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 **LPC**
LLEWELLYN & PARTNERS CO.

 THE HONG KONG INSTITUTE OF
SURVEYORS
香港測量師學會



CIC ACCREDITED
BIM MANAGER COURSE
建造業議會認證建築信息模擬經理課程

Global BIM Manager Professional Training

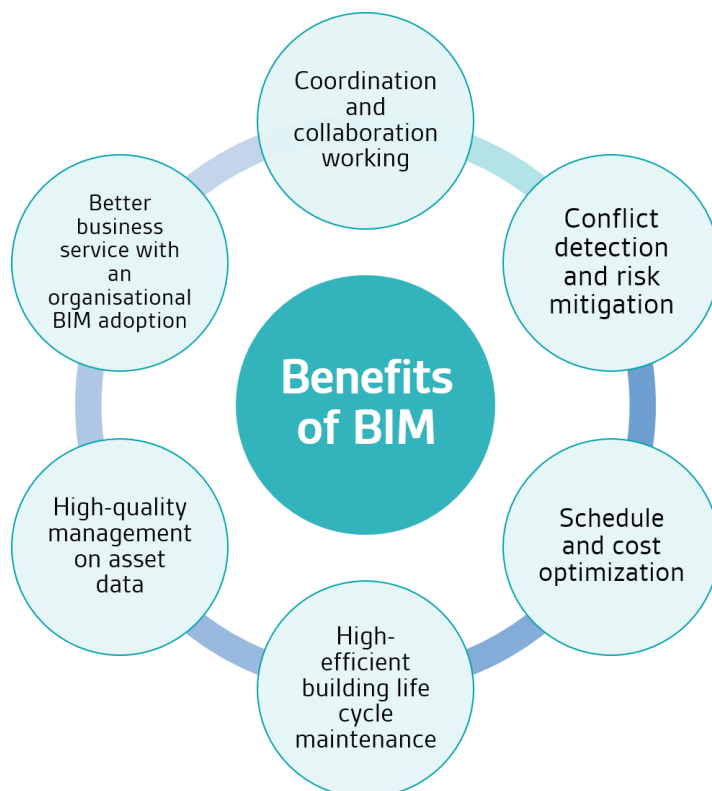
- *Course Brochure* -



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 internationalizing 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 be eligible for certification as a CIC-Certified BIM Manager (CCBM), one of the requirements is the successful completion of BIM Manager course accredited by CIC.

To cope with the surge in demand for BIM personnel and training needs, we are pleased to announce that BSI launches the "Global BIM Manager Professional Training". The purpose of this course is for the preparation of CCBM application and it is the route to be a CCBM.

We aim to offer delegates a quality BIM Manager training with the appropriate skill levels and competency in using BIM technology at international standard.



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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 utilizing 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 standardization 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 Plc, BAM Ireland, BAM Construct UK Ltd, Gammon Construction Ltd, Skanska UK Plc and voestapline Metsec Plc.

HKIS - The only surveying professional body incorporated by ordinance in Hong Kong.

HKIS work includes setting standards for professional services and performance, establishing codes of ethics, determining requirements for admission as professional surveyors, and encouraging members to upgrade skills through continuing professional development. HKIS has an important consultative role in government policy making and on issues affecting the profession. We have advised the government on issues such as unauthorized building works, building safety campaign, problems of property management, town planning and development strategies, construction quality and housing problems. We are working on amendments to standard forms of building contract and have issued guidance notes on floor area measurement methods.

The application of BIM is becoming widely adopted in the building industry to enhance the design, construction and operation efficiency and productivity. For the development stage, the application of BIM is in starting stage. Nowadays, people are talking about smart city, future city, 2050, etc., and the key to achieve those should have a well city planning. To do this, the planning tools and information is crucial. Innovation thinking, application of big data and latest technology, would help on the design of city planning so as to match with the human needs and be sustainable.

Admission Requirement:

Qualification:

A degree in architecture, engineering, surveying, building or construction, or equivalent as recognized by CIC, plus five years of relevant post-degree experience (including at least six months in Hong Kong)

Practical BIM experience:

At least two years of practical experience in BIM in past five years (including at least six months in Hong Kong)

*Non-standard route of admission will be given to applicants who do not meet the admission requirements under special consideration of BSI in consultation with CIC

Policies and procedures for admission

- Completion of Application Form by internet or hardcopy formats
- Submission of relevant original documents to prove the requirements as stated
- The profile of the applicant will be sent to training operations manager for approval

WHO should take this course?

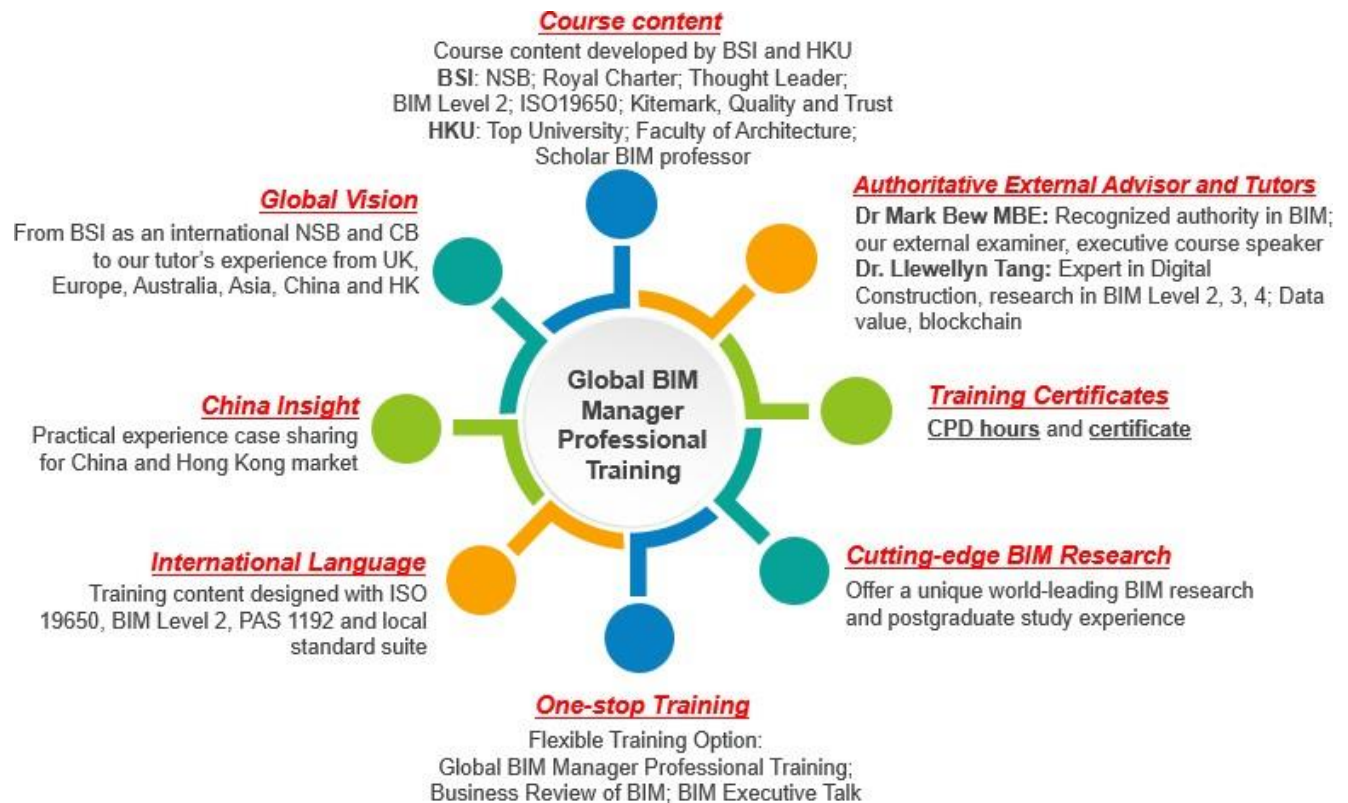
The training course targets, but not limited to:

- 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
- Surveyors
- Academia and Government Authorities

From the following industries:

- Government
- Construction
- BIM Consultancy
- Building Materials
- Quantity Surveying
- Project Management
- Architecture
- Real Estate Planning and Development
- Asset Management
- Property and Facility Management
- Green Building Development and Management

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 Michael Wong
- Dr Paul Ho
- Sr Arthur Cheung
- Sr Eddie Wong



Sr Michael Wong



Dr Paul Ho



Sr Arthur Cheung



Sr Eddie Wong

You may apply for either funding below:

RTTP Fund Claimable

Our Global BIM Manager Professional Training is registered under VTC Reindustrialization and Technology Training Programme (RTTP), which is a funding scheme under the Innovation and Technology Fund that **subsidies 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 <https://rttp.vtc.edu.hk/>.

**RTTP
Fund
Claimable**

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 5,400 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?

Course content covers ISO 19650-1:2018, ISO 19650-2:2018, PAS 1192-3:2014, BS 1192-4:2014

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

| Topic | How this will help you |
|---|---|
| <ul style="list-style-type: none"> • BIM concept • Local & Global Contexts, BIM standards and guidelines • BIM software • Technology trend • Digital information management • Common Data Environment (CDE) | <ul style="list-style-type: none"> • 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

| Topic | How this will help you |
|--|---|
| <ul style="list-style-type: none"> • Data quality control & assurance across various stages • Commercial issue • Contract issue | <ul style="list-style-type: none"> • 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)

| Topic | How this will help you |
|--|---|
| <ul style="list-style-type: none"> Client BIM Strategy Client Pre-tender Project Stage | <ul style="list-style-type: none"> 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)

| Topic | How this will help you |
|---|--|
| <ul style="list-style-type: none"> Definition and Design Stage Construction Stage Handover Stage Operations and Maintenance Stage | <ul style="list-style-type: none"> 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

| Topic | How this will help you |
|--|--|
| <ul style="list-style-type: none"> Activities Assessment | <ul style="list-style-type: none"> 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 Analyze and dissect the barriers to BIM in relation to building and construction |

Instructor Team

Principal tutor



Ir Dr Llewellyn Tang

BSc (First Class Hons); PGCert; PhD; FHEA; MHKIE; MCIQB; FCInstCES;
 CCBM Associate Professor in Building Information Modelling (BIM)
 Master of Science in Integrated Project Delivery [MSc (IPD)]
 Department of Real Estate and Construction, Faculty of Architecture, The University of Hong Kong
 Founder & CEO of Llewellyn and Partners Company Limited (Certified with BSI Kitemark for BIM Software)

Currently Associate Professor in Building Information Modelling in the University of Hong Kong, Programme Director of Master of Sciences in Integrated Project Delivery, Director of i5 BIM Research Group, Founder of HKU BIM Innovation Start-up - Llewellyn and Partners Co. Ltd. (LPC), Member of the BIM Assessment Panel (BIMAP) of CIC, Committee member for Hong Kong for ISO/TC 59 and ISO/TC 59/SC 13. TEDx Speaker Shanghai Huaihai 2018, 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 (U.K. Chapter), Former member of Construction Excellence BIM Industry Task Group (PAS 1192) for the U.K. Government.

With over 100+ high impact research work on information management, construction informatics and BIM innovation internationally and over a decade of international and local experience in BIM adoption and innovation on mega projects, Tang continues to bring good international practice on BIM adoption, training, research, and development into the U.K., Asia-Pacific, China, and Hong Kong. In early 2018, as a pioneer, Tang successfully introduced UK BIM level 2 (PAS1192/ ISO19650) into China for a real estate developer, helping her tap the most value of this international standard for their digitization journey. The same year, the team designed an application of a strategic framework for the national new smart city (Xiongan New Area) based on A.I., BIM, IoT and Blockchain. The research outcome was delivered in TEDx 2018.

With the experience and knowledge, Tang is one of the advocates of BIM in the bringing the West and East together East Asia to drive the digitalization and Smart City Blueprint in Hong Kong since 2019. In Q4 2020, as a significant BIM achievement, Tang is awarded the BIMers 2020 by the Construction Industry Council. In 2021, LPC won key awards and funds from ITC and HKSTP and was given the Gold Award for Emerging BIM company in the HKIBIM Awards 2020 and Bronze Award for CIC Digitalization Award 2021. Internationally, the LPC research team's inventions (BIM Warehouse) were awarded Silver Medal at the Special Edition 2021 Inventions Geneva Evaluation Days. These patented products of LPC, are among the first globally to achieve the BSI Kitemark™ for BIM Software in April 2021, providing assurance and trust to its users and clients.

Certified BIM Instructors

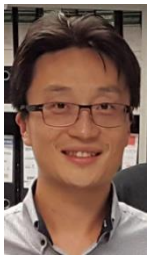


Dr. Greg Chan

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.



Ir. Cedric CHI

BSc, MSc, MAIB, MCIQB, MHKIE, MRICS, BEAM Pro,
 CCBM

Cedric is a Construction Project Management profession having over 19 years' experiences in handling large scale projects. He has participated in both civil and building works who responsible for the coordination and monitoring works between relevant parties and statutory submission in different construction stages.

He has been promoting wider BIM adoptions for design review, construction coordination, quantity taking off, project management applications in various commercial and infrastructure projects in the past 10 years and acquired CCBM in 2021.

His duties including the planning, immersive review (BIM) and supervision of day-to-day site progress in order to complete the project on time and within budget. He is a professional construction project manager with several international qualifications and he also has a sound knowledge of Government procedures and statutory submission and ordinances.



Ir. Ken Mao

BSc, BEng, MBA, RPE (BUD), MCIQB, MHKIE, MHKIBIM,
MbSHK, CCBM, BIMers 2020


Ken is a Registered Professional Engineer of ERB, Chartered Builder of CIOB, CIC Certified BIM Manager (1st batch) and professional member of HKIBIM and HKICBIM. His endeavor to construction has been recognized by obtaining HKIBIM BIM Awards - Grand Award in two consecutive years (2018 & 2019), BIM Level 2 verification certification in 2019, Quality Public Housing Awards - Innovative Use of BIM Technology in 2017 & 2019 and Quality Public Housing Awards - Safety Innovation in 2019 for Paul Y. Engineering Group.

Ken has been one of the pioneers in BIM development and implementation for Paul Y. Engineering Group for over 10 years, leading a team of BIM specialists in enhancing corporate BIM standards, engaging in BIM training programs and adopting BIM across projects.

Ken has possessed a passion for construction technology in which he has developed several innovative and practical digital applications for enhancing site safety management. He will continue his commitment to BIM development in Hong Kong without hesitation when necessary.

In year 2020, he was awarded the certificate of BIMers 2020 which demonstrated his outstanding achievement and contribution to local BIM industry.

Certificate



Notes: Trainees will be granted training certificate issued by BSI upon completion of the course and passing the examination.

Training Details

| | |
|-----------|--|
| Duration: | 5 days, (09:00 – 18:00) or 10 half-days, (4 hours per morning/ afternoon session, exact time to be varied) |
| Venue: | 23/F, Cambridge House, TaiKoo Place, 979 King's Road, Island East, Hong Kong or Online Virtual Training |

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.

Enrolment



<https://bit.ly/2JOABXN>

Find out more
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 Email: hk@bsigroup.com
 Visit: bsigroup.com/en-HK