Training - Low-carbon fuels and processes

BIOCPP-EN-P | Face-to-face only | 3 days

This session provides general technical information on the characteristics and processes leading to key bio-based products and intermediates: existing and developing biofuels, petrochemicals and chemicals

Level

Expert

Public

Professionals from different technical departments in sectors ranging from refining to petrochemicals or involved in the energy transition

Objectives

Attendees will be able to implement the following skills:
Upon completion of the training, participants will be able to:

- • List the main characteristics of bio-based products on the current market
- • describe the principle of existing and developing processes

Pedagogical & technical resources

- • Interactive course: active participation of the trainees through games and quizzes to grasp the key points of the course.
- • Joint construction of a diagram of all bio-processes.

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites

Meet at least one of the following criteria:
• Have 3 months of proven professional experience in the energy sector, in a technical position.
• Or have followed a training course oriented towards the introduction to refining or petrochemical processes.

Responsable

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

CONTEXT AND FEEDSTOCKS — 0.5 day

Challenges of carbon-free energy and bioplastics in the context of climate change.
Associated environmental and regulatory framework.
Process development strategy.
Different types of biomass: sugar biomass, starchy biomass, oilseed biomass, waste.

Biomass generations: 1G, 2G, 3G
Other feedstocks:

- CO2, low-carbon hydrogen.
- Recycled plastics.

BIOFUELS AND PETROCHEMICAL INTERMEDIATES — 0.5 day

Description of hydrocarbon molecules families: Olefins, Aromatics, Paraffins.
Main characteristics and specificities of the different biofuels and comparison between them:

- For gasoline engine (ETBE, ethanol).
- For diesel Engine (FAME, HVO).
- For Jet (HEFA, FT-SPK, ATJ, DSHC).
- For the maritime sector (Methanol, NH3, GNL).

Other energetic fuels (H2 /e-fuels).
Main intermediates for access to plastics or chemicals: Olefins, Aromatics, Methanol, Syngas.
Main polymers: Bio-based vs. biodegradable, bioplastics, recycled plastics.

LOW CARBON PROCESSES — 2 days

Overview of processes for transforming feeds into intermediate and finished products: feedstocks and treatments, process diagrams, different technologies when relevant, typical operating conditions, advantages and drawbacks, comparison and maturity.
Current processes:

- ethanol by fermentation.
- ETBE by etherification.
- FAME by transesterification.
- HVO-HEFA by hydrotreatment.
- Co-processing.

Advanced processes:

- Biogas by digestion
- Biomethane by digestion or methanation.
- Different routes to syngas.
- Methanol and Ammonia via Syngas.
- Fuels by Fischer-Tropsch via syngas.
- Olefins by dehydration of alcools (ethanol and methanol).
- Different routes for SAF by ATJ, DSHC.
- Bio-crude /Py-oil by pyrolysis of biomass, wastes or plastics.
- Bio-oil by hydrothermal liquefaction.
- E-fuels production.

To French entities : IFP Training is referenced to DataDock ; you may contact your OPCO about potential funding.
Please contact our disabled persons referent to check the accessibility of this training program : referent.handicap@ifptraining.com

Training - Furnace optimisation

00000774_002-EN-P | Face-to-face only | 2 days

This training allows students to develop knowledge of furnaces, their operation and the optimization axes of these units

Level

Knowledge

Public

- Anyone involved in furnace operation and maintenance: from operators to engineers

Objectives

Attendees will be able to implement the following skills:

- apply safety rules in the operation of furnaces
- ensuring the reliability and optimisation of furnaces
- analyse faults using relevant methods
- identify the technology and describe the operating conditions of the furnace
- identify the constraints related to the operation of a furnace and their significance

Pedagogical & technical resources

- Case Studies and Industry REX
- Interactive pedagogy
- Visit to educational units and platforms

Assessment of achievements

- Entry and exit quiz

Prerequisites

Have basic technical knowledge of furnaces. Have completed the e-learning course "Safety inspection"

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Analysis of unreliability and safety impacts.
Operator monitoring parameters.
The environmental consequences of furnaces.
How can we improve yield and efficiency?
Safety requirements for furnace equipment and their operation.
The consequences on energy efficiency.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Gestures and postures - technical

00004640_020-EN-P | Face-to-face only | 1 day

This training makes it possible to raise awareness among participants of the risks associated with handling and to transmit to them the appropriate gestures and postures in order to prevent musculoskeletal disorders, improve safety at work and strengthen professional efficiency

Level

Knowledge

Public

- All persons whose work involves manually handling loads

Objectives

Attendees will be able to implement the following skills:

- recognising dorso-lumbar risks and taking appropriate preventive measures (directive of the Council 90/269/CEE and French Labour Code Art.R231-66 and following)
- applying the appropriate occupational gesture and posture techniques to reduce the frequency of accidents, attenuate fatigue and improve professional capability

Pedagogical & technical resources

Alternating theoretical contributions and practical applications

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Awareness of the risks of accidents related to handling:

- Statistics on accidents at work.
- Regulatory framework (Directive 90/269/EEC, Labour Code Art.R231-66 et seq.).
- Notions of anatomy and applied physiology.
- Concepts of effort, fatigue and the evolution of injuries.

Practical exercises:

- Physical principles of handling.
- Effort-saving techniques.
- Handling of various loads.

Organization of the workstation:

- Application of the principle of saving effort to the layout of the workstation.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Gestures and postures - technical

00004640_021-EN-P | Face-to-face only | 4 hours

This training makes administrative staff aware of the risks associated with handling and working postures, in order to prevent musculoskeletal disorders and improve well-being at the workplace

Level

Knowledge

Public

- All persons whose work involves manually handling loads

Objectives

Attendees will be able to implement the following skills:

- recognising dorso-lumbar risks and taking appropriate preventive measures (directive of the Council 90/269/CEE and French Labour Code Art.R231-66 and following)
- applying the appropriate occupational gesture and posture techniques to reduce the frequency of accidents, attenuate fatigue and improve professional capability

Pedagogical & technical resources

Alternating theoretical contributions and practical applications

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Awareness of handling risks:

- Statistics on work-related accidents related to material handling.
- Regulatory framework (Directive 90/269/EEC, Labour Code Art.R231-66 et seq.).
- Notions of anatomy and applied physiology.
- Concepts of effort, fatigue and evolution of injuries.

Practical exercises:

- Physical Principles of Handling.
- Effort-saving techniques.
- Handling of various loads.
- Adapted working postures.

Organization of the workstation:

- Application of the principle of saving effort to the design of space.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Introduction to the cause tree analysis

00008118_001-EN-E | E-Learning | 30 min

This training allows students to transmit a logical and participatory method of analysis, which is widely used in professional environments

Level

Skilled

Public

- Members of personnel who may take part in accident analysis meetings and who wish to learn about the cause tree analysis method

Objectives

Attendees will be able to implement the following skills:

- master the analysis method and its rules
- identify best practices and anticipate potential deviations

Pedagogical & technical resources

- Alternation between theoretical contributions and practical exercises
- Valuation of peer-to-peer exchanges and feedback

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Introduction:

- Presentation of the method.
- Context of use and challenges.

The fundamentals of the method:

- Operating principles.
- Key stages of the analysis.
- Rules to be respected.

Good practices and possible deviations:

- Successful use cases.
- Common mistakes and biases to avoid.

- Limitations of the method.

Conclusion:

- Synthesis of knowledge.
- Putting professional practices into perspective.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Adjustment of amine inits

00013918_001-EN-E | E-Learning | 4 hours

This training allows you to discover the amine units as well as the adjustments to be implemented in operation

Level

Knowledge

Public

- Outside Operators, Panel Operators, Heads of Areas, Technical/Process Engineers

Objectives

Attendees will be able to implement the following skills:

- define an Amine Unit
- identify its place in the refinery scheme
- describe the operation of the unit
- explain the chemical reactions
- justify the need for the equipment
- explain and apply the operational parameters, and know the risks and the STAKES of its operation

Pedagogical & technical resources

- Process diagram studies
- Case Studies and Industry REX
- Presentation of operating procedures with field illustrations

Assessment of achievements

- Quiz

Prerequisites

Basic knowledge of refinery operations
Basic knowledge of petroleum products
Knowledge of refinery safety procedures

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Definition, challenges of amine units, location.
Operation.

- Unit products.
- Chemical reactions.

- Implementation and equipment.

Operative parameters:

- Respect the environment and the quality of the products.
- Avoid foaming.
- Avoid corrosion.
- Synthesis of operating parameters & evaluation.

Case Studies: SO2 Alert.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Adjustment of sulfur units

00014040_001-EN-E | E-Learning | 4 hours

This training allows you to discover the sulphur units as well as the settings to be implemented in operation

Public

- Outside Operators, Panel Operators, Heads of Areas, Technical/Process Engineers

Objectives

Attendees will be able to implement the following skills:

- define an Sulphur Unit
- identify its place in the refinery scheme
- describethe operation of the unit
- explain the chemical reactions
- justify the need for the equipment
- explain and apply the operational parameters, and know therisks and the STAKES of its operation

Pedagogical & technical resources

- Process diagram studies
- Case Studies and Industry REX
- Presentation of operating procedures with field illustrations

Assessment of achievements

- Quiz

Prerequisites

Basic knowledge of refinery operations
Basic knowledge of petroleum products
Knowledge of refinery safety procedures

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Introduction.
Definition, stakes of sulphur units, location.
Operation:

- The unit's products.
- Chemical reactions.
- Implementation and Equipment.

Operating parameters:

- Respect the quality of the products.
- Respect the environment.
- Avoiding corrosion.
- Avoid clogs.
- Avoiding exothermicity.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Maintenance 2: hydrocarbon detection

00014088_001-EN-E | E-Learning | 1 hour

This training allows you to become familiar with oil detection equipment

Public

- Depot Operator

Objectives

Attendees will be able to implement the following skills:

- understand the role of hydrocarbon detection and associated maintenance operations

Pedagogical & technical resources

- Schematic Overview
- Presentation of equipment illustrations

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Role of hydrocarbon detection.
Equipment Overview.
Operating principle.
Maintenance and control procedure.
The main malfunctions.
Risks associated with malfunction.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Cleaning and degassing tank operations

00014775_001-EN-E | E-Learning | 1 hour 30 min

This training allows you to present the bin cleaning operations and the associated points of vigilance

Level

Knowledge

Public

- All staff in charge of cleaning and degassing tanks operations

Objectives

Attendees will be able to implement the following skills:

- how to clean tanks safely and control degassingoperations

Pedagogical & technical resources

Presentation of operating procedures with field illustrations

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Introduction.
Preparation of a cleaning and degassing operation.
Emptying and dewatering of the tank.
Lockout and opening the tank.
Tank degassing.
Tank cleaning.
Provision of the tank for inspection or work.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Confined space entry

00014932_002-EN-E | E-Learning | 1 hour

This training course makes learners aware of the challenges related to working in confined spaces, by providing them with the essential knowledge to identify risks, understand safety procedures and adopt appropriate behaviours

Level

Knowledge

Public

- Personnel involved in cinfed space entry operations

Objectives

Attendees will be able to implement the following skills:

- explain what is meant by a confined space
- describe the dangersthat can be caused by confined space entry work
- explain the importanceof risk assessment
- describe individual roles and responsibilitiesinvolved in confined space entry work
- explain the Permit-to-Workprocess for confined space entry
- explain the requirements for confinedspace entry
- explain the actions to take in an emergency situation

Pedagogical & technical resources

- Active and interactive pedagogy
- Concrete situations and practical examples

Assessment of achievements

- Quiz

Prerequisites

Staff working in confined spaces

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION:

Definition and examples of confined spaces.
Identification of hazards related to these environments.
Importance of Risk Assessment.
Prevention: how to avoid entry into a confined space.
Roles and responsibilities of stakeholders.

Phases of the confined space work procedure: preparation, first entry, completion of the work, end of work.
Safety equipment required.
What to do in an emergency.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Work process

13388-EN-P | Face-to-face only | 3 days

This training helps to strengthen the safety culture of the participants by providing them with an in-depth understanding of the principles of prevention, individual responsibilities and best practices to adopt in the context of works on an installation

Level

Knowledge

Public

- Participants of the coordination meeting of Maintenance / Operation / Safety works: maintenance work coordinators, gate keepers, safety prevention, operation work technicians...

Objectives

Attendees will be able to implement the following skills:

- coordinate actions and information towards the establishment of the best condition and procedures for a completely safe work environment

Pedagogical & technical resources

- Participatory and experiential pedagogy
- Concrete cases, interactive exchanges and scenarios

Assessment of achievements

- Quiz

Prerequisites

Work permit process training

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Introduction to safety culture.
Contributions of the Seveso standard.
General principles of prevention.
Differentiation of safety guiding principles.
Responsibilities of each participant.
In-depth work on three key rules.
Acceptance of the audit as a lever for progress.
Preparation for return to the workplace.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Work permit process

13389-EN-P | Face-to-face only | 2 days

This training allows participants to master the work permit process in an operational environment, by integrating the tools, safety rules and associated best practices

Level

Knowledge

Public

- Any person involved in the process of controlling risks during on-site maintenance: supervisor, maintenance technician, chief operator, team leader, works manager

Objectives

Attendees will be able to implement the following skills:

- apply the work permit process
- use the ATI database effectively
- reduce risks during construction
- identify the roles and responsibilities of the actors in the work permit

Pedagogical & technical resources

- Active and interactive pedagogy
- Alternation between theoretical contributions and practical applications

Assessment of achievements

- Quiz

Prerequisites

Have previous knowledge of the use of the ATI database (EWPS)

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Presentation of the ATI work permit software and the safety prevention regulation.
Understanding of the work permit workflow and the BV validation form.
Identification and definition of risks and hazards.
Exploring the ATI Risk Analysis Database and its Usage.
Organization of pre-visits and preparation of work permits.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Inhibitions management

13393-EN-E | E-Learning | 30 min

This training allows you to discover inhibitions and good practices during their implementation

Level

Knowledge

Public

- All Field Operations staff

Objectives

Attendees will be able to implement the following skills:

- state the types of inhibitions
- apply the procedure for managing inhibitions
- illustrate the importance of the Risk Analysis phase
- list the responsibilities
- explain the follow-up and the recording of inhibitions

Pedagogical & technical resources

- Schema analysis
- Presentation of operating procedures with field illustrations

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Characteristics of inhibitions.
Security inhibitions.
Issues related to the management of inhibitions.
The procedure.
The 3 phases in the management of inhibitions.
Use of appropriate forms.
Emphasize risk analysis.
Roles and responsibilities.
Meaning of decision points.
Difference between short-term and long-term inhibition.

Principles associated with key milestones.
Impact of inhibition management on daily operations.
Management of inhibitions and site performance.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Industrial facilities modernization plan

13534-EN-P | Face-to-face only | 2 days

This training strengthens the skills of professionals in the field of the industrial facilities modernization plan (PM21)

Level

Knowledge

Public

- Staff from the maintenance, inspection, HSE and operation departments

Objectives

Attendees will be able to implement the following skills:

- carrying out monitoring inspections of retention pits, reservoir foundations, pipe racks and wet pit gutters, identifying disorders (in accordance with the catalogue of disorders)
- write the monitoring sheets
- identify serious disorders, alert relevant personnel to implement associated priority measures
- define what needs to be done to establish the diagnosis

Pedagogical & technical resources

- Theoretical and regulatory contributions
- Hands-on field activities
- Active methods: surveillance visits, drafting of follow-up sheets, analyses of concrete cases

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Identification of the signs and causes of the aging of the installations.
Composition of concrete and chemical phenomena responsible for its degradation.
Typology of cracks encountered on structures.
Study of structures and foundations according to the DTs: retention basins and tank foundations (DT92), pipe bridges (DT98), gutters and wet pits (DT100).
Methodology of a 40-minute monitoring visit, supported by a catalogue of disorders specific to the 3 DTs.
Implementation of the inspection plan for oil tanks and retention basins.
Development of input data for diagnosis and action plan in the event of failure.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Downstream operator's certificate (BO)

13551-EN-B | Blended-Learning | 29 days

This training provides the knowledge and know-how necessary for the profession of operator of complex processes in the chemical and energy industries

Level

Knowledge

Public

- Any person pre-recruited to work as an operator

Objectives

Attendees will be able to implement the following skills:

- ensure compliance with safety rules and procedures
- monitor installations and equipment to ensure safety, product quality, and environmental protection
- perform routine operational tasks
- detect equipment or process issues, analyze root causes, take corrective action, and communicate efficiently

Pedagogical & technical resources

- Face-to-face courses
- Role-playing in the field (work-study training)
- Practical work in the workshop
- Case Studies and Industry REX
- Interactive pedagogy with tutors

Assessment of achievements

A continuous assessment of knowledge makes it possible to validate access to certification: this consists of exercises, quizzes and oral presentations based on written reports, on the different themes addressed during the training
The final validation of prior learning is done during the Final Jury

Prerequisites

Master the fundamentals of technical disciplines such as mathematics, physics, mechanics, electricity, automation, etc.
A minimum level will be verified during recruitment tests prior to the programme

Complementary informations

At least 30% of the training time will be dedicated to learning job-specific skills and safety procedures on-site in the field under the guidance of a certified operations trainer. Among other things, you will participate in interactive and hands-on activities involving role-playing scenarios, both independently and in groups

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Safety and firefighting in addition to general and technical knowledge: physical quantities, elements of professional chemistry, products, conversion and/or manufacturing processes, receiving, shipments and storage, equipment and operations.
Refining scheme, rotating machinery, static equipment and instrumentation, immersed in full-scale units resulting from the conversion of TotalEnergies refineries.
Behaviors and attitudes to have with regard to safety and the operations to be carried out.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Technological Risks & Assets Integrity Awareness

1508-EN-P | Face-to-face only | 1 day

This training helps to strengthen the industrial safety culture by raising awareness of major technological risks and concrete ways to prevent them

Level

Knowledge

Public

- Operation, Maintenance, Inspection, Process and HSE personnel
- Site personnel aiming at having a global overview of Major Risks in their facility

Objectives

Attendees will be able to implement the following skills:

- strengthen awareness of technological risks and knowledge of risk management measures for operational staff
- identify your daily role in the prevention of major accidents
- monitor and maintain safety barriers in operation
- recognize a downgraded situation and how to react
- understand the Assets Integrity approach

Pedagogical & technical resources

- Interactive workshops
- Real-life case studies
- Real-life examples and REX
- Facilitation by a business expert

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Identification of hazardous phenomena and associated effects.
Risk analysis: acceptability matrix, bow tie scenarios, safety barriers.
Control of processes and operations: maintenance of the effectiveness of barriers, management of daily tasks, prevention of major accidents, management of degraded situations and compensatory measures.

Site specificities: major scenarios, critical barriers, degraded situations, facility integrity approach.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Supervision of work at height

15695-EN-P | Face-to-face only | 2 days

This training guarantees the safety of agents working at height, by enabling them to master the rules for the use of individual and collective protective equipment

Public

- Safety and prevention personnel, maintenance contractors
- Any person who needs to be authorised to wear a harness

Objectives

Attendees will be able to implement the following skills:

- understand the risks associated with working at height
- apply the regulations on work at height and Group Rule CR-GR-HSE-425
- prepare and organise your work
- know how to check your safety harness before using it, know how to wear it inside and outside collective protections and adapt its fixing
- master the risk analysis for work at height
- intervene with a victim and evacuate him/her

Pedagogical & technical resources

- Alternation between theoretical contributions and practical applications
- Real-world case studies

Assessment of achievements

- Quiz

Prerequisites

Medical fitness to wear the harness: according to INRS document ed6110-Prevention of risks of falls from height: "There is a reinforced individual health monitoring system (SIR) for workers assigned to a position involving a risk of falling from a height during scaffolding assembly and dismantling operations. In this case, the occupational physician's visit takes place before the worker is assigned to the workstation and results in a fitness-for-duty form being drawn up. In other cases, it is an information and prevention visit with the issue of a follow-up certificate

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Principles of prevention and analysis of risks related to working at height.
Presentation of safety equipment: harnesses, anchorage systems, collective and individual protection (temporary and permanent).
Practical exercises: securing access and moving at height in complete safety, evacuation of a victim.

Case studies: intervention on roof, work on an industrial structure in a pit.
Regulatory framework: legal obligations, rights and responsibilities of agents.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Observation reporting

15980-EN-E | E-Learning | 5 hours

This module makes it possible to raise learners' awareness of the identification and reporting of anomalies in the workplace, in a logic of risk prevention and continuous improvement

Level

Knowledge

Public

- Project personnel

Objectives

Attendees will be able to implement the following skills:

- define an anomaly
- explain the need to report an anomaly(immediate action, short term)
- explain the interest of reportinganomalies (long-term action)
- give the tools available to report ananomaly
- explain how to report an anomaly

Pedagogical & technical resources

- Concrete cases illustrated by photos
- Scenario
- Learning by doing with reporting tools

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Identify the risks present from a proposed list.
Complete an observation map.
Understand the principles of handling reported anomalies.
Discover the use made of the observations reported in the context of reporting.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Installation and inspection of column internals for packing

16067-EN-P | Face-to-face only | 2 days

This training allows you to train in the installation and inspection of column internals in due form

Level
Knowledge

Public
- Engineers and managers in the design, engineering, process and operations departments of refineries and petrochemical and chemical plants involved in the design, selection or operation of internal equipment for distillation columns or similar

Objectives
Attendees will be able to implement the following skills:
- using best practice in column inspection during T&I
- controlling maintenance work using column inspection best practice (R-DOP-BC-REC-017)
- identify the different types of materials, their strengths, weaknesses and areas of application
- receiving a column before starting

Pedagogical & technical resources
- Practice
- Scenarios
- Interactive Educational

Assessment of achievements
Quiz
Field evaluation

Prerequisites
Have completed the "Binary distillation" e-learning course

Responsable
TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Fundamental practices of assembly and inspection of column internals and the best techniques for using trays and linings installed in distillation, stripping, absorption and washing columns.
Gas-liquid contact separation processes.
Distillation, stripping, absorption, gas scrubbing processes.
The technologies and operation of the trays (high performance, multi-pass, etc.) and fillings (bulk, structured, grids, etc.).

Practice on a column on four levels.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Basic exercises on real fires

1715-EN-P | Face-to-face only | 2 hours

This fire training makes all staff aware of the risks associated with fire and provides them with the essential skills to react effectively in the event of a fire or fire outbreak

Level

Knowledge

Public

- Any person belonging to the Company

Objectives

Attendees will be able to implement the following skills:

- identify the different extinguishing processes, classes of fire and extinguishing agents
- use appropriate fire extinguishers in the event of a fire or fire outbreak

Pedagogical & technical resources

Scenarios on real fire

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Fundamentals of fire: understanding of combustion mechanisms and fire classes.
Extinguishing processes: presentation of extinguishing agents and their use according to the type of fire.
Fire extinguisher handling: practical exercises on a live fire using an ecological fireplace generator.
Role-playing: fire simulations to test reflexes and the application of safety instructions.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Works compliance inspection

2369-EN-P | Face-to-face only | 2 days

This training allows participants to carry out a compliance visit of the work by integrating the principles of safety culture

Level

Knowledge

Public

- Staff working on RC facilities, occupational health and safety experts, maintenance division (control group, preparation of facility closures / major works), site audit staff in case of facility closures

Objectives

Attendees will be able to implement the following skills:

- carry out a work compliance inspection from a safety culture point of view and with the necessary tools
- propose actions for improvement after analysing the report of the work compliance inspection

Pedagogical & technical resources

- Active and interactive pedagogy
- Alternation between theoretical contributions and practical applications

Assessment of achievements

- Quiz

Prerequisites

Know the golden rules and the work permit process. Have completed the e-learning course Safety inspection

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Understanding of the work process and its safety issues.
Mastery of control techniques adapted to compliance visits.
Learning how to prepare for and conduct a site visit.
Carrying out a structured debriefing and developing action plans.
Analysis of a visit report and identification of levers for improvement.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Centrifugal pumps

4275-EN-P | Face-to-face only | 5 days

This training strengthens the technical skills of professionals in the field of centrifugal pumps, allowing them to understand how they work, to master the selection and installation criteria, and to optimize their operation in various industrial environments

Level

Knowledge

Public

- Graduate engineers involved in centrifugal pump operation, maintenance or engineering

Objectives

Attendees will be able to implement the following skills:

- explain the operation and use of centrifugal pumps and the selected technical solutions
- contribute to diagnosing incidents encountered on these machines
- pre-select and size a centrifugal pump, either to adapt to modified operating conditions or for a new installation

Pedagogical & technical resources

- Theoretical contributions
- Practical applications via dynamic simulators and case studies

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Hydrodynamic anamysis of a pumping service (2 days):

- Operation of a centrifugal pump.
- Influence of the circuit and the operating point.
- Tutorials on a dynamic simulator.

Technical solutions (2 days):

- Criteria for choosing a centrifugal pump.
- Mechanical seal selection.
- Installation constraints and ATEX zones.

Operation of centrifugal pumps (1 day):

- Good operating practices.
- Incident diagnosis.
- Adaptation to market conditions.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - BLOST - Basic land operation safety training

4399-EN-P | Face-to-face only | 5 days

This training prepares professionals working in isolated environments on land to deal effectively with emergency situations

Level

Knowledge

Public

- All operational personnel in exploration, exploitation, drilling and construction who work in an isolated environment on land. All new recruits: engineers and supervisors. Sessions are dedicated to the COP (Operations Geology) Curriculum

Objectives

Attendees will be able to implement the following skills:

- understand and Identify the risks encountered during onshore assignments
- act and react in a calm manner to incidents with or without injuries
- perform a makeshift victim extraction
- assist injured people in various situations
- react in basic emergency situations

Pedagogical & technical resources

- Active and immersive pedagogy
- Realistic scenarios

Assessment of achievements

- Quiz

Complementary informations

A refresher course is mandatory between the 3rd and 4th year following the training

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Safety and first aid component:

- First aid training with the First Aid certificate.

Practical firefighting exercises with the issuance of certificates:

- Firefighting Level 2
- Wearing the SCBA (Self-Contained Breathing Apparatus).
- Simulation on fire platform: intervention on vehicle fire.

- Learning to extricate oneself with makeshift means.

Driving and navigation component:

- Theory and practice of off-road driving on developed terrain.
- Certificate issued by the French 4x4 Federation.
- GPS navigation: track tracking and waypoint calibration in real conditions.
- A refresher course is mandatory between the 3rd and 4th year following the training.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Gestures and postures - technical

4640-EN-P | Face-to-face only | 1 day

This training makes it possible to raise awareness among participants of the risks associated with manual handling and to transmit to them good practices in terms of gestures and postures

Level

Knowledge

Public

- All persons whose work involves manually handling loads

Objectives

Attendees will be able to implement the following skills:

- recognising dorso-lumbar risks and taking appropriate preventive measures (directive of the Council 90/269/CEE and French Labour Code Art.R231-66 and following)
- applying the appropriate occupational gesture and posture techniques to reduce the frequency of accidents, attenuate fatigue and improve professional capability

Pedagogical & technical resources

- Alternating theoretical contributions and practical applications
- Use of innovative technologies (sensors, avatar) for immediate feedback on postures

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Awareness of the risks of accidents by handling:

- Statistics on work-related accidents related to material handling.
- Regulatory framework (Directive 90/269/EEC, Labour Code Art. R231-66 et seq.).
- Notions of anatomy and applied physiology.
- Understanding of exertion, fatigue and the evolution of injuries.

Practical exercises:

- Physical Principles of Handling.
- Application of the principle of saving effort.
- Handling of various loads.

- Analysis and correction of working postures.

Organization of the workstation:

- Layout and optimization according to the principle of effort-saving.

Technological immersion:

- Use of sensors and an avatar to visualize and correct postures in real time on the Oleum Nord site.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Workplace First Aider Retraining

477-EN-P | Face-to-face only | 1 day

This training guarantees a rapid, efficient and safe intervention in the event of an accident in the workplace

Level

Knowledge

Public

- First aid at work, holder of the SST certificate for less than 2 years

Objectives

Attendees will be able to implement the following skills:

- update their competencies to respond effectively to accident situations, preserve the victim's condition, and act while awaiting organized emergency services
- renew their Occupational First Aider (SST) certification

Pedagogical & technical resources

- Alternation between theoretical and practical contributions
- Participatory approach: exchanges, feedback, group work
- Personalized support from a first aid expert
- Use of various media: demonstrations, simulations, reference documents

Assessment of achievements

- Quiz

Prerequisites

Hold an OHS Certificate and be up to date with refresher training (every 24 months)

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Review of first aid gestures: protection, alert, emergency gestures.
Practical scenarios: concrete cases, role-plays, accident simulations.
Updating of theoretical knowledge according to INRS/Health Insurance standards.
Exchanges on experiences and good practices in companies.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Operation of electrical networks on industrial sites

483-EN-P | Face-to-face only | 3 days

The training aims to strengthen the understanding of electrical infrastructure, improve the ability to analyze incidents and promote autonomy in the application of safety procedures

Level

Knowledge

Public

- Operating personnel in charge of the electrical network, sector manager and energy operation foreman, electrical service technician (new position), foreman and maintenance service manager in charge of a contract

Objectives

Attendees will be able to implement the following skills:

- operate the electrical networks of an industrial site safely
- ensure reliable operation of networks
- identify malfunctions
- implement operating procedures to ensure the safety of installations

Pedagogical & technical resources

- Case studies, role-plays, exercises, and incident simulations
- Quiz
- Individualized follow-up with feedback from the trainer, learners and sponsor

Assessment of achievements

- Participants will be evaluated throughout the training through quizzes and exercises

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Know the regulations in force.
Identify and avoid electrical hazards.
Recognize grounding patterns.
Identify the different equipment and know their functions.
Know the various forms of network architecture that meet different availability needs:

- Departures, arrivals and couplings.

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- Loops and antennas.
- Replacement production, backup production, etc.

Understand the rules of source coupling.
Identify the main electrical faults:

- Overloads.
- Homopolar.
- Short circuit...

Recognize and identify electrical protections, redundancies and their selectivities.
Analyze an electrical incident.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Electrical isolations management

50062320_001-EN-E | E-Learning | 1 hour 15 min

This module helps to raise awareness of the fundamentals of electrical insulation, providing them with the knowledge to understand, apply and supervise insulation procedures in a safe professional setting

Level

Knowledge

Public

- Personnel involved in Permit-to-Work system

Objectives

Attendees will be able to implement the following skills:

- define Electrical Isolations
- list the reasonsfor isolating an electrical circuit
- describe the generalpoints applying to all electrical isolations
- outline thefive steps needed to complete an electrical isolation
- describe the roles and responsibilities of personnel involved in electricalisolations
- explain the documentation used during theelectrical isolation process
- explain the 5 steps of theelectrical isolation process
- describe the process when acontinuation permit is required
- outline the process forlong term isolations
- outline the process for multipleisolations
- outline the process for grouped electricalisolations
- emphasize the importance of a work permit to electrical isolations

Pedagogical & technical resources

- Alternation between theoretical contributions and practical cases
- Use of visual aids and technical documentation
- Interactive exchanges to promote ownership of responsibilities and procedures
- Case studies on complex isolation scenarios (clustered, multiple, long durations)

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Introduction to Electrical Insulation:

- Definition of electrical insulation.
- Reasons to isolate an electrical circuit.
- General principles applicable to all insulation.
- General steps in the insulation process.
- Roles and responsibilities of the personnel involved.
- Documentation associated with the insulation process.

Electrical Insulation Process:

- Preparation.
- Electrical insulation.
- De-insulation for testing.
- Re-insulation after test.
- Final deinsulation.

Continuation Permits and Special Cases:

- Long-term isolation.
- Multiple isolations.
- Grouped isolations.
- Importance of the work permit for electrical insulation.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Process isolation management

50062376_001-EN-E | E-Learning | 30 min

This training allows students to discover process insulation and its implementation

Level

Knowledge

Public

- Personnel involved in Permit-to-Work System

Objectives

Attendees will be able to implement the following skills:

- Define Process Isolation List the reasons forisolating a process circuit
- Describe the general points applying to all process isolations
- Outline the five typesof isolation used in process isolation and their application
- Describe the roles and responsibilities of personnel involved in process isolations
- Explain the documentation used during the isolation process
- Outline the process for longterm isolations
- Explain the 5 steps of a process isolation

Pedagogical & technical resources

- Schema analysis
- Presentation of operating procedures with field illustrations

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Process isolation.
Reasons why a process is isolated.
General points that apply to all process isolations.
Types of process insulation and how to apply it.
Roles and responsibilities of personnel involved in process isolation.
Documentation used during process isolation.
Procedure to be followed for long-term insulation.

Preparation.
Implementation.
Registration and follow-up.
Withdrawal.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Corrosion and corrosion control under thermal insulation

50070901-EN-E | E-Learning | 1 hour

This training allows you to develop knowledge about the corrosion mechanisms and recommendations to be implemented in the fields of engineering and operations

Level

Knowledge

Public

- Engineers in conceptual and engineering studies, in construction, HSE and field operations personnel, both in subsidiaries and at Head Quarters
- Inspectors, production chemists, laboratories, junior corrosionists...

Objectives

Attendees will be able to implement the following skills:

- identify risks related to poor thermal insulation and propose appropriate solutions
- master monitoring and maintenance actions during the operational phase

Pedagogical & technical resources

- A progressive and illustrated approach, facilitating the understanding of complex phenomena
- Visual aids and explanatory diagrams to reinforce assimilation
- Concrete examples from the field to link theory and practice
- Free navigation allowing the learner to progress at his own pace

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Presentation of the damage resulting from corrosion under thermal insulation, and the integrity/safety and cost issues associated with controlling this corrosion.
Description of the main causes of this corrosion.
Introduction to solutions, materials and installation conditions to minimize this form of corrosion.
Presentation of the monitoring, inspection and maintenance actions associated with this thermal insulation during the operationnal phase.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Corrosion control by chemicals during field operations

50070914-EN-E | E-Learning | 30 min

This module makes it possible to raise awareness among non-specialists and junior specialists of the issues related to anti-corrosion treatments in the context of industrial operations

Level

Knowledge

Public

- Non specialists working in engineering studies, in process, safety & environment and field operations.
- Inspectors, production chemists, laboratories, junior corrosionists...

Objectives

Attendees will be able to implement the following skills:

- identify the different families of anticorrosion products and their appropriate uses
- integrate operational and environmental constraints into the selection and application of treatments

Pedagogical & technical resources

- A progressive approach, adapted to non-expert profiles
- Multimedia content (videos, diagrams, animations)
- Concrete examples from the field to illustrate the concepts
- A scenario

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Presentation of the 4 families of anti-corrosion chemicals: introduction to the types of products used, with their main characteristics.
Analysis of impacts and limitations: identification of side effects and usage constraints specific to each product family.
Selection process and application requirements: description of selection criteria, on-site application conditions and monitoring requirements.
Operational constraints and associated solutions: taking into account the realities on the ground and possible technical responses.

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Emerging environmental issues: highlighting the issues related to the ecological impact of anti-corrosion products.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Managing erosion-corrosion on production facilities

50083463_001-EN-E

E-Learning

1 hour

This e-learning module makes non-specialists aware of the phenomena of erosion and erosion-corrosion in industrial facilities

Public

- Design, Process, construction & production, inspectors, junior corrosion engineers...

Objectives

Attendees will be able to implement the following skills:

- identify erosion and erosion-corrosion mechanisms
- recognize the challenges associated with controlling these phenomena
- propose preventive solutions adapted to the operational context

Pedagogical & technical resources

- Concrete illustrations from the field
- An alternation between theoretical contributions and role-playing
- Interactive materials promoting autonomy and commitment

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Fundamental definitions: vocabulary and mechanisms of erosion and erosion-corrosion.
Industrial issues: presentation of the problems encountered in the field and the associated impacts.
Forecasting tools: introduction to methods for anticipating erosion-corrosion phenomena.
Prevention solutions:

- In the design phase: choice of materials, adapted design.
- In the operation phase: monitoring, maintenance, operational adjustments.

Operational constraints: technical and organizational limits to be taken into account in the implementation of solutions.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Corrosion in hydroprocessing units

50145306-EN-P | Face-to-face only | 2 days

This training strengthens the skills of professionals in the identification, analysis and control of corrosion phenomena specific to hydroprocessing units

Public

- Engineers and staff in operation, inspection, in the Hydroprocessing environment

Objectives

Attendees will be able to implement the following skills:

- identify and locate specific corrosions in a hydroprocessing unit
- apply the parameters influencing corrosion
- estimate the rate of corrosion or its potential evolution
- implement solutions to monitor, limit or stop corrosion
- evaluate the consequences of changes (process, product, material)

Pedagogical & technical resources

- Active and participatory pedagogy
- Learning by doing (concrete cases and scenarios)

Assessment of achievements

- Quiz

Prerequisites

Have watched the 3 videos (MOOC) on hydrotreatment

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Introduction to the fundamentals of corrosion: definitions, morphologies, influencing factors.
Reminder on hydroprocessing units: operating principles, typologies (HDT, HDS, DHC), service conditions.
Corrosion typology: dry corrosion: HTHA, H_2S/H_2, HV sulfidation, wet sulfidation: polythionic acids, salt deposition corrosion (NH_4HS, NH_4Cl), aqueous NH_4HS corrosion, wet H_2S.
Practical case studies: implementation of proper practices in design, operation, stop/start.
Monitoring and control: daily monitoring (sampling, process parameters), adaptation of process conditions according to corrosion risks, risk anticipation in HAZOP and MOC approaches.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Operational safety tests

50207396-EN-E | E-Learning | 1 hour

This training reinforces employees' knowledge of operational security testing

Level

Knowledge

Public

- All employees

Objectives

Attendees will be able to implement the following skills:

- understand why operational safety tests are necessary
- identify systems or equipment requiring regular safety testing
- understand the fundamental principles of successful safety testing
- define the required testing frequencies and associated responsibilities

Pedagogical & technical resources

- Theoretical content illustrated by concrete examples from the field
- Practical activities promoting knowledge anchoring
- A scenario

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Understand why operational security testing is a must at sites.
Identify the safety equipment and systems concerned, in particular those related to emergency stops.
Assimilate the fundamentals to pass security tests.
Define roles and responsibilities for periodic testing.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Fire and gas systems

50211134-EN-E | E-Learning | 1 hour

This training provides learners with a fundamental understanding of the Fire & Gas safety systems used on production sites

Level

Knowledge

Public

- All employees

Objectives

Attendees will be able to implement the following skills:

- name the differenttype of Gas and Fire Detectors
- interpret the different type of theF&G detectors
- expose the principles used in Logic management forF&G system
- name the different principles and technologies used inFire Fighting

Pedagogical & technical resources

- Interactive and modular content
- Concrete scenarios to facilitate the anchoring of knowledge
- An alternation between theoretical contributions and practical applications
- Personalized support throughout the course

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Fire & Gas detectors:

- Identification of the different types of detectors.
- Technologies used (thermal, optical, catalytic, etc.).
- Areas of application and selection criteria.

Management logic and system design:

- Principles of operation of detection systems.

- Signal processing logic and alarm triggering.
- Integration into fire safety systems.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Operate a boiler

50347199_001-EN-E | E-Learning | 1 hour

This training provides an overview of boiler operating principles and typical operations

Level

Knowledge

Public

- Operators and process engineers

Objectives

Attendees will be able to implement the following skills:

- operate a boiler safely

Pedagogical & technical resources

- Process diagram studies
- Case Studies and Industry REX
- Presentation of operating procedures with field illustrations

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Fundamentals.
Safe start and stop.
Operating windows (OWL).
Essential Requirements (MSR).
Critical situations.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Risks associated with lifting and handling operations on construction sites

50372096-EN-E | E-Learning | 20 min

This e-learning module makes learners aware of the technical and safety issues related to lifting operations, particularly in offshore environments

Level

Knowledge

Public

- All personnel assigned to a project or a subsidiary project entity and anyperson required to perform risk analysis associated with construction activities:
- Project Manager, Package Manager, Construction Leader, Operation Safety Leader, QA/QC Manager/Head, Construction Superintendent, Head of PJC Entity, Head of Projects, Head of Construction

Objectives

Attendees will be able to implement the following skills:

- describe the various types of lifting operations, the associated equipment,and the risk mitigation measures to be deployed
- describe and explainthe safety rules applicable to lifting operations
- assess thecompliance of the equipment and accessories being used
- identify therisk situations during lifting operations
- implement and enforceapropriate risk mitigation measures after analysing the situation
- knowthe grounds and reasons for stopping a lifting operation

Pedagogical & technical resources

- Realistic situation
- Alternation between theoretical contributions and practical cases
- Use of visual and interactive aids

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Introduction to Lifting Operations:

- Overview of lifting activities.
- Key terminology.

Rules and Standards:

- International standards and regulations.

Lifting Operations and Load Characteristics:

- Types of loads.
- Load behaviour and constraints.

Lifting Equipment:

- Classification and operating principles.

Lifting Accessories:

- Proper use and compatibility.

Inspection and Certification:

- Inspection procedures.
- Compliance criteria.

Offshore Lifting Operations:

- Marine environment specificities.
- Risks and precautionary measures.

Personnel Transfer by Lifting:

- Safety requirements.
- Emergency stop procedures.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - the separation

50375190_001-EN-E | E-Learning | 40 min

This training allows you to discover separation in process units

Level
Knowledge

Public
- All employees

Objectives
Attendees will be able to implement the following skills:
- present the basic concepts of separation processes

Pedagogical & technical resources
Process diagram studies

Assessment of achievements
- Quiz

Prerequisites
No prerequisites are necessary to follow this course

Responsable
TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Presentation.
Overview of separation and basic concepts.
Gravity separation.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Simultaneous operations

50391555_001-EN-E | E-Learning | 1 hour 30 min

This module makes learners aware of the safety issues related to simultaneous operations (SIMOPS) on installations in production

Level

Knowledge

Public

- All personnel

Objectives

Attendees will be able to implement the following skills:

- identify and understand the risks and the specific precautions bound to the operations SIMOPS
- know and understand the instructions concerning the simultaneous operations and the co-activities
- know the internal rules for the management in safety of SIMOPS: CR EP FP 450 Drilling & production simultaneous operations : SIMOPS,bCR EP EXP 010 simultaneous Operations of production and construction, CR EP EXP 408 Simultaneous operations of subsea handling and production (SIMOPS Subsea)

Pedagogical & technical resources

- Theoretical content illustrated by concrete cases
- Explanatory animations to facilitate the understanding of the processes

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Introduction to simultaneous operations (SIMOPS): definition and context of intervention.
Study of the different types of operations:

- Well operations in production.
- Construction work on site in production, underwater handling on installation in production, other specific cases.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Scaffolding verification

50432450_001-EN-E | E-Learning | 15 min

This module makes users aware of the essential verification points before using scaffoldings, in order to guarantee the safety and compliance of the installations

Level

Knowledge

Public

- Users of scaffoldings (operators, maintenance technicians, safety staff).

Objectives

Attendees will be able to implement the following skills:

- present the key checks and points of attention to be observed before using scaffolding

Pedagogical & technical resources

- Role-playing
- Practical examples
- Visuals

Assessment of achievements

- Quiz

Prerequisites

We recommend that you first take the e-learning course "Discovering Scaffolding"

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

General presentation of the context and issues related to the use of scaffolding.
Verification points: Details of the elements to be checked before use, including technical, regulatory and safety aspects.
Summary of good practices and reminder of points of vigilance.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Hot working

50525134-EN-E | E-Learning | 30 min

This training makes it possible to raise awareness of the risks associated with hot work and to transmit to them the knowledge necessary to adopt good prevention practices

Level

Knowledge

Public

- Project Manager, Package Manager, Construction Leader
- Operation Safety Leader, QA/QC Manager, Head
- Construction Superintendent, Discipline Supervisors

Objectives

Attendees will be able to implement the following skills:

- understand the risks associated with hot work and the preventive measures to be implemented

Pedagogical & technical resources

- Active and participatory pedagogy
- Alternation between theoretical contributions and practical applications

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

General Introduction:

- Presentation of the equipment concerned: grinders, welding devices, compressed gases.

Use of grinders:

- Operating principles, associated risks, safety measures.

Welding work:

- Welding techniques, specific hazards, protective equipment.

Oxy-fuel and industrial gases:

- Gas handling, safe procedures, incident prevention.

Conclusion and quiz:

- Synthesis of learning and evaluation of knowledge.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Metallic materials and corrosion in refineries - Petrochemicals

50566970-EN-P

Face-to-face only

3 days

This training provides participants with an in-depth understanding of metallic materials and corrosion phenomena in the specific context of the refinery and petrochemical industry

Level

Knowledge

Public

- Engineer and OETAM in the fields of Operation, Maintenance, Inspection, Process, Engineering, Instrumentation, TD

Objectives

Attendees will be able to implement the following skills:

- list The essential Data on metallic materials (nature and mechanical behaviour)
- identify The basics of corrosion of metallic materials
- name The different types of corrosion

Pedagogical & technical resources

- Structured theoretical contributions to lay the scientific foundations
- Practical illustrations via concrete cases from refining and petrochemicals

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Presentation of metallic materials: comparison with other types of materials, mechanical properties and behaviour in industrial environments.
Basic principles of corrosion: mechanisms, influencing factors and typologies.
Practical applications: study of common degradations in refining and petrochemical units.
Non-destructive testing: introduction to techniques for detecting and quantifying degradation.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - OLEUM toolbox - P&ID plan - instrumentation loops

50619170_001-EN-E | E-Learning | 30 min

This training allows you to discover and analyze the representation of instrumentation loops on P&ID planes

Level

Knowledge

Public

- People interested in instrumentation, P & ID plans, HAZOP studies.

Objectives

Attendees will be able to implement the following skills:

- identify the different components of an instrumentation loop on a P&ID diagram
- use P&ID diagrams effectively as tools for HAZOP studies on sites

Pedagogical & technical resources

Analysis of plans and symbols

Assessment of achievements

- Quiz

Prerequisites

It is strongly recommended to follow the "OLEUM TOOLBOX - DiscoveringP&ID Plans" module first.
Only in French

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

A general introduction (Reminder).
A presentation of the loop elements (Measurement, processing, actuator) with the technologies used and the associated symbols.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Biological risks

50811768-EN-E | E-Learning | 30 min

This module makes it possible to raise awareness among employees of the main biological agents (parasites, fungi, bacteria, viruses), with a focus on their classification, modes of transmission and pathogenicity

Level

Knowledge

Public

- All employees

Objectives

Attendees will be able to implement the following skills:

- inform and raise awareness among employees about biological agents, their modes of transmission, and their pathogenic potential

Pedagogical & technical resources

- Theoretical contributions illustrated by concrete examples
- Visual aids (diagrams, explanatory videos)

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Classification of biological agents:

- Introduction to the broad families of biological agents and their categorization according to their nature and level of risk.

Parasites:

- Definition.
- Modes of transmission.
- Pathogenicity and examples of parasitic infections.

Mushrooms:

- Definition.
- Modes of transmission.
- Pathogenicity and health impacts.

Bacteria:

- Definition.
- Modes of transmission.
- Pathogenicity and cases of bacterial infections.

Viruses:

- Definition.
- Modes of transmission.
- Pathogenicity and examples of viral pathologies.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Legionelle risk prevention

50813625-EN-E | E-Learning | 30 min

This module aims to raise employees' awareness of the biological risks associated with legionnaires' disease, by providing them with the knowledge necessary to identify risk situations, understand the effects on health, and adopt appropriate preventive behaviours

Level

Knowledge

Public

- All employees

Objectives

Attendees will be able to implement the following skills:

- identify the risks related to legionellosis
- identify potential exposure sites for legionellosis
- adopt appropriate behavior according to the situation

Pedagogical & technical resources

- Theoretical contributions illustrated by concrete examples
- Visual aids (diagrams, photos of sites, explanatory videos)

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Definition of Legionnaires' disease:

- Nature of Legionella bacteria.
- Mechanisms of infection.

Mode of transmission & health effects:

- Routes of contamination (inhalation, aerosols).
- Symptoms and consequences on the body.

Potential Exhibition Venues:

- High-risk facilities (air conditioning systems, cooling towers, hot water networks).
- Specific areas on site.

Risk assessment:

- Identification of potential sources.
- Risk analysis and prioritization methods.

Means of prevention:

- Technical and organisational measures.
- Best practices to adopt.

Medical surveillance:

- Follow-up of exposed employees.
- Procedures in case of suspected exposure.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Lifting fundamentals - Serious Game

50828149_001-EN-E | E-Learning | 4 hours

This training course makes it possible to raise learners' awareness of the challenges and best practices of lifting operations, through an immersive and interactive approach

Level

Knowledge

Public

- Any Staff personnel who is linked directly or indirectly to liftingoperation (conception, engineering, procurement, commissioning, supervision,inspection, maintenance, production, construction, drilling, etc...)
- However, regarding RC branch: mandatory for all safety officer – each LBU may define more stringent target, depending on local context

Objectives

Attendees will be able to implement the following skills:

- be aware with the specific lifting equipment
- be aware with the load-related constraints during a lifting operation
- be aware with the physical phenomena involved in lifting
- be aware with the inspection rules before use
- be able tounderstand the criticality of a lifting operation
- be awarewith the features of a lifting procedure
- be aware with therules governing lifting
- identify the field measures thatmust be implemented
- be aware of the risks during liftingoperations
- be aware with the role of the main actors

Pedagogical & technical resources

- Interactive serious games
- Realistic situations

Assessment of achievements

- Quiz

Prerequisites

Previous completion of Lifting fundamentals

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Moving a Pipe:

- Simulation of a pipe relocation operation.
- Identification of lifting equipment.
- Load stress analysis.

Integrating a valve into a network:

- Simulation of the integration of a valve into an existing network.
- Application of inspection and procedural rules.
- Identification of risks and field measurements.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Lifting fundamentals

50828149_002-EN-E | E-Learning | 4 hours

This digital training aims to raise awareness and train employees in good lifting practices in the workplace, by providing them with the theoretical knowledge necessary to obtain the Safepass

Level

Knowledge

Public

- Any Staff personnel who is linked directly or indirectly to liftingoperation (conception, engineering, procurement, commissioning, supervision,inspection, maintenance, production, construction, drilling, etc...)
- However, regarding RC branch: mandatory for all safety officer – each LBU may define more stringent target, depending on local context

Objectives

Attendees will be able to implement the following skills:

- be aware with the specific lifting equipment
- be aware with the load-related constraints during a lifting operation
- be aware with the physical phenomena involved in lifting
- be aware with the inspection rules before use
- be aware with the regulatory inspection rules
- be able tounderstand the criticality of a lifting operation
- be awarewith the features of a lifting procedure
- be aware with therules governing lifting
- identify the field measures thatmust be implemented
- be aware of the risks during liftingoperations
- be aware with the role of the main actors

Pedagogical & technical resources

- Animated content (motion design)
- Structured and progressive e-learning modules
- Serious games

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

The challenges of lifting.
The right equipment.
Check the equipment.
Building a lifting procedure.
Lifting safely.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Train the trainer panel or (simulator)_remote

51081383_001-EN-D | Distance only | 1,5 day

This training allows you to train in the facilitation of training on simulators for console operators

Level

Knowledge

Public

- Site trainers

Objectives

Attendees will be able to implement the following skills:

- conduct training, in complete autonomy, on driving simulators using the library of existing exercises and associated documents
- connect to the simulator cloud interface and load a session on the chosen simulator
- start, stop, reload an initial condition, use the main features of the facilitator interface and navigate through the learner interface of each simulator
- use all the features of the learner interface on each simulator and use the library of exercises made available
- manage and lead a training session independently

Pedagogical & technical resources

- Practical case studies
- Interactive Educational
- Simulator exercises

Assessment of achievements

- Quiz

Prerequisites

Remote prerequisites (2 hours) integrated into the program: first steps on simulators, discovery of functionalities

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Discovery of the functionalities of 6 driving simulators called BLM = Basic Learning Model.
BLMs are:

- Oven.
- Centrifugal compressor.
- Reciprocating compressor.

- Binary distillation column.
- multi-racking distillation column.
- Control and instrumentation.

Presentation of the cloud interface of the simulation system and the 6 different simulator models.
Reminder of the 'first steps'' / Loading the BLMs.
"DYNSIM": Presentation and use of the main features of the instructor interface.
Create a malfunction.
"INTOUCH": Presentation of the learning interfaces of each BLM.
Presentation of the library of available exerciseso.
Exercises with the use of the library.
Management of a training session with the simulator.
Scenario.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Driving on a simulator

51081388-EN-P

Face-to-face only

2 days

This training allows students to develop skills in the operation of industrial units through digital simulators dedicated to training

Level

Knowledge

Public

- In-post and trainee Site Console Operators, shift supervisors, operations foremen.

Objectives

Attendees will be able to implement the following skills:

- allow the various units to operate safely and in an optimized manner with driving experts
- implement and follow the new daily instructions and driving actions included in an operational procedure
- make the settings of a unit and find the minimum and maximum flow rates
- optimize the general operation of a unit, manage malfunctions and sequences of malfunctions
- stop and start a unit

Pedagogical & technical resources

- Active and interactive pedagogy
- Case Studies
- Role-plays

Assessment of achievements

Quiz
Evaluation on pedagogical scenarios developed on simulators

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Initiation and use of simulators.
6 BLM (Basic Learning Model) simulators:

- Forced draft oven.
- Centrifugal compressor.
- Reciprocating compressor.
- Binary distillation column.

Multiple Racking Distillation Column.
Control and instrumentation.
Fundamentals of the equipment and the process treated.
Practical cases on the simulator (start, stop, normal operation, optimization, malfunction).

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Operator tour and weak signals

51105179-EN-P | Face-to-face only | 1 day

This training illustrates common best practices to be implemented in operation by operators during their routine tour of the units

Level

Knowledge

Public

- External operators with more than 3 years' experience and young switchboard operators

Objectives

Attendees will be able to implement the following skills:

- strengthen the role of the operator with regard to safety and availability objectives
- improve the efficiency of field checks, operator tours and shift changes
- develop tips for identifying weak signals on ovens and rotating machines

Pedagogical & technical resources

- Practice
- Case Studies, REX
- Simulations on an educational platform
- Interactive Educational

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Best practices.
Detection of anomalies on pumps.
Detection of anomalies on compressors.
Detection of defects on furnaces.
Rex analysis.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Process drifts and management of abnormal situations

51105181-EN-P

Face-to-face only

4 hours

This training allows you to develop a better vigilance of abnormal situations and to remedy them effectively

Level

Knowledge

Public

- Console operators with more than 3 years' experience

Objectives

Attendees will be able to implement the following skills:

- developing understanding and identifying risks
- identify the role of the operator in the application of procedures
- manage alarms and operational excellence objectives
- improve the effectiveness of interventions

Pedagogical & technical resources

- Practice
- Case Studies, REX
- Role-playing on educational platforms or simulators
- Interactive Educational

Assessment of achievements

- Quiz

Prerequisites

Have operational experience in operations or training in operational jobs

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Use of Tableau operator tools.
Write and apply operational procedures.
Describe incident strategies.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Train the trainer on operational excellence

51105185-EN-P

Face-to-face only

1 day

This training allows you to develop skills to be able to lead training courses related to the themes of operational excellence

Level

Knowledge

Public

- Site trainer or facilitator targeted for module facilitation

Objectives

Attendees will be able to implement the following skills:

- explain and facilitate the Operational Excellence modules, covering both pedagogical aspects and technical content

Pedagogical & technical resources

- Practice
- Case Studies
- Scenarios
- Interactive pedagogical to transmit good animation practices

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Learning to master the Operational Excellence modules, both on the pedagogical and technical aspects of the modules. with experimentation of practical cases and scenarios.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Operational work management

51108216-EN-P

Face-to-face only

4 hours

This training strengthens the operators' skills in the analysis of feedback (REX) related to the work, in order to improve the quality, safety and efficiency of on-site interventions

Public

- Console and outdoor operator with at least 3 years' experience

Objectives

Attendees will be able to implement the following skills:

- explain work processes and procedures
- improve the quality of advice, work permits and acceptance of work
- distinguish between good practices in the works process
- carry out constructive site audits

Pedagogical & technical resources

- Flipped pedagogy
- Interactive quizzes
- Concrete scenarios

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Analysis of REX.
Best practices in creating reviews.
Prioritization of work.
Risk analyses and creation of work authorizations.
MAD and SIOPE: analysis of REX and identification of areas for improvement.
Site audits: best practices for the acceptance of work.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Fire-fighting: Train the Trainer

51117851-EN-P | Face-to-face only | 3 days

This training allows participants to design and conduct basic firefighting training, integrating the technical, educational and safety aspects necessary for an effective first response

Level

Knowledge

Public

- Staff responsible for delivering basic firefighting training

Objectives

Attendees will be able to implement the following skills:

- develop and lead basic firefighting training
- implement teaching tools
- assess hazards to ensure the safety of trainees during practical exercises

Pedagogical & technical resources

- Alternation between theoretical contributions and practical applications
- Use of educational tools that promote involvement: active listening, questioning, reformulation
- Collaborative construction of training sequences
- Real-life situations to reinforce learning

Assessment of achievements

- Quiz

Prerequisites

General fire fighting training including handling of fire extinguishers

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Technical reminder on the use and handling of fire extinguishers.
Pedagogical contributions: definition of objectives, active listening, questioning, reformulation.
Practical exercises: Use of a fire tray. Application of safety rules, development and animation of a theoretical sequence on firefighting and nimation of a practical sequence on the handling of fire extinguishers.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Management of energy - energy efficiency

60000047-EN-E | E-Learning | 1 hour

This training allows you to define the notion of energy efficiency and the areas of optimization in the operation of process units

Level

Knowledge

Public

- Anyone working on an industrial site in both technical and support functions

Objectives

Attendees will be able to implement the following skills:

- to be able to link Total's strategy to energy management on a local level
- describe the objectives and the indicators used for improving enery consumption
- list the different areas of action of the RC branch's energy efficiency improvement plan
- recognize the main actions that contribute to the Energy Management System
- identify its missions that have an impact on the site's energy performance

act on a daily basis to help improve energy efficiency

Pedagogical & technical resources

- Case Studies and Industry REX
- Presentation of operating procedures with field illustrations

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Energy efficiency.
the Ovens.
Steam.
Processes.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Liquid hydrocarbon depots - The basics of operations

60000124-EN-E | E-Learning | 3 hours

This training course presents the fundamentals to be implemented in operation for liquid hycrocarbon deposits

Level

Knowledge

Public

- MS Branch : Operations Managers, Depot managers and deputy depot managers, Depot technicians and operators

Objectives

Attendees will be able to implement the following skills:

- guarding against the risks associated with products stored in the depots
- operate a bin according to its type (especially a bin with an internal floating screen)
- open and close a bin safely and securely
- make an effective handover
- know how to carry out measurements in order to carry out the stocktaking
- implement the right behaviour during the reception / dispatch of trucks
- know how to manage stocks
- know how to react in the event of a critical safety barrier failure
- adopt the right reflexes in terms of safety

Pedagogical & technical resources

- Case Studies and Industry REX
- Field illustrations

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Characteristics of the products stored.

Hazards and risks.
Tanks and equipment.
Loading logistics.
Opening and closing of the depot.
Metrology and gauging.
Receiving and shipping.
Inventory management.
Safety barriers.
Fire defense.
Safety and security.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - FO Movies - Field Operations tutorials

60000138-EN-E | E-Learning | 1 day

This training course illustrates common best practices to be implemented in operations through didactic videos

Level

Knowledge

Public

- Field operations personnel (technicians, engineers, managers)

Objectives

Attendees will be able to implement the following skills:

- illustrate the standards for the Field Operations in the E&P, by relying on pictures and videos taken on sites
- provide associated reference for each topic (REX, Company rules, Site procedures...)

Pedagogical & technical resources

Instructional Videos

Assessment of achievements

- No prior learning assessment

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Tutorials to show the operational best practices to implement on operating sites.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Risk prevention related to physical activities

60000291-EN-E | E-Learning | 30 min

This module makes learners aware of the risks related to their work environment and provides them with the necessary knowledge to analyse work situations, identify potential hazards and implement appropriate prevention measures

Level

Knowledge

Public

- All employees, and in particular people in charge of health

Objectives

Attendees will be able to implement the following skills:

- analyze the work situation
- identify risk situations
- implement the means of prevention adapted to risk situation

Pedagogical & technical resources

- Clear and illustrated theoretical contributions
- An approach based on the analysis of concrete situations

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Anatomy:

- Introduction to the anatomical bases relevant to understanding the impacts of occupational risks on the human body.

Risk situations:

- Identification and analysis of professional contexts likely to generate health or safety risks.

Means of prevention:

- Presentation of the tools, methods and behaviours to effectively prevent the risks identified.

Conclusion:

- Synthesis of the learnings and putting into perspective the good practices to be adopted.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - 360° Training Action - Centrifugal pumps

60000295-EN-E | E-Learning | 1 hour 15 min

This training allows you to develop knowledge about centrifugal pumps, their operation and the associated common operations

Public

- Operational staff (technician or engineer) on the field or in technical support.

Objectives

Attendees will be able to implement the following skills:

- recognize the key components of centrifugal pumps: pump, motor, mechanical seals, lubricating systems
- describe the function of each of these components and their criticality
- know the different types of centrifugal pumps and their industrial applications
- understand the operating principle of a centrifugal pump and master the concepts essential to their operation: head, performance curves, optimal point of operation, NPSH required and available
- know how to operate a centrifugal pump safely; pre-start checks, start-up steps, follow-up of equipment in the normal operating phase (routine actions), equipment shutdown
- explain common problems potentially encountered in operation, characterize them, and describe the corrective actions to implement: cavitation, rotating in the wrong direction, performance losses, mechanical problems
- understand the principles and know how to implement a pump change-over operation

Pedagogical & technical resources

- Case Studies and Industry REX
- Interactive pedagogy
- Immersive session with 360° images

Assessment of achievements

- Entry and exit quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Positioning at the entrance of the course.
Technical knowledge of equipment in their industrial environment.
Operational practices in operation.
How to implement a pump swapping operation in an industrial environment?

Evaluation.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Raising awareness of operators (Upstream) to reduce their carbon footprint

61234625-EN-E | E-Learning | 45 min

This training makes it possible to make farmers aware of their carbon footprint and to propose areas for optimization in their daily practices

Level

Knowledge

Public

- E&P Branch, field operators in a broad sense
- Operational staff of all levels
- Support staff at all levels in subsidiaries and at headquarters
- Supervision, Management

Objectives

Attendees will be able to implement the following skills:

- embed objectives for emission reduction and control
- identify action levers
- understand that everyone plays a role in reducing emissions
- convince operational teams of the need to strictly comply with the rules (flaring policy, etc.) defined by the affiliate
- support the implementation of a rigorous and accurate energy management system
- fully leverage information from the Business and Environment GM

Pedagogical & technical resources

- Case Studies and Industry REX
- Presentation of operating procedures with field illustrations

Assessment of achievements

- Quiz

Prerequisites

To have completed the other corporate and branch training courses on the subject

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Climate issues.

laurent.stephane@totalenergies.com

Carbon Footprint:

- Identify levers for action on sites and in PE studies.
- Study real cases.

Feedback and resources.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Road transport of LNG

61234901-EN-D | Distance only | 2 days

This training allows participants to master the fundamentals of LNG and adopt safe and compliant behaviours in the context of road transport of this hazardous material

Level

Knowledge

Public

- Logistics managers, sales representatives, carriers, LNG supply chain actors

Objectives

Attendees will be able to implement the following skills:

- name the main characteristics of the product
- identify the technical specifications of LNG tanks and trucks
- explain the risks associated with LNG transport, loading and unloading
- apply safety rules
- react and take action in the event of a problem

Pedagogical & technical resources

- Active pedagogy
- Case studies
- REX analysis

Assessment of achievements

- Participants will be evaluated throughout the training through quizzes and exercises

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Introduction to LNG:

- Origins and composition.
- Physicochemical properties.

Risks and security:

- Transportation hazards.
- Current regulations.

- TotalEnergies requirements.

Road transport:

- Technical specifications of tanks and trucks.
- Loading and unloading procedures.

Emergency Management:

- Reactions in the event of a problem.
- Implementation of emergency procedures.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Animated REX - Incidents and best practices in 3 minutes

61235895-EN-E | E-Learning | 1 hour

This training allows you to review real incident cases that have occurred on industrial units and to deduce the associated lessons and good practices

Level

Knowledge

Public

- Field operations personnel (operators, technicians, engineers, managers)

Objectives

By the end of the training, participants will be able to:

- share feedback and best practices, and recall the applicable rules and procedures

Pedagogical & technical resources

- Case Studies and Industry REX
- Visual pedagogy with the help of videos

Assessment of achievements

- No prior learning assessment

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Discover events related to Safety or Availability.
Their actual or potential consequences.
The best operational practices to be implemented on operating sites.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - SOP Safe Operation Principles

61236180-EN-E | E-Learning | 1 hour

This training course allows you to discover the principles to be followed in operation for better leak control on industrial units

Level

Knowledge

Public

- All operational staff

Objectives

Attendees will be able to implement the following skills:

- know how to implement each of the principles in a practical way on your site
- become aware of the risks of leakage from seemingly innocuous situations
- look for and identify risk situations related to the Safe Principles of Operations
- assess and/or appreciate the risk associated with any situation encountered
- define the most appropriate corrective action for each situation (alert, correct on site, postpone etc.)

Pedagogical & technical resources

- Case Studies and Industry REX
- Visual pedagogy with the help of photos and videos on real units

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

The main causes of Tier1&2 external leaks related to equipment failures: corrosion; Flange or mechanical seal leakage or human failures mainly related to our daily operations: MAD, open bleeding, start-up.
Basic operational principles.
9 principles to follow scrupulously in operation to reduce the risk of leaks.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - 360° Pathway - Reciprocating Compressor

61236379-EN-E | E-Learning | 1 hour

This training allows you to develop knowledge about reciprocating compressors, their operation and the current operations associated with them

Level

Knowledge

Public

- Operational staff or technical support (technician or engineer) on the field or in technical support

Objectives

Attendees will be able to implement the following skills:

- recognize the key components of reciprocating compressors: compressor, motor, coupling, seals and lubrication system
- describe the function of each of these components and their criticality
- know the different types of reciprocating compressors and master the essential concepts for their operation
- know how to safely operate a reciprocating compressor
- understand the importance of monitoring auxiliaries (oil circuits, valves)
- know how to operate safely a reciprocating compressor: pre-start checks, the follow-up in the functional phase, equipment shutdown
- know the main risks, explain the common problems potentially encountered in operation phase, list the corrective actions to implement
- know the key points to check during an operator tour

Pedagogical & technical resources

- Case Studies and Industry REX
- Interactive pedagogy
- Immersive session with 360° images

Assessment of achievements

- Entry and exit quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Positioning at the entrance of the course.
Technical knowledge of reciprocating compressors.
Operational practices in operation.
Operator tour of the equipment.
Evaluation.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - 360° Pathway - LPG centrifugal Pumps

61236952-EN-E | E-Learning | 1 hour

This training allows students to develop knowledge of Liquefied Petroleum Gas centrifugal pumps, their operation and the current operations associated with them

Level

Knowledge

Public

- Operational staff or technical support (technician or engineer) on the field or in technical support

Objectives

Attendees will be able to implement the following skills:

- understand the particularities of LPG pumps and their operations
- know how to operate a LPG centrifugal pump safely; pre-start checks, start-up steps, follow-up of equipment in the normal operating phase (routine actions), equipment shutdown
- explain common problems potentially encountered in operation

Pedagogical & technical resources

- Case Studies and Industry REX
- Interactive pedagogy
- Immersive session with 360° images

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Technical knowledge of the equipment in their industrial environment.
Operational practice in operation.
Final evaluation quiz.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - 360° Pathway - Hot centrifugal Pumps

61236953-EN-E | E-Learning | 1 hour

This training allows you to develop knowledge about hot pumps, their operation and the associated common operations

Public

- Operational staff (technician or engineer) on the field or in technical support.

Objectives

Attendees will be able to implement the following skills:

- understand the particularities of hot pumps and their operations
- know how to operate a hot centrifugal pump safely; pre-start checks, start-up steps, follow-up of equipment in the normal operating phase (routine actions), equipment shutdown
- explain common problems potentially encountered in operation

Pedagogical & technical resources

- Case Studies and Industry REX
- Interactive pedagogy
- Immersive session with 360° images

Assessment of achievements

- Quiz

Prerequisites

Followed eLearning "360° Training Action - Centrifugal pumps"

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Technical knowledge of the equipment in their industrial environment.
Operational practice in operation.
Final evaluation quiz.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - 360° Pathway - Centrifugal Compressor

61236954-EN-E | E-Learning | 1 hour

This training allows students to develop knowledge of centrifugal compressors, their operation and the associated common operations

Level

Knowledge

Public

- Operational staff or technical support (technician or engineer) on the field or in technical support

Objectives

Attendees will be able to implement the following skills:

- recognize the key components of centrifugal compressors: compressor, motor, coupling, seals and lubrication system
- describe the function of each of these components and their criticality
- know the different types of centrifugal compressors and master the essential concepts for their operation
- know how to safely operate a centrifugal compressor
- understand the importance of monitoring auxiliaries (oil circuits, valves)
- know how to operate safely a centrifugal compressor: pre-start checks, the follow-up in the functional phase, equipment shutdown
- know the main risks, explain the common problems potentially encountered in operation phase, list the corrective actions to implement
- know the key points to check during an operator tour

Pedagogical & technical resources

- Case Studies and Industry REX
- Interactive pedagogy
- Immersive session with 360° images

Assessment of achievements

- Entry and exit quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Positioning at the entrance to the course.
Technical knowledge of centrifugal compressors.
Operational practices in operation.
Operator tour of the equipment.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - 360° Pathway - Exchangers

61236955-EN-E | E-Learning | 1 hour

This training allows you to develop knowledge about exchangers, their operation and the current operations associated with them

Level

Knowledge

Public

- Operational staff or technical support (technician or engineer) on the field or in technical support

Objectives

Attendees will be able to implement the following skills:

- recognize the key components of exchangers: tubes, shell
- know the different types of exchangers and master the essential concepts for their operation
- know how to safely operate an exchanger
- know how to operate safely an exchanger: pre-start checks, the follow-up in the functional phase, equipment shutdown
- know the main risks, explain the common problems potentially encountered in operation phase, list the corrective actions to implement
- know the key points to check during an operator tour

Pedagogical & technical resources

- Case Studies and Industry REX
- Interactive pedagogy
- Immersive session with 360° images

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Technical knowledge of the equipment in their industrial environment.
Operational practice in operation.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Confined Space Supervisor

61237651-EN-P | Face-to-face only | 4 hours

This training allows participants to work safely in confined spaces

Level

Knowledge

Public

- All employees designated to supervise access to a confined space

Objectives

Attendees will be able to implement the following skills:

- obtain the qualification of confined space supervisor
- identify and understand the different types of confined spaces
- identify hazards and risks in confined spaces
- assume the role of capacity supervisor
- implement the means of intervention and rescue procedures

Pedagogical & technical resources

- Theoretical contributions in the classroom to frame regulatory and technical issues
- Practical scenarios to promote the appropriation of safety gestures and reflexes

Assessment of achievements

- Quiz

Prerequisites

Reinforced medical aptitude to intervene in confined spaces "claustrophobia" (wearing emergency breathing apparatus, wearing harness)

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Confined space risks and understanding specific hazards.
Knowledge of confined space types and regulatory requirements.
Implementation of the intervention and rescue operating procedure, including: control of the atmosphere verification of preventive measures before access, use of specific equipment: rescue tray, fall arrester, spillway, jib crane, winches, SCBA, atmosphere detectors.
Practical accident simulation workshop to apply rescue procedures.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Animated REX - Incidents and best practices in 3 minutes-suite

61238909_001-EN-E | E-Learning | 15 min

This training helps to strengthen the safety culture on the operating sites by relying on concrete feedback and proven operational practices

Level

Knowledge

Public

- Field operations personnel (operators, technicians, engineers, managers)

Objectives

Attendees will be able to implement the following skills:

- share feedback and lessons learned, as well as best practices
- recall and apply the relevant rules and procedures

Pedagogical & technical resources

- Motion design videos to illustrate incidents
- Immersive and visual approach to facilitate memorization
- Realistic context of the situations encountered in the field
- Transmission of knowledge via short and impactful formats

Assessment of achievements

- Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Exploration of feedback (REX) of incidents related to security and availability.
Analysis of the actual or potential consequences of incidents on operating sites.
Presentation of the best operational practices to be implemented.
Reminder of the rules and procedures applicable in the environments concerned.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Port of the ARI - train the trainer

7602-EN-P | Face-to-face only | 4 days

This training allows participants to safely design and facilitate a training session on the wearing of self-contained breathing apparatus (SCBA), mastering both the technical, pedagogical and safety aspects

Level

Knowledge

Public

- Staff in the company to lead training sessions on wearing an open circuit self-contained breathing apparatus (ARICO)

Objectives

Attendees will be able to implement the following skills:

- design, prepare and evaluate training to wear breathing apparatus
- know how to use the traditional teaching aids of the training
- ensure the safety of trainees during practical exercises
- understand the maintenance Isof breathing apparatus

Pedagogical & technical resources

- Basics of Communication in Training
- construction of a pedagogical sequence
- Use of appropriate educational tools

Assessment of achievements

- Quiz

Prerequisites

Have a good level of general culture and the ability to communicate in a group.
Have a theoretical and practical knowledge of wearing the BA (or have followed the courses referenced CM ARI, ARI 11, EISARI or LCF 2)

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Theoretical part:

- Physiological notions related to the use of the SCBA.
- Review of the technical operation of the devices.
- Engagement under SCBA: principles and precautions.

Practical part:

- Preparation of a training action.
- Implementation of a training session including the use of the ARI.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - Safety in laboratory activities

787-EN-P | Face-to-face only | 2 days

This training makes it possible to raise awareness and equip professionals working in laboratories so that they can identify, prevent and effectively manage risks related to their work environment

Level

Knowledge

Public

- Engineers and technicians in control laboratories, research and development, beginners or confirmed

Objectives

Attendees will be able to implement the following skills:

- adapt their behaviour
- identify the risks associated with laboratory activities
- discern the dangers due to habits and correct risky behaviour
- use equipment and products correctly, in particular by consulting toxicological data sheets before any work
- participate in the analysis of critical tasks in a laboratory

Pedagogical & technical resources

- Active and interactive pedagogy
- Alternation between theoretical contributions and practical applications

Assessment of achievements

- Quiz

Prerequisites

At least a few months' experience of working in a laboratory

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Analysis of real incidents and accidents to illustrate concrete risks.
Hazard assessment and appropriate protective measures.
The correct use of equipment and products, with consultation of toxicological data sheets.
The application of security procedures and the use of specialized services (security, medical).
The discovery of the CLP regulation from the GHS.
The design and layout of laboratories.
Product and inventory management.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

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Training - Safety and availability in operation

8503-EN-P | Face-to-face only | 3 days

This training provides training to strengthen practices aimed at improving availability and safety in operations

Level

Knowledge

Public

- Supervision of the RC in charge of or in close connection with the operation of oil units.
- Senior operator called upon to hold a supervisory or coordinating position in operations. Operator or chief operator seconded to prepare major shutdowns. Experienced field operator

Objectives

Attendees will be able to implement the following skills:

- list the company rules in relation to the missions of the operation
- developing The culture of availability
- cross-functional sharing of feedback and good practice across departments and sites

Pedagogical & technical resources

- Practice
- Scenarios
- Interactive Educational

Assessment of achievements

- Quiz

Prerequisites

Have basic knowledge of petroleum unit operations, the work permit process and petroleum products

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Safety: measuring the impact of the human factor risk in operating operations, carrying out the various decommissioning and operating operations in compliance with best practices.
Availability: analyse the various elements contributing to availability and know how to use the appropriate tools, link the missions and objectives of each person with the availability progress plan, manage the impact of the work process on availability.

Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

Training - HUET - Helicopter underwater escape

8943-EN-P | Face-to-face only | 1 day

This training aims to prepare professionals in the offshore oil and gas industry to intervene safely during helicopter travel to and from facilities and vessels

Level

Knowledge

Public

- Anyone working in the offshore oil and gas industry

Objectives

Attendees will be able to implement the following skills:

- use the required safety equipment
- follow safety procedures
- escaping from a helicopter after a water landing

Pedagogical & technical resources

- Targeted theoretical contributions
- Hands-on experimentation
- Individual and collective involvement

Assessment of achievements

- Quiz

Prerequisites

Possess a valid offshore medical certificate or a medical certificate approved by the employing company equivalent to an offshore medical certificate. If you do not have a medical certificate, you must undergo a medical check-up by completing an appropriate medical check-up form provided by the OPITO approved centre
For training at a UK centre: have a valid and unexpired Offshore Oil and Gas UK (OGUK) medical certificate and have a certificate of fitness to undertake CA-EBS shallow water training issued by an OGUK approved medical examiner

Responsable

TotalEnergies Learning Solutions trainer, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

DESCRIPTION

Theoretical contributions on safety procedures before and during the helicopter flight.
Handling of required safety equipment, such as compressed air emergency breathing systems.
Practical scenarios in a simulated environment, including the evacuation of a helicopter after a ditching.
Case studies and intervention scenarios to strengthen reflexes in emergency situations.

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Please contact our disabled persons referent to check the accessibility of this training program: digital.accessibility@totalenergies.com.

IFP Training

This training course is offered under the **Alliance4Training** brand

Training - Operation of a Chemical Production Unit

CRC-EN-P | Face-to-face only | 4 days

This training provides greater autonomy in the operation and optimization of the unit

Level

Skilled

Public

Site operating personnel involved in the operation of the unit(s) to be studied in more detail: chemical, petrochemical or refining industry: field operators, console operators, chief operators, as well as technician

Objectives

Attendees will be able to implement the following skills:

- Explain the characteristics of the chemical transformation(s) and separations implemented and the associated operational requirements
- list the operating parameters, the role of the control loops and the process control elements implemented
- detect the cause of the main malfunctions and know the appropriate corrective measures

Pedagogical & technical resources

- The program and content are adjusted according to the types of processes implemented on the site, under cover of a confidentiality agreement if necessary
- Content and case studies are applied to site units
- Numerous references on sites with very varied characteristics

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites

No prerequisites are necessary to follow this course

Responsable

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

MAIN SECTIONS OF THE UNIT — 0.25 day

General diagram of the unit and detail of the reaction zone.
Main operating conditions: temperatures, pressures, flow rates; control.

CHEMICAL TRANSFORMATIONS — 0.5 day

Composition of the feedstock and the reaction effluent - Nature of the feed and characteristics of the products.
Nature and characteristics of the reactions carried out: thermal effect, complete or balanced, catalyzed or not.
Nature of the catalyst (if relevant): mode of action, impact of poisons, causes of aging, etc.
Operating parameters: temperature, pressure, proportion of reactants.
Potential influence of operating conditions on the conversion rate, reaction rate, yield of undesirable products, etc.

EQUIPMENT & MATERIALS USED — 0.5 day

Reactors: type (plug flow, mixed), internal (nature of the wall, arrangement of the catalyst, agitators), associated materials and thermal fluids,
Separation equipment: distillation, filtration, etc.
Specific instrumentation, control and automation implemented, safety equipment (valves, rupture discs, inhibitor injection system, etc.°;

ANALYSIS OF OPERATING CONDITIONS — 1 day

Material balance - Thermal balance.
Influence of operating conditions: temperature, pressure, flow rate, etc. in an operating situation.
Conversion rates, selectivity and yield observed.
Reaction cycle: duration, evolution of parameters during the period. Operating constraints (catalyst aging, nature of effluents, variation in feed quality, etc.).
Operating conditions and parameters for the fractionation and downstream purification process.

UNIT OPERATION AND INCIDENTS — 0.75 day

Operation tuning case studies
Nature and origin of potential malfunctions: contamination of the feed, runaway, etc.
Safety Instrumented Systems.
Safety procedures. Consequences.

To French entities : IFP Training is referenced to DataDock ; you may contact your OPCO about potential funding.
Please contact our disabled persons referent to check the accessibility of this training program : referent.handicap@ifptraining.com

Training - Environmental Management

ENVMGT-EN-P | Face-to-face only | 5 days

This course provides a thorough and applied knowledge of best industry standards and practices for appraising environmental matters throughout the life cycle of a field development, to implement the management of impact and risks throughout the life cycle of a project from exploration up to abandonment

Level

Knowledge

Public

Managers, advisors, engineers, and operations staff involved in management of environmental issues all along the lifetime of a field development

Objectives

Attendees will be able to implement the following skills:

- Explain the fundamentals of environmental management in terms of risks and impacts
- Describe techniques, fundamentals and contents of environmental impact assessments
- Identify mitigation measures
- Select key performance indicators, and set up environmental management plans
- Explain the content of an oil spill contingency plan

Pedagogical & technical resources

- Several applications and illustrations
- Several case studies and teamwork sessions

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites

No prerequisites are necessary to follow this course

Responsable

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

FUNDAMENTALS OF ENVIRONMENTAL MANAGEMENT — 0.5 day

Why environmental management is necessary. Concept of sustainability.
Definitions: environmental impact, significance, accidental vs. operational discharges, discharge and pollution.
Legal standards: definition, standard determination. Best available technology. Best environmental practices.

Environmental Quality Standards (EQS), discharge standards - Regional, international, conventions.
Introduction to social management.

ENVIRONMENTAL, SOCIAL & HEALTH IMPACT ASSESSMENT — 1 day

Risk assessment: concept of hazards, risks, hazard identification and risk assessment process.
Impact assessment throughout the lifecycle of the project.
Aspect and potential impact identification.
Sources of environmental information.
Impacts on atmosphere: air pollution, GHG emissions.
Impacts on aquatic resources: water pollution and water availability.
Impacts on land resources: ground pollution and land use.
Impacts on biodiversity.
Socio-economic and cultural impact.

ENVIRONMENTAL MANAGEMENT PLAN — 0.75 day

Concept and elements.
Control measures to reduce air emissions.
Control measures to reduce water consumption and water pollution.
Control measures to reduce land pollution and use.

MONITORING & REPORTING — 0.5 day

Key performance indicators, Industry performance - Trends.
Environmental monitoring and surveillance.
Green house gases estimation and reporting.

WASTE MANAGEMENT PLAN — 0.5 day

Strategy - Type of waste.
Waste collection.
Transport and storages (primary, final...).
Treatments options (biological, thermal desorption).

MANAGEMENT OF ENVIRONMENTAL EMERGENCIES — 0.75 day

Identification of spill scenarios.
Oil spill contingency planning strategies: onshore and offshore cases.
Typical resources for oil spill contingency plans.

STAKEHOLDERS ENGAGEMENT — 0.25 day

Stakeholders identification.
Engagement and information process.
Stakeholders engagement plan review.

ENVIRONMENTAL MANAGEMENT SYSTEM — 0.5 day

Elements of environmental management systems.
Referentials and certification. ISO 14001.
EMS as part of integrated management systems.
Environmental culture and leadership in the organization.

ENERGY MANAGEMENT — 0.25 day

Introduction to energy sources.
Energy efficiency. Measures for improvement.

Sessions

Pau - From 11/02/2026 to 11/06/2026 **4360 €/HT**

To French entities : IFP Training is referenced to DataDock ; you may contact your OPCO about potential funding.
Please contact our disabled persons referent to check the accessibility of this training program : referent.handicap@ifptraining.com

Training - Environmental and Social Risk Management

ENVSOC-EN-P | Face-to-face only | 5 days

This course provides a thorough and applied knowledge of best industry standards and practices for appraising environmental and social matters that need to be handled cautiously throughout the life cycle of an upstream project, from design to construction and operation of Oil & Gas processing facilities

Level

Knowledge

Public

Managers, advisors, engineers and operations staff involved in oversight or management of environmental and social issues all along the lifetime of an upstream project

Objectives

Attendees will be able to implement the following skills:

- Understand the global prevailing context for the Oil & Gas industry
- Grasp legal requirements and standards with respect to impact on local environment and populations
- Understand techniques and contents of environmental and social impact assessments
- Identify mitigation measures, perform stakeholders' mapping and build public consultation and disclosure plans
- Select key performance indicators, and set up monitoring with environmental and social management plans

Pedagogical & technical resources

- Several applications and illustrations
- Several case studies and teamwork sessions

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites

No prerequisites are necessary to follow this course

Responsable

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

ENVIRONMENTAL ISSUES RELATED TO E&P ACTIVITIES — 0.25 day

Historical overview of impact awareness, management.
Definitions: environmental impact, significance, accidental vs. operational discharges, discharge and pollution.

THE STAKES — 0.75 day

Environmental issues: local, regional, global.
Air, water (availability, pollution), biodiversity, wastes.
Kyoto protocol, carbon dioxide accounting, cap and trade, clean development mechanisms.
Toxicity, ecotoxicity.

ENVIRONMENTAL RISK ASSESSMENT (ERA), LEGAL REQUIREMENTS/LEGAL STANDARDS: NATIONAL, REGIONAL, INTERNATIONAL — 0.25 day

Environmental Risk Assessment (ERA).
Legal standards: definition, standard determination, best available technology, best environmental practices.
Environmental Quality Standards (EQS), discharge standards - Regional, international, conventions.

ENVIRONMENTAL IMPACT ASSESSMENT - PROJECTS — 0.5 day

Environmental impact assessment activities throughout the life cycle of a field, tools used for impact prediction.
The EIA process, scoping an EIA, ENVID (Environmental Hazard Identification), environmental management plan. Case study.

ENVIRONMENTAL RISK MANAGEMENT - PRODUCTION ACTIVITIES — 0.5 day

HSE MS - EMS (ISO 14001), continuous improvement processes.
Key environmental procedures: wastes management, chemical management, monitoring.
Oil spill contingency planning.

MONITORING & REPORTING — 0.5 day

Key performance indicators, industry performance - Trends.
Environmental monitoring & surveillance.
Green house gases estimation and reporting.

ENVIRONMENTAL RISK MANAGEMENT - ABANDONMENT — 0.25 day

SOCIAL ISSUES RELATED TO E&P ACTIVITIES: THE RISKS, THE STAKES & THE STRATEGIES — 0.5 day

The risks and the stakes. Some high profile cases (human rights, NGOs activism, etc.).
Documentary viewing and discussion on social risks in E&P activities.
How to change practices and image?

PARTICIPATIVE SOCIAL IMPACT ASSESSMENT AS A RISK MANAGEMENT TOOL — 0.5 day

Participative social impact assessment: definition, business case and standards, process.
Social management plans and monitoring. Focus on special topics: involuntary resettlement, local communities, business in conflict zones.

STAKEHOLDER ENGAGEMENT — 0.5 day

Stakeholder engagement: definition and business case.
Public consultation and disclosure plan (steps and techniques).
Stakeholder mapping.
Stakeholder engagement: misguiding assumptions and key success drivers.

CASE STUDY: SOCIAL SCREENING OF AN OIL & GAS PROJECT — 0.5 day

Based on a group work, participants should prepare a:

- Stakeholder mapping.
- Social impacts identification and mitigation plan.

To French entities : IFP Training is referenced to DataDock ; you may contact your OPCO about potential funding.
Please contact our disabled persons referent to check the accessibility of this training program : referent.handicap@ifptraining.com

Training - Polymers Extrusion and Pelletizing

EXTRU-EN-P | **Face-to-face only** | **3 days**

This course provides a better knowledge of the equipment and physical phenomena used in the extrusion and granulation of polymers, and a better understanding of the operating rules

Level

Skilled

Public

- Operating staff in charge of the operation of extruders; pelletizers and ancillary equipment
- Technical staff involved in the operation or maintenance of this kind of facilities

Objectives

Attendees will be able to implement the following skills:

- Describe the phenomena involved in an extruder
- Explain settings
- Assign the role of safety and automation

Pedagogical & technical resources

- The content may be customized for a particular type of machine or for products if information is provided in advance
- Otherwise, standard products are covered: PolyEthylene, PolyPropylene. It can be implemented on specialties polymers and compounds
- Case studies based on industrial cases

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites

No prerequisites are necessary to follow this course

Responsable

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

EXTRUSION OF THERMOPLASTIC - PROCESS DESCRIPTION — 0.25 day

Aim of the extrusion, general layout description and the various steps of the polymer treatment.
Operating principle of raw material feeding system.

Operating principle and different cross section areas: feeding system, filling, melting, degassing, compression, transport, pelletization.
Different types of screws, advantages and drawbacks.
Different types of extruders: single screw, counter-rotating or co-rotative twin screw, BUSS type mixers, advantages and drawbacks.
Operating principle of pellets conveying.

TECHNOLOGY & OPERATION OF EXTRUDERS 1.5 days

Drive: motors and starters, variable speed drives, gearboxes, loads, overload safety devices, structure of the thrust bearings, auxiliaries..
Extruder: feeding systems, blockage prevention; different section of screw and barrel, adjusting the temperature; starting diverter valve and start-up operation; fouling filters monitoring and filter changing device, the die plate: technology, different heating systems, pressure monitoring, calculating the percentage of blocked holes, risk of damage. The pelletizer, different cutting systems, calculation and adjustment of knifes speed, water flow, water temperature, monitoring of pellets size/shape.
Principle of heat exchange in the die plate and temperature control.

AUTOMATION & SAFETY 0.25 day

Review of the machine safety principles (flow charts, logic diagrams).

PRODUCT QUALITY 0.25 day

Different grades manufactured; specifications in relation to the applications.
Laboratory tests: equipment procedures, visualization of various types of defects.

INFLUENCE OF OPERATING PARAMETERS 0.75 day

Fluidity, viscosity: dynamic viscosity, definition, effect of shear rate, kinematic viscosity, melt index (MI), testing conditions, temperature effect.
Consequences: control of the temperature as a function of the polymer grade and feedrate.
Required power: the influence of the feedrate, the MI and temperature: guidelines.
Equipment reliability.
Application: troubleshooting, solutions, items to be checked.

To French entities : IFP Training is referenced to DataDock ; you may contact your OPCO about potential funding.
Please contact our disabled persons referent to check the accessibility of this training program : referent.handicap@ifptraining.com

Training - M&A in the Energy World

FAE-EN-P | Face-to-face only | 2 days

Current developments in the energy sector are expected to lead to a new wave of mergers and acquisitions (M&A). Traditional Oil & Gas players will have to adapt (or continue to adapt for the most advanced) their business portfolio to the energy transition, and also to meet the challenges of the recent health crisis. The growth of Renewable Energy could also lead to consolidation amongst the first entrants as the sector matures. The objective of this training is to enable participants to successfully manage their acquisition operations and/or asset sales so that they can best position themselves for the future

Level

Knowledge

Public

Oil & Gas, Renewables companies' commercial, technical, financial managers and support functions staff involved in external growth operations. Public administration decision makers and personnel (industry, finance, energy, environment)

Objectives

Attendees will be able to implement the following skills:

- Lead/contribute to an M&A project through a structured process
- Evaluate assets to buy or sell using different methods (e.g.: multiples, discounted cash flows)

Pedagogical & technical resources

- Exercises
- Analysis of recent transactions
- Case studies: setting the maximum purchase price
- Case study: Critical review of a sale and purchase contract clauses
- Quiz

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites

No prerequisites are necessary to follow this course

Responsable

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

KEY STEPS & RISKS OF M&A TRANSACTIONS — 0.2 day

The various types of transactions: assets/equity.
The main stages of an acquisition/divestment project.
M&A transactions risks: key success factors.
Key participants in the process.

DETERMINING THE PURCHASE/SALE PRICE — 1 day

The different valuation methods: multiples (comparable transactions, EBITDA, PER), discounted cash flows.
Discounted cash flow method and analysis criteria refresher (NPV, IRR, Payback time). Calculating the residual value/terminal value.
Defining the maximum purchase price (or minimum sale price) taking into account synergies/di-synergies and risks.
Price adjustment options to manage uncertainties/close valuation gaps between buyer and seller.
Taking into account debt.

DUE DILIGENCE & DEAL STRUCTURING — 0.4 day

Preparing an information memorandum.
Risk management. The due diligence process and datarooms.
Choosing the legal and tax structure of the transaction.
Assessing the impact of competition laws.

NEGOTIATIONS & KEY CLAUSES OF SALE & PURCHASE AGREEMENTS — 0.4 day

Pros and cons of the various sale methods: auctions, negotiations.
Counterparties' assessment.
Conditions/ precedents.
Commitments and guarantees.
Completion adjustments.

Sessions

Rueil-Malmaison - From 09/08/2026 to 09/09/2026 — **1980 €/HT**

To French entities : IFP Training is referenced to DataDock ; you may contact your OPCO about potential funding.
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This training course is offered under the **Alliance4Training** brand

Training - Downstream Panel Operator

FBMOC-EN-P | **Face-to-face only** | **35 days**

This course makes possible a rapid mastery of panelist skills. The facilities are optimized and operated in a pro-active way Successful participants will be granted the “Panel Operator” IFP Training Certificate

Level

Knowledge

Public

Experienced field operators moving to panel operator positions in refining and petrochemical plants

Objectives

Attendees will be able to implement the following skills:

- Specify the elements of communication that allow you to work effectively in a team
- Explain the process studied
- Identify risks to equipment
- List unit settings to optimize production and product quality
- Identify possible causes of process disruption
- Specify the points to be taken into account in order to prepare, start and stop a unit

Pedagogical & technical resources

- Case studies and applications on generic dynamic simulators: 80% of the time spent in the training center
- Reminding of necessary theoretical and technical fundamentals directly through simulator handlings
- Training involves on-site work and supervision from mentors in the plant
- Permanent interactive delivery method
- Some pedagogical activities of this course can take place in OLEUM's facilities (subject to availability)

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners’ understanding and assimilation of the knowledge linked to the training objectives

Prerequisites

No prerequisites are necessary to follow this course

Responsable

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

WELCOME (IF IN OLEUM FACILITIES)

- Welcome/safety. PPE distribution. Presentation of the training.

PANEL OPERATOR DUTIES & CONTROL ROOM ACTIVITIES — 2 days

Panel operator role within the operation team; control room staff. Reporting and handover duties.
Plant documentation: inventory, content, usage, role and duties of the panel operator.

BASIC PROFESSIONAL TRAINING — 2 days

Notions of industrial chemistry. Fluid mechanics: pressure, flowrates, fluid flow, pressure drops.
Heat exchange: exchange mechanisms, resistance to heat transfer.
Liquid-vapor equilibrium of pure substances and mixtures.
Simulators: impact of operating parameters on the chemical reaction performances, heat exchanges through various types of heat exchangers, separation in a flash drum.

PROCESS CONTROL, AUTOMATION & DCS USAGE — 6 days

Process control:

- Constitution of a control loop, symbols used. Sensors and transmitters. Control valves.
- Controllers operating principles, inputs/outputs, internal parameters and tuning.
- Complex control loops (cascade, split range, multiple calculation blocks). Advanced control basics.
- Simulators: Valves characteristic curves. PID parameters tuning. Heat exchanger duty control. Split range configuration. Behavior analysis of complex control loops.

Distributed Control System (DCS):

- Architecture and system components. Man - Machine Interface (MMI). Trends tools. Information flux between site and control room.

Automation:

- Safety instrumented systems: PSS, ESD, HIPPS, EDP; architecture and relationship with DCS. Safety logics and cause & effect matrix.
- PLCs and automation: grafcet analysis, study of specific sequences.
- Simulators: furnace safety logics.

EQUIPMENT OPERATION — 8 days

For each: working principles, technology, ancillary systems, process control scheme monitoring, operation, alarms, safety devices.
Pumps, compressors, drivers:

- Simulators: filters switch, operation of pumps; changes in operating conditions, capacity control of compressors, troubleshooting of a compressor; start-up of a steam turbine driven centrifugal compressor.

Thermal equipment: heat exchangers, air coolers, furnaces, boilers:

- Simulators: fouling of a heat exchanger; changing fuel supplied to burners, coil fouling, start-up and shutdown of a furnace.

Specific equipment for a given assignment unit (gas turbines, solid handling, extruders...).

PRODUCTS & PROCESSES — 8 days

Composition and physico-chemical properties of feeds and products.
Commercial product quality requirements, specification and standard tests. Mixing rules.
Process units: role, principles, main equipment, specific hazards. Influence of the main operating parameters on the operation, consequences on process and products. Material balance.
Distillation, absorption, stripping.
Utilities: flare systems, air production, effluent treatment units, steam, water treatments...:

- Simulators: start-up and shutdown, operation and control of various process units (for instance: two-product distillation columns, multi draw-off distillation column, amine absorption and regeneration, sulfur recovery unit, hydrotreatment unit).

INTEGRATED PLANT SAFE OPERATION — 6 days

Panel operator safe behavior:

- Radio communication, other communication equipment. Teamwork, responsibility sharing. Transmission of know-how.
- Alertness, forward thinking plant operation. Alarm management.
- Application: role plays using the simulators (with panel operator views and FODs).

HSE in operation:

- Product, equipment and process-related risks; prevention and protection.
- Risks related to operation of equipment, to decommissioning-commissioning and start-up of equipment, specific prevention measures.
- Routine operations. Permit to work, work order, consignations and isolations.
- Special operations: SIMOPS, black start. Emergency operation and crisis management.
- Impact of plant operation on gas release into the atmosphere and on the wastewater treatment unit; minimization of releases.

Integrated plant operation:

- Steady state runs: routine checks, operating windows, integrated plant behavior (inertia, interferences).
- Global performances, margin optimization/impact of quality gaps.
- Identification, analysis and reaction to upsets and equipment failures; stabilization.

Simulators: field round on a running process unit; commissioning, start-up and shutdown procedures, justifications of different steps; inhibition management; operations in downgraded situations; practice of emergency operations.

ASSESSMENT — 3 days

Continuous assessment (including practical exercises on simulators).
Final test with real-life situation simulation exercises to validate objectives.

To French entities : IFP Training is referenced to DataDock ; you may contact your OPCO about potential funding.
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Training - The Essentials for Field Operators

FTBO-EN-P | **Face-to-face only** | **40 days**

This course provides operators with the knowledge and know-how required for safe, efficient and reliable field operations

Level

Knowledge

Public

- Operators of oil refineries or chemical plants, without any operator certification background
- Technicians or staff to be retrained as operators in the chemical, petrochemical or oil industries

Objectives

Attendees will be able to implement the following skills:

- Specify the elements of communication that allow you to work effectively in a team
- List the monitoring points of a unit
- List the types of operations of a unit
- Identify risks to equipment
- List unit settings to optimize production and product quality
- Identify possible causes of process disruption
- Specify the points to be taken into account in order to prepare, start up and shut down a unit

Pedagogical & technical resources

- IFP Training classroom training uses interactive delivery methods (tutorials, case studies, role playing)
- During classroom training, short practical on-site exercises on specific pieces of equipment
- In between IFP Training classroom modules, On-the-Job Orientation on Clients' assigned unit

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites

No prerequisites are necessary to follow this course

Responsable

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

PIPING - VESSELS - STORAGE TANKS - DRAWINGS — 6 days

Valves, fittings, flexible hoses, safety devices/interlocks. Vessels, storage tanks. Identification symbols for various items of equipment.
Block diagrams, flow sheet, P&ID. Introduction to isometric drawings.

- Field applications: equipment recognition, practical exercise of line-plotting, demonstration equipment in the workshop (when available).

INSTRUMENTATION & CONTROL DEVICES — 7 days

Physical variables used in process operations (pressure, temperature, flowrate, density, specific gravity).
Components of a control loop. Instrumentation: workings and operation.

- Field applications: practical exercise on control loops, demonstration loops (if available), work on Man-Machine Interface in control room.

HEAT EXCHANGE EQUIPMENT — 7 days

Heat, energy and heat transfer. Heat exchangers: technology, main types, workings and operation.

- On-site practical exercise on a heat exchanger.

Furnaces and boilers: technology, combustion, draft and operation.

- On-site practical exercise on furnaces/boilers.

ROTATING MACHINERY — 8 days

Fluid flows.

- Rotating machinery field recognition.

Centrifugal and positive displacement pumps.

- On-site practical exercise on pumps.

Centrifugal and reciprocating compressors.
Single stage, back-pressure steam turbines.

- On-site practical exercise on a compressor or turbine.

Electric motors operation.
Extruder.

PROCESSES - PRODUCTS - SAMPLING & TESTING - UTILITIES — 5 days

Basic chemistry. Chemical products and chemical solutions: composition and hazards.
Chemical reactions.
Vapor pressure and boiling point.
Distillation: principles of the separation, distillation columns.
Products. Quality control tests. Sampling.
Principles of manufacturing processes.
Notion of material and heat balance.
Manufacturing process diagram.
Utilities: flare network, wastewater treatment, cooling water, air production.

- On-site practical exercise on different processes (main equipment, operating conditions).

OPERATORS' TOOLS - SKILLS & ORGANIZATION — 2 days

Plant documentation: inventory, content, usage.
Radio communication. Teamwork.
Reporting and handover duties.

- Role plays.

SAFETY — 5 days

Product hazards: flammability, toxicity, physical hazards.

- Job Safety Analysis for field operators' routine activity (equipment check, circuit alignment, sampling, etc.).

Emptying processes: blind and gasket fitting, degassing and inerting, entering a vessel.
Example of procedures for equipment shutdown and start-up.
Safe behavior.

- Field hazard recognition and prevention means plotting.
- Case studies - Group work. Lessons learned.

ASSESSMENT (DURATION INCLUDED IN THE PREVIOUS CHAPTERS)

Continuous assessment: written tests and oral presentations.

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Training - Low-Carbon Hydrogen - H2BC

H2BC-EN-D | Distance only | 3 days

To provide the necessary technical knowledge on hydrogen, its value chain and its production methods, making it possible to understand and anticipate the challenges of the development of hydrogen as a solution in the energy transition

Level

Expert

Public

Engineers, technical executives or project managers involved in hydrogen logistics and/or production

Objectives

Attendees will be able to implement the following skills:

- describe the different modes of production, storage and transport of hydrogen
- understand the strengths and limiting elements of each pathway

Pedagogical & technical resources

- Highly interactive synchronous training. Quiz.
- Through our LMS, training documentation, applications and complementary content are shared.

Assessment of achievements

Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

CONTEXT — 0.5 day

Brief overview of climate change: current situation, regulatory framework, impacts on businesses.
Priority applications for low-carbon hydrogen: energy carrier, chemical intermediates, industrial H2.
Hydrogen “rainbow,” low-carbon hydrogen: distinguishing between different terms, costs, orders of magnitude, advantages, and limitations.

HYDROGEN STORAGE AND TRANSPORT — 0.75 day

Physicochemical properties of hydrogen.
Regulatory aspects - Safety.
Packaging : Compression, liquefaction, hydrogen transformation .
Description of the different types of hydrogen storage:

- Buffer storage in production sites before transport.
- Natural cavities.

- Cryogenic storage.
- Absorption or adsorption of hydrogen in a solid or liquid.

Description and use of the different modes of transport for hydrogen:

- Pipeline Transportation.
- Transport by road, rail and sea.

HYDROGEN USES 0.25 day

Hydrogen needs in the refining industry.
Hydrogen for mobility.
Manufacture of synthetic fuels.

FOSSIL HYDROGEN PRODUCTION 0.25 day

Grey hydrogen production methods: reforming and catalytic steam reforming of hydrocarbons, partial oxidation (POx), "hybrid" autothermal reforming (ATR) route:

- Schematic diagram, main operating conditions. Examples of achievements.
- Characteristics of the hydrogen produced.
- Energy considerations. Selection criteria.

FOCUS ON ELECTROLYSIS 0.5 day

Electrolysis: principles and reactions.
Presentation of the different technological blocks around the electrolyser: water treatment, hydrogen purification, storage, compressors and other equipment.
Dimensioning of the electrolyzer power supply. Specific constraints related to intermittency. Electrical auxiliaries.
The different types of electrolysers: alkaline, PEM and solid oxide:

- Description.
- Special features. Pros and Cons.
- Maturity and initial feedback.
- LCOH, Efficiencies, Current Density, and Power Requirements .

Possible recovery of the heat and oxygen produced by the electrolyser.

LOW-CARBON HYDROGEN PRODUCTION WAYS 0.75 day

Production of fossil hydrogen with CCS. The different modes of CO2 capture: cryogenics, amine process, other solvent-based processes, membrane-based processes, etc.
Water electrolysis with renewable energy.
Production from biomass: gasification.
Purchases of Renewable Certificates of Origin.
Other pathways: photoelectrolysis, native H2, plasma, etc.
Comparison of the different production methods.
Case Studies.

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Training - Low-Carbon Hydrogen - H2BC

H2BC-EN-P | Face-to-face only | 3 days

To provide the necessary technical knowledge on hydrogen, its value chain and its production methods, making it possible to understand and anticipate the challenges of the development of hydrogen as a solution in the energy transition

Level
Expert

Public
Engineers, technical executives or project managers involved in hydrogen logistics and/or production

Objectives
Attendees will be able to implement the following skills:

- describe the different modes of production, storage and transport of hydrogen
- understand the strengths and limiting elements of each pathway

Pedagogical & technical resources

- Highly interactive synchronous training. Quiz.
- Through our LMS, training documentation, applications and complementary content are shared.

Assessment of achievements
Quiz

Prerequisites
No prerequisites are necessary to follow this course

Responsable
IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

CONTEXT — 0.5 day

Brief overview of climate change: current situation, regulatory framework, impacts on businesses.
Priority applications for low-carbon hydrogen: energy carrier, chemical intermediates, industrial H2
Hydrogen “rainbow,” low-carbon hydrogen: distinguishing between different qualifiers, costs, orders of magnitude, advantages, and limitations.

HYDROGEN STORAGE AND TRANSPORT — 0.75 day

Physicochemical properties of hydrogen.
Regulatory aspects - Safety.
Packaging : Compression, liquefaction, hydrogen transformation.
Description of the different types of hydrogen storage:

- Buffer storage in production sites before transport.
- Natural cavities.

- Cryogenic storage.
- Absorption or adsorption of hydrogen in a solid or liquid.

Description and use of the different modes of transport for hydrogen:

- Pipeline Transportation.
- Transport by road, rail and sea.

HYDROGEN USES 0.25 day

Hydrogen needs in the refining industry.
Hydrogen for mobility.
Manufacture of synthetic fuels.

FOSSIL HYDROGEN PRODUCTION 0.25 day

Grey hydrogen production methods: reforming and catalytic steam reforming of hydrocarbons, partial oxidation (POx), "hybrid" autothermal reforming (ATR) route:

- Schematic diagram, main operating conditions. Examples of achievements.
- Characteristics of the hydrogen produced.
- Energy considerations. Selection criteria.

FOCUS ON ELECTROLYSIS 0.5 day

Electrolysis: principles and reactions.
Presentation of the different technological blocks around the electrolyser: water treatment, hydrogen purification, storage, compressors and other equipment.
Dimensioning of the electrolyzer power supply. Specific constraints related to intermittency. Electrical auxiliaries.
The different types of electrolysers: alkaline, PEM and solid oxide:

- Description.
- Special features. Pros and Cons.
- Maturity and initial feedback.
- LCOH, Efficiencies, Current Density, and Power Requirements.

Possible recovery of the heat and oxygen produced by the electrolyser.

LOW-CARBON HYDROGEN PRODUCTION WAYS 0.75 day

Production of fossil hydrogen with CCS. The different modes of CO2 capture: cryogenics, amine process, other solvent-based processes, membrane-based processes, etc.
Water electrolysis with renewable energy.
Production from biomass: gasification.
Purchases of Renewable Certificates of Origin.
Other pathways: photoelectrolysis, native H2, plasma, etc.
Comparison of the different production methods.
Case Studies.

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Training - Main Polymers PE/PP/PS

MAIPOLY-EN-P | Face-to-face only | 5 days

To provide comprehensive information on polymers and polymerization processes used to produce polyethylenes, polypropylenes and polystyrene

Level
Skilled

Public
Engineers and technical staff interested in the manufacturing of commodity polymers

Objectives
Attendees will be able to implement the following skills:

- Understand the global technical and economical structure of commodity polymers, by far the biggest outlet of petrochemistry
- Master the link between product slate and process selection in function of company marketing strategy
- Know the main industrial commodity polymers processes available for licensing, and their main characteristics
- Be aware of the main industrial safety and operational problems

Pedagogical & technical resources
Applications and case studies treated in small groups, based on typical situations encountered in the normal or unsettled operation of these units

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites
No prerequisites are necessary to follow this course

Responsable
IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

MAJOR POLYMERS — 0.5 day

Various polymer families: commodities, engineering, high performance polymers.
History of polyethylene development.
History of polypropylene development, the youngest of all commodity polymers. Various types of grades (homo, block, random, isotactic, syndiotactic, atactic...); their main applications.
Project management in petrochemical industry. Patent strategy. Staging of projects Order of magnitude of

investment costs.
Fixed and variable cost for site production and outside logistics.
Polymer pricing mechanisms. Notion of economical spread. Explanations of the causes of polymers wide price fluctuations.

CATALYTIC SYSTEMS USED FOR POLYOLEFINS PRODUCTION — 0.5 day

Review of the various types of catalytic systems for polyolefins.
Mass and heat transfer in the heterophasic polymerization of polyolefins.
Multigrain model of the growing particles and variations around this model.

IMPLEMENTATION OF POLYMERIZATION - MAIN POLYETHYLENE & POLYPROPYLENE PROCESSES — 1 day

Techniques implemented in polymers production: solution, bulk, emulsion, suspension or slurry, gas phase. Advantages and drawbacks of these techniques, consequences for process implementation.
Main processes involved in production of polyethylene and polypropylene. Basic schemes and average operating conditions. Influence of operating parameters (temperature, pressure, reactants proportion) on product quality.

POLYETHYLENES - POLYPROPYLENES & OTHER COMMODITY POLYMERS — 2.5 days

General presentation of high pressure and low pressure polyethylene processes, with the various types of polymers grades they can produce. Low, medium, high, ultra-low density...; narrow, broad molecular weight distribution; low, high melt indexes...
Main applications per family of grades.
High pressure processes. Heat transfer in reactors and conversion rate. Comparison of autoclave, tubular mono-injection, tubular multiple injection reactors; consequences on product quality. Specific equipment technology used in HPPE (hypercompressors, letdown valve...).
Safety risks associated with ethylene decomposition.
Main low pressure catalytic processes. Main characteristics of catalyst and reactor types. Which market do they serve? Announced developments.
Various polymerization processes available for polypropylene production (gas phase, loop, liquid pool...). Staged polymerization for broad molecular weight distribution and impact copolymers. New development with single reactor double reaction zone.
Polymer finishing. Extrusion. Storage. Logistics. Supply chain.
Main safety issues. Catalyst killing system in case of emergency.

POLYSTYRENE PROCESSES — 0.5 day

Main design and operation characteristics.
How to treat run-away in case of thermal initiation.

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Training - Overview and Challenges of the Energy Mix

MXE-EN-P | Face-to-face only | 4 days

This course aims to provide an updated overview of the energy sector and the upcoming economic, political and environmental challenges (Covid-19, climate change, supply and demand crisis, unconventional Oil & Gas...). Participants will get a complete overview of both fossil fuels and renewable energy sources, with their respective benefits and burdens

Level

Knowledge

Public

Engineers from the energy sectors (oil, gas, renewables, power), industrial partners, executives (banking, insurance, consulting), public administration staff, PhD and postgraduate students

Objectives

Attendees will be able to implement the following skills:

- Describe the main stages (upstream, downstream, trading) of the oil and gas sectors and understand the technical and economic characteristics of hydrocarbons (production, outlets, availability, market)
- Analyze the advantages and disadvantages of each energy and interpret the evolution of factors affecting the supply and demand of the energy mix
- Identify the actors of the energy scene and their strategic lines (states, international organizations, public and private companies in the sector)
- Understand the role of renewable energies in the energy mix (maturity, intermittency, carbon footprint)

Pedagogical & technical resources

- Quiz and videos on the fundamentals of the energy sector
- Board game about the different steps of an oil or gas project
- Team game on the composition of the energy mix and the role of renewables
- Team game on factors affecting crude prices, the upstream sector and trading

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites

No prerequisites are necessary to follow this course

Responsable

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

INTERNATIONAL ENERGY SCENE — 0.5 day

Energy resources: definition, characteristics, conversion factor.
Climate change & energy transition: supply/demand asymmetry, Kaya's identity analysis.
Short and long-term forecasts (Covid-19 crisis, supply situation, climate change) and IEA scenarios.

OIL SECTOR ISSUES — 1 day

Stakeholder's strategy: NOC, IOC, majors, international organizations.
Upstream: stages and technical-economic aspects of the Exploration-Production.
Oil contracts and principles of oil rent sharing.
Downstream: refining economics and margins, capacity and new projects.

GAS SECTOR ISSUES — 1 day

Structure of the gas value chain: production, treatment, transportation, storage.
Pros and cons: natural gas and LNG in the energy transition.
Markets & grids, introduction to gas contracts.
Focus on current trends: crisis, market, evolutions, technological breaks...

RENEWABLES ISSUES & ENERGY TRANSITION — 1 day

Overview of the main renewables: solar, wind, hydro, bio, geothermal.
Comparison and competition: outputs, costs, availability, pros, limits.
CCUS technology and use of renewables in the Oil & Gas sector.
Stakeholders' strategy and supply chain presentation.

CASE STUDIES — 0.5 day

Economic calculations on Oil & Gas and renewables projects.
Opex, capex, revenues, assumptions, taxable income, cash flows, IRR.

Sessions

Rueil-Malmaison - From 09/29/2026 to 10/02/2026 — **3360 €/HT**

To French entities : IFP Training is referenced to DataDock ; you may contact your OPCO about potential funding.
Please contact our disabled persons referent to check the accessibility of this training program : referent.handicap@ifptraining.com

Training - Commissioning and Start-Up of Process Units

OPDEM-EN-P | Face-to-face only | 5 days

Prepare participants to manage commissioning and start-up operations

Level
Skilled

Public
Supervisors, engineers and technicians of oil/chemical companies or engineering, involved in the commissioning and start-up of new units

Objectives
Attendees will be able to implement the following skills:

- Present pre-commissioning, commissioning and start-up activities on a project from the perspective of their programming and management
- Specify the basis for supervising or delegating activities in a context of mastering the specific constraints related to these operations

Pedagogical & technical resources
Cases studies on the precommissioning, commissioning and start-up of typical units

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites
No prerequisites are necessary to follow this course

Responsable
IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

PROJECT BACKGROUND & COMMISSIONING PHASES — 2 days

Main phases of a project.
Engineering studies (FEED, Detail) and anticipation of commissioning activities.
Project contract type and impact on commissioning activities.
Integration of commissioning activities into the project process: mechanical completion, pre-commissioning, commissioning and start-up activities during the project steps.

ORGANIZATION — 1 day

Commissioning procedures. Interfaces with the different engineering disciplines according to the types of

contract.
Plant/project breakdown into systems and subsystems. Execution plan for commissioning and start-up. Setting up of commissioning/start-up teams. Split of responsibilities. Preparation of the list of precedents. Start-up phases: pre-commissioning, commissioning and preparation for start-up, performance tests, provisional acceptance, mechanical guarantees, final acceptance. Hand over.

SAFETY — 0.25 day

Risks related to the auxiliary fluids and the introduction of hydrocarbons. Risk evolution between construction, commissioning and start-up. Control of the risks related to modifications during the different phases.
Pre-Start-up Safety Review (PSSR).

END OF CONSTRUCTION - PRECOMMISSIONING — 0.75 day

Precommissioning activities: static verification of equipment, hydraulic tests and equipment cleaning, involvement of operations in the mechanical completion, punch-list, actions follow-up and close out.

COMMISSIONING — 0.75 day

Commissioning activities. Cleaning, flushing, blowing and drying. Dynamic testing.
Synchronization of control loops and Programmable Logic Controller (PLC).

START-UP & ACCEPTANCE — 0.25 day

Start-up permit: checks required before oil-in. Leak tests, air removal, raw materials introduction.
Transition towards industrial production: performance tests, temporary and final acceptance, responsibility transfer.

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Training - Overview and challenges of renewable energies

PANENR-EN-P | Face-to-face only | 3 days

This training provides a global vision of renewable energies, their share in the French, European and global energy mix, as well as a technical and economic overview of the available solutions

Level

Awareness

Public

People interested in the energy transition, renewable energies and decarbonation issues

Objectives

Attendees will be able to implement the following skills:

- Briefly describe the techniques used in the different renewable energy production sectors
- List the main advantages and disadvantages of these production chains

Pedagogical & technical resources

- Sub-groups activities, business cases, educational games
- Illustration by concrete industrial cases and current events

Training integrating a complete environment of accompaniment of the trainees in their process of acquisition of the contents, proposed in three sequences:

- Mobilize: allows participants to become familiar with the training, a few days before the course, by providing introductory content
- Training: the heart of the classroom training allowing a face-to-face meeting with the participants
- Anchor: After-the-fact support is provided to participants through supplemental content that allows those who wish to deepen their knowledge on the topics covered

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites

No prerequisites are necessary to follow this course

Responsable

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

ENERGY TRANSITION AND CURRENT CONTEXT — 0.5 day

World energy scene: supply & demand, actors, findings and perspectives.

The place of renewable energy in the French, European and global energy mix.
Neutrality, budget and carbon bubble: commitments, constraints, risks and opportunities.
Energy & Climate: decarbonation and electrification.

SOLAR ENERGY — 0.5 day

Different production methods: thermodynamic, photovoltaic, thermal, passive.
Technology and state of the art - Main production sites and current projects.
Main applications.
Cost of electricity production and GHG emissions during the life cycle.
Application: Sizing of a production plant.

WIND ENERGY — 0.5 day

Different production methods: Onshore – Offshore – Floating. Advantages and disadvantages.
Different types of wind turbines. Principle of operation.
Technology and state of the art - Distribution of production in the world.
Cost of electricity production and GHG emissions during the life cycle.
Application: Analysis of a production site.

BIOENERGIES — 0.5 day

Biomass, Biogas and Biofuels - Associated technologies and end uses.
Place of bioenergy in France and in Europe.
State of the art and main projects in progress.
Cost of electricity production.
Application : Production of biogas by methanization.

MARINES ENERGIES — 0.25 day

Main production methods: hydroelectricity, tidal, current, wave, osmotic.
Current state of art and main projects underway.
Cost of electricity production and life cycle GHG emissions.

GEOTHERMAL ENERGY — 0.25 day

Geothermal energy for power and heat production - Main technologies.
Advantages and disadvantages - Impact on the environment.
Integration with existing production sites.
Cost of electricity production and life cycle GHG emissions.

HYDROGEN INDUSTRY — 0.25 day

Hydrogen: an energy carrier.
The different colors of hydrogen depending on the production method.
End use of hydrogen. Constraints of use.
State of the art and main projects in progress.

CONCLUSIONS & OPENING — 0.25 day

Strategy of the key players.
Availability of strategic metals, rare earth metals and water.
Low-carbon approach: from energy sufficiency to compensation.

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Training - Commodity Polymers Manufacturing

PPLAS-EN-P | Face-to-face only | 3 days

This course provides a comprehensive information on polymers and polymerization processes used to produce polyethylenes, polypropylenes, polyvinylchloride and polystyrenes

Level

Knowledge

Public

Professionals interested in polymers production

Objectives

Attendees will be able to implement the following skills:

- Explain the principles of polymerization techniques and the main characteristics of manufactured polymers
- Describe the operating conditions of polymerization processes

Pedagogical & technical resources

- This course can be adapted for distance learning
- Presentation of polymer samples from the manufacturing plants
- Presentation of end uses application samples

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites

No prerequisites are necessary to follow this course

Responsable

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

POLYMER TYPES & NATURE — 0.25 day

Polymer constitution: monomers, macromolecules, building blocks.
Various kinds of polymer: fibers, elastomers, plastics.
Plastic types: thermoplastics and thermosets.
Main commodity polymers: polyethylenes, polypropylenes, polystyrenes and polyvinylchloride.
Economical aspects relating to these commodity polymers.

POLYMER PRODUCTION - ASSOCIATED PROPERTIES — 1 day

Main polymerization reactions: polyaddition, polycondensation.
Basic characteristics of polymer reactions: heat of reaction, activation mode, etc.
Different arrangements of monomer building blocks in polyaddition: atactic, syndiotactic or isotactic polymers; random block; graft; alternate polymers.
Relationship between end uses implementation and main polymer properties. Impact on properties.
Main tests used to get polymer characterization: melt index, viscosity index, etc. Test signification, relationship with polymer structure.
Consequences regarding polymer implementation techniques (extrusion, injection, etc.).

POLYMERIZATION IMPLEMENTATION - MAIN COMMODITY PLASTIC PROCESSES — 1.75 days

Techniques implemented to produce polymers: solution, bulk, emulsion, suspension, gas phase techniques.
Advantages and drawbacks of those different techniques consequences on processes implementation.
Examples applied to the main processes used to manufacture the major thermoplastics: polyethylenes (PE), polypropylenes (PP), polystyrenes (PS) and polyvinylchloride (PVC).
Flow charts and principles of processes. Some typical operating conditions.
Influence of operating parameters (temperatures, pressures, monomers ratio and proportion of any chemicals involved in the reaction) regarding the quality of polymer obtained.
Some pretreatments of polymers outside the reactor before the transformation step.

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Training - Practicing Commissioning

PRACOM-EN-P | Face-to-face only | 4 days

This course provides practical knowhow so as to get the participants directly confront the reality of the field

Level

Knowledge

Public

Operating and technical staff in charge of commissioning and start-up operations on field

Objectives

Attendees will be able to implement the following skills:

- Anticipate the risks while commissioning and start-up operations
- Identify the key points of the most current operations
- Proceed to main pre-commissioning and commissioning activities

Pedagogical & technical resources

- Experience sharing through applications and cases studies on Oil & Gas units
- Cases studies on the precommissioning, commissioning and start-up of units
- Analysis of incidents occurred while precommissioning, commissioning or start-up phases

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites

No prerequisites are necessary to follow this course

Responsable

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

COMMISSIONING & START-UP PHASES IN PROJECT CYCLE — 0.5 day

End precommissioning, mechanical completion, commissioning, ready for start-up, start-up permit, performance test runs, temporary and final acceptance.
Commissioning and start-up: a non-linear schedule. SIMOPS. Input data and reference documentation. Punch lists. Management of Change (MOC).

SPECIFIC RISKS TO COMMISSIONING & START UP — 0.5 day

Fluid behavior and energy associated hazards. Chemical and physical hazards. Flammability.

Main risks induced by equipment, such as rotating, pressure vessels, thermal or naked flame equipment.
Risks related to utilities start-up: inert gas, nitrogen, steam, instrument air, water, fuel gas, diesel.
Risks evolution from construction to start-up. Transient phases. Safety reviews. Managing leaks.

WHAT TO DO BEFORE COMMISSIONING PROCESS UNITS — 1.5 days

End of construction: visual control and checks for static and rotating equipment (no energy, no fluid). Cold clamping. Check of installation standards for piping and instrumentation.
Precommissioning activities: hydraulic tests and process equipment cleaning.
Mechanical completion.
Particular case of Utilities facilities: pre-commissioning, commissioning and start-up (ready for operations).

COMMISSIONING OF PROCESS UNITS & START UP — 1.5 days

Chemical cleaning, flushing and blowing. Equipment drying and dynamic testing.
Particular case of instrumentation - Loops and DCS tests. Synchronization.
Preparation for the start-up of rotating equipment.
Prestart-up checks before oil-in. Plant line-up and test run.
Start-up: leak tests, air removal, oil-in. Heating up and hot bolting.
Update of documentation.

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Training - Sustainable Aviation Fuel - SAF

SAF-EN-P | Face-to-face only | 2 days

This training course deals with the different jet fuels that can replace fossil jet fuel with a view to reducing pollutant and CO2 emissions. It provides an overview of what can be considered in the choice of production schemes

Level

Expert

Public

Executives, engineers and technicians in the renewable industries, refining, trading in petroleum products or renewable fuels... concerned by the evolution of jet fuel quality, in relation to the technologies applied to aviation turbines

Objectives

Attendees will be able to implement the following skills:

- to know the certified SAF, their manufacturing and distribution ways
- understand the integration of SAF into conventional jet fuel production schemes

Pedagogical & technical resources

Interactive training with trainees

Assessment of achievements

Quiz

Prerequisites

No prerequisites are necessary to follow this course

Responsable

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

FOSSIL-BASED JET FUEL — 0.5 day

Origine and composition of fossil-based jet fuel through the process flow diagram in a refinery.
Main characteristics necessary for its use.
Air emissions from jet fuel combustion.

SAF-SUSTAINABLE AVIATION FUELS — 1.25 days

Context, Regulations and issues, general review of the different production sectors, environmental assessment from well to wheel.
Certification – taxation.
Main production routes certified or in the process of certification of SAF: hydrotreated vegetable oils, synthetic biojets, biological routes and e-fuel.

INTEGRATION OF SAFS IN THE REFINING INDUSTRIES — 0.25 day

Modifications and adaptations: processes, storage, logistics.
Segregation of products and/or certificates.
Sustainability and Traceability.

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Training - Social Risk Management

SOCIAL-EN-P | Face-to-face only | 5 days

This course aims to identify and understand social issues related to Oil & Gas activities

Level

Knowledge

Public

Managers, advisors, engineers, and operations staff involved in oversight or management of operational, environmental and social issues throughout the lifetime of an upstream project

Objectives

Attendees will be able to implement the following skills:

- Identify and understand what constitutes a social risk (non-technical risk), an impact assessment and management
- Understand key concepts related to SIA and Social Impact Management Plans (SIMPs)
- Understand social management methodologies and their appropriate uses
- Design and implement of a stakeholder engagement strategy and plan
- Understand the main components of a Social Impact Management Plan (RAP, local content, etc.), including design and implementation

Pedagogical & technical resources

The training will have an interactive format providing room for practice and discussion. It will involve multimedia presentations, case studies, quizzes and teamwork sessions

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites

No prerequisites are necessary to follow this course

Responsable

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

SOCIAL ISSUES RELATED TO OIL & GAS ACTIVITIES: RISKS, STAKES & STRATEGIES — 1 day

Risk of overlooking non-technical risks.
How to spot non-technical risks?

How to identify and understand the underlying mechanisms?
How to manage social risks?
Oil & Gas industry reaction to underlying mechanisms.
Why and how should they be managed as a risk and an opportunity?
Key risks areas for Oil & Gas industry and developed standards: transparency and corruption, business and human rights, operations in areas of conflict, etc.

STAKEHOLDER ENGAGEMENT — 1 day

Social License to Operate (SLO).
How to build this SLO?
What is the Free Prior & Informed Consent (FPIC) principle?
Stakeholders-business interactions analysis.
How to do a stakeholder analysis and mapping?
How to design and implement a stakeholder engagement plan?
How to design, implement and monitor a grievance mechanism?
What are the do's and don'ts in stakeholder engagement?

PARTICIPATIVE SOCIAL IMPACT ASSESSMENT AS A RISK MANAGEMENT TOOL — 1 day

Conceptual framework and techniques used for Social Impact Assessment.
International standards.
Definition of a social impact.
Links between environmental and social impacts.
Predict, analyze and assess the likely social impacts pathways and evaluate their significance.
Develop a mitigation strategy for negative impacts and an enhancement strategy for the project-related opportunities.
How to monitor social impacts?
How to assess a SIA quality?
How to achieve the full potential of a SIA?

SOCIAL IMPACT MANAGEMENT PLANS & MONITORING: TOOLS & PROCESSES — 0.5 day

Social Impact Management Plans (SIMP).
The main components of a SIMP.
How can a SIMP be operational?
What are the organizational and institutional arrangements that need to be developed?
The role for the project's stakeholders in a SIMP?
Implementation and results monitoring and reporting.

SOCIAL IMPACT MANAGEMENT PLANS & MONITORING: FOCUS ON SPECIAL TOPICS & ISSUES — 1 day

Depending on the audience's needs and expectations, a focus can be put on specific social issues and how to manage them through specific social impact management plans: Resettlement Action Plan (RAP), Community Development Plan and Social investments, local content, etc.

CASE STUDY: SOCIAL SCREENING OF AN OIL & GAS PROJECT — 0.5 day

Through a work in group, the participants will do a stakeholder mapping, a high level impact assessment with the use of a mind mapping and an identification of potential impacts and mitigation strategies.

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