

A Comprehensive and Instructional Three-Days Training Course on SS638 - Modules 3,4,5,6,7



Introduction

In conjunction with the Publication and Launching of the new SS638(2018) – Requirements for Electrical Installations, IESA is now offering and providing a 5 days comprehensive instructional training course, split into 2 days and 3 days based on the new SS638(2018) requirements for Electrical Installations. For a start, only module 1 and 2 were offered and held on 16 & 17 March 2020. The new topics covered under Modules (3 to 7) are to be held on 08, 09 & 10 Sept 2020.

Objectives

This comprehensive 5 days instructional training course split into 2 days and 3 days based on the new issue of SS638(2018) – Requirements for Electrical Installations, is designed to help young and practicing electrical engineers who wants to have a clear understanding of SS638 requirements. The scope of the course generally follows that of SS638(2018), but it also contains materials not included in the new issue of SS638(2018) that are necessary to explain, expand upon and simplify the essential parts of the regulations, ensure high quality guidance that is simple, easy to follow and understanding of specific key topics.

Target audience

This course is intended to help practicing Electrical Engineers and Contractor's Engineers as well as mid-career electrical design Engineers working in consulting engineering companies, who are engaged in designing electrical systems for commercial buildings and industrial plants.

The course should also be suitable for intermediate grade Electrical Engineering Designers who are hoping to move into a position of more responsibility as Project Managers and or Chief Electrical Designer, as well as those young Electrical Engineers preparing to sit for the PPE Part II examinations conducted by PE Board.

It should also be of valuable assistance to Senior Engineers of other discipline who have some project responsibilities requiring coordination with Electrical Engineers and installers in project works. It should also be helpful to Electrical Technicians, testing and commissioning Inspectors, LEWs and RTOs.

DETAILS

Date : 8, 9 & 10 Sept 2020

Time : 9:00AM - 6:00PM

Duration : 21 hours, 3 days training

Venue : IES Academy@Jurong East

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

CPD : 21 PDU - Confirmed

Fee (include GST):

IES Member: \$898.80

Non-member: \$1,123.50

Target Audiences

- ☐ Electrical Engineers
- ☐ Electrical Technicians

IES Academy@Jurong East

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

Contact Person: Lee Jing Min (Ms)

DID: 6460 4247 | Main Line: 6463 9211

E-mail: jingmin.lee@iesnet.org.sg

Trainers' Profile



Er. Lee Keh Sai
DFH MIEE CEng PEng

Er Lee Keh Sai is a Chartered Electrical Engineer and a Registered Professional Engineer with more than 50 years of industrial experience. He specializes in Electrical Power Engineering, Energy Management and Power Quality Solutions.

Er Lee is the Principal of K.S.Lee & Associates which he established in 1970. He has provided consultancy services to many MNC and SMEs. Prior to the establishment of his consultancy services, he held senior staff positions in the Electricity Department of the former Public Utilities Board and later with Shell Eastern Petroleum at their Pulau Bukom Refinery Complex.

Er Lee has served in various capacities in many professional associations, government agencies and educational institutions. He had previously served as Deputy Chairman, Board of Governors, for both the ITE and Singapore Polytechnic. He is currently serving as a member of Strata Titles Board and EMC 's Market Surveillance Compliance Panel.

Er Lee is an approved and certified trainer and is currently teaching the core module “Motor Driven Systems” under the Singapore Certified Energy Managers (SCEM) Program.

PROGRAMME SCHEDULE

8 Sept 2020 – Tuesday

- ☐ **Module 3 - Protection against electric shock**
- ☐ **Module 4 - Isolation and switching**
- ☐ **Module 5 – Protection**

Registration	Registration start at 8.30am
Module 3 – Protection Against Electric Shock	9.00am – 10.15am Section A <ul style="list-style-type: none"><input type="checkbox"/> Electric shock and protective measures<input type="checkbox"/> Physiology of electric shock
Tea Break	10.15am – 10.30am
Module 3 – Protection Against Electric Shock	10.30am – 12.00pm Section B <ul style="list-style-type: none"><input type="checkbox"/> Fault protection provided by protective earthing, protective equipotential bonding and automatic disconnection of supply<input type="checkbox"/> Requirements for disconnection in TN-S and TT systems<input type="checkbox"/> Section C<input type="checkbox"/> Double or reinforced installation<input type="checkbox"/> The protective provisions - electrical separation to one item of equipment<input type="checkbox"/> Section D<input type="checkbox"/> Requirements for RCDs<input type="checkbox"/> Additional protection by RCDs<input type="checkbox"/> Additional protection by supplementary equipotential bonding
Lunch	12.00pm – 1.00pm
Module 4 - Isolation and Switching	1.00pm – 3.30pm <ol style="list-style-type: none">1. Fundamental principles and definitions Means of isolation and definition of isolation Switching off for mechanical maintenance Emergency switching2. Emergency stopping3. Isolation at the origin of an installation4. Isolation of circuits within an installation5. Isolation requirements6. Switching off for mechanical maintenance Emergency switching and emergency stopping Functional switching7. Firefighting switches
Tea Break	3.30pm – 3.45pm
Module 5 - Protection Against Fire	3.45pm – 6.00pm <ol style="list-style-type: none">1. Overview of the wiring regulations2. Generally applicable requirements3. Wiring systems in escape route4. Protection against burns5. Measures to minimize the spread of fire6. Materials for sealing of wiring system penetrations

	including sealing arrangements 7. Safety services and source of safety services including classification and change-over time 8. Wiring systems and special installation and locations 9. Use of RCDs for protection against fire 10. Solar photovoltaic (PV) power supply 11. Exhibitions, shows and stands 12. Temporary electrical installations for structures, amusement devices and booth at fairgrounds, amusement parks and circuses
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<u>PROGRAMME SCHEDULE</u> 9 Sept 2020 – Wednesday (Module 6 - Earthing and Bonding)	
Registration	Registration start at 8.30am
Section A: Protective earthing	9.00am – 9.30am
Section B: The means of earthing	9.30am – 10.15am
Tea break	10.15am – 10.30am
Section C: The earthing conductor	10.30am – 11.00am
Section D: System types and earthings arrangements	11.00pm – 12.00pm
Lunch	12.00pm – 1.00pm
Section E: Protective equipotential bonding Section G: Automatic disconnection of supply (ADS)	1.00pm – 2.00pm
Section F: Extraneous conductive parts and their connections	2.00pm – 3.30pm
Tea Break	3.30pm – 3.45pm
Section G: Automatic disconnection of supply (ADS)	3.45pm – 4.00pm
Section H: Supplementary equipotential bonding	4.00pm – 6.00pm

<u>PROGRAMME SCHEDULE</u> 10 Sept 2020 – Thursday (Module 7 - Special installations or location)	
Registration	Registration start at 8.30am
Introduction	9.00am – 9.15am
Section A	9.15am – 10.15am Location containing a bath or shower Scope and risks Body impedance
Tea break	10.15am – 10.30am

Section A	10.30am – 12.00pm <ul style="list-style-type: none"> • Classification of zones for space containing bath and shower • Protection against electric shock • Supplementary equipotential bonding • Wiring systems and control gears • Summary of requirements for bath and shower
Lunch	12.00pm – 1.00pm
Section B	1.00pm – 2.00pm <ol style="list-style-type: none"> 1. Swimming pools and other basins. Classification of zone 0, 1 and 2 requirements 2. Protection for safety within zone areas and luminaries installation in swimming pools 3. Special requirements for the installation of 4. electrical equipment for swimming pools and other basins 5. Fire alarms and public alarm systems
Section C: Construction and demolition site installations Section D: Horticultural premises Section E: Marinas and similar locations	2.00pm – 3.30pm
Tea Break	3.30pm – 3.45pm
Section F: Medical locations Section G: Solar photovoltaic (PV) power supply Section H: Exhibitions, shows and stands	3.45pm – 4.30pm
Section I: Electric vehicles charging installations Section J: Extra-low voltage lighting installations Section K: Outdoor lighting installations	4.30pm – 6.00pm

A Comprehensive and Instructional Three-Days Training Course on SS638 - Modules 3,4,5,6,7 (1st Run)

Date: 8,9 &10 Sept 2020

Time: 9:00AM to 6:00PM

Venue: IES Academy@Jurong East

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

Fees (Include GST): IES Members: **\$898.80**

Non-Members: **\$1,123.50**

Please register online/fax the completed form by **31 Aug 2020 before 3pm** to:

Contact Person: **Jing Min (Ms)**

IES Academy@Jurong East

80 Jurong East Street 21, #04-10

Devan Nair Institute for Employment and Employability

Singapore 609607

Tel: 6463 9211 Fax: 6563 6030

Participant Details

*Name : _____ *NRIC : _____
(Please written in BLOCK Letter)

Company : _____ *Designation : _____

*Address 1 : _____
(For mailing of invoice and receipt)

*Postal Code : _____ Sex : _____ Male / Female

*Contact No. : _____ Fax : _____

*Your Email : _____
(For sending of confirmation email, preferable personal unless company sponsored)

Please indicate: ☐ IES members IES M'ship No.: _____ P.E. No.: _____ (if applicable)
☐ Non-members Affiliated member: _____

☐ Sponsored by company (Please indicate the Contact person detail)

Contact Person Details (if different from participant)

#Name : _____ #Designation : _____

#Contact No. : _____ Fax: _____

#Email : _____

Payment Details

Bank / Cheque No : _____ Amount (\$): _____

~ All Fees are inclusive of 7 % GST.

~ Cheque make payable to Engineers Singapore Pte Ltd.

Acceptance of Terms and Conditions for Registrations of IES Academy's Events

I agree to abide by the Terms and Conditions for Registration of IES Academy's Events.

Name : _____ Signature : _____

***Mandatory entry**

#Compulsory Entry for participant who choose to be INVOICE to your company

TERMS & CONDITIONS COURSE REGISTRATION

Registration

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

All registrations must be submitted with duly completed registration form.

Closing Date

The closing date of the event will be 1 week prior to event commencement date or earlier. Cheques should be crossed 'A/C payee only' and made payable to '**Engineers Singapore Pte Ltd**', with the ***Title of The Event indicated clearly written on the back of the cheques***, and submitted with the duly completed registration forms to:

Attention to: Lee Jing Min (Ms.)
IES Academy@Jurong East
Devan Nair Institute for Employment and Employability,
80 Jurong East Street 21, #04-10
Singapore 609607

Confirmation of Registration

Confirmation of registration will be given at least 1 week before the commencement date via email. ***If you do not receive the said confirmation email, you are required to contact IESA at 6463 9211 during office hours.***

IESA reserves the right to allow only confirmed 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. IES 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

I consent to the processing by Institution of Engineers, Singapore of personal data, including sensitive personal data as defined in the Data Protection Act 2014, about me for the proper purposes of Institution of Engineers, Singapore (IES). I undertake to observe the provisions of the Data Protection Act 2014 in relation to any personal data I may myself hold and process as a Members of Institution of Engineers, Singapore, and I 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.