

**REDESIGNED MODULES FOR THE SECTOR
OF
ARCHITECTURAL DRAFTING AND
BASIC 3D DESIGN WITH AUTODESK
REVIT**

**Under
MODULAR EMPLOYABILITY SKILLS (MES)**

**Redesigned in
2014**

**By
Government of India
Ministry of Labour & Employment
Directorate General of Employment & Training (DGE&T)**

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

Name of Sector	Construction
Name of Module	Architectural drafting and 3D design with autodesk revit
Code	CON 722
Duration of Course	500 Hours
Entry Qualification of Trainees	10 th Passed and having completed Course in Architecture & civil 2D drafting with AutoCAD (CON 721) Or ITI/CTS passed in architectural draughtsmanship or civil draughtsmanship or architectural assistant
Age	18 years above
Unit Size	20 Trainees
Power Norms	4 KW
Space Norms	50 sqm
Terminal competency	<ul style="list-style-type: none"> •Apply this knowledge to understand the Architectural design work flow process in the industry. •To acquire knowledge of advanced 3D modeling concept. •Prepare drawing in REVIT of different types of designing by Autodesk Revit
Instructor's qualification	3 years Diploma in Civil Engineering with knowledge of REVIT or 3 years Diploma in Architecture with knowledge of REVIT or CITS in civil / architectural draughtsmanship with knowledge of REVIT
Desirable Qualification	CITS

Practical Competencies	Underpinning Knowledge (Theory)
<ul style="list-style-type: none"> • Preparing Architectural working drawing • Representing Standard base 2D drafting • Planning, designing & measuring of drawing • Drawing Elementary CADD commamd - Line, Polyline, Polygon, Circle, Polyline, arc, ellipse, Text- Single Text, Multitext, Dtext • Modifying Elementary Commands - Erase, Move, Copy, Mirror, Offset, Scale, Stretch, Chamfer, fillet & explode • Making layers, line type & Line weight • Preparing of the color drawing • Preparing utilization of architectural working drawing • Practice on 3D drawing & designing • Rendering of 3D model (Light, Material & Landscaping) • Purpose & presentation of working drawing with building course. • Project -e.g.Case study & measuring of hotel suite or bed room or living room or similar small scale projects <p>Designing of related Project</p> <p>Detail layout plan in revit</p> <p>Sectional elevation in revit</p> <p>Perspective view in revit</p> <p>Electrical planning & other furnishing details in revit</p>	<p>Architecture Drafting & Design I</p> <ul style="list-style-type: none"> • Introduction to the preparation of architectural working drawing • Drawing conventional signs • Design consideration. • Different types of Architectural drawing. • Construction technique - Residential . • Introduction & Applications of revit, • Shortcut keys, Function keys. <p>Architecture Drafting & Design II</p> <ul style="list-style-type: none"> • Methods of utilized in the preparation of architectural working drawing. • Analysis of the Material& construction details of commercial & Industrial building <p>Architecture Design theory.</p> <ul style="list-style-type: none"> • Introduction to the creative thinking process & its application to basic Architectural design theory. • Basic skill & presentation technique use in the design of simplified architectural Project. • Focus on the investigation theoretical concept, color, space form & texture in emphasized

LIST OF TOOLS & EQUIPMENTS

<u>Sl.no</u>	<u>description</u>	<u>quantity</u>
1.	Hardware: Pentium IV PCs with 4 GB RAM, (Multimedia Enabled, and Windows XP), NVIDIA GeForce 7300 GT	20
2.	Inkjet/ Laser Jet Printer (A3 size) with latest configuration	1
3.	A4 Color Scanner/printer with Latest Configuration	1
4.	800VA or higher Offline UPS	20
5.	Printer Table (module type)	2
6.	Operator's revolving chair	22
7.	Instructor 's Lab table	1
8.	Air conditioner 1.5 / 2.0 tons (preferably split type) for CAD lab	3
9.	Internet connection	1
10.	Software: 20 licenced Autodesk REVIT software	20