## BCA ACADEMY



**E-LEARNING** 

100% online. May include pre-recorded session, live streaming/webinar and discussion forum, where applicable.

#### **ONLINE LEARNING:**

Frequency: : Annual

Time: 9.00am to 5.30pm

**Platform:** BCAA Learning Management System (LMS)

FEE (incl of GST): S\$730

#### **TARGET AUDIENCE**

All practising M&E engineers, contractors and fresh graduates who wish to be updated or gain specialised knowledge in lightning protection within the built environment.

#### **AWARD**

e-Certificate of Attendance (e-COA) will be awarded to participants who meet the attendance requirement.

CPD POINTS PEB: -

# PROTECTION AGAINST LIGHTNING FOR BUILDINGS

#### INTRODUCTION

Singapore experiences the highest incidence of lightning strikes in the world. These lightning strikes have caused major disruptions to main systems equipment and considerable damage to building structures. Understanding of lightning phenomenon and proper setup of lightning protection system are critical for the protection of lives, properties and equipment.

#### **OBJECTIVES**

The 2-day course aims to provide participants with an understanding of the effects of lightning and various lightning protection methods for building structures. It will also cover various analytical methods for the performance assessment of lightning protection systems.

#### CONTENT

- Overview of Lightning Protection Systems
  - Principles of lightning
  - Causes of lightning damage
  - Methods of lightning protection and effectiveness methods for buildings
- SS 555:2018 Code of Practice for Protection against Lightning
  - Risk Management
  - Physical damage to structures and life hazard
  - Electrical and electronic systems within structure
- Case Studies

#### **LECTURERS**

**ER. CHAN HENG LIM** received a B.Eng (Hons) degree in Electrical & Electronic Engineering from the University of Aberdeen, UK. He also holds a postgraduate certificate in Teaching in Higher Education. Er. Chan has acquired considerable experience in Power Plant Operation, Factory Automation, Electrical System Design, Planning and Implementing the different nature of projects in this region. He was the Vice President with an established consultancy company responsible for the design and management of electrical building services for infrastructural development, healthcare facilities, institutional building, commercial and residential buildings. Subsequently, he held a post of Deputy Director with a Government agency responsible for the standardization of guidelines and establishment of good practices for healthcare infrastructure.

Er. Chan is a registered Professional Engineer (Electrical) in Singapore, Chartered Engineer (UK), International Professional Engineer (UK), Chartered Professional Engineer (Australia), APEC Engineer, ASEAN Chartered Professional Engineer (ACPE) and European Engineer (EurIng). He is a Licensed Electrical Engineer registered with EMA and a certified Green Mark Professional (GMP), Singapore.

**ER. TAN KENG SWEE** is a Principal Engineer of the Building and Policies Department, Building Plan and Management Group, Building and Construction Authority. He conducts TOP inspections on completed building works including processing of TOP applications and building plan submissions.



### REGISTRATION

To register, please log into our Online StoreFront (OSF) at <u>https://eservices.bcaa.edu.sg/</u> registration/#/Login or scan QRcode and search for course code 78026