Professional Certification - Foundation

Learning Outcome

"Basic" Curriculum

Version 2.0
June 2020

Authors: PCERT International Steering Committee

education@buildingsmart.org

BASIC Curriculum - Learning Outcomes

1) Understand what BIM is, why it is needed, and recognise its specific terminology.

1-1)   Define the drivers that have led to BIM;
1-2)   Define BIM;
1-3)   Identify & Define key BIM terminology;
1-4)   Know the stages of information management (BIM) maturity;
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 process 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 owner and operators.

3) Understand the 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 exchanges of information 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 Organizational goals;
5-4)   Identify the benefits and challenges to BIM adoption;
5-5)   Know what the data security implications are for adopting BIM.