



E-LEARNING

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

ONLINE LEARNING VIA WEBINAR:

FREQUENCY: 4 weeks

TIME: 9.00am to 5.30pm

DELIVERY MODE: e-learning via webinar and BCAA Learning Management System (LMS)

DURATION: 15.5 hrs

FEE (incl of GST): S\$1,400.00

SkillsFuture Singapore (SSG) funding is available for eligible participants as follows:

| | |
|---|-----------------------------------|
| Singaporeans 40 years old and above OR SME company sponsored Singaporeans or Singapore PRs. Fee payable after 70% funding support | S\$484.11 <i>(incl of GST)</i> |
| Singaporeans, Singapore PRs and non SME company sponsored participants. Fee payable after 50% funding support | S\$745.79 <i>(incl of GST)</i> |

Participant must achieve at least 75% attendance and pass all assessments. BCA Academy reserves the right to recover the funded amount from the participant (self-sponsored) or employer (company sponsored) if participant did not meet the eligibility criteria. Details of SSG's funding can be found in <https://www.enterprisejobskills.gov.sg/content/upgrade-skills/course-fee-and-absentee-payroll-funding.html> (TGS-2022014138)

AWARD

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

CPD POINTS

PEB: -

Introduction to Smart Building Management System for FM Practitioners

SYNCHRONOUS E-LEARNING

INTRODUCTION

With increasing adoption of digitalisation and Smart Facility Management, the desire of FM Practitioners for improved efficiency and effectiveness has never been greater. An integrated and optimised Building Management System also known as Building Automation System works on cohesive digitalised communication network including communication controllers and web-enabled network to manage, control and monitor the sub-systems within a building to achieve energy efficient and comfortable environment for productivity workflow gain.

OBJECTIVES

At the end of the course, participants should be able to:

- Describe the fundamentals of a BMS
- Identify the types of communication protocol, features and functions
- Describe how HVAC systems integrate with BMS and controls are used
- Explain logic programming and identify basic programming techniques
- Review data trends
- Identify the ways cloud based BMS is changing the SMART FM industry

CONTENTS

BASICS OF BUILDING MANAGEMENT SYSTEM

- Introduction to BMS, IBMS & Intelligent Buildings
- Components of BMS
- Features and Functionality
- Basic Instrumentation & Measurement in BMS
- Sample BAS architecture

COMMUNICATION PROTOCOLS

- Types of sensors – Purpose & Functionality
- Communication Techniques
- Basics of Networking

BMS SYSTEMS

- HVAC-Environment-Systems-Controls
- Control Elements
- Control Systems
- Air handling Unit and BMS – Example
- Water Cooled Chillers and BMS - Example

INTERPRETATION OF LOGIC PROGRAMMING

- Data Flow Analysis
- Module and Logic Block Analysis
- Modify a Standard Application
- Troubleshooting Tips
- Overview of Controller Configuration Tool Concepts
- Setpoint Determination
- State Based Control

BMS ADVANCED FEATURES

- Scheduling
- Alarms
- Trending

FUTURE OF BMS

- Overview of new IoT platform - Cloud-based BMS
- Tagging Schema - Brick, Haystack
- Cybersecurity

LECTURERS

Expert trainers/practitioners from leading global organization in the built environment

TARGET AUDIENCE

Facilities Technician, Technical Officer / Executive Building Supervisor, Building Officer / Facilities Officer / Property Office, Building Executive / Facilities Executive / Property Executive and Facilities Manager / Facilities Engineer



REGISTRATION

To register, please log into our Online StoreFront (OSF) at <https://eservices.bcaa.edu.sg/registration/#/> Login or scan QRcode and search for course code **80072**