



PROGRAM PROSPECTUS

buildingSMART Professional Certification – Foundation

Version 3.2

Supported by:



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Program Title

buildingSMART Professional Certification – Foundation

Program Overview

The 2.5-day buildingSMART Professional Certification – Foundation program provides international endorsement that you are verified to be trained in Building Information Modelling (BIM) processes based on global standards. The curriculum is developed and coordinated by the buildingSMART Professional Certification Committee from various Chapters globally and is peer reviewed by an international advisory panel.

The program is divided into eight Modules and its core content is based on the ISO19650 and offers guidelines in approaching smart construction project deliveries. The first seven Modules are delivered live online by instructors on Day 1 and after that the participants, with access to various notes and videos the Program Portal, will have the opportunity to continue with a self-paced study for a duration of 14 days. In reinforcing the students' understanding, it is followed by a physical classroom session for the Module 8 (Colloquium) as well as for quizzes, activities and demo exam. The final day of the program will cover the concluding discussion, exam preparation and the exam itself which will be held using the buildingSMART's Qualification Platform.

Focus Area

Building Information Modelling, Construction 4.0, Smart Construction, openBIM Implementation

Skill Area

Addresses knowledge and comprehension around openBIM principles and in reference to the ISO 19650 standards.

Level of Program

Intermediate – A deeper understanding on how BIM processes work through international standards and best practices

Pre-requisites

Minimal knowledge on the topic of construction digitalisation.

No prior hands-on BIM authoring software experience is required for this program

Bring your own laptop to access the notes and videos on the Program Platform; and to enter the buildingSMART's Qualification Platform for the exam at the end of the training.

Learning Outcomes / Objectives

- Understand the definition, key terminologies and benefits of Building Information Modelling (BIM)
- Recognise the advantages of BIM compared to traditional project delivery
- Understand project information management, with BIM, according to the ISO 19650 series.
- Recognise the need for open and interoperable solutions
- Understand the importance of asset lifecycle and Owner / Operator perspectives for Information Management
- Understand the national standards and guidelines with regards to information management on projects in Australasia (Case Studies)

Target Participants / Audience

Government, industry (clients, consultants, manufacturers, contractors) and education practitioners as well as students who wish to be certified in BIM under a globally recognised qualification program; based on international standards and best practices.

Target Industry

Architectural, Engineering and Construction (AEC), Manufacturing, Education

Course Content / Modules

Module 1: Construction 4.0 and BIM Fundamentals - Construction 4.0, Fundamentals of BIM, Fundamentals of ISO 19650

Module 2: BIM vs Traditional Project Delivery - Information Management in Projects, Adopting BIM Benefits

Module 3: BIM Dimensions and Level of Development (LOD) - BIM Dimensions, Level of Development (LOD)

Module 4: Project Information Management with BIM based on ISO 19650 Series - Information Requirement, BIM Execution Plan and Common Data Environment (CDE), Information Delivery

Module 5: BIM - Open and Interoperable Solutions - buildingSMART & openBIM, Industry Foundation Classes (IFC) Standard, Information Delivery Specification (IDS) and Use Case Management, Other buildingSMART Standards and Solutions

Module 6: Asset Lifecycle and Perspectives in Information Management - Adopting openBIM based information Management Approach, Developing Digital Approach for Information Management, Data Security for Information Management

Module 7: Case Studies: National standards and guidelines with regards to information management on projects in Australasia - BIM Terminology in National Standards and Guidelines, Digital asset strategies and plans and issuing government bodies and departments, Digital engineering frameworks and strategies, Open BIM Open Standards (OBOS) and its participating organisations, Existing national classification system and its potentials

Module 8: Colloquium covering all modules as well as exam preparation

Teaching Methodology

Hybrid (Live online training for Day 1 and face-to-face training for Day 2 and 3)

(Self-paced study for a duration of 14 days in between Day 1 and Day 2 of live training)

Assessment

buildingSMART Professional Certification – Foundation Exam

Online exam, 25-30 multiple choice questions

Min. passing mark: 75%

Exam can be retaken once (1 more time) at a mutually agreed resat date and with a fee of RM800/pax.

100% training attendance is compulsory prior to the assessment

Medium of Instruction (Language)

- Teaching materials in English
- Training conducted in English

Resources including Teaching Materials

- Notes and videos through Innovacia's Program Portal
- Exam platform through buildingSMART's Qualification Platform
- Trainers' BIM Software – Revit, Blender, BIMVision IFC Viewer, TiffinBIM, etc
- Trainers' Software Plugins – Bonsai BIM for Blender, etc
- Computer with an internet connection and an internet browser (by participants)

Program Duration

2.5 Days (18 hours)

Program Schedule

DAY 1

TIME	TOPIC
9.00 am – 9.30 am	Program and speaker introduction Innovacia's Program Portal and access of training materials
9.30 am – 11.30 am	Module 1: Construction 4.0 and BIM Fundamentals Module 2: BIM vs Traditional Project Delivery Module 3: BIM Dimensions and Level of Development (LOD)
11.30 am – 1.00 pm	Module 4: Project Information Management with BIM based on ISO 19650 Series Module 5: BIM - Open and Interoperable Solutions
1.00 pm – 2.00 pm	Lunch break
2.00 pm – 5.00 pm	Module 6: Asset Lifecycle and Perspectives in Information Management Module 7: Case Studies: National standards and guidelines with regards to information management on projects in Australasia

DAY 2

TIME	TOPIC
9.00 am – 12.00 pm	Module 8: Colloquium
12.00 pm – 1.00 pm	buildingSMART Qualification Platform
1.00 pm – 2.00 pm	Lunch break
2.00 pm – 5.00 pm	Quizzes, Activities and Demo Exam

DAY 3

TIME	TOPIC
9.00 am – 11.30 am	Discussion and Exam Preparation
11.30 am – 12.30 am	Certification Exam
12.30 pm – 1.00 pm	Closing remarks
1.00 pm	Program ends

Certification

Professional Certification – Foundation certificate and a digital badge in the buildingSMART Qualification Platform.

You will also receive a buildingSMART professional title: Foundation Level: buildingSMART Foundation Qualified (bQ)

Program Fee

RM5,000/pax all-in; inclusive of buildingSMART Professional Certification – Foundation exam fee.

This training is HRD Corp Claimable

Contact info@innovacia.com.my for HRD process

Additional 10% discount for the members of Malaysian Association of Engineers (MAE) and National STEM Association Malaysia (NSA)

About buildingSMART

buildingSMART is a global community of chapters, members, partners and sponsors led by the parent body, buildingSMART International. It is the worldwide authority driving the digital transformation of the built asset environment, through creation and adoption of open, international standards for infrastructure and buildings. buildingSMART Professional Certification Program supports both professionals in achieving international recognition as well as training organisations to educate and certify individuals according to a recognised global learning framework.

buildingsmart.org

About Innovacia Sdn Bhd

Since 2006, Innovacia serves professional and educational users with affordable technical products and services. Among the pioneers in Digital TVET, we fulfil your training needs by complementing it with our innovative ICT solutions. We offer our TVET Digitalised series of programs to provide Competency and Professional Certificates for the built industry. In mid-2025, we have reached another international milestone by being appointed as a Training Provider for the buildingSMART Professional Certification - Foundation program.

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