

FUTURE GEN TECHNOLOGIES

PDMS & SP3D SYLLABUS

PDMS COURSE SYLLABUS

1. Equipment

CLASS : I

Introduction about Piping & PDMS, PDMS Login, PDMS Modules Introduction creation of Equipment, primitives & Standard Equipment and cutout Primitives.

CLASS : II

How to Create Nozzle, Nozzle Placement, type of Nozzles, Nozzle Orientation, Nozzle Speciation Selection and Nozzle class selection.

CLASS : III

Equipment co-ordination, Position of equipment and create & Modification of list

CLASS : IV

Creation of Standard Equipment in the library file, modifying the Property of the standard Equipment, Equipment Specification and Electrical Equipment.

CLASS : V

Usage of the Model Editor Tool, How to use with the Model Editor tool and model editor settings

CLASS : VI

Creation Working Plane, Creating deferent shape use with Extrusion primitives And Revolution Primitives, Creating Mitre Bends.

CLASS : VII

Deals with the general settings, display settings, members, view settings and command window.

2. Piping

CLASS : I

How to create pipe,branch,and piping components using connect method

CLASS : II

Deals with the pipe creation using explicit method, modification of pipe&branchand model editor commands

CLASS : III

Orientation of component,branch connection,creating pipe assemblies,splitting pipe and isometric drawings.

CLASS : IV

Positioning of branch&piping components,maintaining bottom of pipe,and pipework toolbar.

3. Structural

CLASS : I

How to set profile for section,create a section using sting method and regular structure.

CLASS : II

How to create tower using regular structure,description about upper &lower s.o.p,bracingconfiguration and joint creation

CLASS : III

Modification of sctn elements,creation of fittings and positioning of sctns

CLASS : IV

SCTN connection,orientation of structure,general settings and grid creation.

CLASS : V

Creation of panel,negative extrusion,splitting of panel,postioning of panel and panel

fitings&connections

CLASS : VI

Creation of wall & floor,modification of wall & floor,creation of fittings,position & orientation of wall&floor and connecting wall

CLASS : VII

Creation of platform & handrail,modification of platform & handrail and deletion of paltform & handrail.

CLASS : VIII

Creation & modification of stairflight,stair tower, ladder and circular platform @90°,270°,110°.

4. HANGER & SUPPORT

CLASS : I

Creation of hangers&supports,modification of hanger configuration,positioning of support and general utilities.

5. HVAC & ELECTRICAL

CLASS : I

Creation of hvac components,modification of hvac,positioning of duct and general utilities.

CLASS : II

Creation & modificaton of cable tray components,positioning of trays and general utilities.

CLASS : III

Creation&modification of cableway,branch elements,routepoint,route node,route attachment points and material.

6. DRAWINGS & REPORTS

CLASS : I

Report generation (MTO) using template,creation of template modification of report and filter report.

CLASS : II

Creation of spool drawing,weld,spool break and isometric drawing of pipe, convert to DXF,DWG & DGN.

CLASS : III

Creation of department,sheet,userdefined view,limits defined view,modification of sheet&view,creation of predefined frame.

CLASS : IV

Creation of 2d draft,shapes,symbols,text and modification of dynamic primitives and general utilities.

CLASS : V

Creation &modification of linear/angular dimension and labelling & Tagging.

CLASS :

Creation of section flat,section perpendicular,stepped,hatching rules,covering to dwgformat and auto drawing production

CLASS : VII

Clash checking,clipping options utilities and colour settings

FUTURE GEN TECHNOLOGIES

SmartPlant 3D SYLLABUS

Major Topics:

- SmartPlant 3D Software Architecture
- SmartPlant 3D Common Environment
- Workspace & Filters
- Interference Checking
- Project Management Environment
- Access & Change Control Mechanisms
- Equipment Modeling

- Structural Modeling
- Pipe, Cableway & Duct Routing

- Drawing & Report Generation
- Reference Data Overview

SP3D Piping & Equipment Modeling

Major Topics:

- Overview of Common Graphics Environment
- Defining a Working Set
- SmartStep Commands and User Options
- Interactive Interference Checking
- Equipment Modeling
- 3D Routing System
- General Routing Techniques

- Hangers & Supports
- Change Management
- P&ID Integration
- Isometric Drawing Generation

SP3D Drawings & Reports

Major Topics:

- Drawing Console
- Creating & Updating Drawings
- Creating & Updating Reports

- Smart Labels
- Drawing & Report Templates
- Bulkload Utility
- Drawing Types (Manual, Spatial)

SP3D Isometric Drawings

Major Topics:

- Drawing Console
- Creating & Updating Piping Isometrics
- Isogen Options
- Atext (Alternate Text) Definitions
 - Symbols and Symbol keys
 - Customizing Isometric Drawing Styles
 - Configuring Isometric Drawing Content

SP3D Electrical Modeling & Reference Data**Major Topics:**

- Overview of Common Graphics Environment
- Defining a Working Set
- SmartStep Commands
- Interactive Interference Checking
- Equipment Modeling
- 3D Routing System
- Routing techniques
- Hangers & Supports
- Catalog & Specification Databases
- Bulkload Utility
- General Format of Bulkload Files
- Adding a New Part to the Catalog
- Cableway Specifications
 - Cabletray Specifications
 - Cable Specifications
- Conduit Specifications

SP3D Structural Modeling & Reference Data**Major Topics:**

- Overview of Common Graphics Environment
- Defining a Working Set
- SmartStep Commands and User Options
- Interactive Interference Checking
- Grid System
- Structural Modeling
- Modeling Stairs & Ladders
- Modeling Footings and Equipment Foundations
- Change Management

- Catalog & Specification Databases
- Bulkload Utility
- General Format of Bulkload Files
- Symbol 2D
 - Adding User Defined Sections
 - Adding User Defined Openings
- Adding a New Slab Type

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