

Course Title: IFC-SG and BIM Workflows Introduction Programme

Course Synopsis

Building Information Modelling (BIM) and workflows are increasingly adopted to improve coordination of construction value chain and reduce reworks. Recently, the Building Construction Authority has mandated that files adhering to the BIM IFC-SG guidelines, must be submitted for processing and authority approval.

While this process allows for a streamlined, information-rich process, it is a paradigm shift for many users as they must ensure 3D building models are rich sources of data to assist in compliance checks. As critical sources of data, the models must comply to guidelines and standards for regulators to do data take-offs while processing the submissions.

Through this course, an introduction to CorenetX and IFC-SG standards, participants will be empowered with fundamental knowledge on how to use technology tools and processes, evaluate use cases to have an in-depth understanding of digitalisation of the construction sector. Best practices for the submission process will be covered to ensure participants are equipped with the necessary knowledge for hassle-free submissions.

Learning Objectives & Outcomes

1. Understand digitalisation objectives in the Construction Industry
2. Introduction to CorenetX and the RABW (Regulatory Approval for Building Works)
3. Introduction to OpenBIM and IFC-SG
4. IFC-SG Validation and BIM submission process (IFC-SG information in model and export to IFC)
5. Regulatory data take-offs from IFC-SG models
6. Working with IFC models using Query tools and Issues
7. Critically evaluate use cases based on different types of submissions with mapping assessment.

Schedule (1st Day)

Time	Topic
0900 - 1030	(1) Overview of Digitalisation processes in Construction <ul style="list-style-type: none"> a) Digitalisation objectives b) Introduction to CorenetX, open BIM, IFC-SG
1030 – 1045	Break
1045 – 1245	(2) IFC-SG and BIM Submission Process <ul style="list-style-type: none"> a) Benefits of IFC-SG b) Use of configuration files c) Use of validator tool for compliance
1245 – 1345	Lunch
1345 - 1600	(3) Hands on Session <ul style="list-style-type: none"> a) Simulate model checking before submission b) Ensure relevant information is present in the model using interoperability tools c) Export to IFC
1600 – 1615	Break
1615 - 1800	(4) Insights to the Future of Fintech and Future of Work <ul style="list-style-type: none"> a) Use FulcrumHQ to create queries and issues used by regulators b) Evaluate use cases based on different types of submissions

Schedule (2nd Day)

Time	Topic
0900 - 1030	(5) Assignment <ul style="list-style-type: none"> a) Walk through of assignment objectives. b) Q&A
1030 – 1045	Break
1045 – 1230	(6) Best Practices <ul style="list-style-type: none"> a) Best practices for modelling

Time	Topic
	b) Revision of learnings -
1230 - 1300	(7) Assessment of Assignment

Prospective Trainers

Tan Jing Min

Jing Min is an Assistant Vice President of Product in LeapThought – with a strong focus on driving product research and development, and leading implementation of key government projects such as CORENETX Collaboration Platform and Automated Model Checker.

She began her career as an Architectural Designer at WOHA Architects, where she worked on significant large-scale projects with multi-disciplinary consultancies. Leveraging on more than 6 years of experience across the Architectural, Engineering, and Construction sector, her role has evolved from product consultancy towards driving product innovations, R&D and project management.

Jing Min provides deep domain knowledge from Architecture and bridges initiatives from regulatory agencies and government clients with LeapThought's products. In synergy with international development teams, industry leaders and consultants, her work drives the design of computational algorithms, automations and management workflows – fostering industry-wide shifts towards enhanced BIM workflows and digital sophistication within the AEC sector.

Praveen Nair

Praveen is an Assistant Vice President of Service Excellence in LeapThought. He is responsible for product design and development based on customer experience and research. He leads the implementation of InSIGHT, the collaboration platform used by the Land Transport Authority of Singapore, powered by FulcrumHQ.

With more than 7 years of working experience in both Architecture and UX design, he specializes in designing user experiences with deep domain knowledge to optimize end-to-end product delivery for B2B and enterprise SAAS products. Adopting an investigative and data-centric approach, Praveen has led research analysis, A/B testing and training activities to create useful insights that drive product development. Integrating design thinking methodologies, strategic planning and collaboration, he works with client organizations to lead change management activities for seamless digital integration.

Praveen holds a Master of Architecture degree (Design Technology & Sustainability) from the National University of Singapore and is a BCA Sponsorship Recipient.

Deepansh Singh

Deepansh is a Product Consultant and Subject Matter Expert in Architecture and BIM at LeapThought. He is proficient in digital product delivery in AEC industry for private and government clientele. His expertise lies in assisting clients with meeting their digital transformation goals and addressing business challenges via digital project management, project delivery and consultancy.

With more than 6 years of experience working in Architecture, Construction, product management and BIM management, his core responsibilities at LeapThought are to deliver BCA CorenetX, BCA Automated Model Checker and HDBs Smart Design Platform. His previous experience as (BIM, VDC and R&D) Manager has given him valuable insights to research, implement and educate users on latest technologies. He is well versed with latest BIM solutions, workflows and automations.

He has also led development and customization of various software for construction industry in Singapore as well as design experience in various commercial, transportation and healthcare projects as an Architect. Deepansh holds a Masters degree (Project Management with Finance specialization) from National University of Singapore and Bachelors in Architecture (hons) from Indian Institute of Technology, Kharagpur

Song Yu Chuan

An experienced architect and educator, Yu Chuan is a Lecturer at the School of Design and Environment in Ngee Ann Polytechnic, where he teaches the Diploma in Design program, specialising in Architecture, BIM and Digital Design Technology.

He leads etc.lab, a design studio that focuses on community design and social architecture. His professional journey includes working with renowned firms such as RSP Architects Planners & Engineers, DP Architects, and ONG&ONG. His collaborative efforts have contributed to the success of many award-winning architectural and master planning projects.

Yu Chuan's design philosophy revolves around innovation, meticulous attention to detail, and a holistic approach to design. His perception of design and architecture extends beyond the technical realm, viewing them as integral aspects of life, where every moment presents an opportunity to learn and enhance experiences.