

## Designing the interface where human meets machine

### ABOUT THE PROGRAM

Qualified for 12 PDUs by PEB

Human factors engineering and ergonomics is concerned with the design of the interface where human meets machine. The interface may be physical (the controls on a vehicle) or psychological (process information on a computer display). Control may be via the arms, legs, head, etc. Input may be via the eyes (visual), ears (auditory), vibratory, temperature, pressure, olfaction, etc. A well-designed interface requires good understanding of human anthropometry, capabilities, and limitations.

This program teaches technologists to design systems that take advantage of what humans are good at versus machines. It gives an appreciation also of what tasks should be better left to machines. HFE and ergonomics is a field of study. It provides a set of design principles that focus on the most important element in any system that is - the human.

The following topics will be covered:

1. Introduction to human factors engineering and ergonomics
2. Human information processing
3. The human visual system and its implications for interface design
4. The human auditory system and its implications for interface design
5. Displays and controls
6. Human anthropometry and the design of the physical workplace
7. Human error, accidents, and safety.

**Date:** 9 - 10 October 2014 (Thursday - Friday)

**Time:** 9.00 am - 5.00 pm

**Venue:** National University of Singapore

**Fees:** SGD 1,284.00 (Inclusive of GST)  
Discounts are available.

### ABOUT THE SPEAKER



**Associate Professor Tan Kay Chuan** is with the Department of Industrial and Systems Engineering at the National University of Singapore. He also supervises the Department's Ergonomics Laboratory and teaching in the following subject areas:

- Human Factors Engineering and Ergonomics
- Engineering statistics
- Quality Planning and Management

His current research interests include: advancement in Quality Function Deployment, reflectivity improvements of traffic information signs, and the use of mental models in human-computer interface design. He holds memberships in the Institute of Industrial Engineers and the Human Factors and Ergonomics Society.

**This program may be provided in-house or customized to meet an organization's specific needs. Please contact us for a discussion on how we may assist you.**

For more information about this program and to register, please click [here](#).