

iBuildSG LEAD Milestone Programme

Executive Development Programme in

LEADERSHIP FORESIGHT & INNOVATION IN THE BUILT ENVIRONMENT

6 – 10 November 2023 | Held on campus at Imperial College London, UK



Organised by:

BCA ACADEMY

PROGRAMME OVERVIEW

The Executive Development Programme is a collaboration between BCA and the Imperial College London (ICL) to drive transformation through in-depth exchange and discussions with global peers and leading educators on the forces and trends shaping our sector.

Thru’ learning journeys, keynote lectures and executive dialogues, the programme aims to equip C-Suite Executives, Senior Management, and top decision makers of BE sector with key knowledge to formulate strategic plans for AMA and IDD implementation for the organisations, as well as for the sector collectively.

Anchored on the theme of Manufactured Construction and Digitalisation, facilitated by Integrated Project Delivery, the programme supports leadership development beyond knowledge in the technical aspects, allowing BE Leaders to develop long term foresight acumen to anticipate & plan for the challenges ahead.



PROGRAMME OBJECTIVES

- i) Facilitate foresight planning through an understanding of global trends and directions of the BE sector, learn from the strategic directions of the UK to advance and transform the BE sector and glean best practices from globally leading organisations and advanced projects
- ii) Understand the systems engineering approach in the integration of project delivery and business drivers for Advanced Manufacturing & Assembly
- iii) Understand and apply the use of collaborative framework in BE projects and the role as key decision makers to achieve strategic business objectives



PROGRAMME HIGHLIGHTS

Day-1: Global Foresight & UK’s Strategic Key Thrusts

- 2050 Scenarios impacting the Built Environment
- UK Strategic Approach on Digital Engineering and Integrated Information Management
- UK’s Experience in Driving Industry Change through Advanced Manufacturing and Assembly (AMA)
- Innovation & Enterprise through Design Engineering @ Dyson

Day-2: System Approach towards AMA and IDD adoption

- Systems Engineering with Focus on Built Environment
- Strengthening Supply Chain Ecosystem as part of AMA & IDD
- Data-driven manufacturing & construction leveraging on Platform
- Visit to leading BE firm

Day-3: AMA & IDD Best Practices & Adoption of Cutting-Edge Technology

- Latest work of Laing O’Rourke on off-site fabrication and construction
- Practical challenges of integrating DfMA/IDD with MEP including implementation and solutions
- Visit to exemplary project

Day-4: Collaborative Delivery Model & innovation for BE Projects

- The NEC Journey in UK: Challenges & Implementation
- Changing the Face of Construction through Collaboration and Innovation
- Automation, innovation, and business strategic improvement drivers
- Group activities and presentation

Day-5: Visit to UK’s leading Technology and Innovation Centre

- Learning Journey to state-of-art Innovation Centre in facilitating growth and success of advanced manufacturing in UK, offering access to leading edge-equipment, expertise and environment for industry collaboration.



PROGRAMME LEAD



Mr Mark Enzer
Strategic Advisor, Mott MacDonald, London, UK, and Visiting Professor, Imperial College London

Mark is a keen champion of innovation in the context of collaborative delivery models and he is particularly interested in the transformation of the infrastructure industry, including systems-thinking, digital transformation, connected digital twins, data infrastructure, low-carbon sustainable solutions and the circular economy in the built environment.

As Advisor within Mott MacDonald Digital Ventures, Mark provides strategy-level advice to key clients on digital transformation, connected digital twins and broader industry transformation. The role also includes engagement in the wider industry, particularly focused on digital transformation.

As the former Head of the National Digital Twin programme (NDTp), he contributed to the leadership of this ambitious programme to enable an ecosystem of connected digital twin across the built environment. For five years as Mott MacDonald’s Chief Technical Officer, he was accountable to the Executive Board for technical excellence across the Group.

He was the Digital Transformation workstream lead as part of Project 13 for the Infrastructure Client Group and he was the lead author of the Infrastructure Carbon Review, published by HM Treasury.

PROGRAMME PARTNERS

Imperial College London

Imperial College London is a world top ten university with an international reputation for excellence in teaching and research. Consistently rated amongst the world's best universities, Imperial is committed to developing the next generation of researchers, scientists and academics through collaboration across disciplines. Located in the heart of London, Imperial is a multidisciplinary space for education, research, translation and commercialisation, harnessing science and innovation to tackle global challenges. Imperial College London is located in South Kensington next to several world renowned museums, Victoria & Albert Museum, Science Museum, Natural History Museum and within walking distance to the Royal Albert Hall and the famous Hyde Park.

Centre for Systems Engineering and Innovation

Lead by Dr Ana Mijic, the Centre for Systems Engineering and Innovation supports the application of systems engineering in the construction sector. The aim is to bring world class research on systems engineering and innovation into the sector to transform production of the built environment. The Centre acts as a hub for related inter-disciplinary research across campus on both systems engineering and innovation as applied to buildings and infrastructure. The Centre works collaboratively with leading engineers and managers to achieve its' aim through research, executive education and inspiring the next generation of engineers.



BCA Academy

The BCA Academy (BCAA) is the education arm of the Building and Construction Authority, Singapore. Founded in 1984, BCAA offers a wide range of training and education programmes tailored to the needs of the building and construction industry. These include programmes for professionals, management and executive personnel, and technical specialists. BCAA has been collaborating with established tertiary institutions to conduct undergraduate degree, postgraduate degree, executive

development and advanced management programmes. Our partners include Imperial College London, Stanford University, Carnegie Mellon University, Singapore Management University, Singapore University of Social Science, University College London, University of Nottingham, HFT Stuttgart University of Applied Sciences, Tsinghua University, Tongji University, Kyoto University, University of Florida, Denmark Technological University and University of Newcastle, Australia.

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COURSE DURATION: 6 – 10 November 2023 (Registration close: 20 Oct 2023)

ADMINISTRATIVE DETAILS

PROGRAMME FEE: SGD 7,650* (GST not applicable)

Fee includes course materials, refreshments, and local ground transportation to and from the airport, for participants taking the recommended flights. Fee does not include airfare, accommodation, and other meal expenses.

FLIGHTS AND ACCOMMODATION

- BCA will propose flights and accommodation options in due course

PAYMENT

Payment instruction will be provided after the registration is submitted

CONDITIONS ON REPLACEMENT AND WITHDRAWAL REQUEST

- Replacement request in writing must reach BCA Academy on or before 20 Oct 2023
- Withdrawal request in writing that reaches BCA Academy before 20 Oct 2023: 90% refund of the programme fee
- Withdrawal request in writing that reaches BCA Academy after 20 Oct 2023: No refund of programme fee



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 **81034**. On the registration page, please select **'I want to proceed to register without selecting a course date.'** We will assign you to the run this year.

ENQUIRIES

You may contact Mr Wan Thuan Teng (Wan_thuan_teng@bca.gov.sg) should you have any queries.

CPD POINTS

Subject to award from BOA-SIA and PEB

BCA Academy reserves the rights to amend the course or programme details, content and application fees without prior notice. It also reserves the right to cancel or postpone the course or programme due to unforeseen circumstances.



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