Chairman,
Electrical Engineering Technical Division,
The Institution of Engineers Malaysia,
Lots 60 & 62, Jalan 52/4, P.O. Box 223 (Jalan Sultan),
46720 Petaling Jaya, Selangor Darul Ehsan
Tel: 03-7968 4001/2 Fax to 03-7957 7678 (Email : sitiaisyah@iem.org.my)

REGISTRATION FORM

One Day Course on Automatic Transfer Switch to MS IEC 60947-6-1 and Selection, Design and Operation of ATS and Generator Controllers

(Closing Date: 20th August 2019)

No	Name(s)	M'ship No.	Grade	Fee (RM)*
			SST 6%	
			SUB TOTAL	
			Total Payable	

***Fees MUST be fully paid BEFORE the CLOSING DATE. Seats could only be confirmed upon payment.**
Enclosed herewith a crossed cheque No: _____for the sum of RM _____ issued in favour of "**The Institution of Engineers, Malaysia**" and crossed 'A/C payee only'. I/We understand that the fee is not refundable if I/We withdraw after my/our application is accepted by the Organising Committee as stated in the **cancellation term**. If I/We fail to attend the seminar, the paid registration fee will not be refunded.

Contact Person: _____ Designation: _____

Name of Organization: _____

Address: _____

_____

Telephone No.: _____ (O) _____ (Fax)

_____ (H) _____ (HP)

Email: _____

_____ _____
Signature & Stamp Date

Photocopies are acceptable

PERSONAL DATA PROTECTION ACT

I have read and understood the IEM's Personal Data Protection Notice published on IEM's website at http://www.myiem.org.my and I agree to IEM's use and processing of my personal data as set out in the said notice.

IEM
The Institution of Engineers, Malaysia

22nd August 2019

One Day Course on Automatic Transfer Switch to MS IEC 60947-6-1 and Selection, Design and Operation of ATS and Generator Controllers

ORGANISED BY
ELECTRICAL ENGINEERING TECHNICAL DIVISION, IEM
IN COOPERATION WITH
WISEPRO SDN BHD

Venue: Four Points by Sheraton, Puchong
Time: 8.30am – 5.30pm
Speaker: Mr. SF Ng and Mr. Ritesh Lutchman

BEM Approved CPD/ PDP hours :6.5 Ref. Np. : IEM19/HQ/329/C

REGISTRATION FEES (SUBJECT TO 6% SST)		
	ONLINE	**NORMAL (Offline)**
IEM Student Member	RM 50.00	RM 80.00
IEM Graduate Member	RM 100.00	RM 120.00
IEM Corporate Member	RM 150.00	RM 200.00
Non-IEM Member	RM 400.00	RM500.00

SYNOPSIS

The Automatic Transfer Switch (ATS) and Generator Controllers work in hand to provide continuity of essential electrical supply to an installation. The course seeks to provide an understanding on the selection of an ATS for an electrical system, and discusses the design of generator supply applications including the AMF and Autosync, ATS and Auto Changeover applications and remote monitoring of generator controller with cloud monitoring systems.

The first part of the course looks into the MS IEC 60947-6-1 for automatic transfer switching equipment (ATSE), covering the following:
1) MS IEC60947-6-1 for ATSE
a. Short circuit withstand of ATS
b. Category utilization - AC31/33 in "A" or "B"
c. Different Classes of ATS - CB, PC & CC

2) The functionality and application for different types of Automatic Transfer Switch. Types of Automatic Transfer Switches available for different applications such as :-
a. Standard Transfer : Open Type - Simple transfer system for small load
b. Closed Transition Transfer : Overlap Type - For continuity of power supply to load without interruption
c. Delay Transfer with “OFF” position : Open Type - The “OFF” position is important when transferring large motor load. This is to allow the magnetic field to “decay” before transfer to prevent back EMF generated by the motor which can trip the CB or blow the fuses.
d. High Speed Transfer less than 20 ms : Open Type - Introducing High speed transfer for loads such as electronic equipment without interruption. Comply to SEMI-F47, ITIC – Voltage / depth duration curve.

3) As required in MS IEC, together with the Smart ATS Controller, these Automatic Transfer Switches function well without much complications. The ATS Smart controller has functions for voltage, frequency and timer settings for various types for application. Engine start / stop and other functions are also available from these Smart Controllers.

4) A comparison against other types of change-over devices for use as ATS.

TENTATIVE PROGRAMME

Time	Description
8.00 am – 9.00	**Registration**
9.00 am – 10.30 am	Standards governing ATS and ATS Controllers Transfer Switch technologies and comparisons Redundancy, Resilience and Reliability of ATS Mechanical and Electrical Characteristics of ATS.
10.30am – 11.00am	**Morning Break**
11.00am – 12.30pm	• Utilization category (ATS sizing) • ATS Protection (Fault Free Zone) • ATS Controller characteristics • Various ATS tyes and description (Open Transition, Closed Transition, High Speed etc)
12.30pm – 1.30pm	**Lunch**
1.30pm – 3.00pm	• Smartgen Family of Products • Advantages of Micro Processor based controllers • Generator controllers • Generator Controller Applications
3.00pm – 3.30pm	**Tea Break**
3.30pm – 5.00pm	• ATS & Auto Change Over Controllers • Applications of ATS and Auto Changeover Controllers • Cloud Monitoring System for Generators
5.00pm – 5.30pm	Question and Answer
5.30pm	End of Course

The second part of the course evaluates the types of generator controllers and ATS systems and covers the discussions on the following:

1) Conventional ATS and Generator controllers with hard wiring, relays and timer control systems
2) Advantages of microprocessor based controllers
3) Generator systems and the design of its control systems
a. AMF, Peak Load Shaving, Auto Synchroniser, Bus Tie etc
4) ATS & Auto Changeover systems
a. Advantages of microprocessor based ATS & Auto Changeover systems.
b. Automated control system for two ACB (Open Transition/Close Transition)
c. Automated control system for two incomer and Bus Tie system
d. Automated control system for two incomers, bus tie and generator systems.
5) Remote monitoring of generators
a. Internet of Things. IOT application.
b. Ability to locate, control and observe generator operation remotely.

SPEAKERS' PROFILE

Mr SF Ng is currently the sales and marketing engineer at Wisepro Sdn Bhd. He has been working in the industry for the past 10 years and has gathered great experience in the design, installation, troubleshooting and site works for the industries mentioned above. He has also received extensive training on the Lightning Protection at Dehn headquarters in Germany, power factor capacitors, reactors and harmonics at Shizuki headquarters in Japan and ATS applications and troubleshooting at Vitzrotech headquarters in Korea. He graduated from the University of Hertfordshire with a Master's Degree in Automotive Engineering in 2007.

Mr Ritesh Lutchman is currently the Senior Sales and Marketing Manager at Wisepro Sdn Bhd. He has been working in the industry for the past 15 years and has gathered great experience in the design, installation, troubleshooting and site works for the industries mentioned above. He has also received extensive training on the Lightning Protection at Dehn headquarters in Germany, power factor capacitors, reactors and harmonics at Shizuki headquarters in Japan and ATS applications and troubleshooting at Vitzrotech headquarters in Korea. He graduated from the University of Cape Town with a degree in Electrical Engineering in 2004 and Master's Degree in Electrical Engineering in 2006.

Terms & Conditions:

- For **ONLINE REGISTRATIONS, only ONLINE PAYMENT** is applicable [via RHB and Maybank2u –Personal Saving & Personal Current; Credit Card - Visa/Master].
- Payment via **CASH / CHEQUE / BANK-IN TRANSMISSION / BANK DRAFT / MONEY ORDER / POSTAL ORDER / LO / WALK -IN** will be considered as **NORMAL REGISTRATION.**
- **FULL PAYMENT** must be settled before commencement of the course, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participants fail to attend the course, the fee is to be settled in full.
- Fee paid is not refundable. Registration fee includes lecture notes, refreshment.
- The Organizing Committee reserves the right to cancel, alter, or change the program due to unforeseen circumstances. Every effort will be made to inform the registered participants of any changes. In view of the limited places available, intending participants are advised to send their registrations as early as possible so as to avoid disappointment.

CANCELLATION POLICY

IEM reserves the right to postpone, reschedule, allocate or cancel the course. Full refund if cancellation is received in writing more than 7 days before start date of the event. No cancellation will be accepted prior to the date of the event. However, replacement or substitute may be made at any time with prior notification and substitute will be charged according to membership status.