

BCA ACADEMY

# ENHANCED GREEN MARK ADVANCED ACCREDITED PROFESSIONAL COURSE [Enhanced GMAAP]



An enhanced certification course streamlining the certification courses for:

1. Green Mark Advanced Accredited Professional [GMAAP]
2. Green Mark Advanced Accredited Professional (Facilities Management) [GMAAP(FM)]

*Prior to the streamlining exercise, an industry survey was conducted to assist in the design of the Enhanced GMAAP course that will benefit learners.*

# Why do we need to streamline the GMAAP and GMAAP(FM)?

- To tailor course curriculum in tandem with BCA Green Mark 2021 (GM:2021) scheme and implementation, which encourages industry and professionals to collaborate and develop green building solutions.
- To upskill/support capability development in the following areas:
  - raising standards in building energy performance;
  - increasing emphasis on resilience to address climate change; and
  - creating healthier environment for building users.

## UNIQUE FEATURES OF THE ENHANCED GMAAP



### FLEXIBILITY

Choose relevant module that match your professional development



### SUIT LEARNER'S SCHEDULE

Up to 2 years to complete the Enhanced GMAAP course



### NO FINAL EXAM

100% Continual Assessment



### ADVANCED CREDIT

Enjoy advanced credit at BCA Academy's partner university programmes



### STACKABLE MODULES

On completion of the total course requirements within two years, learners will be awarded with e-Certificate of Successful Completion (e-CSC) of the "Certification Course for Green Mark Advanced Accredited Professional (GMAAP)"

*Note: To apply for your GMAAP certificate, please visit <https://go.gov.sg/gmaap-cert-req>*

# Key Highlights on Course Structure

## PREVIOUS COURSE STRUCTURE

Certification Course for:

### A) GMAAP COURSE

- 4.5-day GMAP Course
- 14-day GMAAP core modules
- 4-day GMAAP elective modules

### B) GMAAP(FM) COURSE

- 4.5-day GMAP(FM) Course
- 13-day GMAAP(FM) core modules
- 4-day GMAAP(FM) elective modules

## NEW COURSE STRUCTURE

Enhanced GMAAP

- 5-day Enhanced GMAP Course\*
- Elective modules totaling 18 days, with at least one module from the following categories:
  - a) Active Design
  - b) Passive Design
  - c) Building Simulation
  - d) Operation and Maintenance
  - e) Net Zero Carbon<sup>#</sup>

\* Those who had completed the 4.5-day GMAP/GMAP(FM) course will need to attend a 0.5-day bridging course – “Understanding Green Mark 2021” (course code: 80082)

<sup>#</sup>Applicable from Apr 2023 onwards

## Available Stackable Modules

(click on the courses for more details)

CATEGORY	ENHANCED GMAAP COURSE – AVAILABLE MODULES		
<b>A</b> Active Design	<b>4-DAY</b> Design, Optimisation and Measurement of High Efficiency Central A/C System ▶	<b>NEW 2-DAY</b> Driving Energy Performance in SLE Buildings ▶	
<b>B</b> Passive Design	<b>2-DAY</b> Efficient Building Envelope Design, ETTV & RETV ▶	<b>2-DAY</b> Solar Architecture ▶	<b>NEW 2-DAY</b> Urban Heat Island (UHI) Mitigation Strategies ▶
<b>C</b> Building Simulation	<b>3-DAY</b> CFD Modelling for Natural Ventilated Buildings ▶	<b>3-DAY</b> Building Performance Simulation ▶	<b>3-DAY</b> Solar Modelling ▶
<b>D</b> Operation & Maintenance	<b>NEW 4-DAY</b> Managing Buildings for Health and Wellness ▶	<b>ENHANCED 2-DAY</b> Strategies for Smart FM and Maintainability ▶	<b>ENHANCED 3-DAY</b> Sustainable Energy Management for Existing Buildings ▶
	The number of days is equivalent; courses may be conducted over several weeks in multiple sessions.		
<b>E</b> Net Zero Carbon	<b>NEW 2.5-DAY</b> Life Cycle Assessment: Carbon Computation and Management Strategies ▶		

# Exemptions

To allow progression for our industry practitioners, exemption(s) is/are allowed for the following courses:

## a) Full Course Exemption\*

No.	Attained COA/CSC for Previous GMAAP/ GMAAP(FM) Course(s)	Equivalent to Enhanced GMAAP Stackable Modules
1	<b>[COA]</b> Solar Architecture	<b>[2-DAY]</b> Solar Architecture
2	<b>[COA]</b> Solar Modelling	<b>[3-DAY]</b> Solar Modelling
3	<b>[CSC]</b> Efficient Building Envelope Design, ETTV and RETV	<b>[2-DAY]</b> Efficient Building Envelope Design, ETTV & RETV
4	<b>[CSC]</b> CFD Modelling for Natural Ventilated Buildings	<b>[3-DAY]</b> CFD Modelling for Natural Ventilated Buildings
5	<b>[CSC]</b> Building Performance Simulation	<b>[3-DAY]</b> Building Performance Simulation
6	<b>[CSC]</b> Both 'Energy Efficiency through Management and Audit' and 'Retro-Commissioning and Performance Contracting'	<b>[3-DAY]</b> Sustainable Energy Management for Existing Buildings
7	<b>[CSC]</b> Design, Optimisation and Measurement of High Efficiency Central A/C System	<b>[4-DAY]</b> Design, Optimisation and Measurement of High Efficiency Central A/C System

Note: COA: Certificate of Attendance; CSC: Certificate of Successful Completion

## b) Partial Course Exemption\*

Partial course exemption is allowed for the stackable module '**Certification Course on Sustainable Energy Management for Existing Buildings**', if you have:

No.	Attained CSC for Previous GMAAP(FM) Course(s)	Only Required to
1	Retro-Commissioning and Performance Contracting	Attend Day 1 of the enhanced stackable module course and meet assessment requirements
2	Energy Efficiency through Management and Audit	Attend Day 2 & 3 of the enhanced stackable module course and meet assessment requirements

Partial course exemption for the stackable module '**Certification Course on Strategies for Smart FM & Maintainability**' is allowed if CSC is attained for previous GMAAP(FM) course \*, only required to attend Day 2 of the enhanced module course.

Note: CSC: Certificate of Successful Completion

**\*NOTE: All exemption(s) is/are only applicable when the COA/CSC is/are attained during the period from Mar 2020 till Dec 2021, when the Certification Courses for GMAAP and GMAAP(FM) were conducted.**

To learn more about the Green Mark Professional Qualification Scheme, visit

<https://gmap.sgbc.online/public/directory>

## Schedule of Enhanced GMAAP Stackable Modules (2023)

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