, AM (PM/ WM) as work logically flows.

ORDER	MODULE TITLE	MODULE CODE	LEVEL	CREDITS
1.	Health, and safety related to the	900332-000-00-	2	2
	refrigeration repair environment	KM-01		
2.	Internet of Things and smart	900332-000-00-	3	1
	appliances	KM-02		
3	Drawings	900332-000-00-	3	1
		KM-03		
4	Basics of Electrical and	900332-000-00-	3	2
	Electronics	KM-04		
5	Customer Relation Management	900332-000-00-	3	2
		KM-05		
6	Interpersonal Skill, Emotional	900332-000-00-	2	1
	Intelligence	KM-06		
7	Green Solar Energy, Solar Power	900332-000-00-	3	2
	and Hybrid	KM-07		
8	Field service report writing	900332-000-00-	3	1
		KM-08		
9	Developing manual dexterity	900332-000-00-	2	4
		PM-01		
10	Consult client or refer to work	900332-000-00-	2	1
	order to establish nature of a	PM-02		
	defect small domestic appliance			
11	Repair a variety of small domestic	900332-000-00-	3	28
	appliances	PM-03		

©Copyright: QCTO Page **55** of