9am - 6pm www.seas.org.sg 28 Feb - 2 Mar 2018



Singapore Certified Energy Manager Professional Course: Elective

Course Summary

The continued guest for higher thermal efficiencies has resulted in innovative modifications to conventional power plants. These used to function on either a pure gas or vapour power cycle and individually produced power. The large quantity of heat generated is dumped into the atmosphere or large water bodies which act as heat sinks.

In Singapore, more than 80% of the power generated is from natural gas-fired combined cycle power plants due to their proven superior thermal efficiency and relatively cleaner fuel.

This module is tailored in the backdrop of the above and aims to provide comprehensive fundamentals of Combined Heat and Power Plants targeted at industrial professionals operating under Singapore regulatory requirements.

Learning Outcomes

Understand the fundamental thermodynamic concepts behind CHP systems:

- Analyze energy performance characteristics of CHP systems
- Identify and analyze energy savings opportunities and operate the system in an energy efficient manner
- Select and size CHP systems for an industrial set-up with different heat and power requirements
- Conduct feasibility and cost benefit analysis for a CHP proposal

24 SCEM PDU Points Awarded



28 Feb - 2 Mar 2018

9am - 6pm

Singapore Sustainability Academy 180 Kitchener Road Level 6 Sky Park, #06-10 City Square Mall Singapore 208539



Combined Heat & Power

Singapore Certified Energy Manager Professional Course: Elective

Program Outline

- CHP Basics
- Thermal Concepts of CHP
- •Gas Power Cycle (Brayton Cycle)
- Vapour Power Cycles
- Power Equipment and Systems
- Cogeneration systems
- The Feasibility Study and Regulatory Issues
- Industrial Site Visit (Trigeneration Plant)

<u>Rates</u>

Before Funding: \$963.00 After Funding: \$577.80

Fees are inclusive of GST

E2I funding is available to all Singaporean and PRs.

Interested participants are to register for full qualification of 4 cores & 2 electives to be eligible for funding

Optional Examination fees at \$85.60

SEAS may cancel or reschedule a course at its discretion and will use reasonable efforts to notify delegates at least 5 working days in advance. In these circumstances, delegates will be offered an alternative date, an alternative location or a full refund of course fees paid. SEAS is not responsible for airline or accommodation costs incurred by delegate in the event a course is cancelled or re-scheduled.

Substitutions (name changes) are accepted at any time prior to the event without penalty, subject to the replacement delegate satisfying any necessary course pre-requisites.

Dr. Jahangeer K. Abdul Halim



Speaker's Profile

Dr. Jahangeer K. Abdul Halim graduated with a Master of Science (M.Sc.) in Mechanical Engineering from National University of Singapore in 1998. He was awarded a Research Scholarship by the National University of Singapore (NUS) in 1999 to undertake a research project on solar energy and was awarded a Master of Engineering (M.Eng.) degree in 2002.

Call us at +65 6338 8578 to enquire Email: training@seas.org.sg

Registration Form Participant's Details	Yes! I would like to register for this programme
Name (Dr/Mr/Ms/Mrs) Hp NRIC	Designation Email
Participant's Details	
Name (Dr/Mr/Ms/Mrs)	Designation
Hp	Email
NRIC	
Billing Information	
Company Name	Contact Name
Company Address	Email
Tel	