



Quality Council for Trades & Occupations

[www.qcto.org.za](http://www.qcto.org.za)

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## OCCUPATIONAL SKILLS PROGRAMME CURRICULUM DOCUMENT

**IN LINE WITH THE QQSF POLICY (2021) OCCUPATIONAL QUALIFICATION TYPE  
(NOMENCLATURE)**

SKILLS PROGRAMME	SKILLS PROGRAMME ID	TITLE (DESCRIPTOR)	NQF LEVEL	CREDITS
	SP-250312	Solar Photovoltaic (PV) Installation Planner	5	60
CURRICULUM CODE	900278-000-00-00			
PARTNER DETAILS	ORGANISATION NAME	WEBSITE ADDRESS	TELEPHONE NUMBER	LOGO
QUALITY PARTNER - DEVELOPMENT	EWSETA	<a href="http://www.ewseta.org.za">www.ewseta.org.za</a>	011 274 4700	

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## SECTION 1: CURRICULUM SUMMARY

### 1.1 Occupational Information:

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

313109: Solar Photovoltaic Service Technician

#### 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	Solar Photovoltaic PV Installation Planner	5	60	900278-000-00-00

#### 1.1.3 Alternative titles used by industry:

- None

### 1.2 Curriculum Information:

#### 1.2.1 Articulation for Qualifications and Part Qualifications

N/A

#### 1.2.2 Articulation for Skills Programmes

##### (a) Work Opportunities:

There are several work opportunities for a person who has successfully completed a Solar Photovoltaic (PV) Installation Planner skills programme may access employment opportunities in public and private organisations, become self-employed and may also work as instructors/coach in education and training organisations.

##### (b) Learning Opportunities:

An individual who has successfully completed a Photovoltaic (PV) Installation Planner skills programme may access several further learning opportunities available in the energy or engineering fields.

### **1.3 Curriculum Structure:**

#### **1.3.1 Knowledge/Theory Modules:**

- 121905-000-00-KM-03, Project Scope Management, NQF Level 5, Credits 8
- 313109-001-00-KM-11, Components of the solar PV system, NQF Level 4, Credits 20

Total number of credits: 28

#### **1.3.2 Practical Skills Modules:**

- 121905-000-00-PM-03, Plan and develop a project timeline and schedule, , NQF Level 5, Credits 8
- 121905-000-00-PM-06, Monitor and control the scope of a project, NQF Level 5, Credits 8
- 121905-000-00-PM-10, Conduct and control project communication and stakeholder interaction, NQF Level 5, Credits 8
- 121905-000-00-PM-13, Manage and control project close-out activities, NQF Level 5, Credits 8

Total number of credits: 32

#### **1.3.3 Work Experience Modules:**

N/A

Total number of credits: N/A

### **1.4 Entry Requirements:**

- NQF Level 4 qualification with Mathematics

### **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 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.

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 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.

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.

For exemption from modules through RPL, learners who have gained the stipulated competencies of the modules of a skills programme through any means of formal, informal, SP Curr: Solar PV Installations Planner 5 60

or non-formal learning and/or work experience, may be awarded credits towards relevant modules, and gaps identified for training, which is then concluded.

### **1.6 Quality Partner for Assessment:**

N/A

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

- Higher Occupational Certificate: Solar Photovoltaic Standalone Service Technician, (SAQA ID: 120863)
- National Occupational Certificate: Solar Photovoltaic Standalone System Installer, NQF Level 4, (SAQA ID: 120883)
- Occupational Certificate: Solar Photovoltaic Standalone System Mounter, NQF Level 5 (SAQA ID: 120885)

## 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 Solar Photovoltaic Installation Planner.

A Solar Photovoltaic (PV) Installation Planner conducts site inspection for solar PV power system installations, gathers, analyses and interprets information and data on structural architectural, engineering drawings and electrical connections including energy use and loads, develops and maintains solar PV installation project master plan ensuring adherence to the applicable legislative, regulatory and accepted industry practices for solar PV installations projects.

### 2.2 Tasks:

TASK	LINKS TO ELO
Task 01: Plan and prepare a small-scale embedded generation plant	ELO 1: Interpret and use information and data on existing solar Photovoltaic infrastructure to plan and prepare a small-scale embedded generation plant
Task 02: Analyse and interpret structural engineering and electrical connections data and information on existing infrastructure related to short-term and future plans	ELO 2: Analyse, and evaluate information and data on solar photovoltaic installations requirements to optimise energy production and ensure safe and efficient solar photovoltaic system installation
Task 03: Produce a detailed master plan using appropriate project planning software tool	ELO 3: Design and develop a detailed solar photovoltaic installation master plan and layout of a solar Photovoltaic (PV) system on a specific site to meet client requirements

### 2.3 Occupational Task Details

#### 2.3.1 Plan and prepare a small-scale embedded generation, NQF Level 5

##### Unique Product or Service:

- Detailed planning for solar PV installations

##### Occupational Responsibilities:

- Gather and interpret information and data on the existing infrastructure related to short-term and future plans solar PV installations

##### Occupational Contexts:

- Data gathering and planning processes

### **2.3.2 Analyse and interpret structural engineering and electrical connections data and information on existing infrastructure related to short-term and future plans, NQF Level 5**

#### **Unique Product or Service:**

- Reliable and credible structural engineering and electrical connections data and information

#### **Occupational Responsibilities:**

- Evaluate structural engineering and electrical connections
- Plan and estimate project activity resources for a solar PV system installation

### **2.3.3 Produce a detailed master plan using appropriate project planning software tool, NQF Level 5**

#### **Unique Product or Service:**

- A copy of detailed plan with clear specifications (e.g. size, energy consumption and component sizing, types of modules needed, electrical design, sizing of battery storage and back-up requirements, if applicable)

#### **Occupational Responsibilities:**

- Use project planning software to perform project planning and scheduling based on information and data from architectural, engineering and electrical drawings
- Evaluate, define, sequence and estimate solar PV project activities and resources requirements
- Generate reports on solar photovoltaic project throughout the project implementation stages in consultation with the stakeholders for decision-making

#### **Occupational Contexts**

- Solar PV planning and scheduling processes, NQF Level 5

### **2.3.4 Conduct regular inspection on-site and communicate to provide technical support and revision on Solar PV systems installations, NQF Level 5**

#### **Unique Product or Service:**

- Solar PV Installation Report

#### **Occupational Responsibilities:**

- Communication strategy and tactics are applied to address the communication needs of the project

- A communication management plan is developed in line with project communication needs
- effectiveness of PV installations

### **Occupational Contexts**

- On-site inspection visits and reporting processes, NQF Level 5

## SECTION 3: CURRICULUM COMPONENT SPECIFICATIONS

### 3.1 Knowledge Module Specifications:

*State compulsory modules:*

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
121905-000-00-KM-03	Project Scope Management	5	8	Blended
313109-001-00-KM-11	Components of the solar PV system	4	20	Blended

Total Credits = 28

*State compulsory modules:*

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
121905-000-00-PM-03	Plan and develop a project time line and schedule	5	8	Face-to-Face
121905-000-00-PM-06	Monitor and control the scope of a project	5	8	Face-to-Face
121905-000-00-PM-10	Conduct and control project communication and stakeholder interaction	5	8	Face-to-Face
121905-000-00-PM-13	Manage and control project close-out activities	5	8	Face-to-Face

Total Credits = 32

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

Knowledge Module (KM) - 08

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
313109-001-00-KM-08	Components of the solar PV system	4	20	Blended

(a) Purpose of Knowledge Module:

The main focus of the learning in this knowledge subject is the components of a PV system and theoretical concepts related to solar PV systems.

(b) List of Knowledge Topics:

TOPIC CODE	TOPIC TITLE	% OF TIME TO BE SPENT
KM-08-KT01	PV array systems and PV applications	(13%)
KM-08-KT02	Solar radiation	(5%)
KM-08-KT03	The photovoltaic effect	(5%)
KM-08-KT04	Solar cell types	(13%)
KM-08-KT05	Electrical properties of solar cells	(5%)
KM-08-KT06	PV modules	(10%)
KM-08-KT07	PV junction/string boxes, smart boxes, string diodes, connectors and fuses	(8%)
KM-08-KT08	Inverters	(13%)
KM-08-KT09	Cabling, wiring and connection systems, installation materials and switching (direct current load switch [DC main switch] and AC switch disconnecter)	(8%)
KM-08-KT10	Batteries	(10%)
KM-08-KT11	Charge Controllers	(10%)

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

KM-08-KT01 PV ARRAY SYSTEMS AND PV APPLICATIONS (13%)		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0101	Stand-alone systems (without storage, with storage, hybrid systems)	33%
KT0102	Grid-connected systems	34%
KT0103	Components of the two systems	33%

(d) Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0101	Describe stand-alone systems and grid-connected systems	30%
IAC0102	Identify their main components and describe their functions	40%
IAC0103	Explain the principles of operation of these two systems	30%

KM-01-KT02 SOLAR RADIATION (5%)		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0201	Sun as energy source	12%
KT0202	Distribution of solar radiation	12%
KT0203	Direct and diffuse radiation	11%
KT0204	Angle definition	11%
KT0205	Sun position and solar spectrum	11%
KT0206	Solar radiation on an inclined plane	11%
KT0207	Ground reflection	11%
KT0208	Measuring solar radiation	11%
KT0209	Tracking PV rays	10%

(d) Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0201	Explain the concepts of irradiance, insolation, energy content and the solar constant	9%
IAC0202	Explain the difference between direct and diffuse radiation	9%
IAC0203	Explain the concept of angle definition and identify some of the symbols used to depict the angles	9%
IAC0204	Explain the relationship between solar altitude and air mass	9%
IAC0205	Describe solar positions and air mass (AM) in different places in the world	9%

IAC0206	Explain the concept of the solar spectrum and describe how the sun's position affects the solar spectrum	9%
IAC0207	Identify the factors that reduce the passage of light through the earth's atmosphere	9%
IAC0208	Explain the impact of angle of inclination on solar radiation	9%
IAC0209	Explain the concept of ground reflection in terms of the albedo value	9%
IAC0210	Identify the instruments used to measure radiation and describe their accuracy	9%
IAC0211	Describe the advantages of tracking PV arrays and identify tracker systems	10%

KM-08-KT03 THE PHOTOVOLTAIC EFFECT (5%)		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0301	Operation of a solar cell	50%
KT0302	Design and function of a crystalline silicon solar cell	50%

(d) Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0301	Explain the concept of intrinsic conductivity using the atomic theory	33%
IAC0302	Describe the design and function of a crystalline silicon solar cell	34%
IAC0303	Explain the concept of energy balance	33%

KM-08-KT04 Solar cell types (13%)		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0401	Crystalline silicon	5%
KT0402	Monocrystalline (single-crystal) silicon cells	5%
KT0403	Polycrystalline silicon cells	5%

KT0404	Polycrystalline UMG silicon cells	5%
KT0405	Ribbon pulled silicon cells	5%
KT0406	Texturing and anti-reflection coating	5%
KT0407	Front contacts	5%
KT0408	Back contacts	5%
KT0409	Alternatives for wafer production	5%
KT0410	High performance cells (manufacturing processes - float-zone method, optimised cell structures, surface passivation, selective emitters, edge isolation, back surface field, point contacts, back-contacted solar cells [types include MWT, EWT and back-contact (IBC) solar cells]; polarisation effect [HIT solar cells, transparent solar cells, spherical solar cells, silver cells])	10%
KT0411	Thin-film cell technology	10%
KT0412	Amorphous silicon cells	5%
KT0413	Micromorphous solar cells	5%
KT0414	Copper indium diselenide (CIS) cells	5%
KT0415	Cadmium telluride cells (CdTe)	5%
KT0416	Nano-structured solar cells (nano-structured CIS cells, organic solar cells: dyesensitised nano-crystalline cells)	5%
KT0417	Concentrator solar cells and concentrating systems	5%
KT0418	Comparison of solar cell types and trends	10%

(d) Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0401	Explain the use of silicon in crystalline solar cells	25%
IAC0402	Describe polycrystalline, monocrystalline and amorphous cells in detail	25%
IAC0403	Discuss thin-film technology	25%
IAC0404	Briefly describe each of the other solar cell types	25%

KM-08-KT05 ELECTRICAL PROPERTIES OF SOLAR CELLS (5%)		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0501	Equivalent circuit diagrams of solar cells (additional solar cell models, the effective solar cell model)	40%
KT0502	Spectral sensitivity	30%
KT0503	Efficiency of solar cells and PV modules	30%

(d) Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0501	Discuss two solar cell models using circuit diagrams	<b>35%</b>
IAC0502	Explain spectral sensitivity of different solar cells	<b>35%</b>
IAC0503	Explain efficiency of solar cells and PV modules	<b>30%</b>

KM-08 -KT06 PV MODULES (10%)		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0601	Cell stringing	10%
KT0602	Glass and cell encapsulation (EVA, PVB, PTFE, Ionomer, TPU, acrylates or silicon (TPSE), new module concepts)	10%
KT0603	Module junction boxes and connection cables	10%
KT0604	Module frames	10%
KT0605	Types of modules and classification of modules (substrate, frame structure, construction- specific additional functions etc.)	10%
KT0606	Design options for PV modules (cell type, glass size, cell coverage, glass type, glass format, cell shape, cell contacting, encapsulation material, cell background etc.)	10%
KT0607	Wiring symbols	10%
KT0608	Module characteristics	10%
KT0609	Irradiance dependence and temperature characteristics	5%
KT0610	Hot spots, bypass diodes and shading	5%

KT0611	Electrical characteristics of thin-film modules	5%
KT0612	Expansion and contraction of modules	5%

(d) Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0601	Explain the importance of conducting a scoping exercise in a work management process	10%
IAC0602	Differentiate and discuss the various magnitude between scope of work and job scoping making use of examples	10%
IAC0603	Identify and describe the basic planning process steps with regard to work at hand	10%
IAC0604	Describe the module frames in terms of use, mounting and types	10%
IAC0605	Describe the different types of modules and design options	10%
IAC0606	Draw the wiring symbol used for solar cells, solar cell string, PV module, string of PV modules, PV sub-array and PV array	10%
IAC0607	Discuss briefly the characteristics of different types of modules	10%
IAC0608	Discuss the relationship between irradiation, temperature, power and voltage	10%
IAC0609	Explain hot spot and shading and the role of diodes in these instances	10%
IAC0610	Explain the electrical characteristics of thin-film modules	10%
IAC0611	Explain the aspect of expansion and contraction of modules	10%

KM-08-KT07 PV JUNCTION/STRING BOXES, SMART BOXES, STRING DIODES, CONNECTORS AND FUSES (8%)		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0701	PV junction/string boxes	20%
KT0702	Smart boxes	20%
KT0703	String diodes	20%
KT0704	Connectors	20%
KT0705	Fuses	10%

KT0706	Telemetry/intelligence	10%
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(d) Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0701	Describe the functions of PV junction/string boxes, smart boxes, string diodes, connectors and fuses	50%
IAC0702	Explain telemetry/intelligence system of smart boxes	50%

KM-08-KT08 INVERTERS (13%)		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0801	Wiring symbols, inverter symbols (single and three phase)	15%
KT0802	Internal circuit diagrams	15%
KT0803	Self-commuted inverters (with high frequency, transformerless)	15%
KT0804	Specifications, characteristics and properties of inverters (different efficiencies like conversion, static, Euro, Californian, overall)	10%
KT0805	Grid-connected inverter types and construction sizes in various power classes (multiple MPP trackers [multi-string concept]; master slave concept in low power ranges, three phase concept in low power ranges, thin-film optimised inverters, back-up inverters or inverters optimised for self- use, medium voltage inverter)	20%
KT0806	Stand-alone inverters (sine-wave and square-wave)	15%
KT0807	Telemetry/intelligence of inverters	10%

(d) Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0801	Describe the functions of the inverter	15%
IAC0802	Identify and explain inverter symbols	5%
IAC0803	Draw the internal circuit diagram for an inverter and explain its operating principles	10%
IAC0804	Discuss the different efficiencies and overload behaviour of inverters	15%

IAC0805	Discuss the inverter's recording of operation data	10%
IAC0806	Discuss the characteristics and properties of inverters	10%
IAC0807	Explain the principle of grid connection when using an inverter	15%
IAC0808	Describe the types of inverters	10%
IAC0809	Explain telemetry/intelligence system of inverters	5%
IAC0810	Explain how to interpret inverter data sheets	5%

KM-08-KT09 CABLING, WIRING AND CONNECTION SYSTEMS, INSTALLATION MATERIALS AND SWITCHING (DIRECT CURRENT LOAD SWITCH [DC MAIN SWITCH] AND AC SWITCH DISCONNECTOR) (8%)		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0901	Module and string cables	10%
KT0902	Connection systems	10%
KT0903	DC main cable	10%
KT0904	AC connection cable	10%
KT0905	Installation materials (PG protective tubing, finned tubing, cable duct, cable ties, cable clamps and nail clamps)	10%
KT0906	Direct current load switch (DC main switch)	10%
KT0907	Miniature circuit breakers (MCBs)	10%
KT0908	Residual current device (RCD)	10%
KT0909	Isolation switches and grid integration	10%
KT0910	Integration of decentralised feed-in sources in the grid management process	5%
KT0911	Metering	5%

(d) Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC0801	Describe module and string cables, connection systems, the DC main cable and the AC connection cable and explain their functions	20%
IAC0802	Describe the installation materials and explain their functions	10%

IAC0803	Describe the impact of quality of cables in terms of system losses	<b>15%</b>
IAC0804	Explain the functions of direct current load switch (DC main switch), miniature circuit breakers (MCBs), residual current device (RCD), isolation switches and grid integration	<b>20%</b>
IAC0805	Describe the two types of residual current devices	<b>15%</b>
IAC0806	Elaborate on the integration of decentralised feed-in sources in the grid management process	<b>20%</b>

<b>KM-01-KT10 BATTERIES (10%)</b>		
<b>TOPIC ELEMENT CODE</b>	<b>TOPIC ELEMENT TITLE</b>	<b>% OF TIME TO BE SPENT</b>
KT01001	Construction and operating principles	10%
KT01002	Types and designs of lead-acid batteries (lead-acid gel batteries, stationary tubular plate batteries [types OPzS and OPzV], block batteries with positive plates [OGi block], excursus modern battery concepts – lithium-ion batteries etc.)	20%
KT01003	Batteries and system specifications	15%
KT01004	Operating behaviour and characteristics of lead-acid batteries (voltage, charging and discharging, state of charge)	10%
KT01005	Ageing effects (acid stratification, sulphation, corrosion, studging, drying out)	10%
KT01006	Battery replacement	10%
KT01007	Battery safety and maintenance	10%
KT01008	Recycling	15%

(d) Internal Assessment Criteria (IAC) and Weight

<b>IAC CODE</b>	<b>IAC DESCRIPTION</b>	<b>% OF TIME TO BE SPENT</b>
IAC1001	Describe the construction, types and designs of batteries used in PV systems	<b>20%</b>
IAC1002	Explain the operating principles, operating behaviour and characteristics of lead acid batteries	<b>15%</b>
IAC1003	Discuss ageing effects on batteries	<b>10%</b>

IAC1004	Describe the criteria and specifications to be used when selecting batteries for PV system	15%
IAC1005	Describe the safety requirements when working with batteries	15%
IAC1006	Describe battery replacement procedures	10%
IAC1007	Describe battery maintenance and recycling procedures	15%

KM-08-KT11 CHARGE CONTROLLERS (10%)		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT01101	Deep discharge protection and charging	20%
KT01102	Series controller	20%
KT01103	Shunt controllers	10%
KT01104	MPP charge controllers	20%
KT01105	Stand-alone inverters (sine-wave inverters, square-wave inverters, application criteria for inverters in stand-alone systems)	15%
KT01106	Telemetry/intelligence of charge controllers	15%

(d) Internal Assessment Criteria (IAC) and Weight

IAC CODE	IAC DESCRIPTION	% OF TIME TO BE SPENT
IAC01101	Describe the main function of a charge controller	20%
IAC01102	Describe the essential features expected from a modern charge controller	15%
IAC01103	Describe a deep discharge protector and explain its function	10%
IAC01104	Explain the 3- or 4-stage charging cycle	15%
IAC01105	Describe the functions and operating principles of series controllers, shunt controllers and MPP charge controllers	20%
IAC01106	Explain telemetry/intelligence system of charge controllers	20%

### 3.1.2 Criteria for accreditation

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

#### Physical Requirements:

SKILLS DEVELOPMENT PROVIDER (SDP)	
<b>EQUIPMENT &amp; TOOLS</b>	<ul style="list-style-type: none"> <li>• Access to training facilities conducive for classroom and practical training, Curriculum aligned learning materials, facilitation aids, media, Whiteboard, Flipchart Stand, Computer, Access to Internet, Learning Management System (LMS) and Learning Management Information System (LMIS)</li> <li>• Quality Management Systems</li> </ul>
<b>CONSUMABLES</b>	None

#### Human Resource Requirements:

SKILLS DEVELOPMENT PROVIDER (SDP)	
<b>QUALIFICATIONS &amp; EXPERIENCE</b>	<ul style="list-style-type: none"> <li>• NQF level 6 qualification in project or programme management, public management, business management or administration</li> </ul>
<b>FACILITATOR/LEARNER RATIO</b>	1: 24

#### Legal Requirements:

SKILLS DEVELOPMENT PROVIDER (SDP)	
<b>QUALIFICATIONS &amp; EXPERIENCE</b>	<ul style="list-style-type: none"> <li>• Registered Legal Entity</li> <li>• Compliant with Occupational Health and Safety Act</li> <li>• Display of Labour Laws</li> <li>• Compliance with Tax requirements</li> <li>• Compliance to POPI act</li> </ul>

### 3.1.3 Exemptions

- None

### 3.1.2 Detailing Knowledge Module (KM) contents

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
121905-000-00-KM-03	Project Scope Management	5	8	Blended

(a) Purpose of Knowledge Module:

The main focus of the learning in this knowledge module is to build an understanding of Project scope management practices and processes

(b) List of Knowledge Topics:

KM-03-KT01 Project scope management planning (15%)		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0101	Scope management planning concepts and flow of data	(20%)
KT0102	The importance and benefits of scope management planning	(20%)
KT0103	Scope management planning source documents (Project Management Plan, Project Charter, Enterprise Environmental Factors, Organisation Process Assets)	(20%)
KT0104	Scope management planning tools and techniques (Expert judgement, Analytical techniques, Meetings)	(20%)
KT0105	Outputs of project scope management planning (The scope management plan, Requirements management plan)	(20%)

(e) Internal Assessment Criteria (IAC)

IAC CODE	IAC DESCRIPTION	
IAC0101	Project scope management planning concepts can be explained	(10%)
IAC0102	An understanding of the flow of data/information as well as interrelationships between the concepts are demonstrated	(20%)
IAC0103	The importance and benefits of project scope management planning can be explained	(10%)

IAC0104	Scope management planning source documents can be listed and their application explained	(20%)
IAC0105	Tools and techniques to perform project scope management planning can be selected for a specific purpose and motivated	(20%)
IAC0106	Project scope management documents can be identified, the application explained, evaluated for completeness, gaps identified and corrective measures motivated	(20%)

KM-03-KT02 Scope management requirements and needs (15%)		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0201	Concepts related to the requirements for effective scope management and flow of data	(10%)
KT0202	The importance and benefits of defining requirements and needs that must be addressed by the scope of the project	(10%)
KT0203	Input documents to establish requirements and needs (Scope Management Plan, Requirements, Stakeholder Management Plan, Project Charter, Stakeholder Register)	(20%)
KT0204	Tools and techniques to collect and refine requirements and needs (Interviews, Focus Groups, Facilitated workshops, Group creativity Techniques [Brainstorming, Nominal group technique, Idea/Mind mapping, Affinity diagrams, Multi-criteria decision analysis], Group Decision making Techniques [Unanimity, Majority, Plurality, Dictatorship], Questionnaires and surveys, Observations, Prototypes, Benchmarking, Context Diagrams, Document Analysis)	(20%)
KT0205	Documenting the requirements and needs (Business requirements, Stakeholder requirements, Solution requirements, Project requirements, Transition requirements, Requirement assumptions, dependencies and constraints)	(20%)
KT0206	Requirements traceability matrix	(20%)

(e) Internal Assessment Criteria (IAC)

<b>IAC CODE</b>	<b>IAC DESCRIPTION</b>	
IAC0201	An understanding of the concepts related to defining project requirements and needs as well as the flow of data is explained	(20%)
IAC0202	The importance and benefits of defining the requirements and needs that must be met by the project can be explained and motivated	(20%)
IAC0203	Source documents that are used to define the project requirements and needs can be listed and their application explained	(20%)
IAC0204	Tools and techniques to perform project requirement and needs identification and analysis can be selected for a specific purpose and motivated	(20%)
IAC0205	Project resource and needs documents can be identified, the application explained, evaluated for completeness, gaps identified and corrective measures motivated	(20%)

<b>KM-03-KT03: Define scope (15%)</b>		
<b>TOPIC ELEMENT CODE</b>	<b>TOPIC ELEMENT TITLE</b>	<b>% OF TIME TO BE SPENT</b>
KT0301	Project scope concepts and flow of data	(20%)
KT0302	Importance and benefits of defining the project scope	(10%)
KT0303	Input documents that are used to define the project scope (Scope Management Plan, Project Charter, Requirements Documentation, Organisational Process Assets)	(20%)
KT0304	Tools and techniques used to define the project scope (Expert judgement, Product analysis, Alternatives generation, Facilitated workshops)	(20%)
KT0305	Project scope statements (Product scope description, Acceptance criteria, Deliverable, Project exclusion, Constraints, Assumptions)	(30%)

(e) Internal Assessment Criteria (IAC)

<b>IAC CODE</b>	<b>IAC DESCRIPTION</b>	
IAC0301	An understanding of the concepts related to defining project scope as well as the flow of data is demonstrated	(20%)
IAC0302	The importance and benefits of defining the project scope can be explained and motivated	(20%)
IAC0303	Source documents that are used to define the project scope can be listed and their application explained	(20%)
IAC0304	Tools and techniques to define the project scope can be selected for a specific purpose and motivated	(20%)
IAC0305	Project scope documents can be identified, the application explained, evaluated for completeness, gaps identified and corrective measures motivated	(20%)

KM-03-KT04 Work breakdown structures (20%)		
<b>TOPIC ELEMENT CODE</b>	<b>TOPIC ELEMENT TITLE</b>	<b>% OF TIME TO BE SPENT</b>
KT0401	Project work breakdown concepts and flow of data	(20%)
KT0402	Importance and benefits of a work breakdown structure	(10%)
KT0403	Input documents to develop a work breakdown structure (Scope Management Plan, Project Scope Statement, Requirements documentation, Enterprise Environmental Factors, Organisational Process Assets)	(20%)
KT0404	Tools and techniques to create a work breakdown structure (Decomposition, Expert judgement)	(20%)
KT0405	Scope baseline	(20%)
KT0406	The work breakdown structure report and dictionary	(10%)

(e) Internal Assessment Criteria (IAC)

<b>IAC CODE</b>	<b>IAC DESCRIPTION</b>	
IAC0401	An understanding of the concepts related to developing a work breakdown structure as well as the flow of data is demonstrated	(20%)

IAC0402	The importance and benefits of developing a work breakdown structure can be explained and motivated	(20%)
IAC0403	Source documents that are used to develop a work breakdown structure can be listed and their application explained	(20%)
IAC0404	Tools and techniques to develop a work breakdown structure can be selected for a specific purpose and motivated	(20%)
IAC0405	Work breakdown structure documents can be identified, the application explained, evaluated for completeness, gaps identified and corrective measures motivated	(20%)

KM-03-KT05: Validate scope (15%)		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0501	Scope validation concepts and flow of data	(20%)
KT0502	Importance and benefits of validating the project scope	(20%)
KT0503	Input documents to validate project scope (Requirements documentation, Requirements Traceability Matrix, Verified Deliverables, Work Performance Data)	(20%)
KT0504	Tools and techniques to validate the project scope	(20%)
KT0505	Scope validation reports and outputs (Accepted deliverables, Change requests, Work performance information, Project document updates)	(20%)

(e) Internal Assessment Criteria (IAC)

IAC CODE	IAC DESCRIPTION	
IAC0501	An understanding of the concepts related to validating a project scope as well as the flow of data is demonstrated	(20%)
IAC0502	The importance and benefits of validating a project scope can be explained and motivated	(20%)

IAC0503	Source documents that are used to validate a project scope can be listed and their application explained	(20%)
IAC0504	Tools and techniques to validate a project scope can be selected for a specific purpose and motivated	(20%)
IAC0505	Scope validation documents can be identified, the application explained, evaluated for completeness, gaps identified and corrective measures motivated	(20%)

KM-03-KT06: Control scope (20%)		
TOPIC ELEMENT CODE	TOPIC ELEMENT TITLE	% OF TIME TO BE SPENT
KT0601	Scope control concepts and flow of data	(20%)
KT0602	Importance and benefits of controlling the project scope	(20%)
KT0603	Input documents to control the project scope (Sections of the Project Management Plan (Scope baseline, Scope management Plan, Change management plan, Configuration management plan, Requirements management plan), requirements documentation, requirements Traceability Matrix. Work Performance Data, Organisation Process Assets)	(20%)
KT0604	Tools and techniques to control the project scope (Variances analysis)	(20%)
KT0605	Scope control reports and outputs (Work Performance Information, Change Requests, Project Management Plan Updates, Project Document Updates, Organisation Process Assets Updates)	(20%)

(e) Internal Assessment Criteria (IAC)

IAC CODE	IAC DESCRIPTION	
IAC0601	An understanding of the concepts related to controlling a project scope as well as the flow of data is demonstrated	(20%)
IAC0602	The importance and benefits of controlling a project scope can be explained and motivated	(20%)

IAC0603	Source documents that are used to control a project scope can be listed and their application explained	(20%)
IAC0604	Tools and techniques to control a project scope can be selected for a specific purpose and motivated	(20%)
IAC0605	Scope control documents can be identified, the application explained, evaluated for completeness, gaps identified and corrective measures motivated	(20%)

### 3.1.2 Criteria for accreditation

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

#### Physical Requirements:

SKILLS DEVELOPMENT PROVIDER (SDP)	
<b>EQUIPMENT &amp; TOOLS</b>	<ul style="list-style-type: none"> <li>Access to training facilities conducive for classroom and practical training, Curriculum aligned learning materials, facilitation aids, media, Whiteboard, Flipchart Stand, Computer, Access to Internet, Learning Management System (LMS) and Learning Management Information System (LMIS)</li> <li>Quality Management Systems</li> </ul>
<b>CONSUMABLES</b>	None

#### Human Resource Requirements:

SKILLS DEVELOPMENT PROVIDER (SDP)	
<b>QUALIFICATIONS &amp; EXPERIENCE</b>	NQF level 6 qualification in project or programme management, public management, business management or administration
<b>FACILITATOR/LEARNER RATIO</b>	1:24

#### Legal Requirements:

SKILLS DEVELOPMENT PROVIDER (SDP)	
	<ul style="list-style-type: none"> <li>Registered Legal Entity</li> <li>Compliant with Occupational Health and Safety Act</li> <li>Display of Labour Laws</li> <li>Valid Tax Compliance Pin / Exemption</li> <li>Compliance to POPI act</li> </ul>



### 3.2 Practical Skill Module (PM) Specifications:

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
121905-000-00-PM-03	Plan and develop a project timeline and schedule	5	8	Face-to-Face
121905-000-00-PM-06	Monitor and control the scope of a project	5	8	Face-to-Face
121905-000-00-PM-10	Conduct and control project communication and stakeholder interaction,	5	8	Face-to-Face
121905-000-00-PM-13	Manage and control project close-out activities	5	8	Face-to-Face

Total Credits = 32

#### 3.2.1 Detailing Practical Module (PM) contents

##### Practical Module (PM) – 03

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
121905-000-00-PM-03	Plan and develop a project timeline and schedule	5	8	Face-to-Face

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

The focus of the learning in this module is on providing the learner an opportunity to: Conduct project time and schedule planning in a controlled learning environment.

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

PRACTICAL SKILL CODE	ACTIVITY TITLE
PM-03-PS01	Plan schedule management

(c) Scope of each Practical Skill Activity:

PM-03-PS01 Plan and develop a project schedule	
<b>PRACTICAL SKILL ACTIVITY SCOPE OUTLINE:</b>	
Given task instructions, relevant documentation and project planning software/tool, the learner will be able to:	
<b>PRACTICAL SKILL ACTIVITY ELEMENT CODES</b>	<b>PRACTICAL SKILL ACTIVITY ELEMENTS</b>
PA0101	Schedule project activities
PA0102	Sequence project activities
PA0103	Estimate project activity resources and duration
PA0104	Develop a project schedule

(d) Applied Knowledge that underpins the Practical Skill

<b>APPLIED KNOWLEDGE CODE</b>	<b>APPLIED KNOWLEDGE</b>
AK0101	Project scheduling and planning
AK0102	Ways to present a project schedule
AK0103	Systemic scheduling approach

(e) Internal Assessment Criteria (IAC)

<b>IAC CODE</b>	<b>IAC DESCRIPTION</b>
IAC0101	Compile project schedule data in the required format
IAC0102	Develop appropriate time scales in line with project activities
IAC0103	Describe the purpose of using schedules
IAC0104	Describe different project schedules according to organisational requirements
IAC0105	Apply systematic thinking approach when completing the task
IAC0106	Produce and maintain an integrated project schedule that consolidates the entire component plans
IAC0107	Interrogate and adjust component plans to ensure consistency across all component areas

### 3.1.2 Criteria for accreditation

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

#### Physical Requirements:

SKILLS DEVELOPMENT PROVIDER (SDP)	
<b>EQUIPMENT &amp; TOOLS</b>	<ul style="list-style-type: none"> <li>• Access to training facilities conducive for classroom and practical training, Curriculum aligned learning materials, facilitation aids, media, Whiteboard, Flipchart Stand, Computer, Access to Internet, Learning Management System (LMS) and Learning Management Information System (LMIS)</li> <li>• Quality Management Systems</li> </ul>
<b>CONSUMABLES</b>	None

#### Human Resource Requirements:

SKILLS DEVELOPMENT PROVIDER (SDP)	
<b>QUALIFICATIONS &amp; EXPERIENCE</b>	NQF level 6 qualification in project or programme management, public management, business management or administration
<b>FACILITATOR/LEARNER RATIO</b>	1:24

#### Legal Requirements:

SKILLS DEVELOPMENT PROVIDER (SDP)	
<b>QUALIFICATIONS &amp; EXPERIENCE</b>	<ul style="list-style-type: none"> <li>• Registered Legal Entity</li> <li>• Compliant with Occupational Health and Safety Act</li> <li>• Display of Labour Laws</li> <li>• Valid Tax Compliance Pin / Exemption</li> <li>• Compliance to POPI act</li> </ul>

### 3.1.3 Exemptions

- None

### 3.2.2 Detailing Practical Module (PM) contents

Practical Module (PM) - 03

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
121905000-PM-06	Monitor and control the scope of a project	5	8	Face-to-Face

(a) Purpose of the Practical Skills Module:

The focus of the learning in this module is on providing the learner an opportunity to monitor and control the scope of a project (b) List of Practical Skill Activities:

PRACTICAL SKILL CODE	ACTIVITY TITLE
PM-06-PS01	Evaluate and refine the project scope statement
PM-06-PS02	Validate the project scope
PM-06-PS03	Control the project scope

(c) Scope of each Practical Skill Activity:

PM-06-PS01 EVALUATE AND REFINE THE PROJECT SCOPE STATEMENT	
PRACTICAL SKILL ACTIVITY SCOPE OUTLINE:	
Given task instructions and customer requirements, the learner is able to:	
PRACTICAL SKILL ACTIVITY ELEMENT CODES	PRACTICAL SKILL ACTIVITY ELEMENTS
PA0101	Utilise the scope statement to prevent scope creep
PA0102	Establish a change control process
PA0103	Set success metrics
PA0104	Log key project risks

(d) Applied Knowledge that underpins the Practical Skill

APPLIED KNOWLEDGE CODE	APPLIED KNOWLEDGE
AK0101	Different types of project risks
AK0102	Mitigation measures

AK0103	Issue log management processes
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(e) Internal Assessment Criteria (IAC)

IAC CODE	IAC DESCRIPTION
IAC0101	A structured process for managing scope changes, including the steps, responsibilities, and approval mechanisms is documented
IAC0102	Potential risks and the most probable or impactful one are identified and highlighted
IAC0103	A mitigation plan is developed to address the identified potential risks
IAC0104	A success metrics is defined, quantified and aligned with project goals, such as customer satisfaction, revenue, or social impact
IAC0105	A scope statement is clearly defined as per the customer requirements to prevent scope creep
IAC0106	A project scope statement clearly outlines the project's objectives, deliverables, milestones, boundaries, and acceptance criteria

PM-06-PS02 VALIDATE THE PROJECT SCOPE	
<b>PRACTICAL SKILL ACTIVITY SCOPE OUTLINE</b>	
Given task instructions and customer requirements, the learner is able to:	
<b>PRACTICAL SKILL ACTIVITY ELEMENT CODES</b>	<b>PRACTICAL SKILL ACTIVITY ELEMENTS</b>
PA0201	Identify and agree on project deliverables with the customer based on customer requirements
PA0202	Conduct inspections and reviews
PA0203	Obtain formal acceptance
PA0204	Document and address change requests
PA0205	Update project documents

(d) Applied Knowledge that underpins the Practical Skill

<b>APPLIED KNOWLEDGE CODE</b>	<b>APPLIED KNOWLEDGE</b>
AK0101	Inspection process
AK0102	Types of project documentation

(e) Internal Assessment Criteria (IAC)

<b>IAC CODE</b>	<b>IAC DESCRIPTION</b>
IAC0201	The deliverables that need to be achieved are verified and accepted by the customer
IAC0202	Have the customer, sponsor, or user inspect the work to ensure it meets requirements. This can be done through a point-by-point review or a feedback session.
IAC0203	A formal sign-off from the customer and other key stakeholders on the project scope statement and the work breakdown structure (WBS) is obtained
IAC0204	Any issues or discrepancies and take corrective action are documented.
IAC0205	Project documents with the accepted deliverables, work performance information, and change requests are updated

<b>PM-01-PS03 CONTROL THE PROJECT SCOPE</b>	
<b>PRACTICAL SKILL ACTIVITY SCOPE OUTLINE</b>	
Given task instructions, project scope deliverables checklist and project management software, the learner must be able to:	
<b>PRACTICAL SKILL ACTIVITY ELEMENT CODES</b>	<b>PRACTICAL SKILL ACTIVITY ELEMENTS</b>
PA0301	Implement the project as per the project scope
PA0302	Create a Work Breakdown Structure (WBS)
PA0303	Involve stakeholders
PA0304	Develop a change management process
PA0305	Create a scope baseline
PA0306	Use project management software
PA0307	Create a detailed schedule
PA0308	Conduct a business requirements analysis

(d) Applied Knowledge that underpins the Practical Skill

<b>APPLIED KNOWLEDGE CODE</b>	<b>APPLIED KNOWLEDGE</b>
AK0101	Work Breakdown Structure
AK0102	Business requirements analysis techniques

(e) Internal Assessment Criteria (IAC)

IAC CODE	IAC DESCRIPTION
IAC0301	Project scope is defined clearly
IAC0302	A Work Breakdown Structure indicates that the project scope statement is broken down into smaller tasks breaks to manage and control the project delivery
IAC0303	Communication with the stakeholders is maintained to ensure that the project scope is understood and agreed upon
IAC0304	Guidelines for evaluating and executing changes are established
IAC0305	The scope baseline and approved version of the scope is clearly documented to serve as a reference point
IAC0306	Appropriate project management software is used effective project scope management
IAC0307	A schedule developed reflect the major milestones, resource allocation to provide flexibility for scope changes

### 3.1.2. 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)	
<b>EQUIPMENT &amp; TOOLS</b>	<ul style="list-style-type: none"><li>• Access to training facilities conducive for classroom and practical training, Curriculum aligned learning materials, facilitation aids, media, Whiteboard, Flipchart Stand, Computer, Access to Internet, Learning Management System (LMS) and Learning Management Information System (LMIS)</li><li>• Quality Management Systems</li></ul>
<b>CONSUMABLES</b>	None

#### Human Resource Requirements:

SKILLS DEVELOPMENT PROVIDER (SDP)	
<b>QUALIFICATIONS &amp; EXPERIENCE</b>	NQF level 6 qualification in project or programme management, public management, business management or administration
<b>FACILITATOR/LEARNER RATIO</b>	1:24

## Legal Requirements:

SKILLS DEVELOPMENT PROVIDER (SDP)	
<b>QUALIFICATIONS &amp; EXPERIENCE</b>	<ul style="list-style-type: none"><li>• Registered Legal Entity</li><li>• Compliant with Occupational Health and Safety Act</li><li>• Display of Labour Laws</li><li>• Valid Tax Compliance Pin / Exemption</li><li>• Compliance to POPI act</li></ul>

### 3.1.3 Exemptions

- None

### 3.2.3 Detailing Practical Module (PM) contents

Practical Module (PM) – 10

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
121905000-PM-10	Conduct and control project communication and stakeholder interaction	5	8	Blended

(a) Purpose of the Practical Skills Module:

The focus of the learning in this module is on providing the learner an opportunity to conduct and control stakeholder engagement.

(b) List of Practical Skill Activities:

PRACTICAL SKILL CODE	ACTIVITY TITLE
PM-10-PS01	Conduct project communication
PM-10-PS02	Identify, analyse and manage project stakeholder groups

(c) Scope of each Practical Skill Activity:

PM-10-PS01 CONDUCT PROJECT COMMUNICATION
<b>PRACTICAL SKILL ACTIVITY SCOPE OUTLINE:</b>
Given task instructions, stakeholder database, communication devices (e.g telephone/cellphone and relevant documentation, the learner must be able to:

<b>PRACTICAL SKILL ACTIVITY ELEMENT CODES</b>	<b>PRACTICAL SKILL ACTIVITY ELEMENTS</b>
PA0101	Develop a communication plan

(d) Applied Competence

<b>APPLIED KNOWLEDGE CODE</b>	<b>APPLIED KNOWLEDGE</b>
AK0101	Communication tools, techniques and templates
AK0102	Communication plan requirements
AK0103	Types of information required to include in a project communication management plan
AK0104	Information management systems
AK0105	Communication requirement analysis

(e) Internal Assessment Criteria (IAC)

<b>IAC CODE</b>	<b>IAC DESCRIPTION</b>
IAC0101	Communication plan meets the overall project scope and plan
IAC0102	The communication management plan matches the project information needs
IAC0103	An understanding of the impact and best practices of communication on the achievement of project delivery is described and motivated
IAC0104	A risk and an issue log is developed and scenario relevant mitigating actions recorded
IAC0105	The documented records of controlling project communication meets project, scenario, plan and scope

**PM-10-PS02 IDENTIFY, ANALYSE AND MANAGE PROJECT STAKEHOLDER GROUPS**

**PRACTICAL SKILL ACTIVITY SCOPE OUTLINE**

Given task instructions, stakeholder database, communication devices (e.g telephone/cellphone and relevant documentation, the learner must be able to:

<b>PRACTICAL SKILL ACTIVITY ELEMENT CODES</b>	<b>PRACTICAL SKILL ACTIVITY ELEMENTS</b>
PA0201	Utilise the stakeholder database

PA0202	Apply methods and techniques to engage stakeholders effectively
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(d) Applied Knowledge that underpins the Practical Skill

APPLIED KNOWLEDGE CODE	APPLIED KNOWLEDGE
AK0201	Stakeholder analysis reports
AK0202	Identification of stakeholders
AK0202	Techniques to engage stakeholders

(e) Internal Assessment Criteria (IAC)

IAC CODE	IAC DESCRIPTION
IAC0201	Implementation requirements and practices of the stakeholder management are applied
IAC0202	The process for evaluating the impact and influence of each stakeholder is applied

### 3.1.2 Criteria for accreditation

*Add additional line spaces as required. Requirements, against which Skills Development Providers (SDP) and Assessment Centres, will be accredited, as listed below.*

#### Physical Requirements:

SKILLS DEVELOPMENT PROVIDER (SDP)	
<b>EQUIPMENT &amp; TOOLS</b>	<ul style="list-style-type: none"> <li>Access to training facilities conducive for classroom and practical training, Curriculum aligned learning materials, facilitation aids, media, Whiteboard, Flipchart Stand, Computer, Access to Internet, Learning Management System (LMS) and Learning Management Information System (LMIS)</li> <li>Quality Management Systems</li> </ul>
<b>CONSUMABLES</b>	None

### Human Resource Requirements:

<b>SKILLS DEVELOPMENT PROVIDER (SDP)</b>	
<b>QUALIFICATIONS &amp; EXPERIENCE</b>	NQF level 6 qualification in project or programme management, public management, business management or administration
<b>FACILITATOR/LEARNER RATIO</b>	1:24

### Legal Requirements:

<b>SKILLS DEVELOPMENT PROVIDER (SDP)</b>	
<b>QUALIFICATIONS &amp; EXPERIENCE</b>	<ul style="list-style-type: none"><li>• Registered Legal Entity</li><li>• Compliant with Occupational Health and Safety Act</li><li>• Display of Labour Laws</li><li>• Valid Tax Compliance Pin / Exemption</li><li>• Compliance to POPI act</li></ul>
<b>FACILITATOR/LEARNER RATIO</b>	N/A

### 3.1.3 Exemptions

- None

### 3.4 POSSIBLE SEQUENCING AND INTEGRATION

ORDER	MODULE TITLE	MODULE CODE	LEVEL	CREDITS
1.	313109-001-00-KM-11	Components of the solar PV system	4	20
2.	121905-000-00-KM-03	Project Scope Management	5	8
3.	121905-000-00-PM-03	Plan and develop a project timeline and schedule	5	8
4.	121905-000-00-PM-10	Conduct and control project communication and stakeholder interaction	5	8
5.	121905-000-00-PM-06	Monitor and control the scope of a project	5	8
6.	121905-000-00-PM-13	Manage and control project close-out activities	5	8