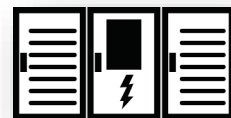


# 10<sup>th</sup> ANNIVERSARY

الذكرى العاشرة لتأسيس منصة SELFLEARN

Battery Energy Storage System

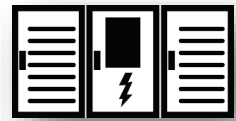
Online Course Brochure



## Index

<b>Course Title:</b> .....	2
<b>Learning Method:</b> .....	2
<b>Duration:</b> .....	2
<b>Overview:</b> .....	2
<b>Who Should Attend?</b> .....	2
<b>At Course Completion:</b> .....	2
<b>Instructor Bio:</b> .....	3
<b>Course Outline:</b> .....	4
<b>Fee &amp; Payment:</b> .....	4



**Course Title:****Battery Energy Storage System****Learning Method:**

Instructor-led Online Classroom Learning by Zoom

**Duration:**

5 Days (10 Hours)

**Overview:**

The Battery Energy Storage System (BESS) course is designed to provide a comprehensive understanding of BESS and its critical role in the renewable energy ecosystem. As the world moves toward a cleaner energy future, energy storage technologies like BESS are becoming essential for enhancing grid stability, integrating renewable energy sources, and meeting energy demands sustainably.

This five-day course covers a range of topics, including an introduction to BESS, its importance in renewable energy, different technologies and types, structural and component details, Battery Management Systems (BMS), and the standards, guidelines, and technical requirements for ensuring safe and efficient operation. Participants will gain in-depth knowledge about design, installation, and performance standards critical for BESS deployment and operation.

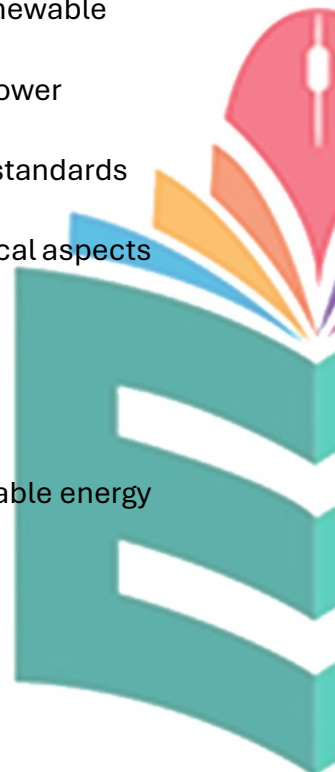
**Who Should Attend?**

- Renewable energy professionals seeking to deepen their knowledge of energy storage systems.
- Electrical engineers, project managers, and technical staff involved in renewable energy or energy storage projects.
- Utility and grid operators who wish to understand BESS integration into power systems.
- Policymakers and regulatory professionals looking to develop or update standards and guidelines for BESS.
- Entrepreneurs, investors, or anyone interested in the business and technical aspects of battery energy storage.

**At Course Completion:**

Upon successful completion of this course, students will be able to:

- ✓ Understand the fundamental principles of BESS and its role in the renewable energy landscape.



- ✓ Differentiate between various types of BESS technologies and their applications.
- ✓ Gain insights into the components, structure, and functionality of BESS, including Battery Management Systems (BMS).
- ✓ Learn about key safety, design, installation, and performance standards required for BESS deployment.
- ✓ Apply knowledge to design and implement energy storage systems effectively, ensuring compliance with technical and safety guidelines.
- ✓ Be equipped with actionable knowledge to address challenges in integrating BESS into renewable energy projects and the grid.
- ✓ Completion Certificate 10 hours

### Instructor Bio:

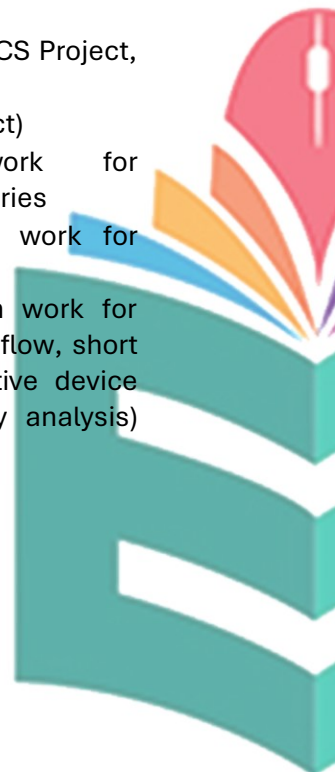


**Eng. Mohamed Ibrahim,,**

**Renwauble Energy Expert, +25 Years Experinace**

Some of the Renewable Energy projects

- Led the establishment of the renewable energy department
- Conducted feasibility studies for solar power systems and microgrids using PVSYST
- Designed and engineered PV solar systems for various applications
- Managed tendering for EPC contractor selection
- Supervised EPC contractors from engineering to project handover
- Get 98% ranking on the consultancy technical proposal for solar PV project (Engineering and construction supervision)
- Project Manager of 600 KWp solar PV project, Ministry of Energy and Mining
- Project Manager of Hirgigo Power Plant                      DCS Project, Asmara, Eritrea
- Project Manager of Nile Club Project (Mega project)
- Managed and reviewed design work for electrical/instrumentation systems in sugar factories
- Provide coaching, guidance and supervision work for Elect/Instrumentation project engineers team
- Conducted power system analysis simulation work for Kenana Sugar project co-generation plant (load flow, short circuit, motor starting & acceleration, protective device coordination, harmonic and transient stability analysis) study using ETAP software



### Course Outline:

No	Lecture Topic
First	<ul style="list-style-type: none"> <li>• Introduction to BESS</li> <li>• The role and importance of BESS for Renewable Energy future</li> </ul>
Second	<ul style="list-style-type: none"> <li>• BESS types and technology</li> <li>• Comparison of different types of BESS</li> </ul>
Third	<ul style="list-style-type: none"> <li>• Component and structural of BESS</li> <li>• Battery Management System (BMS)</li> </ul>
Fourth & Fifth	<ul style="list-style-type: none"> <li>• Standards and technical requirements for BESS</li> <li>• Safety Standard of BESS</li> <li>• Design and operation guidelines of BESS</li> <li>• Installation requirements of BESS</li> </ul>

### Fee & Payment:

Please visit the link below for more details:

<https://www.selfelearn.com/batteryform/>

Or feel free to contact us by WhatsApp:

<https://wa.me/+249123009776>

#AcquireNewHorizons

