

Organised By:  
Urban Engineering Development  
Special Interest Group (UEDSIG), IEM

# *Virtual One Day Crash Course on* **“BESS from Technical & Financial Perspective”**

## **SPEAKER**

**Ir. NOOR IZIDDIN ABDULLAH  
BIN GHAZALI**

**Date: 28 November 2026, Saturday**  
**Time: 09.00 am – 5.30pm**  
**Venue: Zoom Platform**

**BEM APPROVED CPD: 7 HOURS**  
**REF NO.: IEM26/HQ/398/C(w)**

**Closing Date: 20 November 2026**



### REGISTRATION FEE'S (subject to 8% SST)

|                                    | <b>ONLINE (NON HRDF Claimable)</b><br>(Log-in for registration & payment:<br><a href="http://www.myiem.org.my/member/login.aspx">www.myiem.org.my/member/login.aspx</a> ) | <b>NORMAL FEE (HRDF Claimable)</b><br>(By Email : Payment by cash, credit card,<br>bank-in, Quotation & Invoice) |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| IEM Student Members                | 75.00                                                                                                                                                                     | 90.00                                                                                                            |
| IEM Graduate Members               | 125.00                                                                                                                                                                    | 150.00                                                                                                           |
| IEM Corporate Members              | 200.00                                                                                                                                                                    | 225.00                                                                                                           |
| Non-IEM Members (Non of the Above) | 480.00                                                                                                                                                                    | 540.00                                                                                                           |

# SYNOPSIS

Battery Energy Storage Systems (BESS) are rapidly transforming how utilities manage grid flexibility, renewable energy integration, and peak demand. This half-day virtual course offers a structured and practical introduction to utility-scale BESS technologies, system design, grid applications, and financial considerations. Participants will gain insights into how large-scale storage supports energy transition goals, enhances grid resilience, and addresses intermittency issues associated with solar and wind power. The course connects technical design and sizing principles with regulatory frameworks, project development lifecycles, and evolving business models such as capacity payments and ancillary services markets. Designed for engineers, developers, policymakers, and sustainability professionals, this course provides a clear roadmap to understanding and implementing utility-scale BESS in real-world contexts—particularly in Malaysia and the ASEAN region.

## Learning Outcome:

- Understand BESS technology types, functions, and system configurations. Identify grid applications such as frequency regulation, peak shaving, and renewable smoothing.
- Analyse key design parameters: power rating (MW), energy capacity (MWh), duration, and cycle life.
- Interpret technical and financial feasibility considerations for utility-scale deployment.
- Align BESS implementation with national grid strategies and clean energy goals

# PROGRAMME

| TIME          | DESCRIPTION                                                      |
|---------------|------------------------------------------------------------------|
| 09:00 – 09:20 | Session 1: BESS Technology Fundamentals & System Architecture    |
| 09:20 – 10:20 | Session 2: Grid Applications of BESS                             |
| 10:20 – 10:30 | Break                                                            |
| 10:30 – 11:30 | Session 3: BESS Design Considerations & Financial Feasibilit     |
| 11:30 – 1:00  | Session 4: National and ASEAN Perspectives on Utility-Scale BESS |
| 1:00 - 2:00   | Lunch Time                                                       |

This intensive half-day course provides a focused exploration of the financial and policy dimensions of Battery Energy Storage Systems (BESS). It is designed to equip participants with the ability to model project economics, assess financial viability, and evaluate policy and risk factors affecting bankability in Malaysia and ASEAN. Learning Outcomes Participants will be able to: Build and interpret a basic BESS financial model in Excel Estimate key financial indicators (IRR, NPV, payback, LCOS) Understand Malaysian/ASEAN policy frameworks affecting bankability Identify and mitigate technical and financial risks Course Deliverables Editable Excel financial model template PDF slide deck with policy references and formulas Risk matrix sample for bankability assessment

| TIME        | DESCRIPTION                                                      |
|-------------|------------------------------------------------------------------|
| 2:00 - 3:00 | Module 1: BESS Economics in Energy Transitio                     |
| 3:00 - 4:00 | Module 2: Financial Modelling Fundamentals for BESS              |
| 4:00 - 4:10 | Break                                                            |
| 4:10 - 4:30 | Module 3: Policy, Risk & Bankability Frameworks                  |
| 4:30 - 5:00 | Session 4: National and ASEAN Perspectives on Utility-Scale BESS |
| 5:00 - 5:30 | Interactive Case Study & Wrap-Up                                 |



# **SPEAKER'S DETAILS**

Ir. Noor Iziddin Abdullah Bin Ghazali has more than 20 years of technical and leadership roles in the following industries: semiconductor, property, data center & telecom. He previously led sustainability energy programs at 22 government hospitals. Initially in a semiconductor with Spansion then MIMOS. Subsequently to data center development at Cyberjaya for Google, Deutsche Bank, TM, NTT, Petronas, and BMW. Then attach to Mesiniaga as Project Manager for Cisco network implementations at Petronas.

Next with Putrajaya Holdings for the development of green buildings. After that as Electrical Manager at Sunway Property overseeing the M&E projects. Later with edotco (Axiata) as the Regional Head overseeing energy projects in Malaysia, Bangladesh, Sri Lanka, Myanmar, Pakistan & Cambodia using a remote energy monitoring system. Then as Program Manager 4G/LTE modernization with Huawei & Ericsson. Subsequently as the Dean, of Engineering Faculty at UNIMY before joining Medivest as the Head of the Sustainable Energy Program.

Before this managing a clean energy supply & demand (electricity, fuel & water) portfolio at Westports Holdings. Followed by setting up a solar energy & energy storage subsidiary at Worldwide Holdings Berhad. Recently as the Senior Energy Advisor at GIZ (German Development Corporation) for Kuala Lumpur City Council focus on Energy Efficiency (EE) and Renewable Energy (RE) project implementation at more than two dozen sites (planning & execution) to be benchmarked at two dozen megacities around the world in terms of climate change and sustainability including potential district cooling.

As the energy advisor and project management consultant in the clean energy sector, now as Head of Project Development & Management at North Consult Engineering leading a project management consultant for multiple type of large scale solar farm in Malaysia & ASEAN region.

Ir. Noor Iziddin Abdullah Bin Haji Ghazali carries out work related to low carbon activities in supporting UN SDG and ESG agenda based on Kuala Lumpur Climate Action Plan (KL CAP 2050) & Dasar Tenaga Negara (DTN) 2022-2040 besides Malaysia Renewable Energy Roadmap (MyRER) plus National Energy Transition Plan (NETR).

Chairman,  
organised BY:  
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## **REGISTRATION FORM**

**VIRTUAL ONE DAY CRASH COURSE ON  
“BESS FROM TECHNICAL & FINANCIAL PERSPECTIVE  
28 NOVEMBER 2026 **Closing Date: 20 NOVEMBER 2026****

| NAME                   | MEMBERSHIP NO. / GRADE | FEES (RM) |
|------------------------|------------------------|-----------|
|                        |                        |           |
|                        |                        |           |
| Sub Total:             |                        |           |
| SST Added 8% :         |                        |           |
| Total Amount Payable : |                        |           |

### **PAYMENT DETAILS :**

☐ Cash RM \_\_\_\_\_

☐ Cheque no. \_\_\_\_\_ for the amount of RM \_\_\_\_\_ (non-refundable) .

**FULL PAYMENT must be settled before commencement of the course**, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participant fails to attend the course, the fee is to be settled in full. If the participant failed to attend the course, the fee paid is non refundable. The Registration Fee includes lecture notes, refreshment and lunch.

For **ONLINE REGISTRATIONS**, please note that payment **MUST** be made **BEFORE the closing date**. If payment is not received within the stipulated time, the registration fee will be reverted to the normal registration fee.

Contact Person: \_\_\_\_\_ Designation: \_\_\_\_\_

Name of Organization: \_\_\_\_\_

Address : \_\_\_\_\_

Telephone No. : \_\_\_\_\_ (O) \_\_\_\_\_ (Fax No.)

\_\_\_\_\_ (H) \_\_\_\_\_ (HP)

Email : \_\_\_\_\_

\_\_\_\_\_  
Signature & Stamp

\_\_\_\_\_  
Date

**Photocopies are acceptable**