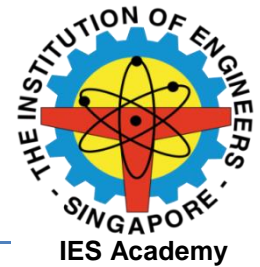


# IES Facility & Energy Management (IFEM) Course \*2021 Revised Edition\* (4th Run)

By Dr. Kang Kok Hin



## Introduction

This program focuses on the regulatory framework of FM service and the understanding energy standards, strategic and sustainable management of facilities, green technologies, integration of active and passive designs and sustainability in building maintainability management and co-operation between various disciplines in design, construction, project close out and whole life cost of FM and Integrative Strategic Asset Management (ISAM) to create awareness on and to provide practical approach as well as value added services to the understanding of Asset management perspectives from a holistic life cycle and predictive maintenance approach:

- Integrated design & compliance to Green Mark sustainability standards
- Cost Benefit Analysis (CBA) and value attainment of FM options, explore probable solutions in this new normal situation
- Documentation process as pathway for smooth certification & implementation.

## Objectives

- To understand Green Mark legislation criteria and framework
- To understand energy efficiency management, Technologies and practices in Property Asset/Facilities Management (AFM)
- To know green building technology and use of simulation tools to predict total building performance and enhanced green productivity
- To know building management, operation, maintenance and offering of an integrative building FM (IFM) services
- To apply Green and smart Building criteria in earlier life of project and compute assessment scores
- To facilitate a total integrated design, verify compliance to Green Mark & other High Performance Building standards
- To conduct cost-benefit analysis (CBA) of options, explore Innovative and creative solutions to enhance performance scores

## Programme Details:

**Date** : 12, 13 & 14 July 2021  
Monday - Wednesday

**Time** : 9am – 6pm

**Duration:** 3 Days

**Venue** : IES Academy @ Jurong East

**CPD** : PDU (PEB) / PDU (SCEM)

**Course Fee** : \$802.50 (IES Members)  
\$963.00 (Non Members)

*\*Inclusive of 7% GST and course materials*

*\* Certificate of completion will be issued to participants who **PASS the Assessment.***

### Prerequisites:

- Degree in engineering & 1-2 years working experience

### OR

- Diploma in engineering & 3-5 years working experience

### OR

- SCEM, GMFM, GMM & GMP

### **IES Academy@Jurong East**

80 Jurong East Street 21, #04-10  
Devan Nair Institute for Employment  
and Employability, Singapore 609607

Contact Person: Jessie Tan (Ms)  
Tel: 6461 1250 | Main Line: 6463 9211  
E-mail: [jessie.tan@iesnet.org.sg](mailto:jessie.tan@iesnet.org.sg)

- To coordinate the documentation process necessary for Data creation, analysis, smooth certification and implementation
- To understand the importance of IFM and Life Cycle Cost of the high performance building that will enable value creation to attain green productivity and digitalized platform for the new generation AFM (**Asset FM**)

## **Target Audience**

Architects, M&E/C&S Engineers, Practicing Facilities Managers, Plant Managers, Maintenance Personnel, Contractors, Property Developers, Project Managers and Procurement Specialist who wish to explore and introduce best practices in facilities management to improve productivity, effectiveness and efficiency.

## **Course Syllabus**

1. Strategic & Sustainable FM (D1)
2. Energy Management System (D1)
3. Operation & Maintenance Management (D1)
4. IAQ/IEQ & Environmental Sustainability (D1)
5. Smart Building & Technology Management (D1)
6. Green Building & Green Productivity (D2)
7. Risk Management & Business Continuity planning (D2)
8. Data Analytic, BIM application in FM (D2)
9. Design For Maintainability & Safety (D2)
10. Economic Analysis in Energy Efficiency Projects (D2)
11. Building Value in AFM Services
12. Building Services - C&S, M&E, Conservancy, Building Fabrics (D3)
13. Life Cycle Costing Management, LCCM (D3)
14. Total Building Performance & KPIs (D3)
15. The Future of FM (Day 3)

Question and answer will be conducted to help formulate an FM management plan augmented with sustainable standard operating procedures

***- 20x Quiz and 5 short Essay Questions with duration 1 hour for assessment***



## Trainer's Profile

**Dr. Kang Kok Hin**

***(Managing Director, MPF Consultants Pte Ltd)***

Dr. Kang earned his 1st class honors B. Eng (Mechanical Engineering) from Monash University of Australia (PSC scholarship). He also obtained his Master of Engineering degree and Doctor of Philosophy in Building Science from NUS.

Professionally Dr. Kang is a Chartered Engineer in Australia and UK, Professional Engineer in Singapore; Corporate members of IFMA (USA)/BIFM (UK) in Facilities and Project management. He is a corporate member of ASHRAE (USA); ASME (USA); Fellow of Institute of Plant Engineers UK and Fellow of Asian Concrete Institute of Singapore. He founded the Institution of Facilities Management (IFM), Singapore and is currently its Honorary President. He sits in the "Spring Singapore Technical Committee" for Building and Maintenance Services as Committee Member. He also assisted Singapore Test Services in the R&D of advanced project management training.

Dr. Kang is an Adjunct A/P, School of MAE Faculty, NTU; an concurrent Adjunct A/P of University Of Manchester UK for MSc (Project Management). He was also Adjunct A/P in 2010 – 2012 for the School of Facilities and Events Management/SUSS, and Chairman of the Program Advisory Committee (2010-2012).

He started as a design and maintenance engineer with Singapore Public Works Department where he garnered the expertise in building design, operation and sustainable facilities/Infra-structure management, strategic project management with his 30 over years of experiences in General and International business Management & international FM; in the capacities of General Manager of IT Park Bangalore India; and Director of Wuxi Industrial Park China etc.; plus General Manager of CDL's 100% owned subsidiary company CBM etc.

For industry participation, he lectures in Singapore Building Construction Authority (BCA) & BCA Academy on Green Mark FM certification, Construction Management productivity, Sustainable FM, Project Design/Planning/Control and FM Solutions. He also sits in the BCA Academy BIM-FM steering Committee.

He has had several academic exchanges of Asset and Energy management with several Chinese universities and Industrial Parks, Retail malls, office/commercial, Institutions and industrial buildings on the importance of becoming green via the integration of data analytic, integrated maintenance planning with Artificial Intelligence, innovative technologies such as BIM-FM, strategic and sustainable FM approaches. He has also been reaching out to Institution of Engineer Malaysia and IKRAM (Malaysia Public Works Department).

## REGISTRATION FORM

### IES Facility & Energy Management (IFEM) Course \*2021 Revised Edition\* (4th Run)

Date of Course:	12, 13 & 14 July 2021 (Monday - Wednesday)		
Course Time:	9:00am to 6:00pm (3 Days)		
Venue:	IES Academy@Jurong East 80 Jurong East Street 21 #04-10 Devan Nair Institute (e2i) S(609607)		
Course Fee:	\$802.50 (IES members); \$963.00 (Non-member)		
CPD Programme:	PDU (PEB) / PDU (SCEM) / PDU (CEng) (TBC)		
Course Coordinator:	Jessie Tan (Ms) Tel: 6461 1250 Email: jessie.tan@iesnet.org.sg		
Closing Date:	1 July 2021 or till class is full (whichever comes first)		
<b>Participant's Details:</b>			
Name (As per NRIC):		NRIC/FIN:	
Company Name:			
Address:			
		Postal Code:	
Office No:		Mobile:	
		Gender:	Male / Female
Email:		Designation:	
Please indicate: (where applicable)	<input type="checkbox"/> IES Member No:		<input type="checkbox"/> PE / SCEM No:
	<input type="checkbox"/> Non Members	<input type="checkbox"/> Company Sponsored	<input type="checkbox"/> Meal Request - Vegetarian
<b>Contact Person (HR/Accounts Department)</b>			
Name:			
Contact No:		Designation:	
Email:			
Address (For mailing of invoice):			
Payment Cheque No:		Amount:	
<ul style="list-style-type: none"><li>➤ Cheque to be made payable to <b>IES ACADEMY PTE LTD</b></li><li>➤ Written notice via email to course coordinator is required for Cancellation or Withdrawal from Course, 7 working days prior to course date</li><li>➤ Course fees are inclusive of 7% GST, course materials and Halal refreshments</li><li>➤ Certificate of Attendance will be issued to paid participants with 100% Attendance</li><li>➤ No-Show of participant would not be accepted as reason for withdrawal or cancellation from course. Thus course fee is chargeable</li></ul>			
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 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.