tic training

TECHNIQUE INSPECTION & CONTROLE

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tic training

TECHNIQUE INSPECTION & CONTROLE

TO IMPROVE YOUR SKILLS
AND YOUR EXPERTISE

TRAINING CALENDAR

API & ASME PREPARATORY COURSE

Course	Duration (Days)
API 653 Above Ground Storage Tank Inspector Preparatory Course	7
API 570 Piping Inspector Preparatory Course	7
API 510 Pressure Vessel Preparatory Course	7
API 577 Advance knowledge of welding inspection and metolorgy course	5
API 580 Advance knowledge of risk based inspection course	5
API 936 Course : Refractory Personal Certification	5
API 571 Advance knowledge of corrosion and material course	5
ASME B31.3,Process Piping Design, Construction, and Mechanical Integrity (ASME B 31.1& API 570)	5
ASME B 31.1 Power Piping	5
API-579 : Fitness –For –Service (FFS)/ASME FFS-1-2007 and Damage Mechanisms of Process Plant Equipment, Piping and Storage Facilities	5

CERTIFIED API EXAMS (International Exam conducted by API)

Course	Duration (Days)
Certified API 510 Pressure Vessel Inspector Examination	1
Certified API 570 Piping Inspector Examination	1
Certified API 653 Above Ground Storage Tank Inspector Examination	1
Certified API 580 Supplemental Inspection Certification for Advance Knowledge of Risk Based Inspection	1
API 577 Exam (Welding Inspection)	1
Certified API 571 Supplemental Inspection Certification for Advance Knowledge of Corrosion & Materials	1
API 936 Exam	1

Mechanical Maintenance

Course	Duration (Days)
Machinery Failure Analysis and Prevention	3
Refrigeration & Air Conditioning	3
Heat Transfer & Heat Exchangers	3
Fundamentals of Mechanical Engineering Skills	3
Steam — Generation, Distribution & Utilization	3
Industrial Hydraulic Systems	3
Industrial Process Heating Systems	3
Industrial Boilers Operations	3
Gas Turbine: Design, Operation, Control & Maintenance	3
Boiler Water Treatment Technology	3

Painting/Coating & CORROSION

Course	Duration (Days)
Corrosion in The Oil and Gas Industry	3
Modern Cathodic Protection Systems-NACE: Design, Fabrication, Installation, Operation and Repair	3
Corrosion Monitoring Prevention and control in oil companies	3
National Seminar on Surface Coating, Application, Quality Control	3
Waste water Management	3
Corrosion in concrete	3
Problem solving in Cathodic protection design and operation	3
Bio- corrosion for Engineers	3
Internal corrosion of Pipelines	3
Corrosion Basics	3
Corrosion and rehabilitation of concrete- Towards quality and safe construction practices	3
The right and wrong use of stainless steel	3
Composites, plastics and rubber – an alternative to metallic corrosion	3
BGAS CSWIP Painting Inspector 3,1	5

Power / Electrical Courses

Course	Duration (Days)
Seminar On Electrical Hazardous Area classification	5
Seminar On Electrical safety and protection	5
Seminar On Energy conservation	5
Course on Transformers	5
Power Generation	5
Power Plant Engineering	5
Power Quality & Harmonics	5
Reading of Protection Relay	5
Practical Electrical Engineering	5
LV/MV/HV Circuit Breakers : Inspection & Maintenance	5
Power Distribution System for Utilities	5
Generator Operations, Maintenance, Control, Testing	5
Electric Distribution System Operations & Maintenance	5
Earthing, Bonding, Lightning & Surge Protection	5
Power Systems Protection Technology	5
Power Generation : Selection, Operations, Maintenance	5
Fault Analysis in Electrical Networks and Distribution Cables	5
Electrical Maintenance, Testing Inspection and Risk Assessment	5
Testing & Maintenance of Electrical Power Distributions Systems	5

Process & Chemical Engineering

Course	Duration (Days)
Water Chemistry	5
Waste Water Management	5
Rules of Thumb for Chemical and Process Engineers	5
Industrial Water Treatment in Refineries and Petrochemical Power Plants	5

HSE

Course	Duration (Days)
Behavior Based Safety	2
Health and Safety for managers and supervisors	2
Workshop on ways and means of implementing safety management system	2
Shop floor safety, Manual handling, & Chemical Safety	3
Safety Integrity Level (SIL) Determination and Verification	3
First Aid and Fire Fighting	2
Advance Safety In Oil & Gas Industry	2
Safety Auditing NM / PI reporting, safety culture	3
Oil spill Training (Environmental Control)	5
Offshore Reliability, HAZOP, Risk And Safety	5
Modern Safety Management and Risk Assessment in industrial plants	2
Hazardous Chemicals: Handling, Storage Disposal, Monitoring and Response	5
Managing, Changing HSE Culture	3
Environmental Management and Technology (EMT)	3
HAZOP Study	5
Basic Food Hygiene (HACCP)	2
Intermediate Food Hygiene (HACCP)	5
Disasters Management	3
Application centered risk assessment & occupational safety	3
Accountability for Safety	3
Accident Investigation & Analysis	3

HSE IN OIL & GAS

Course	Duration (Days)
Occupational health and hygiene	3
Safety auditors course	2
Marine oil spill response and handling	3
Safety in logistics	2
On Site Hydrogen sulphide safety course	2
Crude oil tanker familiarisation	4
LPG & LNG tanker familiarisation	4

Course	Duration (Days)
Emergency Response Planning	2
Major emergency management	3
Safety inspection and safety auditing	2
Management of contractors	2
Risk Assessment & Contingency measures	2
Permit To Work System (PTW) in Offshore	3
PHA,JSA & SIL analysis	3
HAZOP & HAZID studies	4
Offshore HSE & Safety case	2
Safety in Heavy Lifting	3
LOSS Prevention engineering	5
Risk & Reliability engineering	5
Major Construction on a live platform	3
Fire Regulations & Fire fighting in Offshore	3
Life saving equipment in Offshore	3
Risk & Reliability engineering	5
Major Construction on a live platform	3
Fire Regulations & Fire fighting in Offshore	3
Life saving equipment in Offshore	3

NON DESTRUCTIF TESTING (NDT)

Course	Duration (Days)
Liquid Penetrant Testing Direct Level I or II, Course Exam & Certification	5
Magnetic Particle Testing Direct Level I or II Course & Examination	5
Ultrasonic Testing Direct Level I or II, Course Exam & Certification	10
Radiographic Testing Direct Level I or II Course Exam & Certification	10
Radiographic film Interpretation Course Exam & Certification	3
Eddy current testing Level II Course Exam & Certification	10

WELL ENGINEERING & DRILLING

Course	Duration (Days)
Well Planning, Designing and Well Construction	5
Advanced Casing and Tubing Design	5
Fundementals of Tubular and Casing Design	4
Advanced Underbalanced Well design	4
Underbalanced Well Operation and Control	4
Advanced Well Control	3
Primary Cementing and Cementing Practices	5
Deep Water Cementing	5
Wire line Tools & Coil Tubing	3
X Mas Tree Ibnstallation - Dry and Wet Trees	4

Course	Duration (Days)
Basic Drilling Technology	5
Directional, Horizontal and Multilateral Drilling	5
Drill String Design and Optimization	5
Drilling Practices	5
Drilling Fluids Engineering	5
Managed Pressure Drilling	5
Solids Control Systems	5
Stuck Pipe Prevention	5
Managing Well Site Operations	5

RESERVOIR ENGIEERING

Course	Duration (Days)
Applied Reservoir Engineering	4
Basic Reservoir Engineering	5
Basic Reservoir Stimulation	4
Capillarity in Rocks	3
Gas Reservoir Management	4
Horizontal and Multilateral Wells: Analysis and Design	5
Integrated Reservoir Modeling	4
Naturally Fractured Reservoirs- Geologic and Engineering Analysis	5
Oil and Gas Reserves Evaluation	5
Oil Recovery Enhancement Techniques	3
Production Logging	4
Reservoir Characterization – Multi disciplinary Team Approach	5
New Opportunities in Old Fields	3
Well Test Design and Analysis	3
Reservoir Engineering for Others	5
Reservoir Fluid Properties	3
Reservoir Management	3
Reservoir Stimulation Strategies	5
Waterflooding – Practices and Applications	5
Improved Waterflooding	3

OFFSHORE OIL AND GAS OPERATIONS DEEP SEA / FPSO/FPU & FSO

Course	Duration (Days)
Introduction to Offshore Oil & Gas Systems	5
Overview of Offshore Oil & Gas Systems	5
Offshore Facilities Design and Construction	5
Introduction to Floating Production Systems	3
Overview of FPSO Developments	4
FPSO - The Project approach & Key Intrefaces	5

Course	Duration (Days)
Verification of FPSO Structural Integrity	3
Vessel Global Loading & Rigid body Response	3
FPSO Topside Facilities - Design and installation	5
FPSO - Envoronmental Loading and Vessel Response	3
FPSO Mooring Systems	3
FPSO Protection Systems	3
Vessel Hull & Storage - Semisubmersible,Deep draft submersible, TLP & SPARS	5
FPSO Topside PS Lay out and Restrictions	3
FPSO Interfacial Systems & Operations With SPS	5
FPSO New Builds Vs. Conversion	3
FPSO Inspection & Integrirty	3
FPSO Maintenance & Repair	5
FPSO Crude Oil Transfer - Shuttle Tanker Loading	3
FPSO Accommodation & Vessel safety	5
Offshore Materials Handling & Storage	4
Integrity Management of Dynamic Flexible Risers	4
FPSO Economics and Costing	5

SUBSEA OIL AND GAS ENGINEERING

Course	Duration (Days)
SubSea Field Development	4
Deep Sea Drilling parctices and Management	5
Sub Sea Well Systems- Costruction and Installation	4
SubSea Support Systems	3
Seabed Structure and Pipe systems	4
SubSea Well Operations	5
SubSea Well Workover, Coiled tubing & Well testing	4
SubSea Control Systems	5
SubSea Topside Facilities - Spar/TLP/FPSO	5
SubSea Protection Systems	3
Sub Sea Flow Lines/Risers/Umbilicals	4
SubSea Enhanced Oil Recovery	5
SubSea Flow Assurance & Well Fluid Transfer	3
SubSea Pigging Operations	3
SubSea Interfacial Systems & Operations With FPSO	5
SubSea ESD Systems	3
SubSea Systems Inspection & Integrirty	3
SubSea Systems Maintenance & Repair	5
Designing of SubSea wells & Operability	3
Safety in SubSea Systems Operation & Maintenance	5
Safety in Helicopter Operations	3
Safety in Diving Operations	3

Course	Duration (Days)
OFFSHORE STRUCTURAL ENGINEERING	
Introduction to Offshore Oil & Gas Systems	5
Overview of Offshore Oil & Gas Systems	5
Offshore Facilities Design and Construction	5
Development Of Offshore Structures	5
Mooring; Cables; Anchoring and Deep Water moorning Dynamics	5
Physical Modeling of Offshore Structure	5
Met Ocean & Geotechnical Studies in Offshore Designing & Analysis	5
Offshore Structures Analysis - Loads and Responses	5
Model Test Planning; Supervision and Data Analysis	5
Designing For High Integrity	3

PRODUCTION AND PROCESS ENGINEERING

Course	Duration (Days)
Acidizing in Sandstones and Carbonates	5
Fracturing of Formation – Hydraulic Fracturing	3
Artificial Lifting of Crude Oil – Systems & Equipment	5
Casing and Cementing – Primary & Secondary	3
Well completions and Workover	3
Downhole Remediation Practices for Mature Oil & Gas Wells	
Flow Assurance for Offshore Production	5
Formation Damage- Causes, Prevention & Remediation	5
Gas Lift Operation	5
Gas Production Engineering	5
Gas Well Deliquification	5
Horizontal and Multilateral Drilling, Completions and stimulation	5
Production Optimization Using NODAL Analysis	5
Production Logging	5
Well Head Production Operations	5
Sand Control	3
Well stimulation Practices	3
Gas injection	5
Water Injection	3
Surface Production Operations	5
Coil Tubing Practices	3
Central Production Facility Operations	5
Pigging & Sphering – Intelligent Pigging	5
Chemical Injection in Oil & Gas Pipelines	5
Production Facilities Integrirty and Reliability	5

GEOLOGY AND GEOPHYSICS

Course	Duration (Days)
Basic Geophysics	5
AVO Inversion and Attributes: Principles and Applications	5
Seismic Acquisition Field Techniques	5
Seismic Imaging of Subsurface Geology	5
Introduction to Seismic stratigraphy	5
Seismic Interpretation	5
Advanced Seismic Stratigraphy	5
Basic Petroleum Geology	5
Development Geology	5
Mapping of Subsurface Structures	5
Carbonate Reservoirs	5
Sand stone Reservoirs	5
Development Geology	5
Mapping of Subsurface Structures	5
Carbonate Reservoirs	5
Sand stone Reservoirs	5

PETROPHYSICS

Course	Duration (Days)
Capillarity in Rocks	5
Cased Hole Formation Evaluation	5
Coring and Core Analysis	5
Applied Rock Mechanics	5
Fundementals of PetroPhysics	5
Integration of Rocks, Log and Test Data	5
Operations Geology	5
Shaly Sand Petrophysics	5
Structural and Stratigraphic Interpretation	5
Well Log Interpretation	5
Wireline Formation Testing and Interpretation	5
Working with Electricity (Offshore)	2
Working with Electricity (Onshore)	2
Positive Isolations, Breaking, HC, Containment	3
Confined Space Entry	3
Personnel Protective Equipment	3
Safety handling of explosives & radioactive devices in seismic and well logging, operations	3
Safety in Drilling rigs	3
Safety in Helicopter Operations	3
Safety in Diving Operations	3

Pressure Vessel (PV) & PIPING /STATIC EQUIPMENT DESIGN & ASME CODES

Course	Duration (Days)
Mechanical Design of Process /Static Equipment Level I as per ASME and API PV Codes	5
Mechanical Design of Process /Static Equipment Level II Design & Fabrication as per ASME and API Codes	5
Mechanical Design of Process/ Static Equipment Level III : Design & Analysis of Heat Exchanger	5

WELDING

Course	Duration (Days)
AWS Certified Welding Inspector Exam Preparation(API 1104)	5
AWS EXAM	1
CSWIP Welding Inspector 3,1	5
CSWIP EXAM	1
Modern and advance welding inspection technology and qualification; welding ,fabricatiobn and inspection(AWS, ASME and API course)	3
National Seminar On Welding Qualification As Per ASME Codes	2
National Seminar on Fabrication & Welding of Duplex Stainless Steel	3
National Seminar on Advance Welding Technology & Inspection Codes (ASME Sec IX & V)	3
Selection of Welding Consumables for Ferrous Materials	2

Instrumentation & Automation

Course	Duration (Days)
Safety Relief Valve Inspection, Maintenance, Operation ,Trouble shooting and Repair	3
Programmable Logic Controllers(PLC)and SCADA System	3
PLC – Logic Development, Programming & Troubleshooting	3
Modern Distributed Control Systems(DCS) – Practical Applications	5
Introduction to Control Systems in Petrochemical Industry(SCADA/PLC/DCS)	5
Instrumentation for Non Instrument Personnel	3
Safety Relief Valve Inspection, Maintenance, Operation ,Trouble shooting and Repair	3
Programmable Logic Controllers(PLC)and SCADA System	3

NEBOSH / IOSH Courses

Course	Duration (Days)
OSHA 30 Hr. - (Construction / General Industry)	5
NEBOSH - IGC	12
IOSH - Working Safely	2
IOSH – Managing Safely	2
Medic First Aid	2

OFFSHORE STRUCTURAL ENGINEERING

Course	Duration (Days)
Introduction to Offshore Oil & Gas Systems	5
Overview of Offshore Oil & Gas Systems	5
Offshore Facilities Design and Construction	5
Development Of Offshore Structures	5
Mooring; Cables; Anchoring and Deep Water moorning Dynamics	5
Physical Modeling of Offshore Structure	5
Met Ocean & Geotechnical Studies in Offshore Designing & Analysis	5
Offshore Structures Analysis - Loads and Responses	5
Model Test Planning; Supervision and Data Analysis	5
Designing For High Integrity	5