

ACCREDITED ENERGY MEASUREMENT & VERIFICATION PROFESSIONAL (AEMVP) TRAINING

Organised by :



Supported by :



Date : 02 - 04 April 2019

Venue : PKNS BizPoint, Seksyen 7, Shah Alam, Selangor

* **12 CPD Points**

Fees :

- **RM 3500.00 / person (Public / Non members)**
- **RM 3200.00 / person (MAESCO members)**



Trainer's Profile



Dr. Hassan Bathish is a Chartered Engineer (Institution of Engineers, Australia) and hold an MBA (Technology Management), a Ph.D in Power System Engineering, a M.Sc. in Electrical Drives and Automation of Industrial Plants, and a Certified Measurement & Verification Profession by EVO (USA) with more than 40 years of professional experience. Dr Hassan is a leading energy management trainer with world class expertise in, energy efficiency, monitoring & verification, least cost renewable power generation and Smart Grid applications from feasibility studies to design, installation and commissioning.

Participant Eligibility

Each candidate for AEMVP certification must attend the 2.5 days training of Energy Measurement & Verification training prior to sitting for the AEMVP exam. Each candidate for AEMVP certification must pass the 3-hour written open-book exam as well as meet one of the following criteria:

- 4-year degree from an accredited university or college in science, engineering, architecture, business, law, finance or related field, **AND** 3 years of experience in energy or building or facility management, or energy measurement and verification; **OR**
- Registered Professional Engineer or Professional Architect with **AND** 3 years of verified experience in energy or building or facility management, or energy measurement and verification; **OR**
- 4-year non-technical degree from an accredited college or university in a field not specified above **AND** 5 years of verified experience in energy or building or facility management, or energy measurement and verification; **OR**
- 2 year technical degree **AND** 5 years of verified experience in energy or building or facility management, or energy measurement and verification; **OR**
- 10 years of verified experience in energy or building or facility management, or energy measurement and verification; **OR**
- Current Status of Registered Electrical Energy Manager (REEM). Current Status of Registered Electrical Energy Manager (REEM).

Training Objectives

1. Raising the technical understanding of Energy Measurement & Verification (EM&V) fundamentals by specialist involved in EM&Vs;
2. Maintaining existing accreditation of existing **AEMVPs**;
3. Familiarizing with the status of International Measurement and Verification Standards, Guidelines and Protocols widely used globally;
4. Learning how to develop and implement an effective EM&V Plan;
5. Learning on how to decide on the acceptable level of metering accuracy to be used for EM&Vs;
6. Learning how to deal with metering errors, missing or corrupted metering data;
7. Learning how to model energy monitoring data using regression analysis and understanding statistical uncertainty and level of confidence and precision levels in estimating energy savings as per adopted EM&V Plan;
8. Learn how to verify the operations and savings Renewable Energy Systems; and
9. Learning how to adopt the most suitable Energy Measurement & Verification Option that fits your project;
10. Learn how to issue an effective reporting on estimated savings within the agreed precision range.

Course Outline

1. The Need for Energy Measurement & Verification Standards;
2. Overview of Global Energy M&V Standards, Protocols and Guidelines;
3. Energy Measurement and Verification Principles;
4. Energy Measurement and Verification Plan;
5. M&V Uncertainty and other Critical Issues;
6. Energy M&V Related Data Gathering and Analysis;
7. Adjustments of Energy Baseline;
8. Examples on Using Measurement & Verification Standards;
9. Verification of Renewable Energy System Operations and Savings; and
10. Workshop on How to Select the Energy M&V Option that Fits Your Project.

To Register :

<http://www.maesco.org.my>

MAESCO, 9, Jalan SS7/10, Kelana Jaya, 47301, Petaling Jaya, Selangor

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