An ISO 9001:2015 Certified Organisation

Suvidya Institute of Technology Pvt. Ltd.

Training Programme Schedule and Syllabus

Mechanical Design of Process Equipment (Fulltime)

Batch No. 02082

Skill India कौशल भारत-कुशल भारत

N·S·D·C National Skill Development Corporation

Transforming the skill landscape

Eligibility : Degree/ Diploma in Mechanical/ Production Engg.

SYLLABUS -

- **Introduction to:**
  Role of Process Equipment designer in various fields,
  Industry functioning and plot overview,
  Basic process requirement of plants/projects
  Importance of codes and standards and their applications
- **Documents study**:
  P&ID,
  Process Data Sheet,
  PFD and other documents used for designing,
  Vendor data, its checking & use in design.
  Other various inputs
- **Selection of materials required for various services**
- **To understand pressure part calculations**
- **Preparation of:**
  Mechanical data sheets of process equipment
  Bill of Material at various stages
- **Basic Introduction of:**
  Piping components used in equipment.
  Construction procedure of process equipment
  Welding, Inspection and method of testing.
- **Mechanical design of Process Equipments (Vessels, Reactors, Heat Exchanger, Distillation Columns etc.)**
- **Overview of Accessories mounted on equipment like drip pipe sensors Overview of Chimney Design**
- **Overview of Equipment Design Software like PV Elite**
- **MDMT (Minimum Design Metal Temperature**
- **Overview of NDT**
- **Overview of Rotary Equipments**
- **Overview of Piping**
- **Site Visit will be arranged at industrial plant**

Basic subject preparation required before joining this Training Program.

- Strength of Material
- Applied Mechanics
- Trigonometry
- Engineering Drawing
- Introduction to Physical Metallurgy Author: Avner

Note: SIT reserves right to change the Training Content at any time as per the current job requirement.

Key Benefits of Training Program:

- ❖ Exposure to working culture of Engineering, Procurement and Construction Companies.
- ❖ Thorough Knowledge provided to understand the project activities.
- ❖ Introduction of interactive methods within the departments.
- ❖ Understanding of Deliverables to function smoothly and quality output.
- ❖ Training of relevant soft skills helps to improve attitude and efficiency.
- ❖ Acquire the knowledge of Advance technologies used currently in the industry.

- Enrich the knowledge of international codes and standards for perfection in design.
- Enhance the knowledge of Current engineering practices used.
- Introduction to relevant advanced software (wherever applicable).
- Training in Personal Development to enhance communication skills (wherever applicable).

After successful completion of Training Program, you will have opportunity to work in EPC sector as:

- Design Engineer
- Construction Engineer
- Project Engineer
- Inspection and Testing Engineer
- Site Engineer
- Erection Engineer
- Installation & Commissioning Engineer
- Maintenance & Operation Engineer
- QA/ QC Engineer

SIT conducts various Training programs in Following Disciplines. (Full time / Weekend Batches / Part Time Corporate Batches)

- Piping Engineering
- Mechanical Design of Process Equipments
- Process Engineering
- Advance Pipe Stress Analysis
- Process Instrumentation & Control
- Water & Waste Water Engineering
- Air Conditioning System Design (HVAC)
- Structural Engineering
- Electrical System Design
- Engineering Design and Drafting
- Health, Safety & Environment in Construction
- Piping Design and Drafting
- HVAC Design & Drafting
- The Art of Developing a Balanced Personality
- Civil/Structural Design & Drafting
- MEP (Mechanical, Electrical & Plumbing)

Together We Will Bring New Dimensions To Engineering Industry

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