

# Singapore Certified Energy Manager (SCEM) Associate and Professional Level



## Benefits of SCEM Programme

The SCEM programme is designed for engineering professionals who intend to build their career as energy managers. It gives a thorough understanding of the key energy issues either in the building or industry sector. The programme will help the participants to develop the technical skills and competencies needed to manage and tract energy usage within the organisations they serve:

### A SCEM is envisioned as:

A competent energy professional equipped and qualified to perform technical and managerial functions in the areas of

- Energy audits, management and measurements
- Energy retrofitting services
- Financial advisor for energy efficiency measures and contracting
- Consultation and procurement services
- Facility and energy management
- Energy engineering works

## SCEM Training Levels

There are 2 certifiable training levels for SCEM, namely **Associate** and **Professional** Levels. Both levels are defined for the **Industry and Building sectors**. Each individual needs to undertake 4 core modules and 2 elective modules, pass the respective examinations and acquire relevant working experience to qualify for the SCEM certification.

**Sustainable Energy Association of Singapore (SEAS) is a registered training provider for SCEM Professional for both Industry and Building sectors.**

**SCEM Professional Level** training focuses on the theory and practice of energy management, energy efficiency and analysis, procurement, finance and economics. The training aims to develop competency in energy audit works, energy performance and contracting and project management, energy efficiency analysis, energy economics and financial assessment. Participants will eventually identify saving potentials and make sound recommendations and proposals

### Training Course Contents

The SCEM curriculum comprises both compulsory and elective modules. Each individual needs to undertake 4 compulsory and 2 elective\* modules. At the end of each module, the individual has to take the respective examination.

The training modules are as follow:

#### Core Modules:

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

#### \*Elective Modules:

- Combined Heat and Power Systems (CHPS)
- Steam and Compressed Air Systems (SCAS)
- Lighting Systems and Building Envelopes (LSBE)
- Energy Recovery and Reuse (ERR)
- Integrative Design for Energy Efficiency (IDEE)



Sustainable Energy Association of Singapore (SEAS)

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**SCEM Professional Level Training Grant Eligibility:**

The SCEM Training Grant is co-funding scheme administered by E2I to develop local expertise and capability in professional energy management. The scheme is targeted at engineers/managers who manage manufacturing facilities and buildings and provide energy services or engineering consulting services.

Candidates who sign up for the full SCEM programme at Professional Level are eligible for the Training Grant.

Candidates must be:

- a Singaporean or Singapore Permanent Resident
- have a relevant degree in Engineering
- have at least 1 year relevant engineering experience after graduation
- be under employment
- meet at least 80% attendance for each module
- complete post module survey
- passed the modules

**Course Fees: S\$6,398.60 (Module Fee + Exam Fee with 7% GST) – Mode of Payment: Cheque, NETS or Telegraphic Transfer**

The training grant funds up to 70% of the SCEM training cost (inclusive of one round of exam fees). Each module, except for the EMA which costs S\$1,080 before GST, costs S\$980 before GST. Candidates will need to pay the module and exam fees upfront and will only be entitled to the training grant upon passing of exam.

**SCEM Associate Level** focuses on skill training and practical development in energy auditing works, installations, measurements and instrumentations. Each individual needs to undertake 6 modules.

At the end of the programme, students will be able to:

- Assist in conducting energy audit measurements and data logging
- Undertake basic efficiency evaluation of energy and utility systems
- Compare energy norms with existing energy consumption levels
- Collect and analyse measured data
- Assist in the preparation of measurements, monitoring and verification report
- Workplace safety and health management

**Training Course Modules Conducted by SEAS:**

- Apply Management and Economics in Energy Management
- Assess Air-Conditioning and Mechanical Ventilation Systems
- Conduct Preliminary Energy Assessment of Building Facilities

**Training Course Modules Conducted by Singapore Polytechnic**

- Assess Building Automation Systems in Intelligent Building
- Optimise Efficiency of Motor Driven Systems
- Assess Building Envelope for Thermal Efficiency

**For enquiries on modules conducted by Singapore Polytechnic, please email [pace@sp.edu.sg](mailto:pace@sp.edu.sg)**

**Pre-Requisite Criteria for SCEM Associate Level**

- An engineering or technical certificate or its equivalent with at least 3 years of relevant working experience, or
- A polytechnic diploma from the local polytechnics, or its equivalent, or
- A specialist diploma in relevant disciplines

**Module Fee and Subsidy**

Module Fee: S\$1,200/module

WDA Funding\*: S\$390

Additional WDA Funding available for SME sponsored trainees\*: S\$390

(\*All prices subject to 7% GST)

**SCEM Professional Level Training Grant Eligibility:**

SCEM Associate is supported by Singapore Workforce Development Agency.

**Eligibility for WDA Funding**

- Singaporean/PR
- Achieve at least 75% of attendance
- Complete and pass all required assessments
- To retain in current job for at least 3 months after completing of training
- Complete all surveys

Applicant companies can apply for the funding in the SkillsConnect system. For more information, please call 6883 5885 or email [wda\\_sdf@wda.gov.sg](mailto:wda_sdf@wda.gov.sg)