

TRAINING COURSES BROCHURE

2017 Piping Design & Plant Layout Engineering



PROGRAM OUTLINE

- PDPE 101. Introduction to Oil & Gas Industry and EPC Contracts.
- PDPE 102. Fundamentals of Pipe, Pipe Fittings and Piping Components
- PDPE 103. Piping Codes & Standards, Piping Material Specifications
- PDPE 104. Process Plant Layout Engineering
- PDPE 105. Plant Design Management System (PDMS)

JAS-ANZ



ISO 9001:2008
CERTIFIED

ISO 9001:2008 Certified for Engineering Procurement & Construction Training Company

SmartBrains Training Program

SmartBrains is the global market leader in providing high-level training services to the energy sector (Oil and Gas, Petrochemical, Refinery, LNG, Power Plants, Fiscal, Contracts, Strategy & Finance and Leadership & Management). Operating nation wise over the last 8 years, our courses are widely acknowledged within the energy community for quality and up-to-date information. Our success and distinguished reputation is down to our commitment to the industry, a high-level of expertise, sector knowledge, cultural diversity and experience that comes from organising many courses.

SmartBrains Affiliation & Accreditation



SmartBrains engineers and technologist Pvt. Ltd. has received recognition, endorsement and affiliation from National Skill Development Corporation of India (NSDC), a Public Private Partnership (PPP), Under the Ministry of Skill Development and Entrepreneurship (Govt. of India Enterprises) & various Skill Sector Councils as an authorized training partner under various trades. SmartBrains is authorized to provide skill based training for engineering/non-engineering candidates as per their interest. SmartBrains as a training institute will provide complete practical knowledge based skill training to the candidates and NSDC/Skill Councils will be responsible for providing recognition & certification to the candidates.

Why SmartBrains

- **Highly qualified and experienced trainers**
 - ✓ Our team consists of highly qualified and experienced trainers with years of teaching, as well as hands-on and in-depth expertise in EPC industries
- **Technical Insight & Case Study**
 - ✓ Our courses combine technical knowledge and experience to make learning accessible and entertaining.
- **Convenient Place & High Quality Training Material**
 - ✓ Classroom & Training Material are excellent designed to create a positive learning environment
- **Training on latest designing and drafting softwares**
 - ✓ Our Courses combine latest engineering designing softwares, 3d modeling tools and 2D drafting softwares as well.
- **Online classes are available through VC**
 - ✓ You can attend our live training classes from your home or at your convenient place by Video conference



2017 TRAINING SCHEDULE

Training Courses	Course Duration	Course Fee	March
PDPE 101- Introduction to Oil & Gas Industry and EPC Contracts	3 Hours	INR 2000/-	8th April
PDPE 102- Fundamentals of Pipe, Pipe Fittings and Piping Components	15 Hours	INR 8000/-	8th, 9th , 10th April
PDPE 103- Piping Codes & Standards, Piping Material Specifications	12 Hours	INR 8000/-	11th , 12th April
PDPE 104- Process Plant Layout Engineering	6 Hours	INR 5000/-	13th April
PDPE 105- Plant Design Management System (PDMS)	18 Hours	INR 20000/-	14th , 15th , 16th April

Terms and Conditions :



1. All the Public Training will be held in SmartBrains Training Centers
2. Course fee excluding Tax.
3. Course fee including :
 - Tea Break
 - Training Kit (Pen, Note. etc)
 - A full set of the course Module
 - CD containing complete course slide
 - Certificate of Completion
4. SmartBrains reserves the right to cancel classes up to one week before scheduled date due to low registration.
5. Upon cancellation, SmartBrains will provide registrants a full refund for pre-paid course fees. Cancellation of courses does not imply responsibility for reimbursement to registrants for non refundable expenses

• Please Note That We Offer :

- ✓ Upto 15% Fee Discounts on all Modules Training
- ✓ Upto 10% Fee Discounts on Early Bid
- ✓ Upto 15% Fee Discounts on Group Registration

The all modules training discount will be apply only to participants who are registering for all 9 Modules

The early bird will apply only to sign up 7 days before the course commencing date.

The Group Registration Discount will apply on a group of minimum 3 participants

April
2017

8
Saturday

COURSE OUTLINE

General Industry overview and basic concepts
Oil & Gas prospecting (Exploration)
Production facilities
EPC- engineering, procurement and construction
Cost estimation of plant
The tender & procurement process
The scope of works
Role of a Piping Engineer in various fields of industry

April
2017

9
Sunday

COURSE OUTLINE

Fundamentals of Pipe and Pipe Fittings
-Pipe dimensions and pipe representation
-Use of pipe data tables
-Pipe joining methods
Pipe fittings
-Elbows, Tees, Reducers, End caps
-Fitting dimensions and tables

April
2017

10
Monday

COURSE OUTLINE

Piping System Components
-Basics of flanges
-Flange ratings and flange types
-Flange data tables and their use
-Gaskets
-Bolting
Different types of valves and their applications
-Valve data tables
Pipe hangers & supports
-Classification, types and uses
-Pipe rack design

April
2017

11
Tuesday

COURSE OUTLINE

ASME Codes & Standards
-Introduction to B31.3 process piping codes
-ASME standards for Common Piping Elements
-Piping specifications
-Material selection
Piping Materials and Material Specifications
-Material properties
-Classification of materials

April
2017

12
Wednesday

COURSE OUTLINE

Material specifications (ASTM)
Common piping materials
Piping System Studies
-Drum Piping, Pump Piping, Compressor Piping, Heat Exchanger Piping, Column Piping, Tank Farm Piping, Underground Piping, Pipe Rack Piping

April
2017

13
Thursday

COURSE OUTLINE

Flow diagrams
-Block flow diagrams
-Process flow diagrams
-Utility flow diagrams
-Piping and instrumentation diagram
Plant layouts
-Plot plans
-Piping layouts

Equipment layouts
Piping Isometrics
-Definition
-Piping Isometrics Drawings
-Isometric Dimensions, Notes & Callouts
-Isometric Offsets, Print Reading Exercises
-Exercises on creation of Isometrics from Piping plans and Sections
-Piping spools

April
2017

14
Friday
15
Saturday

COURSE OUTLINE

Introduction of 3D Modelling in Oil & gas
Getting Start with PDMS
Familiarize with the basics of the User Interface
Equipment Modelling
-Basic Equipment Modelling in PDMS
-Creating Equipment by using primitives
-Creating Equipment by using PDMS standards catalogue.
-Creating Obstructions
-Manipulation of primitives & equipment

April
2017

16
Sunday

COURSE OUTLINE

Equipment Modelling
-Nozzles placements & manipulations
-Understanding parameters & attributes
-Preparing Layouts by using Draft modules
-Creating Views
-Amotion & Dimensioning
PDMS ISO Draft
-Extracting Isometrics
-Preparing Isometrics for Fabrication & Erection

Admission Procedure :

Submit Dully filled Admission Form, along with Registration Fee.

To,
SmartBrains Engineers & Technologist Pvt. Ltd.
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Email : info@smartbrains.in
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Mode of Payment :

Registration fee will be 50% of course module fee

Registration fee is acceptable by DD/ Cash or online bank Transfer

The DD should be in favour of SmartBrains Engineers & Technologist Pvt. Ltd. , Payable at Ghaziabad.

Online Bank Transfer should be in favour of SmartBrains Engineers & Technologist Pvt. Ltd.

PA/C NUMBER : 071805001090

PRTGS/NEFT IFSC CODE : ICIC0000718



Declaration

- Training programs provided in SmartBrains are approved, affiliated and certified by National Skill Development Corporation of India.
- SmartBrains has right to expel any student at any time for misbehavior, poor attendance without refunding the fees.
- Certification will be issued after successful completion of program followed by assessment examination.
- SmartBrains strictly follows rules and regulations of NSDC in conducting examinations and assessments.

SmartBrains Engineers & Technologist Pvt. Ltd.

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