

## Engineering Buildability for International Projects

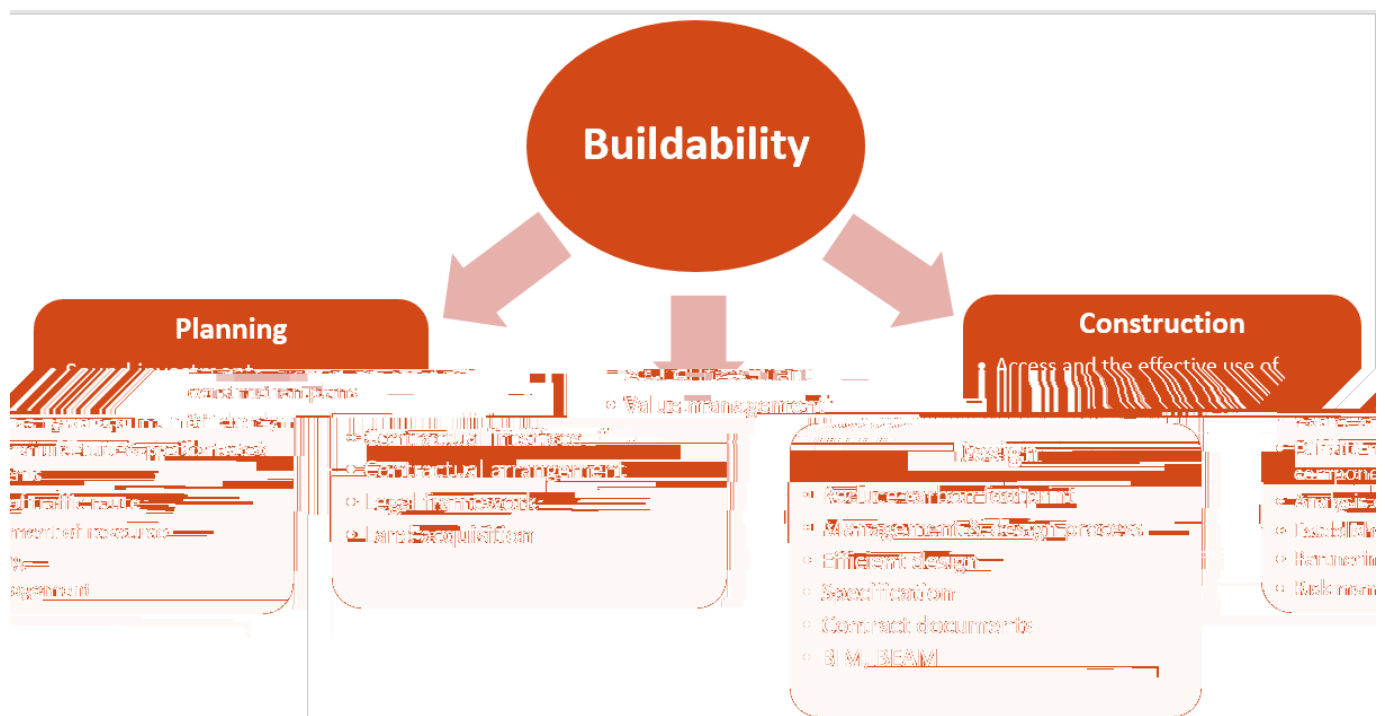
### Course Introduction

Buildability is an in-dispensable and integral development of any buildings or infrastructures from design to construction. It is a project management technique to review construction processes from start to finish during pre-construction phase in order to identify obstacles before a project is actually built to reduce or prevent errors, delays and cost over-runs. The term “Buildability” defines the ease and efficiency with which structures can be built. The more buildable a structure is, the more economical it will be. Buildability is in part a reflection of the quality of the design documents; that is, if the design documents are difficult to understand and interpret, the project will be difficult to build and vice versa.

### Course Outlines

With the aid of video, the presentation will focus on the following issues:

1. Buildability is a pre-construction exercise that looks at a design from the perspective of those that will manufacture, install components and carry out the construction works. This should not be confused with value engineering though some processes are common to both activities.
2. Assessment of buildability should look into the three elements of the planning, design and construction as illustrated in the chart below in relation to:
  - a. Achieving the desired final quality
  - b. Meeting the programme requirement
  - c. De-risking perceived problems
  - d. Achieving optimum value for money.
3. The constructability of a long span bridge and case study relating to the collapse of a suspension bridge in USA.
4. Case study relating to the collapse of a multi storey residential building in Shanghai



**Target Audience**

Engineers / construction professionals

**Instructor** Instructor with relevant professional qualifications and experience.**Medium of Instruction** To be conducted in English with Cantonese supplementary**Venue**

335-341

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Alameda Dr. Carlos D' Assumpção 335-341, Hotline Centre, 11/F, Macau

**Course Date & Time****Tuition Fee**

MOP 1,200

**Class Size**

30

\* The School of Continuing Studies,  
MUST is an Academic Affiliate of Chartered Association of Building Engineers (CABE).

\* **Enrollment Notes \***

(9:00 - 20:00)

(9:00 - 13:00) [ ]

**Operation hours: Monday to Friday (9:00 – 20:00) ; Saturday (9:00 - 13:00) [Close at Public Holidays]**

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For those who enroll for our courses for the first time, please go to <https://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do> or scan the QR Code below, choose the category of < >, and input personal information (no need to upload ID copy). After registration online successfully, please come to our school to make payment. You should bring along with your ID card and copy, and a passport size photo.

2. / SCHOOL OF CONTINUING  
STUDIES MACAU UNIV. OF SCIENCE AND TECHNOLOGY /  
**5,000**

Tuition fee and materials fee (if any) should be paid by cash or by cheque/Cashier Order (Please make payable to SCHOOL OF CONTINUING STUDIES MACAU UNIV. OF SCIENCE AND TECHNOLOGY ). **Cash is accepted for payment of not more than MOP5,000.**

3. All payment made is not refundable (except that the course is cancelled by the School) or transferable.
4. The School reserves the right to cancel or postpone the courses if minimum class size is not reached.