

# Basic Concept in Construction Productivity Enhancement



## E-LEARNING

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

**Frequency:** Bi-monthly

**DELIVERY MODE:** e-Learning via BCAA Learning Management System (LMS)\*

\* Participants may commence to embark on e-learning and learn at own pace (within 3 days from course start date).

**FEE** (incl of GST): S\$85.00

### AWARD

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

## INTRODUCTION

Raising construction productivity is critical for efficient and timely completion of projects. As part of construction industry transformation, BCA has introduced various initiatives and promote adoption of Design for Manufacturing and Assembly (DfMA). This course on Basic Concept in Construction Productivity Enhancement (BCCPE) is meant to introduce various key productivity initiatives, technology awareness and best practices as well as basic concepts of DfMA to mostly small companies registered under BCA's Contractors Registration System (CRS) in selected categories and specific grades.

## OBJECTIVES

- Explain the definition and concepts in measurement of site productivity.
- Understand concept of Design for Manufacturing and Assembly (DfMA).
- Learn the strategies to improve construction productivity during planning, design and construction stage.
- Illustrate how site layout, site deployment planning and site coordination can help to enhance construction productivity.
- Understand the importance of good site management practices and quality control.
- Share examples of successful cases on productivity improvement.

## CONTENTS

- 1. Definition and Measurement of Site Productivity**
- 2. Increasing Construction Productivity Through Buildable Design and Constructability**
  - a. Buildable design upstream that result in efficient labour usage
  - b. Constructability Planning for more labour-saving construction methods and technologies downstream that reduces the industry's reliance on foreign workers
  - c. Areas for possible productivity improvement for trades such as civil & structural trades, finishing trades, MEP trades, etc
- 3. Enhancing the Quality of the Construction Workforce**
  - a. Planning of site layout such as material and equipment storage
  - b. Emphasize the importance of site coordination as keys to project success
  - c. Use of project planning tools to allocate resources and manage manpower (with Case Study)
  - d. Pre-planned for inspection to avoid time wastage on last minute scheduling of inspections with clients, QP and authorities.
- 4. Introduction of Design for Manufacturing and Assembly Continuum and Its Adoption in Singapore**
- 5. Good Management practices & Quality Control**
  - a. Manpower and resource management, with examples on use of technologies
  - b. Provide adequate facilities such as toilets, washing points, tools resources collection points
  - c. Key quality issues and the recommended practices to be adopted.

## TARGET AUDIENCE

This public run is specifically targeted for new CRS contractors wanting to register under the workhead CW, CR, ME, MW02, MW03, TR, SY04 and SY08 with grades B2 to C3, L5 to L1 and Single Grades who are required to send one of their Technical Personnel (TP) in order to be registered under CRS. Besides TPs, Directors of companies, without the necessary qualification but registered with ACRA, can attend this course to fulfil the BCCPE requirements for CRS registration. For an existing contractor, if their existing TP resigns, they are required within 3 months to re-employ a full-time relevant TP and attend the BCCPE course. This public run will also be opened to anyone who are interested in gaining the basic knowledge to improve site productivity as well as understanding the various BCA incentive schemes to enhance productivity.



### 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 **78029**