

## ADVANCE ARCHITECTURAL DRAFTING AND 3D DESIGN WITH AUTODESK REVIT

1. Name ADVANCE ARCHITECTURE 3D DESIGN WITH AUTODESK REVIT

2. Sector/Information on & Communication Technology

3. Code ICT 328

4. Entry Qualification SSC passed and having completed course in Architecture drafting and 3D design with Auto Desk Revit

5. Terminal Competency: After completion of the training, participants would be able to:

- Apply this knowledge to understand the architectural design work flow process in the industry.
- To acquire knowledge in advanced 3D architectural modeling Concept
- Prepare working drawing of different types of designing building by Autodesk

6. Duration 200 Hours

7. Contents

<b>Practical Competencies</b>	<b>Underpinning Knowledge (Theory)</b>
<ul style="list-style-type: none"> <li>• Production of parametric three-dimensional building design models &amp; working drawing using Revit software</li> <li>• Generating building elevation and sections</li> <li>• Annotating &amp; documenting the drawing</li> <li>• Surface modeling □ Revolved , Ruled, Tabulated &amp; Edge surfaces.</li> <li>• Solid modeling Bo• , Polysolid , Cone ,</li> </ul>	<p style="text-align: center;"><b>Advanced Architecture Design</b></p> <ul style="list-style-type: none"> <li>• Fundamental of creating,&amp; modifying three dimensional topography &amp; building mass object</li> <li>• Parametric building wall with floor &amp; roof slabs</li> <li>• Creating floor &amp; reflected ceiling plans</li> <li>• Function of Revit</li> <li>• Fundamentals of creating,&amp; modifying</li> </ul>

<p>Pyramid ,Wedge &amp; Torus</p> <ul style="list-style-type: none"> <li>• Creating professional quality rendering</li> <li>• Creating &amp; modifying three - dimensional objects</li> <li>• Placing of cameras &amp; lights</li> <li>• Computer rendering technique</li> <li>• Creating professional quality output</li> </ul> <p>Applying light ( point, distance &amp; spot light) to 3 D Model</p> <p>Applying material &amp; landscaping to the model</p> <ul style="list-style-type: none"> <li>• Showing e•teriors &amp; interiors in the correct setting with appropriate lighting &amp; coloring</li> <li>• Hands- on-e•ercises will be used to reinforce</li> <li>• Practice on 3 D drawing &amp; designing</li> <li>• Structural designing</li> <li>• Electrical plumbing layout design &amp; drafting</li> <li>• Project: e.g. Commercial building</li> </ul> <p>3 D grid modeling of a Ship , bridge</p>	<p>three dimensional objects</p> <ul style="list-style-type: none"> <li>• Creation &amp; application of materials</li> </ul> <p><b>Introduction of Structure drafting and MEP</b></p> <ul style="list-style-type: none"> <li>• Structural requirements</li> <li>• Analysis of the Material &amp; construction details of commercial &amp; Industrial building</li> <li>• Electrical plumbing layout design &amp; drafting</li> </ul>
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## **LIST OF TOOLS & EQUIPMENTS**

**1. Hardware** workstations of suitable configuration

**2. Software** licenses of Autodesk REVIT software