

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

1. Name : ARCHITECTURAL DRAFTING AND 3D DESIGN  
WITH AUTODESK REVIT.
2. Sector : Information & Communication Technology
3. Code : ICT 225
4. Entry Qualification : **SSC Passed and having completed Architecture & civil 2D drafting with AutoCAD.**
5. Terminal Competency After completion of the training, participants would be able to:
- To acquire knowledge of advanced 3D modeling concept.
- Prepare working drawings of different types of designing building by Autodesk
- Apply this knowledge to understand the Architectural design work flow
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6. Duration : 200 Hours
7. Contents

<b>Practical Competencies</b>	<b>Underpinning Knowledge (Theory)</b>
<ul style="list-style-type: none"> <li>• Preparing Architectural working drawing</li> <li>• Representing Standard base 2D drafting</li> <li>• Planning, designing &amp; measuring of drawing</li> <li>• Drawing Elementary CADD command - Line, Polyline, Polygon, Circle, Polyline, arc, ellipse, Te•t- Single Te•t, Multite•t, Dte•t</li> <li>• Modifying Elementary Commands - Erase, Move, Copy, Mirror, Offset, Scale, Stretch, Chamfer, fillet &amp; e•plode</li> <li>• Making layers, line type &amp; Line weight</li> <li>• Preparing of the color drawing</li> <li>• Preparing utilization of architectural working drawing</li> <li>• Practice on 3D drawing &amp; designing</li> <li>• Rendering of 3D model (Light, Material &amp; Landscaping)</li> <li>• Purpose &amp; presentation of working drawing</li> </ul>	<p style="text-align: center;"><b>Architecture Drafting &amp; Design I</b></p> <ul style="list-style-type: none"> <li>• Introduction to the preparation of architectural working drawing</li> <li>• Drawing convention.</li> <li>• Design consideration.</li> <li>• Different types of Architectural drawing.</li> <li>• Construction technique - Residential construction &amp; commercial building.</li> <li>• Introduction &amp; Applications of Auto-Cad,</li> <li>• UCS Co-ordination System.</li> <li>• Shortcut keys, Function keys.</li> </ul>

<p>with building course.</p> <ul style="list-style-type: none"> <li>• Structural designing</li> <li>• Construction detail of commercial &amp; Industrial building</li> <li>• Applying skill &amp; presentation technique to the Architectural Project</li> <li>• Project -e.g.Case study &amp; measuring of hotel suit</li> </ul> <p>Detailing of Construction Drawing</p> <p>Designing of related Project</p> <p>Detail layout plan</p> <p>Sectional elevation</p> <p>Perspective view</p> <p>Electrical planning &amp; other furnishing details.</p>	<p><b>Architecture Drafting &amp; Design II</b></p> <ul style="list-style-type: none"> <li>• Methods of utilized in the preparation of architectural working drawing.</li> <li>• Advanced drawing convention.</li> <li>• Advanced Design consideration.</li> <li>• Structural requirements.</li> <li>• Analysis of the Material&amp; construction details of commercial &amp; Industrial building</li> </ul> <p><b>Architecture Design theory.</b></p> <ul style="list-style-type: none"> <li>• Introduction to the creative thinking process &amp; its application to basic Architectural design theory.</li> <li>• Basic skill &amp; presentation technique use in the design of simplifies architectural Project.</li> <li>• Focus on the investigation theoretical concept, color, space form &amp; te•ture in emphasized</li> </ul>
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## **LIST OF TOOLS & EQUIPMENTS**

**1. Hardware:** 20 workstations of suitable configuration

**2. Software :** 20 licenses of Autodesk REVIT software