







## Advantages:

We at "**DHANUSH MEP Centres**" have a strong team of 30 full-time skilled faculty members and 25 non teaching staff. We have been constantly training and placing candidates both in the domestic as well as international market with various reputed companies.

#### Dhanush has been mandated to skill & place 1 Lakh youth by 2021.

The focus of the company is to establish, manage and operate skill development centers across India which acts as a bridge between unemployed youth and the industries, seeking skilled manpower.

MEP Centre is committed to grooming future MEP leaders. The MEP Centre has associations to ensure that students gain industrial exposure and have the opportunity to interact with industry leaders, entrepreneurs, and faculty from some of the world's leading business and MEP Industries.

This makes the MEP Centre one-of-its kind in India. The industrial-academic linkage ensures that the programme is relevant, international in perspective and delivered according to industrial standards. In a short span of Programme, students get an understanding of the Industrial Needs and are equipped to take on challenging roles in some of the best companies in the world.

MEP Centre is strategically located to create synergies between India, and the global business environment, with a backdrop of MEP thinking and practices from the West and the East. With a unique perspective on the emerging markets, our programmes enable students to capitalise on the opportunities of the global economy.

Dhanush EnggServices Pvt. Ltd developed this content in-house with committed and qualified Faculties and professionals. These courses are well structured, self-explanatory and user-friendly course content. Need not to worry you need not to stop your day to day work. Whenever you have free time you can take these classes.

- ★ You can take this training any where and any time.
- ★ Structured and well refined Content.
- ★ User-friendly and self-explanatory.
- ★ Available at Affordable cost.
- $\star$  24/7 you can take these courses for self training.
- ★ For any Technical clarifications "Dhanush MEP Centre" will support you online\*.
- ★ Train yourself according to your requirements and upgrade your skill.
- $\star$  Trainer dependence will not be there, you will have opportunity to learn own .
- ★ Can prove yourself to employer with your additional professional skill knowledge.

**DHANUSH** 

M.E.P

★ Very good chances to demand/request for next level promotion

## Process Piping Design Course Curriculum

#### 1. Introduction of Piping Engineering:

Definition of Pipe and piping Application of Piping Introduction of Process Plants Differences between tube, Pipe and its application Piping Standards Line specification and its importance Pipe ends, joining types and application Pressure class rating NPS, DN and OD

#### 2. Pipe Manufacturing Methods

Seam pipie Seamless Pipie Spiral Pipe U.O Pipe

#### 3. Valves : ASME Standards

Applications Operation Orientation Drawing symbols Dimensions Pressure Drop Back flow Standards Selections Specifications Types of valve – Gate, globe, ball, plug, pinch, diaphragm, PSV, PRV, Butterfly, NRV, Diverting, mixing, knife, etc.,

#### 4. Flanges

Pipe Flange Joining Methods Stub – In Stub – On Stub – End Flange standards Applications Drawing symbols Dimensions and pressure class rating selection Types of flanges (Slip on flange, Threaded, Orifice, Weld neck, Socket, Blind, Reduced, Lap joint, Flange, Spades & spectical blinds

#### **Course Demo Link**

You can visit our website and request for demo at http://www.mepcentre.com/courses/demopage/

# Sample Certificate





\*\*After completion of Course within 30 days we will assign project.

#### 5. Fittings

Standards Dimensions Symbolic representations Applications **Design concepts** Specification Types. (90° LR & SR,45° LR & SR.) Bends – 180° LR &SR , miter bends Branch connections - SS Straight (Equal Tees, Unequal Tees) Cross – Tees Reducers /Expands. (Concentric, Eccentric) Olets (Weldolets, Sockets, Threadolets, Latrolets, Elbolets, Sweepolets, Thermolets, Flageolets etc.) Couplings.(Full,Half,Reducing, Unions) Special fittings. (Traps, Expansion bellows, Expansion loops, Strainers,)

## 6. Gaskets

Types of gaskets Selection @ process fluids Specification Standards Types of flange facings.(Flat, Raised face, RTJ.) Flange face finishing.(Tangent grooves, Radio graphics and Concentric gloves.)

## 7. Gaskets indication color representation

Drawing generations Straight isometric Single rolling isometric Double rolling isometric Drawings Extractions.

## 8. Detailed MTO's

Process Equipment (Representation, Standards, Application) Static Equipment (Horizontal Vessel, Vertical Vessel, Storage Tank, Heat exchangers) Rotary Equipment (Pumps, Compressors, Blowers, Turbines, Reactors and Distillery Columns, Etc.)

## 9. PFD and P&ID's.

Process Flow Diagram (PFD) Piping and Instrumentation Diagram (P&ID) Development of P&ID from formulae Symbolic representation Process flow Reading of P&ID ( Line list, Equipment list ) Development of piping diagrams with PFD and P&IDInstruments, loop diagrams, symbols Utility flow diagrams

#### 10. General arrangement diagrams Extraction of isometrics and MTO's Development of detailed diagrams

## 11. Pressure drop calculations

Straight pipes Valves, fittings and components Pressure Drop in ( Liquid line, Gasses lines and Multi Fluid lines ) Fluid flow in Pipe line Types of flows.

## 12. Pipe supports.

Importance of Supports Classification of supports. (Rigid, Hanger, Flexible and Restraints) Standards Span and specification Applications Representation Rigid ( Shoe, Saddle, Trunnion, Dummy leg, Base adjustment Support and Sleeper ) Flexible (Constant load, Variable Load.) Restraints (Guide ,Roller, Anchor Supports.)

## 13. Pipe Racks :

Design Concepts Width and height calculations Spacing (spans) Pipe arrangements Process Pipelines Utilities Cable Trays

## 14. Pipe Thickness calculation: Schedule Selections

## 15. Pump Head.

Pump head Calculations Closed System and Open system Design Concepts NPS Ha NPS Hr – Cavitations Applications Pumps Selection

#### 16. Pump Piping Basic : All types of applications, Rooting Concepts of Piping for a pump.

## 17. Plot Plan

Equipment layout Piping Layout Preparation equipment layout- Factors consideration, Battery limits and Bund walls Concepts Sample Layouts Importance

## 18. Piping Layout

Complete Design Concepts Pumps Vessels Racks / Tracks Hazardous Head Room clearances Control Stations Drain Pipelines Vent Pipelines Process Pipelines Safety, Maintenance, Operation. Etc.,

#### **Programme Enrolment Process:**

To be eligible for admission, you must fill this registration form: Http://www.mepcentre.com/courses/registration/ (an online form) To complete MEP Online registration registration you need to send soft copies of

- Passport size photos 1.
- Government of India Issued ID Card (Passport or Aadhar Card) 2.
- 3. Address proof
- **Copies of Educational Certificates** 4.
- Payment Receipt (scan/soft copy) 5.

#### **Our payment Details:**

Dhanush EnggServices India Pvt. Ltd. Bank Of India - KukatPally, Hyderabad AC No: 862420110000496 IFSC: BKID0008624 Once we receive this information we will start our enrolment process

## Course Fee / and other Details:

EASE CA Dhanush will charge Rs. 12,000/- for each Course, for International Student this will be \$ 250 USDs. You can make this payment either online. Or we will providing our bank details so that you can make a payment and share payment receipt information with us.

Each course duration will be around 35 hours of seat time. (continuously go through with audio narration) We will provide Online access for 30 days, if there any special request we will extend this access for another one week. Any additional extension will be chargeable according to request and time of extension. We will be providing "Course Completion Certificate" will be sent to your mailing address provided in registration form. If you are an abroad student you need to pay actual courier charges in advance to get your certificate to your address.

It is not mandatory but you can attend an online assessment of 30 Multiple choice questions in 30 minutes. Based on this assessment, your can check your learning.

## Dhanush Offices:

Administrative Office Dhanush EnggServices India Pvt Ltd, 2nd Floor, H.No:6-3-788/A/9, Durga Nagar Colony, Ameerpet, Hyderabad, Telangana, India -500016

Training Campus: 2nd Floor, Lenin Building, Bhagyanagar colony, Kukatpally, Hyderabad, Telangana, India-500072

#### Dhanush EnggServices India Pvt Ltd,

Door No:65/3997 Veluthamana Building, Near Seiken East End, Ponoth Road, Kaloor, Cochin, Kerala 682017.

# H.No: 19/224/2, Matha Complex, BSNL Quarters Road

Opposite to Merlin Hotel, Behind Railway Station Thrissur Kerala -680004

www.mepcentre.com www.meptrainings.com www.facebook.com/mepcentre

#### Dhanush EnggServices India Pvt Ltd,

RE INFORMATIO

9908080813 A

D-247, 2rd Floor, Above Jindal cloths, Behind Metro Gate No.1 Lane Laxmi Nagar, New Delhi-110092

#### Dhanush EnggServices India Pvt Ltd,

H.No. 12-21-31, Ist Floor, Old Bank Road. Above Shankar motors Kothapeta, Guntur, A.P - 522001,

## Dhanush EnggServices India Pvt Ltd,

Dravidian University Kuppam. Gurukulam Block II Kuppam, Chittoor Dist, A.P - 517425.