



Building Envelope and Lighting Systems

Singapore Certified Energy Manager Professional Course: Elective

Course Summary

The façade together with the rest of the building envelope and roof contribute most to the solar heat gain of a building. Energy managers should be well-equipped with knowledge and technical skills to minimise these loads. Possession of a good knowledge of lighting products, systems, design & methods of integrating supplementary daylight will help energy managers to save on lighting and thermal loads.

Major topics discussed in this module include façade systems (monocoque & hybrid), curtain and glass wall systems, energy and sustainability with different types of envelopes-shades & louvres; daylighting design principles, concepts, tools and standards; calculation of ETTV and RETV wall, roof and fenestration of a building; lighting principles, eco-friendly lighting design, characteristics of lamps, LED, ballasts, lighting design method, control-upgrades for energy-efficiency and life-cycle comparison.

24 SCEM PDU Points Awarded

10 - 12 January 2018

9am - 6pm

Singapore Sustainability Academy

180 Raffles Place Level 6 Sky Park, #06-10

City Square Mall Singapore 208539



Building Envelope and Lighting Systems

Singapore Certified Energy Manager Professional Course: Elective

Course Outcomes

1. Develop a 'single skin' concept for façade design to satisfy different issues arising from various types of curtain walls and their components
2. Evaluate inputs of Façade specialists and manage critical events during planning & installation
3. Define and calculate the ETTV and RETV of Wall, Roof and Fenestration of a building
4. Introduce Daylighting design via physical and computer simulations to meet requirements of Singapore Standards, Green Mark & LEED
5. Survey the existing lighting of a building with the use of a pre-designed template
6. Analyse the current lighting components and devise possible changes & retrofits with state-of-the-art lighting products for greater energy-efficiency
7. Evaluate the most appropriate new or retrofit solution based on initial cost as well as life-cycle economics
8. Integrate the above management practice into the business practice of clients and their own organisations

Rates

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.

Speakers's Profile



K Seshadri (SESH) is CEO of Gritti Consulting Pte Ltd and Chairman of Singapore Standards Technical Committee (IEC 34) for Lamps & Related Equipment and Codes of practice (for Emergency lighting and Indoor-Outdoor work places).



Alvin Cheong has 8 years experience as an ESD, acoustic and vibration engineer, providing designing and prediction consultancy as well as troubleshooting services to various industries.



Kelvin Kan is a registered Architect in the UK and Singapore and practiced in both countries for more than 10 years. Kelvin's strength is his ability to visualise and provide design concepts and solutions for unusual requirements including integration of LED lights for all different facade systems.

Call us at +65 6338 8578 to enquire

Email: training@seas.org.sg

Registration Form

Yes! I would like to register for this programme

I am unable to attend but please put me on your mailing list

Participant's Details

1 Name (Dr/Mr/Ms/Mrs)
Hp
NRIC

Designation
Email

Participant's Details

2 Name (Dr/Mr/Ms/Mrs)
Hp
NRIC

Designation
Email

Billing Information

Company Name

Contact Name

Company Address

Email

Tel