

## Topics for Essentials in IDD Management

S/N	Topics
1	<p>IDD Pre-Planning:</p> <ul style="list-style-type: none"> <li>• Be able to describe IDD overview and how it disrupts traditional methodologies.</li> <li>• Be able to identify the Preliminary IDD [BIM] requirements for the Building Project to benefit the Owner or Developer's business operations.</li> </ul>
2	<p>IDD Ecosystem: Be able to explain the Overview of the Software Environment such as Common Data Environment &amp; Connected Data Environment</p>
3	<p>Conceptual Design [CD]: Be able to identify Conceptual Design Stage's [CD] BIM Dimension and LOD and ability to explain what the available IDD tools are for CD stage and utilise them to fullest potential.</p>
4	<p>Schematic Design [SD]: Be able to identify Schematic Design Stage's [SD] BIM Dimension, LOD &amp; BIM Classification and ability to explain the types of software and hardware to use for design presentation, clash detection and costing analysis. in relationship to Interoperability issues and their pitfalls. Be able to identify the software and hardware advantages and disadvantages to the building project.</p>
5	<p>Development Design [DD]: Be able to identify Design Development Design Stage's [DD] BIM Dimension and LOD and ability to determine the types of software and their functions, to use for simulation analysis, clash detection analysis, costing analysis, and design optimisation purposes to benefits the project.</p>
6	<p>Tender [TD]: Be able to identify Tender Documentation Stage's [TD] BIM Dimension and LOD and gain insight on the VDC Guide on PCP's and ICP's effects on D.B.B, D&amp;B and E.C.I contracts. Be able to describe the Mechanisms for Quality Control Checks, quality matrix, potential value with BIM 5D to benefit the building project.</p>
7	<p>Construction [CD]:</p> <ul style="list-style-type: none"> <li>• Be able to identify Construction Stage's [CD] BIM Dimension and LOD and describe CDE implementation, their features, types of Scheduling, Clash Detection &amp; Costing Analysis Software, and BIM to Field Tools, so as to deploy them for the benefit of the building project.</li> <li>• Be able to identify Construction Stage's [CD] BIM Dimension and LOD and describe CDE implementation, their features, types of Scheduling, Clash Detection &amp; Costing Analysis Software, and BIM to Field Tools, so as to deploy them for the benefit of the building project.</li> </ul>
8	<p>As-Built [AB]: Be able to identify As-Built's [AD] BIM Dimension and LOD and gain insight on how from a Construction Model is upgraded to a As-Built Model, with the use of Lidar Scanners to track Assets, so that the Information or Data consolidated can seamlessly dovetail to FM's proprietary systems, where benefits to Operations will be highlighted.</p>
9	<p>Facility Management [FM]:</p> <ul style="list-style-type: none"> <li>• Be able to identify Facility Management [AD] BIM Dimension and LOD and gain insight on Smart FM Solutions and description Digital Twin: Simulation and Real time monitoring for operations and maintenance to enhance asset values to benefit the Operations' processes.</li> <li>• Be able to identify Facility Management [AD] BIM Dimension and LOD and gain insight on Smart FM Solutions and description Digital Twin: Simulation and Real time monitoring for operations and maintenance to enhance asset values to benefit the Operations' processes.</li> </ul>
10	<p>Immersion Stations:</p> <ol style="list-style-type: none"> <li>Station 1: IDD Ecosystem <ul style="list-style-type: none"> <li>• Types of CDE</li> </ul> </li> <li>Station 2: Conceptual Design   Schematic Design <ul style="list-style-type: none"> <li>• AR/ VR Technologies: VR Collab with HTC Vive, VisualLive HoloLens &amp; Augment</li> </ul> </li> <li>Station 3: Design Development <ul style="list-style-type: none"> <li>• 3d printing</li> </ul> </li> <li>Station 4: Tender   Construction <ul style="list-style-type: none"> <li>• Costx</li> <li>• Navisworks [ICE]</li> <li>• Solibri Model Checker</li> </ul> </li> <li>Station 5: As-Built   Facility Management <ul style="list-style-type: none"> <li>• Smart Facility Management Systems</li> </ul> </li> <li>Mini brainstorming on how to improve existing workflow</li> </ol>