

ASHRAE HVAC Design Training LEVEL 1 – ESSENTIALS Singapore, August 24 – 26, 2016

Abstract

ASHRAE's HVAC Design: Level I - Essentials training provides participants with instruction that accelerates their transformation into effective members of a design, construction or facilities maintenance team. Developed by industry-leading professionals selected by ASHRAE, the training provides attendees with the fundamentals and technical aspects of HVAC design. Attendees will gain practical skills and knowledge to design, install and maintain HVAC systems that can be put to immediate use.

In addition to gaining in-depth knowledge and understanding, attendees will receive real-world examples of HVAC systems. The training also teaches a systematic approach to guide a design team to a solution that optimally meets the client's expectations.

Who Should Attend

- Engineers new to the HVAC industry, including recent engineering graduates lacking practical experience
- Facilities managers involved in new construction or major renovation projects
- Technicians who would like to gain design knowledge
- Architects who want to understand HVAC design
- Sales engineers and HVAC equipment suppliers who want to gain a broad knowledge of HVAC systems

How Your Firm Will Benefit

- The need to improve overall building performance
- The technologies that lead to improved building performance
- The economics of sustainable buildings and the roles of the designer and facilities manager
- The basic skills needed to design high-performance buildings
- The skill set that will be required by designers of the future
- Techniques to interact effectively with all design partners (architects, owners, other engineering disciplines) in an integrated design team
- The capacity to participate in the design of high-performance buildings

Outline

Wed Aug 24, 2016 (Day 1)

- 8:30 Introductions
- 8:45 Fundamentals
- 9:45 Load Calculation
- 10:30 Break
- 10:45 Load Calculation (cont.)
- 12:45 Lunch
- 1:30 Psychrometrics
- 3:30 Break
- 4:00 Design Process
- 5:30 Wrap-up

Fri Aug 26, 2016 (Day 3)

- 8:30 HVAC Systems
- 10:30 Break
- 10:45 HVAC Systems (cont.)
- 11:30 Overall briefing & review of relevant ASHRAE Standards
- 12:45 Lunch
- 1:30 Singapore Standard SS553 – Part 1
- 3:30 Break
- 4:00 Singapore Standard SS553 – Part 2
- 5:30 Wrap-up

Thu Aug 25, 2016 (Day 2)

- 8:30 System selection
- 9:30 Basic Design of Air Systems
- 10:30 Break
- 10:45 Basic Design of Air Systems (cont.)
- 12:45 Lunch
- 1:30 Basic Design of Hydronic Systems
- 2:45 HVAC Equipment
- 3:30 Break
- 4:00 HVAC Equipment (cont.)
- 5:30 Wrap-up

**Outline subject to change*

Instructors



Donald L. Brandt
ASHRAE Member

Donald L. Brandt has devoted his career to the HVAC industry. During his 39-year tenure with the Trane Company, he has held the positions of sales engineer, sales manager, trainer, facility manager and controls project manager. He worked in the sales offices at Wilkes-Barre-Allentown, Pennsylvania, and Phoenix, Arizona.

Don is very active in ASHRAE. He has served at the Chapter, Regional and Society Levels, including TEGA (now CTTC) from 1997- 2002, and chair in 2002; DRC for Region X from 2002-2005;

Standards Committee from 2005-2009; and Conferences and Expositions Committee in 2010. Currently, Don is the chair of the Professional Development Committee, and has been a committee member since 2011. He is also a member of the Standards Appeal committee and the Energy Targets MTG. Don received the ASHRAE Distinguished Service Award in 2005. He is also an IEEE Member and he teaches a CEM Prep Course.

Don has a Bachelor of Science degree in electrical engineering from Penn State University.



Er. Chee Yan Pong
Principal,
Y P Chee & Associates
ASHRAE Member

Er. YP Chee is the principal of his own professional engineering consulting firm practicing in Singapore, offering specialist mechanical consultancy services and engineering management consultancy.

Er. Chee graduated with a Bachelor of Engineering (Hons) from the University of Adelaide, Australia. Then he conducted post-graduate studies in air-conditioning, ventilation, refrigeration and cryogenics at the University of New South Wales.

Er. Chee is active as a mechanical engineering expert witness (EEW) with the Institution of Engineers, Singapore. He served in BCA

Academy Board of Examiners for the Specialist Diploma in Facility and Energy Management programme as Member. He was also Member of the Interviewing Committee for Specialist Professional Engineer for Amusement Rides. He was the past-President of the ASHRAE Singapore Chapter for two terms.

He is a Registered Inspector (RI) for mechanical and electrical services; an Authorized Examiner (AE) on lifting equipment like lifts, hoists, hydraulic platforms, chain blocks, lifting gears/appliances; lorry loaders; fixed cranes and lifting machines. He is also a Qualified Person (QP) for Submission of Flammable Liquids & Gases to SCDF. In addition, he is a Specialist Professional Engineer (SPE) for Amusement Rides.

Registration Form – **ASHRAE HVAC Design: Level I – Essentials**

Date: 24 – 26 August 2016

Time: 8.30am – 5.30pm

(Registration starts 8.00am)

Fee for early registration by 24 July 2016:

S\$1,310 for ASHRAE members

S\$1,660 for non members

Standard fee after 24 July 2016:

S\$1,380 for ASHRAE members

S\$1,730 for non members

Group of 3 and above: S\$1,240

Bonus:

Attendees each receive a FREE copy of *ASHRAE Standard 189.1-2014 for the Design of High Performance Green Buildings* and the *189.1 User's Manual* – a value of over USD 200

Venue:

Singapore Polytechnic, Lecture Theatre LT17A, 500 Dover Road, Singapore 139651

(2 Tea Break and 1 Buffet Lunch will be provided)

Register by email to elta.ascsecretariat@gmail.com by **10 August 2016**, with the required Registration Details below. Please make the payment by issuing a cheque to **ASHRAE Singapore Chapter**, c/o 159 Sin Ming Road, AMTECH Building, Lobby 2 #07-02, Singapore 575625.

Professional Engineers Board (PDU) points: Pending

SCEM-PDU Points: 22

For enquires on program and registration matters please contact:

Dr. Peter Cheng [Email: peter.cheng@armacell.com], ASC

Registration Details

| Name of Participant | ASHRAE Membership No.: | ASC Reg No.: | PE Reg No.: |
|-------------------------|------------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Organization: | <input type="text"/> | Designation: | <input type="text"/> |
| Mailing Address: | <input type="text"/> | | |
| | <input type="text"/> | Postal Code | <input type="text"/> |
| Telephone / Mobile No.: | <input type="text"/> | Fax no.: | <input type="text"/> |
| Email: | <input type="text"/> | | |

Signature

Date