



E-LEARNING

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

ONLINE LEARNING VIA WEBINAR:

Date: Oct 2023

Time: 9.00am – 5.30pm

Platform: BCAA Learning Management System (LMS)

MCQ ASSESSMENT

Time: 6.30pm - 7.00pm

Platform: BCAA Learning Management System (LMS)

FEE (incl of GST): S\$690.00

TARGET AUDIENCE

Professionals who need to recommend or implement high performance façade systems for green building projects.

CPD POINT

PEB: -

SCEM: -

SGBC-GMAP: -

Efficient Building Envelope Design, ETTV & RETV

INTRODUCTION

Building envelopes play an important role in determining how energy efficient a building can be. At the end of the course, participants will have a better understanding of the performance aspects of modern façade systems. Special focus will be placed on the application of innovative daylighting systems while minimising glare and solar heat from daylight. The course will also cover the concept of ETTV / RETV and discuss strategies to reduce the value.

CONTENTS

- **The Importance of Building Envelope**
 - Impact on Heat Load
 - Impact on Occupant Comfort
 - Impact on Environment
- **Function and design of Building Envelope**
 - Building Skin as a Responsive Skin
 - Sustainable Design Consideration
 - Façade Systems and Materials
- **Efficient Building Envelope Design**
 - Heat Transfer Fundamentals
 - ETTV and RETV Equations
 - Strategies to Lower ETTV and RETV
 - Types of Walls, Fenestrations, Glass and Shading Devices Impact from Geometry and Location
- **Daylighting**
 - Benefits and Issues
 - Maximising Daylight in Interior
 - Minimise Glare and Heat from Daylight
- **Design to Innovative Facade**
 - Energy Saving, Water Saving, Indoor Environment Quality and other Environmental considerations

LECTURER

Mr Mathieu Meur is the Director (Technical) of DP Architects. Before joining the DP Group, he was the Managing Director of Meinhardt Façade Technology International, providing strategic and technical leadership. Mr Meur is a multi-disciplinary engineer by training. Throughout the years, he has developed extensive knowledge of all types of building envelope systems in terms of design, engineering and related codes of practice. Mr Meur is also passionate about sharing his knowledge and skills with others. Other than lecturing, Mr Meur writes for technical publications and is a frequent speaker at conference. He is also a Senior Member of the Institution of Engineers of Singapore since 2004 and a fellow of the Society of Façade Engineering from United Kingdom since 2010.

ASSESSMENT AND AWARD

This course involves assessment. A Certificate of Successful Completion (CSC) will be issued to participants who:

- i. Achieve at least 75% class attendance; and
- ii. Pass all the assessment(s)

This course is one of the core modules under the Certification Course for Green Mark Advanced Accredited Professional [GMAAP]



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 **71929**