



# SCEM Energy Measurement and Audit

**\*\* Supported by e2i \*\***

## Introduction

SCEM is a formal training and certification system that offers competent, relevant and holistic training for Energy managers in Singapore. It aims to build competent technical capacity in support of the energy service sector.

Designed for engineering professionals who intend to build their careers as energy managers, the programme gives a thorough understanding of the key energy issues in the industry sector. It will help participants develop the technical skills and competence needed to manage energy services in the organization they serve.

## Objectives

- Lead detailed energy audit, perform energy performance diagnosis and analysis, prepare and provide sound recommendation and report

## Course Outline

- Introduction and definition of different Energy Audit Level
- Scope of Works of the Three (3) Audit Levels
- Energy Measurement and Verification (M&V)
- Instrumentation and Measurement Accuracy
- Audit Reporting
- Workplace Occupational Safety and Health

## Details

**Date** : 11, 12, 13 Oct 2021 (Mon – Wed)

**Time** : 9am – 6pm

**Duration:** Consecutive 3 Days per module

**Venue:** IES Academy@Jurong East

**CPD** : PDU (TBC)

**Fee (include GST):** \$1,070.00

Certificate of Attendance will be awarded to paid participants who have completed the course survey and assessment.

## Target Audience

Engineering professionals who intend to build their careers as energy managers

## **IES Academy@Jurong East**

80 Jurong East Street 21, #04-10

Devan Nair Institute for Employment and Employability, Singapore 609607

Contact Person: Jessie Tan

DID: 6461 1250 | Main Line: 6463 9211

E-mail: [jessie.tan@iesnet.org.sg](mailto:jessie.tan@iesnet.org.sg)



## Trainers' Profile

- 1. Mr Steven Kang** is the Business Development Director for Measurement & Verification Pte Ltd. A graduate of the National University of Singapore with an honors degree in mechanical engineering, Steven also holds a Graduate Diploma in Marketing from the Marketing Institute of Singapore. Additionally, Steven is also qualified as: Certified Green Mark Professional, BCA Registered Energy Auditor, Singapore Certified Energy Manager, US Certified Energy Manager (US AEE), LEED Accredited Professional (USGBC) & Six Sigma Black Belt (American Standard). Steven travels extensively throughout Asia to help design and implement high efficiency HVAC systems. He conducts in-depth trainings on HVAC design and optimization to ESCOs, consultants, and building owners throughout Asia. He is also a designated Energy Model Assessor for Green Mark certification and a trainer for both the Singapore's Green Mark and Singapore's Certified Energy Manager courses. Appointed as Ambassador for the Singapore's Building Construction Authority, he also sits on the committee for Singapore Energy Auditor Certification, Singapore Standard on Chiller Plant Measurement and Verification (SS591), Singapore Standard on Air-conditioning and Mechanical Ventilation in Buildings (SS553) and was in the technical review committee of Vietnam Green Building Council's Sustainable Building Assessment System.



## **THE SINGAPORE CERTIFIED ENERGY MANAGER (SCEM) TRAINING PROGRAMME**

Candidates are required to take **4 core** and **2 elective** modules and take the individual exams within 36 months. Candidates are required to pass all examinations for all modules in order to apply for the SCEM certification.

SCEM Energy Measurement and Audit is one of the core modules mention below:

### **Core Modules**

- Motor Driven Systems (MDS)
- Air-Conditioning and Mechanical Ventilation Systems (ACMV)
- Energy Measurement and Audit (EMA)
- Energy Management and Economics (EME)

### **Electives**

- Steam and Compressed Air Systems (SCAS)
- Combined Heat and Power Systems (CHP)
- Building Envelope and Lighting Systems (BELS)
- Integrative Design for Energy Efficiency (IDEE)
- Energy Recovery and Reuse (ERR)

\*Candidate who has completed the Green Mark Manager course offered by BCA Academy may be exempted from taking 1 elective module.

To register for the SCEM full programme (Professional Level - 4 Cores & 2 Electives) and application for e2i funding, please e-mail [jessie.tan@iesnet.org.sg](mailto:jessie.tan@iesnet.org.sg) for more details.

If you just want to register for this EMA module, please fill up the registration form below.

# REGISTRATION FORM



## SCEM Energy Measurement and Audit

\*\* Supported by e2i \*\*

Date of Course:	11, 12, 13 October 2021 Monday – Wednesday
Course Time:	9.00am to 6.00pm (Consecutive 3 Days per module)
Venue:	IESA Academy@Jurong East
Course Fee:	\$1,070.00 (Inclusive of GST)
CPD Programme:	PDU - (To be confirmed)
Course Coordinator:	Jessie Tan Tel: 6461 1250 Email: jessie.tan@iesnet.org.sg
Closing Date:	First come first serve or when class is full

### Participant's Details:

Name (As per NRIC):	Mr/Ms/Mrs/Dr		
NRIC/FIN:		Designation:	
Gender:	Male / Female	Nationality:	Singaporean / Permanent Resident /Others:
Company Name:			
Address:			
		Postal Code:	
Office No:		Mobile:	
		PE / SCEM No:	
Email:		Qualification:	

### Contact Person (HR/Accounts Department)

Name:			
Contact No:		Designation:	
Email:			
Address (For mailing of invoice):			
Payment:	Nets/Cheque No:	Amount:	

- Cheque to be made payable to **IES ACADEMY PTE LTD**
- Written notice via email to course coordinator is required for Cancellation or Withdrawal from Course, 7 working days prior to course date
- Course fees are inclusive of 7% GST, course materials and Halal refreshments
- Certificate of Attendance will be issued to paid participants with 100% Attendance
- No-Show of participant would not be accepted as reason for withdrawal or cancellation from course. Thus course fee is chargeable

### Acceptance of Terms & Conditions for Registration of IES Academy Courses / Events

I have read, deemed understood and accept the Terms & Conditions of IES Academy courses and events.

Name:

Signature:

Date:



## **TERMS & CONDITIONS FOR COURSE REGISTRATION**

### **Registration**

Any registration, whether online, fax or by email, will be based on a ***first-come-first-served basis*** and will only be confirmed upon receipt of full payment by IES Academy Pte Ltd unless otherwise invoice to company.

All registrations must be submitted with duly completed registration form.

### **Closing Date & Payment**

The closing date of the event will be 1 week prior to event commencement date. Cheques should be crossed 'A/C payee only' and made payable to **'IES ACADEMY PTE LTD'**, with the ***Date of event, Title of The Event and participants' name indicated clearly on the back of the cheque***, and post to:

**Attn: Jessie Tan**  
**IES Academy@Jurong East**  
80 Jurong East Street 21 #04-10  
Devan Nair Institute for Employment & Employability  
Singapore 609607

### **Confirmation of Registration**

Confirmation of registration will be given at least one week before the commencement date of event via email. ***If you do not receive the said confirmation email, you are required to contact IES Academy at 6463 9211 during office hours.***

IESA reserves the right to allow only confirmed and paid registrants to attend the Event.

### **Withdrawals/Refunds of Fees**

- Written notice **at least 1 week in advance** before the commencement of the event
- Full course fee shall be refunded subjected to 4.5% transaction charge
- **NO** refund otherwise.
- No-show of participant would not be accepted as a valid reason for withdrawal/refund.
- One time replacement is allowed only if written notice is received by us at least 1 week before the commencement of the event. However, when an IES member is replaced by a non-member, the participant has to pay the difference in the relevant fees.

### **Cancellation/Postponement**

Changes in Venue, Dates, Time and Speakers for the Events can occur due to unforeseen circumstances. IESA reserves the full rights to cancel or postpone the Event under such circumstances without prior reasons. Every effort, however, will be made to inform the participants or contact person of any cancellation or postponement.

Fees will be refunded in FULL if any Event is cancelled by IESA.

### **Personal Data Protection Act**

By registration, you consent to the processing by Institution of Engineers, Singapore of personal data, including your sensitive personal data as defined in the Data Protection Act 2014 for the proper purposes of Institution of Engineers, Singapore (IES). You undertake to observe the provisions of the Data Protection Act 2014 in relation to any personal data you may hold and process as a Members of Institution of Engineers, Singapore, and you agree to indemnify Institution of Engineers, Singapore from liability for any claims or damages that may arise from the processing of this data. For more information kindly refer to [here](#).

### **Enquiries**

For further enquiries, please contact IESA general office at Tel: 6463 9211.