Engineers 3D

IT & ENGINEERING SERVICES

TRAINING PROJECTS PLACEMEMNTS

PDMS COURSE WEEKLY CALENDAR

Week 1

Introduction to PDMS Piping. and it's Principles

Accessing the Design Environment

Using Forms.

Using Menu

Manipulating the display

PDMS Primitives- Cylinders, boxes, negative primitives etc.

E-INSTRUCTION ASSIGNMENT- PETROLEUM REFINING IN NON-TECHNICAL TERMS –Chapters 1 thru 3.

Week 2

Controlling PDMS

PDMS: Basics and Functions

Organization using a Hierarchy

Building the Draw list

Hierarchy

Parent/child relationship

Creating the Site, Zone and Basic equipment.

SITE=FIRSTNAMELASTNAME;

=EQUI

ZONE

-FIRSTINITIALLASTNAME

(EXAMPLE: GC-C1301)

EQUI=INITIALSEQUIPMENTNAME

Creating Equipment from Primitives

PDMS Primitives- Cylinders, boxes, negative primitives, p points etc.

E-INSTRUCTION ASSIGNMENT- PETROLEUM REFINING IN NON-TECHNICAL TERMS –Chapters 4 thru 8

Week 3

Displaying Modeled Elements

PDMS Primitives- Cylinders, boxes, p points nozzles etc.

Principles of the 3D Display

Setting the View Limits and the View Direction

Equipment modeling – STABILIZER 1101

Vessel nomenclature and general process

Attribute in PDMS

Querying Attributes

Modifying Attributes

Model Editor

E-INSTRUCTION/ASSIGNMENT – FIND AND STUDY 4 DIFFERENT TYPES OF VESSEL USED IN

PETROLEUM REFINING

Week 4

Controlling PDMS again

Displaying Modeled Elements

Continue Equipment modeling – STABILIZER 1101 AND STABILIZER REFLUX DRUM 1201

Reading a plot plan for equipment placement.

Vessel nomenclature and general process

Attribute in PDMS

Querying Attributes

Modifying Attributes

Model Editor

E-INSTRUCTION/ASSIGNMENT – CREATE A SIMPLE P&ID OF FRESH WATER SYSTEM FOR HOME.

Week 5

Working with the 3D Views.

Multiple 3D Views

Manipulating the View

Heirarchy-manipulation, reordering

Continue Equipment modeling –STABILIZER REFLUX DRUM 1201 AND STABILIZER REBOILER 1301

E-INSTRUCTION/ASSIGNMENT – FIND AND STUDY HOW AND WHY EQUIPMENT MAY BE LAID OUT IN A

PROCESS UNIT. .

Week 6

Equipment modeling continues.

REFLUX CONDENSER 1302 A AND 1302 B

Renaming elements

E-INSTRUCTION/ASSIGNMENT- FIND AND STUDY PDMS SYNTAX

Week 7

Equipment modeling continues

Position, Orientation.

Move, copy, mirror.

Using equipment templates

STABILIZER REFLUX PUMP-MOTOR DRIVEN 1501 A AND B

STABILIZER TOP SUCTION PUMP-MOTOR DRIVEN 1502 A AND B

E-INSTRUCTION/ASSIGNMENT- FIND AND STUDY TYPES OF VALVES AND THEIR PURPOSES

Week 8

Equipment modeling continues

COMPLETE ALL EQUIPMENT

E-INSTRUCTION/ASSIGNMENT – FIND AND STUDY ORIGANIZATION OF EASEMENTS ROADS AND RACKS.

Week 9

Mid-Term Exam.

Begin Pipework Modeling:

Basic concepts

Piping specification

Pipework tool bar, Pipe Creation Form

Pipe Branch Head and Tail

E-INSTRUCTION/ASSIGNMENT – FIND AND STUDY 4 DIFFERENT TYPES OF VALVES

Week 10

Pipework Modeling

Equipment layout, Introduction to Pipe Routing with PDMS Handout, PDMS: Pipework

Introduction to Pipe Routing with PDMS: Pipework

Basic plant layout.

Organization of easements, roads, racks.

Begin Pipe Routing

E-INSTRUCTION/ASSIGNMENT – FIND AND STUDY 3 DIFFERENT TYPES OF INSTRUMENTS

Week 11

Orientation and Positioning Component in Sloping Pipelines

Positioning Piping Items relative to Other Design Items

Data Consistency Checker

Possible Types of Data Error

Clash Management

E-INSTRUCTION/ASSIGNMENT – FIND AND STUDY DATA CONSISTENCY ON REFERENCE MATERIAL

Week 12

Building pipework: connecting vessels

Pipe specifications

Building pipe and connecting

Pipe design

E-INSTRUCTION/ASSIGNMENT – FIND AND STUDY 3 DIFFERENT TYPES OF PIPE SUPPORT

COMPONENTS

Week 13

Continue: Building pipework: connecting vessels

E-INSTRUCTION/ASSIGNMENT – FIND AND STUDY PIPE RACKS- THEIR PURPOSE AND

ARRANGEMENTS

Week 14

Drawing Production:

COMPLETE PIPE

Iso Production

Bill of Material

Reports

E-INSTRUCTION/ASSIGNMENT- PRODUCE A MANUAL BILL OF MATERIAL FOR THE FRESH WATER

SUPPLY SYSTEM FOR HOME

Week 15

General Semester work and Exam review

Drawing Production PDMS: Drawing Production

The project completion