CONSTRUCTION INDUSTRY COUNCIL
建造業議會

Construction Innovation and Technology Fund (CITF)

Manpower Development (MPD) Reference List

August 2026

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Remark: The budget provided is for reference only. Actual fund grant will be subject to programme income and 30% income allocation rule.

MPD Reference List

Non-local enrichment course for students (Referencing ID1279)

Aspect	Approved Content
Overview and programme description	• Event name: Swansea University "Innovation in Construction Programme" • The programme is a 15-day overseas construction innovation enrichment course in Swansea, UK focusing on technological innovations in modern construction • Participants will attend technical lectures, workshops, industrial visits and cultural visits to learn about construction innovation, BIM, sustainable development, active buildings, coastal engineering, structural steel technology and advanced computational modelling
Intended Learning Outcome (ILO)	• IL1: Enhance international exposure through exchanges with professors and practitioners in the UK construction industry • IL2: Gain understanding of recent construction innovations and infrastructure developments in the UK • IL3: Develop an international perspective on the impacts of construction innovation on global infrastructure, economy and climate change
Target Participants	• 25 participants
Itinerary/ Rundown	• 15-day programme
Description of the Course (venue, speaker, activities, assessment)	• Participants will visit Swansea University engineering facilities, the £450 million Bay Campus development, SPECIFIC Innovation and Knowledge Centre, SPECIFIC Active Buildings, Tata Steel, Active Home Project Development in Neath, St. Modwen Properties construction projects and Hale Construction sites. • The programme also includes visits to London city developments, Swansea city regeneration projects and Gower Peninsula, together with observations of BIM applications, renewable energy technologies, infrastructure planning, site safety measures and innovative construction practices.
Implementation plan	• A post-tour sharing session will be organised for students in the School of Engineering to disseminate learning outcomes and experiences • Technical presentations, concluding gala ceremony with certificate presentation • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$1,278,407

MPD Reference List

Non-local enrichment course for students (Referencing ID9241)

Aspect	Approved Content
Overview and programme description	• Event name: Unlocking the full potential of Building Information Modelling with openBIM • This 8-day non-local enrichment course in Korea aims to strengthen students' competencies in BIM innovation, interoperable data exchange, openBIM standards and collaborative project delivery.
Intended Learning Outcome (ILO)	• ILO1: Learn the latest BIM technologies and their adoption in construction projects. • ILO2: Comprehend openBIM applications and their importance in the collaborative BIM environment. • ILO3: Discover the IT infrastructure of smart cities and innovative architectural design. • ILO4: Compare and contrast BIM practices between South Korea and Hong Kong.
Target Participants	• 30 participants
Itinerary/ Rundown	• 8-days programme
Description of the Course (venue, speaker, activities, assessment)	• Activities include visits buildingSMART Korea, Kyung Hee University (ITalab), SK ecoplant, Samsung C&T, Innovative Architecture in Seoul, Incheon National University (IDCM Lab), G-Tower and the Knowledge & Information Industrial Complex. • Workshops, seminars, university visits, company visits and smart city tours, participants will learn how openBIM has been successfully adopted in one of the leading BIM countries in the world.
Implementation plan	• Students will participate in seminars, workshops, company visits, university visits and smart city tours designed to achieve the four ILOs. • Participants are required to submit a final report, complete a feedback form and deliver a presentation to CityU staff and students to disseminate their learning outcomes. • Post-course meetings will be conducted for evaluation and knowledge sharing. • CITF will be promoted in all publicity materials of the programme
Budget	• HK$906,716

MPD Reference List

Non-local enrichment course for students (Referencing ID2534)

Aspect	Approved Content
Overview and programme description	• Event name: Digital Transformation in Construction (UCL Summer School in London, UK) • The programme focuses on digital engineering and construction, including Building Information Modelling (BIM), mixed reality, big data analytics and blockchain technologies. It aims to equip students with foundational knowledge and management skills in digital transformation within the construction sector
Intended Learning Outcome (ILO)	• ILO1: Understand the rationale for digital transformation and its impact on the built environment • ILO2: Gain knowledge of innovative digital technologies and their impact on architecture, engineering, construction and asset management • ILO3: Understand current research developments concerning digitalisation in the built environment and their implications • ILO4: Develop skills to analyse and respond to organisational and project-level digital transformation challenge
Target Participants	• 20 participants
Itinerary/ Rundown	• 4-week programme
Description of the Course (venue, speaker, activities, assessment)	• The programme comprises 129 teaching hours delivered through lectures, workshops, online learning, case studies, technical visits and study tours • Key activities include UCL campus orientation tour, Bentley Information Academy visit and workshop, Thames Tideway Project visit, Building Research Establishment (BRE) visit, Lectures on digitalization, Harvard case-study teaching, group project presentations and online learning activities • Teaching methods include lectures, workshops, site visits, online learning and case-study-based learning
Implementation plan	• Students will complete formative quizzes, group coursework and an individual essay. Assessment consists of a group presentation (30%) and a 2,000-word individual essay (70%) • Participants will receive a non-credit-bearing Certificate of Attendance issued by UCL Consultants on behalf of University College London • CITF will be promoted in all publicity materials of the programme
Budget	• HK$2,000,000

MPD Reference List

Non-local enrichment course students (Referencing ID5644)

Aspect	Approved Content
Overview and programme description	• Event name: Augmented Virtual Reality Enhanced Building Information Modelling, Design and Built Workshop – A Journey of Future Sustainable Construction: Bamboo-Timber Grid-shell Challenge • The programme combines BIM, Design for Manufacture and Assembly (DfMA), mixed-reality (MR) technologies, sustainable timber and bamboo construction, and hands-on construction practices through the design and construction of a bamboo-timber grid-shell structure in Edinburgh, UK hosted by Edinburgh Napier University (ENU)
Intended Learning Outcome (ILO)	• ILO1: Acquire knowledge of advanced construction technologies that are transforming the construction industry • ILO2: Enhance understanding of BIM-enabled structural analysis and design methodologies • ILO3: Learn international construction practices and health and safety standards through direct exposure to UK construction projects • ILO4: Apply BIM, DfMA, mixed-reality and digital fabrication techniques in a practical design-and-build project
Target Participants	• 30 participants
Itinerary/ Rundown	• 9-day programme
Description of the Course (venue, speaker, activities, assessment)	• The programme runs in Edinburgh, Scotland • Activities include pre-departure online workshops, BIM and Tekla training, mixed-reality workshops, manufacturing training, construction safety training, site visits, industrial visits and construction of a small-scale bamboo-timber grid-shell structure. • Students attend workshops on Rhinoceros 3D, Grasshopper, Tekla Structures, Tekla Open API and Trimble Connect for BIM modelling, fabrication planning and mixed-reality construction applications.
Implementation plan	• The project culminates with technical review sessions, reflection activities and architectural study tours. • The programme leverages ENU's internationally recognised expertise in timber engineering, digital fabrication and sustainable construction research • CITF will be promoted in all publicity materials of the programme
Budget	• HK$1,797,478

MPD Reference List

Non-local enrichment course students (Referencing ID1199)

Aspect	Approved Content
Overview and programme description	• Event name: 2019 Computing in Construction Summer Construction Summer School (CCSS) • The summer school in Semigallia, Italy aims to teach engineering and architecture students and young industry professionals the latest developments in computing and informatics for the Architecture, Engineering, Construction and Facility Management (AEC/FM) sector.
Intended Learning Outcome (ILO)	• ILO1: To understand the latest developments in OpenSEES and engineering simulation technologies. • ILO2: To acquire practical knowledge on the use and development of the OpenSEES framework for structural, geotechnical and fire engineering applications. • ILO3: To learn practical applications and case studies of infrastructure disaster simulation and extreme loading analysis.
Target Participants	• 27 participants
Itinerary/ Rundown	• 7-day summer school
Description of the Course (venue, speaker, activities, assessment)	• Key topics include Digitising Infrastructure, Robotic Systems for Inspection, Cyber Physical Systems for Construction, Mixed Reality, Productivity Improvement, Proactive Site Monitoring, AI-based Project Controls, Real-Time Safety Management, Linked Data in AEC, BIM 4D and 5D Applications, 3D Printing, Deep Learning, Blockchain Technology, Supply Chain Management, Computer Integrated Construction and Big Data Analytics. • Activities include lectures, reading sessions, discussions, networking, an essay competition and interaction with international academics, researchers and students.
Implementation plan	• Activities include inviting international and GBA experts, organising keynote presentations, technical sharing sessions and a research exhibition • Evaluation methods include participation in lectures and discussions, completion of the essay competition and submission of a post-event survey report to evaluate learning outcomes and programme effectiveness. • CITF will be promoted in all publicity materials of the programme
Budget	• HK$490,974

MPD Reference List

Non-local training /visits for Practitioners (Referencing ID15811)

Aspect	Approved Content
Overview and programme description	• Event name: HKCA YMS Overseas Delegation 2023 – Sydney, Australia • The delegation aims to provide young construction practitioners and students with opportunities to learn from Australia's construction industry through technical visits, company visits, university exchanges and professional sharing sessions focusing on innovation, sustainability and construction technologies
Intended Learning Outcome (ILO)	• ILO1: Gain practical understanding of innovative and sustainable construction practices adopted in Australia • ILO2: Learn about advanced construction technologies, digital management systems, renewable energy solutions and sustainable building practices • ILO3: Understand the strengths and challenges of the construction industry through exchanges with contractors, consultants, academics and local professionals • ILO4: Enhance participants' perspectives on safety, sustainability, innovation and future career development in the construction industry
Target Participants	• 45 participants
Itinerary/ Rundown	• 7-day programme
Description of the Course (venue, speaker, activities, assessment)	• Participants will visit major infrastructure and construction projects in Sydney, including WestConnex M4-M5 Link Rozelle Interchange, Nepean Hospital, Western Sydney Airport and Crows Nest Metro Station, covering innovative methods, digital tech and sustainable delivery • Key speakers include Boyd Merrett (Chief Operating Officer, John Holland), Robert Vranjesevic (Project Manager, CPB Contractors), Taylor Street (Workforce Initiatives and Communications Manager), Sagi Pradhan (Chief Engineer, Sydney Metro), Colin Danby (Deputy Chief Executive Officer, A W Edwards), Rowenna Walker (Managing Director, Aurecon), Professor Richard Stuetz (UNSW) and Sidney Koh (Director, Supersoma)
Implementation plan	• Post-trip evaluation and follow-up activities include review and sharing sessions, group presentations, dissemination of learning outcomes, and participation in future seminars, school talks and industry promotion activities • CITF will be promoted in all publicity materials of the programme
Budget	• HK$110,646

MPD Reference List

Non-local training /visits for Practitioners (Referencing ID18535)

Aspect	Approved Content
Overview and programme description	• Event name: ICE HKA G&S Spain Delegation 2024 • Programme description: A 9-day overseas delegation for young engineers and students to explore Spain's successful practices in sustainable infrastructure development, urban planning, transportation infrastructure and technological innovation through site visits, academic exchanges and company visits
Intended Learning Outcome (ILO)	• ILO1: To understand Spain's approaches to sustainable infrastructure development, resilient cities and urban planning. • ILO2: To gain first-hand knowledge of innovative engineering projects in renewable energy, transportation infrastructure, data centres and urban redevelopment. • ILO3: To identify transferable best practices and innovative solutions applicable to Hong Kong through engagement with Spanish academic and industry counterparts • ILO4: To foster professional networking, knowledge exchange and collaboration between young engineers and students from Hong Kong and Spain
Target Participants	• 24 participants
Itinerary/ Rundown	• 9-day programme
Description of the Course (venue, speaker, activities, assessment)	• Visiting places include Madrid Metro Expansion, Madrid Río Project, Santiago Bernabéu Stadium, Getafe Data Centre, Madrid Nuevo Norte, Royal Palace of Madrid, Royal Basilica of Saint Francis the Great, Plaza de Toros de Las Ventas and Templo de Debod • Academic exchange sessions will be arranged with the European University of Madrid and Polytechnic University of Madrid • Company visits will be conducted at CheckToBuild, sAtt Arquitectura and Aldesa
Implementation plan	• Attendance records, participant surveys and a post-visit report will be used to evaluate the programme. • CITF will be promoted through information booklets, banners, study reports, dissemination seminars and publicity materials
Budget	• HK$246,530

MPD Reference List

Non-local training /visits for Practitioners (Referencing ID17643)

Aspect	Approved Content
Overview and programme description	• Event name: Overseas Technical Visit to Sydney in 2024 • A one-week overseas technical visit to landmark infrastructure projects in Sydney, covering innovative approaches and latest technologies in geotechnical engineering, tunnelling, urban infrastructure, transport planning, sustainability and construction safety.
Intended Learning Outcome (ILO)	• ILO1: To gain first-hand knowledge of innovative construction approaches and latest technologies adopted in major infrastructure projects in Sydney and Australia • ILO2: Gain knowledge of advanced tunnelling, marine works, rail infrastructure and geotechnical engineering solutions • ILO3: Learn sustainability-focused project planning, design and construction approaches adopted in Australia • ILO4: To establish communication channels with local geotechnical engineering professionals and promote future collaboration and knowledge exchange
Target Participants	• 25 participants
Itinerary/ Rundown	• 7-day programme
Description of the Course (venue, speaker, activities, assessment)	• Visiting places include Western Harbour Tunnel and Warringah Freeway Upgrade, Sydney Gateway, Sydney Metro West, Central Interceptor, M6 Motorway, Western Sydney Airport, Martin Place Station and North Head Wastewater Treatment Plant • The visits will cover major infrastructure works involving tunnelling, marine works, road interchange construction, railway tunnels and stations, wastewater tunnel systems, deep shafts, sustainable design and innovative materials
Implementation plan	• Key takeaways from the visits and meetings will be shared through discussion sessions at the end of the trip among participants and subsequently shared with HKIE-GD members • An electronic survey will be sent to all participants after the event to collect feedback on event content, speakers, logistics and overall satisfaction. • CITF will be promoted in all publicity materials of the programme
Budget	• HK$242,024

MPD Reference List

Non-local training /visits for Practitioners (Referencing ID4250)

Aspect	Approved Content
Overview and programme description	• Event name: Hong Kong Delegation to the World Sustainable Built Environment Conference 2020 (WSBE 2020), Gothenburg, Sweden • WSBE 2020 is a globally recognised conference on sustainable built environment, focusing on climate change, sustainability, digitalisation, innovation, smart cities, low-carbon construction and sustainable technologies.
Intended Learning Outcome (ILO)	• ILO1: Understand international best practices in climate change mitigation, decarbonisation and sustainable construction across the building value chain. • ILO2: Acquire knowledge of innovative digital strategies, smart city development, digitalisation and emerging construction technologies. • ILO3: Learn about advanced building materials, low-carbon technologies, climate-resilient design and sustainable building practices for improving environmental performance. • ILO4: Gain insights from international case studies, technical tours and expert presentations that can be applied to improve safety, productivity, quality and sustainability in Hong Kong's construction industry
Target Participants	• 100 participants
Itinerary/ Rundown	• 5-day programme
Description of the Course (venue, speaker, activities, assessment)	• Activities included technical tours, followed by the three-day WSBE 2020 conference. Conference themes covered Climate Change & Sustainability, Digitalisation & Innovation, Policy & Finance, Decarbonisation, Circular Built Environment, Digital Cities and Sustainable Development. • The conference featured keynote speeches, panel discussions, breakout sessions, Hong Kong sharing sessions, exhibitions and networking events.
Implementation plan	• Delegates were required to complete post-trip questionnaires to evaluate knowledge gained under the CITF objectives and identify applicable practices for Hong Kong • The implementation schedule included delegate recruitment, preparation of delegation kits, attendance at conference and technical tours, post-event surveys and submission of a final report. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$812,700

MPD Reference List

Non-local training /visits for Practitioners (Referencing ID3830)

Aspect	Approved Content
Overview and programme description	• Event name: Specialist Certificate in Design for Manufacturing and Assembly (DfMA) • The programme is a 9-day full-time intensive award-bearing training course in Singapore designed to equip construction professionals with essential knowledge and technical skills in applying DfMA principles to improve construction productivity.
Intended Learning Outcome (ILO)	• ILO1: To gain a comprehensive understanding of Design for Manufacturing and Assembly (DfMA) principles and supporting policies, regulations and accreditation requirements. • ILO2: To understand Lean Construction principles and their applications in fabrication and project management. • ILO3: To learn the adoption and integration of prefabricated systems and technologies, including PPVC, structural connections and MEP integration • ILO4: To apply Integrated Digital Delivery (IDD) and BIM technologies in DfMA projects and develop practical solutions through integrated group projects
Target Participants	• 22 participants
Itinerary/ Rundown	• 9-day programme
Description of the Course (venue, speaker, activities, assessment)	• Activities include lectures on DfMA, Lean Construction, PPVC technologies, structural and MEP integration, IDD and BIM applications; four site visits; case studies; and an integrated group project requiring participants to prepare and present a PPVC adoption proposal for a real project. • The programme comprises lectures, case studies, site visits and integrated group projects focusing on DfMA, PPVC, Lean Construction and Integrated Digital Delivery (IDD).
Implementation plan	• Participants are required to complete an integrated group project involving the identification of a suitable project and preparation of a PPVC adoption proposal. • Each group will submit a PowerPoint report and deliver a presentation on the final day of the programme. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$400,000

MPD Reference List

Non-local training /visits for Practitioners (Referencing ID2969)

Aspect	Approved Content
Overview and programme description	• Event name: BCA Academy "3-Day Executive Training Programme" • The programme is a construction innovation-focused executive training course covering Design for Manufacture and Assembly (DfMA) and Modular Integrated Construction (MiC/PPVC) in Singapore
Intended Learning Outcome (ILO)	• ILO1: Understand Singapore's policies, initiatives and roadmaps for driving construction productivity improvement • ILO2: Understand the opportunities and challenges associated with DfMA adoption • ILO3: Appreciate the strategies adopted by Singapore in promoting DfMA and MiC implementation • LIO4 Gain essential understanding of DfMA concepts and principles, including the offsite construction continuum • LIO5: Understand the MiC spectrum, key architectural, structural and MEP design considerations, module production, transportation, installation and maintenance requirements
Target Participants	• 30 participants
Itinerary/ Rundown	• 6-day programme
Description of the Course (venue, speaker, activities, assessment)	• Activities include sharing sessions by BCA, DfMA and MiC workshops, ICPH visits, project site visits and networking sessions. Topics cover construction productivity, DfMA concepts, MiC case studies, architectural design considerations, structural and MEP design considerations, and module installation and coordination. • It includes sharing sessions by the Building and Construction Authority (BCA), site visits and Integrated Construction and Prefabrication Hub (ICPH) visits to provide an understanding of Singapore's DfMA ecosystem and productivity enhancement initiatives.
Implementation plan	• Learning outcomes will be achieved through direct observation of MiC projects and interaction with practitioners in Singapore's DfMA ecosystem. • Each participant will complete a questionnaire to evaluate achievement of course objectives and learning outcomes. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$210,086

MPD Reference List

Non-local training /visits for Practitioners (Referencing ID13909)

Aspect	Approved Content
Overview and programme description	• Event name: HKCA YMS Pro Overseas Delegation 2023 – Osaka, Japan • The delegation aimed to expose young construction practitioners to Japan's advanced construction practices, innovation, sustainability initiatives and technology adoption
Intended Learning Outcome (ILO)	• IL1:Understand application of robotics, digitalisation and smart construction technologies in Japan • IL2:Learn sustainable construction approaches including CLT, ZEB and green urban planning • IL3: Explore AI, IoT, AR/VR and Society 5.0 concepts relevant to construction.• Understand innovative site management, remote operation and construction productivity initiatives • IL4: Evaluate opportunities to adopt Japanese innovations within Hong Kong's construction industry
Target Participants	• 30 participants
Itinerary/ Rundown	• 6-days programme
Description of the Course (venue, speaker, activities, assessment)	• The programme focused on construction innovation, smart construction, sustainability, welfare, health, information technology and best practices in the Japanese construction industry. • The programme includes visit Kajima Corporation & Midosuji Awaji-Cho Building, Osaka Expo 2025, Obayashi Corporation, SKK Corporation (SK Kaken), Umekita Phase 2 Development. • Delegates participated in networking sessions with Japan Building Maintenance Association (JBMA), Hong Kong Trade Development Council (HKTDC).
Implementation plan	• Delegates were divided into groups and required to conduct presentations at the end of the trip. Assessment covered professionalism, engineering content, presentation skills, teamwork and creativity. Knowledge sharing was further disseminated through social media, newsletters and post-delegation presentations targeted at students and young practitioners. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$223,667

MPD Reference List

Non-local training /visits for Practitioners (Referencing ID1200)

Aspect	Approved Content
Overview and programme description	• Event name: “Time to Change” UK Study Visit • The study visit aimed to provide experiential learning opportunities for Hong Kong construction practitioners to learn from the UK’s leading practices in construction innovation and technology.
Intended Learning Outcome (ILO)	• IL1:Understand UK best practices in MiC and offsite construction. • IL2:Learn how BIM supports project delivery and digital construction. • IL3: Explore smart infrastructure and data-driven asset management approaches. • IL4: Understand application of robotics and advanced construction technologies in project delivery.
Target Participants	• 34 participants
Itinerary/ Rundown	• 7-days programme
Description of the Course (venue, speaker, activities, assessment)	• The programme was aligned with the Construction 2.0 initiative and focused on areas promoted under CITF, including Modular Integrated Construction (MiC), Building Information Modelling (BIM), Advanced Construction Technology (ACT), robotics, offsite construction, digital delivery and smart infrastructure. • The programme includes visit BRE (Building Research Establishment), Smart Infrastructure Project Site (London), Royal Institute of British Architects (RIBA), Infrastructure Industry Innovation Platform (i3P), CDL Training Session, UK MiC Consortium and High-rise Modular Development, MiC Site Visits, Croydon, University College London (UCL), Elements Europe MiC Factory, Premier Modular Hospital Project, University of Cambridge, Modular Systems Factory, Crossrail Bentley Information Academy and Imperial College London.
Implementation plan	• The programme combined classroom-based training, site visits, factory visits, laboratory visits, seminars, meetings and knowledge exchange sessions. • Activities were delivered by leading UK universities, research institutions, professional bodies and industry organisations specialising in construction innovation and technology. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$254,317

MPD Reference List

Non-local training /visits for Practitioners (Referencing ID19744)

Aspect	Approved Content
Overview and programme description	• Event name: HKCA YMS Pro Overseas Delegation 2024 – Dubai & Abu Dhabi • The delegation aimed to expose young construction practitioners, including engineers, surveyors and project coordinators, to futuristic designs, innovative construction technologies and sustainable infrastructure developments in Dubai and Abu Dhabi.
Intended Learning Outcome (ILO)	• IL1:Understand innovative infrastructure, high-rise and mega-project delivery approaches adopted in the UAE. • IL2 :Learn advanced structural engineering and construction methodologies including precast construction, strand-jacking and long-span structures. • IL3: Explore smart city technologies, digital transformation and sustainable development. • IL4: Evaluate applicability of emerging construction technologies and management approaches to Hong Kong projects.
Target Participants	• 24 participants
Itinerary/ Rundown	• 7-days programme
Description of the Course (venue, speaker, activities, assessment)	• The programme includes visit Bridges 7 & 8 Between Reem Island and Sheikh Khalifa Bin Zayed Highway, teamLab Phenomena Abu Dhabi, City of Lights, Al Reem Island, Burj Khalifa, Arup Dubai, and One Za'abeed. • The programme focused on innovation, sustainability, information technology and mega infrastructure projects, with knowledge exchange and technical visits to landmark developments.
Implementation plan	• Participants were required to complete group presentations and written reports on lessons learned during the delegation. Assessment criteria included engineering and construction content, presentation skills, teamwork, creativity and application of learning to Hong Kong. • Social media sharing and newsletter dissemination were also planned throughout the trip. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$119,231

MPD Reference List

Non-local training /visits for Practitioners (Referencing ID24228)

Aspect	Approved Content
Overview and programme description	• Event name: HKCA HSC & EC Overseas Delegation 2025 – Hangzhou • A 4-day overseas delegation for construction practitioners to explore innovative construction technologies, health and safety practices, environmental management measures, AI applications and smart construction solutions in Mainland China
Intended Learning Outcome (ILO)	• ILO1: Participants will be able to analyse and discuss how innovative practices observed in Hangzhou can be adapted and implemented in Hong Kong to enhance health, safety and environmental standards • ILO2: Participants will establish connections with local industry experts and organisations to facilitate knowledge exchange and potential collaboration on future health, safety and environmental initiatives • ILO3: Participants will critically evaluate the effectiveness of the safety and environmental measures observed during the visit and assess their applicability to the Hong Kong construction industry
Target Participants	• 27 participants
Itinerary/ Rundown	• 4-day programme
Description of the Course (venue, speaker, activities, assessment)	• Participants visit Hangzhou Huawei Headquarters, Zhejiang Construction Investment Group (ZCIGC), Ant Group Global Headquarters Phase II, Whitehorse Lake Laboratory Headquarters, Zhejiang Construction Engineering Machinery Group, DEEP Robotics • The programme aims to facilitate knowledge exchange between Hong Kong and Mainland construction professionals and promote the adoption of innovative and sustainable construction practices in Hong Kong
Implementation plan	• Learning outcomes will be assessed through post-visit presentations and sharing sessions with non-participating committee members • Participants will evaluate the applicability of observed safety and environmental practices and disseminate findings within their organisations • CITF acknowledgement will be provided through event communications and publicity materials
Budget	• HK$151,060

MPD Reference List

Non-local training /visits for Practitioners (Referencing ID22946)

Aspect	Approved Content
Overview and programme description	• Event name: HKCA YMS Overseas Delegation 2025 – Singapore • The delegation aims to expose young construction practitioners to Singapore's best practices in sustainability, innovation, BIM, modular construction, smart infrastructure, sustainable urban development and advanced construction technologies.
Intended Learning Outcome (ILO)	• IL1 – Understand sustainable construction practices adopted in Singapore, including Green Mark, energy efficiency, water conservation and eco-friendly building materials. • IL2 – Learn innovative technologies such as BIM, VR safety training, IoT, smart mobility systems, PPVC and DfMA. • IL3 – Appreciate modular and prefabricated construction methods for improving productivity, quality and sustainability. • IL4 – Gain insights into project management, stakeholder coordination, risk management and construction safety practices.
Target Participants	• 33 participants
Itinerary/ Rundown	• 7-days programme
Description of the Course (venue, speaker, activities, assessment)	• The programme includes visit of Singapore Institute of Technology (SIT), Contract N109A North South Corridor, Gammon–Bachy JV LTA Project (Cross Island Line), Mandai Wildlife Reserve, The Myst, Upper Bukit Timah, Concrete Innovators Co. Pte. Ltd. (Precast Factory). • Participants will visit construction projects, educational institutions and a precast factory to learn how Singapore integrates innovation and sustainability into its built environment.
Implementation plan	• Participants will conduct a final group presentation summarising observations and learning outcomes relating to innovation and sustainability. Presentations will be assessed on understanding, relevance, analysis and communication skills. A panel of senior management and industry experts will provide professional feedback. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$40,357

MPD Reference List

Non-local training /visits for Practitioners (Referencing ID19926)

Aspect	Approved Content
Overview and programme description	• Event name: ICE HKA Netherlands Delegation 2024 – Netherlands Technical Visit on Sustainable and Innovative Built Environment • The delegation aims to expose Hong Kong construction practitioners to innovative Dutch engineering solutions in sustainable development, climate resilience, water management, sustainable transport, low-carbon construction, and infrastructure planning through technical visits, seminars and networking activities..
Intended Learning Outcome (ILO)	• ILO1: Understand the Netherlands' innovative strategies in sustainable development and their application in Hong Kong's construction sector. • ILO2: Assess sustainable technologies and practices from the Netherlands that can be adapted to Hong Kong's built environment. • ILO3: Analyse challenges and solutions in implementing sustainable construction in dense urban environments. • ILO4: Develop collaborative networks for sustainability knowledge exchange between Dutch and Hong Kong professionals.
Target Participants	• 26 participants
Itinerary/ Rundown	• 9-days programme
Description of the Course (venue, speaker, activities, assessment)	• Activities include visits Albert Cuyp Under-canal Parking Garage, HAUT Timber-Hybrid Building, Katwijk Multifunctional Coastal Protection Project, Uithoflijn Tram Line (Utrecht), Afsluitdijk Dam, Port of Rotterdam, Delft University of Technology, Dieseko Piling Factory, DBFM Blankenburg Link A24, AECOM Netherlands, Cruquius Museum.
Implementation plan	• Participants will complete post-event surveys evaluating learning outcomes and programme effectiveness. • A public study report and post-visit report will be produced to disseminate knowledge gained from the delegation • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$290,733

MPD Reference List

Non-local training /visits for Practitioners (Referencing ID18860)

Aspect	Approved Content
Overview and programme description	• Event name: HKCA YMS Overseas Delegation 2024 – Germany • The delegation aims to provide young construction professionals with exposure to innovative construction technologies, sustainable development, BIM, digitalisation, prefabrication, modular construction, advanced manufacturing, and international best practices through technical visits, university exchanges and project site visits.
Intended Learning Outcome (ILO)	• ILO1: Understand advanced manufacturing technologies, automation and digital fabrication applications in construction, including electron beam welding and additive manufacturing. • ILO2: Learn international best practices in construction plants, machinery, quality control and construction equipment technologies. • ILO3: Gain insights into innovative construction methods, BIM-enabled project delivery, sustainable urban development and energy-efficient building technologies. • ILO4: Understand major infrastructure delivery, railway development, high-rise building construction and integrated urban development projects.
Target Participants	• 20 participants
Itinerary/ Rundown	• 9-days programme
Description of the Course (venue, speaker, activities, assessment)	• Activities include visits Pro Beam (Munich), Wacker Neuson (Munich), Frankfurt University of Applied Sciences, Liebherr, Plus Energy Quarter P18, Stuttgart Main Station (S21), Milaneo Urban Quarter Project (Züblin Building Company), FOUR Frankfurt Project.
Implementation plan	• Delegates will be divided into groups and complete a group presentation and sharing session at the end of the trip. • A post-delegation report and sharing activities will be conducted to further disseminate the knowledge gained from the delegation. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$74,140

MPD Reference List

Non-local training /visits for Practitioners (Referencing ID3024)

Aspect	Approved Content
Overview and programme description	• Event name: HKCA YMS Pro Overseas Delegation 2019 – New York & Boston Delegation Trip • The delegation aims to expose young construction practitioners to advanced construction technologies and project delivery approaches in the United States, focusing on BIM, digital construction, MiC, design-build procurement, infrastructure development and sustainable urban projects through technical visits, seminars and industry exchanges.
Intended Learning Outcome (ILO)	• ILO1: To understand the latest advancements in Modular Integrated Construction (MiC) technology. • ILO2:To gain firsthand exposure to MiC manufacturing processes and production of MiC modules. • ILO3:To learn about innovative construction techniques, including prefabrication and sustainable building materials. • ILO4:To exchange knowledge with AluHouse professionals on MiC project experience, industry trends, challenges and practical applications.
Target Participants	• 34 participants
Itinerary/ Rundown	• 8-days delegation trip
Description of the Course (venue, speaker, activities, assessment)	• Activities include visits to MIT, Harvard University, Green Line Extension Project by MassDOT, Autodesk Technology Center, Javits Center Expansion Project, MiC Seminar by AIA and Hudson Yards Redevelopment Project, together with networking and guided city tours. • Delegation will visit, MIT (BIM) Visit and BIM Factory Seminar, Green Line Extension Project, Autodesk Technology Center, Javits Center Expansion Project, MiC Seminar by American Institute of Architects (AIA), Hudson Yards Redevelopment Project (Vessel).
Implementation plan	• A post-delegation report and sharing session will be organised to disseminate knowledge and innovative construction practices acquired during the trip to the wider construction industry in Hong Kong. • CITF will be promoted in all publicity materials of the programme
Budget	• HK$147,678

MPD Reference List

Non-local training /visits for Practitioners (Referencing ID2421)

Aspect	Approved Content
Overview and programme description	• Event name: HKIHT Overseas Delegation 2019 to London – Smart Mobility in the City of Tomorrow • The delegation aims to enable participants to study smart mobility, transportation infrastructure, BIM implementation, modular construction, transport operation and major infrastructure projects in London. Through technical visits, seminars and a BIM training course.
Intended Learning Outcome (ILO)	• ILO1: To understand the implementation of Building Information Modelling (BIM) and BIM Level 2 principles in infrastructure and construction projects. • ILO2: To learn smart mobility, transport operation, infrastructure planning and urban development strategies adopted in London. • ILO3: To gain knowledge of modular construction, major transport infrastructure projects, station upgrades and transit-oriented development (TOD).
Target Participants	• 14 participants
Itinerary/ Rundown	• 8-day delegation trip
Description of the Course (venue, speaker, activities, assessment)	• The delegation includes technical visits to TfL Surface Transport & Traffic Operation Centre, High Speed 2 (HS2), Crossrail (Elizabeth Line), modular construction projects, major station upgrades, Institute of Civil Engineers (ICE), Chartered Institution of Highways and Transportation (CIHT), WSP and Atkins. • Participants will attend the one-day training course “BIM Implementation – Putting People First”, delivered by Richard Lane (UK BIM Task Group) and Steven Eglinton (GeoEnable). Other learning activities include seminars on London Infrastructure Plan 2050, NEC contract case studies, TOD and station upgrades, smart mobility, transport operation, urban movement and innovation in infrastructure projects.
Implementation plan	• Three pre-delegation briefing sessions will be organised to prepare participants with relevant background knowledge. Post-trip debriefing sessions will be conducted. • CITF will be promoted in all publicity materials of the programme
Budget	• HK$86,127

MPD Reference List

Non-local training /visits for Practitioners (Referencing ID1359)

Aspect	Approved Content
Overview and programme description	• Event name: HKCA YMS Ho Chi Minh City Construction Technology Delegation Trip 2019 • The delegation trip aims to explore construction technology, smart city development and innovative practices in Vietnam's construction industry. Through project visits, BIM-focused exchanges, university visits and meetings with industry leaders, participants will learn how innovative technologies and BIM are applied in major developments and infrastructure projects.
Intended Learning Outcome (ILO)	• ILO1: To understand the practical implementation of BIM in design, construction management, safety management and project delivery. • ILO2: To learn how smart city concepts, green building technologies and innovative construction practices are applied in Vietnam. • ILO3: To gain insights into large-scale development projects, BIM-enabled project delivery, digital construction and smart building operations.
Target Participants	• 40 participants
Itinerary/ Rundown	• 5-day delegation trip
Description of the Course (venue, speaker, activities, assessment)	• Participants will visit a series of construction projects, universities and BIM organisations, including Vietnam National University HCMC, COFICO's Estella Height Phase 2 Project, HausNeo Project, Friendship Tower, China Harbour Engineering's Saigon Peninsula Project, Saigon Technology University, Landmark 81, and The BIM Factory. • Key knowledge-sharing activities include meetings with Mr. Hung Lam Vu Ngo, BIM Manager of COFICO, regarding BIM implementation and application in construction projects, and Mr. Tri Quang Mai, Atkins Vietnam Country Director, regarding BIM adoption and innovation in Landmark 81.
Implementation plan	• The programme includes post-trip group presentations, reporting and sharing sessions to disseminate the knowledge gained from the delegation to other HKCA members and the wider industry • CITF will be promoted in all publicity materials of the programme
Budget	• HK$56,887

MPD Reference List

Non-local training /visits for Practitioners (Referencing ID15873)

Aspect	Approved Content
Overview and programme description	• Event name: ACEHK Greater Bay Area Delegation 2025 • The delegation consists of a half-day technical visit to the AluHouse MiC factory, a leading Modular Integrated Construction (MiC) supplier in Hong Kong
Intended Learning Outcome (ILO)	• ILO1: Understand the latest developments and practical applications of Modular Integrated Construction (MiC) technology and prefabricated construction methods. • ILO2: Gain first-hand knowledge of advanced manufacturing processes, sustainable construction practices and innovative building technologies adopted by leading MiC suppliers. • ILO3: Learn from industry professionals about current trends, challenges, opportunities and successful implementation of MiC projects in Hong Kong and the Greater Bay Area
Target Participants	• 30 professionals + 2 supporting staff
Itinerary/ Rundown	• 1-day visit from 08:00-18:30 including travelling time
Description of the visit (visiting places, speaker, activities)	• Visit to AluHouse MiC factory in Zhaoqing, Guangdong Province, China. AluHouse is a leading MiC supplier that has delivered over 50 MiC projects and supplied more than 10,000 MiC modules for public housing, schools, hostels, transitional housing, quarantine facilities and office developments • Activities include technical presentations and experience-sharing sessions by AluHouse professionals, project briefings, discussions and Q&A with engineers, factory tours and demonstrations of MiC production processes
Implementation plan	• Post-trip knowledge-sharing activities will be conducted through presentations, reports and articles to disseminate learning outcomes to the wider Hong Kong engineering community • Follow-up surveys and impact assessments may be conducted to evaluate delegates' professional development and long-term benefits arising from the programme. • CITF will be promoted in all publicity materials of the programme
Budget	• HK$12,242

MPD Reference List

Local Collaborative Course (Referencing ID1120)

Aspect	Approved Content
Overview and programme description	• Event name: Technical Seminar on Modular Integrated Construction (MiC) • The seminar forms part of the "Professional Development Programme for Design and Construction Engineers" and aims to promote the adoption of Modular Integrated Construction (MiC) through sharing of industry practices, latest developments, research findings and case studies
Intended Learning Outcome (ILO)	• ILO1: Understand the latest developments and international applications of Modular Integrated Construction (MiC) and prefabricated construction technologies. • ILO2: Learn key design considerations, engineering requirements and implementation strategies for MiC projects in Hong Kong. • ILO3: Gain insights into practical applications of MiC from construction contractors, consultants, developers and academia through case studies and experience sharing.
Target Participants	• 350 participants
Itinerary/ Rundown	• 1-day programme
Description of the Course (venue, speaker, activities, assessment)	• Topics include high-rise modular construction, design considerations for MiC in Hong Kong, semi-precast concrete MiC systems, DfMA technologies, steel structure innovations, modular construction implementation and student hostel MiC case studies • Speakers include Prof. Priyan Mendis (University of Melbourne), Ir Prof. K.F. Chung (The Hong Kong Polytechnic University), Dr. T.M. Chan (The Hong Kong Polytechnic University), Ir Richard S.M. Lee (Yau Lee Construction), Ir W.M. Leung (P&T Group), Prof. S.P. Chiew (Singapore Institute of Technology), Mr. Z.M. Chen (China Construction Steel Structure Corporation), Ir Dr. Goman Ho (Arup) and Dr. Louis Y.L. Chu (The University of Hong Kong).
Implementation plan	• The seminar is delivered through a one-day professional development programme comprising technical presentations, knowledge sharing sessions and panel discussions led by international experts, academics and industry practitioners. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$95,528

MPD Reference List

Local Collaborative Course (Referencing ID3200)

Aspect	Approved Content
Overview and programme description	• Event name: Augmented Reality in Construction Workshop • This advanced workshop introduces participants to Augmented Reality (AR)-based craftsmanship, digital workflows and construction applications. Using Microsoft HoloLens and Fologram software, participants will learn how AR can enhance architectural design implementation, fabrication processes and onsite construction activities.
Intended Learning Outcome (ILO)	• ILO1: Gain a critical understanding of Augmented Reality hardware and software systems. • ILO2: Understand how AR can enhance traditional construction craftsmanship and construction workflows. • ILO3: Develop and demonstrate architectural applications using AR-based construction methods. • ILO4: Develop aptitude in contemporary digital construction tools, workflows and problem-solving techniques. • ILO5: Extend and advance the adoption of emerging technologies in architecture and construction.
Target Participants	• 20 participants
Itinerary/ Rundown	• 4-day programme
Description of the Course (venue, speaker, activities, assessment)	• Topics include Introduction to Fologram for Rhino, mixed reality fabrication workflows, Grasshopper integration, computer vision tools, mixed reality application development, and project fabrication. Participants receive hands-on training and guidance for implementing AR-assisted fabrication projects. • Activities include AR model visualisation, mixed reality fabrication, Rhino and Grasshopper integration, holographic construction guidance, computer vision applications and prototype fabrication using bamboo components.
Implementation plan	• Participants are required to produce: (i) a geometrically complex physical prototype assembled using HoloLens-assisted workflows, (ii) a video report documenting the workflow and implementation process, and (iii) a strategy statement on deployment of the technology in the construction industry. • Performance indicators include successful prototype fabrication, submission of the mandatory video report and demonstration of AR-assisted construction workflows. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$125,241

MPD Reference List

Local Collaborative Course (Referencing ID4640)

Aspect	Approved Content
Overview and programme description	• Event name: Data-driven Design: UAV Photogrammetry Based Generative Architectural Design Methodologies • The programme is a series of three workshops aims to introduce participants to UAV (drone) surveying, photogrammetry, BIM integration, GIS applications and generative architectural design methodologies.
Intended Learning Outcome (ILO)	• ILO1: Understand the planning and execution of UAV-based surveying and site data collection, including flight path planning and photogrammetry principles. • ILO2: Develop the ability to process aerial survey data into accurate 3D models using photogrammetry software and integrate the outputs into BIM and GIS platforms. • ILO3: Acquire knowledge of generative and computational design methodologies for architectural and urban design applications. • ILO4: Apply environmental analysis, generative design workflows and multi-objective optimisation techniques to evaluate and improve design performance
Target Participants	• 24 participants
Itinerary/ Rundown	• 8-day programme
Description of the Course (venue, speaker, activities, assessment)	• The programme consists of three standalone but related workshops, Workshop 1: Scanning of a Small Development Site, Workshop 2: Site Analysis and Basic Generative Design, Workshop 3 (4–6 Feb 2021): Multi-objective Optimisation Generative Design. • The workshops combine lectures, technical demonstrations, studio-based exercises, group tutorials and project work. Participants work in teams to perform UAV site surveys, process photogrammetry data, calibrate BIM and GIS models, conduct environmental analysis and develop optimised design proposals..
Implementation plan	• Participants are required to submit an A4 report documenting their site selection, scanning process, workflow development, design outcomes and evaluation methodology • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$181,648

MPD Reference List

Local Collaborative Course (Referencing ID3731)

Aspect	Approved Content
Overview and programme description	• Event name: Multi-Axis Robotics Workshop for Architecture • Advanced-level architectural workshop exploring the use of 6-axis collaborative robotics, artificial intelligence (AI), BIM, CNC fabrication, computational design and robotic construction technologies.
Intended Learning Outcome (ILO)	• ILO1: Critically investigate concepts and constraints driving architectural design and develop a contemporary design proposal through an iterative design process. • ILO2: Demonstrate architectural applications using 6-axis collaborative robotics, artificial intelligence, computational design and SCARA robotic assembly tools. • ILO3: Develop technical competency and problem-solving skills associated with advanced robotic construction and digital fabrication technologies.
Target Participants	• 20 participants
Itinerary/ Rundown	• 4-day programme
Description of the Course (venue, speaker, activities, assessment)	• Six workshop sessions conducted between April and September 2020, comprising approximately 8 hours of intensive tutorials. Topics include: (1) Robotics and Kinematics, (2) Design Tool Workflows, (3) Software Control Systems, (4) Peripheral Device Control, (5) Interface Devices and Camera Recognition, and (6) AI Frameworks. Each session consists of approximately 2–3 contact hours. • Activities include training on 6-axis collaborative robotic arms, robotic programming, BIM and CNC workflows, Python and Grasshopper scripting, robotic control systems, sensor integration, camera recognition, AI-assisted design development, robotic fabrication, pick-and-place operations, routing, 3D printing and digital fabrication workflows.
Implementation plan	• Performance assessment includes submission of an A3 report containing drawings, diagrams, animations, workflow documentation and a strategy for deployment within the construction industry. • Evaluation will be conducted by CUHK faculty members and external academic and industry experts based on participants' design outputs. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$299,690

MPD Reference List

Local Collaborative Course (Referencing ID3249)

Aspect	Approved Content
Overview and programme description	• Event name: AI and Robotics Workshop for Architecture • Advanced-level architectural workshop exploring the integration of Artificial Intelligence (AI), computation, BIM, CNC fabrication and robotic construction technologies in design, construction and assembly workflows.
Intended Learning Outcome (ILO)	• ILO1: Critically investigate concepts, and constraints driving architectural design; understand design as an iterative practice; develop a clear argument for a contemporary design proposal. • ILO2: Demonstrate architectural applications using artificial intelligence, digital design and robotic assembly tools; develop an aptitude for technical tools and problem solving associated with contemporary architectural practice; extend and advance the use of new tools and technologies into architectural design. • Become familiar to the incorporation of digital sensor hardware, artificial intelligence software and its applications within an architecture, construction and assembly context
Target Participants	• 20 participants
Itinerary/ Rundown	• 4-day programme
Description of the Course (venue, speaker, activities, assessment)	• Six workshop sessions conducted between January and April 2020, comprising approximately 8 hours of intensive tutorials. Topics include: (1) Robotics and Kinematics, (2) Design Tool Workflows, (3) Software Control Systems, (4) Peripheral Device Control, (5) Interface Devices (Camera Recognition), and (6) AI Frameworks. Each session consists of approximately 2–3 contact hours. • Activities include training on robotic arms, computational design workflows, BIM for CNC fabrication, Python and Grasshopper scripting, robot programming, robotic control systems, sensor and camera recognition technologies, AI-based design and assembly processes, digital fabrication and robotic construction applications..
Implementation plan	• Evaluation will be conducted by CUHK faculty members and external academic and industry experts through reviews of participants' design outputs, workflows, technical competency and architectural proposals. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$279,084

MPD Reference List

Local Collaborative Course (Referencing ID2684)

Aspect	Approved Content
Overview and programme description	• Event name: As-Built BIM Checking for Builders • The course introduces laser scanning technology and its application in BIM-based as-built checking. Participants will learn the workflow of as-built verification, handling geo-referenced point cloud data, and identifying discrepancies between as-built conditions and design information using BIM technologies
Intended Learning Outcome (ILO)	• ILO1: Understand the basic concepts and applications of laser scanning technology • ILO2: Understand the workflow and processes for as-built checking • ILO3: Learn how to use geo-referenced point cloud files within a BIM environment • LIO4: Learn techniques to compare surveyed conditions against BIM design models and identify discrepancies • LIO5: Generate as-built condition checking reports using laser scanning and BIM technologies
Target Participants	• 28 participants
Itinerary/ Rundown	• 1-day programme
Description of the Course (venue, speaker, activities, assessment)	• Four sessions of 1.5 hours each, totalling 6 teaching hours including assessment. Course topics include: Basic laser scanning (0.5 hour), Introduction to BIM and BIM projects (1 hour), Data capture by laser scanning technology (1 hour), Handling point cloud data for as-built modelling (1 hour), Checking design information against surveyed point clouds (1 hour), Generating as-built checking reports (1 hour), and Course work assessment (0.5 hour).. • Activities include lectures, demonstrations and practical exercises covering laser scanning, BIM applications, point-cloud processing, as-built modelling, design verification and report generation.
Implementation plan	• Evaluation will be conducted using the CITF Evaluation Form. • Performance target is for participants to learn laser scanning techniques and perform BIM-based as-built checking.- Performance indicator: minimum 75% attendance and successful completion of coursework. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$24,600

MPD Reference List

Local Collaborative Course (Referencing ID558)

Aspect	Approved Content
Overview and programme description	• Event name: Advanced Bridge Construction Technology – Case Study of Cross Bay Link • The programme is a half-day seminar designed to share knowledge and innovative construction technologies with industry practitioners through the case study of the Tseung Kwan O Cross Bay Link project • Participants will learn innovative concepts and new technologies covering planning, design and construction of major infrastructure projects
Intended Learning Outcome (ILO)	• IL1: Understand HKSAR Government policies and strategies on innovation, Modular Integrated Construction (MiC) and Design for Manufacture and Assembly (DfMA) • IL2: Learn the innovative design concepts and advanced engineering techniques adopted in the Tseung Kwan O Cross Bay Link project, including wind tunnel modelling and high-strength steel design • IL3: Gain knowledge of planning, procurement, transportation and installation of large-scale prefabricated bridge units
Target Participants	• 230 participants
Itinerary/ Rundown	• 3-week programme
Description of the Course (venue, speaker, activities, assessment)	• Distinguished speakers include Dr Robin Sham (AECOM), Mr Jun Kan (China Road and Bridge Corporation), Prof K F Chung (The Hong Kong Polytechnic University), Mr Stephen Mak (Meinhardt Infrastructure and Environment Ltd) and Mr Chengrui Hu (Hewson Consulting). • Topics cover Cross Bay Link design concepts, wind tunnel modelling, high-strength steel applications, mega-scale prefabrication, marine transportation and installation of bridge units, DfMA technologies and innovative bridge engineering solutions.
Implementation plan	• Attendance records, participant survey and post-seminar report will be used to assess programme effectiveness and disseminate key findings through ICE networks. • An electronic survey covering content, speakers and logistics will be conducted after the event. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$235,325

MPD Reference List

Local Collaborative Course (Referencing ID22952)

Aspect	Approved Content
Overview and programme description	• Event name: 14th Asia-Pacific-Euro Summer School on Smart Structures Technology (APESS 2025) • The programme delivers hands-on expertise in structural health monitoring, smart sensing, machine learning, non-destructive testing, drone inspection and energy harvesting through lectures, lab experiments, technical visits and group projects.
Intended Learning Outcome (ILO)	• IL1: Build problem-solving skills via lab experiments, technical visits and group projects in 3D printing, drone-based inspection, energy harvesting and vibration-based health monitoring • IL2: Advance Hong Kong's construction industry by nurturing engineers skilled in smart structures technology, innovation, sustainability and resilience • IL3: Strengthen critical thinking and decision-making via case studies, simulations and training discussions
Target Participants	• 70 participants
Itinerary/ Rundown	• 3-week programme
Description of the Course (venue, speaker, activities, assessment)	• The programme features expert-led lectures, lab experiments, workshops, technical visits, industry conferences (ANCRiSST2025 & ZHITU2025), group projects and presentations. Topics: Bayesian inference, 3D printing, guided wave testing, drone-based inspection, energy harvesting, smart dampers, machine learning, computer vision, smart sensing, SHM system design and wireless sensor networks. • Experts from PolyU, University of Illinois Urbana-Champaign, Purdue, Rice, KAIST, University of Tokyo, University of Macau, Zhejiang University, Nanyang Technological University and others.
Implementation plan	• Evaluation: group project presentations, project reports and lab performance assessments. Indicators: knowledge improvement, applied smart structures technologies, interdisciplinary collaboration and networking outcomes. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$247,845

MPD Reference List

Local Collaborative Course (Referencing ID6972)

Aspect	Approved Content
Overview and programme description	• Event name: Waste Wall – 3D Printing Recycled Bioplastic • The workshop focuses on the use of robotic fabrication and 3D printing technologies to produce architectural components from recycled PLA plastic and food-waste-based bioplastics.
Intended Learning Outcome (ILO)	• ILO1: Develop applied knowledge of code-based software and optimisation of architectural design based on climatic, structural, environmental and material performance criteria. • ILO2: Acquire practical skills in contemporary robotic and digital fabrication technologies. • ILO3: Compare and optimise the use of different fabrication systems, including desktop 3D printers, large-scale 3D printers and robotic 3D printing systems. • ILO4: Develop and fabricate modules for a full-scale architectural prototype.
Target Participants	• 30 participants
Itinerary/ Rundown	• 7-days workshop
Description of the Course (venue, speaker, activities, assessment)	• Programme comprising lectures, software tutorials, robotic fabrication training, material experimentation, prototype production and final presentation sessions. • Participants will receive training in Grasshopper, robotic fabrication, biodesign, biomaterials and 3D printing technologies. • Practical activities include preparation and testing of bioplastic mixtures, robotic fabrication trials, production of prototype bricks, development of an architectural strategy, and construction of a full-scale waste wall using recycled plastic and food-waste-based bioplastic materials
Implementation plan	• Participants will design and produce a series of optimised 3D-printed bricks using recycled PLA and bioplastic materials. • The workshop will culminate in the assembly of a 1:1 scale self-supporting Waste Wall prototype produced through robotic and digital fabrication techniques. • CITF will be promoted in all publicity materials of the programme
Budget	• HK$249,980

MPD Reference List

Local Collaborative Course (Referencing ID6971)

Aspect	Approved Content
Overview and programme description	• Event name: Connecting the Construction Site: : Augmented In-Situ Construction • The workshop is an advanced-level architectural training programme focusing on the integration of remote sensing, BIM, mixed reality (MR), indoor positioning systems and digital fabrication technologies to transform construction workflows.
Intended Learning Outcome (ILO)	• ILO1: Gain a theoretical and practical understanding of indoor positioning and mixed reality technologies, including their applications, benefits and limitations in construction. • ILO2: Understand and demonstrate competencies in mixed reality, object tracking and digital fabrication technologies. • ILO3: Develop construction details and methodologies based on specific material processes and working methods. • ILO4: Understand the importance of accurate surveying, precise fabrication and BIM-enabled project logistics in construction.
Target Participants	• 20 participants
Itinerary/ Rundown	• 5-days workshop
Description of the Course (venue, speaker, activities, assessment)	• Topics include AR/MR fabrication workflows, laser positioning systems, motion capture technologies, sensor integration, Rhino/Grasshopper-based digital fabrication, rapid prototyping and the construction of a full-scale “site perfect” timber structure. • Participants will receive training on mixed reality visualisation, motion capture, robotic total station systems, LiDAR scanning, BIM integration, Rhino, Grasshopper, Fologram and Ultraleap software.
Implementation plan	• As evaluation outputs, participants will produce a documentary video report and an individual portfolio reflecting on the potential application of the technologies within professional practice. • Participants will collaboratively construct a 1:1 “site perfect” timber prototype on the HKU campus to demonstrate practical application of the technologies. • CITF will be promoted in all publicity materials of the programme
Budget	• HK$188,308

MPD Reference List

Local Collaborative Course (Referencing ID6955)

Aspect	Approved Content
Overview and programme description	• Event name: Extended Reality Integration into Design and Fabrication Processes • The programme aims to promote digital transformation in architecture and construction through the integration of extended reality technologies into design and fabrication processes.
Intended Learning Outcome (ILO)	• ILO1: Gain a critical understanding of Augmented Reality software and hardware. • ILO2: Critically investigate concepts and constraints driving manual craftsmanship in architectural design and construction, and explore computer-driven craft expansion through the integration of Augmented Reality workflows. • ILO3: Demonstrate an architectural application of Augmented Reality-based craftsmanship. • ILO4: Develop aptitude in technical tools and problem-solving associated with contemporary construction implementation.
Target Participants	• 20 participants
Itinerary/ Rundown	• 5-days workshop
Description of the Course (venue, speaker, activities, assessment)	• Topics include Augmented Reality in design and fabrication, Fologram for Rhino, mixed reality fabrication, Grasshopper integration, computer vision tools, mixed reality application development, and project fabrication exercises. • Speaker / Instructor: Mr. Garvin Goepel, licensed Fologram instructor and researcher specializing in Augmented Reality implementation in design and fabrication processes. Support provided by Associate Professor Kristof Crolla and workshop assistants.
Implementation plan	• Participants will submit a video report documenting workflow design, implementation process, diagrams, screen captures and time-lapse photography. • Participants are required to produce a geometrically complex bamboo prototype assembled using HoloLens 2 and AR workflows. • CITF will be promoted in all publicity materials of the programme
Budget	• HK$270,000

MPD Reference List

Local Collaborative Course (Referencing ID2450)

Aspect	Approved Content
Overview and programme description	• Event name: Architecture Design and Robotics Workshop • The workshop explores advanced architectural workflows through the adoption of computational design, BIM, CNC fabrication and robotic construction technologies.
Intended Learning Outcome (ILO)	• ILO1: To critically investigate architectural design concepts, constraints and iterative design processes and develop contemporary architectural proposals. • ILO2: To develop proficiency in computational design, digital modelling, BIM, CNC fabrication and robotic assembly technologies. • ILO3: To demonstrate architectural applications using digital design and robotic construction tools and develop problem-solving skills relevant to modern architectural practice.
Target Participants	• 15 participants
Itinerary/ Rundown	• 2-week studio sessions and tutorials
Description of the Course (venue, speaker, activities, assessment)	• Participants will develop an architectural design system incorporating computational design models that can be fabricated and assembled using CNC robotic equipment. Performance outputs include an A3 report containing drawings, diagrams, animations, workflow documentation and deployment strategies for industry application. • Activities include studio-based design development, robotic prototyping, technical tutorials, hardware training workshops and final project demonstrations.
Implementation plan	• The workshop will evaluate participants through design reviews and final presentations involving internal CUHK faculty and external experts from academia and industry. • Performance will be evaluated through project outcomes, technical demonstrations, design proposals and mandatory A3 reports documenting the integration of computational design and robotics technologies. • CITF will be promoted in all publicity materials of the programme
Budget	• HK$260,200

MPD Reference List

Local Collaborative Course (Referencing ID1091)

Aspect	Approved Content
Overview and programme description	• Event name: Digital Construction Summit 2019 • The summit aims to support construction industry transformation and promote digital construction. In line with the Development Bureau's Construction 2.0 initiative and CIC BIM Year 2019, the programme focuses on the latest global developments in BIM, digitisation and construction technologies, featuring experts from the UK, USA, Australia, Mainland China and Hong Kong.
Intended Learning Outcome (ILO)	• ILO1: To understand the latest global development and adoption of BIM and digital construction technologies. • ILO2: To learn about digital construction from the perspectives of technology, process, policy and people. • ILO3: To understand BIM implementation strategies, organisational BIM maturity, capability development and information management. • ILO4: To gain insights into BIM policies, professional assessment integration, industry transformation and digital construction best practices from international experts.
Target Participants	• 200 participants
Itinerary/ Rundown	• One-day
Description of the Course (venue, speaker, activities, assessment)	• Speaker: XXXX • The summit covers digital construction topics including BIM adoption, systems engineering and innovation, organisational BIM performance, BIM implementation strategies, policy development and professional assessment integration.
Implementation plan	• The programme includes keynote presentations, panel discussions, technical sharing sessions, networking opportunities and knowledge exchange between local and overseas experts. Promotion will target professionals, tertiary students and technicians within the construction industry • CITF will be promoted in all publicity materials of the programme
Budget	• HK$214,528

MPD Reference List

Local Collaborative Course (Referencing ID18031)

Aspect	Approved Content
Overview and programme description	• Event name: BIM Execution Plan and Coordination (Case Study) for BIM Coordinator with Workplace-based Projects • The programme is designed for prospective BIM Coordinators involved in workplace-based projects. It focuses on BIM Execution Plans (BEP), BIM coordination practices and compliance with ISO 19650.
Intended Learning Outcome (ILO)	• ILO1: Gain a comprehensive understanding of BIM Execution Plans (BEP) and their significance in project coordination • ILO2: Develop the ability to read and interpret BEPs effectively • ILO3: Acquire skills in understanding and extracting essential information from BEPs • ILO4: Apply theoretical knowledge through real-world case studies and BIM coordination strategie
Target Participants	• 30 professionals per session of course
Itinerary/ Rundown	• Four sessions of 2-day programmes (14 hours for each session)
Description of the Course (venue, speaker, activities, assessment)	• Structure: Four identical sessions of 2-day programmes (14 hours for each session). Day 1 covers BEP fundamentals, BIM knowledge, model navigation and information retrieval using Revit. Day 2 covers model integration, clash detection, quantity take-off, 4D simulation, case studies, group activities and practical BIM coordination exercises. • Topics include BIM Execution Planning (BEP), BIM applications throughout the building lifecycle, Level of Information Need (LOIN), information extraction from BIM models, clash detection, model integration, quantity take-off, 4D simulation, and practical application of BEP in workplace-based projects.
Implementation plan	• Survey and short quiz will be conducted for evaluation, together with participant feedback and self-reflection. • Certificates will be issued to successful participants and learning outcomes will be reviewed through post-course evaluation • CITF will be promoted in all publicity materials of the programme
Budget	• HK$259,920

MPD Reference List

Local Collaborative Course (Referencing ID17302)

Aspect	Approved Content
Overview and programme description	• Event name: BIM Execution Plan (BEP) Mastery: Train-the-Trainer Program for Effectively Managing BIM Projects in the Workplace • The programme is designed for trainer-teachers, academic staff and construction practitioners who wish to develop competency in preparing and implementing BIM Execution Plans (BEPs) for construction projects
Intended Learning Outcome (ILO)	• ILO1: Gain a comprehensive understanding of BIM Execution Plans (BEPs), including their purpose, structure and significance in project management • ILO2: Develop practical skills in preparing and implementing BEPs through a structured step-by-step approach • ILO3: Learn effective methods for communicating and managing BIM information to enhance project accountability and coordination • ILO4: Apply BIM knowledge to real-world project scenarios through case studies, group activities and practical workshops • ILO5: Understand BEP compliance requirements and BIM best practices, including ISO 19650 standards
Target Participants	• 30 professionals per session of course
Itinerary/ Rundown	• Four sessions of 2-day programmes (14 hours for each session)
Description of the Course (venue, speaker, activities, assessment)	• Activities include group presentations, peer review, facilitated discussions and reflection sessions to strengthen practical application and communication skills • Structure: 1 day of 10 modules of training on the fundamentals (3.5 hours) and advanced topics (3.5 hours) of BMP and another 1 day of 8 modules of training on real-world case studies (3.5 hours) and practical implementation (3.5 hours).
Implementation plan	• Evaluation findings will be used to assess achievement of learning objectives and identify areas for programme enhancement • CITF will be promoted in all publicity materials of the programme
Budget	• HK$259,920

MPD Reference List

International Conference in Hong Kong (Referencing ID963)

Aspect	Approved Content
Overview and programme description	• Event name: The 8th IWA-ASPIRE Conference and Exhibition • The main theme of the conference is “Smart Solutions for To deliberate Water Resilience”. Full spectrum of issues, from policy and governance to management and technologies will be addressed in the conference, in water industry
Intended Learning Outcome (ILO)	• ILO1: Gain knowledge of innovative technologies and best practices in the planning, design, construction, operation and maintenance of water infrastructure • ILO2: Understand smart water management, water conservation, water recycling, wastewater treatment and resource recovery technologies • ILO3: Learn about sustainable infrastructure development, climate change adaptation, resilience planning and energy-efficient water management solutions • ILO4: Exchange international experiences and research findings with global experts, utility operators, academics and industry practitioners in the water sector
Target Participants	• 1000 participants
Itinerary/ Rundown	• 3-day programme
Description of the Course (venue, speaker, activities, assessment)	• Key topics include water supply management, stormwater management, wastewater management, smart water solutions, seawater desalination, water recycling, resource recovery, river revitalisation, biodiversity, climate resilience and asset management • Speakers include Prof. Gary Amy (Clemson University), Prof. Eng-Soon Chan (National University of Singapore), Prof. G.H. Chen (HKUST), Prof. Ana Deletic (UNSW), Prof. Jurg Keller (University of Queensland), Mr. Henk Ovink (Special Envoy for International Water Affairs of the Netherlands), Prof. Chris Zevenbergen (IHE Delft), Prof. Kyung Soo Jun (Sungkyunkwan University), Prof. Sung-uk Choi (Yonsei University) and other industry leaders.
Implementation plan	• Post-conference follow-up includes evaluation reports, registration statistics, publication of presentation materials and dissemination of conference outcomes • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$1,000,000

MPD Reference List

International Conference in Hong Kong (Referencing ID16471)

Aspect	Approved Content
Overview and programme description	• Event name: Construction Blockchain Conference 2023: IoT, Blockchain, and Smart Environments (CBC2023) • The conference focuses on the application of blockchain technology, Internet of Things (IoT), digital twins, smart environments, data interoperability and emerging digital technologies in the built environment. It serves as a platform for academics, industry practitioners and technology leaders to share research findings, industry best practices and innovative applications that support digital transformation in the construction sector.
Intended Learning Outcome (ILO)	• ILO1: Understand emerging applications of blockchain, IoT and smart environment technologies within the construction and built environment sectors • ILO2: Gain insights into digital twins, data portability, interoperability and intelligent built environment systems • ILO3: Learn about industry best practices and real-world implementation of innovative digital technologies from leading international experts and practitioners
Target Participants	• 130 participants
Itinerary/ Rundown	• 3-day programme
Description of the Course (venue, speaker, activities, assessment)	• The conference features internationally recognised experts in blockchain, BIM, digital twins, smart construction and digital transformation, including: Prof. Daniel Hall (TU Delft), Dr Eleni Papadonikolaki (UCL), Mr Greg Demchak (Bentley Systems), Mr Kean Walmsley (Autodesk), Dr Volker Buscher (Former Chief Data Officer, Arup), Dr Abel Maciel (UCL / CBC), Dr Chimay Anumba (University of Florida), Dr Borja García de Soto (NYU Abu Dhabi), Prof. David Greenwood (Northumbria University), Prof. Sean Hanna (UCL), Mr Sean Chen (Red Date Technology), Prof. Markus König
Implementation plan	• Conference outcomes include international knowledge exchange, dissemination of research findings, promotion of industry best practices, professional networking opportunities and publication of conference proceedings. Conference effectiveness will be evaluated through participant feedback surveys, registration statistics, attendance figures and website engagement metrics • CITF will be promoted in all publicity materials of the programme
Budget	• HK$663,829

MPD Reference List

International Conference in Hong Kong (Referencing ID1091)

Aspect	Approved Content
Overview and programme description	• Event name: Digital Construction Summit • The summit aims to deliver the latest global developments in BIM and digital construction, focusing on digitisation, construction innovation and industry transformation. International and local experts from academia and industry will share their experiences on technology, process, policy and people development in digital construction
Intended Learning Outcome (ILO)	• ILO1: Gain an understanding of the latest global developments and trends in BIM and digital construction • ILO2: Learn about BIM technologies, software, hardware, IT infrastructure and digital transformation strategies for the construction industry • ILO3: Understand BIM adoption, implementation challenges, organisational readiness and information management practices • ILO4: Explore international perspectives on policy, standards, professional assessment, education, training and workforce development for digital construction
Target Participants	• 200 participants
Itinerary/ Rundown	• 1-day programme
Description of the Course (venue, speaker, activities, assessment)	• Activities include keynote presentations, technical seminars, panel discussions, knowledge sharing sessions and networking opportunities on BIM adoption, digital construction, BIM implementation, organisational performance and industry transformation • Speakers include Prof. Jennifer Whyte (Imperial College), Dr. Bilal Succar (BIMe), Adam Matthews (Centre for Digital Built Britain), Dr. Harris Ismail (BIM Institute of Malaysia), Prof. Guangbin Wang (Tongji University), Mr. Lai Wei (China Accreditation Alliance), Prof. Jack Cheng (HKUST), Sr Miranda Lui (CoE), Mr. Kelvin Kuo (MES) and Mr. Francis Leung (Aurecon)
Implementation plan	• The event will provide a knowledge exchange platform to promote BIM adoption, digital transformation and construction innovation in Hong Kong • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$214,528

MPD Reference List

International Conference in Hong Kong (Referencing ID7760)

Aspect	Approved Content
Overview and programme description	• Event name: Smart City Conference 2021 – Smart Infrastructure Conference • The conference focuses on the application of smart infrastructure technologies, smart city development, digital transformation, sustainability, big data, digital twins, IoT and smart built environment in Hong Kong and the Greater Bay Area
Intended Learning Outcome (ILO)	• ILO1: Gain an understanding of the latest smart infrastructure technologies and applications for sustainable city development • ILO2: Explore the utilization of innovative smart city solutions, including digital twins, BIM, IoT, big data analytics and geospatial technologies • ILO3: Learn about smart infrastructure planning, design, operation and maintenance practices adopted by government departments, academia and industry leaders • ILO4: Facilitate knowledge exchange and collaboration among professionals from Hong Kong, Mainland China and overseas to support smart city development in the Greater Bay Area
Target Participants	• 250 participants
Itinerary/ Rundown	• 2-day programme
Description of the Course (venue, speaker, activities, assessment)	• Speakers include senior representatives from government departments, public organisations, academia and industry, including the Office of the Government Chief Information Officer, Development Bureau, Civil Engineering and Development Department, Airport Authority Hong Kong, MTR Corporation, CLP Power, HKUST, Autodesk, AECOM, Arup and other industry practitioners. • Activities include keynote presentations, technical seminars, panel discussions, Q&A sessions, networking opportunities and knowledge sharing on smart city and infrastructure innovations
Implementation plan	• Event feedback surveys and evaluation meetings will be conducted after the conference to assess participant satisfaction and programme effectiveness • CITF will be promoted in all publicity materials of the programme
Budget	• HK$355,900

MPD Reference List

International Conference in Hong Kong (Referencing ID22816)

Aspect	Approved Content
Overview and programme description	• Event name: 16th International Workshop on Advanced Smart Materials and Smart Structures Technology (ANCRiSST2025) & 4th ZHITU Symposium on Advances in Civil Engineering • An international conference focusing on smart materials, smart structures, structural health monitoring (SHM), AI-assisted structural assessment and design, digital twins, IoT technologies, robotics and infrastructure resilience
Intended Learning Outcome (ILO)	• ILO1 – Enhanced Understanding of Smart Technologies: Participants will gain a comprehensive understanding of smart materials, smart structures, AI and IoT applications in civil engineering and construction. • ILO2 – Development of Collaborative Skills: Participants will develop interdisciplinary collaboration skills by exchanging ideas with researchers and professionals from different fields. • ILO3 – Strengthened Professional Network: Participants will establish professional connections that may lead to future collaborations, research projects and career development opportunities.
Target Participants	• 200 participants
Itinerary/ Rundown	• 2-day programme
Description of the Course (venue, speaker, activities, assessment)	• Key Speakers include Prof. Hongping Zhu, Prof. Yuanfeng Duan, Prof. Yuequan Bao, Prof. Mayuko Nishio, Prof. Tsukasa Mizutani, Prof. Yozo Fujino, Prof. Sung-Han Sim, Prof. Jian Li, Prof. Shirley Dyke, Prof. Eleni Chatzi, Prof. Bill Spencer, Prof. Tong Guo, Prof. Xugang Hua, Prof. Chung Bang Yun and Prof. Hyung-Jo Jung • Technical Sessions include Structural Health Monitoring and Evaluation, Smart Materials and Structural Control, Data-Driven Modelling and Machine Learning, Sensors and Robotics in Inspection, Life Cycle Maintenance and Resilience, Innovative Maintenance Approaches, Signal Processing and Data Management, and Practical Applications of AI in Construction
Implementation plan	• Evaluation through daily participant surveys, self-evaluation reports, workshop presentations and follow-up surveys assessing technology adoption and changes in professional practices • CITF acknowledgement through conference materials, website, ceremonies, networking activities and post-event reports
Budget	• HK$176,419

MPD Reference List

International Conference in Hong Kong (Referencing ID22113)

Aspect	Approved Content
Overview and programme description	• Event name: The Sixth International Conference on Civil and Building Engineering Informatics (ICCBEI 2025) • The conference serves as a platform for researchers, practitioners and industry professionals to share knowledge, discuss advancements and explore innovative solutions that utilise engineering informatics to improve construction processes, infrastructure management and project efficiency
Intended Learning Outcome (ILO)	• ILO1: Participants will gain insights into the latest advancements in Building Information Modelling (BIM), Artificial Intelligence (AI) and Internet of Things (IoT) technologies and their applications in civil and building engineering. • ILO2: Participants will develop professional connections with peers, industry leaders and researchers, fostering collaborations that can lead to innovative projects and research initiatives. • ILO3: Participants will learn how to translate theoretical concepts into practical applications and implement emerging technologies and methodologies in real-world construction • ILO4: Attendees will be encouraged to contribute to ongoing research and innovation efforts, promoting continuous improvement and knowledge sharing within the industry
Target Participants	• 180 participants
Itinerary/ Rundown	• 4-day programme
Description of the Course (venue, speaker, activities, assessment)	• Keynote speakers include Prof. Ioannis Brilakis, Prof. Yong Kwon Cho, Prof. Dongping Fang, Prof. Ada Fung Yin-suen, Prof. Timo Hartmann, Prof. Shang-Hsien Hsieh, Prof. Hyoungkwan Kim, Prof. Kincho Law, Prof. Farzad Rahimian, Prof. Skibniewski, Dr. Yelda Turkan, Prof. Xiangyu Wang and Prof. Nobuyoshi Yabuki • Visiting places include HKUST, CIC iHub and Macau • Activities include keynote presentations, technical paper sessions, panel discussions, networking sessions, workshops, conference banquet and technical visits
Implementation plan	• Evaluation will be conducted through post-event surveys, registration records, website statistics and participant feedback • CITF will be promoted in all publicity materials of the programme
Budget	• HK$956,000

MPD Reference List

International Conference in Hong Kong (Referencing ID18189)

Aspect	Approved Content
Overview and programme description	• Event name: 4th World Conference on Floating Solutions (WCFS 2024) • An international conference on floating solutions providing a platform for researchers, business leaders, industry practitioners and government officials to exchange the latest developments in floating technologies and their applications in sustainable ocean development, climate resilience, renewable energy, food production, blue economy and urban development
Intended Learning Outcome (ILO)	• ILO1: To gain knowledge of the latest research findings and technological developments in floating solutions across multiple sectors including architecture, climate change, environmental enhancement, food sustainability, renewable energy and urban planning. • ILO2: To understand the benefits, feasibility and challenges of applying floating solutions for sustainable development and blue economy initiatives. • ILO3: To learn innovative applications of floating technologies in addressing climate change, population growth, renewable energy generation, food production and land shortage issues
Target Participants	• 180 participants
Itinerary/ Rundown	• 4-day programme
Description of the Course (venue, speaker, activities, assessment)	• Keynote Speakers include Prof. Torgeir Moan (Norwegian University of Science and Technology, Norway), Prof. Chien-Ming Wang (The University of Queensland, Australia), Prof. Masashi Kashiwagi (Osaka University, Japan) and Ir Jacky Wu, JP (Head of Sustainable Lantau Office, CEDD, Hong Kong). • Activities include keynote presentations, technical paper presentations, conference proceedings publication, special journal issues, networking among academia, industry and government representatives, and technical visits
Implementation plan	• An attendee survey will be conducted to evaluate conference organisation, speaker quality, topic relevance, networking opportunities, discussion outcomes and learning effectiveness. • Performance targets include over 80 papers, more than 180 participants from over 10 countries, Best Student Paper Awards, one conference proceeding and two special journal issues. • CITF will be promoted in all publicity materials of the programme
Budget	• HK$254,797

MPD Reference List

International Conference in Hong Kong (Referencing ID3307)

Aspect	Approved Content
Overview and programme description	• Event name: Asian Forum on Graphic Science 2021 (AFGS 2021) • AFGS is a well-recognized international conference on engineering graphics that provides a platform for sharing academic and industrial research related to Computer Graphics, Graphics Education and engineering applications.
Intended Learning Outcome (ILO)	• ILO1: To understand the latest developments, research findings and industrial applications in graphics science, BIM and digital construction. • ILO2: To exchange knowledge and research outcomes relating to Computer Graphics, Digital Twin, Mixed Reality and AI-enabled engineering applications. • ILO3: To explore innovative methods, concepts and techniques for improving construction productivity, quality and safety through graphics-related technologies.
Target Participants	• 150 participants
Itinerary/ Rundown	• 4-day programme
Description of the Course (venue, speaker, activities, assessment)	• Keynote speakers include Prof. Mirosław J. Skibniewski (University of Maryland, USA), Prof. Nashwan Dawood (Teesside University, UK), Prof. Nobuyoshi Yabuki (Osaka University, Japan), Prof. Shih-Chung Jessy Kang (University of Alberta, Canada), Prof. Guangbin Wang (Tongji University, China) and Prof. Yasushi Ikeda (Keio University, Japan). • Conference themes cover Building Information Modelling (BIM), Digital Twin, Mixed Reality, AI-enabled Computer Graphics, visualization in engineering, digital construction, robotics, virtual reality, computer-aided design, geometry applications and graphics education. Activities include keynote lectures, paper presentations, poster sessions, networking and technical exchanges among academia and industry.
Implementation plan	• Organising and technical committee members from academia and industry will coordinate conference delivery, participant engagement and dissemination of research outcomes. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$206,817

MPD Reference List

International Conference in Hong Kong (Referencing ID3003)

Aspect	Approved Content
Overview and programme description	• Event name: The 8th International Conference on Innovative Production and Construction (IPC 2019) – "Towards Advancement in Technologies and Processes for Smart Buildings and Construction" • IPC 2019 is an international conference that brings together academics, researchers and industry practitioners to share the latest developments and applications in smart buildings and construction.
Intended Learning Outcome (ILO)	• ILO1: Understand the latest developments and applications of BIM, digital construction and other advanced AEC technologies in the construction industry. • ILO2: Gain exposure to international research and innovations in smart buildings and construction. • ILO3: Learn advanced technologies including virtual reality, augmented reality, IoT, automation, robotics, machine learning, AI and modular construction. • ILO4: Promote collaboration between local practitioners and overseas academics and industry experts
Target Participants	• 200 participants
Itinerary/ Rundown	• 4-day programme
Description of the Course (venue, speaker, activities, assessment)	• The conference features keynote and invited speakers including Carnegie Mellon University, University of Alberta, University of Florida, University of Cambridge, Stanford University, Tsinghua University, Tongji University, Yonsei University, Osaka University and Construction Industry Council Hong Kong.. • Topics include BIM, digital construction, modular integrated construction, prefabrication, machine learning, AI, digital twins, cyber-physical systems, smart construction, VR/AR, automation and robotics.
Implementation plan	• Parallel technical sessions will cover BIM and digital construction, prefabrication, automation and robotics, data modelling and analytics, integrated project delivery and design optimisation. • Technical visits to CIC BIM Space, MiC Display Centre, Tencent Building and Shenzhen University BIM Centre will provide practical exposure to innovative construction technologies. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$47,736

MPD Reference List

International Conference in Hong Kong (Referencing ID2093)

Aspect	Approved Content
Overview and programme description	• Event name: International Conference on Modular Integrated Construction: Innovating Higher • The conference aims to share state-of-the-art knowledge and international practices on Modular Integrated Construction (MiC), with a focus on innovative solutions for higher-rise, higher-density, higher-tech and higher-co-creation developments
Intended Learning Outcome (ILO)	• IL1: Understand the latest international developments, policies and governance frameworks for Modular Integrated Construction (MiC) • IL2: Gain insights into the planning, design and delivery of high-rise modular buildings through case studies of the world's tallest modular buildings in London and Singapore • IL3: Learn advanced applications of structural engineering, smart supply chain management and digital transformation in modular construction
Target Participants	• 380 participants
Itinerary/ Rundown	• 1-day programme
Description of the Course (venue, speaker, activities, assessment)	• The programme includes opening remarks, keynote speech, presentations on MiC policies and governance in the UK, Australia and Singapore, technical presentations, two plenary sessions on the world's tallest modular buildings, luncheon speech, case studies on Hong Kong MiC developments, refreshments breaks and closing remarks. • Activities include presentations on MiC policy and governance, modular building research, digital transformation, and case studies of the 44-storey steel-framed modular building in London and the 40-storey precast concrete modular building in Singapore. Hong Kong MiC projects including HKU WCH Student Hostel, ArchSD FSD Staff Quarters and HKSTP InnoCell will also be presented.
Implementation plan	• Attendance records, participant registration statistics and conference dissemination activities will be used to assess programme reach and effectiveness. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$547,248

MPD Reference List

International Conference in Hong Kong (Referencing ID19731)

Aspect	Approved Content
Overview and programme description	• Event name: HKIA Annual Conference 2024 – Design in the Digital and AI Era: Is This the End or Just the Beginning. • The conference examined the impact of Artificial Intelligence (AI) and digital technologies on architecture and the construction industry.
Intended Learning Outcome (ILO)	• IL1:Understand how AI and digital technologies influence architectural workflows and design decision-making. • IL2 :Learn emerging technologies including AI-generated design, BIM, intelligent construction, automation, robotic construction and data-driven design. • IL3: Explore AI applications in construction administration, MiC, DfMA and project management.. • IL4: Analyse ethical, legal and copyright implications of AI adoption.
Target Participants	• 160 physical & 1,000 online participants
Itinerary/ Rundown	• 7-days programme
Description of the Course (venue, speaker, activities, assessment)	• Topics included AI-driven design workflows, digital transformation of architectural practice, intelligent construction, BIM, automation, ethics, copyright, data privacy, workforce transformation, and future opportunities and challenges arising from AI adoption. • Keynote speakers include Prof. Charleston Sin, Prof. Dr. Sandra Manninger (NYIT, USA – online), Dr. Winnie Tang, Mr. Kaloyan Erevinov (Zaha Hadid Architects), Mr. Zee Leong (RoboticPlus.AI), Dr. Zheng Hao, Ms. Garette Hwang (UNStudio), Prof. Xu Weiguo (Tsinghua University – online), Mr. Wilber Yuen (XKool Technology), Mr. Ramon Van der Heijden (Arup).
Implementation plan	• Self-evaluation report, Online participant feedback survey, Recording of conference sessions for future CPD learning and knowledge sharing. Collection of post-event papers and reflections related to AI and digital architecture. HKIA also agreed to share recordings with CIC/CITF for public dissemination. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$179,079

MPD Reference List

International Conference in Hong Kong (Referencing ID22804)

Aspect	Approved Content
Overview and programme description	• Event name: CAAD Futures 2025 – Catalytic Interfaces • CAAD Futures is a leading international biennial conference on Computer-Aided Architectural Design (CAAD), bringing together researchers, academics and industry practitioners to explore computational design, BIM, MiC, automation, robotics, artificial intelligence, digital fabrication and other emerging digital construction technologies.
Intended Learning Outcome (ILO)	• IL1 – Understanding Advanced Construction Technologies: Participants will gain a foundational understanding of key digital construction technologies relevant to productivity and sustainability in the construction industry. • IL2 – Application of Computational Design Principles: Participants will learn applications of computational design principles and data-driven approaches in design and construction. • IL3 – Enhancing Cross-disciplinary Collaboration Skills: Participants will develop collaborative skills through workshops, discussions and the Catalytic Interfaces programme. • IL4 – Critical Evaluation of Global Case Studies: Participants will be able to evaluate international best practices and adapt them to local construction challenges.
Target Participants	• 220 participants
Itinerary/ Rundown	• 3-days programme
Description of the Course (venue, speaker, activities, assessment)	• The programme includes keynote speakers Prof. Shigeru Ban, Ms. Wanyu He, Prof. Daniela Mitterberger, Prof. Mariana Popescu. • Speaker-driven sessions and discussions include speakers Prof. Peter Russell, Prof. Christiane Herr, Dr Andrea Ling, Prof. Hank Haeusler, Prof. Urs Hirschberg.
Implementation plan	• Evaluation through participant surveys, Whova analytics, attendance tracking and organising committee review, with findings reported to CITF. • CITF acknowledgement through conference website, banners, publications, programme materials, presentations and post-event reports.
Budget	• HK$598,760

MPD Reference List

International Conference in Hong Kong (Referencing ID21375)

Aspect	Approved Content
Overview and programme description	• Event name: International Week on Geotechnology: How Innovation and Technology (Innotech) in Geotechnical Engineering Shape our Future Cities • The programme aims to address challenges faced by Hong Kong in landslide hazard mitigation, sustainable land reclamation and manpower shortage through innovation and technology in geotechnical engineering.
Intended Learning Outcome (ILO)	• ILO1: To provide a platform for international experts, practitioners and academia to share state-of-the-art information and knowledge on using technology in landslide risk management and other geotechnical engineering and engineering geological practices. • ILO2: To identify knowledge gaps that warrant further research and development in geotechnology, including artificial intelligence, digitalisation, big data analytics and remote sensing technologies. • ILO3: To learn about advanced technologies and practices from world-leading experts from Europe, America and Asia, inspiring local practitioners and researchers to further elevate geotechnical engineering standards
Target Participants	• 300 participants
Itinerary/ Rundown	• 6-days programme
Description of the Course (venue, speaker, activities, assessment)	• The programme includes keynote speeches, expert lectures, practical workshops, panel discussions, networking sessions, presentations on AI, digitalisation, remote sensing and geotechnical innovations, as well as field visits with on-site discussions led by engineers and technical experts.
Implementation plan	• Participant feedback and evaluation questionnaires will be collected after the programme to assess topic relevance, speaker quality, knowledge gained, networking opportunities, overall satisfaction and impact on professional development. • CITF will be promoted in all publicity materials of the programme.
Budget	• HK$355,588

MPD Reference List

International Conference in Hong Kong (Referencing ID1138)

Aspect	Approved Content
Overview and programme description	• Event name: CIB World Building Congress 2019 – Constructing Smart Cities • The CIB World Building Congress is a triennial international conference and is regarded as one of the leading construction research and innovation conferences worldwide.
Intended Learning Outcome (ILO)	• ILO1: To enhance participants' understanding of smart city development and emerging technologies for the built environment. • ILO2: To learn the latest developments and applications of BIM, VR, robotics, IoT, smart infrastructure and smart construction technologies. • ILO3: To promote productivity, uplift built quality, improve site safety and enhance environmental performance through sharing of innovative construction approaches and smart technologies • ILO4: To facilitate international knowledge exchange and foster future collaborations among academics, industry practitioners, policymakers and researchers
Target Participants	• 720 participants
Itinerary/ Rundown	• 5-day conference
Description of the Course (venue, speaker, activities, assessment)	• The Congress theme is "Constructing Smart Cities" and covers eight sub-themes including Smart Buildings and Infrastructure, Smart Environment, Smart Governance, Smart People and Living, Smart Planning, Design and Construction, Smart Service, Smart Transportation and Mobility, and Smart Utilities and Facilities Management. Topics include BIM, VR, robotics, IoT, smart construction, smart materials, smart transportation, renewable energy and facility management • Activities include keynote speeches, technical paper presentations, workshops, poster presentations and site visits.
Implementation plan	• Activities include inviting international and GBA experts, organising keynote presentations, technical sharing sessions and a research exhibition • CITF will be promoted in all publicity materials of the programme
Budget	• HK$921,300

MPD Reference List

International Conference in Hong Kong (Referencing ID1104)

Aspect	Approved Content
Overview and programme description	• Event name: Translational Research Forum on Sustainable Urban Development in the Greater Bay Area (GBA) • The forum aims to provide a platform for researchers, business leaders, industry practitioners and government officials from the Greater Bay Area and overseas to discuss sustainable urban development, innovative construction technologies, translational research and collaboration opportunities. An accompanying exhibition will showcase research excellence and promote industry collaboration.
Intended Learning Outcome (ILO)	• ILO1: To identify and discuss key challenges and development opportunities arising from the Greater Bay Area initiative. • ILO2: To exchange the latest research findings in sustainable urban development, construction, energy, environment, urban informatics and urban hazard mitigation. • ILO3: To understand how translational research can contribute to sustainable urban development and construction innovation in the Greater Bay Area.
Target Participants	• 300 participants
Itinerary/ Rundown	• Two-day forum
Description of the Course (venue, speaker, activities, assessment)	• Speaker: XXXX • The forum focuses on sustainable urban development in the Greater Bay Area, with topics covering construction, energy, environment, urban informatics, urban hazard mitigation, smart construction, intelligent transportation systems, sustainable buildings and environmental management.
Implementation plan	• Activities include inviting international and GBA experts, organising keynote presentations, technical sharing sessions and a research exhibition • CITF will be promoted in all publicity materials of the programme
Budget	• HK$135,227

MPD Reference List

International Conference in Hong Kong (Referencing ID712)

Aspect	Approved Content
Overview and programme description	• Event name: The 8th International Conference on Construction Engineering and Project Management (ICCEPM 2019) Organiser: Department of Building and Real Estate (BRE)
Intended Learning Outcome (ILO)	• ILO1: To enhance understanding of sustainable and smart construction technologies and management practices. ILO2: To learn the latest developments in BIM, AR/VR, AI, IoT and big data applications in construction management. ILO3: To gain knowledge in construction risk, safety, quality, schedule and cost management through research presentations and keynote sessions. ILO4: To facilitate knowledge exchange among academics, researchers and industry practitioners on innovative construction technologies and project management.
Target Participants	• 210 participants
Itinerary/ Rundown	• 3-day conference
Description of the Course (venue, speaker, activities, assessment)	• Venue: XXXX • Speaker: XXXX • Structure: The conference focuses on ten major themes: Sustainable Construction and Management, Risk & Safety Management, Schedule and Cost Management, Quality Control and Management, BIM Applications for Construction Management, Facility Management, New Technologies and Tests, AR/VR-AI-IoT Technologies, Big Data for Construction Management, and Higher Education and Practice in Construction Management.
Implementation plan	• The conference implementation plan includes conference organisation, venue reservation, programme development, sponsorship acquisition and keynote speaker invitations. • Paper submission activities include call for abstracts, abstract review, call for full papers, full paper review and preparation of conference proceedings • CITF will be promoted in all publicity materials of the programme
Budget	• HK$275,791

Thank you