

## Annex A Professional Certification - Foundation

## **Learning Outcomes - Basic**

- Understand the definition, key terminologies and benefits of Building Information Modelling (BIM).
- 1.1 Define the drivers that have led to BIM.
- 1.2 Define BIM.
- 1.3 Identify and Define key BIM terminology.
- 1.4 Know the information management maturity stages, according to ISO 19650-1.
- 1.5 Define what constitutes an Information Model.
- 2 Recognise the advantages of BIM compared to traditional project delivery.
- 2.1 Know why collaborative and new ways of working are required.
- 2.2 Identify the effects of poor information management on projects.
- 2.3 Identify the processes and standards developed to mitigate poor information.
- 2.4 Identify the benefits of BIM for design and construction professionals.
- 2.5 Identify the benefits of BIM for facility owners and operators.

- 3 Understand project information management, with BIM, according to the ISO 19650 series.
- 3.1 Understand why appointing parties need to clearly define their requirements.
- 3.2 Understand the content and value of a BIM Execution Plan (BEP).
- 3.3 Know why consistent information exchanges are required.
- 3.4 Identify the key elements and benefits of using a Common Data Environment (CDE).
- 3.5 Know why clearly defined information management roles are required.
- 3.6 Know why assessing potential supply chain members before appointment is required.
- 4 Recognise the need for open and interoperable solutions.
- 4.1 Know what buildingSMART is and what it represents.
- 4.2 Define openBIM® and its benefits compared to using proprietary solutions.
- 4.3 Know what IFC is and its benefits.
- 4.4 Know what MVDs are and their benefits.
- 4.5 Know what IDMs are and their benefits.
- 4.6 Know what the bSDD is and its benefits.
- 4.7 Know what BCF is and its benefits.

- 5 Understand the terms and measures of BIM capability within an organisation.
- 5.1 Understand the potential benefits for a company in adopting BIM.
- 5.2 Understand the factors that define an organisations level of BIM Maturity.
- 5.3 Know why BIM adoption needs to align to organisational goals.
- 5.4 Identify the benefits and challenges to BIM adoption.
- 5.5 Know what the data security implications are for adopting BIM.