



## BLENDED LEARNING

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

### 36<sup>th</sup> RUN

#### LIVE ZOOM

Module 1 (7 – 14 Mar 2023)  
Module 2 (15 – 29 Mar 2023)  
Module 3 (31 Mar – 11 Apr 2023)  
Module 4 (12 - 29 Apr 2023)  
Time: 6.30pm - 9.30pm

#### 3 IN-PERSON PRACTICAL TRAININGS AT SITE ON SATURDAYS

Date: Module 4\* (13 – 27 May 2023)  
Time: 9.00am to 5.30pm

#### COURSE ASSESSMENT

Date: 9 May 2023  
Time: 7.00pm to 9.00pm  
Venue: BCA Braddell Campus

#### FEES (incl of GST):

S\$2,900 (without Subsidy)  
S\$1,544.86 (with SSG Training Grant)  
S\$1,002.80 (with Enhance Funding for SME)  
S\$1,002.80 (with Mid-career Enhanced Subsidy for self-sponsored applicant)  
SSG training grant is available for this course. BCA Academy will apply the funding for applicant through [www.tpgateway.gov.sg](http://www.tpgateway.gov.sg) (terms and conditions may apply)

In keeping with our green and sustainable practices, course notes will be available in e-format.

#### ASSESSMENT & AWARD

This course involves assessment. A Certificate in Precast Concrete Construction Supervision will be issued to participants who:  
i. Achieve at least 75% class attendance; and  
ii. Pass the assessment.

# Certification Course on Precast Concrete Construction Supervision

## INTRODUCTION

The developers and contractors are increasingly using buildable design and Precast Concrete (PC) Construction to achieve higher productivity. The supervisor or coordinator of precast construction work needs to adopt a different approach from cast-in-situ construction. He needs to pay more attention to the sequence of erection, handling and storage of precast components, site access, safety measures, alignments and tolerances.

A competent PC supervisor needs to understand how the different joint details could affect the design behaviour of the PC components. He needs to have good understanding of the work site handling and site management procedures for PC construction, able to supervise and coordinate the erection of PC components and have the ability to plan and mobilize site resources to ensure a safe and satisfactory completion of the project. Construction professionals and managers working in companies that switch from traditional building methods to precast technology will find this course helpful in enhancing their competencies. It also opens up opportunities to move up to higher supervisory and management roles.

## OBJECTIVES

At the end of the course, the participant should have acquired the skills and knowledge to:

- Describe the various types of precast technology, their advantages and disadvantages, and their applications;
- Explain the behaviours of precast structures under loading and execution;
- Plan and organize the precast site and yard for effective erection and production
- Supervise the production, transportation, erection, waterproofing and repair of precast components;
- Implement safe site and yard practices in precast construction.

## CONTENTS

### MODULE 1- Introduction to Precast Concrete Technology

- What is precast technology
- Advantages of precast technology
- Limitations of precast technology
- Types of precast components
- Production process of precast components
- Understanding of drawings and specifications
- Joint connection details
- Incorporation of building services
- Understanding design behaviour of the PC component

### MODULE 2 - Production

- Production procedures; design impact; repair work

### MODULE 3 - Site Management

- Proper procedures of storage & space requirements
- Handling of equipment & machineries; worksite handling procedures

- Site management & administration; scheduling

### MODULE 4 - Erection of Precast Concrete Components

- Handling of transported components; lifting/rigging procedures
- Inspection & quality control
- Placements & adjustments
- Propping; sealants; membranes
- Building services connection
- Safety consideration & aspects
  - i) inspection test & quality control
  - ii) precast concrete components erection & procedures
  - iii) prefab construction
  - iv) case studies
- On-site practical sessions at Approved Training and Testing Centre (ATTC)
- 'Anti-Corruption' in the Governance of MCST

## ENTRY REQUIREMENTS

The Applicant must be a Singapore Citizen or Permanent Resident or holder of valid employment pass/work permit and possess one of the following recognised qualifications:

- a) Degree or Diploma in Construction/Building related courses from recognised institutions or universities; or
- b) Certificate in M&E Coordination; or
- c) National Certificate in Construction Supervision; or
- d) Certificate in Building Measurement with minimum 3 years relevant working experience

Applicants with one of the following qualifications may be considered on a case-by-case basis:

Attain at least 3 GCE 'O' levels in English (Grade 1 to 8), Mathematics (Grade 1 to 6) and one other subject (Grade 1 to 8) with minimum 3 years relevant working experience; or Workplace Literacy & Numeracy (WPLN) Level 6, and at least 3 years of relevant experience.



### 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 **74009**