GTI SERVICES

Your local focal point

Web www.gtis.com.ph
Contact manager@gtis.com.ph

Web
Contact

Training Catalog - Rev. 2020

World-Class Out-Sourced Training Solutions for Your Operations

About Training

Training is by definition the way to improve the performance of our customers' operations.

Local Partnerships

GTIS Group created a Learning & Development Department that contributes to the success of its clients' organizations by driving strategic, measurable and effective learning process.

Our local partners are selected based on their compliance with GTIS Business Ethics Principles, and Training Standards.

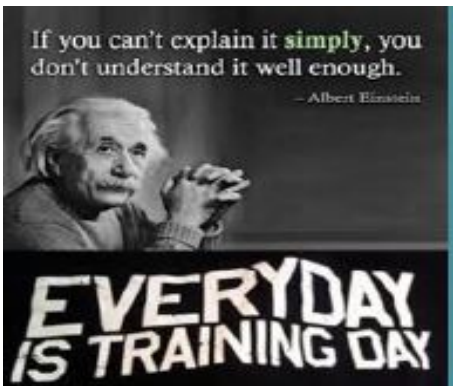
Motto

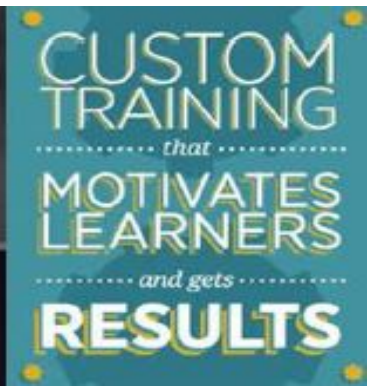
"Make complicated concepts becoming simple by using proven stimulating and thoughts-provoking methodologies"

Vision

Our Unique Vision of Training

- Strategic: aligned with business objectives
- Specific: as per Audience and Culture
- Scalable: leverage content across audiences
- Measureable: tied to improved performance
- Partnership: shared accountability with Client





Multiple Disciplines to cover Industry Needs

Regular updates in line with Technological Changes

A 100% Continuous Improvement Process

Dedicated Professionals to Achieve Top Performance

Harmonized Training Principles & Methodologies Throughout GTIS Group

What you NEED is what you GET thanks to exclusive Courses Customization

- **Chemistry Courses**
  - Polymer Courses
  - Surfactant Courses
  - QA/QC
- **O&G Industry - Upstream**
  - Basic Mud school
  - Advanced Mud School
  - Drilling fluids courses
  - Integrated Cementing Seminars
  - Cementing Operations
  - Wells Stimulation Fluids
  - Formation Damage
  - Water Shut Off
  - Well Control Introduction
  - Stuck Pipe Course
  - Drilling & Completion
  - Shale Gas & Oil
  - Logs Acquisition and Technologies
  - Wireline Operations
  - Geology
  - Petrophysics
  - Reservoir
  - Well Services & Well Testing
- **O&G Industry - Production**
  - Corrosion Engineering
  - Production Operations
  - Production Chemistry
  - Enhanced Oil Recovery
- **O&G Downstream Operations**
- **Geothermal Industry**
- **Hydrogeology**
- **Health, Safety, Environment & Quality**
- **Cosmetics & Wellness Industry**
- **Other Courses**
  - Software
  - Projects Management
  - Train the Trainers
  - Drilling for non-drilling personnel
  - Technical English Courses

Do it "At Home"

In-House Training Solutions

In-house training allows you to maximize training process by reaching more personnel at the same time.

All In-house Training courses are fully analyzed and reports delivered to continuously improve performance and deliverability

Fly our Instructors to your location, reducing logistics costs!

Do it with us

Training Centers

GTI and Nadoil can also welcome you in their own training centers, available in France (Nadoil) and in the Philippines (GTIS).

Facing more and more demands from our Clients, we are currently in the process of upgrading our facilities with the construction of new centers, adding in particular laboratories in The Philippines for practical trainings.

On-the-Job Solutions

OJT & OJC, on-site training support

On-the-Job Training or On-The-Job Coaching are solutions that allow development of personnel on their actual working environment.

It deals with a mid- to long-term process that leads to proper Standards to be implemented on your Operations.

Our Instructors have a wide experience in mentoring and coaching trainees on site, also highlighting HSE policies of the Clients directly applicable to daily duties.

Contact us, and let us manage the full OJT/OJC process on your behalf.

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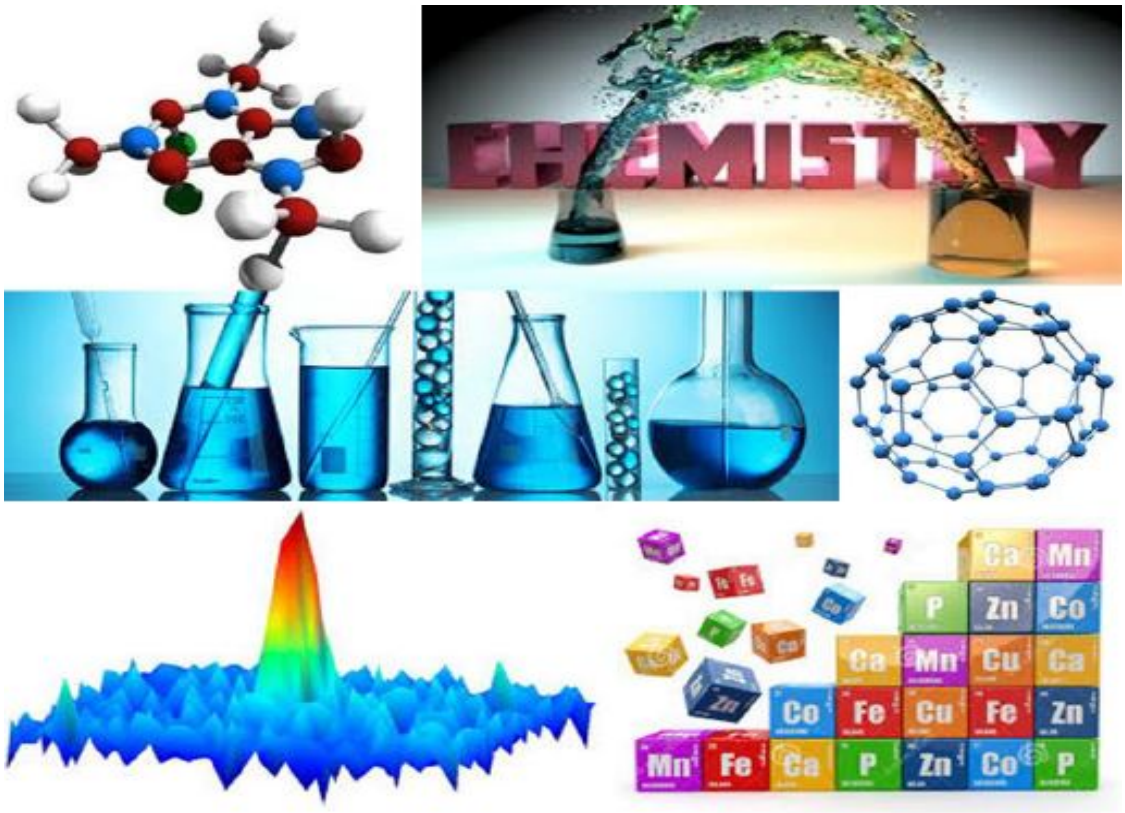
Chemistry Courses



World-Class Out-Sourced Training Solutions for Your Operations

Course ID:

GTIS-CHEM-001

Gas Chemistry

Course of Interest for

Mud Engineers

Chemists

Chemical engineers

Course Duration:

2 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course covers the gaseous state of matter. It Includes numerous examples of application of kinetic molecular theory and discusses real gases

Observable properties

Basic laws

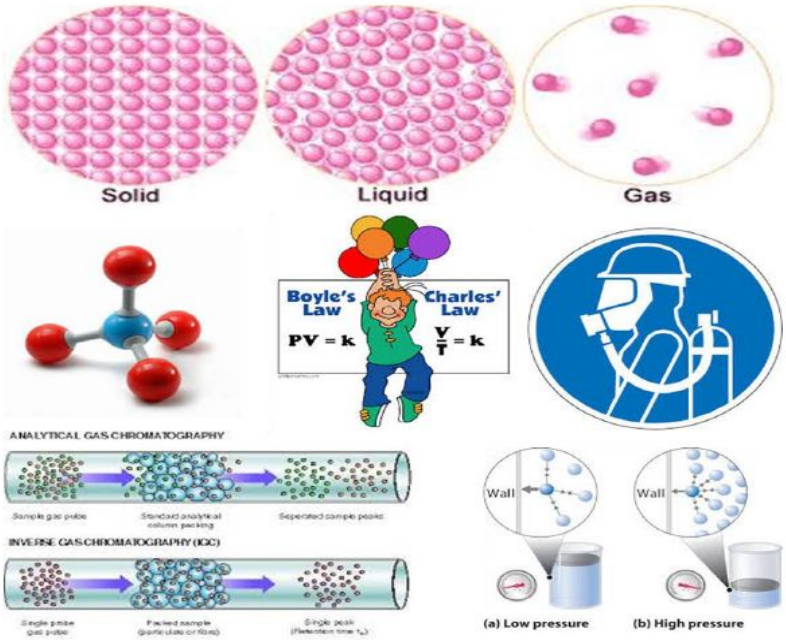
Moles & mixtures

KMT-1 (lite)

KMT-2 (classic)

Real gases

Working Safe in Gas Environment



GTI SERVICES

Course ID:

GTIS-CHEM-002

Oilfield Chemicals Integrated Course (Advanced)

Course of Interest for

Production Engineers

Facilities Engineers

Chemists and technicians

Government employees

HSE Engineers

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course covers the selection and use of chemicals used in oil and gas production. It includes methods to determine the need for chemical treating, how to select the proper chemicals, and how testing for chemical compatibility with the formation and other chemicals is performed. Requirements for environmentally friendly products and products for deep water production are discussed.

Corrosion

- Corrosive agents
- Corrosion inhibitor selection and application
- Predicating and monitoring corrosion rates

Basics of oil field emulsions

- Demulsifier selection and field application

Foams

- Defoamers
- Foam basics
- Field application of foams
- How defoamers work

Scales

- Compounds that cause scaling
- Predication of scaling tendency
- Scale inhibitors
- Solvents to dissolve scales

Gas Hydrates

- Requirements for gas hydrates to form
- Types of compounds used to control hydrate formation

Wax Control

- Causes of paraffin (wax) problems
- Paraffin treatment chemicals
- Asphaltene stability tests
- Asphaltene treatment chemicals

H2S Control

- Chemicals used as H2S scavengers
- Application of scavengers

Environmental Impact

- Oil carryover in water
- Removal of oil and oily solids
- Tests required for chemicals used in deepwater
- Green chemicals (Environmentally friendly chemicals)
- International guidelines

GTI SERVICES

Course ID:

GTIS-CHEM-003

Surfactants Course

Course of Interest for

Sr. Mud Engineers

Industrial chemists

Polymer and materials scientists

Chemical engineers

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course will provide fundamental background so that attendees can take advantage of more efficient and rational approach to surfactant selection and use in their work

Surfactant chemical structures

Surfactants organization
- Why surfactants self-assemble into micelles and vesicles?
- Understanding self assembly through molecular packing parameter
- Behavior of surfactants in aqueous solutions
- Manipulating surfactant behavior through mixtures

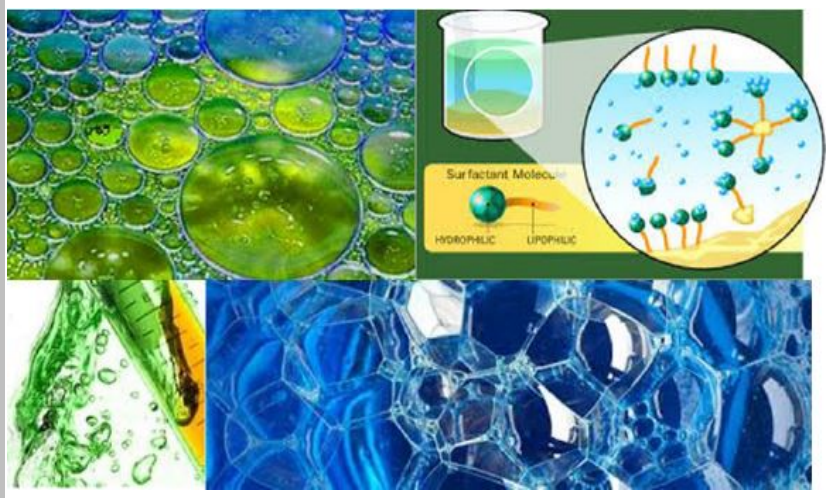
Solubilization in surfactant systems

Droplet and bicontinuous microemulsions

Block copolymer surfactants and micelle formation

Solubilization in block copolymer micelles

Applications to O&G industry



GTI SERVICES

Course ID:

GTIS-CHEM-004

Polymers Course

Course of Interest for

Sr. Mud Engineers

Research chemist

Engineers, physicist, or technician who works with polymers and applications

Managers in polymer industry

Course Duration:

6 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is designed for attendees to gain better understanding of polymer structure, morphology and properties

Polymer synthesis
- Molecular weight determination
- Characterization of rheological and viscoelastic behavior

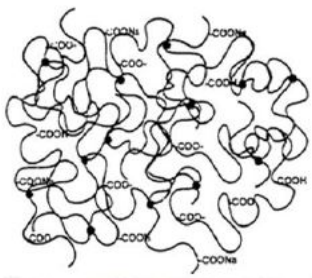
Polymer structure and morphology
- Mechanical testing

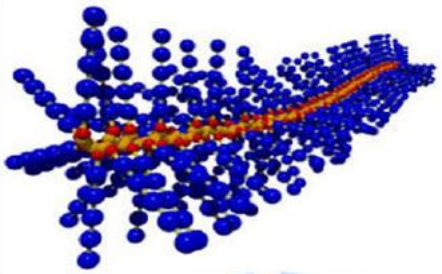
Elastomers, plastics, and fibers

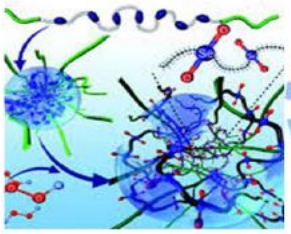
Adhesion and composites

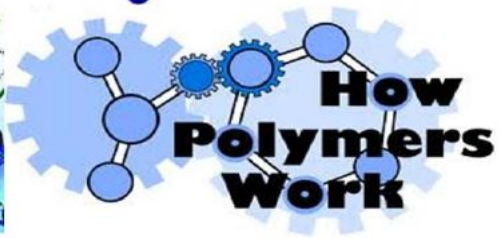
Properties of polymers discussed as functions of
- Chemical composition
- Molecular weight
- Topology
- Morphology

Degradation of Polymers









GTI SERVICES

Course ID:

GTIS-CHEM-005

Oilfield Waters Course

Course of Interest for

Surface facilities operation engineers

Production chemistry engineers

Flow assurance engineers

Production engineers

Course Duration:

2 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Properties of produced water

Environmental regulations

Water specifications

Factors affecting water treatment

Process and equipment design

Chemical treatment

Chemicals used in water treatment

Study of water treatment real cases

Injection water treatment

This course will explore all theories and technologies involved produced water treatment

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Course ID:

GTIS-CHEM-006

Oil Desalting Course

Course of Interest for

Surface facilities operation engineers

Production chemistry engineers

Flow assurance engineers

Production engineers

Main problems of salty crude oil

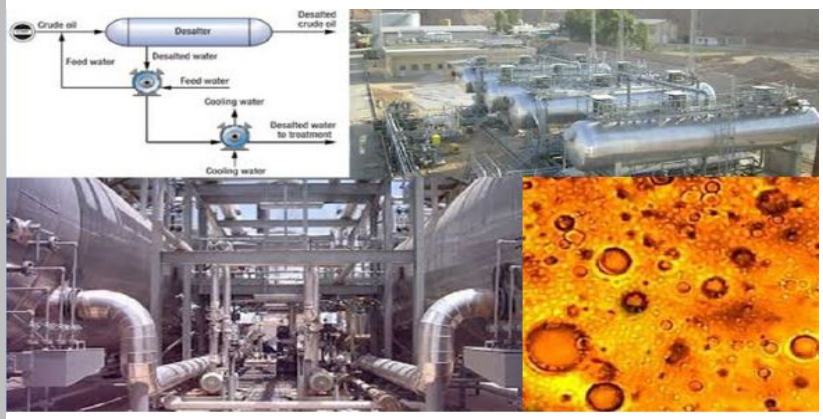
Desalters: equipment and technology

Operation and design considerations

Life cycle costing for selection considerations

Course Duration:

1 day



Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

The course will discuss desalting technologies and processes needed to achieve the required oil specifications

GTI SERVICES

Course ID:

GTIS-CHEM-007

Electrochemistry Course

Course of Interest for

Sr. Mud Engineers

Chemists

Materials scientists

Chemical engineers

Chemistry and electricity

Electrochemical cells

Prediction and significance of cell potentials

The Nernst equation

Batteries and fuel cells

Electrochemical Corrosion

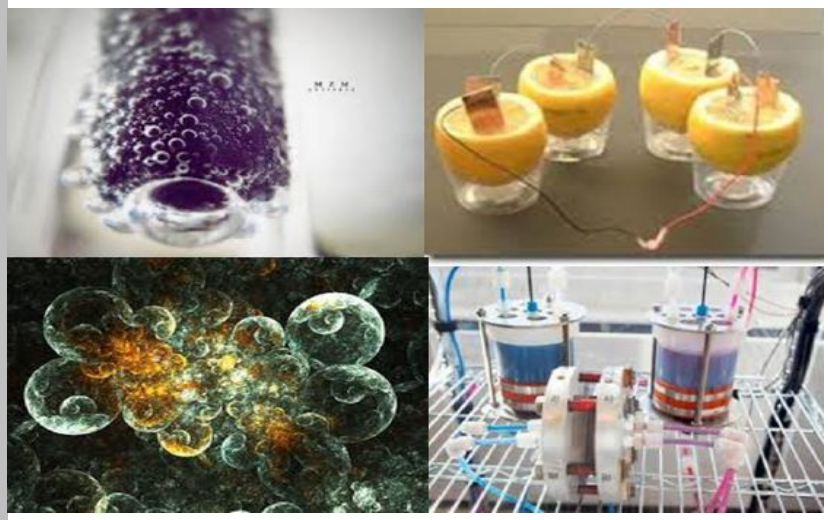
Electrolytic cells

Course Duration:

2 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox



This course covers elementary electrochemistry

GTI SERVICES

Course ID:

GTIS-CHEM-008

Best Practices in the Laboratory

Course of Interest for

Lab managers

Lab supervisors

Scientists & technical assistants

Course Duration:

3 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Standard Operating Procedures (SOP's).

Statistical procedures for data evaluation

Instrumentation validation

Reagent/materials certification

Analyst certification

Lab facilities certification

Specimen/Sample tracking

This course provides coaching and mentoring of lab employees to ensure compliance with Best Practices to operate a laboratory

GTI SERVICES

Course ID:

GTIS-CHEM-009

Natural Gas Measurement–Fundamentals

Course of Interest for

Gas measurement technicians

Gas analysts

Gas Production Engineers

Auditors in natural gas measurement

Units of measurement

Natural gas chemistry

Physical behavior

Volume determinations
- Orifice meter–general
- Orifice meter–gas
- Turbine meter–gas
- Ultrasonic gas meter
- Positive displacement meter
- Coriolis mass force gas meter

Course Duration:

3 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course covers basics of physical and chemical makeup of gas mixtures, how mixtures are affected by temperature and pressure. It explains how to analyze and determine good measurement and how to obtain it; It also covers fundamentals of volume determination devices

GTI SERVICES

Course ID:

GTIS-CHEM-010

Laboratory Analysis Techniques for Oil & Gas Applications

Course of Interest for

Laboratory personnel

Operational staff

Other professionals interested in lab analysis for oil and gas operations

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course provides comprehensive knowledge of and develop practical skills in conducting reliable and safe laboratory analyses for the oil and gas industry

Role and responsibilities of laboratory staff

- Production Staff: Equipment yields controls/monitoring
- Final product quality controls/monitoring
- Recommendations to improve treatments

Analysis specific to crude oil

- Specific gravity or Density
- Vapor Pressure (Reid VP)
- Water content: BSW, Dean Stark distillation
- Salt content: Chlorides content, Conductimetry
- Acid components content
- H2S content (Methylene Blue)
- H2S & Mercaptans by Potentiometry
- Total Acid Number (TAN) of liquid Hydrocarbons
- Fluid rheology: Pour point, Kinematic viscosity, Wax content

Analysis specific to gas

- Gas characterization analysis
- Dew Point (HC & Water)
- Gas composition by Gas Phase Chromatography (GPC)
- Gas Specific Gravity estimate from composition
- Acid components content
- H2S content (Dräger), H2S & Mercaptans content (Potentiometry, I
- CO2 content (Dräger & Acidimetry)

Analysis for follow-up of effluent treatment operations

- Demulsifiers evaluation & selection (Bottle Tests, Field Tests)
- Quality controls/monitoring of poor and rich Triethyleneglycol (TEG
- Water content, pH
- Hydrocarbon content
- Equipment performances: Water content, Residual emulsion

Laboratory visit

Deposits and scale analyses

- Chemical corrosion and bacterial corrosion appraisal
- Recommendations for chemical additives and treatments

HSE in laboratory activities

- Laboratory facilities design and implementation
- Chemicals management (storage, use...)
- Occupational Health and Safety behavior

GTI SERVICES

Course ID: GTIS-CHEM-011	**Laboratory Health & Safety**
Course of Interest for Lab managers Lab supervisors Scientists & technical assistants	Important aspects of chemical hygiene and safety Hazard identification and control measures Codes, standards, and practices for laboratory safety and health Effective storage, labeling, safe handling, and control of hazardous ch Causes of accidents and prevention strategies
Course Duration: 3 days	Health hazards of chemicals Proper selection and use of personal protective equipment Effective training, Required record keeping
Course includes: Training Materials Training Certicates End-of-Course Report Customized Toolbox	Hazard analysis for lab work How to measure success Laboratory vs. Hazard Communication Standard Developing/Auditing Chemical Hygiene Plans Laboratory Ventilation Safe Handling of Compressed Gases Electrical Safety, Controlling Hazardous Energy
This course will give an overview of practical and latest regulatory measures for the prevention of accidents, incidents, or exposures that may cause health impairment, injury, fire, or interference with laboratory operations. It includes OSHA training requirements. Registrants are invited to bring case histories, problems descriptions for evaluation and discussion	Handling Lab Emergencies

Course ID:

GTIS-CHEM-012

Emulsions Course

Course of Interest for

R&D Technicians & Engineers

Chemists

Process Engineers

Course Duration:

3 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course provides understanding on fundamental solution properties of emulsions an microemulsions, how to make and evaluate them

Emulsion Concepts

- Designing Emulsions
- Where to Start
- How to get a Specific Feel
- Ingredients
- Emulsifier Behavior
- Emulsifier Location and Phases
- Polymeric Emulsifiers
- Emulsions without Emulsifiers

Making Emulsions

- Formulating methods
- Ingredient
- Mixing
- Homogenization
- Heat transfer
- Scale up Effect

Evaluation and Testing

- Stability
- Efficacy
- Safety
- Preservation
- Claim substantiation
- Use of the microscope

Microemulsions

- Phenomenon of Microemulsion Formation
- Droplet Microemulsions
- Bicontinuous Microemulsions
- Phase Diagrams
- Size and Composition Dispersion of Droplets
- Persistence Length in Bicontinuous Microemulsions
- Calculation of Interfacial Tension
- Phase Transitions Between Microemulsion Systems
- Nonionic Microemulsions
- Microemulsions With Ionic Surfactants
- Use of Cosurfactants

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Cementing Courses

World-Class Out-Sourced Training Solutions for Your Operations

Course ID:

GTIS-CMTS-001

Integrated Cement Seminar

Course of Interest for

Petroleum Engineers

Drilling Engineers

Fluids/Cement Specialists

personnel having to manage cement service companies

Cement Lab Chemists

Course Duration:

7 days

Optional:
1 week lab practice if laboratory is available

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is designed to give advanced understanding on slurry design and operational aspects of Cementing Operations. It also covers cement chemistry and Cement Jobs Evaluation

Principles of Cementing

Cement Chemistry
- Clinker & Hydration
- Composition of Cement Slurry
- Cement Lab Induction

Mud Removal

Operational Concerns
- Cementing Operations: Process & Responsibilities
- LOT vs. FIT
- Operations Records
- Designing a balanced plug
- Remedial Jobs: Squeeze cementing
- Multi stage job or not? 2 case studies
- Horizontal Liner Cement Jobs
- Lost Circulation vs. Cementing Operations

Foam Cements, Light Weight Cements, Expansive Cements

Cement Job Evaluation
- Hydraulic Testing
- Temperature, Nuclear and Noise Loggings
- Acoustic Measurements

Equipment for Cementing Operations

Simulation with Software
- Use of Cement21 from Maurer or Client software

GTI SERVICES

Course ID:

GTIS-CMTS-002

Mud Removal Course

Course of Interest for

Petroleum Engineers

Drilling Engineers

Mud Engineers

Cement Lab Chemists

Course Duration:

2 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is intended to deliver full understanding on mud removal, parameters influencing it and solutions to achieve best performance to ensure optimum cement operations and maximum zonal isolation

Fluids Aspects of Mud Removal

- Incompatibilities
- Spacers & Washers
- Impact of Spacer on Hydrostatic
- Spacer's viscosity
- Compatibility of Spacer with other fluids
- Spacer's Wettability
- Erodibility
- Chemical Washes

Wiper Plugs

Mechanical Aspects of Mud Removal

- Wiper Trips & Pipe Centralization
- Caliper
- Casing Centralization
- Scratchers

Flow Aspects of Mud Removal

- Type of Flow
- Casing Stand-Off

Surfactants

- Structure and Chemistry of surfactants
- HLB
- CMC and Surface Tension
- Types of Surfactants

GTI SERVICES

Course ID:

GTIS-CMTS-003

Course of Interest for

Petroleum Engineers

Drilling Engineers

Fluids/Cement Specialists

personnel having to manage cement service companies

Cement Lab Chemists

Course Duration:

1 day

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is covering all aspects of Salt Cementing Operations, from salt chemistry to cement designs and properties.

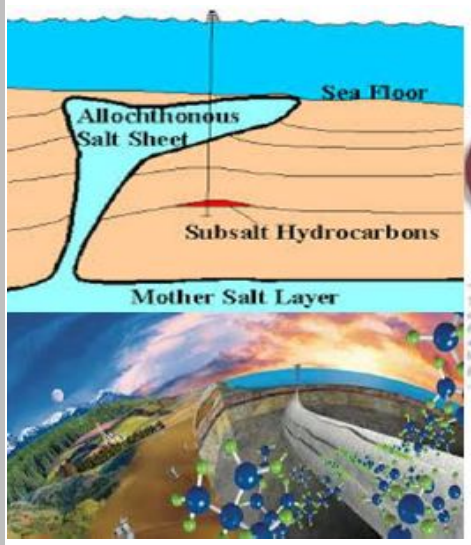
Salt Zone Cementing Course

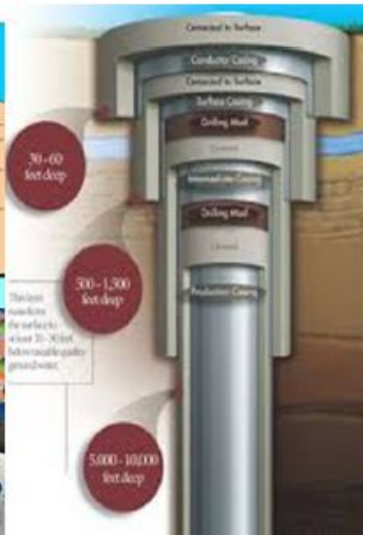
All About Salts Chemistry

Salt Cement

- Impact of Salt on Cement Characteristics
- Case History: Design of Salt Cement
- Aluminum Powder
- Calcined magnesium oxides
- BFS (slag cement)

Factors impacting Expansion





GTI SERVICES

Course ID:

GTIS-CMTS-004

Course of Interest for

Petroleum Engineers

Drilling Engineers

Fluids/Cement Specialists

personnel having to manage cement service companies

Cement Lab Chemists

Geothermal drilling teams

Course Duration:

2 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is a technical review of HPHT wells Cementing Challenges and describes technical solutions available for HPHT wells, including Thermal Recovery wells and geothermal wells

HPHT Cementing Course

HPHT Cementing Challenges

Targets for Designing HPHT Cement Slurries

Properties of HPHT Cements

- Thickening Time & CS development
- Rheology
- Fluid-Loss Control
- Long-term performance

BFS Slurries (Slag Cement)

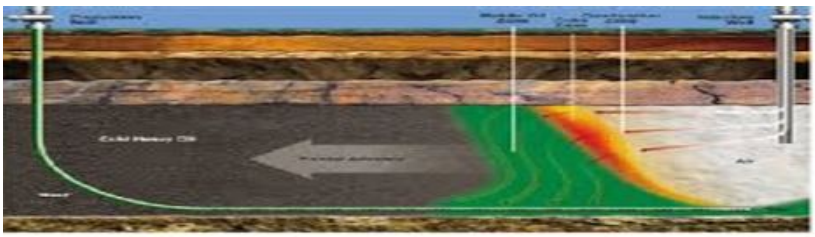
Thermal Cements

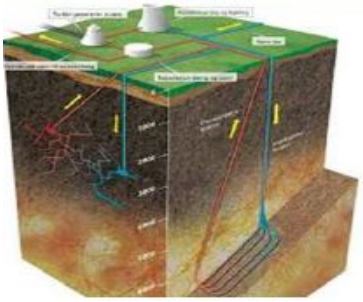
- HT Chemistry of Portland Cement
- High-Alumina Cement
- Class J Cement
- Calcium Aluminosilicate Systems
- Calcium Phosphate Systems

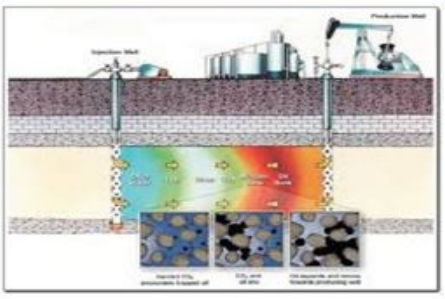
Geothermal Wells Cementing

Thermal Recovery Wells

Case Histories: High-density elastic cement in South Texas







GTI SERVICES

Course ID:

GTIS-CMTS-005

Introduction to Cement Engineering Operations for Jr. Drilling Supervisors and Non-Technical Personnel

Course of Interest for

Jr. Drilling Supervisors

Jr. Ops Engineers

Finance staff

Technical Assistants

Course Duration:

1 day

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Principles of Cementing

Cement Clinker & Hydration

Cement Description & Characterization

Cement Hydration Process

Cement Life: Bulk, Slurry, set Material

Composition of Cement Slurry

Mud Removal

Operational Concerns

Cement Job Evaluation

Equipment for Cementing Operations

Simulation with software

This short course provides a quick overview of cement engineering operations to new-comers, non-technical and finance staff. Objective is to deliver comprehensive information to enhance communication between departments and bring additional value to cement contract management

GTI SERVICES

Course ID:

GTIS-CMTS-006

Course of Interest for

Asset Managers

Drilling and Completion Engineers

Petroleum engineers

Geologists,

Production Managers and Engineers

Reservoir Managers and Engineers

HSE Engineers

Course Duration:

3 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Objective of the course is to evaluate and discuss various technologies used to repair wellbore communication paths due to wellbore aging that can develop allowing fluid to migrate from the high pressure downhole strata through leakage paths in the cement containment

Cement Remediation

Problems Associated With Primary Cementing

Squeeze Cementing

Plug Cementing

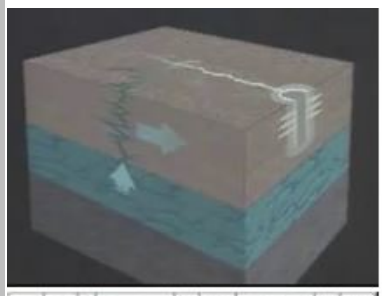
Cementing Temperature Issues for Squeezes/Plugs

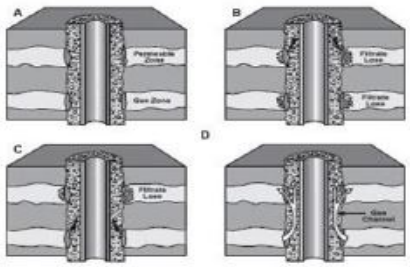
Laboratory Testing Procedure

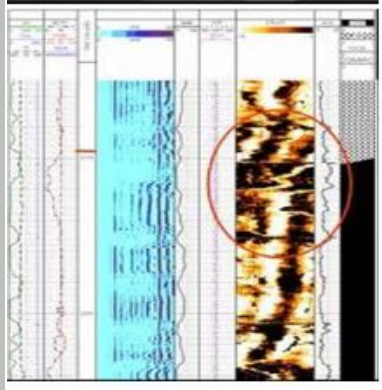
Improved Techniques for Remedial Cementing

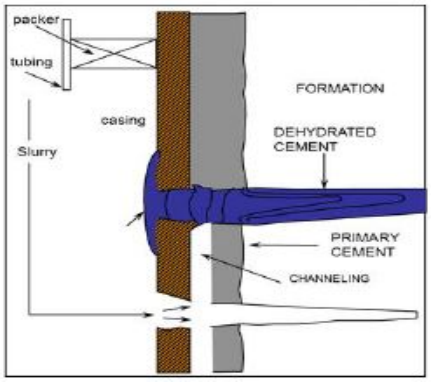
Cement Evaluation Techniques

Guidelines









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Training Catalog - Rev. 2020

Drilling & Completion Courses

World-Class Out-Sourced Training Solutions for Your Operations

Course ID:

GTIS-DRCO-001

Basic Drilling, Completion & W/O Course

Course of Interest for

Junior Engineers

Data Engineers

Mud Engineers

Production Personnel

Non-technical Personnel

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is designed to provide basic training on drilling and completion operations, including equipment, fluids and hydraulics

Drilling process;

- Well Construction
- Specific terms & acronyms of Drilling Reservoir rock and fluid prope
- Drilling string components & BHA
- Drilling fluids & hydraulics
- Induction to Well control
- Hole problems & stuck pipe
- Primary cementing
- Directional, horizontal, multilateral & under-balanced drilling
- Wellhead & trees

Overview of Completion process;

- Zonal isolation
- Tubing, packers & completion equipment
- Safety & flow control devices
- Open hole completions
- Completion types
- Perforating
- Open & cased hole logging
- Formation damage & treatment Completion fluids

Overview of workover techniques:

Stimulation application;
- Surfactants
- Solvents
- Acidizing
- Fracturing & deep perforating

Formation & sand control
- Screens
- Chemical consolidation
- Gravel packing
- Frac-pack
- New Techniques

Scale & corrosion
Paraffin & asphaltenes
Workover Operations
- Recompletion
- Sidetracking
- Deepening

Coiled tubing

GTI SERVICES

Course ID:

GTIS-DRCO-002

Well Control Induction

Course of Interest for

Rig Crew

Mud Engineers

Cementing Engineers

Mud Loggers

NOTE: Course does NOT deliwer IWCF/IADC certificates

Primary well control

Causes of kicks

Indications of kicks

Basic wellbore calculations

Normal and abnormal formation pressures

Hydrostatic exercises

Pressure losses & Equivalent circulating densities

Leak-off tests

Equivalent mud weights

Maximum mud weights - Frac Pressure

Introduction to kill sheet

Introduction to Well Control equipment

Course Duration:

4 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is designed to give rig personnel an awareness of Well Control theory, practices and equipment

GTI SERVICES

World-Class Out-Sourced Training Solutions for Your Operations

Course ID:

GTIS-DRCO-003

Underbalanced Drilling

Course of Interest for

Drilling Engineers

Drilling Managers

Supervisors

Superintendents

Rig Managers

Mud Engineers

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is designed to introduce Under Balanced Drilling Technologies to Drilling Team and to point-out main features of technologies

Basic Principles of Managed Pressure Drilling

- Definitions
- Implications of narrow pore pressure and fracture
- Pressures windows on well design & well control
- Dynamic factors affecting BHP
- Examples

Mud Cap Drilling

- Pressurized and floating mud cap
- Mud Cap Operations

MPD Equipment

- Rotating Control Devices
- Chokes
- Drill Pipe non return valves
- Annular valves
- ECD Reduction Tools
- Coriolis Flow meter, friction pump

MPD using Pressure as Primary Control

- Opened & closed back-pressure systems
- Automated back-pressure systems
- Continuous circulating systems

MPD using Flow as Primary Control

- Process description
- Equipment
- Applications

UBD

- Objectives and applications
- Equipment and operations

GTI SERVICES

Course ID:

GTIS-DRCO-004

Advanced Stuck Pipe Course

Course of Interest for

Tool Pushers

Drillers

Drilling Supervisors

Mud Engineers

Mud loggers

Course Duration:

4 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox
Decision tool

This course is designed to provide an in-depth understanding of stuck pipe phenomena and prevention along with mechanical and chemicals solutions available to solve problems

Problem of stuck pipe

Causes of Stuck Pipe
- Differential Sticking
- Hole Cleaning (Mud Properties, ROP)
- Mechanical sticking (Wellbore stability,stabilization,…)

Bottom hole assemblies

Stuck pipe Prevention & Recommendations
- Predicting stuck pipe
- Warning signs of stuck pipe
- Hole cleaning procedures & Optimization
- Mud properties

Freeing stuck pipe
- Jarring systems
- Pipe Release Agent pills

Economics of stuck pipe

Case histories

Using Decision Tool

GTI SERVICES

Course ID:

GTIS-DRCO-005

Surface & Mud Logging

Course of Interest for

Technicians and Engineers onsite

New comers in mud logging

Drilling Engineers

Mud Engineers

Course Duration:

6 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is designed to provide overview of mud logging operations and equipment, understanding and interpretation of logs acquired while drilling

Introduction

History and technical evolution
Purpose of surface logging service
Surface Logging Unit acquisition system
Equpiment for geological data acquisition
Lithological and formation fluid analysis

Equipment

Equipment for drilling parametrers determination & measurements
Typology of the main sensors used
Equipment for hydrocarbon gas detection & measurements
Typology of gas shows
Gas detection system (gas trap, gas line, analysers)
Equipment for non-HC gas detection & measurements

Data Processing

Data presentation and reporting
Processing & interpretation of surface logging data
Gas data (conventional approach, GWD)
Carbonate reservoir (gas analysis, losses analysis)
Drilling parameters (drilling optimisation, hydraulics, overpressure de
Quality Control (Unit, Sensors, Calibration)
Wellsite charts interpretation (time and depth basis)
Master Log interpretation
Composite Log

GTI SERVICES

Course ID:

GTIS-DRCO-006

Artificial Lift

Course of Interest for

Drilling Engineers

Completion Engineers

Mud Engineers

All personnel working on Productivity

Components of sucker rod pumping system

Alternative configurations of components & applications

Operation of overall system

Function of components in downhole sucker rod pumping system

Operating principle of oilfield surface equipment

Gas Lift Systems

- Operational and Design Aspects of Gas Lift systems
- Electric Submersible Pumping Systems

Maintenance operations in Artificial Lift

Course Duration:
5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is designed to describe artificial lift technologies, including equipment and maintenance operations

GTI SERVICES

Course ID:

GTIS-DRCO-007

Basics on Perforations

Course of Interest for

Drilling Engineers

Completion Engineers

Mud Engineers

All personnel working on Productivity

Basic perforating components, equipment, operations, and design considerations

Safety measures taken in perforating operations

Principles behind a shaped charge

Deployment options and equipment for perforating guns

Differentiate wireline-deployed and tubing-deployed depth correlation methods

Operation of basic firing mechanism for perforating guns

Types of firing actuation

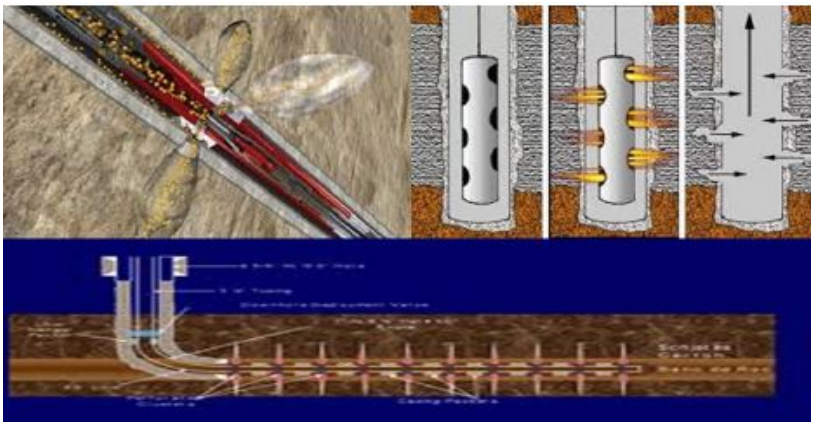
Operation of mechanical-based and pressure-based firing actuators

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox



This course is designed so that attendees will better understand perforations operations, equipment, state of the art and tools selection

GTI SERVICES

Course ID:

GTIS-DRCO-008

Drilling Hydraulics

Course of Interest for

Drilling Engineers

Completion Engineers

Mud Engineers

All personnel working on Rigsite

Course Duration:

3 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course intends to give in-depth overview of hydraulics calculations used in drilling wells and to demistify "black-box" software computations. It also relates hydraulics to ECD management and hole cleaning concepts

Introduction to Rotary Drilling Hydraulics

Annular Hydraulics

Pressure & Pressure Drop

Review and use of API 13-D

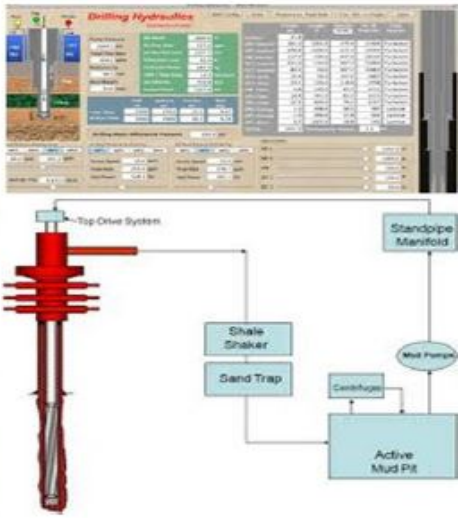
Hydraulics Optimization

Mud Pumps Sizing

Swab & Surge Pressures

Impact of Drilling Parameters on Hydraulics

Concept of ECD Management



GTI SERVICES

Course ID:

GTIS-DRCO-009

High Angle & Extended-Reach Drilling Wells

Course of Interest for

Drilling Engineers

Directional Drillers

Rig Managers & Toolpushers

Mud Engineers

Course Duration:

6 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Drainage Area Estimation

Engineering Design

Types of wells and Rig Location

Trajectory Planning

Surveying

Tubular Design & Failure Analysis

BHA Design

Torque & Drag and Buckling Fundamentals

Hole Cleaning

Tripping Practices

ECD Management

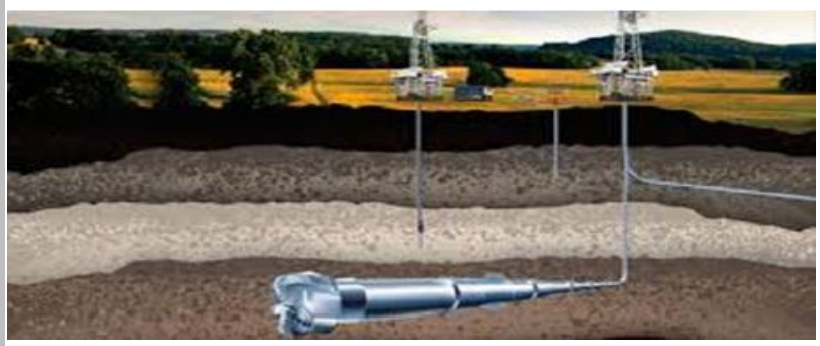
Casing Running, Swab & Surge and Casing Wear

Horizontal Well Cementing

Centralization programming

Horizontal Well with multi-frac treatments

This course is designed to give advanced undestanding of Operations to be performed during planning and execution of horizontal and ERD wells drilling



GTI SERVICES

Course ID:

GTIS-DRCO-010

'Making Hole' Course for Jr Engineers

Course of Interest for

Junior Engineers

Data Engineers

Sr. Mud Engineers

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Responsibilities of a Drilling Engineer

Drilling Rig and Drilling Rig Systems
- Hoisting System
- Power System
- Rotary System
- Circulation System
- Well Control System

Pressure Control
- Circulating Kick with Drillers Method
- Circulating Kick with Engineers Method

Casing Setting Depth Design
- Formation Pressure Prediction
- Mud Weight Selection
- Formation Fracture Gradient Prediction
- Selection of Casing Setting Depths

Drill Bit Selection
- Drill Bit Characteristics
- Rock Bit Terminology
- Rock Failure Models
- Drill Bit Selection Criteria
- Trip Time
- Optimal Weight on Bit Rotary Speeds
- Contour Method
- Dull Bit Grading
- Drill Off Tests

This course is designed to provide drilling engineering understanding through all stages calculations related to Pressure Control and bit selection. Attendees will demonstrate their ability to design a well

GTI SERVICES

Course ID:

GTIS-DRCO-011

Fundamentals of Casing Designs

Course of Interest for

Jr. Drilling Engineers

Sr. Fluids Engineers

Petroleum Engineers

Reservoir Engineers

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course provides a comprehensive overview of the design process, emphasizing the working stress approach currently used in the industry. On completion of this course, successful participants will be able to select casing points, identify tubular requirements and loads, and design and specify the required casing string

Goals of casing design

Tubulars & Connections and size determination

Casing point selection

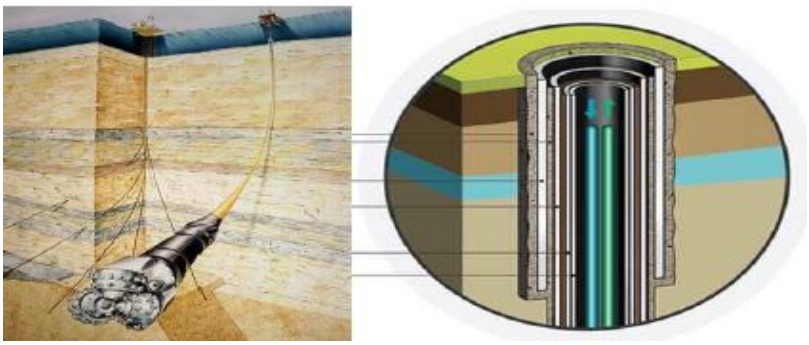
Load estimation methods for casing and liners

Typical design factors

Theories of strength and failure
- Burst, Collapse
- Axial failure
- Yield basis for combined loads

Design examples for key loads and strings

Casing handling, running and hanging practices



GTI SERVICES

Course ID:

GTIS-DRCO-012

Well Completions

Course of Interest for

Drilling Engineers

Completion Engineers

Rig Managers & Toolpushers

Mud Engineers

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is an introduction to many facets of completion and intervention technology. It focuses on practical aspects of each technology, using design examples and both successes and failures to illustrate designs and risks involved during the whole process

Basic well completion design, practices, and strategies

Well quality and integrity

Safety aspects of well design

Packer selection and tubing forces

Equipment
- Wellheads
- Chokes
- Subsurface safety valves
- Flow control equipment

Corrosion and erosion Inflow and tubing performance

Tubing design and selection

Materials selection

Completions Considerations
- Deviated & multiple zones
- Subsea horizontal/multilateral wells
- HPHT completions

Perforating design

Causes and prevention of formation damage

Stimulation design considerations

Sand control

Wireline/coiled tubing/workover rig operations

Snubbing

GTI SERVICES

Course ID:

GTIS-DRCO-013

Course of Interest for

Reservoir Engineers

Exploration and Development Geologists

Core and log Analysts

Geophysicists

Drilling and Completion Engineers

Government Officials

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course intends to be a multidisciplinary course during which participants are taken through the steps necessary to obtain reliable core analysis data and solve formation evaluation problems. Participants are given hands-on problems and practical laboratory and field examples

Coring Operations and Core Analysis

Coring and core analysis objectives

Coring Operations

- Coring hardware
- Maximizing core recovery
- Core-handling: wellsite procedures and preservation methods
- Sidewall coring and analysis

Core Analysis

- Organizing effective laboratory programs
- Porosity, permeability and fluid saturation
- Quality control in core analysis
- Petrography and mineralogy
- Special core analysis sample selection and statistical data analysis
- Core-log correlation (includes NMR log calibration, acoustic, nuclea
- Wettability
- Relative permeability
- Capillary pressure
- Reservoir fluid distribution

Data integration in reservoir simulation

Final problem: design of coring and core analysis program

GTI SERVICES

Course ID:

GTIS-DRCO-014

Introduction to Casing While Drilling

Course of Interest for

Jr. Drilling Engineers

Sr. Fluids Engineers

Petroleum Engineers

Reservoir Engineers

Anyone exposed to technology

Drilling with casing?

Technology description
- Drillability analysis, drill bit knowledge
- Bit record and dull grading
- Basic log interpretation
- Drilling exponent
- Casing drill bit and casing drives
- Hydraulics, Torque and Drag analysis
- Cementing
- Drilling with liner

Maturity level

Technology restrictions

DwC Operations and economics

Know-How

Course Duration:

2 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This fundamental course begins with an introduction to the DwC industry, key benefits of the technology, and the primary DwC systems employed by various operators. This is followed by selection of equipment for setting up a competent DwC system comprising of surface casing drive and handling equipment and downhole components.

GTI SERVICES

Course ID:

GTIS-DRCO-015

Sand Control Course

Course of Interest for

Drilling, Completion, Production and Research Engineers

Field Supervisors

Production Foremen

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course identifies parameters that must be considered when selecting sand control technique to be used. Examples, problems and case histories will be examined to illustrate key points. It also teaches how to perform quality control checks during sand control application to help insure successful wells

Sand control techniques

Radial flow and formation damage

Causes and effects of sand production

Predicting sand production

Gravel pack design

Slotted liners and wire wrapped screens

Gravel pack completion equipment and service tools

Well preparation for gravel packing

Perforating for gravel placement techniques

Perforation prepacking and enhanced prepacking

Frac packing

Open hole gravel packing

Expandable screens

Gravel pack performance

Horizontal well completions

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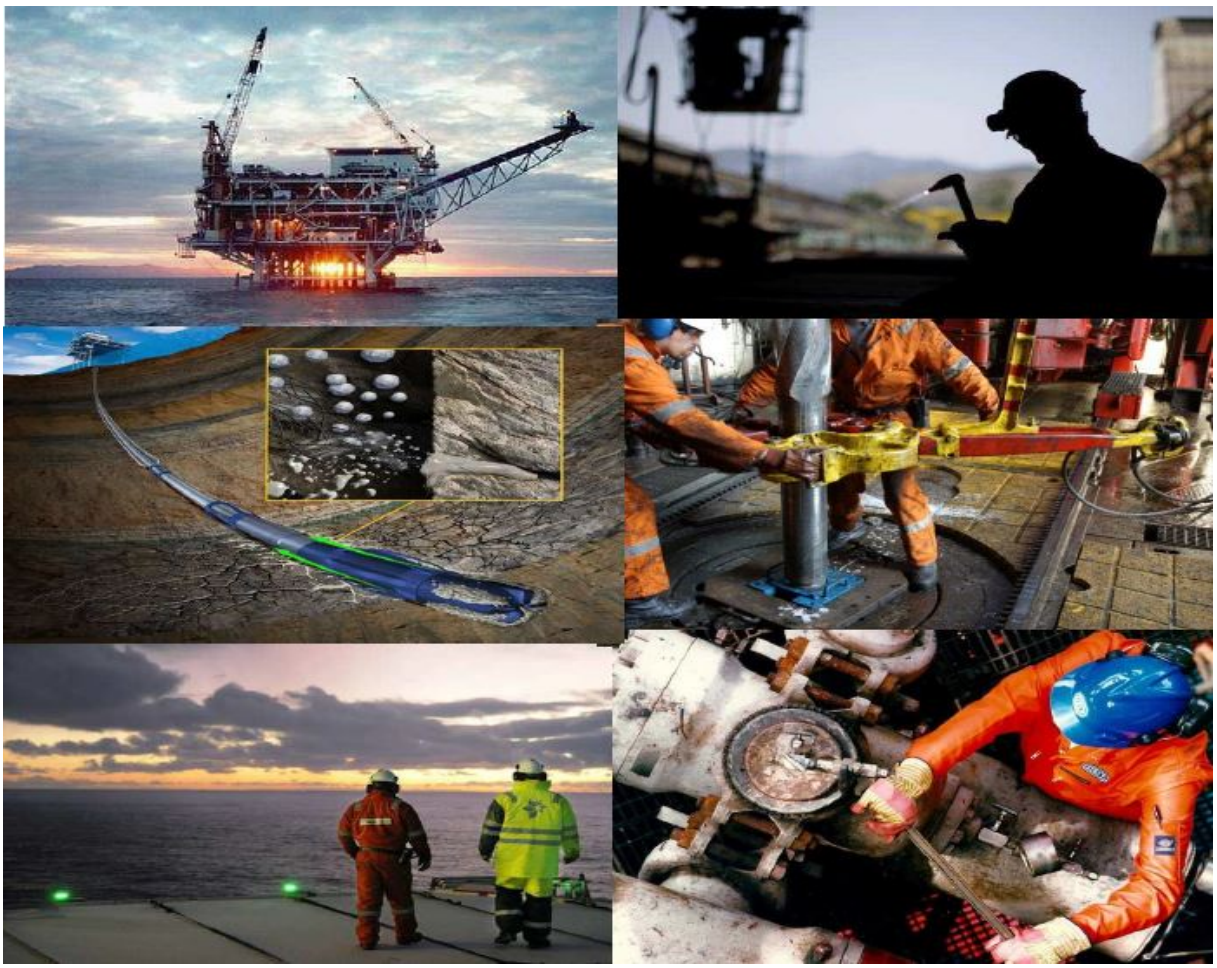
Training Catalog - Rev. 2020

Corrosion Courses



World-Class Out-Sourced Training Solutions for Your Operations

Course ID:

GTIS-CORR-001

Corrosion Management in Production/Processing Operations

Course of Interest for

Managers

Engineers

Chemists

Operators

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Fundamentals of corrosion theory

Major causes of corrosion (O2, CO2, H2S, microbiologically influence

Forms of corrosion damage

Materials selection

Protective coatings & linings

Cathodic protection

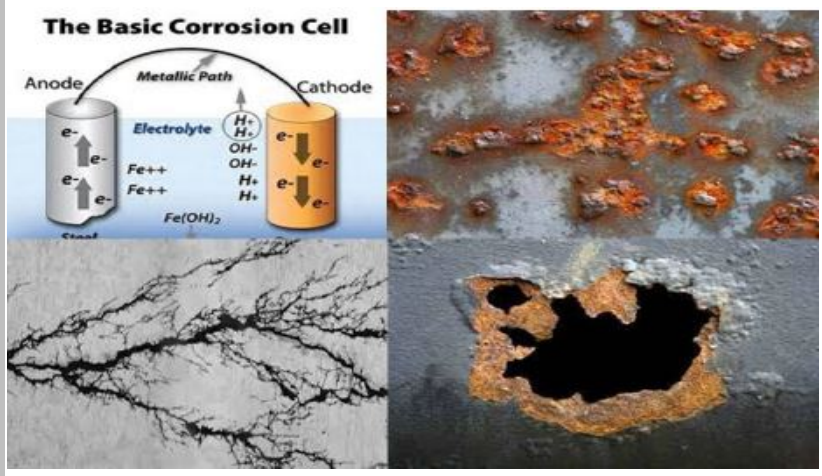
Corrosion inhibitors

Corrosion monitoring and inspection

Corrosion in gas processing facilities

Corrosion in water injection systems

Corrosion management strategy and life-cycle costs



This course provides an appropriate balance of necessary theory and practical applications to solve/mitigate corrosion related problems

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Course ID:

GTIS-CORR-002

Corrosion Management and Microbiologically Influenced Corrosion

Course of Interest for

Corrosion Engineers

Materials Engineers

Oilfield microbiologists

Production chemists

Asset integrity managers

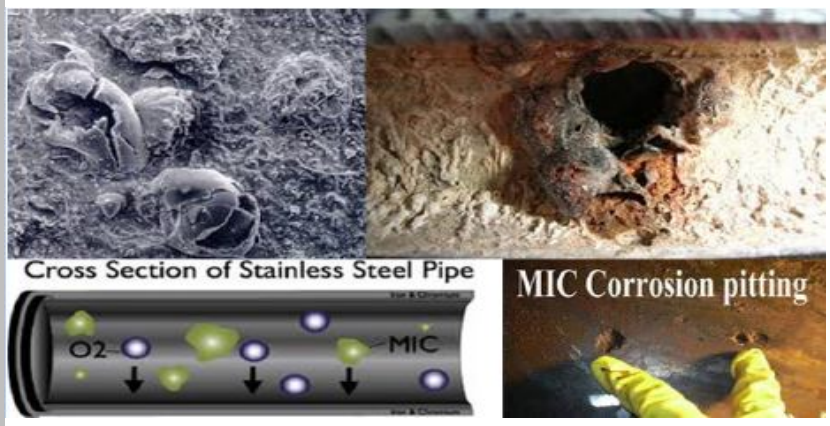
Laboratory staff

Field staff

- Basic corrosion management principles
- Basic MIC mechanisms
- Use of molecular microbiological methods (MMM)
- Selection of MIC mitigation methods
- Selection and interpretation of MIC monitoring methods
- Case studies demonstrating MIC diagnostic tools
- Sampling techniques/equipment

Course Duration:

2 days



Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is an introduction to MIC and mitigation solutions

GTI SERVICES

Course ID:

GTIS-CORR-003

Course of Interest for

Corrosion practitioners

Designers, Architects

Technical managers

Inspection Engineers

Maintenance Engineers

Quality Control Personnel

Course Duration:

5 Days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course covers fundamental aspects of corrosion control and its prevention to establish solid foundation in corrosion

Corrosion Control and Prevention - Basic Program

Day 1 Definition of Corrosion
Corrosion & Society: economic, social, political and environmental impacts
Basic Concepts of Corrosion
Primer in Chemistry & Electrochemistry
Terminologies and Conventions
Exercise/Practical Session

Day 2 Why do metals corrods?
Thermodynamics
Laws driving corrosion
Kinetics
Exercise/Practical Session

Day 3 How do metals corrode?
Mechanisms, Recognition and Prevention
Exercise/Practical Session

Day 4 Practical Corrosion Cells Important to Corrosion Diagnosis
Corrosion in Specific Environments
Methods for Corrosion Control and Prevention (Part 1)

Exercise/Practical Session

Day 5 Methods for Corrosion Control and Prevention (Part 2)

Corrosion Testing and Monitoring
Corrosion Modeling and Corrosion Prediction
Exercise/Practical Session
End of Course Examination

GTI SERVICES

Course ID:

GTIS-CORR-004

Concrete Corrosion: Causes and Prevention

Course of Interest for

Engineers, architects and designer concerned with corrosion of reinforced concrete structures

Building inspectors and surveyors

Technicians and maintenance personnel

Facility owners concerned with corrosion and method of mitigation

Course Duration:

2 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox
Decision tool

This corrosion short course systematically and thoroughly covers the causes of corrosion in buildings and other concrete structures, and the practical prevention methods ranging from coatings and corrosion inhibitors to cathodic protection

Corrosion & Society
- Economic, social, political & environmental impacts
- Liabilities due to corrosion

Basic Concepts in Concrete Corrosion
- Metal Corrosion Processes
- Terminologies and Conventions
- Processes in concrete corrosion

Processes in Concrete Corrosion
- Corrosion of steel in aqueous environment
- Corrosion of steel in concrete
- Corrosion Reactions

How to Control & Prevent Concrete Corrosion
- Concrete Quality
- Patching, membranes and sealers
- Inhibitors and Coatings
- Galvanizing
- Cathodic Protection

Testing and Monitoring Concrete Corrosion

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Training Catalog - Rev. 2020

Environment Courses

Course ID:

GTIS-ENVT-001

Carbon Capture Technologies

Course of Interest for

Production Engineers

R&D Engineers

Environment Engineers

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Emissions and Climate Change

Carbon Sources

Use of Captured Carbon

Carbon Capture Approaches

Carbon Separation Technologies

Post-combustion Chemical Absorption

IGCC with Physical Absorption

Adsorption

Oxyfuel Process with Carbon Capture

Chemical Looping Combustion

Membrane Technology

This course introduces to the delegates different technologies and strategies for CO_2 emission reduction from power generation and energy intensive industries.

GTI SERVICES

Course ID:

GTIS-ENVT-002

Environmental Management

Course of Interest for

Engineers in power generation, energy, and process industries

Environment Jr. Engineers

HSE Engineers

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

A short course which considers the human impact on the environment and provides updated knowledge of pollution control equipment and environmental management systems and tools.

Environmental Pollution Introduction

- Main ecological concepts
- Ecosystem processes
- The human dimension
- Environmental gradients, tolerance and adaptation
- Major biogeochemical cycles

Atmospheric Pollution

- Sources, sinks and concentration trends for atmospheric pollutants

Environmental Impacts of Atmospheric Pollution

- Global issues (global warming; ozone-layer depletion)
- Regional issues (acid deposition; the Arctic haze)
- Urban air pollution
- Urban growth patterns
- Urban air pollutants
- Atmospheric pollution and human health
- Effects of atmospheric pollution on plants

Dispersal of Atmospheric Pollutants

Control of Atmospheric Pollution

- Particulate pollutants, VOCs, SO_2, NOx, CO_2

Water Pollutants and Basic Treatment Principles

- Water contaminants
- Overview of drinking water treatment processes
- Regulatory requirements for drinking water

Wastewater Pollutants and Basic Treatment Principles

- Rationalization of wastewater quality
- Pollution measurement
- Overview of regulations
- Common wastewater treatment processes and principles

Treatment processes to achieve water/wastewater treatment

- Solid Waste Management, & Recycling
- Composting, Anaerobic digestion, Gasification, Pyrolysis
- Refuse, Incineration, Disposal, EIA
- Laws & Regulations

GTI SERVICES

Course ID:

GTIS-ENVT-003

Water and Wastewater Treatment Principles

Course of Interest for

Production Engineers

Production Operators

Environment Engineers

Water Treatment Plants Personnel

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course covers the conventional unit operations employed in water and wastewater treatment, including scientific engineering principles on which they are based

Classification significance and concentration ranges of impurities
- Suspended and dissolved solids
- Organic and inorganic compounds
- Trace contaminants
- Pathogens

Physical methods for removing particulates
- Screening and grit removal
- Sedimentation
- Filtration

Chemical dosing
- Precipitation
- Coagulation and flocculation processes
- Colloid science
- Disinfection
- Chemical oxidation

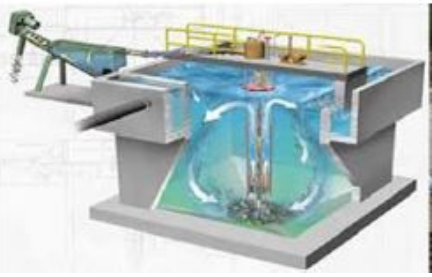
Adsorption and ion exchange

Biological processes for wastewater treatment
- Aerobic
- Anaerobic

Activated sludge, trickling filters and sludge digestion

Pumping and process control systems and strategies

Examples in treatment plants
- Flow sheets
- Unit operations



GTI SERVICES

Course ID:

GTIS-ENVT-004

Introduction to Process Science for the Water Industry

Course of Interest for

Chemists

Chemical Engineers

Process Engineers

HSE Engineers

Course Duration:

5 days

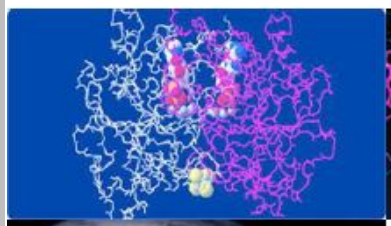
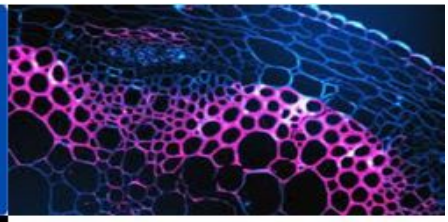
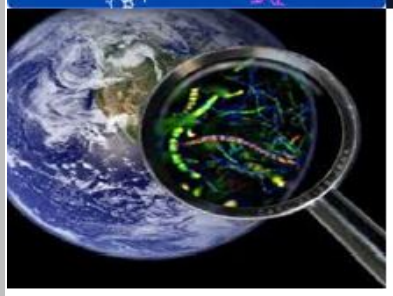
Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Aqueous chemistry
- Moles and equivalents
- Solubility
- Acids, bases and alkalinity
- Kinetics
- Equilibria
- Surface science and electrochemistry

Fundamental process principles
- Engineering and SI units
- Fluid mixing and flow through porous media
- Mass balance, Mass transfer
- Elementary chemical reactor theory

Introductory cell biology
- Basic microbiology and biochemistry
- Classification and terminology
- Structure of biochemicals and biochemical pathways


During this course attendees will acquire knowledge of basic principles of water chemistry, physics, microbiology and chemical engineering as applied to the treatment of water and wastewater.

GTI SERVICES

Course ID:

GTIS-ENVT-005

Environmental Impact Assessment

Course of Interest for

all workers in the Industry

Course Duration:

2 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Purpose and aims of EIA

EIA administration and practice

Concept of associated assessment processes

Key elements of the EIA process

Undertaking an EIA

Role of public participation

Stages that follow EIA

Costs and benefits of undertaking EIA

Understanding of strengths and limitations of EIA

The course is designed to provide critical overview of theory and practice of EIA as operated internationally to those who need to understand EIA

Course ID:

GTIS-ENVT-006

Green Chemistry Seminar

Course of Interest for

Production Engineers

Production Operators

Environment Engineers

Chemists

Students

Course Duration:

3 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This seminar intends to introduce green and sustainability concepts. Attendees will learn about the green chemistry principles and technologies

Chemistry & Society

Green Chemistry
- History of Green Chemistry
- Why green chemistry?
- What is green chemistry?
- Key concepts

A word on Green Engineering

Concept of Sustainability

Life-Cycle Assessment

Global Recognition of Green Chemistry
- Drivers for change
- Legislation
- Sustainable Development
- Factors affecting Sustainability

Renewable resources

Progress in Green Chemistry
- Pharmaceuticals Industry
- Alternative Synthetic rooutes for feedstocks
- Green Solvent
- Biosorption
- Designing safer chemicals
- Green energy in conventional energy businesses
- Green energy in mining industry

GREEN CHEMISTRY

GTI SERVICES

Course ID:

GTIS-ENVT-007

Course of Interest for

Drilling Engineers

Production Engineers

Environment Engineers

Chemists

Government Officials

Course Duration:

3 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Site Remediation Course

Course Under Preparation

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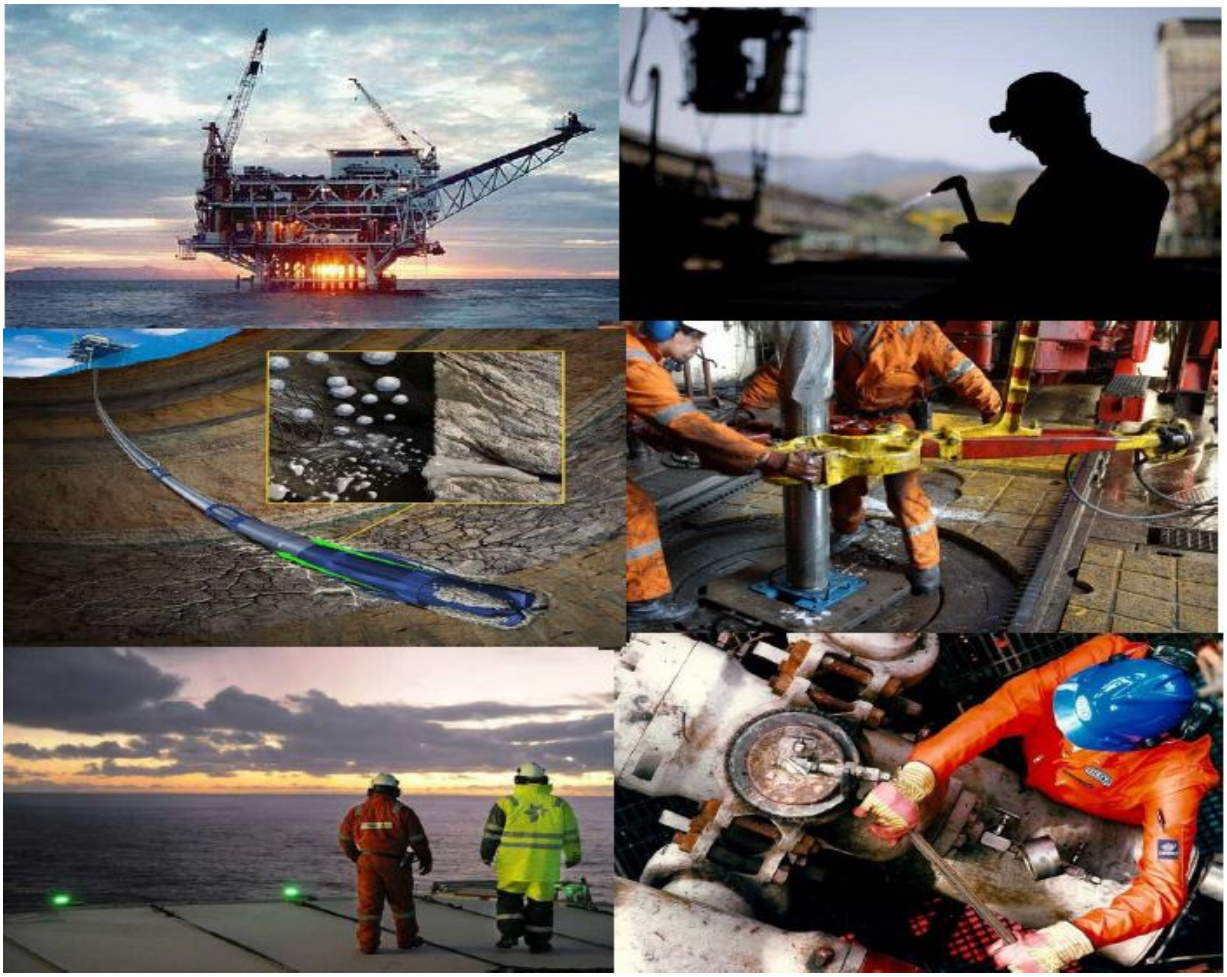
Geology Courses



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Course ID:

GTIS-GEOL-001

Course of Interest for

Reservoir Engineers

Completions Engineers

Geophysicists

Log analysts

Technologists

Non-technical professional Managers

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

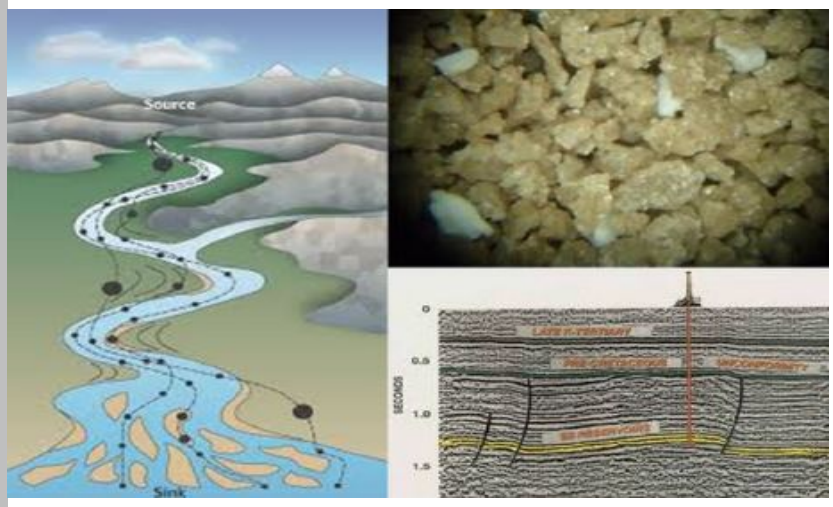
This course will provide participants with knowledge of the fundamental geologic parameters of hydrocarbon plays that determine reservoir quality, variability, heterogeneity, predictability and economic viability. Knowledge of geology as a pre-requisite to this course is not necessary

Geology for Engineers

Fundamental principles of sedimentary geology as applied to E&P

Origin and heterogeneity of formations
- Conglomerate reservoirs
- Sandstone reservoirs
- Siltstone reservoirs
- Carbonate reservoirs

Review of properties of shale as source rocks and HC reservoirs



GTI SERVICES

Course ID:

GTIS-GEOL-002

Integrated Carbonate Reservoir Characterization

Course of Interest for

Exploration & development geoscientists

Petrophysicists

Reservoir Engineers

Geostatistical modelers

Research/Development staff

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course provides nnderstanding on how primary depositional facies, diagenesis, and the sequence stratigraphic framework control the development of pores in carbonate rocks, and how the variation in pore architecture influences reservoir porosity and permeability characteristics

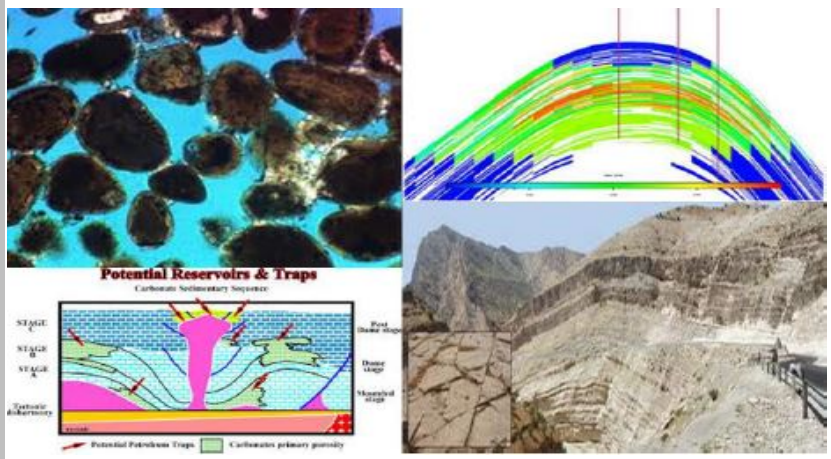
Heterogeneity in carbonate reservoirs

Basics on Carbonate Reservoirs

- Carbonate deposition, diagenesis, mineralogy, rock textures and pc
- Carbonate rock and carbonate pore system classification
- Carbonate rock properties and core analysis

Charaterization of Carbonate Reservoirs

- Well log response, limitations and strengths
- Determination of lithology, porosity, and permeability
- Fracture identification and distribution
- Porosity/depth relationships in limestone and dolomite
- Sequence boundaries to development of pore architecture
- Variations in carbonate pore architecture & effect on permeability
- Relationship of primary depositional facies, sequence stratigraphic framework and diagenetic history to pore architecture and reservoir quality
- Controls on reservoir heterogeneity
- Value of analogs for development of reservoir models
- Value and limitations of 3-D geostatistical models to understand reservoir heterogeneity and architecture



GTI SERVICES

Course ID:

GTIS-GEOL-003

Course of Interest for

Geoscientists

Petroleum Engineers

Well Engineers

Production Technologists

Course Duration:

x weeks

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

At the end of the integrated course participants will be able to contribute effectively to the preparation of planned wells and their concurrent operations during the exploration, appraisal and development phase

Operations Geology Course

Petroleum geology and systems

Operations geology
- Prospect to well planning
- Provision of geological services

Wellsite geology
- Geological sampling
- Sample analysis and well stratigraphy
- Cutting and core description

Structural geology
- Fractures
- Faults
- Borehole geology

Drilling Operations
- Bits, fluids, casing and cement,
- Drilling problems and well control
- Directional drilling, geosteering

Logging operations
- Acquisition, tools
- Quick look interpretation
- MWD/LWD, geosteering

Well testing & fluids
- Reservoir properties
- Rock and fluid interactions
- Permeability
- Data gathering and interpretation

Tendering and contracting

Reporting: geological data, petrophysical data, pressure data

Exercises: cores, cuttings, quick look, pressures, daily drilling report

GTI SERVICES

Course ID:

GTIS-GEOL-004

Production Geology for Other Disciplines

Course of Interest for

Production Engineers

Completion Engineers

Reservoir Engineers

Financial staff

Professional staff from Disciplines other than Geology

Managers involved with reservoir management and development/production

Correlation and stratigraphy

Structural interpretation

Seismology

Clastic/carbonate deposition

Reservoir geology

Reservoir characterization and modeling

Volumetrics

Well planning

Reservoir appraisal

Field development

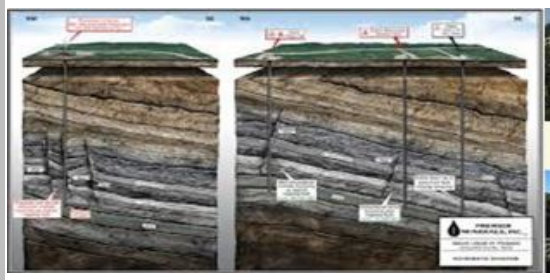
Uncertainty Analysis

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox



This Course provides a review of key geological principles and environments of deposition, all keyed to focus on practical impact of geological models and uncertainty on appraisal and development. Without common understanding between geologists and engineers, there can be no real interdisciplinary communication or teamwork in reservoir development and production activities

GTI SERVICES

Course ID:

GTIS-GEOL-005

Basic Petroleum Geology

Course of Interest for

Petroleum industry personnel in need of basic geological training, including engineering, geophysical, technical support, and administrative personnel

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

The course is designed for those with no technical training. Primary objectives are to broaden geological vocabulary, explain selected geological principles and processes, and describe how certain petroleum reservoirs and source rocks are formed

Minerals and rocks

Plate tectonics

Geological times

Weathering and erosion

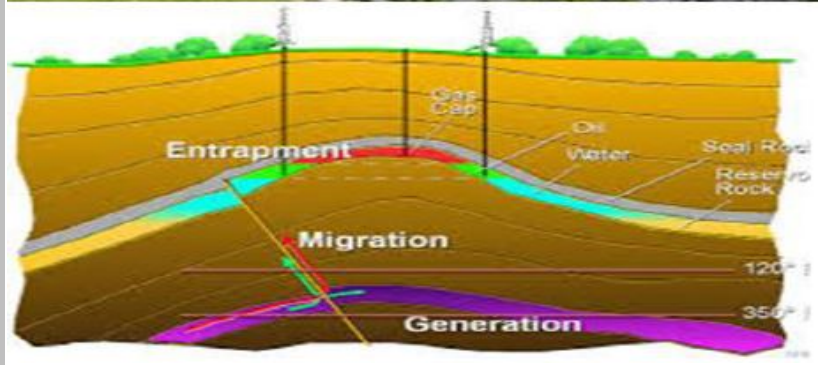
Deposition

Diagenesis

Reservoirs

Structural geology and petroleum

Origin, migration, and trapping of petroleum



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HSEQ Courses

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Course ID:

GTIS-HSEQ-001

Laboratory Health & Safety

Course of Interest for

Lab managers

Lab supervisors

Scientists & technical assistants

Course Duration:

3 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course will give an overview of practical and latest regulatory measures for the prevention of accidents, incidents, or exposures that may cause health impairment, injury, fire, or interference with laboratory operations. It includes OSHA training requirements. Registrants are invited to bring case histories, problems descriptions for evaluation and discussion

Important aspects of chemical hygiene and safety

Hazard identification and control measures

Codes, standards, and practices for laboratory safety and health

Effective storage, labeling, safe handling, and control of hazardous ch

Causes of accidents and prevention strategies

Health hazards of chemicals

Proper selection and use of personal protective equipment

Effective training, Required record keeping

Hazard analysis for lab work

How to measure success

Laboratory vs. Hazard Communication Standard

Developing/Auditing Chemical Hygiene Plans

Laboratory Ventilation

Safe Handling of Compressed Gases

Electrical Safety, Controlling Hazardous Energy

Handling Lab Emergencies

Clients issues discussions

GTI SERVICES

Course ID:

GTIS-HSEQ-002

HSE Basic Principles

Course of Interest for

all employees

Course Duration:

3 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Why HSE?

"H" for Health
- Exposure to Pollutants & Chemicals
- Understanding MSDS
- Air Quality
- Noisy Environments

"S" for Safety
- PPE Awareness
- Life Saving Rules Principles
- Process Safety Induction
- Other tools for Safety

"E" for Environment
- Types of Pollution
- O&G: A polluting industry?
- Environmental Affairs
- Spill/Leak Handling
- Waste Management
  - Waste Water Management
  - Industrial Waste Management
  - Waste Disposal
  - Property Assessments
- Environmental Agency Inspections

Induction to Risk Management

This course is designed to provide basic awareness on basic HSE principles to all employees of O&G industry

GTI SERVICES

Course ID:

GTIS-HSEQ-003

Chemicals & NORM Handling

Course of Interest for

Rig Crew

Chemists and Lab personnel

Mud Engieers

Drilling Supervisors and Engineers

Logistics personnel

Course Duration:

2 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is designed to provide participants with understanding of HSE rules applicanle when handling chemicals or NORM

Chemicals Handling

Definitions of Chemicals & Hazards

Impacts of Chemicals on Health

Physical State of Hazards

Proper handling of Chemicals
- Awareness of MSDS
- Incompatible Chemicals
  - Case of flammable chemicals
  - Acids/Bases
- General Safety Tips

Containers Labeling

Handling Chemical Emergencies

Improving Safety at work

Hazardous work in Laboratories

NORM Handling

Definition of NORM & Origins in O&G

Notion of Radiation

HSE Aspects of NORM
- NORM Health Hazards
- Contamination
- Control
- Airborne Contamination Control

Working with NORM
- Best Practices: Objectives, Training & Policy
- Job Preparation & Worker Protection Plan
- Security & Posting
- Protection of Personnel
- Job Execution
- Job Completion and Monitoring
- Laws & Regulations

GTI SERVICES

Course ID:

GTIS-HSEQ-004

HSE Awareness in Drilling Operations

Course of Interest for

all employees working on rig site

Drilling Engineers

Course Duration:

3 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox
Decision tool

Safety Pilars: Training - Procedures - Maintenance

Audits of Safety Procedures

JSA/JRA: what is this?

Effective Safety Reporting (incident reports, lessons learnt …)

Safety around Drilling
- Drilling Equipment
- Mud Circulation and treating equipment
- Hoisting equipment
- Rotating Equipment Derricks and Substructures
- Pipe handling equipment
- Certifications of Equipment
- Safety while running casing and cementing
- Mud Logging
- Logging and DST

Hydrogen Sulphide

Blow-Out Prevention

Practices to minimize Impact of Drilling Operations (ISO 14001)

This course is designed to provide awareness of HSE aspects of Operations at the rig site

GTI SERVICES

Course ID:

GTIS-HSEQ-005

Risk Assessment Course

Course of Interest for

all personnel working in HSE department

Drilling personnel

Production personnel

Course Duration:

4 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Risk Assessment
- Concepts of Hazards, Risk and Risk Assessment
- Method for Risk Evaluation
- Integrating Risk Assessment within Risk Management

HAZOP
- Hazard Identification and Analysis
- Integrating HAZOP within Risk Management
- Planning and Implementing HAZOP Actions

Human Factors and Risk Assessment
- Integrating Human Factors within Risk Management
- Cause Tree Analysis
- Workgroup

QHSE Management
- System Elements of HSE MS
- HSE Audits
- Promoting a Positive Safety Culture

The course is designed to provide participants with Risk Assessment objectives and strategy, introduce HAZOP methodology and explain HSEQ Management System Philosophy

GTI SERVICES

Course ID:

GTIS-HSEQ-006

Course of Interest for

all employees

Course Duration:

as per your needs

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

"What You Need Is What You Get" Package

GTIS and Nadoil understand that needs vary from site to site and from operations to operations.
"What You Need Is What You Get" Package allows you to choose short terms courses and to combine them into one single training package

Basic Cause Tree Analysis	1 day
Environment Awareness	0.5 day
HazCom introductory course	0.5 day
Incidents Management	1 day
Invisible Energies	0.5 day
ISO 14001 internal auditors course	1 day
Manual handling + Slips, trips and falls	0.5 day
Permit To Work Induction	0.5 day
Personal Protective Equipment	0.5 day
Task Risk Assessment	0.5 day
Understanding MSDS	0.5 day
Waste Segregation	0.5 day

And more upon request. Contact us …

WYNIWYG safety course allows you to choose short terms modules of interest for your organization. It can be used for Safety enhancement programs or Safety day for instance, or to develop specific skills with employees and new comers.

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Course ID:

GTIS-HSEQ-007

Course of Interest for

XXXXXXX

Course Duration:

x days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Basic oil spill recovery awareness

Course Under Preparation

GTI SERVICES

World-Class Out-Sourced Training Solutions for Your Operations

Course ID:

GTIS-HSEQ-008

Course of Interest for

XXXXXXXXX

XXXXXXXXX

XXXXXXXXX

Course Duration:

x weeks

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Lifting & Hoisting Awareness

Course Under Preparation

Course ID:

GTIS-HSEQ-009

Course of Interest for

XXXXXXXXX

XXXXXXXXX

XXXXXXXXX

Course Duration:

x weeks

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Process Safety Basics

Course Under Preparation

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Hydrology & Soils Courses

World-Class Out-Sourced Training Solutions for Your Operations

Course ID:

GTIS-HYDR-001

Surface and Groundwater Hydrology

Course of Interest for

Water and Sanitation Engineers

Government employees

Construction Engineers

Civil Engineers

Construction Managers

Attorneys

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course provides a conceptual and quantitative understanding of hydrology and the basic principles of hydraulics as a basis for later applied studies of water quality, water engineering, and water management

Hydrological cycle and influence of men

Basics of hydraulics
- SI Units, fluids, basic mechanics
- Pressure & measurement, submerged surfaces

Fluids in motion
- Types of flow, Continuity
- Energy and momentum equations and applications
- Behaviour of real fluid

Precipitation
- Measurement of precipitation amount and intensity
- Spatial analysis
- Interception and depression storage
- Evapotranspiration, Penman approach,actual evapotranspiration

Runoff
- Overland flow, interflow, base flow
- Runoff measurement (velocity area methods)

Structures
- hydraulic principles of weirs and flumes
- Stage measurement, Rating curves and other methods

Groundwater occurrence
- Porosity, Permeability
- Water holding formations
- Aquifers, aquicludes, aquifer types, aquifer boundaries
- Springs and streams in relation to groundwater

Aquifer properties:
- Transmissivity, Storage coefficient, significance and magnitudes

Groundwater movement
- Flow lines and equipotentials
- Natural flow, recharge, flow to wells,
- Drawdown, cone of influence, radius of influence, interference

Pumping tests and analysis

Groundwater recharge: processes, methods of estimation

GTI SERVICES

Course ID:

GTIS-HYDR-002

Soil and Water Chemistry

Course of Interest for

Water and boring engineers

Government employees

Construction Engineers

Civil Engineers

Environment Engineers

Course Duration:

8 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

The course describes the dominant geochemical and water cycles on earth. Attendees will demonstrate understanding of basic chemistry including atoms and their components, elements, compounds and chemical reactions

Soil Chemistry

Soil Chemical Processes

Soil-Chemical Testing

Soil Chemistry – Applications in Agriculture

Soil Chemistry – Applications in Environmental Management

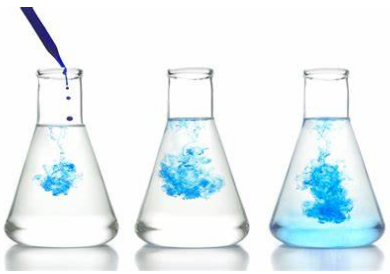
Water Chemistry -- Introduction

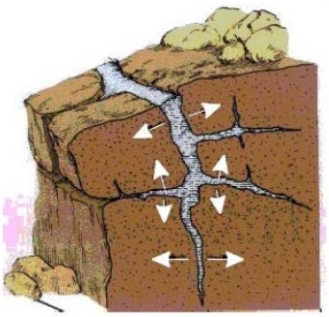
Water – Chemistry of Water Sources and Drinking Water

Water chemistry –applications in agriculture

Water chemistry – applications in the environment management

Temperature effects of water and general health





GTI SERVICES

Course ID:

GTIS-HYDR-003

Advanced Hydric Soils For Soil Scientists

Course of Interest for

Soil Scientists

Wetland Scientists

Agricultural Engineers

Construction Engineers

Environmental Engineers

Hydric soils definition, criteria, indicators, and technical standard

Pedogenic processes

Redoximorphic features

Regional hydrology

Installation of monitoring equipment

Interpreting data

Course Duration:

x weeks

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course intends to present technical information to assist soil/wetland scientists in the identification and delineation of hydric soils

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Procurement & Logistics Courses

Course ID:

GTIS-LOCS-001

Logistics - Equipment Support

Course of Interest for

employees of Logistics Providers

Warehouse personnel and manager

On-site Logistics Manager

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is designed to provide basic knowledge of Equipment Support Tools and to optimize company's tools and procedures

Coordinate and control equipment transit operations

Optimize communication for improved customs clearance

Regulate activities for In/Out flows of equipment

Fill and validate transport data sheets

Follow-up incident report and non-conformities
- *Reporting Procedures*
- *Color coding*
- *3rd party certifications*
- *DROPS Inspection*

Optimize storage areas in warehouse and onsite

Coordinate stock inventory

Course ID: GTIS-LOCS-002	**Logistics - Human Support**
Course of Interest for employees of Logistics Providers Warehouse personnel and manager On-site Logistics Manager	Coordinate and control employees transit operations Planning Air transfer operations Planning Marine transfer operations Planning Land transfer operations
Course Duration: 3 days	
Course includes: Training Materials Training Certicates End-of-Course Report Customized Toolbox	
This course is designed to provide basic knowledge of Human Support Tools and to optimize company's tools and procedures	

Course ID: GTIS-LOCS-003	**Safe Logistics**
Course of Interest for employees of Logistics Providers Warehouse personnel and manager On-site Logistics Manager	Handling, loading/unloading equipment operations Handling suspended loads (metal rings, slings, baskets, ...) Chemicals & NORM Handling Environmental Management Emergency plans: mitigation, evacuation and rescue Risk Analysis for Logistics
Course Duration: 3 days	
Course includes: Training Materials Training Certicates End-of-Course Report Customized Toolbox	
This course intends to provide knowledge of HSE Best Practices related to Logistics operations in order to reduce exposure	

Course ID:

GTIS-LOCS-004

Organizational Roles for Logistics

Course of Interest for

employees of Logistics Providers

Warehouse personnel and manager

On-site Logistics Manager

- Planning of team's activities
- Management of equipment in storage and shipment areas
- Optimize activities planning
- Monitor performance of Logistics Department (KPI)
- Supervise Logistics Team
- Schedule maintenance of storage area, fleet of equipment and worki
  - *Sstorage area*
  - *Fleet of equipment*
  - *Working tools*

Course Duration:

3 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course intends to provide advanced techniques in organizing material and human flows

Course ID: GTIS-LOCS-005	**Warehouse Management**
Course of Interest for employees of Logistics Providers Warehouse personnel and manager On-site Logistics Manager	Warehouse Organization Requisitions and Replenishment of Materials Receipt and Inspection of Materials Stocktaking Storage and Handling Practices of Materials Computerization of Warehouse Activities (Database creation) Planning and Optimization of Warehouse Location, Layout and Facilit
Course Duration: 5 days	Inventory Control (Classification and Codification)
Course includes: Training Materials Training Certicates End-of-Course Report Customized Toolbox	
This course intends to provide good knowledge of efficient management of goods and movement within a warehouse environment, and to optimize the use of all available resources including personnel, stock inventory, space, equipment and time	

Course ID:

GTIS-LOCS-006

Course of Interest for

XXXXXXX

Course Duration:

x days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Contracts & Tenders Fundamentals

Course Under Preparation

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Course ID:

GTIS-LOCS-007

Course of Interest for

XXXXXXX

Course Duration:

x days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Effective Materials Management

Course Under Preparation

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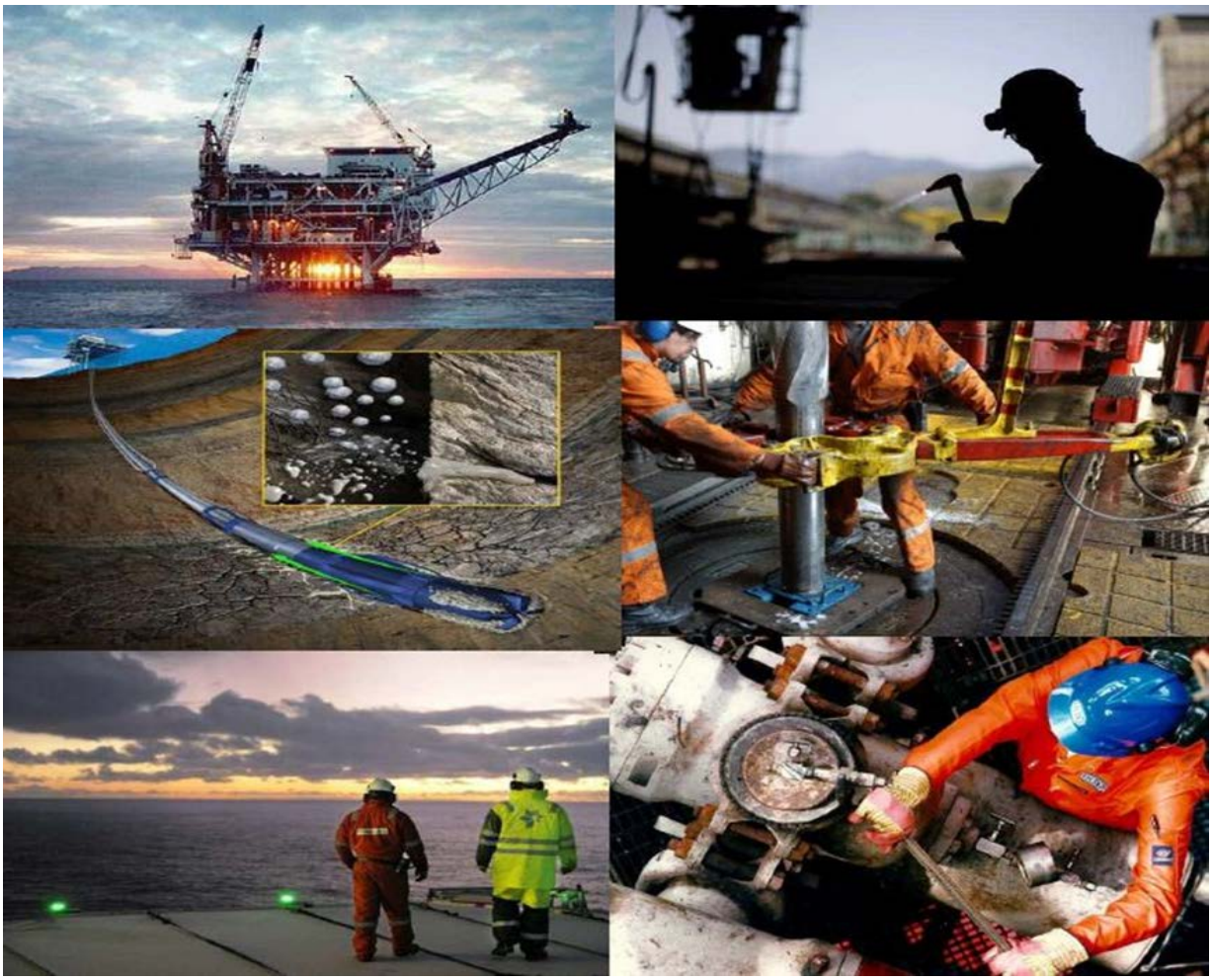
Mud Engineering Courses



World-Class Out-Sourced Training Solutions for Your Operations

Course ID:

GTIS-MUDS-001

Drilling Fluids for Drilling Operations

Course of Interest for

Drilling Engineers

Drilling Supervisors

Mud Engineers

Mud loggers

Rig Crew

Course Duration:

2 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is designed to provide drilling fluids knowledge for those working on operations, focusing on 3 major concepts: Fluids Hydraulics, Hole Cleaning and Lost Circulation

Fluid Mechanics

- Rheology
- Flow regimes
- Newtonian and non-Newtonian fluids
- Newtonian Model
- Bingham plastic Model
- Power Law Model
- Herschel-Buckley Model
- Pressure losses

Hole Cleaning

- Hole Cleaning definition
- Cuttings bed formation
- Wellbore inclination
- Impact of Mud Parameters
- Pipe rotation
- Pipe eccentricity
- Vertical Hole Cleaning
- Horizontal wellbore cleaning: cuttings bed concerns
- Hole Cleaning Strategy
- Let's go deeper
  - Barite sag prevention
  - Wellbore stability for better hole cleaning
  - Differential sticking

Lost Circulation

- Definition & Type of Losses
- Detection & Monitoring
- Strategies
- LCM
- Field Practices
- Treatments for WBM
- Treatments for OBM
- Barite Plugs

Course ID:

GTIS-MUDS-002

Drilling Fluids for Directional Drillers

Course of Interest for

Directional Drillers

Course Duration:

2 days

Optional: 3 days lab course if laboratory is available

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is dedicated to Directional Drillers and provides an overview of what every single DD shall know about drilling fluids to perform effective operations

Generalities on Drilling Fluids
- Definitions and Functions
- Mud Circulation in hole
- Properties vs. Functions

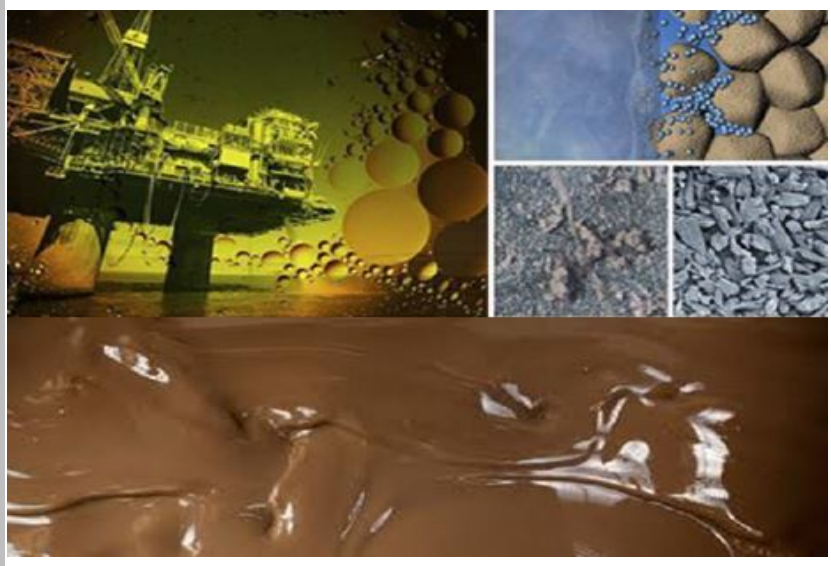
Composition of Water Based Muds

Composition of Oil Based Muds

Drilling Fluids Basic Testing for Directional Drillers

Understanding Daily Mud Report

Drilling Fluids Concerns
- Basic Hydraulics Calculations
- Hole Cleaning
- Stuck Pipe
- Lubrication Processes
- Equipment Failure vs Drilling Fluids (wear, corrosion)
- Extended Reach Wells



GTI SERVICES

Course ID:

GTIS-MUDS-003

Drilling Fluids for Deep Water Operations

Course of Interest for

Drilling Engineers

Drilling Supervisors

Mud Engineers

Mud loggers

Rig Crew

Course Duration:

2 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is providing information on drilling fluids problems expected while drilling deep water wells along with available technical solutions to mitigate them.

Introduction to Riserless Drilling

Riserless Drilling Fluids
- Drilling 26" & 20" Casing sections
- Gas Hydrates
- Shallow water Flows
- Synthetic-Based Fluids
- Effect of Cold Water on Synthetic Based Fluids
- Ballooning / Breathing Phenomenon
- Lost Circulation in Deepwater Drilling

Bore Hole Stability issues

Hydraulics

GTI SERVICES

Course ID:

GTIS-MUDS-004

Introduction to Mud Engineering Operations for Jr. Drilling Supervisors and Non-Technical Personnel

Course of Interest for

Jr. Drilling Supervisors

Jr. Ops Engineers

Finance staff

Technical Assistants

Planning Mud for the well

Rheology and Flow

Mud Composition

Basics on Hole Cleaning

Basics on Lost Circulation

Course Duration:

1 day

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This short course provides a quick overview of mud engineering operations to new-comers, non-technical and finance staff. Objective is to deliver comprehensive information to enhance communication between departments and bring additional value to mud contract management

GTI SERVICES

Course ID:

GTIS-MUDS-005

Introduction to Particle Size Distribution for Drilling Fluids

Course of Interest for

Mud Engineers

Course Duration:

1 day, plus one additional day if lab practice is required

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Particle Size Distribution is an aspect of Drilling Fluids too often neglected but which can have critical impact on miscellaneous operations. This course intends to provide knowledge of the tools available to control and optimize PSD

Introduction

- What is a particle?
- Why measure particle properties?
- Which particle properties are important to measure?

Particle Properties

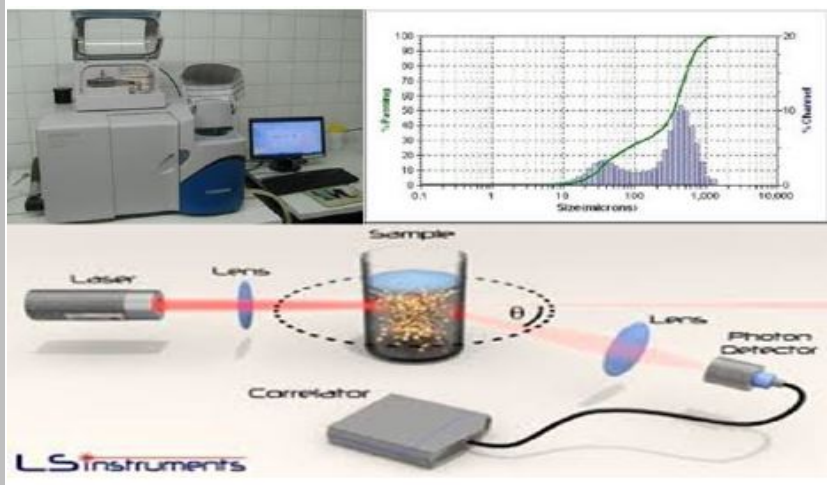
- Particle size
- Particle size distributions
- Particle shape

Particle Characterization Techniques

- Which particle characterization techniques?
- Sampling
- Sample dispersion
- Techniques: Laser Diffraction Particle Sizing
- Techniques : Dynamic Light Scattering Principles
- Techniques: Automated Imaging
- Techniques: Electrophoretic Light Scattering (ELS)
- Particle related properties: Rheology

Selecting a particle size analyzer

- When to choose laser diffraction
- When to choose dynamic light scattering
- When to choose image analysis



GTI SERVICES

Course ID:

GTIS-MUDS-006

In-House Basic Integrated Mud School

Course of Interest for

Fresh Graduate Mud Engineering Trainees

Jr. Mud Engineers

Course Duration:

4-7 weeks, depending on classroom/lab ratio expected and on optional modules selected. Lab shall be available for Module 11 purpose.

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is a fully integrated basic mud school dedicated to Jr. Mud Engineers and Fresh Graduates aiming to become Mud Engineers. It covers all aspects of engineering for the participants to effectively perform mud checks, to determine appropriate solutions to mud contaminations, and to support rig opperations with best-in-class practices. It also covers comprehensive overview of Solid Control and Waste Management.

Module 0: Introduction to Well Construction

Module 1: Basics in Chemistry

Module 2: Mud Chemicals
- Drilling Fluids Chemicals
- API Standards and Drilling Fluids Basics

Module 3: Shales reactivity & associated problems

Module 4A: Fluids Systems
- WBM, OBM
- Drill-In Fluids & Completion Fluids
- Contaminants

Module 4B: HPHT Technologies (optional)

Module 5: Solid Control

Module 6A: Loss Circulation

Module 6B: Stuck Pipe

Module 7: Mud Calculations

Module 8: Waste Management

Module 9: Hydraulics (includes effective hand calculations)

Module 10: Hole Cleaning

Module 11: Laboratory Module (practical)

Note: In Option, Basic Mud School can be delivered in OJT mode (On the Job Training)

In such case, schedule is as follows till completion of course;
- 2 weeks in classroom
- 2 weeks off
- 4 weeks on site (multiple sites for learning assessment)

Total course duration: 4.5 months

GTI SERVICES

Course ID:

GTIS-MUDS-007

In-House Advanced Mud School

Course of Interest for

Sr. Mud Engineers

Jr. Mud Engineers having completed Basic Program

Fluids Specialist

Course Duration:

2-3 weeks, adjustable

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Module 1: Introduction to Well Control

Module 2: Deep Water Operations

Module 3: HPHT & Challenging Technologies

Module 4: Advanced Formate Brines

Module 5: Advanced Chemistry for Mud Engineers

Module 6: Mud Removal

Module 7: Induction to Cementing Operations

This course is designed to delivered advanced notions of mud engineering. It is addressed to Sr. Mud Engineers having at least 6-8 years experience and good technical background. It is also available for Jr. Mud Engineers who have successfully completed Basic Mud School Program.

GTI SERVICES

Course ID:

GTIS-MUDS-008

Basic Fluids Engineering for Drilling Supervisors

Course of Interest for

Senior Drilling Supervisors

Junior Drilling Supervisors with more than 1 year experience on site

Course Duration:

2 weeks

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Module 1: Basics in Chemistry

Module 2: Drilling Fluids Systems
- Water Based Mud
- Oil Based Mud
- Completion Fluids

Module 3: Clays Chemistry

Module 4: Understanding Mud Checks and Mud Reports

Module 5: Contamination

Module 6: Drilling Problems vs. mud
- Impact of mud properties on Hydraulics
- Lost Circulation
- Stuck Pipe

Module 7: Solid Control

Module 8: Cementing
- Cement Slurries
- Spacers
- Displacement

This course intends to provide technical background on Fluids systems, including mud and cement, to Drilling Supervisors to enhance operations and communication with specialists and contractors

GTI SERVICES

Course ID:

GTIS-MUDS-009

Stuck Pipe Course

Course of Interest for

Rig Personnel

Drilling Team members

Mud Engineers

Mud Loggers

Introduction

Differential Sticking

Mechanical Sticking

Warning signs

Prevention

Lubrication

Course Duration:

2 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is designed to provide comprehensive knowledge on understanding and preventing the underlying causes of Stuck Pipe and Wellbore Instability, as well as describing fluids solutions to mitigate them

GTI SERVICES

Course ID:

GTIS-MUDS-010

Lost Circulation Course

Course of Interest for

Rig Personnel

Drilling Team members

Mud Engineers

Mud Loggers

Course Duration:

1 day

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Definition & Type of Losses
- Natural
- Induced

Detection & Monitoring

Prevention

Loss severity classification
- Seepage
- Partial
- Total

Treatment
- LCM
- Field Practices
- Treatments for WBM
- Treatments for OBM
- Barite Plugs
- Engineered Solutions

This course is providing information on Lost Circulation management on the site and addresses multiple mitigation options

GTI SERVICES

World-Class Out-Sourced Training Solutions for Your Operations

Course ID:

GTIS-MUDS-011

Enzymes in the Oil Industry

Course of Interest for

Chemists

Mud Engineers

Course Duration:

3 days

Course includes:

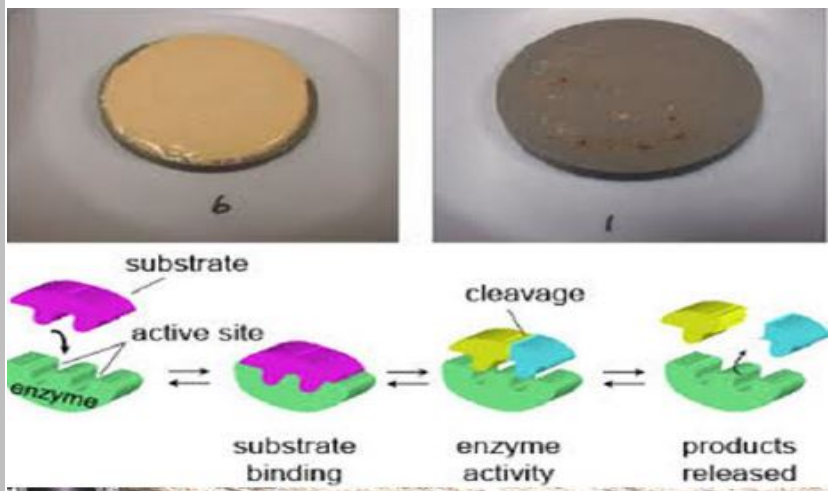
Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

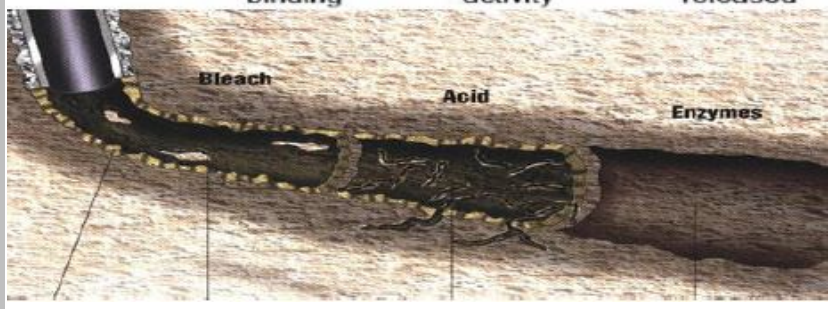
What is an Enzyme?

Enzyme Structure

Reaction and Specifity
- Enzymes, Cofactors & Coenzymes
- Enzyme-Substract complex
- Kinetics
- Enzyme catalytic mechanisms
- Inhibition of Enzymes
- Stability

Oil & Gas Applications
- Enzymes as breakers
- Comparison with other types of Breakers
- Displacement and Procedure
- Oil Sludge Treatments opportunities
- Environmental Impact





This unique course is designed to give in-depth understanding of what enzymes are, how they actually work and what can be their applications in the O&G businesses. Based on the principle that misuse comes from misunderstanding, it covers all aspects of enzymatic activity and helps participants to properly design fluids and placement to ensure high performance of enzyme solutions. All you need to know is here

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Your local focal point

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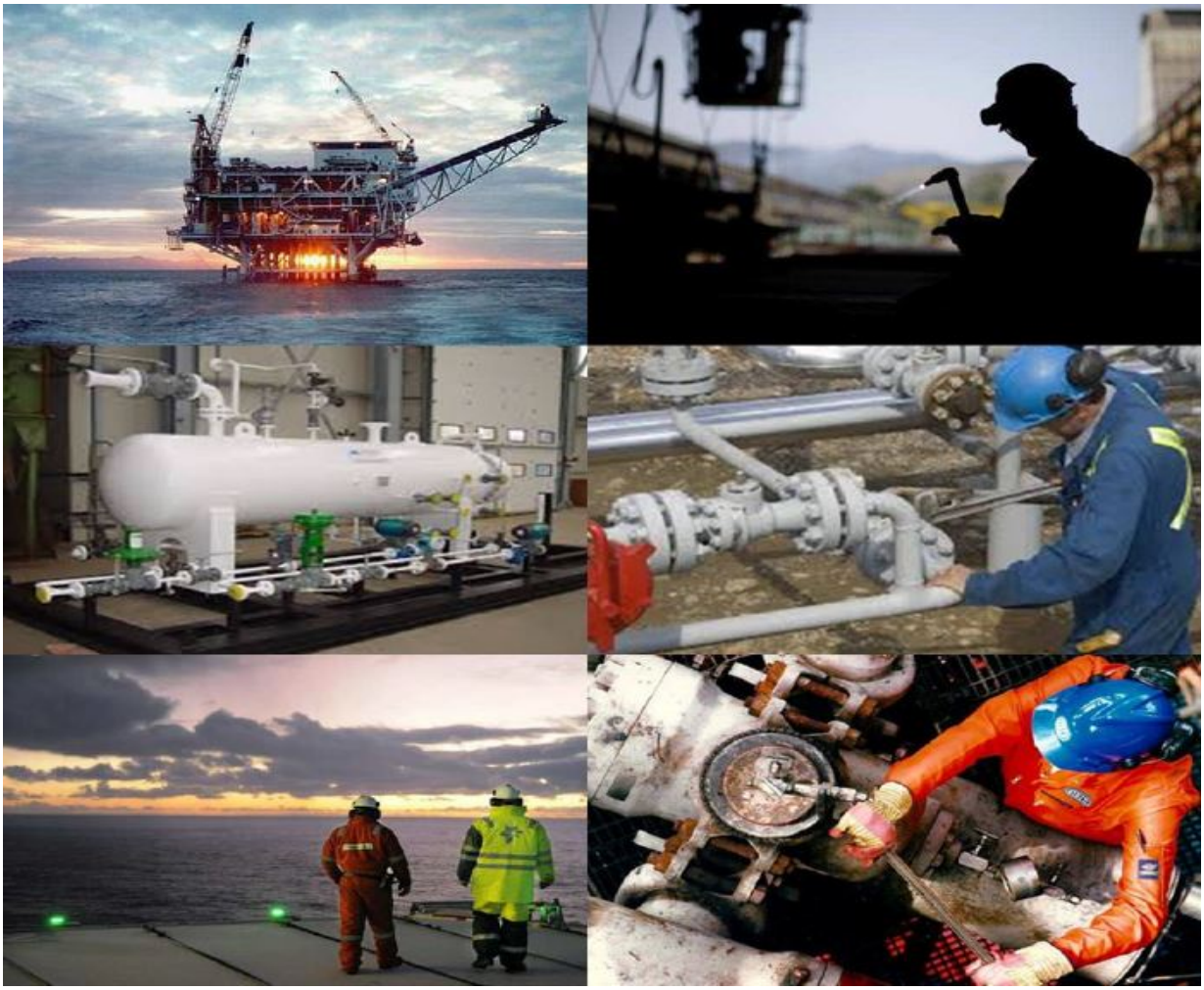
Training Catalog - Rev. 2020

Production Courses



World-Class Out-Sourced Training Solutions for Your Operations

Course ID:

GTIS-PROD-001

Production Technology and Chemistry

Course of Interest for

Exploration Engineers

Production Engineers

Production Technicians

Equipment Operators

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course explores the properties of produced fluid and its evolution from reservoir to production facilities. The impact and methods of wax, hydrate, asphaltenes control will be examined. Basic downstream processing plant operation, separation and chemical treatment will be introduced

Flow Assurance Fundamentals and Production Chemistry

- Introduction to Production Chemistry and Flow Assurance

Fluid Sampling

- Well Testing
- Downhole Sampling and Testing techniques
- PVT analysis

Design for Hydrates

- Prediction of Hydrate Formation
- Thermal Management
- Chemical and Mechanical Control of Hydrates
- Thermodynamic Inhibition
- Kinetic Inhibitors and Anti Agglomerates

Wax and Rheology

- Thermal Management
- Chemical and Mechanical Control of Wax Deposition
- Non-Newtonian flow
- Viscous Oils and Gel Transport

Scale Prediction and Control

- Scale Prediction
- Mechanical and Chemical/Process Treatment and Control of Scale

Asphaltenes and Napthanates

- Prediction and Control of Asphaltine and Napthanates

Chemical Injection Systems

- Chemical Storage
- Metering and Distribution Systems
- Umbilical Design.

Downstream Processing and Design of Separation Systems

- Basic Downstream Processing Plant Operations
- Separation and Chemical Treatment

Course ID:

GTIS-PROD-002

Process Plant Operations

Course of Interest for

Production Engineers

Chemical Engineers

Process Engineers

Environment Engineers

Environment Technicians

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course aims to familiarise delegates with principles, equipment design and operating characteristics of typical unit operations in process plants within chemical, petrochemical, water, oil and gas industries.

Overview of Process Plant Operations

Stirred Tanks

Evaporators

Crystallisers

Dryers

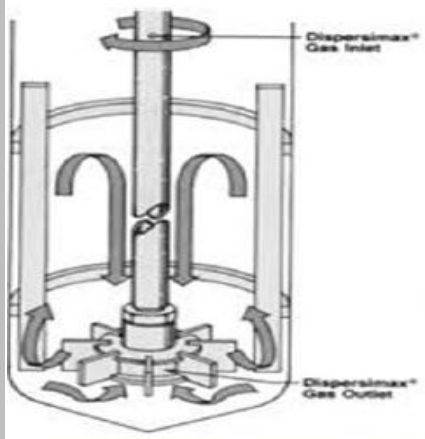
Thickeners

Filters

Centrifugal Separators

Distillation

Workshop – Waste Water Processing Plant



GTI SERVICES

Course ID:

GTIS-PROD-003

Subsea Oil and Gas Exploitation

Course of Interest for

Subsea Production Engineers

Other personnel related

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course will provide a knowledge and understanding of the equipment and procedures employed in the exploration and production of offshore oil and gas

Reservoir engineering

- Introduction
- Reservoir rocks
  - Properties
  - Reservoir fluids
  - Rock-fluid interaction
  - Phase behaviour of reservoir fluids
  - Classification of reservoir fluids

Drilling

- History
- Drilling systems
- Tubing programs
- Connectors
- Wellhead housings
- Running tools
- Templates and tiebacks
- Completion overview

Subsea production

- Fundamental requirements
- Hardware
  - Trees
  - Manifolds
  - Flowlines
  - Analysis of building blocks
  - Subsea developments

Case studies

New technologies

GTI SERVICES

Course ID:

GTIS-PROD-004

O&G Basic Production Chemistry for Engineers & Operators

Course of Interest for

Production engineers

Petroleum engineers

Chemists

Field managers

Production supervisors

Operations supervisors

Operations technicians

Environment personnel

Technical support personnel

Course Duration:

3 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course will allow attendees to acquire holistic appreciation of Production Chemistry in O&G production, and understand how production can be threatened by chemical phenomena
It helps understanding chemical treatments and recognise risks to asset integrity from corrosion mechanisms

What is Production Chemistry?

Chemistry of Petroleum

Oilfield Chemical Phenomena

- Scaling
- Emulsions
- Foaming
- Wax
- Asphaltenes
- Hydrates
- Corrosion
- Microbial Activity
- Reservoir Souring

The Affected Systems

- Oilfield Production
- Gas Processing
- Produced Water
- Water Injection
- Waste Water Treatment
- Oil & Gas Transmission
- Oil Storage
- Utilities

Sampling & Analysis

Chemical Regulation & Control

GTI SERVICES

Course ID:

GTIS-PROD-005

Plant Processing of Natural Gas

Course of Interest for

Field and maintenance Foremen

Fileds and maintenance Superintendents

Field technicians and operators

Field engineers

HSE Engineers

Course Duration:

4 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Characteristics of natural gas

Physical properties of natural gas

Petroleum reservoirs

Gas behavior

Natural gas production

Gas conditioning

Dehydration of natural gas

Pumps

Prime movers and compressors

Natural gas measurement

Instruments and controls

Operating considerations

Safety

Allocation

Maintenance

This course covers the general operation and troubleshooting of systems for natural gas handling and treatment from the wellhead to the gas processing plant to achieve desired product specifications. Emphasis is placed on the field handling and field processing equipment and their safe operation.

GTI SERVICES

Course ID:

GTIS-PROD-006

Basics of Liquefied Natural Gas

Course of Interest for

Managers new to the LNG industry

Operating supervisors

Operations engineers

Project managers

Course Duration:

4 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course provides basic instruction about all facets of LNG industry. It focuses on presenting a thorough understanding of LNG liquefaction and regasification facility operations from the process side. It also addresses the 3 major building links of LNG chain: liquefaction plant, transport ships and receiving terminal

Overview of the LNG industry

Baseload liquefaction plant

Receiving terminal

LNG shipping industry

Major equipment in LNG industry

- Cryogenic exchangers
- Compressors and drivers
- LNG pumps and expanders
- Loading arms
- LNG tanks

Supporting functional units in LNG plants

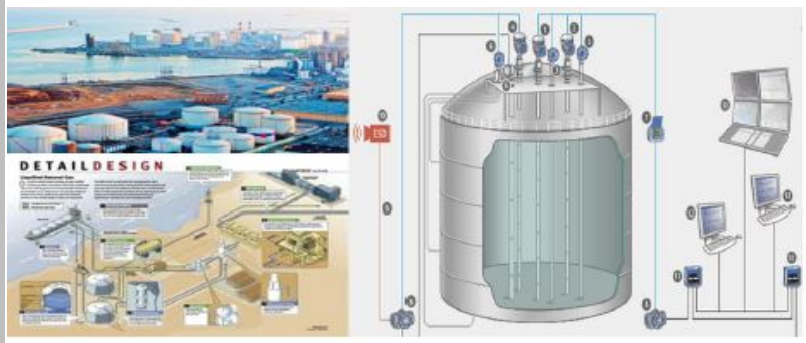
- Gas pretreatment
- NGL recovery
- Nitrogen rejection unit
- Helium recovery

Safety, security, and environmental issues

Offshore LNG

Special topics

- Non-conventional LNG
- Risk management



GTI SERVICES

Course ID:

GTIS-PROD-007

Oilfield Chemicals Integrated Course (Advanced)

Course of Interest for

Production Engineers

Facilities Engineers

Chemists and technicians

Government employees

HSE Engineers

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course covers the selection and use of chemicals used in oil and gas production. It includes methods to determine the need for chemical treating, how to select the proper chemicals, and how testing for chemical compatibility with the formation and other chemicals is performed. Requirements for environmentally friendly products and products for deep water production are discussed.

Corrosion

- Corrosive agents
- Corrosion inhibitor selection and application
- Predicating and monitoring corrosion rates

Basics of oil field emulsions

- Demulsifier selection and field application

Foams

- Defoamers
- Foam basics
- Field application of foams
- How defoamers work

Scales

- Compounds that cause scaling
- Predication of scaling tendency
- Scale inhibitors
- Solvents to dissolve scales

Gas Hydrates

- Requirements for gas hydrates to form
- Types of compounds used to control hydrate formation

Wax Control

- Causes of paraffin (wax) problems
- Paraffin treatment chemicals
- Asphaltene stability tests
- Asphaltene treatment chemicals

H2S Control

- Chemicals used as H2S scavengers
- Application of scavengers

Environmental Impact

- Oil carryover in water
- Removal of oil and oily solids
- Tests required for chemicals used in deepwater
- Green chemicals (Environmentally friendly chemicals)
- International guidelines

GTI SERVICES

Course ID:

GTIS-PROD-008

Crude Oil and Water Treatment

Course of Interest for

Surface facilities operation engineers

Production chemistry engineers

Flow assurance engineers

Production engineers

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Oilfield Processing, Production Fluid Separation, and Emulsion

- Typical oilfield processing
- Production fluid separation
- Potential operation problems
- Emulsion

Oil Treatment Basics, Treaters, and Dehydration Performance

- Oil treatment basics
- Oil dehydration technologies and processes
- Dehydration performance factors

Crude Oil Desalting

- Main problems of salty crude oil
- Desalters: equipment and technology
- Operation and design considerations
- Life cycle costing for selection considerations

Water Treatment

- Properties of produced water
- Environmental regulations
- Water specifications
- Factors affecting the water treatment
- Process and equipment design
- Chemical treatment
- Chemicals used in water treatment
- Study of water treatment real cases

This course explores theories and technologies involved in crude oil and water treatment, starting with emulsion theory formation, stabilization and mechanism, through technology to destabilize and separate water from oil. It also discusses desalting technologies and processes needed to achieve required oil specifications

GTI SERVICES

Course ID:

GTIS-PROD-009

Oil Enhancement Processes
Chemical Flooding

Course of Interest for

Petroleum Engineers

Reservoir Engineers

Production Engineers

Geologists and geophysicists

Course Duration:

3 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is designed to provide key aspects of chemical methods and process limitations. It covers all chemical methods of polymer, surfactant/polymer, alkaline/suractant/polymer (ASP) methods plus microemulsion and other chemical techniques. In addition, it presents technical backgrounds, current status, and future of chemical EOR techniques

Introduction and EOR definitions

Types of EOR methods and enhancement approaches

Screening criteria for EOR techniques vs. chemical ones

Phase behavior and rock-fluid properties for chemical methods

Displacement, vertical, and volumetric efficiencies

Polymer method

- Polymer types, mobility, properties
- Calculating polymer injectivity and mechanical degradation
- Fractional flow of polymer
- Designing the flood
- Case studies of chemical EOR

Surfactant-polymer flooding

- key aspects, surfactant-brine-oil phase behavior, and performance
- Micellar-polymer (MP) flooding
- MP process, high capilary number, designing, non-ideal effects
- how to make a simplified recovery prediction

Alkaline-surfactant-polymer (ASP) process

- Advantages and limitations

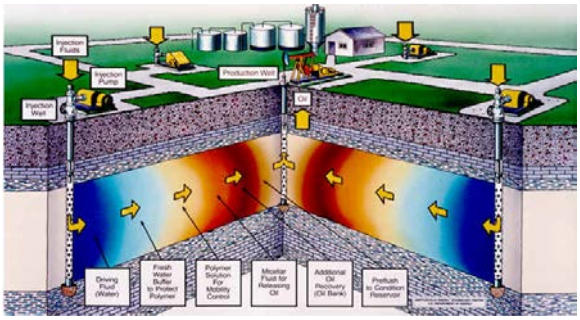
Other chemical EOR methods

- Foam flooding, microemulsions, others

Limitations and proposed solutions for chemical EOR methods

Analysis of results of some field cases

Future of chemical EOR methods



GTI SERVICES

Course ID:

GTIS-PROD-010

An Overview of Heavy Oil Recovery

Course of Interest for

Reservoir Engineers

Production Engineers

Geologists

Production Technicians

Production Managers

Basic concepts of thermal recovery

Mechanics of recovery and operations considerations

Analytical heating models

Field experiences

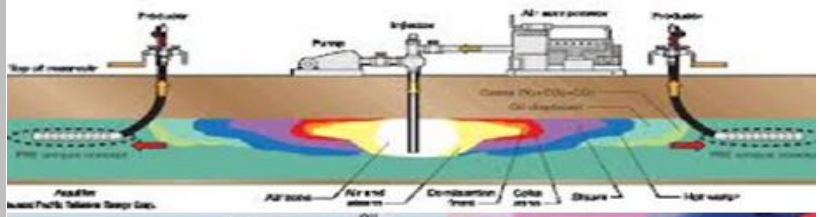
Commonly applied technologies in heavy oil recovery

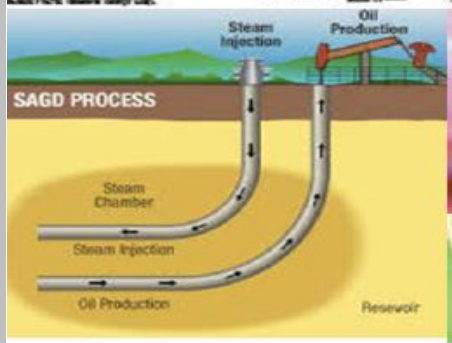
Course Duration:

1 day

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox





$$\text{API gravity} = \frac{141.5}{\rho} - 131.5$$

This overview course is designed to provide a background on a variety of heavy oil recovery techniques with emphasis on steam injection recovery

Course ID:

GTIS-PROD-011

Practical Aspects of Thermal EOR
Advanced Course

Course of Interest for

Petroleum Engineers

Reservoir Engineers,

Production Engineers,

Facilities engineers

Facilities Managers

Government officials

Course Duration:

2 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Thermal effects on rock and fluid properties

Types of thermal oil recovery (TOR)

Thermal EOR (TEOR) screening and economics

Steam TEOR – Analytical methods

Data input into thermal simulators

Reservoir simulation of steam injection thermal projects

Steam additives

In-situ combustion TEOR

Reservoir Simulation of In-Situ combustion

In-Situ oil upgrading

Thermal well design and thermal well drilling

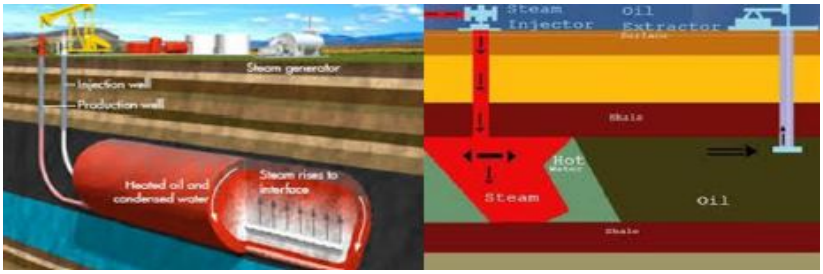
Surface facilities for thermal EOR projects

Thermal EOR project implementation

Thermal EOR operations/HSE

Thermal EOR project management and surveillance

This course discusses practical aspects of whole variety of thermal EOR processes, including utilization of reservoir simulation, and economics of thermal EOR methods



GTI SERVICES

Course ID:

GTIS-PROD-012

On the Job Training "Production Operators"

Course of Interest for

New-comers aimed to become Production Operators

Course Duration:

On site continuous training
Duration: 2 years (12 rotations) per batch and per Instructor

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This long course is designed to provide both theoretical and practical knowledge to new-comers aimed to become production operators. Each theoretical module is followed by an on-site training where participants help existing team, under the supervision of the instructor who is coordination planning with Production Manager. Acquired knowledge is continuously assessed during program, and participants are evaluated at the end of course thorugh tests and project presentation in front of a jury

On-site training

On-the-job training is mainly carried out in shifts at the plant.
Instructors help trainees acquire knowledge and know-how needed to perfom at expected level
Program is customized upon Client's requirements

Mentoring

Instructors play the role of mentors in the training process by:

- Supervising and guiding trainees they are in charge of
- Leading coordination between training and on-site phases
- Validating specific OJT knowledge and skills acquired
- Assessing trainee's ability to evolve in Client's organization

Typical Rotations Schedule: 4x4 or 5x5
After each course Module, a Site Training Period is planned

Modules available

Module 1
P&ID; Air Instrument; Flares; Drains; Daily Operations; Gas-Lift wells; Rod-suck wells; Separators; Desalting; Terminal Operations; Counting; Pigging

Module 2
Pipes & valves; Exchangers; Introduction to DCS; Produced Water; Injection Water; Dehydration

Module 3
Sweetening; Liquefaction; Safety valves; Oil & Grease; x-overs and couplings

Module 4
Pumps; ESD/PSD; Inert Gas; Fuel Gas; Chemical Treatments

Module 5
Distillation & Columns; Process control; Laboratory; Compressors; Turbines; Gasoil and Jet Fuel

Module 6
Engines; Cathodic Protection; Alternators; Batteries; Hydraulics

Module 7
Commissioning; Fire Network; Heaters; Steam; Boilers; Operational Safety

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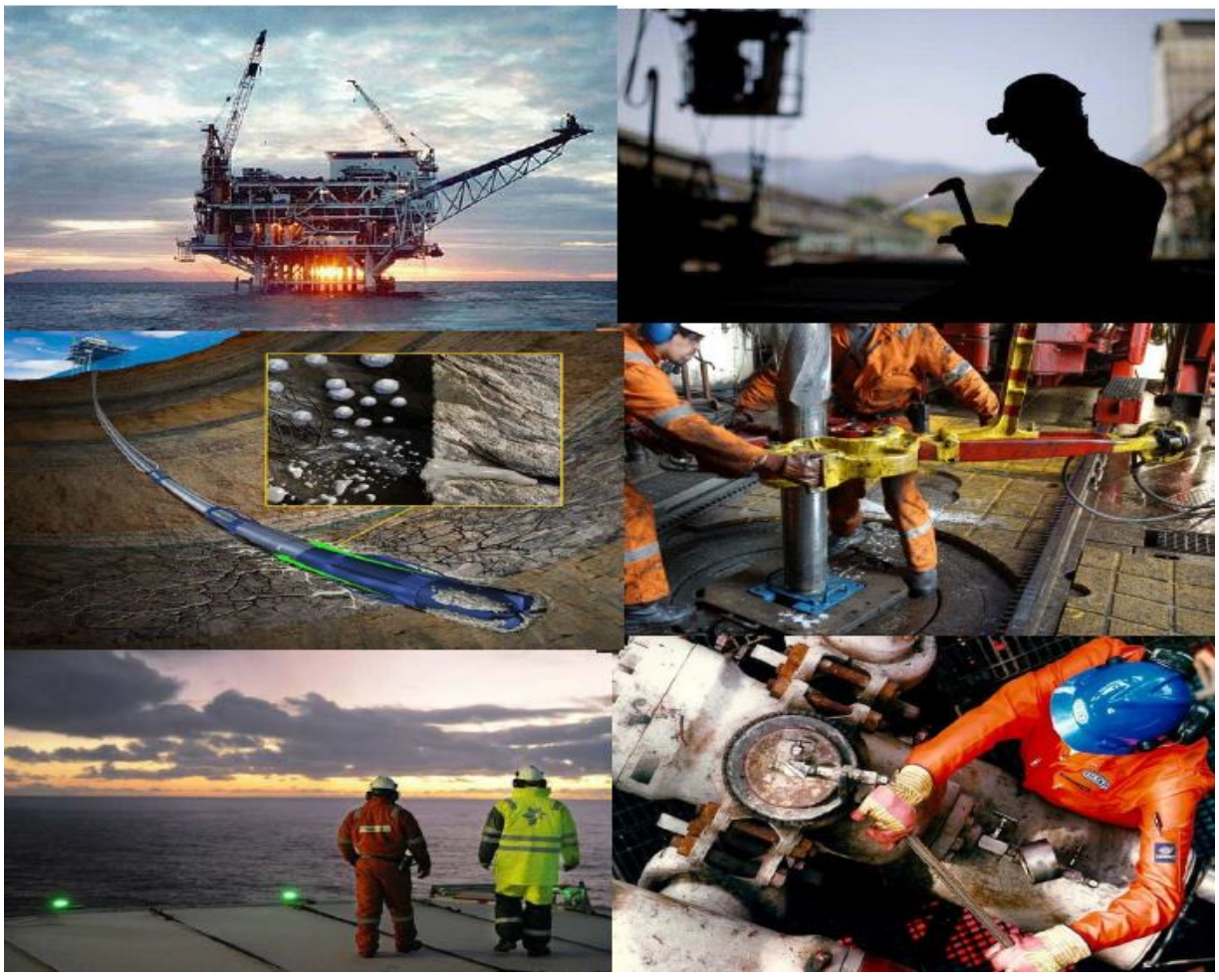
Project Management Courses



World-Class Out-Sourced Training Solutions for Your Operations

Course ID:

GTIS-PROJ-001

Project Management Course

Course of Interest for

Projects Engineers

Project Managers

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course provides the foundation, techniques and tools to manage each stage of the project life cycle, work within organizational and cost constraints, set goals tied directly to stakeholder needs, get the most from project management team, and utilize state-of-the-art project management tools to get the work done on time and within budget

What are "projects"?

- Why project management?
- The project life cycle
- Influences on a project
- Key stakeholders
- Project management process groups
- Project manager responsibilities

Project Initiation

- Understanding the role of senior management
- Needs assessment & Project selection
- Benefit/cost ratio, Present value and net present value
- Building SMART objectives
  - **S**pecific
  - **M**easurable
  - **A**greed to
  - **R**ealistic
  - **T**ime-constrained
- Developing requirements
- Charters & Requirements Documents

Project Planning

- Scope planning
- The work breakdown structure
- Estimating
- Schedule Planning
- Network Diagrams – CPM
- Speeding up the Schedule
- Project Management Planning Software
- Cost Planning
- Responsibility Matrix
- Resource Loading and Leveling
- Risk Planning
- Procurement Planning
- Communication and quality planning

Project Implementation

- Baselines
- Developing and Organizing the project team
- Managing change; Managing Risks
- Performance reporting
- Reserves
- Assessing and monitoring project performance
- Earned value
- Sunk costs

Project Closeout

- Scope verification and customer acceptance
- Administrative and contractual closure
- Transferring lessons learned to future project

Course ID:

GTIS-PROJ-002

Basics of Piping Engineering

Course of Interest for

Piping Design Engineers

Process Engineers

Plant Operating Engineers & Managers

Inspection Personnel

Maintenance Engineers

Project Managers

Course Duration:

10 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is designed to give a detailed discussion of the subject of Process Piping Fundamentals with emphasis on the basic fluid mechanics aspect. It also covers the design, fabrication, inspection and testing of Process piping. Important Piping requirements will be explained, including Short-cut methods in designing of Pipes, Pipe fitting and Flanges, process flow diagrams, piping & instrumentation diagrams, and equipment

Fundamentals of Fluids

- Different types of fluids
- Flow pattern of various fluids
- Laminar Flow, turbulent flow
- Selection of type of flow and pipe line sizing
- Concept of economical velocity
- Pressure Drop calculations of Liquid Flow

Flow of Gaseous Fluids

- Flow characteristics of gas
- Concept of Compressibility Factor
- Economical velocity for gaseous flow
- Selection of Pipe Size for gaseous and steam flows
- Pressure Drop calculations in gaseous flow

Piping for Vacuum Service

- Effect of Vacuum on fluid flow
- Concept of Compressibility Factor in vacuum service
- Selection of Pipe Size for Vacuum service

Selection of Pump

- Various Types of Pumps
- Flow and pressure characteristics of Centrifugal Pumps
- Understanding of NPSHA and NPSHR
- Optimization of selected pump for liquids
- Optimization of centrifugal Pump for viscous applications

Selection of Valves

- Various types of valves
- Flow characteristic of various valves
- Pressure drop in various valves (K factor)
- Choosing a correct valve for intended application

Design of Piping System

- Estimation calculations of available pressure
- Estimation calculations of expected pressure drop
- Calculation of Line size
- Calculation of actual pressure drop based on piping routing
- Trouble shooting in fluid flow

Piping Codes and Standards

GTI SERVICES

Course ID:

GTIS-PROJ-003

Fundamentals of Industrial Process, Measurement & Control

Course of Interest for

Process Engineers

Electrical and E&I Engineers

Production Engineers

Operations Managers

Maintenance Engineers

Project engineers

Course Duration:

10 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course covers practical applications of distributed control systems. Included is relationship between programmable logic controllers and the DCS

Process Control Concepts

- Continuous, Batch
- Discrete Control
- Role of Measurement and Control in Industry
- Graphic Description of Loop Components
- Component Loop Dynamics

Industrial Measurement Systems

- Sensor Selection and Characteristics
- Transmitters
- Smart Transmitters

Pressure Measurements

- Concepts
- Instruments
- Differential Pressure Measurement

Level Measurement

- Hydrostatic Head Level Measurement
- Capacitance Level Measurement
- Ultrasonic Level Measurement
- By Weight

Flow Measurement

- Fluid Fundamentals
- Methods and Concepts
- Differential Head Flow Measurement
- Velocity Flow Measurement Devices
- Mass Flowmeters

Temperature Measurement

- Thermometers, Thermocouples, RTDs, Thermistors
- Temperature Transmitters

Industrial Process Control

- Basic Feedback Control, Components, PID Control
- Final Control Elements
- Tuning Concepts

Trends in Control Technologies

- Smart Components, Fieldbus

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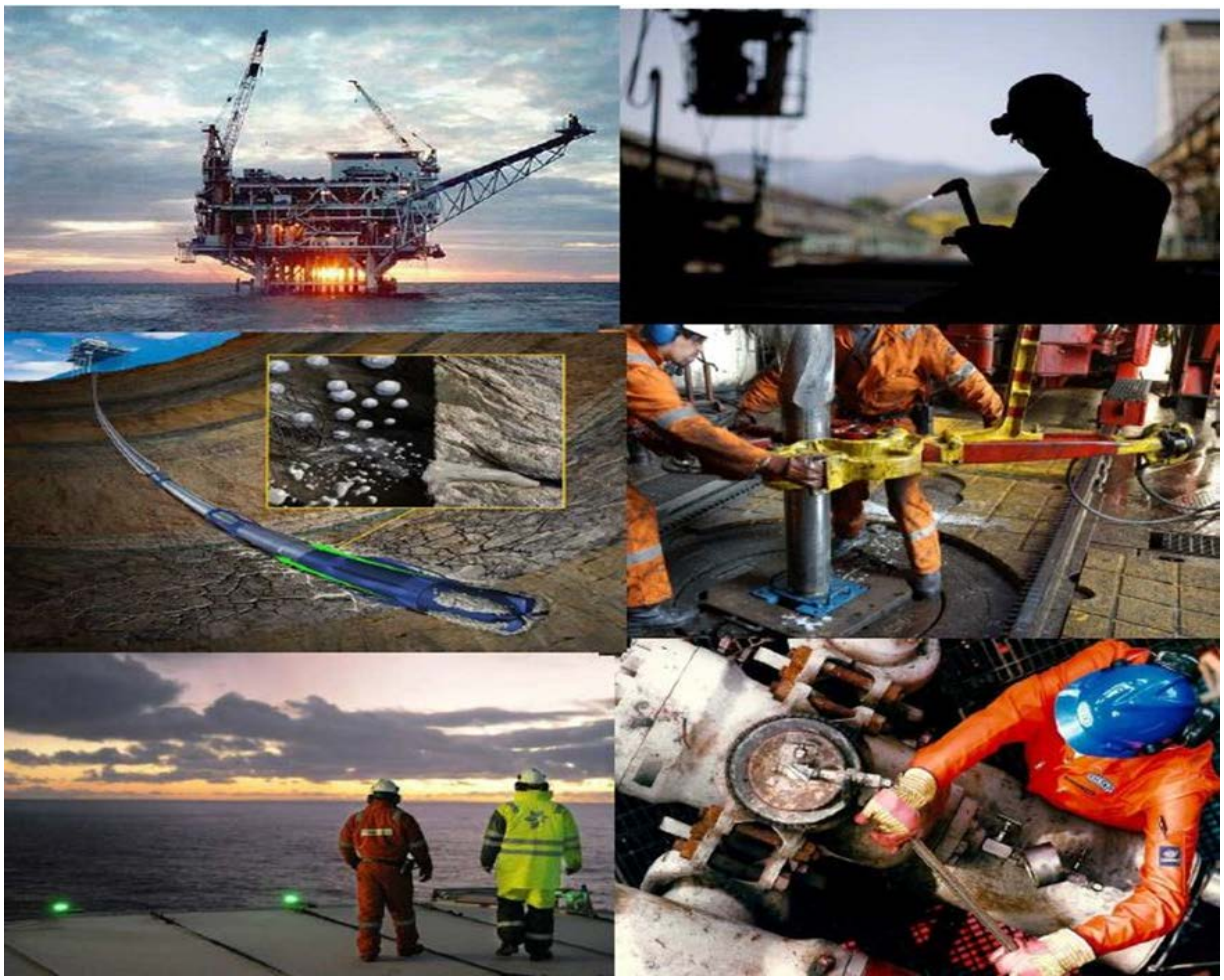
Stimulation Courses



World-Class Out-Sourced Training Solutions for Your Operations

Course ID:

GTIS-STIM-001

Course of Interest for

Drilling & Completion Engineers

Mud Engineers

Drilling Supervisors

Operations Manager

Drilling Manager

Chemists

Course Duration:

2 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This highly technical course is providing deep understanding of all phenomena involved in damages created to formations during drilling and completion operations. It covers both field and lab aspects.

Formation Damage: What we think we know

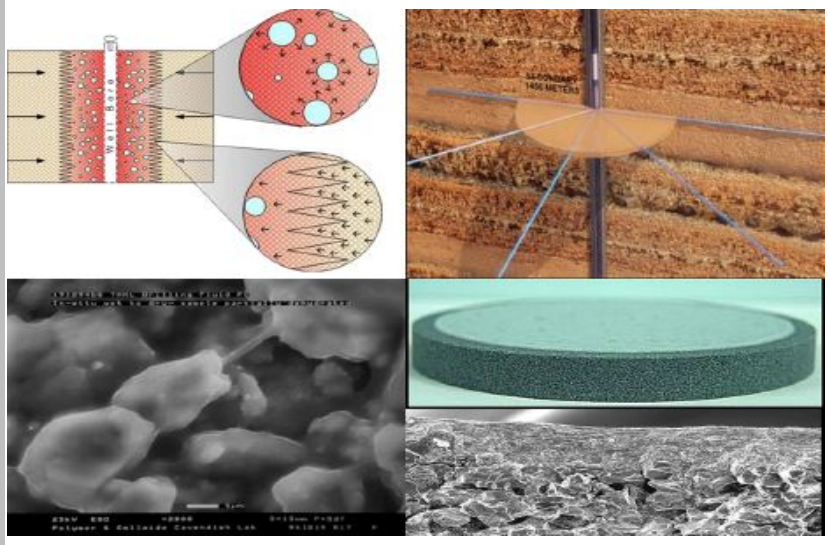
Notions of Reservoir

Introduction to Skin and Well Productivity

Formation Damage Processes
- Filtrate
- Solids
- In-situ reactions
- Clay mobilization
- Bacteria induced damages

Testing Formation Damage

Guidelines



GTI SERVICES

Course ID:

GTIS-STIM-002

Well Stimulations Techniques

Course of Interest for

Drilling & Completion Engineers

Mud Engineers

Drilling Supervisors

Operations Manager

Drilling Manager

Chemists

Acidizing Processes
- Matrix Acidizing of Sandstone Reservoirs
- Matrix Acidizing of Carbonate Reservoirs

Case study: designing a acid stimulation campaign

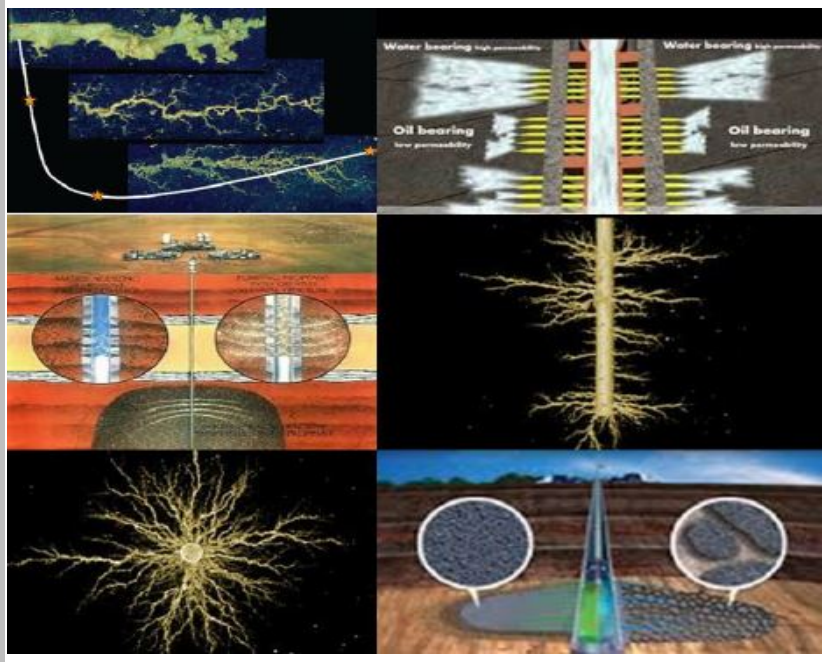
Alternative Solutions to Acid
- Enzyme
- Acid Precursor Technologies (type N-Flow)
- Hydraulic Fracturing
- Water Shut Off Technologies

Course Duration:

3 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox



This course is designed to provide an extensive overview of stimulation techniques, from matrix acidizing to alternative methods. It also comprises case history on stimulation campaign design strategy

GTI SERVICES

Course ID:

GTIS-STIM-003

Hydraulic Fracturing
Design and Treatment

Course of Interest for

Production Engineers

Completion Engineers

Field operations staff

Course Duration:

2 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Rock mechanics/in-situ stress aspects of fracturing

Reservoir aspects of fracturing (How much fracture do I need?)

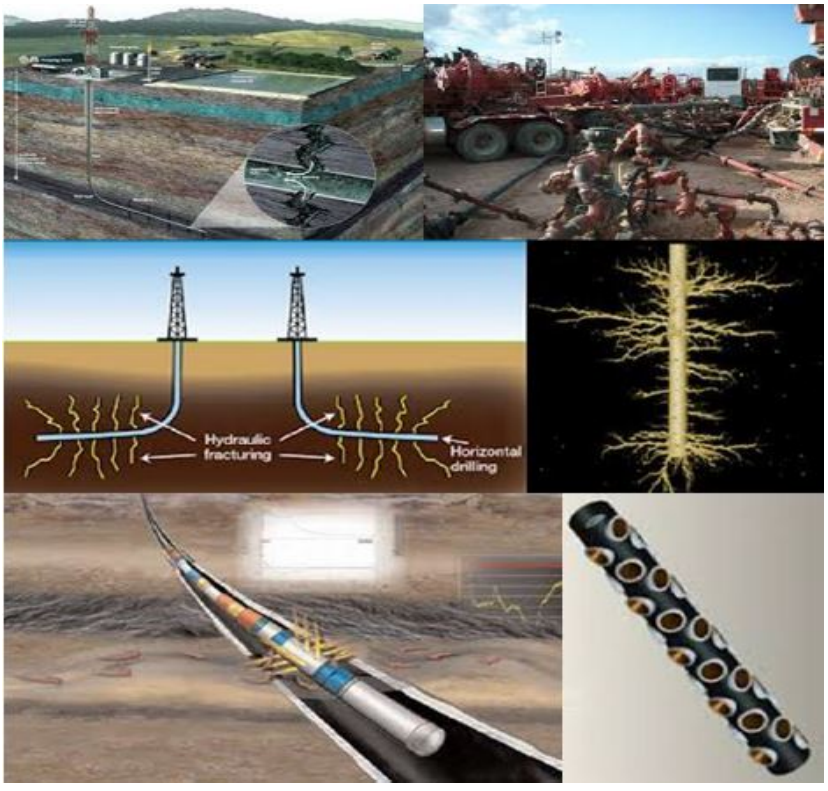
Fracture mechanics

Fracture design variables

Perforating for fracturing

Fracture diagnostics

Fracturing Fluids



This course covers fundamental principles of hydraulic fracturing treatments used to stimulate oil and gas wells. It includes discussions on how to select wells for stimulation, what controls fracture propagation, fracture width, etc., how to develop data sets, and how to calculate fracture dimensions. Hydraulics fluids are also covered

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Wire Operations Courses

World-Class Out-Sourced Training Solutions for Your Operations

Course ID:

GTIS-WLOP-001

Wireline Formation Testing & Evaluation

Course of Interest for

Wireline Operators

Wireline Supervisors

Drilling Engineers

Petrophysicists

Geologist

Reservoir Engineers

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course is designed to satisfy the interdisciplinary need of geologists, petrophysicists, drilling engineers and reservoir engineers, who have an increasing use of wireline/LWD testing and sampling data. Practical class exercises are worked during the course

Need for formation testing and sampling

How WFT/FPWD/FSWD tools work
- Measurement fundamentals
- Test types (pretest, extended flow, and packer test)
- Drawdown mobility applications
- Data QA/QC
- Factors influencing pressure data quality

Fundamental pressure gradient and FWL interpretation principles

Graphical interpretation techniques
- Scatter-plot for gradient QC
- FWL and compositional gradient detection
- Excess pressure plot for compartmentalization studies
- Normalization plot for depleted reservoir

Multiple pressure trends for reservoir compartmentalization

Qualification and quantification of data interpretation uncertainties

Mud filtration phenomena & near wellbore petrophysics
- Mud slumping
- Supercharging
- Wettability/capillary effect

Downhole fluid ID
- Optical property measurement and contamination control
- Sampling principles and fluid sample quality assurance procedures
- In-Situ fluid property measurement and reliability

Permeability test design and data interpretation

Test program design & Class exercises

GTI SERVICES

Course ID:

GTIS-WLOP-002

Course of Interest for

Wireline Operators

Wireline Supervisors

Drilling Engineers

Petrophysicists

Geologist

Reservoir Engineers

Course Duration:

3 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

The course includes a detailed introduction to Slickline equipment and instrumentation used to control, condition and monitor downhole operations.

it provides a clear understanding of the primary operations & need for Slickline in the oil & gas industry.

Fundamentals of Slickline Operations

Slick line unit

Pressure control equipment

Tools string components

Running and pulling tools

Locks, Standing Valves and Landing Nipples

Flow control equipment

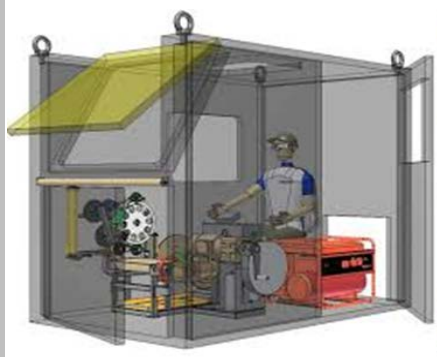
Running – Setting – Equalizing & Pulling process

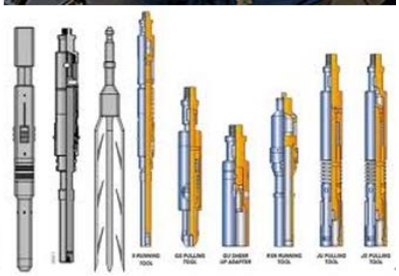
Shifting tools

Service and remedial tools

Changing Gas Lift Mandrels

Running in well





GTI SERVICES

Course ID:

GTIS-WLOP-003

Advanced Production Logging

Course of Interest for

Technicians, supervisors or engineers with little or no prior knowledge of slickline

Course Duration:

5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

This course focuses on providing in-depth evaluations of 2-phase and 3-phase flow in tubulars. it also reviewes various types of reservoir fluids and looks in some details at near wellbore formation damage and concept of positive and negative skin, to help analyzing Productivity Index (PI) of each zone in commingled production and analyze underperforming wells

Reservoir Fluids

- Formation Damage after matrix acidization
- PI curves and Positive and Negative skin

Advanced Production Log Interpretations

- Slippage velocities
- 2-P & 3-P flow, flow regimes, flow stratifications
- Production Logging in Horizontal Wells
- Slippage velocities
- In-situ measurements of slippage velocities

New Technology applications for production Logging

- Electric sensors
- Optical sensors
- FlowScanner
- Flow distribution across the borehole

Measuring Fluid Velocities

- Slippage Velocities
- Phase velocity logs
- Oxygen-activation logs
- Tracer injectors
- Spinner calibrations
- Measuring hold-ups in 1, 2 and 3 phase flow domain
- Advanced Production Log Interpretation Workshop

Saturation Monitoring and Water Salinities

- Carbon Oxygen (C/O) applications
- Pulsed Neutron Logging (PNL) Applications
- Behind Casing Formation Resistivities
- Workshop on Saturation Monitoring

Cased Hole Formation Tester

New applications of Formation testing in cased hole

- Integration of data with other cased hole data

Visit of Client's base

- Review of PL tools
- Monitoring tools best practices

GTI SERVICES

Course ID: GTIS-WLOP-004	**On the Job Training** **PLT Standards & Optimization**
Course of Interest for PLT Operators	On-site training On-the-job training is mainly carried out in shifts at the plant. Instructors help trainees acquire knowledge and know-how needed to perfom at expected level Program depends on Client's operational requirements
Course Duration: On site continuous training Duration: 1 years (6 rotations) **Course includes:** Training Materials Training Certicates End-of-Course Report Customized Toolbox Standardization Posters	Mentoring Instructors play the role of mentors in the training process by: Supervising and guiding trainees they are in charge of Leading coordination between training and on-site phases Validating specific OJT knowledge and skills acquired Assessing trainee's ability to evolve in Client's organization Typical Rotations Schedule: 4x4 or 5x5

Course ID:

GTIS-WLOP-005

Course of Interest for

Wireline Operators

Wireline Supervisors

Drilling Engineers

Petrophysicists

Geologist

Reservoir Engineers

Course Duration:

x days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Fundamentals of Slickline for Weatherford Operations

Course
Under
Preparation

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Business Support Courses

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Course ID: GTIS-BIZS-001	**Business Support for Managers**
Course of Interest for Team Leaders Department Managers Sole Proprietors Project Managers	Module 1: Strategy & Marketing Module 2: Business Unit Financing Module 3: Leading Business Unit Module 4: Team Leadership and Management Module 5: Human Resources key comptencies for Managers
Course Duration: 10 days	Duration of each module is 2 days.
Course includes: Training Materials Training Certicates End-of-Course Report Customized Toolbox	
This course intends to provide knowledge to newly promoted managers and business owners about leadership and company's organization. The attendees will be guided on how to set consistent goals, strategies and practises for themselves and the management team to ensure business runs smoothly and its members grow together	

Course ID: GTIS-BIZS-002	**HR Roles Basic Course**
Course of Interest for XXXXXX	Module 1 (4 days) *Roles of HR* *Recruitment Processes* Module 2: Competencies Management (3 days)
Course Duration: 14 days	Module 3 (2 days) *Continuous Training and Professional Development* *Rights and Negotiation* Module 4 (3 days)
Course includes: Training Materials Training Certicates End-of-Course Report Customized Toolbox	*Skills assessment of employees* *Dashboards* Module 5: Salaries Management and Policies (2 days)

Course ID:

GTIS-BIZS-003

Competencies Management Course

Course of Interest for

XXXXXXX

Course Duration:

2 x 5 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

Module 1 (2 days)
Employment mapping
Strategic Positions
Competencies lexical

Module 2: Competencies Appraisal baseline (3 days)

Module 3: Talents evaluation (2 days)

Module 4: Definition and Management of mobility (1 day)

Module 5: Competencies and Training (2 days)

GTI SERVICES

Course ID:

GTIS-BIZS-004

Course of Interest for

XXXXXXX

Course Duration:

4 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox
Decision tool

HR Focus "HR Overview for new comers"

Course
Under
Preparation

Course ID:

GTIS-BIZS-005

Course of Interest for

XXXXXX

Course Duration:

4 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

HR Focus "All about Recruitment"

Course
Under
Preparation

Course ID:

GTIS-BIZS-006

Course of Interest for

XXXXXXX

Course Duration:

4 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

HR Focus
"HR Manager, Business and Human Partner"

Course Under Preparation

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Course ID:

GTIS-BIZS-007

Course of Interest for

XXXXXXX

Course Duration:

3 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

HR Focus
"Building/Updating your Pay Strategy"

Course Under Preparation

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Course ID:

GTIS-BIZS-008

Course of Interest for

XXXXXXXXX

XXXXXXXXX

XXXXXXXXX

Course Duration:

3 days

Course includes:

Training Materials
Training Certicates
End-of-Course Report
Customized Toolbox

HR Focus
"Internal Mobility Management"

Course Under Preparation

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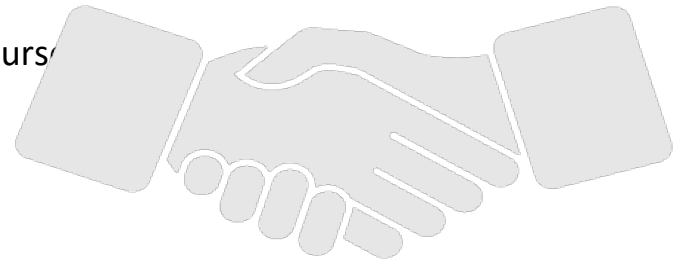
ıpport Cours



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