



# INDUSCAN<sup>®</sup>

## PETROLEUM INSTITUTE



An ISO 9001-2015 Certified Institution

Established in 2002

ENGINEERING CONSULTANCY ♦ SKILLED PROFESSIONAL RESOURCES ♦ ENGINEERING SKILL DEVELOPMENT PROGRAMMES

## **STEEL FABRICATOR** (Structural/ Pressure Vessel/ Piping)





## ABOUT INDUSCAN

Induscan Petroleum Institute is an ISO 9001: 2008 certified, Trade Mark Registered academy established in February 2002. This institute pioneers in Engineering consultancy, Engineering skill development programs, Human Resources, and Skilled Professional Management for all kinds of mechanical construction industries especially in Oil and Gas Sector, Thermal Power sector, Petro-Chemical sector, and other related Industries. Induscan's skill development programs are available from matriculation level (skilled Technician) throughout Post-graduation level (Skilled Design Engineer). The course elevates employability of youth and ensures employment all around the world. Induscan's skill development programs enhance sufficient clarity in the area of employability and nature of the responsibilities of skilled professionals in the industry. Thousands of skilled professionals have benefited this program since 2002.



### VISION

The Global Engineering community shall recognize their skill range in accordance with international standards and specifications. Industry shall recognize the potential of skilled engineering professionals and source of dynamic candidates from Induscan Petroleum Institute.



### MISSION

Construct a strong bridge of engineering skills between engineering professionals and the International Mechanical Construction Industry so that need from either side is successfully fulfilled.



### RECORDS

Since February 2002, Induscan Petroleum Institute has proven records of successful services in accordance with the vision and the mission of its nature. The system of skill development and industrial customization is introduced as a miniature of the core mechanical engineering industry (Mechanical Construction, Mechanical Production/Manufacturing, and Mechanical Maintenance).





# STEEL FABRICATOR

## (Structural/ Pressure Vessel/ Piping)

### SCOPE

Steel Fabricator is a skill development program for undergraduates (Plus two or equivalent) for employability in Mechanical Industries especially for Oil and Gas, Thermal Power, Petrochemical, and similar industries. Three grades of training programs are available in Induscan to qualify fabricators in Mechanical Production factories and construction sites.

### THE COURSE

The following are the stages of training and types of qualifications programs of Induscan for steel fabricators.

Structural Steel Fabrication

Pressure Vessel Fabrication

Process and Power Piping

Trainees shall select individual or multi-level fabrication methods to meet the skill level they need to suit their employment. Upon successful completion of the course, Trainees are capable of handling various responsibilities of Oil and Gas construction sector (factories and sites) just like a steel fabricator with relevant field experience.

### SYLLABUS

The course syllabus is so designed that steel fabrication calculations (Theory) and hands-on practical fabrication classes are properly experienced to take responsibilities from the day of their employment with the best pay scale. Total syllabus is divided into three modules. Main subjects are as listed below

#### Module 1

Construction drawings-Structural

Construction materials- Structural

Marking, cutting, fabrication, welding of structural components as per drawing

#### Module 2

Construction drawings-Pressure Vessel

Construction materials- Pressure Vessel

Marking, cutting, fabrication, welding of pressure vessel components as per drawing

NDT (PT, MT)

Testing (hydrostatic, pneumatic)

#### Module 3

Construction drawings-Process Piping

Construction materials- Process Piping

Marking, cutting, fabrication, welding of process piping components as per drawing



#### Module 4

Structural Fabrication at the workshop as per given drawings  
Pressure Vessel fabrication at the workshop as per given drawings

#### Module 5

Process piping at the workshop as per given drawings

NDT (PT, MT)

Pressure Testing-hydrostatic, pneumatic



### DURATION OF TRAINING

Duration of training depends on the number of modules selected by trainees. Duration of the total course is 800 hours

### TRAINING FACILITIES

Induscan Petroleum Institute is well equipped with an advanced classroom, laboratory, and workshop facilities to explain the course content with factory and site experience.

#### Piping Lab

Piping Lab is constructed with the following specification.

Total lab area is 110 Square Meter

750-inch meter erected piping of heavy wall thickness carbon steel pipe ranging from 1/2 NS to 12 NS using butt and fillet welding. The piping lab is facilitated to explain P&ID, GAD, Isometric, Structural supports, coordinates, elevation, etc. 3 types of Static equipment, (Heat exchanger, Horizontal vessels, and Column) are installed in the piping lab to explain equipment drawing, Equipment construction, Nozzle orientation, etc.

#### Materials Lab

Materials lab is arranged at 75 Square Meters in area

Sufficient quantity of almost all kinds of mechanical construction materials such as seamless pipes, ERW pipes, flanges, Gasket, fasteners, elbows, tees, reducers, O lets reducers, end cap, valves, etc ranging from 1/2NS to 12NS in size.





### **Welding Lab and Workshop**

The welding lab/ Workshop is arranged with the following specifications

Lab/Workshop area is 100 Square Meter

Facility to explain different types of the welding process, Welding Procedure Qualification (WPS/PQR), Welders Qualification Test, Weld visual Examination, Welding Positions, Weld defects, Welding Electrodes, etc.

### **NDT Lab**

NDT Lab is provided with the following specifications

Lab area is 100 Square Meter

Facility for Practical Training in the following 4 methods

#### **PENETRANT TEST**

Solvent Removable Visible Method

Solvent removable Fluorescent Method

#### **MAGNETIC PARTICLE TEST**

Electro Magnetic Yoke Method

Permanent yoke Method

Prod Method

#### **RADIOGRAPHY TEST**

Weld joints to explain all types of Radiographic techniques and Weld defects.

Film samples of various radiographic Techniques

#### **ULTRASONIC TEST**

Digital type UT Machines

Calibration Blocks

Various types of Transducers

Various types of Weld Samples and Test specimen

### **ELIGIBILITY CRITERIA FOR ADMISSION**

Academic: Plus Two or equivalent Certificate is the qualification required for admission.

### **COURSE REGISTRATION**

Properly filled application form along with a copy of the qualification certificate shall be submitted either in person or through the website [www.induscan.net](http://www.induscan.net). Upon receipt of the application and registration fee, registration detail will be forwarded to the applicants.

The applicant shall submit the original of their qualification /course completion certificate at the time of admission.

### **EXAMINATION / TEST**

Theory, Practical, Visual, and Viva are the examinations and tests conducted for each module of fabrication.

### **FINAL EXAMINATION**

Upon completion of total training, the final examination will be conducted in the same method of Modular examination

### **CERTIFICATION**

Upon completion of the final examination, certificate of STEEL FABRICATOR (Structural/ Pressure Vessel/ Piping) is issued to successful candidates by INDUSCAN

### **COURSE FEE**

(Module wise course fee list of Steel Fabricator will be available during course counselling)

### **PLACEMENT**

Placement is not guaranteed for the course of Steel Fabricator. The course fee indicated in the Fee list is only for training and certification. Certified Steel Fabricators are permitted to register through Induscan's campus selection portal for employment. Almost all of our previous batch students are well placed in India as well as abroad through this placement portal.







SKILL DEVELOPMENT COURSES	BASIC EDUCATIONAL QUALIFICATION
X RAY QUALITY WELDER	MATRICULATION (SSC) OR EQUIVALENT
STEEL FABRICATOR	PLUS TWO OR EQUIVALENT
NDT TECHNICIAN	PLUS TWO OR EQUIVALENT
WELDING SUPERVISOR	ENG. DIPLOMA OR NON ENG. GRADUATION
FABRICATION SUPERVISOR	ENG. DIPLOMA OR NON ENG. GRADUATION
SKILLED MECHANICAL INSPECTOR - QAQC	ENG. DIPLOMA (MECHANICAL)
SKILLED MECHANICAL ENGINEER - QAQC	BE/B.TECH (MECHANICAL)
DESIGN ENGINEER (PRESSURE VESSELS & PROCESS PIPING)	M.TECH (MECHANICAL)



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