







Global BIM Manager Professional Training

- Course Brochure -



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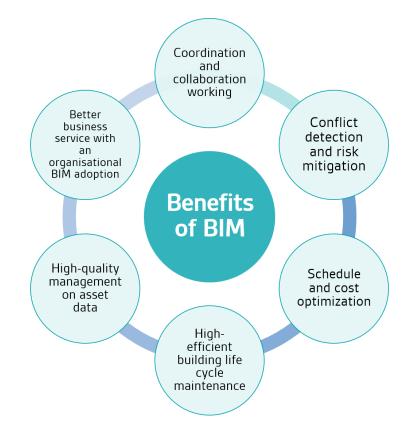
THE UNIVERSITY OF HONG KONG 香港大學 faculty of architecture 建築學院 Department of Real Estate and Construction 房地產及建設系



WHAT is BIM?

BIM is revolutionizing the way the construction industry creates and cares for its assets around the world. It ensures that everyone in the supply chain; from architects, engineers, constructors and facilities management share information in a collaborative way. It is a new method of construction that delivers major benefits - most notably time and cost savings through building in a collaborative and by managing costs through the whole lifetime of a building. To facilitate the adoption of BIM BSI developed, together with construction industry experts, the UK 1192 series of standards which define BIM Level 2 published in 2013. The ISO 19650 suite of standards moves towards internationalising these standards.

Since 4 April 2016, BIM Level 2 is mandatory in a government project in UK. The use of BIM is also becoming more commonplace in other countries, such as Singapore, South Korea, Canada and China etc. In Hong Kong, BIM is being implemented in various sectors, such as BIM for Statutory Submissions in Architectural Services Department, BIM for Asset Management in Electrical and Mechanical Services Department, BIM for Utilities Design in Water Supplies Department etc.



In 2017, the HKSAR Government decreed that BIM technology must be used in the design and construction of all major government capital works projects with a project estimate of more than HK\$30 million that were scheduled to start during or after 2018, and that the use of this technology in private construction projects should also be promoted.

In addition, to ensure the healthy development of BIM in Hong Kong, Construction Industry Council (CIC), has introduced the BIM Certification and Accreditation Schemes to ascertain the competency of BIM personnel and the quality of local BIM training courses.

To cope with the surge in demand for BIM personnel and training needs, we are pleased to announce that BSI and HKU are collaborated to launch the "Global BIM Manager Professional Training". We aim to offer delegates a quality BIM Manager training with the appropriate skill levels and competency in using BIM technology at international standard.







Background of Institutions

BSI - Source of the Standards

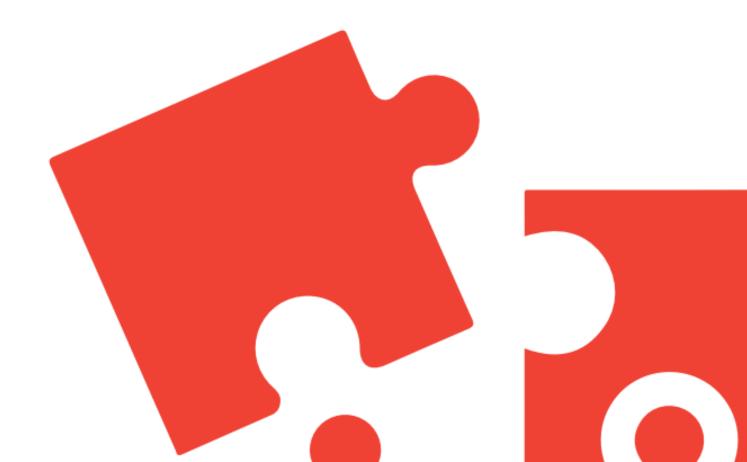
BSI formulated PAS 1192 standard

The UK currently the region, which sees the fastest growth in the application of BIM. As one of the countries utilising BIM for many government projects at the earliest, UK not only published various regulations and relevant standards but also issued the mandatory policies in April 2016. During this course, BSI played an important role in BIM standardisation pushed by the UK government: in 2014, entrusted by the Construction Industry Council (CIC) of UK, BSI formulated PAS1192 standard.

Meanwhile, BSI also provides the construction companies globally with the standard certification services specific to the BIM competency for project delivery in design and construction stages. In 2016, BSI launched the BIM-related Kitemark. So far, the enterprises which have been certified by BSI Kitemark: Balfour Beatty PIc, BAM Ireland, BAM Construct UK Ltd, Gammon Construction Ltd, Skanska UK PIc and voestaplineMetsecPIc.

HKU - Top University in the World

The University of Hong Kong is Asia's global university – and a global university requires a Faculty of Architecture with an equally broad outlook. Through the HKUrbanLab, the Faculty is conducting interdisciplinary research on some of the world's most pressing urban issues, to create cities that are better planned, designed and governed. The lab's base in Hong Kong gives it a unique window into one of the world's cities with the highest density, but its scholarly reach extends around the world, touching on universal topics such as sustainable density, cutting-edge fabrication and material technologies, urban ecologies, human health, culture and more. The BIM team has over a decade of experience globally in cutting-edge research on information management, and A.I. in the AECO industry.









WHO should take this course?

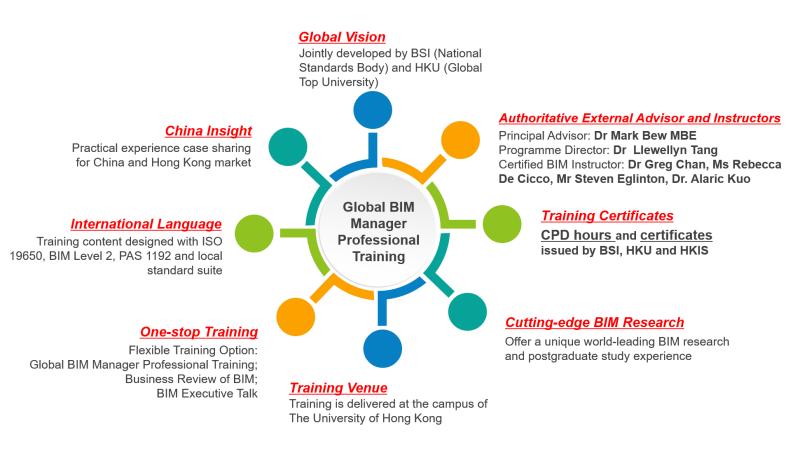
The training course targets, but not limited to:

- CEOs, CFO, CIOs, & COOs
- BIM Managers
- Asset, Engineering, Quality, Facility, Project, Technical Managers
- Real Estate Developers
- Civil, Mechanical and Structural Engineers
- Architects
- Construction Professionals
- Contractors
- Academia and Government Authorities

From the following industries:

- Government
- Construction
- BIM Consultancy
- Building Materials
- Quantity Surveying
- Project Management
- Architecture

WHY this course?



and more...







Course Highlight

4 Surveyors from HKIS are invited as a visiting industry practitioner to deliver 4 sessions (1 hour each) in relation to surveyor on BIM application. They are:

- Sr Bay Wong (PFM and PDD related)
- Sr Sunny Choy (QS related)
- Sr Eddie Wong (LS related)
- Sr YY Yip (BS, PDD related)

You may apply for either funding below:

RTTP Fund Claimable

Our Global BIM Manager Professional Training is registered under VTC Reindustrialisation and Technology Training Programme (RTTP), which is a funding scheme under the Innovation and Technology Fund that subsidises local companies 2/3 of the training cost to train their staff in advanced technologies, especially those related to "Industry 4.0".

The course fee is HKD 6,000 only (original: HKD 18,000) after RTTP reimbursement.

For details of RTTP, please refer to VTC website at <u>https://rttp.vtc.edu.hk/</u>.



CITF Fund Claimable

Our course is also registered under the Pre-Approved Lists of Construction Innovation and technology Fund (CITF). Funding ceiling is HK\$200,000 per applicant. With the funding ceiling, each person enrolling training is entitled to HK\$3,000 per course at maximum.

The course fee is HKD 15,000 only (original: HKD 18,000) after CITF reimbursement.

For details of CITF, please refer to CITF website at https://www.citf.cic.hk/.









WHAT will be taught?

Day 1 - Introduction to BIM and Digital Information Management (I)

Торіс	How this will help you
 BIM concept Local & Global Contexts, BIM standards and guidelines BIM software Technology trend Digital information management Common Data Environment (CDE) 	 Understand the basic principles and terminology of BIM Understand the governments' objectives towards achieving Level 2 BIM, HK BIM and ISO BIM Engage with clients on the benefits and key drivers associated to BIM Understand BIM software and technology trend Understand the value of information and how it should be managed, delivered and used through the capital, delivery and occupation phases of a project Create a common data environment and understand how to deliver information in line with the Design Responsibility matrix and individual supplier responsibilities Understand Construction Operations Building Information Exchange (COBie) Learn how to utilize Industry Foundation Classes (IFC)

Day 2 - BIM Digital Information Management (II), BIM Commercial and Contract

Торіс	How this will help you
 Data quality control & assurance across various stages Commercial issue Contract issue 	 Grasp the concept of 'Digital Built' and ensure your business recognizes the need for the development of BIM as part of the agenda
	 Grasp the practical application of BIM requirements to a client's facilities management strategy and goals
	 Advise clients on how to manage data more effectively and in turn become a desirable supply chain member for them in the future
	 Manage teams and projects to ensure all members of the supply chain are aware of the requirements to be able to deliver
	• Learn legal and contractual implications of BIM and how they may affect your projects





Day 3 - BIM Uses and Processes (I)

Торіс	How this will help you
Client BIM StrategyClient Pre-tender Project Stage	 Understand the importance of data from the client via the Employers Information Requirements (EIR)/ Project Information Requirements (PIR) document
	Understand the development and requirements of the Project Information Model (PIM)
	• Understand the data relevance and collating a plan for an Asset Information Model (AIM) in line with PAS1192-3

Day 4 - BIM Uses and Processes (II)

Торіс	How this will help you
 Definition and Design Stage Construction Stage Handover Stage Operations and Maintenance Stage 	 Understand the basic principles, processes and procedures of BIM Execute the core principles and achieve Level 2 BIM in your projects Assess the supply chain to see if they have the skills and knowledge to deliver BIM
	 Create and use documents such as the BIM Protocol, BIM Execution Plan (BEP) and the Master Information Delivery Plan (MIDP) Gain a better understanding of the relationship between design, construction, facilities, asset management to provide better solutions for your clients Know what to look for when being appointed and how BIM affects your contracts

Day 5 - BIM Review and Assessment

Торіс	How this will help you
ActivitiesAssessment	Identify the key benefits of implementing BIM
	Understand how to effectively embed BIM processes within your business
	Develop a plan and determine the resources required for implementation
	Apply industry good practice across your supply chain
	Discover a variety of strategic and technical solutions from implementing BIM
	Create a change management programme in line with BIM
	Analyse and dissect the barriers to BIM in relation to building and construction





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Principal Advisor



Dr Mark Bew MBE PhD PSc (Hons) CEng CITP FICE FRICS MBCS

Mark is Chairman of PCSG Limited and over the last thirty years has developed a track record of delivering successful innovative process and technology-driven business change programmes from within the Engineering and Construction industry. These include the development of Building Information Modelling (BIM) and Smart City standards and the delivery of systems into asset suppliers, owners and operators to improve asset performance and service outcomes.

Mark is at the forefront of UK and European BIM development and the push towards a digitally enabled construction sector. As Chairman of the Government's BIM Task Group, he leads the Digitally Built Britain programme, which will merge the development of BIM, Smart Cities, industrial controls and advanced manufacturing, to accelerate the digitalisation of the sector and unearth benefits including increased value and reduced costs.





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Instructor Team

Programme Director



Ir Dr Llewellyn Tang

BSc(First Class Hons); PGCert; PhD; FHEA; MHKIE; MCIOB; FCInstCES; CCBM Associate Professor in Building Information Modelling (BIM) Department of Real Estate and Construction, Faculty of Architecture, The University of Hong Kong

CIC Certified BIM Manager (CCBM), BSI Certified BIM tutor, Corporate Member (MHKIE), Chartered Construction Manager, (MCIOB), Fellow of the Chartered Institution of Engineering Surveyors (FCInstCES), Fellow for the Higher Education Academy in the UK (FHEA), Member of the BIM Assessment Panel (BIMAP) of CIC, Founding Director of Digital City Infrastructure and Technology Innovation Laboratory (D-CiTi Lab).

Former Head of Department of Architecture and Built Environment (2012-2017) at the University of Nottingham Ningbo China, Former Lecturer and Postdoctoral Researcher at the University of Reading and Loughborough University respectively, Former Deputy Chairman for the Hong Kong Institution of Engineers (UK Chapter), Former member of Construction Excellence BIM Industry Task Group for the UK Government.

During the time at Nottingham, Llewellyn has its first RIBA and CIBSE unconditional validation and accreditation completed successfully and established the first ICES-accredited GIS-BIM taught master in China. Llewellyn led and involved in multi-million funding from EPSRC, NSFC, Chinese Government, large-scale BIM and information management R&D industry projects including hospital, rail transit, and international airport.

In 2018, Llewellyn successfully introduced UK BIM level 2 with BSI for Wanda Group achieving BIM Kitemark double and helping their BIM system to tap the most value of this international standard for their digitization journey. Recently, he led a team of 12 BIM scientists for the design and application of a strategic framework for the national new smart city (Xiongan New Area) and future smart hospital in China based on A.I., GIS-BIM-IoT and Blockchain. The research outcome was delivered in TEDx Shanghai and Smart Expo Chongqing 2018.







Certified BIM Instructors



Dr. Greg Chan Lecturer, Department of Real Estate and Construction The University of Hong Kong

Greg is a Lecturer in the Department of Real Estate and Construction at the University of Hong Kong. Before joining HKU in Jul 2016, he worked as a Postdoctoral research fellow in both the University of Hong Kong and The Hong Kong Polytechnic University for numerous research projects and consultancy projects. His research interests include Building Information Modelling (BIM), construction safety and information technologies in construction.

Greg carried out six consultancy projects on BIM and virtual Prototyping from 2007 to 2011. The aim of these consultancy projects was to integrate BIM into construction management in real construction projects, which includes China State Construction International Holding Ltd., Gammon Construction Ltd. and Hong Kong Disneyland. The consultancy included both building and infrastructure project, such as Tuen Mun Road construction project and Ting Kau extension project. The sum of the six consultancy projects exceeded \$2,000,000.



Rebecca De Cicco BIM Tutor, British Standards Institution Fellow of the Chartered Institute of Building Chairlady of "Women in BIM"

Rebecca supports Building Smart globally, sits on the Autodesk Developer Network and Expert Elite groups and works with the UK BIM Alliance and BIM Regions to help industry upskill. She is a strong advocate for diversity (Chairlady of "Women in BIM") and works with higher education by tutoring and lecturing both undergraduate and postgraduate students in BIM and construction management.

She is also a fellow of the CIOB and offers support and training to institutions in the BIM space. Having a keen interest in BIM and the drive toward implementing BIM in the UK, she was invited to join a number of leading industry groups such as the BIM Task Group and Building Smart.





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Steven Eglinton BSc (Hons), FBCS, FBCart.S, MIoD, MPWI BIM Tutor, British Standards Institution

Steven is a very experienced geospatial information management and digital transformation specialist with 20 years' experience of strategic definition, project management & hands-on solutions implementation, particularly within the physical asset management, Built Environment and Natural Environment sectors.

His background is in mapping, Geospatial solutions and GIS, but now consults on asset information management and modelling in the widest context. Most often Steven works with Architecture, Engineering, Construction, Owner Operator (AECOO) and asset management clients - such as property developers, Railway infrastructure companies and Utilities companies.



Dr. Alaric Kuo Client Manager British Standards Institution

Alaric is a passionate BIM champion in Taiwan's social network. He created first BIM information news Facebook page in 2010, and actively participated in Taiwan Building Information Modeling Association (TBIMA) since 2012. Alaric is Director and Vice Secretary in the 5th Director Board of TBIMA. Alaric not only had rich experiences in teaching and lecturing, but also had numerous publications including research papers in prestigious conference and journal, blog post, magazine article, and textbook chapter. With the passion in disseminating BIM knowledge, he organized over 100 BIM events ranging from study group seminar to national conference.

Alaric is the member of Taiwan BIM Task Group to support the local adaption of ISO 19650 series. The members of Taiwan BIM Task Group including NTU BIM center, TCRI, TABC and TBIMA are the most prestigious organization in Taiwan BIM development.







CPD and Certification



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Training Details

Duration:	5 days
Time:	08:30 – 18:30
Venue:	The University of Hong Kong, Pokfulam Road, Hong Kong

Passing Requirements

Passing requirement for the full course: 60% of the total score

- 25% of the daily workshop
- 25% of the assignment
- 50% of the examination

Exam lower than 60% of the total score will be regarded as Fail.

One time (only) re-take of the exam can be arranged,

Fee: HKD 500.

Find out more

Call: +852 3149 3334 Email: hk@bsigroup.com Visit: bsigroup.com/en-HK