

Saudi Electric Services Polytechnic (SESP)

Established in September 2012 as a leading center of vocational training in the Kingdom of Saudi Arabia in power utility industry technical education.

As an approved center by Accrediting Council for Continuing Education and Training (ACCET), SESP's ACCET-accreditation is based on bespoke course descriptions with competency-based learning outcomes. Also, ACCET accreditation is assurance that SESP programs meet the quality standards established by the profession.

SESP has a strategic collaboration with Maersk Training, part of the Danish conglomerate to deliver Global Wind Organization (GWO) training in KSA. The aim of the collaboration is to create a workforce that is not just KSA ready but can be part of the global workforce.

Vision:

To be a world-class Avocational training polytechnic which is flexible and responsive to the needs of the power utility and construction industries, and labor market.

Mission:

To safely, effectively and efficiently train and develop the best prepared manpower for local companies

Values:

Safety & Security:

We will work in a manner which is at all times safe for us and others and provide a secure environment across our institute.

Excellence:

We are committed to excellence in effectively and efficiently providing world-class education to secure employment opportunities for our trainees.

Sustainability:

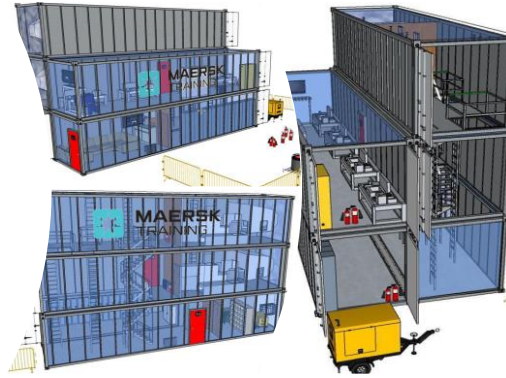
We are all responsible for developing a sustainable culture of trust, transparency and learning. We strive to protect our environment, respect nature and use technology to reduce our impact on the environment.

Professional Partnerships:

Our institution is driven by the needs of the Technical and Vocational Training Corporation, and local companies. We are dedicated to exceeding their expectations by utilizing unparalleled technology and equipment, sourced from select international suppliers, and integrating with the local community to ensure that our goals are aligned with the current and future needs of the Kingdom of Saudi Arabia

Facilities

SESP is fully equipped with state-of-the-art workshops and laboratories in the relevant fields of study and the first of GWO Approved Mobile Training facility in the Middle East.



Faculty

Multiple faculties work together at SESP to facilitate excellence in learning. All trainers on the English faculty are native speakers holding degrees and certifications granted by Western Universities and have a minimum of five years teaching experience. The Technical faculty is comprised of highly qualified and experienced experts in various fields of power utility industry. In relation to the RET program we have experts in the fields of:

- Renewable Energy Technology (RET)
- Global Wind Organization training (GWO)
- NABCEP (North American Board of Certified Energy Practitioners)
- Solar PV Designing and Installation

Renewable Energy Technology (RET-II) Curriculum

The expected RET program outcomes are that, upon completing all training courses including OJT, the trainee will be able to:

- Apply principles of mathematics and applied science, to perform technical calculations and solve technical problems of the types commonly encountered in operation and maintenance technology careers.
- Demonstrate an ability to communicate effectively and function efficiently with members of multi-disciplinary teams and with other workers in an industrial setting, including those from different backgrounds.
- Understand renewable energy sources and the benefit of this type of energy.
- Explain energy principles and how they relate to using renewable energy sources.
- Describe the technology of the sources and conversion of renewable energy.

- Explain environmental impact and safety of each source of renewable energy.
- Explain economic issues around renewable energy sources.
- Evaluate, compare and select energy systems based on economic and environmental considerations.
- Apply the fundamentals of solar system installation, operation, and inspection.
- Apply the fundamentals of wind turbine installation, operation and inspection

Global Wind Organization (GWO) Certification

- The Global Wind Organization (GWO) Training and Certification is designed to provide personnel with the basic skills that will enable them to work in a safe manner in the wind industry.
- SESP along with Maersk Training able to deliver training onsite via our state of the art, middle east's first mobile training facility. Our mobile training facility allows us to deliver all GWO courses, as well as many more non GWO courses and technical training as per the highest accreditation and approved technical standards.

GWO offered courses:

- GWO Working at Height:
- GWO Fire Awareness:
- GWO First Aid / Enhanced First Aid:
- GWO Manual Handling
- GWO Basic Technical Training (BTT)
- GWO Advanced Rescue and Confined Space

Certifying Body: Saudi Electric (SEC) - Solar PV Designer and Installer Certification

- SESP being authorized and licensed training provider by KACARE offering training for Solar PV Designer and Solar PV Installer.
- Based on this mandatory training, certification test will be held at Saudi Electric Company (SEC) in order to be Certified Designer or Installer

SESP-RET PROGRAM Admission Criteria

A-12 months Program

- Be a Saudi national or the mother should be a Saudi national.
- Be certified physically fit, following a medical test.
- Recent holder technical college diploma in electrical and mechanical discipline with a minimum GPA of equivalent to 70%
- Pass the English placement test with A2 and above.
- Not enrolled to college & unemployed and supported by HRDF before

ONE YEAR Program Study Plan

Trimester I

Course Code		TITLE	CTH
AVAET	211	Technical English I	10
G. Math	122	General Math-II	4
WT	111	Wind Energy Technology	5
WT	112	Introduction to working with Electrics & Electronics in the Wind Turbine Industry	6
RW	121	Report writing - I	4
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Trimester II

Course Code		TITLE	CTH
RW	132	Report writing - II	4
W. HSE	112	Health & Safety in Wind Turbine Industry	6
RET	121	Introduction to Renewable Energy: Solar, Wind, Hydro and Biomass	10
RET	125	Solar PV Systems Design	10
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Trimester III

Course Code		TITLE	CTH
WT	132	Global Wind Organization – Basic Safety Training (GWO BST)	6
WT	131	Global Wind Organization - Basic Technical Training (GWO BTT)	10
RET	136	Solar Thermal Applications	5
RET	137	Solar PV System Installation	10
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On the Job Training (OJT)

On the job training is used to enhance trainees' knowledge and skills and to gain practical experience. For OJT each trainee will have a learning plan, signed by the trainee, instructor, and OJT employer. This plan includes instructional objectives and a list of on-the-job and classroom learning experiences. The plan will identify the work location and equipment, skills, and tasks relevant to the trainee's discipline.

Trimester IV

Course Code		TITLE	CTH
RETOJT	311	Installation of Renewable Energy Systems	20
RETOJT	322	Troubleshooting and Repair of Renewable Energy Systems	20
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B- 6 months Program

- Be a Saudi national or the mother should be a Saudi national.
- Be certified physically fit, following a medical test.
- Recent holder Bachelor of Engineering or Bachelor of Engineering Technology in electrical or mechanical discipline with a minimum GPA of equivalent to 70%
- Pass the English placement test with A2 and above.
- Not previously supported by HRDF before: Applicable only for non- KACARE sponsored candidates.

6 Month Program Study Plan

Trimester I

Course Code		TITLE	CTH
WT	112	Introduction to working with electrics & electronics in Wind Turbine Industry	6
WT	111	Wind Energy Technology	5
RET	121	Introduction to Renewable Energy: Solar, Wind, Hydro and Biomass	10
RET	125	Solar PV Systems Design	10
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Trimester II

Course Code		TITLE	CTH
WT	132	Global Wind Organization – Basic Safety Training (GWO BST)	6
W. HSE	112	Health & Safety in Wind Turbine Industry	6
WT	131	Global Wind Organization - Basic Technical Training (GWO BTT)	10
RET	137	Solar PV System Installation	10
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TWO YEARS Program Study Plan :

First year will be general courses and second year will follow the 12 months program cycle and courses.

Conclusion

With more than 250 trainees and 26 faculty members and 15 courses, the SESP-RET program is growing to its glory, fulfilling its commitment to the community, power utility industry and local companies. This would not have been possible without the financial support of K.A.CARE and vision of a dedicated management and the staff of SESP, TVTC and NIDL P.

Kingdom of Saudi Arabia



Renewable Energy Technology (RET-II)

Associate Diploma in Operational and Maintenance Engineering



Accredited by



Collaboration partner on Wind Renewables



Accrediting Council for Continuing Education and Training

2022- 2023

Baish Training Center – Jazan
Riyadh Training Center – Riyadh
Juaymah Training Center – Eastern Province

Collaboration Strategic Partners

