

GeoBIM Application and Technology Certification Programme

Integrate GIS and BIM into one seamless workflow

Register Now

SGD\$1,800.00 / person

Level: Beginner | Course duration: 3 days

The introductory programme aims to demonstrate how the integration of GIS and BIM technologies – also known as GeoBIM – can be applied throughout the key stages of a building's lifecycle: Design, Construction, Operations, and Maintenance.



What is the course about?

Certified trainers from Esri Singapore and BIMAGE Consultancy will take you through how GeoBIM supports and benefits the industry through real-life scenarios like as site selection, facilitating compliance with authority regulations, and emergency response.

By using the various components of the ArcGIS platform and BIM editors, you will integrate BIM models in GIS accurately and quickly, to produce GeoBIM models that can be analysed closely in a geospatial context.

Who is the target audience?

Individuals and professionals responsible for creating building and infrastructure models to analyse their impact on the surroundings.

Are there any prerequisites?

No prerequisites are required. However, basic knowledge of BIM and GIS will be helpful.

What skills will I learn?

After completing this course, you will be able to:

- Understand the benefits of GeoBIM and its application in the built environment
- Develop an understanding of the integration of GIS and BIM technologies
- Perform GeoBIM analysis to make better business decisions
- Gain understanding of mobile configurable technologies around a GeoBIM model

Course topics

What is GeoBIM – GIS and BIM fundamentals

- GIS and BIM stakeholders and users
- Components of GIS and BIM
- How BIM and GIS technologies complement each other
 - Data-rich BIM that enhances GIS data
 - IFC-CityGML integration
 - Geographic context and analysis of BIM models
- GeoBIM benefits and productivity gain for stakeholders
- How GeoBIM supports the building lifecycle: From design, build, operations, and maintenance
- Integrated lifecycle of GeoBIM

Applications of GeoBIM

- Understand the current challenges, GeoBIM approach, benefits, and use cases in IoT, Digital Twins & Smart Cities/Infrastructure
- Applications and benefits of GeoBIM in a project lifecycle
- Application of local and international standards and regulations

Building and Geo-analysis: A GeoBIM model for planning and design

- Site and network accessibility analysis and selection
- Design and development of conceptual model for planning permissions
- Building a detail model for building permissions
- Shadow and solar analysis for thermal and lighting optimisation
- Length and area measurements for regulation compliance
- Line of sight analysis for optimised building views and space planning

Mobile configurable dashboard and apps for operations and maintenance

- Understand how dashboard mobile apps can enhance the value of GeoBIM technology
- Workforce for ArcGIS for workforce management
- Operations Dashboard to monitor key activities