NOCN GROUP

Empowering a Green Workforce

Tuesday 23rd September

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Website:
nocn.org.uk

Greening our environment









Challenges

INTERNATIONAL

Skills Shortages: ***e.g. 232 million construction workers – growing by up to 50% in 5 years – India 30m growth***

New Skills across the Board: ***Solar, Wind, Bio, Nuclear, EV, Transportation, Water etc.***

Lack of Quality Training and International Accreditation: ***affecting facilities, tutors, content***

UK

Similar problems ***– GSAP Initiative now moving international.***

What is GSAP and why is it required?

- A member led committee of building services, housing and construction businesses
- Supported by Government agencies, charities and training providers.
- Encourages, improves and develops sustainable training, development and education opportunities.
- A mission to close the skills gap and provide entry routes into green careers.
- An ambition to educate the current and future workforce in emerging technologies to meet net zero targets.

GREEN SKILLS ADVISORY PANEL

exeter college

International

Malawi	Live
Nepal	Live
Morocco	Ongoing conversations

GREEN SKILLS ADVISORY PANEL

Our key areas of work

- Solar
- Low Carbon Heating - Insulation
- Energy Efficiency and Sustainability
- Nuclear
- Wind
- Hydrogen
- Electric Vehicle Technology




Qualifications

Regulated Qualifications

- Solar
- Hydrogen
- Wind

Short Courses/Micro credentials

- Sustainability and energy efficiency
- Eco Operator

Skills Online (CPD)

- Understanding Protecting Your Home & Health
- Carbon Literacy: A Beginner's Guide to Climate Action
- Inspiring A Green Future: Integrating Sustainability in Education
- Inspiring A Green Future: Integrating Sustainability in Engineering

Our work in action: Gulf

Personnel and Materials: Green Innova Academy

Training: Al Mashreq/NVTC

Funding: Tamkeen

NOCN Level 3 Award for Solar PV Installer and Operator.

The qualification provides learners with an understanding of solar photovoltaic systems installation, commissioning, and operation and maintenance.

Interns will have the opportunity to get site experience and training at Green Innova under the guidance of qualified and experienced staff during this internship period.

Entry requirements

Selection Criteria

A pre-test will be conducted for the individuals who meet the above entry requirement and those who passed the pre-test will be invited for the training program.

Minimum Academic Qualification	***Study Area***	***Work Experience***
Engineering Graduates	Electrical, Mechanical, Civil, Electronic, Mechatronic, Renewable Energy	No Experience Required
Diploma Holders	Electrical, Mechanical, Civil, Electronic, Mechatronic, Renewable Energy	
Experienced Technicians		Minimum 4 years work experience

Theory

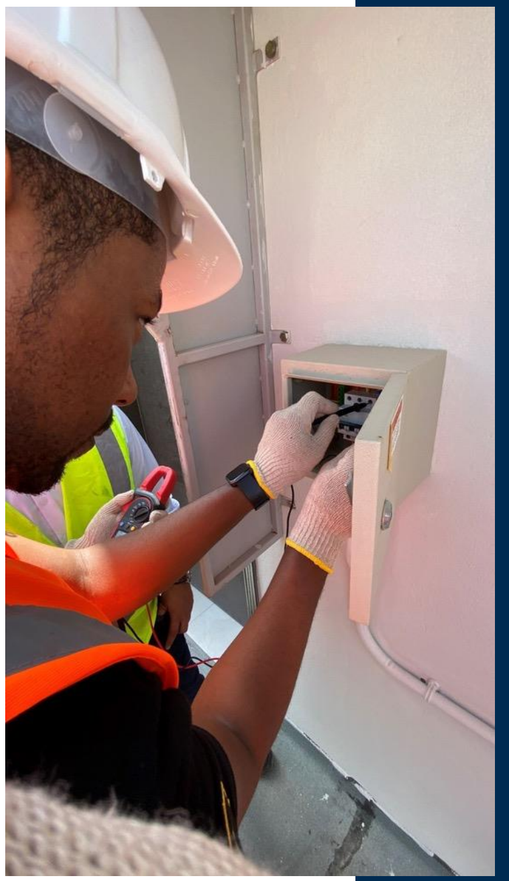
Installation	1.Understand the fundamental concepts relevant to solar PV systems 2.Understand the purpose of pre-installation site visits 3.Understand the installation of different components of a solar PV system
Commissioning	1.Understand the requirements and procedures of pre-commissioning testing 2.Understand the commissioning of solar PV system 3.Understand official handover of solar PV system
Operation and Maintenance	1.Understand the importance and types of operation and maintenance (O&M) 2.Understand the requirements of reporting and documentation
EWA Regulations on Solar PV	1.Connection Guidelines for Distributed Renewable resources Generation Connected to the Distribution Network of Electricity & Water Authority (Net-Metering)

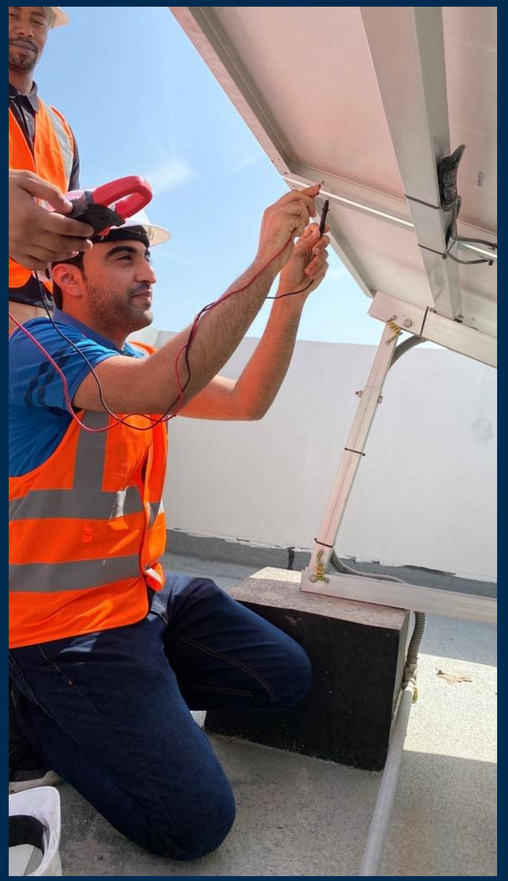
Site visits

- University of Technology Bahrain
- Module Technology - Mono Crystalline
- Inverter Technology – String Inverter and Integrated Weather Station
- Mounting Structure Type – Flat roof Concrete Block (Ballast Type to make minimal/no penetrations to roof slab
- Site – Eker Garden
- Module Technology – Frameless Solar Module
- Inverter Technology – String Inverter
- Mounting Structure Type – Solar Park Shed

Practical Steps

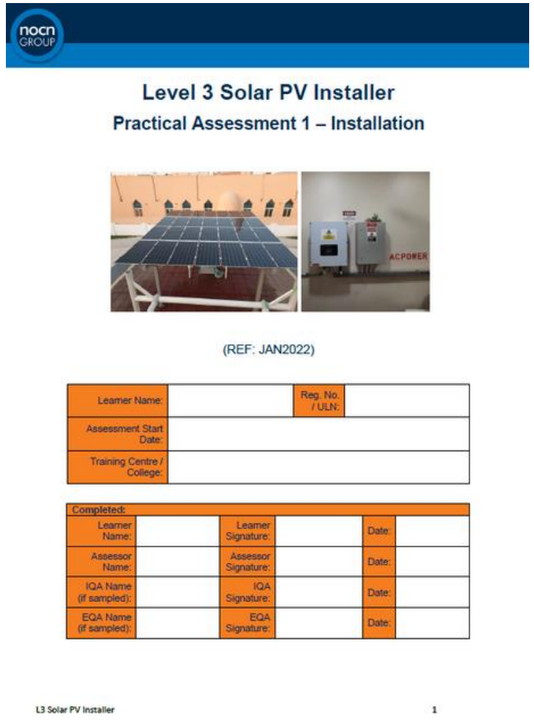
- Safety Toolbox Meeting and Activity Induction
- Perform practical installation of small-scale solar PV system
- Perform the commissioning tests on small-scale solar PV system
- Perform practical O&M of a small-scale solar PV system





Assessment

The qualification is assessed through 3 observed practical tasks



Level 3 Solar PV Installer

Practical Assessment 1 – Installation

(REF: JAN2022)

Learner Name:		Reg. No. / ULN:	
Assessment Start Date:			
Training Centre / College:			

Completed:					
Learner Name:		Learner Signature:		Date:	
Assessor Name:		Assessor Signature:		Date:	
IQA Name (if sampled):		IQA Signature:		Date:	
EQA Name (if sampled):		EQA Signature:		Date:	

L3 Solar PV Installer 1

End Test
Format– 26 MCQ
Duration – 40 Minutes

Level 3 Award for Solar PV Installer and Operator

Invigilator			
Learner Name	[redacted]		
Registration Number	[redacted]	**Unique Learner Number**	
Date of Test	31/05/2023	**Time of Test**	06:00
Allocated Template	36565	**Test Version**	1810
Time Allocated	40 minutes		

Instructions to learners: Please read the below carefully

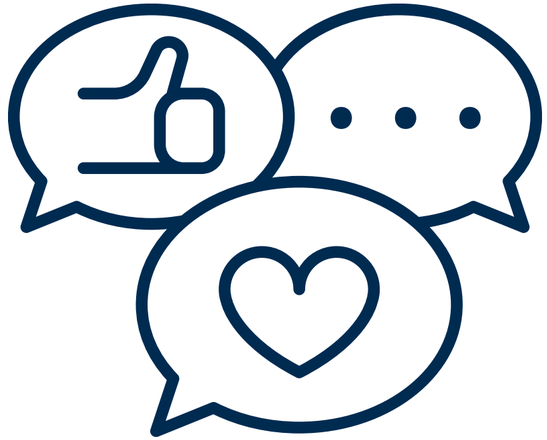
Do not turn this page until your invigilator instructs you to do so.

- There are **26** questions in this test.
- You have **40** minutes to complete this test.
- Please read the questions carefully.
- Each question has only ONE correct answer.
- You should attempt to answer all of the questions.
- Please mark your answer in blue or black ink.
- Mark your chosen answer by placing an X in the corresponding box.
- If you wish to change your answer, please circle the box you no longer want to be considered and place an X in the box of your new answer.
- You MUST NOT communicate in any way with other learners during the test.
- You must raise your hand to signal the attention of your Invigilator if needed.
- You MUST NOT leave your seat without the Invigilator's permission. If you leave the room unaccompanied, you will not be allowed to re-enter.
- You MUST NOT ask for explanation of the questions or answers. The Invigilator is not permitted to help you in any way in completing your test.

S No	Learner ID	Result
1	32186136	76.9 %
2	32186137	100.0 %
3	32186138	65.4 %
4	32186139	80.7 %
5	32186140	73.0 %
6	32186141	92.3 %
7	32186142	88.4 %
8	32186143	73.0%
9	32186144	88.4 %
10	32186145	76.9 %
11	32186146	96.1 %
12	32186147	100.0 %

Feedback

Feedback Summary	*Average*
Demonstrated knowledge of content	***95.0%***
Instructors interest in participant	***93.4%***
Preparation	***90.0%***
Method of teaching	***86.6%***
Response to question	***96.6%***
Content Was What I Expected	***83.4%***
Added Value To My Job/Career	***80.0%***
Content Was Well Organized	***90.0%***
Practical Session (if Applicable)	***90.0%***
Classroom Exercises / Activities	***85.0%***
Text Book/Handouts	***90.0%***
I Received equal treatment	***93.4%***



What did you like best about the course?

- The energy of the instructor
- Practical Time and schedule
- Trainer knowledge
- The practical element
- Site visits and practical assessments

Internship Day 1

Mondelēz International

Thank you.

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