SANJARY EDUCATIONAL ACADEMY®

Society Registered, No. 347 / 08, Government of Telangana.
Registered with Ministry of Commerce & Industry, Director General of Foreign Trade, Government of India.
Registered with Ministry of Micro, Small & Medium Enterprises, Government of India,
Member of Indo - Arab Chamber of Commerce & Industries (IACCI)
Member of Indo-American Chamber of Commerce (IACC),
Member of Federation for Telangana and Andhra Pradesh Chambers of Commerce and Industries (FTAPCCI)

Training, Examination & Certification to Engineers & Individuals

SANJARY EDUCATIONAL ACADEMY SOCIETY OFFERS INTERNATIONAL CERTIFICATION COURSES

SANJARY (SEA) IS ONE TO CERTIFYING / QUALIFYING

• Certified Piping Design Engineer
• Certified QA / QC Manager
• Certified QA/QC Engineer Civil,
• Certified QA/QC Engineer Mechanical
• Certified QA / QC Engineer Piping
• Certified QA/QC Engineer E&I
• Certified Document Controller
• Certified Welding Engineer
• Certified Safety Engineer
• Internal Auditor QMS

CERTIFICATE RECOGNIZED INTERNATIONAL IN MORE THAN 30 COUNTRIES

All the International Certification Courses offered by Sanjary Educational Academy Society for the Below Industries / Sectors In India & Abroad

- Oil and Gas
- Petrochemical
- Refinery
- Power Plant
- High Rise Building
- Heavy Fabrication
- Construction Project
- EPC Consultants

Course Director / Lead Trainer
Mr. Mohammed Shahin
President of Sanjary Educational Academy
International Industry Expert with more than 35 Years of Experience & National Awards Winners
1. Shrestha Jyoti Award – 2008
2. Shrestha Shiksha Ratna Award – 2016
3. Rashtriya Samman Award – 2016

Sanjary Educational Academy Awarded The Most Prestigious

National & International Awards Winners

- Indian Achievers Award 2012
- QMS Excellence Award 2013
- International Achievers Award 2014
- India Gold Awards 2015
- Indo German Excellence Award 2015
- Best Performance Award for Excellence in Social & Environment 2016

No. of Batch Completed From 2009 to 2017

1. Process Design Engineer 100 Batches
2. SQA/IE Engineer 150 Batches
3. Instrumentation Engineer 100 Batches
4. Welding Engineer 90 Batches

Registered & Head Office:
Tel. : +91 9121069809
Mobile: +91 9985445960
Email : hyderabad@sanjaryacademy.in
Web : www.sanjaryacademy.in

Since 2002
ISO 9001 : 2015 Certified

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Dear Sir,

Kindly visit our websites: www.pipingdesigncourse.in / www.pipingdesigncourse.com / www.pipingdesigncourse.net / www.sanjaryacademy.in / www.sanjaryacademy.com for details. We confirm your course booking for the Certified Course as below:

Sanjary Educational Academy has Completed Over 120 + Batches of Piping Design Engineer, Professionals Certification Courses form 2008 to December 2018.

Sanjary (SEA) Certificate is Recognized International in more than 30 Countries and our Certified Engineers are already working including - India, Saudi Arabia, UAE, Qatar, Kuwait, Oman, Bahrain, Jordan, Iraq, Iran, Turkey, Yemen, Sudan, Libya, Nigeria, Sudan, Libya, Portugal, Cameroon, Congo, Germany, USA, Canada, Norway, London, Vitenum

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<tr>
<th>PIPING DESIGN ENGINEERING &amp; CONSTRUCTION CERTIFICATION COURSE</th>
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<td><strong>DIPLOMA PIPING DESIGN ENGINEERING &amp; CONSTRUCTION</strong></td>
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<td>COURSE FEE : Rs 21000/-</td>
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This course is according to Sanjary (SEA) Engineering Professional Certification Program, Industrial Jobs requirements and International Standards

Sanjary Educational Academy Society offers International Certification Courses to Engineers & Individuals last 16 years, Certificate Recognized International in more than 30 Countries and our certified Engineers are already working

Benefit of Our Certified Courses

1. Engineers get easy job anywhere in the world in below mentioned industries / sectors
2. Get promotion in current job
3. Get professional skill knowledge as actual required on the job
International Certification Course

• DIPLOMA IN PIPING DESIGN ENGINEERING & CONSTRUCTION

Eligibility Criteria: Fresh Mechanical Engineer, Chemical Engineer, Petroleum Engineer Graduates, Diploma, ITI & working Piping Engineer, Project Piping Engineer, Piping Supervisor, Piping Draftman

Duration of Course: 30 Days, Hyderabad, Telangana, India

Course Fee: Rs 21000/-

New Batch Start: Every Month

Timing: 11:00 PM - 1:00 PM

Course Fee for Foreign Student: US Dollar - $ 1000/- Hyderabad, India

Maximum No. of Seats / students in a Batch: 10 only


Venue: SANJARY EDUCATIONAL ACADEMY, HEAD OFFICE: 5-9-233 / 234, S. No. 24 & 25, 3rd Floor, SANALI MALL Opposite Chermas Showroom, Abids, Hyderabad - 500001, Telangana, India

Overview:

This comprehensive course which provides a systematic development of skills and knowledge of Piping Design Engineering & Construction in line with international standards including ASME B31.1, ASME B31.3, Industrial job and Sanjary (SEA) Norms etc.

This certification course is design and developed by Sanjary Educational Academy. A comprehensive course covering in depth the design of various pressure piping systems including Basic, Piping Design, Piping Engineering, Piping Layout, detailed design and engineering etc.

This course in directed primarily to meet the needs of various

• Industries
• Engineering Consultants / EPC
• Manufacturing Industries and Govt. & private social sectors including
• Oil & Gas
• Petrochemical
• Refinery
• Power Plant
• Pharmaceutical
• Textiles Industries
• Waste Water Treatment Plant and any type and size of organization.
• Candidates shall meet the following examination requirements to be considered for certification as Diplomas in Piping Design Engineering & Construction

Certification Criteria:

• Candidates shall meet the following examination requirements to be considered for certification as “Diploma in Piping Design Engineering & Construction”. Pass a written three part examination as follows.
  • Part 1 Theory Examination
  • Part 2 Workshop / Assessment
  • Part 3 Oral Examination
  • Candidate shall pass each part of the examination. Individual failing any part of the above examination must retest on particular part as applicable.
  • Candidate must score minimum of 70 percent on each of the above examination to be eligible for the certificate and SEA Qualification Card.
  • Note: Certificate, Marks Sheet and Qualification Card will be awarded to the candidate after successful completion of course & examination and submission of Piping Design & Drafting Project.

International Certification Course

• DIPLOMA IN PIPING DESIGN ENGINEERING & CONSTRUCTION

Course Syllabus:

PART - 1

➢ PIPING SYSTEMS DETAILED ENGINEERING
➢ LAYOUT OF PIPING SYSTEMS & PIPING DRAFTING
➢ PIPING MATERIALS

Module – 1 Fundamentals of piping

Module – 2 ASME codes and standards

Module – 3 Classification of pipe

Module – 4 Piping Material Specifications – ASME / ASTM

Module – 5 Pipe Fittings

Module – 6 Types of Flanges

Module – 7 Types of Valves

Module – 8 Flow Diagrams
Module – 9  Piping Isometric
Module – 10  Piping and Equipment Layout
Module – 11  Pipe Supports

PART - 2

➤ PIPING SYSTEMS DESIGN

Module – 12  Design of process piping requirements as per ASME B31.3
Module – 13  Design pressure integrity as per ASME B31.1 & ASME B31.3

PART - 3

➤ PIPING ERECTION AND CONSTRUCTION AS PER ASME B31.3 & ASME B31.1

Module – 14  Piping Fabrication , Assembly and Construction as per ASME B31.3 & ASME B31.1
Module – 15  Piping Fabrication , Installation and Erection as per ASME B31.3 & ASME B31.1
Module – 16  Piping Inspection and Testing
Module – 17  Fabrication Inspection , Examination and Testing as Per ASME B31.1 & ASME B31.3

DETAILED COURSE SYLLABUS – OUTLINE

PART - 1

➤ PIPING DESIGN SYSTEMS DETAILED ENGINEERING
➤ LAYOUT OF PIPING SYSTEMS & PIPING DRAFTING
➤ PIPING MATERIALS

Module – 1  Fundamentals of piping

▪ Definition and Application of Piping
▪ Pipe Manufacturing
▪ Pipe Fabrication
▪ Pipe Designations

Module – 2  ASME codes and standards

▪ ASME Boiler and Pressure vessels Codes
Module – 3 Classification of pipe

- Manufacturing Methods
- Weight and Size – Standards STD, Extra Strong XS, Double Extra Strong XXS etc.
- Applications or Uses
- Pressure Temperature Rating System

Module – 4 Piping Material Specifications – ASME / ASTM

- Ferrous Material Specifications
- Non Ferrous Material Specifications

Module – 5 Pipe Fittings

- Types of Fitting - Butt Weld, Threaded and Socket Weld
- Elbow – 90 degree (LR & SR), 45 degree, Reducing Ell.
- Branch Connections – Straight & Outlet Tees
- Reducers – Concentric & Eccentric, Reducer Offsets.
- Fabricated Branch Connections – Stub In & Stub On,
- Branch Reinforcements – Reinforcing Pad, Welding Saddle Olets.
- Olet Fittings – Weldolets, Sockolets, Threadolets, Latrolets, Elbolets

Module – 6 Types of Flanges

- Definition of Flange.
- Types of Flanges based on Face and Application, Forged Steel and Cast Iron Flanges.
- Threaded Flanges, Slip-on Flanges, Socket-Welded Flanges, Welded-Neck Flanges, Blind Flanges
- Gaskets – Types, Thickness, Bolts & Nuts.

Module – 7 Types of Valves

- Definition & basic function
- Valve Types – Gate, Globe, Ball, Check, Butterfly, Angle, PRV/PSV, & Plug,
  Automatic Control, Needle, Diaphragm, Safety “Pop
- Application of Check Valve
- Valve Storage Procedure
- Valve Testing
- Control Valve Manifold. – Layout Representation & Requirements.
Module – 8  Flow Diagrams

- Process Flow Diagram – PFD
- Piping & Instrumentation Diagram – P & ID.
- Utility Flow Diagram
- Line Numbering
- P& ID Requirements
- Flow Diagram Exercises.
- Symbols & Abbreviations.
- Flow Plan arrangement etc.

Module – 9  Piping Isometric

- Definition
- Drawing Piping Isometrics
- Isometric Dimensions, Notes & Callouts.
- Isometric Offsets.
- Exercises on Creation of Isometrics form Piping Plans and Sections.

Module – 10  Piping and Equipment Layout – (Plot Plan, Equipment Layout, & Piping GA Drawings

- Plot Plan Development & Requirements.
- Equipment Layout Terminology, Control Point & Battery Limits
- Preparation of Equipment Layout.
- Piping GA Drawing Requirements and Layout Procedure.
- Pump GA Drawing and Layout Consideration.
- Tank & Vessel Layout Consideration etc.

Module – 11  Pipe Supports

- Types and Functions of Supports
- Anchors
- Pipe Guides
- Limit Stops
- Pipe Shoe
- Dummy Leg / Trunion
- Field Support / Base Support
- Rigid Hangers
- Flexible or Resilient Supports - Variable & Constant Load
- Pipe Rack and Yard Piping Design
PART - 2

➢ PIPING SYSTEMS DESIGN

Module – 12 Design of process piping requirements per ASME B31.3

□ Scope of ASME B 31.3, B31.1
□ Design Pressure & Design Temperature for Piping Systems.
□ Ratings of Flanges etc.

Module – 13 Design pressure integrity as per ASME B31.1 & ASME B31.3

□ Concept of Pressure Integrity
□ Pressure Design of Straight Pipe under Internal Pressure. – Wall thickness Calculations

PART - 3

➢ PIPING ERECTION AND CONSTRUCTION AS PER ASME B31.3 & ASME B31.1

Module – 14 Piping Fabrication, Assembly and Construction as per ASME B31.3 & ASME B31.1

□ Fabrication Drawings
□ Piping Materials as per ASTM / ASME / API
□ Welding Joints – Butt Weld, Fillet Weld etc.
□ Fabrication Fit up
□ Welding Positions
□ Welding Processes – SMAW, GTAW, GMAW & SAW as per ASME B31.3 / ASME IX
□ Piping Fabrication traceability

Module – 15 Piping Fabrication, Installation and Erection as per ASME B31.3 & ASME B31.1

□ Welders Performance Qualification - WPQ
□ Welding Procedure Specifications – WPS / Procedure Qualification Records PQR as per ASME ASME B31.1, ASME B31.3 & API
□ Preheating as per ASME B31.3 & ASME B31.1
□ Post Weld Heat Treatment – PWHT as per ASME B31.3 & ASME B31.1

Module – 16 Piping Inspection and Testing

□ Types of Welding Defects
□ NDT Inspection requirements – (PT, MT, RT & UT) as per ASME B31.1 & ASME B31.3
Hydro testing / Pneumatic Testing requirements as per ASME B31.1 & ASME B31.3

Module – 17 Fabrication Inspection, Examination and Testing as Per ASME B31.1 & ASME B31.3

Note: Certificate and Marks Sheet will be awarded to the students / candidate after successful completion of course & examination and project Report Submission.

Venue: SANJARY EDUCATIONAL ACADEMY, 5-9-233 / 234, S. No. 24 & 25, 3rd Floor, SANALI MALL Opposite Chermas Showroom, Abids, Hyderabad - 500001, Andhra Pradesh, India

Please register prior to the above course commencement date.

Note:
1. Course Fees includes the course materials (Hard Copy only), Resources Materials, Standard Forms / Templates for reference, Training, examination and certification.
2. Students / Engineers admission procedure will be Document No. SEA HYD TS-01 for enrolling the admission of certified courses.
3. Certificate and Mark Sheet will be awarded to engineer after successfully completion of course & examination.

-Sanjary Educational Academy legally established in the year 2002. Sanjary Educational Academy is a Society Registered No. 347/08 by Government of Telangana, India.

- Registered with Ministry of Commerce and Industry, Directorate General of Foreign Trade, Government of India.

- Registered with Ministry of Micro, Small & Medium Enterprises, Government of India.

- Registered “Trade Marks Registry “, Government of India

- Member of Indo – Arab Chamber of Commerce & Industries (IACCI). Member of Indo – American Chamber of Commerce (IACC).

- Member of Federation of Telangana and Andhra Pradesh Chambers of Commerce and Industries (FTAPCCI)

- ISO 9001: 2015 Certified Organization – Accredited with UKAS, UK

- Sanjary’s (SEA) Piping Design Engineer course recognized with SPED, USA, Since 2013

SANJARY EDUCATIONAL ACADEMY Awarded The Most Prestige’s National & International Awards Winners

a) Indian Achievers Award for Quality Excellence
b) International Achievers Awards for Education Excellence
c) Indira Gandhi Excellence Award for Education Excellence
d) Best Performance Award for excellence in social and education

Mr. Mohammed Saleem being the President of SEA has been awarded the following:

(1) Bharath Jyoti Award, India
(2) Bharath Siksha Rattan Award, India
(3) Rashtriya Gaurav Award, India

For any further details pls do not hesitate to contact us at

**M/s SANJARY EDUCATIONAL ACADEMY**

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5-9-233 / 234 / 235, S. No. 24 & 25, 3rd Floor, SANALI MALL, Opposite Chermas Showroom, Abids, Hyderabad - 500001, Telangana, India.

TEL: +91 – 40 -66440868, +91 – 9985445560 / 9704083839 / 9121310430 / 9985715560

EMAIL: hyderabad@sanjaryacademy.in / info@sanjaryacademy.in


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Thanks and regards

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