

Date : 04/05/2017

To,  
The Administrative officer  
Anjuman college of Engineering & Technology  
Sadar Nagpur

Respected sir ,

Subject : course completion for F.Y. 2016 -17

We would like to inform that we had successfully complete course as per syllabus  
For below mention class

Division : Electrical Engineering = AUTOCAD 2D
Division : Civil Engineering = AUTOCAD 2D & staad pro basic
Division : Mechanical Engineering = AUTOCAD 2D & Ansys

Warm Regards

For Astral Informatics Pvt .Ltd. Nagpur

Authories signature



PTC university



SOFTWARE SALES | TRAINING | PLACEMENTS | ENGINEERING SERVICES

### AutoCAD Basic

Day	Description
	<b>MODULE # 1 - 2D DRAFTING</b>
<b>Lecture 1</b>	Introduction about AutoCAD.
	Introduction to working environment.
	Introduction to status bar.
	Navigating through the GUI.
	List of shortcut commands.
	Line with dimension & without dimension,
	Drawing angular lines,Ray, construction line,Multiline.
	Ortho,Osnap,osnap setting,Polar,Otrack
<b>Lecture 2</b>	Poly line
	Poly line edit
	Selection Window
	Polygon
	Undo
	Redo
	Trim
<b>Lecture 3</b>	Dimensioning
	Linear
	Aligned.
	Angular
	Continuous
	Baseline.
	Dimension Style
<b>Lecture 4</b>	Rectangle
	Helix
	Arc
	Circle
	Donut
	Erase
<b>Lecture 5</b>	Spline with fit & CV.
	Ellipse.
	Copy.
	Mirror.



<b>Lecture 6</b>	Array - rectangular, polar, path.
	offset
	delete duplicate object.
	Move
<b>Lecture 7</b>	Rotate.
	Scale
<b>Lecture 8</b>	Stretch.
	Lengthen
<b>Lecture 9</b>	Extend
	Break.
	Break at point.
	Join
<b>Lecture 10</b>	Chamfer
	Fillet
	Blend curves
<b>Lecture 11</b>	Inquiry.
	Area
	Distance.
	Radius.
	Angle
<b>Lecture 12</b>	Properties
	Quick properties
	Selection cycling
	<b>Dyn.</b>
	<b>MODULE #2-PRODUCTIVITY TOOLS.</b>
<b>Lecture 13</b>	Make block.
	Insert block.
	Boundary.
<b>Lecture 14</b>	Point
	Divide
	Measure.
	Point style



<b>Lecture 15</b>	Table
	Hatch
	Hatch edit
	Gradient
<b>Lecture 16</b>	Layer properties manager
	LWT,TPY
	Units
	Properties toolbar
	Tool palletes(Architectural)
	Design centre.
	Unit Conversion
<b>Lecture 17</b>	Creating own palletete
	Text- single & multiline
	Match properties
<b>Lecture 18</b>	Creating isometric views
	Iso- circle.
	Increment angle.
	Oblique



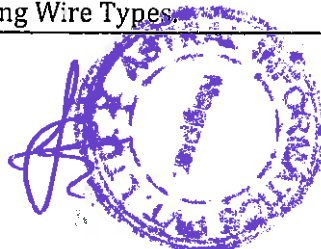
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<b>Lecture 7</b>	Rotate.
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	Reference
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<b>Lecture 18</b>	<b>Project Manager</b>
	Open A Project
	Creating New Project
	Creating Sub-Folders
	Creating New Drawing
	Adding Existing Drawings To A Project
	Adjusting The Order Of The Drawings In A Project.
	Copying A Project.
<b>Lecture 19</b>	<b>Working With Wires</b>
	Inserting Wires.
	Vertical Wires
	Horizontal Wires
	Angled Wires ( 22.5, 45 , 67.5)
	Inserting Multiple Bus Wiring.
	Modifying Existing Wires.
	Trim Wires.
	Stretch Wires.
	Creating Wire Types



	Inserting Wire Numbers.
<b>Lecture 20</b>	Copying Wire Numbers.
	Deleting Wire Numbers.
	Wire Numbers With Leaders.
	Hide Wire Numbers.
	Unhide Wire Numbers.
	Swapping Wire Numbers.
	Finding And Replacing Wire Numbers.
	Move Wire Numbers.
	Scoot Wire Numbers.
	Flipping Wire Numbers.
	Toggling The Wire Number Position.
	Repositioning Wire Number Leader Text.
	Bending Wires At Right Angles.
	Deleting Wire Gaps.
	Adding Source Signal Arrows.
	Adding Destination Signal Arrows.
<b>Lecture 21</b>	<b>Ladders</b>
	Inserting Ladders.
	Renumbering Ladder Rung References.
	Resizing A Ladder - Scoot / Stretch.
	Repositioning Of Ladders - Move.
	Rung Spacing.
	Adding Rungs To Ladders.
<b>Lecture 22</b>	<b>Working With Components</b>
	Insert Component
	Annotating & Editing Symbols
	Selecting An Existing Part Number.
	Creating Parent-Child Relationship.
	Copy Components.
	Delete Components.
	Retag Components.
	Toggle No/Nc.
	Symbol Builder.
<b>Lecture 23</b>	<b>Connectors</b>
	Inserting Connectors.
	Adding Pins To Connectors.





	Deleting Pins.
<b>Lecture 24</b>	<b>Panel</b>
	Inserting Panel Footprint From Icon Menu.
	Inserting Panel Footprints From Manual.
	Inserting Panel Footprints From Manufacturer Menu.
	Tagging Footprints With Balloons.
	Symbol Builder.
<b>Lecture 25</b>	<b>Reports</b>
	Report Generating Dialog Box.
	Changing Report Formats.
	Placing Reports Into Drawings.
	Saving Reports To Files.
	Editing The Database.



Staad Pro Basic	
Day	Description
<b>Lecture 1</b>	Introduction
	Unit Setup
	Model 1 : Beam Modelling
<b>Lecture 2</b>	Material
	Property
	Support
	Loads
<b>Lecture 3</b>	Analysis
	Design
	Project 1
<b>Lecture 4</b>	Model 2: Column
	Analysis
	Design
<b>Lecture 5</b>	Project 2
<b>Lecture 6</b>	Model 3 : Portal Frame
	Analysis
	Design
<b>Lecture 7</b>	Support
	Loads : Dead Load, Live Load
<b>Lecture 8</b>	Seismic Load
	Wind Load
<b>Lecture 9</b>	Load Combinations
	Analysis
<b>Lecture 10</b>	Concrete Design for Beams, columns, slab
	Practise
<b>Lecture 11</b>	Project 2
	Practise





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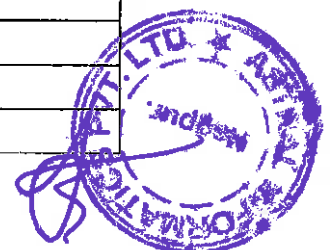


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	Copying A Project.
<b>Lecture 20</b>	Introduction to Mechanical Annotations
	introduction to JIS and DIN librairy
	Layer groups
	mechanical drafting detailing tool
<b>Lecture 21</b>	creating production and detail drawing
	introduction GD & T, Alloncess,Tolerace
<b>Lecture 22</b>	Custom contant librairy .smart engineering dimension,
<b>Lecture 23</b>	Mass calculation & bill of material,custom library creation



## Ansys

	Description
<b>Lecture 1</b>	<b><u>Introduction to FEA and ANSYS</u></b>
	Introduction to FEA
	Types of Analysis
	Important Terms and Definitions
	Introduction to ANSYS
	ANSYS Multi-physics Utility Window
<b>Lecture 2-4</b>	<b><u>Basic Solid Modeling</u></b>
	Solid Modeling in ANSYS
	Creating and Modifying Work planes
	Coordinate System in ANSYS
<b>Lecture 5-6</b>	<b><u>Advance Solid Modeling</u></b>
	Advance Solid Modeling
	Creating Complex Solid Modeling
	Importing Solid Model
<b>Lecture 7</b>	<b><u>Finite Elements Modeling (FEM)-1</u></b>
	Elements Attributes
	Real Constant
	Material Properties
	Elements Attributes Table
<b>Lecture 8</b>	<b><u>Tutorial - 1</u></b>
<b>Lecture 9</b>	<b><u>Tutorial - 2</u></b>
<b>Lecture 10</b>	<b><u>Tutorial - 3</u></b>
<b>Lecture 11</b>	<b><u>Tutorial - 4</u></b>
<b>Lecture 12-13</b>	<b><u>Finite Elements Modeling (FEM)-2</u></b>
	Mesh Generation
	Mesh Density
	Meshing the Solid Model
	Extruding the Mesh
	Transitional Pyramid Elements
<b>Lecture 14-15</b>	<b><u>Solution and Postprocessor</u></b>
	Solution
	Post-processing the Result



<b>Lecture 16-21</b>	<b><u>Advance Structural Analysis (Dynamic and Nonlinear)</u></b>
	Advance Structural Analysis
	Dynamic Analysis
	Performing the Model Analysis
	Performing the Harmonic Analysis
	Performing the Transient Analysis
	Nonlinear Analysis
<b>Lecture 22-25</b>	<b><u>Thermal Analysis</u></b>
	Important Terms Used in Thermal Analysis
	Steady-State Thermal Analysis
	Transient Thermal Analysis
	Solving the Analysis Problem
<b>Lecture 26-27</b>	<b><u>CFD Analysis</u></b>
	Important Terms Used in CFD Analysis
	Laminar Analysis
	Turbulent Analysis
<b>Lecture 28-29</b>	<b><u>Advance Level Project</u></b>
	Contact Mechanics
	MEMS
<b>Lecture 30</b>	<b><u>Generation the Report of Analysis</u></b>
	ANSYS Report Generation

