

| Ref.   | Course Title  | Days |
|--------|---|------|
| Al100  | Artificial Intelligence (AI) for Business Professionals   | 5    |
| Al101  | Big Data and Artificial Intelligence Principles and Practices   | 5    |
| Al102  | Artificial Intelligence (AI): Transforming Business with New Technologies   | 5    |
| Al103  | Introduction to Artificial Intelligence (AI)  | 5    |
| Al104  | Basic Idea of Artificial Intelligence and Machine Learning  | 5    |
| Al105  | Artificial Intelligence Principles and Practices  | 5    |
| API101 | API 570 Piping Inspector Certification Examination (Training only) - Preparatory Course   | 5    |
| API102 | API 653 Aboveground Storage Tank Inspector - Preparatory Course   | 5    |
| API103 | Piping Code (ASME B 31.3) and Fitness for Service Assessment (API 579) for Plant Piping   | 5    |
| API104 | API 510 Pressure Vessel Inspector Certification Examination (Training Only) - Preparatory course                                  | 10   |
| API105 | API Rotor Repair (Based on API 687)   | 5    |
| API106 | API 571(Damage Mechanisms) Supplementary Certification - Preparatory Course   | 5    |
| API107 | API 650 Coded Design of Welded Steel Tanks for Bulk Storage   | 5    |
| API109 | API 580 / 581 Risk Based Inspection   | 5    |
| API111 | Welding Qualifications Code for Transportation Piping   | 5    |
| API115 | API 580 Supplemental Inspection Certification Program Advanced Knowledge of Risk Based Inspection (API Exam Preparation Training) | 5    |
| API117 | API 936: Refractory Inspection Code: Installation, Inspection, Testing & Repair (API Exam Preparation Training)                   | 5    |



| Ref.    | Course Title  | Days |
|---------|---|------|
| API118  | API TES 2015/2016: Tank Entry Supervisor Certification Program (API Exam Preparation Training)                              | 5    |
| API120  | API614 Lubrication, Shaft-Sealing and Oil-Control Systems and Auxiliaries   | 5    |
| API121  | API 579 and ASME PCC-2: Fitness for Service Assessments and Repair Practices  | 5    |
| API126  | API: Demulsifier and Corrosion Inhibitors Chemicals, Selection Criteria and Performance on Offshore and Onshore Facilitates | 5    |
| API127  | API Calculations to Determine Oil Volume  | 5    |
| API128  | API Source Inspector Fixed Equipment Certification Preparatory Course   | 7    |
| API131  | API 650/653 For Tank Construction and Tank Integrity  | 5    |
| ASME104 | ASME B31.8 Gas Transportation Piping Code   | 5    |
| ASME105 | Awareness of ASME Codes (ASME Section I, II, V, VIII & IX Codes)  | 5    |
| ASME106 | Understanding ASME B 31.1 - Power Piping Code   | 5    |
| ASME107 | Understanding ASME Pressure Vessel Codes  | 5    |
| ASME108 | ASME Process Piping, Valve, Flanges Classes Selection Specification, Fittings & Layouts                                     | 5    |
| ASME112 | International Welding Codes ASME Section IX and Section VIII  | 5    |
| ASME113 | Understanding and Application of ASME Section IX (Welding Qualifications)   | 5    |
| ASME114 | Understanding Codes and Standards   | 5    |
| ASME115 | ASME PCC-2 : Repair of Pressure Equipment and Piping  | 5    |
| AT102   | Automotive Maintenance  | 5    |



| Ref.  | Course Title   | Days |
|-------|--|------|
| AT108 | World-Wide Vehicles Inspection for Road Licensing                  | 5    |
| AT111 | Transport Management & Planning                                    | 5    |
| AT120 | Fleet Management   | 5    |
| AV113 | Human Factors in Aircraft Maintenance - Aviation Industry          | 5    |
| AV114 | Total Quality Management in Aviation                               | 5    |
| AV118 | Aviation Fueling Sales & Customer Service Team Development Program | 5    |
| BS108 | Marketing and Business Development                                 | 5    |
| BS111 | Coaching Skills for Managers and Supervisors                       | 5    |
| BS129 | Budget and Cost Effectiveness                                      | 5    |
| BS132 | Effective Communication and Presentation                           | 5    |
| BS134 | Effective Negotiation Skills                                       | 5    |
| BS149 | Crisis and Emergency Management                                    | 5    |
| BS152 | Inventory, Warehousing and Material Management                     | 5    |
| BS168 | Quantitative Methods for Business Management                       | 5    |
| BS171 | Advanced Managerial Skills   | 5    |
| BS172 | Successful Planning, Organizing and Controlling Skills             | 5    |
| BS193 | Turning Stress into High Productivity                              | 5    |



| Ref.  | Course Title  | Days |
|-------|---|------|
| BS272 | Maximizing Training and Learning Effectiveness                        | 5    |
| BS274 | Disaster Recovery Planning: Insuring Business Continuity              | 5    |
| BS283 | Best Practices in Training Need Analysis, Design and Implementation   | 5    |
| BS284 | Warehouse, Stores & Stock Control                                     | 5    |
| BS286 | Inventory Management Techniques                                       | 5    |
| BS296 | Human Resource Dynamic Developing & Training                          | 5    |
| BS325 | Recruitment, Interviewing and Selection Skills                        | 5    |
| BS362 | Business Process Re-Engineering Best Practices                        | 5    |
| BS383 | Contracts for Non-legal Background                                    | 5    |
| BS399 | Procurement Management  | 5    |
| BS422 | Key Performance Indicators (KPI)                                      | 5    |
| BS552 | Advanced Customer Service Management                                  | 5    |
| BS828 | Key Managerial Skills for New Managers and Supervisors                | 5    |
| BS852 | (ISO: 9001:2008)- Building an Effective Training & Development System | 5    |
| BS855 | Fundamentals of Strategic Management                                  | 5    |
| BS877 | The Power of Leaders  | 5    |
| BS878 | Business and Corporate Etiquette                                      | 5    |



| Ref.   | Course Title   | Days |
|--------|--|------|
| BS879  | Leading with Critical Thinking, Creativity and Innovation        | 5    |
| BS880  | Managing Conflicts & Difficult Situations                        | 5    |
| BS881  | Managing Self and Leading Others                                 | 5    |
| B\$882 | Creative Strategic Planning & Leadership                         | 5    |
| BS883  | Leading with Emotional Intelligence                              | 5    |
| BS884  | Time, Stress Management and Prioritization                       | 5    |
| BS885  | Strategic Planning & Goal Setting                                | 5    |
| BS886  | Financial Risk Assessment, Root Cause Analysis & Problem Solving | 5    |
| BS887  | Risk Management for Human Resources                              | 5    |
| BS888  | Supply Chain Risk Management                                     | 5    |
| BS889  | Simplification of Work Processes and Procedures                  | 5    |
| BS890  | Building Personal Leadership Skills                              | 5    |
| BS892  | Crisis Management and Emergency Response Measures                | 5    |
| BS893  | The Effective Buyer  | 5    |
| BS894  | Market Research and Intelligence                                 | 5    |
| BS895  | High Performance Leadership for New Managers                     | 5    |
| BS896  | The Art of Managing People                                       | 5    |



| Ref.  | Course Title   | Days |
|-------|--|------|
| BS897 | Administrative Excellence for Secretaries and Administrators                                     | 5    |
| BS898 | Professional Skills for Administrators & Secretaries   | 5    |
| BS899 | Office Management Specialist   | 5    |
| BS900 | Protocol & Event Management  | 5    |
| CM109 | Disputes, Claims and Negotiation Skills for Construction Engineers                               | 5    |
| CM110 | Advance Material for Construction & Repair of Concrete Structure                                 | 5    |
| CM112 | Construction Risk Management   | 5    |
| CM114 | Construction Quality Control & Assurance   | 5    |
| CM115 | Advance Techniques in Structural Engineering   | 5    |
| CM118 | Introduction to Civil Engineering Codes & Standards  | 5    |
| CM120 | Steel Design & Construction Advance Techniques   | 5    |
| CM132 | Steel Structure Design, Construction and Maintenance   | 5    |
| CM134 | Concrete Assessment and Damage   | 5    |
| CM135 | Assessment of Reinforced Concrete Structure  | 5    |
| CM152 | Computerized methods for Dynamic Analysis and Design of Reinforced Concrete and Steel Structures | 5    |
| CM156 | Materials of Construction for Process Equipment & Piping Systems                                 | 5    |
| CM158 | Materials of Construction Site Management  | 5    |



| Ref.  | Course Title  | Days |
|-------|---|------|
| CM160 | Safe Construction   | 5    |
| CM161 | Successful Construction Project Administration            | 5    |
| DE104 | Reservoir Management                                      | 5    |
| DE107 | Well Completions Design & Performance                     | 5    |
| DE108 | Drilling Fluids Technology                                | 5    |
| DE124 | Rig Inspection  | 5    |
| DE126 | Well Completion and Workover                              | 5    |
| DE134 | Drilling Operations                                       | 5    |
| DE150 | Advanced Drilling, Completion and Workovers Technology    | 5    |
| DE154 | Practical Drilling Skills                                 | 5    |
| DE158 | Wellhead Maintenance and Operations                       | 5    |
| DE160 | Advanced Drilling Strategies and Technologies             | 5    |
| DE161 | Operational Drilling Technology and Advanced Well Control | 5    |
| DE191 | X-mas Tree & Wellhead Operations & Testing                | 5    |
| DE192 | Applied Reservoir Management                              | 5    |
| DE193 | Subsurface Production Operations                          | 5    |
| DE194 | Advanced Drilling Technology                              | 5    |



| Ref.  | Course Title  | Days |
|-------|---|------|
| DE195 | Advanced Well Completion & Work over  | 5    |
| DE196 | Modern Well Testing Technology  | 5    |
| DE221 | Well Log Interpretation   | 5    |
| DE223 | Coiled Tubing & Stimulation   | 5    |
| DE225 | Well Head Design & Selection H2S, Sour Gas Compatible Material X-mas Tree - Advance level | 5    |
| DE226 | Well Completion & Workover - Intermediate level   | 5    |
| DE253 | Well Logging Data Interpretation  | 5    |
| DE254 | Well Integrity Logging  | 5    |
| DE255 | Well completion Design & ESP Technology   | 5    |
| DE256 | Well Drilling and Completion (Geochemistry & Production Chemistry)                        | 5    |
| DE258 | Drilling Problems & Optimization  | 5    |
| DE259 | Managed Pressure Drilling Well Design and Application                                     | 5    |
| DE260 | Acid Stimulation  | 5    |
| DE261 | Introduction to Slickline   | 5    |
| DE262 | Advanced Wireline Operation   | 5    |
| DE263 | Drilling Optimization   | 5    |
| DE264 | Artificial Lift Design & Failure Analysis (PCP, SRP & ESP)                                | 5    |



| Ref.  | Course Title  | Days |
|-------|---|------|
| DE265 | Coiled Tubing & Fishing Operations  | 5    |
| DE266 | Advanced Stuck Pipe Prevention & Fishing Operation  | 5    |
| DE267 | Cased Hole and Production Log Evaluation  | 5    |
| DE268 | Well, Reservoir and Facility Management   | 5    |
| EC108 | Optical Fiber within Transmission Network   | 5    |
| EC110 | Basic Electrical & Electronics  | 5    |
| EC115 | Basic Training on Fiber Optics Technology   | 5    |
| EC117 | Configuring and Testing Smart Field Devices   | 5    |
| EC118 | Tetra Communication System (VoIP)   | 5    |
| EE254 | Electrical Equipment in Hazardous Areas & Classification  | 5    |
| EE283 | System Earthing & Protective Earthing in Utilities & Industrial Electrical Networks             | 5    |
| EE285 | Electrical Equipment & Control Systems: Commissioning, Testing & Start-Up of Electrical Systems | 5    |
| EE341 | Electrical Switchgear Selection and Operation   | 5    |
| EE343 | Electrical Preventive Maintenance and Best Practice   | 5    |
| EE357 | Electrical Demand Side Management (DSM)   | 5    |
| EE360 | Electrical Substations, Transformers & Motor: Design and Safety Requirements                    | 5    |
| EE367 | Variable Frequency Drives   | 5    |



| Ref.  | Course Title  | Days |
|-------|---|------|
| EE372 | Pneumatic & Electro-Pneumatic Systems, Design, Operation & Maintenance                          | 5    |
| EE375 | Design of Protection System   | 5    |
| EE379 | Modern Power System Protective Relaying   | 5    |
| EE383 | Electrical Energy Essentials  | 5    |
| EE391 | Advanced Industrial Process Control & Instrumentation   | 5    |
| EE406 | Electrical Safety and Grounding Practices in Electrical Installations                           | 5    |
| EE420 | Electrical Loss Management  | 5    |
| EE431 | Motors, Transformers & Maintenance  | 5    |
| EE435 | Power Generation and Distribution   | 5    |
| EE462 | Practical Troubleshooting of Electrical Equipments & Control Circuits                           | 5    |
| EE517 | Selection, Inspection, Maintenance and Troubleshooting of MV, LV VFD for Water Pumping Stations | 5    |
| EE533 | Electrical Accident Investigation and System Safety   | 5    |
| EE547 | Emergency Diesel Generator Operation & Maintenance  | 5    |
| EE557 | Modern Electrical Power Systems   | 5    |
| EE573 | Power System Harmonics, Distribution and Protection   | 5    |
| EE604 | H.V. Breaker Repair & Troubleshooting   | 5    |
| EE609 | Electrical Equipment Protection - Advanced Technologies   | 5    |



| Ref.  | Course Title  | Days |
|-------|---|------|
| EE612 | Electrical Submersible Pumps – Advanced ESP Design and Trouble Shooting   | 5    |
| EE614 | Variable Frequency Generators   | 5    |
| EE618 | DCS, SCADA & Flow Computer  | 5    |
| EE621 | Certified Low Voltage Isolation for Operators   | 5    |
| EE622 | Instrumentation Control in Oil Production   | 5    |
| EE623 | Electrical Hazard, Risks & Emergency Shutdown Systems   | 5    |
| EE625 | Process Control and Industrial Control Loops Calculations   | 5    |
| EE627 | Maintenance of Meters and Breakers  | 5    |
| EE628 | Low Voltage Switchgear Operation & Maintenance  | 5    |
| EE631 | Advanced Electrical Safety  | 5    |
| EE637 | Boiler Control and Instrumentation  | 5    |
| EE638 | Transformers Types, Principles, Construction & Maintenance  | 5    |
| EE639 | HV/MV Cable Splicing, Jointing & Termination  | 5    |
| EE642 | Maintenance and Testing of Electrical Network Components  | 5    |
| EE643 | Instrumentation, Measurement, Process Control, PLC'S, SCADA, UPS & DCS for Oil Industries   | 5    |
| EE647 | Motors, Variable Speed Drives & Generators: Selection, Applications, Operation, Diagnostic Testing, Maintenance & Troubleshooting | 5    |
| EE651 | Power Distribution and Substation Automation Systems  | 5    |



| Ref.  | Course Title  | Days |
|-------|---|------|
| EE679 | Advanced Preventive Predictive Maintenance of Substation Equipment of 33KV and 132KV  | 5    |
| EE685 | Variable Speed Drives (VSD)   | 5    |
| EE686 | ESP Power Quality Systems   | 5    |
| EE708 | Electrical Relay Protection System  | 5    |
| EE710 | Adjustable Speed Drives   | 5    |
| EE711 | Power Generation: Gas Turbines, Steam Power Plants, Co-generation and Combined Cycle Plants: Selection, Applications, Operation, Maintenance and Economics  | 5    |
| EE712 | Transformer Operation, Maintenance, Diagnosis & Testing   | 5    |
| EE713 | Advanced Power Distribution Engineering for Utilities   | 5    |
| EE714 | LV/MV/HV Circuit Breakers & Switchgears: Specification, Design, Operation, Inspection, Testing, Maintenance, Repair & Troubleshooting   | 5    |
| EE715 | Electrical Equipment: Transformers, Motors, Variable Speed Drives, Generators, Circuit Breakers, Switchgears & Protective Systems: Selection, Installation, Operation, Testing, Troubleshooting & Maintenance | 5    |
| EE724 | Electrical Submersible Pumping (ESP) Operations, Design & Troubleshooting   | 5    |
| EE725 | Motors and Transformers   | 5    |
| EE726 | Electrical Engineering Principles   | 5    |
| EE727 | Electrical Grounding Systems and Hazardous Area Classifications   | 5    |
| EE728 | Electrical Transformers & Switchgears: Faults, Inspection, Testing, Maintenance and Troubleshooting   | 5    |
| EE729 | Electrical Faults, Causes, Analysis, Detection & Remedies for Safe Operation, Maintenance of Electrical Switchgear  | 5    |
| EE730 | Motor Drives for Industrial Applications  | 5    |



| Ref.  | Course Title  | Days |
|-------|---|------|
| EE731 | High Voltage Switching, Operational Safety, and Protection Relays   | 5    |
| EE732 | Safe Operation and Maintenance High Voltage Equipments - High Voltage Authorization up to 33kv                  | 5    |
| EE733 | Electrical Protections and Relay Coordination   | 5    |
| EE734 | Motor Overhauling, Rewinding & Lubrication  | 5    |
| EE735 | Understanding, Modifying & Making Industrial Electrical Schematic Diagrams                                      | 5    |
| EE736 | Power System Blackouts, Restoration & Troubleshooting   | 5    |
| EE737 | Substation Automation System & Application  | 5    |
| EE738 | Generator Excitation Systems & AVR: Selection, Commissioning, Operation, Maintenance, Testing & Troubleshooting | 5    |
| EE739 | Grounding and bonding: Power Quality  | 5    |
| EE740 | Power System Planning & Economics   | 5    |
| EE741 | Transmission Line Protection  | 5    |
| EE742 | Electric Distribution System Equipment  | 5    |
| EE743 | Electrical Maintenance Management, Failure Analysis & Troubleshooting   | 5    |
| EE744 | Fault Analysis in Electrical Networks & Distribution Cables: Power Systems Troubleshooting                      | 5    |
| EE745 | Distribution Transformer Basic Concepts & Maintenance   | 5    |
| EM101 | Solid Waste Management  | 5    |
| EM110 | Waste Mangement and Chemicals Handling  | 5    |



| Ref.  | Course Title  | Days |
|-------|---|------|
| EM111 | Hazardous Area Classification   | 5    |
| EM113 | Industrial Waste Management   | 5    |
| EM115 | Managing Environmental Impacts through International HSE Standards                            | 5    |
| EM125 | Hazardous Waste Management and Pollution Control  | 5    |
| EM133 | Hazard Identification and Risk Assessment   | 5    |
| EM144 | Contaminated Site Assessment & Remediation Techniques   | 5    |
| EM151 | EMS- Environmental Management Systems   | 5    |
| EM169 | Environmental Impact Assessment   | 5    |
| EM170 | Environmental Risk Management, Pollution Control and Risk Management, in Oil and Gas Industry | 5    |
| EM171 | Environmental Management Standard Specification Systems (ISO 14001)                           | 5    |
| GS104 | Geological Management   | 5    |
| GS105 | Geological Analysis and Interpretation  | 5    |
| GS111 | Advanced Petroleum Geology  | 5    |
| GS117 | Advanced production logging and reservoir monitoring-   | 5    |
| GS125 | Operations and Wellsite Geology   | 5    |
| GS133 | Basic Reservoir Engineering   | 5    |
| GS136 | Reservoir Fundamentals and Coiled Tubing Interventions  | 5    |



| Ref.  | Course Title   | Days |
|-------|--|------|
| GS137 | Structure Geology Geo-Mechanics and Fracture Characterization                    | 5    |
| HR109 | HR and Succession Plans  | 5    |
| HR111 | Human Resources Management   | 5    |
| HR124 | Dynamic Recruitment, Interviewing and Appraisal Techniques                       | 5    |
| HR125 | Employee Relations: Motivation, Grievances and Discipline                        | 5    |
| HR126 | How to Create High-Performance Teams Tackle Difficult Challenges Your Team Faces | 5    |
| HR127 | HR as Business Partner   | 5    |
| HR137 | Introduction to HR Business Sustainability                                       | 5    |
| HR138 | Relations Interpersonal Effectiveness and Collaborative Employee                 | 5    |
| HR146 | Career Development & HR Management   | 5    |
| HR147 | HR Procedures  | 5    |
| HS101 | Hazard Identification and Risk Assessment  | 5    |
| HS114 | Laboratory Safety Management   | 5    |
| HS127 | Hazardous & Non-Hazardous Waste Management                                       | 5    |
| HS157 | Advance Accident & Incident Investigation  | 5    |
| HS161 | OSHA 30-Hour General Industry Safety & Health                                    | 5    |
| HS237 | Health and Safety in Waste industry  | 5    |



| Ref.  | Course Title   | Days |
|-------|--|------|
| HS328 | Risk Assessment and SIL Determination in Process Industry                  | 5    |
| HS329 | HSE Standards Monitoring & Improvement Procedural Programs                 | 5    |
| HS332 | Activity Management in Hazard Area   | 5    |
| HS333 | Incident Accident Investigation & Root Cause Analysis                      | 5    |
| HS335 | Chemical Process Quantitative Risk Assessment (CPQRA)                      | 5    |
| HS338 | OSHA Scaffold Competent Person   | 5    |
| HS339 | Safety Instrumented System, Safety Integrity Level & Emergency Shutdown    | 5    |
| HS340 | Advanced Process Hazard Analysis (PHA) Methods and Leadership              | 5    |
| HS341 | HSE Standards Settings of Export Facilities                                | 5    |
| HS352 | HAZOP Facilitators Course  | 5    |
| HS356 | HSE Orientation Program  | 5    |
| HS357 | Safety Integrity Levels (SIL) Selection & Verification                     | 5    |
| HS358 | Emergency Response & Crises Management                                     | 5    |
| HS359 | Risk & Disaster Management   | 5    |
| HS360 | Health, Safety and Environment: Principles, Responsibilities and Practices | 5    |
| HS363 | Fire Warden  | 5    |
| HS364 | Emergency Response & Process Safety Management                             | 5    |



| Ref.  | Course Title   | Days |
|-------|--|------|
| HS365 | Occupational Safety and Health Management System (ISO 18001)         | 5    |
| IT130 | IT Security & Disaster Recovery                                      | 5    |
| IT159 | Risk Management (IT)   | 5    |
| IT187 | Managing Services in IT  | 5    |
| IT192 | Basics of IOT Technology for Plant Personnel                         | 5    |
| LL101 | Contract Law for Business  | 5    |
| LL102 | Conducting Mergers and Acquisitions – The Best Practices             | 5    |
| LL103 | Copy Rights and Trademarks   | 5    |
| LL107 | Engineering Contracts – The Essentials                               | 5    |
| LL114 | Contract Risks & Mitigation Measures                                 | 5    |
| ME121 | Preventive & Predictive Maintenance Techniques                       | 5    |
| ME126 | Diesel Engine Maintenance Planning and Troubleshooting               | 5    |
| ME133 | Rotating Equipment Reliability Optimization & Continuous Improvement | 5    |
| ME175 | Boiler Operations & Performance                                      | 5    |
| ME178 | Metallurgy for Non-Metallurgists                                     | 5    |
| ME185 | Maintenance Planning and Management                                  | 5    |
| ME192 | Steam Turbine Operation and Maintenance                              | 5    |



| Ref.  | Course Title  | Days |
|-------|---|------|
| ME223 | Mechanical Engineering for Non-Mechanicals  | 5    |
| ME290 | Pumps and Compressors: Operation, Maintenance and Troubleshooting   | 5    |
| ME297 | Bearing Maintenance & Reliability in Rotating Machine   | 5    |
| ME299 | Vibration Analysis  | 5    |
| ME314 | Centrifugal and Reciprocating Gas Compressors- Operation, Performance & Troubleshooting                       | 5    |
| ME339 | Control Valves and Actuators  | 5    |
| ME368 | Reliability Centered Maintenance (RCM)  | 5    |
| ME369 | HVAC Systems and Auditing   | 5    |
| ME379 | Design and Integrity Stress Analysis of Piping Systems and Pipelines  | 5    |
| ME382 | P & IDs, Pipe sizing, Piping layouts and Isometrics   | 5    |
| ME385 | Pipeline Design, Inspection & Testing   | 5    |
| ME427 | HVAC Air System Design  | 5    |
| ME429 | Advanced Troubleshooting of Rotating Equipment  | 5    |
| ME432 | Pipeline Systems: Design, Construction, Maintenance and Repair  | 5    |
| ME451 | Control Valves and Actuators-Selection, Calculations, Sizing, Applications, Operations and Diagnostic Testing | 5    |
| ME455 | Gas Compressor Operation & Control  | 5    |
| ME456 | Mechanical Seals & Dry Gas Seals  | 5    |



| Ref.  | Course Title  | Days |
|-------|---|------|
| ME457 | Advance Furnace Operation, Optimization & Environmental Management                | 5    |
| ME462 | Engineering Drawing Codes & Standards   | 5    |
| ME479 | Maintenance & Reliability Best Practices: Lowering Life Cycle Cost of Equipment   | 5    |
| ME584 | Pipeline Pigging - Technical & Operational Aspects                                | 5    |
| ME587 | Furnaces Technologies, Operation & Troubleshooting                                | 5    |
| ME595 | Selection of Material for Piping and Structural as per Codes                      | 5    |
| ME629 | Hydraulics Control Circuit Maintenance & Troubleshooting                          | 5    |
| ME631 | Mechanical Seals Maintenance  | 5    |
| ME645 | Control Valve Maintenance, Operation & Valves Selection Techniques                | 5    |
| ME656 | Plate Heat Exchangers, Design, Operation & Maintenance                            | 5    |
| ME689 | Boiler Operation, Maintenance & Water Treatment Technology                        | 5    |
| ME695 | Fundamentals and Functions of Rotating Equipment                                  | 5    |
| ME769 | Tank & Tank Farms: Design, Installation, Operation, Maintenance & Troubleshooting | 5    |
| ME774 | Welding Supervisors Training  | 5    |
| ME775 | International Welding Specialist  | 5    |
| ME780 | Heat Exchangers Design, Operations and Maintenance                                | 5    |
| ME782 | Tank Farm and Loading Theoretical   | 5    |



| Ref.  | Course Title  | Days |
|-------|---|------|
| ME787 | Fire Pumps, Design, Selection and Maintenance   | 5    |
| ME788 | Pumps & Hydraulic Valves Technologies   | 5    |
| ME790 | Welding, Metallurgy and Corrosion Considerations- Refinning and Petrochemicals-Downstream                         | 5    |
| ME792 | Industrial Pressure Safety Valves, Control Valves and Actuators: Types, Applications, Maintenance and Calibration | 5    |
| ME795 | Tank & Tank Farms: Design, Operation, Measurement, Inspection & Maintenance                                       | 5    |
| ME810 | Machinery Vibration & Condition Monitoring for Non-Vibration Engineering, Maintenance & Operations Professionals  | 5    |
| ME812 | Failure Analysis Methodologies for Mechanical Engineers   | 5    |
| ME814 | Lifting and Rigging Equipment's   | 5    |
| ME815 | Advanced Heavy Lifting and Transportation   | 5    |
| ME819 | Refinery Energy Management  | 5    |
| ME820 | Water Hammer in Pipes   | 5    |
| ME822 | Maintenance of Gas Compressors  | 5    |
| ME823 | Heating, Ventilation & Air Conditioning (HVAC) Systems Design, Installation, Maintenance & Troubleshooting        | 5    |
| ME828 | Perform Review & Approve Design Calculations of Compressors   | 5    |
| ME829 | Pigging Foundation  | 5    |
| ME830 | Boiler & Steam System Management: Performance, Efficiency, Troubleshooting, Tune-Up, Heat Recovery & Optimization | 5    |
| ME833 | Vibration in Piping & Pipeline Systems Prevention   | 5    |



| Ref.  | Course Title   | Days |
|-------|--|------|
| ME836 | Advanced Knowledge of Welding and Metallurgy   | 5    |
| ME850 | Tank Design, Construction, Inspection & Maintenance  | 5    |
| ME851 | Diesel Engine Operation, Maintenance & Troubleshooting   | 5    |
| ME852 | Advanced Valve Technology: Design, Selection, Installation, Applications, Sizing, Inspection, Maintenance & Troubleshooting              | 5    |
| ME853 | Rotating Equipment Selection, Operation, Maintenance, Inspection & Troubleshooting   | 5    |
| ME854 | Pressure Vessel Design, Fabrication, Inspection, Flaw Evaluation and Repair (ASME Section VIII, API 510 & API 579 Standards)             | 5    |
| ME855 | Pump Selection, Installation, Operation, Performance, Control, Maintenance & Troubleshooting   | 5    |
| ME856 | Safety Relief Valve Design, Installation, Inspection, Testing & Maintenance (API 520/521/526, API RP 576, NB, ASME I/VIII & ASME PTC 25) | 5    |
| ME857 | Control Valves, Actuators and Positioners  | 5    |
| ME858 | Heat Exchanger Design, Operation, Performance, Inspection, Maintenance & Repair  | 5    |
| ME859 | Centrifugal, Reciprocating & Screw Compressor  | 5    |
| ME860 | Centrifugal Pump and Mechanical Seals  | 5    |
| ME861 | Welding Material (Quality Assurance and Reliability)   | 5    |
| ME862 | Mechanical and Rotating Machinery  | 5    |
| ME863 | Tribology: Friction, Wear & Lubrication  | 5    |
| ME864 | Optimization of Equipment/ Utilities Operations Techniques   | 5    |
| ME865 | Mechanical Engineering Essentials  | 5    |



| Ref.  | Course Title  | Days |
|-------|---|------|
| ME866 | Process Piping Design Calculations and Troubleshooting  | 5    |
| ME867 | Heat Exchangers & Fired Heaters Operation & Troubleshooting   | 5    |
| ME868 | Bearings, Lubrication & Gear Boxes  | 5    |
| ME869 | Refinery & Petroleum Products Quality Specifications, Blending, Mixing, Optimization, Operational Planning, Quality Control & Profitability | 5    |
| ME878 | Detailed Engineering Drawings, Codes & Standards P&ID Reading, Interpretation & Developing  | 5    |
| ME879 | Accident Investigation and Root Cause Analysis  | 5    |
| ME880 | Heat Exchangers: Design, Operation, Maintenance and Enhancement   | 5    |
| ME881 | Advanced Welding  | 5    |
| ME882 | Tank Repairs as per API codes   | 5    |
| ME883 | Thermal Insulation for The Mechanical Systems (I.E. Piping, Vessels, Tanks, Exchangers) of a Refinery and Process Plant                     | 5    |
| ME884 | Boiler Operation, Control, Maintenance & Troubleshooting  | 5    |
| ME885 | Fundamentals and Advanced Static Pipe Stress Analysis with CAESAR Exposure  | 5    |
| ME886 | Piping Mechanical Design & Specification  | 5    |
| ME887 | General Mechanical Codes, Standards & Specification   | 5    |
| ME888 | Mechanical Engineering for Rotating Equipment   | 5    |
| ME889 | Risk Based Strategies for Inspection & Maintenance (RBI & RBM)  | 5    |
| ME890 | Centrifugal Pump Selection, Construction, Operation, Maintenance, Repair & Troubleshooting  | 5    |



| Ref.  | Course Title  | Days |
|-------|---|------|
| MS125 | Laboratory Quality Management and Assurance Systems                                 | 5    |
| MS129 | Leadership Management & Supervisory Skills for Laboratory Personal (LAMP)           | 5    |
| MS138 | Laboratory Quality & Good Lab Practice  | 5    |
| MS143 | Data & Method Validation in Analytical Laboratories                                 | 5    |
| MS144 | Modern Laboratory Management: Effective Management of the Chemical Analysis Support | 5    |
| MT106 | Port Performance Indicators & Analysis  | 5    |
| MT109 | ISPS Code for Maritime Professionals  | 5    |
| MT111 | Container Terminal Planning and Development   | 5    |
| MT117 | Ships & Marine Ports Management   | 5    |
| MT119 | Port Economics  | 5    |
| MT120 | Port Operations   | 5    |
| MT128 | Terminals Shipping & Marine Control Duties  | 5    |
| MT137 | Tugs/ Boats Handling and Maneuvering Simulation                                     | 5    |
| MT138 | Integrated Bridge System  | 5    |
| MT142 | Cargo Care Different Ship-types   | 5    |
| MT143 | Port Reception Facilities   | 5    |
| MT146 | Shipping Management, Leadership & Strategy  | 5    |



| Ref.  | Course Title   | Days |
|-------|--|------|
| MT153 | Dry-Docking and Under Water Repairs as per Class Requirements                    | 5    |
| MT154 | Terminal Crisis Management & Incident Investigation Course                       | 5    |
| MT155 | Marine Projects Management Planning  | 5    |
| MT156 | Emergency Response & Process Safety Management                                   | 5    |
| MT157 | Tugs, Crafts and Oil Spill Vessels, Engines and Other Machinery                  | 5    |
| MT158 | Port Facility Security Procedure   | 5    |
| MT159 | Oil & Gas Marine Terminal Management   | 5    |
| MT160 | Marine Pollution Prevention, Control and Management Including Oil Spill Response | 5    |
| MT161 | Tug Handling, Towing, and Ship/Tug Interaction                                   | 5    |
| ND104 | Inspection and Testing Modern Technology   | 5    |
| ND105 | Current Inspection Trends in Fabrication & Plant Maintenance                     | 5    |
| ND121 | Liquid (Dye) Penetrant Testing Method Level-III - Preparatory Course             | 5    |
| ND131 | Radiographic Testing Method Level-III - Preparatory course                       | 5    |
| ND136 | Inspection of Pipelines and Process Piping Systems                               | 5    |
| ND138 | Ultrasonic Testing Level III - Preparatory Course                                | 5    |
| OE102 | Offshore Structures Engineering  | 5    |
| OE109 | Corrosion Awareness Monitoring & Control   | 5    |



| Ref.  | Course Title   | Days |
|-------|--|------|
| OE110 | Corrosion and Cathodic Protection  | 5    |
| OE112 | Natural Gas Processing   | 5    |
| OE148 | Petroleum Refinery Engineering   | 5    |
| OE167 | Laboratory Data Analysis   | 5    |
| OE171 | Water Re-use and Re-cycling  | 5    |
| OE173 | Industrial Corrosion: Monitoring, Inspection, Testing and Control          | 5    |
| OE183 | Chemical Engineering for Non-chemical Engineers                            | 5    |
| OE195 | Sewage Treatment Plant & Auxiliary Equipments                              | 5    |
| OE211 | Polymer Science and Technology   | 5    |
| OE219 | Oil Movement, Storage & Gauging in Oil Plant Tanks                         | 5    |
| OE235 | Root Cause Failure Analysis & Reliability                                  | 5    |
| OE243 | Crude Oil Storage Management Handling Measurement Loss                     | 5    |
| OE247 | Process Plant Start-up Commissioning and Troubleshooting                   | 5    |
| OE268 | Principles of Gas Chromatography   | 5    |
| OE274 | Gas Chromatography Operation, Calibration, Maintenance and Troubleshooting | 5    |
| OE278 | Chromatography for Gas, Crude Oil, Hot Lube Oils and Water                 | 5    |
| OE279 | Water Distribution Systems   | 5    |



| Ref.  | Course Title  | Days |
|-------|---|------|
| OE294 | Sulfur Recovery and Troubleshooting   | 5    |
| OE297 | Correlation between Laboratory Results and Refinery Operation                             | 5    |
| OE298 | Water Treatment & Desalination  | 5    |
| OE304 | Relief & Flare System   | 5    |
| OE309 | Offshore Structures Design, Construction, Inspection, Maintenance & Repair                | 5    |
| OE321 | Lube Oil System Design & Troubleshooting  | 5    |
| OE325 | LNG & Liquified Hydrocarbon Fire Protection & Response                                    | 5    |
| OE333 | Hazardous Chemical Handling & Transportation  | 5    |
| OE334 | Analytical Chemistry Methods and Instrumental Techniques                                  | 5    |
| OE335 | Corrosion Monitoring, Metallurgy and Prevention of Failures for Engineers and Technicians | 5    |
| OE336 | Residual Waste Oil Processing   | 5    |
| OE341 | Operation and Control of Distillation Column  | 5    |
| OE350 | Slickline and Perforating Operation Fundamentals  | 5    |
| OE351 | Analytical Chemistry Process Analyzers  | 5    |
| OE360 | Good Laboratory Practice & Uncertainty Measurements                                       | 5    |
| OE361 | Water Analysis in Petroleum Industry  | 5    |
| OE363 | Desalination Technologies, Sizing, Operation and Maintenance                              | 5    |



| Ref.  | Course Title   | Days |
|-------|--|------|
| OE380 | Boiler Water Analysis  | 5    |
| OE431 | Process Plant Troubleshooting & Engineering Problem Solving                      | 5    |
| OE432 | Corrosion Monitoring, The Required Tests and Calculations                        | 5    |
| OE487 | Design & Inspection of Refractory/ Fireproofing materials in Gas plant           | 5    |
| OE493 | Natural Gas Liquids (NGL) Recovery   | 5    |
| OE498 | Control & ESD Systems  | 5    |
| OE514 | Polymer & Polymerization Technology  | 5    |
| OE516 | Catalyst selection & Production Optimization                                     | 5    |
| OE530 | Artificial Gas Lifting   | 5    |
| OE537 | Statistical Analysis of Laboratory Data  | 5    |
| OE552 | Irrigation System Techniques   | 5    |
| OE557 | Oil & Gas Field Operations: Gas Processing, Hydrates, Dehydration                | 5    |
| OE560 | Process Plant Optimization Technology & Continuous Improvement                   | 5    |
| OE560 | Process Plant Optimization Technology and Continual Improvement                  | 5    |
| OE562 | Material Selection for Oil and Gas Plant   | 5    |
| OE563 | Operational Management in Oil Production Facilities                              | 5    |
| OE566 | Principle and Chemistry of Instrumental Analysis of Water, Wastewater & Seawater | 5    |



| Ref.  | Course Title  | Days |
|-------|---|------|
| OE576 | Oil Analysis  | 5    |
| OE580 | Process Hydraulic Simulation & Ways of Improvement  | 5    |
| OE582 | GC Processes to Deliver Production Quality  | 5    |
| OE666 | Gasoline Engine Diagnosis System  | 5    |
| OE669 | Water Hammer in Pipes   | 5    |
| OE670 | Fundamental of Industrial Coatings & Non-Metallic Materials Application in Oil and Gas Industries | 5    |
| OE679 | Effective Wastewater Treatment  | 5    |
| OE682 | Crude Oil Export  | 5    |
| OE692 | Production optimization, control and Operational Safety   | 5    |
| OE693 | Advanced Production Facilities, Control and Operational Safety                                    | 5    |
| OE694 | Oil Inspection  | 5    |
| OE695 | Methodologies of Corrosion Monitoring, Control & Prevention in Oil, Water & Gas Industry          | 5    |
| OE698 | Simulation for Oil and Gas Production, Conditioning and Processing                                | 5    |
| OE699 | Chemical Solution for Oilfield Production   | 5    |
| OE700 | Pickling and Passivation of Pipe Spools   | 5    |
| OE701 | Methodologies of Oilfield Water Treatment and Ways of Control                                     | 5    |
| OE708 | Petroleum Reservoir Engineering   | 5    |



| Ref.  | Course Title   | Days |
|-------|--|------|
| OE709 | Process Equipment Design, Sizing, Selection, Applications & Troubleshooting  | 5    |
| OE710 | Plastic Additives Selection, Application & Troubleshooting   | 5    |
| OE711 | Distillation-Column Operation, Control & Troubleshooting   | 5    |
| OE712 | Basic Oil & Gas Chemistry  | 5    |
| ME891 | Preventive Maintenance for Motorized Operating Valves  | 5    |
| OE713 | Process Plant Optimization, Rehabilitation, Revamping & Debottlenecking  | 5    |
| OE714 | Flare, Blowdown & Pressure Relief Systems: Operation, Maintenance & Troubleshooting  | 5    |
| OE715 | LPG Filling-Depot & Loading Stations   | 5    |
| OE716 | Oil and Gas: Market, Trading, Pricing and Economic Framework   | 5    |
| OE717 | Process Equipment Design, Applications, Maintenance & Troubleshooting: Rules of Thumb for Process Engineers                | 5    |
| OE718 | World of Polymers: From Engineering Process to Markets & Financials  | 5    |
| OE719 | Modern Cathodic Protection Systems: Design, Installation, Testing & Repair   | 5    |
| OE720 | Tanker Vetting for Terminals   | 5    |
| OE721 | Data & Method Validation in Analytical Laboratories  | 5    |
| OE722 | Liquid & Gas Flow metering & Meter Calibration   | 5    |
| OE723 | Hydro - Treating Technology  | 5    |
| OE728 | Modern Analytical Laboratory: Management Operations, Analytical Instrumentation, Equipment, Safety and Quality (ISO 17025) | 5    |



| Ref.  | Course Title   | Days |
|-------|--|------|
| OE737 | Artificial Lift Systems  | 5    |
| OE738 | Artificial Lift - ESP Troubleshooting  | 5    |
| OE773 | Process Plant Operations   | 5    |
| OE781 | Basic Chemistry for Lab Technicians  | 5    |
| OE805 | Gas Transportation   | 5    |
| OE809 | Troubleshooting Process Operation & Problem Solving  | 5    |
| OE814 | SRP Application and Operation  | 5    |
| OE817 | Process Engineering Fundamentals: Technologies, Control, Instrumentation   | 5    |
| OE824 | Process Hydraulic Operations Optimization  | 5    |
| OE850 | Refinery Operational Economics, Planning & Profitability   | 5    |
| OE857 | Oil Industries Orientation   | 5    |
| OE858 | Corrosion & Corrosion Protection   | 5    |
| OE859 | HEMPLE Training for Quality Assurance and Quality Control in Oil & GAS   | 5    |
| OE860 | Root Cause Analysis (RCA)  | 5    |
| OE861 | Wastewater Treatment Processes   | 5    |
| OE862 | Understanding and Preventing Process Equipment Failures  | 5    |
| OE863 | Oil & Gas Field Operations: Gas Processing, Hydrates, Dehydration, Sweetening, NGL Recovery & Fractionation, Oil Production, Desalting, Stabilization, Storage Tanks, Mixers, Meter Proving, Cargo Calculations & Flow Measurement | 5    |



| Ref.  | Course Title   | Days |
|-------|--|------|
| PM112 | Contracting for Project Management                           | 5    |
| PM123 | Project Risk Management & Quality Assurance                  | 5    |
| PM127 | Project Management Professional (PMP) Preparation            | 5    |
| PM131 | Advanced Project Planning and Control                        | 5    |
| PM139 | Project Management   | 5    |
| PM153 | Advanced Project & Construction Management                   | 5    |
| PM156 | Effective Project Construction Management                    | 5    |
| PM167 | Project Presentation and Report Writing Skills               | 5    |
| PM170 | Petroleum Project Management: Principles and Practices - PPM | 5    |
| PM171 | Project Planning, Scheduling and Control                     | 5    |
| PM175 | Business and Project Management                              | 5    |
| PM176 | Advance Project Management                                   | 5    |
| PM177 | Project Budgeting & Cost Management                          | 5    |
| PM178 | Engineering, Design & Project Management                     | 5    |
| QM101 | Certified Quality Control Expert                             | 5    |
| QM102 | Certified Quality Professional                               | 5    |
| QM132 | Balanced Scorecard Design and Management                     | 5    |



| Ref.  | Course Title   | Days |
|-------|--|------|
| QM170 | Seven Quality Tools  | 5    |
| QM171 | Quality Assurance & Quality Control                                | 5    |
| QM173 | Advanced Quality Management and Quality Engineering Techniques     | 5    |
| QM174 | Quality System Management (ISO 9001)                               | 5    |
| RE102 | Solar Thermal Power Technology                                     | 5    |
| RE106 | Advanced Trends of Renewable Energy                                | 5    |
| RE110 | Solar Energy and Applications                                      | 5    |
| RE120 | PV & Electric Inverters  | 5    |
| RE123 | Renewable Energy, Solar Power Design, Installation and Maintenance | 5    |
| RI103 | Railways and Metro: Environment, Occupational Health and Safety    | 5    |
| RI104 | Engineering Safety Management – Railways                           | 5    |
| RI109 | Costing & Pricing of Rail Transport Services                       | 5    |
| SM101 | Security Fire , Loss Prevention and Emergency Management           | 5    |
| SM123 | Risk Management - Focus on Fraud                                   | 5    |
| SM124 | Security Supervisory   | 5    |