

## 4. Process Safety Courses

Code	Course Title	No of Days
PS 001	TUV Rheinland Certified Process hazed and Risk analysis PH&RA including Exam	4
PS 002	Hazard and Operability Team Leader including IEC 61882 assessment	3
PS 003	An Introduction to Hazard and Operability for team members	1
PS 004	An Introduction to Hazard Identification and SIL Targeting	2
PS 005	An Introduction to Hazard Analysis and Risk Assessment	3
PS 006	Process Hazard Analysis (PHA) and Human Error Analysis	4
PS 007	Process Safety Management & Loss Prevention	4
PS 008	An introduction to Event Tree and Fault Tree Analysis	3
PS 009	Layers of Protection Analysis	3
PS 010	Introduction to Risk Reduction Techniques and Functional Safety	2
PS 011	An Introduction to Process Plant Reliability	2
PS 012	An Introduction to Alarm review and Management to EEMUA 191	2
PS 013	Environmental Hazard Identification (Envid) Training	3
PS 014	Oil & Gas Industry For Administration Team (New)	4
PS 015	Crude Oil Processing and Desalting	4
PS 016	Static and Rotary Equipment (Process Point of View.)	4
PS 017	Oil & Gas Field Processing	4
PS 018	Oil & Gas Industry For Administration Team (New)	4
PS 019	Basic of pump technology, operation , performance	4
PS 020	steam traps , pipelines & steam generation system	4
PS 021	Heat exchangers operation, design , maintenance and troubleshooting	4
PS 022	gas compressors operation , design and troubleshooting	4
PS 023	Pumps; Centrifugal & Positive Displacement (Installation, Operation, Maintenance and Troubleshooting) "Advanced"	4

<b>Code</b>	<b>Course Title</b>	<b>No of Days</b>
PS 024	Surface Production Operation Facilities.	4
PS 025	Basics of Rotating Equipment Operation & Maintenance	4
PS 026	Natural Gas Processing Technology	4
PS 027	Fundamentals of Oil Refining Technology	4
PS 028	Advanced conversion processing & advanced Oil Refining Technology	4
PS 029	Catalyst in petroleum refinery	4
PS 030	Continuous catalyst regeneration (CCR)	4
PS 031	MEROX processes	4
PS 032	Hydro treating processes technology	4
PS 033	Gas and liquid driers operation design , logic and calculation	4
PS 034	naphtha hydro treatment ( HDS&NHT)	4
PS 035	catalytic reforming (CRU)	4
PS 036	PENEX isomerization process	4
PS 037	kerosene MEROX	4
PS 038	LPG MEROX	4
PS 039	LPG & sour gases sweetening amine process & regeneration system	4
PS 040	Hydrocracker technology	4
PS 041	Crude atmospheric and vacuum distillation	4
PS 042	Oil treatment (desalting, dehydration &stabilization)	4
PS 043	Natural gas dehydration process	4
PS 044	Hydrocarbon dew point plant	4
PS 045	Process safety and Hazard Analysis (PHA &HAZOP)	4
PS 046	Process Operations , troubleshooting for Technicians	4
PS 047	water treatment systems	4
PS 048	Surface Facilities Production Operations.	4

<b>Code</b>	<b>Course Title</b>	<b>No of Days</b>
PS 049	Hydrocarbon Storage, Shipping and Utilization.	4
PS 050	Plant Operation and Troubleshooting .	4
PS 051	Fundamental Of Process Calculations (New)	4
PS 052	Process Calculation and Simulation: by HYSYS.	4
PS 053	Planned Shutdown, Critical Activities and Start-up.	4
PS 054	Oily Water Treatment. 41. Chemicals treatment in oil and gas field processing	4
PS 055	Over pressure control and Flare Systems.	4
PS 056	Mass and Heat Balance in Petroleum Industry.	4
PS 057	Oil and Gas Separation Equipment.	4
PS 058	Gas Dehydration Technology.	4
PS 059	LPG, NGL & LNG Production and Handling.	4
PS 060	Fundamentals of crude oil treatment	4
PS 061	Advanced crude oil treatment.	4
PS 062	Crude oil desalting operation ,design , troubleshooting	4
PS 063	Distillation Processes, Calculations and Multivariable Process Control .	4
PS 064	Oil Production & Field handling Facilities	4
PS 065	Operations Accidents Investigations (New)	4
PS 066	Oil & Gas Industry For Administration Team (New)	4
PS 067	Planned Shutdown and Critical Activities, Isolation, Startup & Commissioning	4
PS 068	Fundamentals of Equipment Selection & Sizing , Operation in Oil & gas industry	4
PS 069	Gas Plant Troubleshooting & Special Problems	4
PS 070	Refinery-Petrochemical Integration & Economics	4
PS 071	Overview of Oil, Gas & Petrochemicals industry	4
PS 072	Heat transfer Equipment operation ,start up, Commissioning (Heat Exchanger., fired Heater,condenser)	4
PS 073	Terminal Operations and Oil Movements	4

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PS 074	Safe process start up and shutdown	4
PS 075	Fundamental of catalyst in oil & gas Industry (Eval.,oper., regeneration,.....)	4
PS 076	Hydrocarbon losses in oil and gas industry	4
PS 077	Flare & Valuable gases recovery system	4
PS 078	Petroleum refinery for non technical persons	4
PS 079	hydrocarbon and sour gases MEROX process	4
PS 080	LPG production Technology, Gasoline stabilization	4
PS 081	Flow diagram & control System Fundamentals (PID,PFD,UFD,.....)	4
PS 082	Fundamentals of Process control	4
PS 083	Process measurement (flow, pressure,.....)	4
PS 084	Fundamentals of Corrosion & Corrosion Control	4
PS 085	HAZOP Applications in Petroleum Industry (LEVEL I)	4
PS 086	HAZOP Applications in Petroleum Industry (LEVEL II)	4
PS 087	Basic of Petrochemicals Industry	4
PS 088	Basic of fertilizers industry	4
PS 089	Gasoline production and quality improvement technology	4
PS 090	Process equipments design	4
PS 091	Fired heater design, maintenance ,operation and troubleshooting	4
PS 092	Pollution prevention and production cleaner for oil and gas industry	4
PS 093	Liquefied Petroleum and natural Gas Plant Unit Operations ( LNG&LPG)	4
PS 094	Petroleum products specifications	4
PS 095	Emergency and Process Shut-down (ESD and PSD)	4
PS 096	Paraffin and Asphaltenes removal In Crude Oils 83. Tower internals	4
PS 097	Fundamentals of Ethylene & Propylene, Polypropylene and Polyethylene Industry	4
PS 098	petroleum oil and gases wastes and disposal	4

<b>Code</b>	<b>Course Title</b>	<b>No of Days</b>
PS 099	Process safety engineering and LOPA analysis	4
PS 100	LPG Production Technology (MEROX, Gasoline Stabilization, Processing & Conditioning, Start up and Shutdown)	4
PS 101	WATER TREATMENT AND INJECTION	4
PS 102	Process Plants Design, Calculation & Life Simulation SEMTRONIX	4
PS 103	Process Panel Operator Assessment (DCS Operations, Process Control Fundamentals and Using Life Simulator)	4
PS 104	PFD, P&ID .... Process drawing reading ,	4
PS 105	Basic Gas Chromatography - Principles and Applications	4
PS 106	Bulk Distribution and Handling of LPG	4
PS 107	Corrosion in the Oil & Gas Industry	4
PS 108	Engineering Design for Process Safety	4
PS 109	GAS CONDITIONING AND PROCESSING COURSE FOR JUNIORS	4
PS 110	Gas Processing and Process Control	4
PS 111	GAS PROCESSING TREATMENT AND SULPHUR RECOVERY	4
PS 112	Hydrogen Sulphide (H <sub>2</sub> S) Gas Awareness Program	4
PS 113	Introduction to Instrumentation and Control	4
PS 114	Introduction to Petrochemicals	4
PS 115	L.P.G. Engineering Course	4
PS 116	L.P.G. Design & Installation of Systems	4
PS 117	Quality Control in Oil and Gas Production	4
PS 118	Oil and Gas Operations: Environmental Concerns and Solutions	4
PS 119	Oil Field Operations	4
PS 120	Principles of Auto Control	4
PS 121	Process Operations	4
PS 122	Quality Control in Oil and Gas Production	4
PS 123	Steam Turbines Operation & Trouble Shooting	4