2025

UNION ASSESSMENT & CERTIFICATION

Solar PV Integrator

ASSESSMENT GUIDE

UAC – UNION ASSESSMENT & CERTIFICATION | 1st Floor, Block A, Tamouh Business Hub, Reem Island
Abu Dhabi, UAE
www.uacuae.com

Solar PV Integrator

Assessment Content

Introduction

The assessment is based on the following nine main occupational standards, furtherly divided into twenty-three performance criteria as identified by Abu Dhabi Quality and Conformity Council for Solar PV Integrator:

- Conduct Pre-design activities
- Ability to design small PV system
- Ability to design drawings
- Ability to conduct construction and installation support
- Ability to collect and evaluate project related information and data in order to generate different types of engineering reports
- Evaluating the quality of site work by applying quality assurance techniques and proposing any required changes
- Confirm the adherence to health and safety requirements about good knowledge of Emergency preparedness and response requirements by all project team members and applicable health and safety regulations and standards including ADOSH-SF
- Ability to prepare and obtain Distribution Company's approval for electrical wiring and installation drawings in accordance with the Electricity Wiring Regulations before the commencement of any Electrical Installation Work
- Ability to ensure the implementation of all Electrical Installation Work in accordance with the Electricity Wiring Regulations, and any specifications and requirements issued by the Distribution Company and endorsed or approved by the DOE

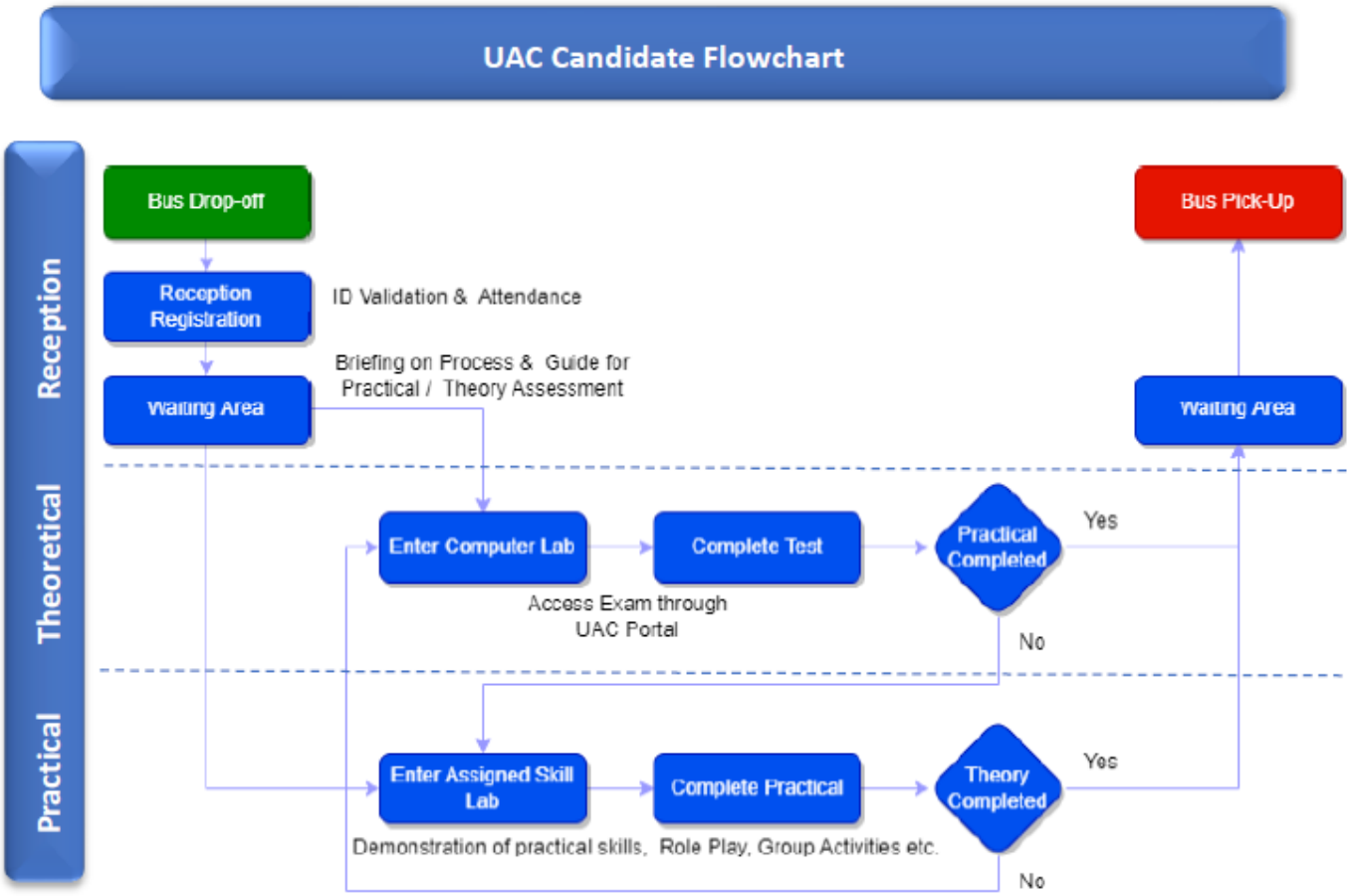
The assessment is carried out onsite at UAC certified assessment center. The latter is equipped with relevant technical and physical infrastructure.

Assessment Methodology

Theoretical: Twenty (20) multiple choice question computer-based test, AI proctored with camera and sound detection recording. Duration of assessment is approximately one hour

Practical: Five (5) scenario-based questions, one-hour onsite assessor led test. Video evidence of candidates undertaking the practical tasks are available on UAC portal

Assessment Life Cycle



Assessment Blueprint

The overall passing percentage is **Seventy percent** (**70%**).

Weightage of different sections of assessment is divided as follows:

Section	Weightage
Theory	40%
Practical	60%

The assessment weightage suggested for each occupational standard with respect to number of questions to be administered in each exam is explained below.

Occupational Standard	Weightage
1.Conduct Pre-design activities	10%
2.Ability to design small PV system	15%
3.Ability to design drawings	15%
4.Ability to conduct construction and installation support	15%
5.Ability to collect and evaluate project related information and data in order to generate different types of engineering reports	10%
6.Evaluating the quality of site work by applying quality assurance techniques and proposing any required changes	10%
7.Confirm the adherence to health and safety requirements about good knowledge of Emergency preparedness and response requirements by all project team members and applicable health and safety regulations and standards including ADOSH-SF	10%
8.Ability to prepare and obtain Distribution Company's approval for electrical wiring and installation drawings in accordance with the Electricity Wiring Regulations before the commencement of any Electrical Installation Work	10%
9.Ability to ensure the implementation of all Electrical Installation Work in accordance with the Electricity Wiring Regulations, and any specifications and requirements issued by the Distribution Company and endorsed or approved by the DOE	5%

Element Grouping

Element groups have been identified across nine occupational standards. Each element group consists of a set of clubbed elements based on relevant group of performance criteria and each represents one area of assessment. Questions are categorized according to element groups. A total number of twenty element groups have been identified.

Question Bank

As part of the submission of assessment, the following questions have been created theoretical (98 multiple choice questions) and practical (10 role play scenarios).

Occupational standard-wise break up of theoretical and practical questions is provided below:

Occupational Standard	Number of Element Groups	No of Theoretical Questions	No of Practical Questions
1.Conduct Pre-design activities	2	10	
2.Ability to design small PV system	3	15	2
3.Ability to design drawings	3	15	1
4.Ability to conduct construction and installation support	3	15	4
5.Ability to collect and evaluate project related information and data in order to generate different types of engineering reports	2	8	
6.Evaluating the quality of site work by applying quality assurance techniques and proposing any required changes	2	10	2
7.Confirm the adherence to health and safety requirements about good knowledge of Emergency preparedness and response requirements by all project team members and applicable health and safety regulations and standards including ADOSH-SF	2	10	1
8.Ability to prepare and obtain Distribution Company's approval for electrical wiring and installation drawings in accordance with the Electricity Wiring Regulations before the commencement of any Electrical Installation Work	2	10	
9.Ability to ensure the implementation of all Electrical Installation Work in accordance with the Electricity Wiring Regulations, and any specifications and requirements issued by the Distribution Company and endorsed or approved by the DOE	1	5	

For full details on Question Bank, kindly refer to Solar PV Integrator Question Bank Guide document.

Full details on related element group weightages are available in Annexure 2, Pages 5 to 8

Annexure 2

Occupation (Standard Unit)	Solar PV Integrator

Sr. No.	Occupational Standards (OS)	OS %	Element Group (EG)	No of Questions by EG	No of Practical Question	PC no	PC Details	No. of Theory Q's
1	Conduct Pre-design activities	10%	1	5		1.1	Analyze the customer needs and requirements	4
						1.2	Establish required alignment between proposed design and the local regulations (EWR) and engineering standards	1
			2	5		1.3	Provide advice and guidance to client	3
						1.4	Consult with client and project manager throughout design process to address issues, changes, and obtain approvals	2
				10				
2	Ability to design small PV system	15%	1	5	2	2.1	Estimate load: 1.Review previous Electrical consumption bills 2.Identify expected Electrical consumption 3.Consider future consumption as required 4.Assess quality of existing infrastructure	5
			2	4		2.2	Consider other aspects of installation: 1.Existing facility construction 2.Existing wiring 3.Proposed electrical installation methods 4.Any other source of integrated or stand-alone system(s)	4
			3	6		2.3	To be able to configure PV electrical components for grid-tie or stand-alone design	6
				15	2			

Sr. No.	Occupational Standards (OS)	OS %	Element Group (EG)	No of Questions by EG	No of Practical Question	PC no	PC Details	No. of Theory Q's
3	**Ability to design drawings**	15%	1	6	1	3.1	To be able to identify required equipment components.	3
						3.2	Determining installation steps, construction phases and required construction equipment and components	3
			2	7		3.3	Ensure drawings contain accurate measurements for: 1.Dimensions of required components 2.Dimensions of existing components, if applicable 3.Placement of components 4.Runs and placement of materials 5.Specifications (Type/size of component, type of material)	7
			3	2		3.4	Capable of using standardized architectural symbols and drawing views	2
				15	**1**			
4	**Ability to conduct construction and installation support**	15%	1	6	4	4.1	Review drawings and documentation: 1.Review manufacturer's installation/manual 2.Compare as-built drawings to original construction/installation drawings 3.Review requirements for installation	6
			2	4		4.2	Ability to determine design changes such as replacing equipment, relocating the installation location/position, changing the orientation of the equipment, adjusting with different equipment types/sizes	9
			3	5				
				15	4			
5	**Ability to collect and evaluate project related information and data in order to generate different types of engineering reports**	10%	1	4		5.1	Be able to collect progress information	4
			2	4		5.2	Prepare snags list and progress report as required	4
				8				

Sr. No.	Occupational Standards (OS)	OS %	Element Group (EG)	No of Questions by EG	No of Practical Question	PC no	PC Details	No. of Theory Q's
6	**Evaluating the quality of site work by applying quality assurance techniques and proposing any required changes**	10%	1	5	2	6.1	To be aware of basic quality requirements	5
			2	5		6.2	To apply quality assurance techniques	5
				10	**2**			
7	**Confirm the adherence to health and safety requirements about good knowledge of Emergency preparedness and response requirements by all project team members and applicable health and safety regulations and standards including ADOSH-SF**	10%	1	5	1	7.1	Applying health and safety regulations and standards including ADOSH-SF and Good knowledge of health and safety requirements.	5
			2	5		7.2	To make sure that the project team members are fulfilling the safety requirements	5
				10	**1**			

Sr. No.	Occupational Standards (OS)	OS %	Element Group (EG)	No of Questions by EG	No of Practical Question	PC no	PC Details	No. of Theory Q's
8	**Ability to prepare and obtain Distribution Company's approval for electrical wiring and installation drawings in accordance with the Electricity Wiring Regulations before the commencement of any Electrical Installation Work**	10%	1	4		8.1	Ability to prepare all the required documents to get approval from DISCO	4
			2	6		8.2	Ability to prepare the electrical drawings and getting the approval as per EWR	6
				10				
9	**Ability to ensure the implementation of all Electrical Installation Work in accordance with the Electricity Wiring Regulations, and any specifications and requirements issued by the Distribution Company and endorsed or approved by the DOE**	5%	1	2		9.1	Ability to execute all activities accordance to EWR	2
			2	3		9.2	Following and complying with all DISCO and DOE requirement and specifications	3
		100.00%		**5**			**Total Questions (Theory)**	**98**
							No. of OS	**9**
							No. of Pcs	**23**
							Roles Play scenarios/ Practical	**10**