



Types of Analyses

Course Introduction:

This course is designed to provide participants with a thorough understanding of the various analytical methods used in the oil and gas industry. In a field where data-driven decision-making is crucial, understanding the different types of analyses and their applications can significantly enhance operational efficiency and reservoir management. This five-day theoretical course covers fundamental analytical techniques, including geological, petrophysical, and production analyses, as well as their roles in optimizing exploration and production strategies.

Participants will explore the principles behind each type of analysis, the methodologies employed, and the interpretation of results. The course will also delve into case studies that illustrate the practical application of these analyses in real-world scenarios. By the end of the course, attendees will be equipped with the knowledge and skills necessary to select and apply appropriate analyses to inform decision-making in the oil and gas sector.

Course Objectives:

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

- Understand the different types of analyses utilized in the oil and gas sector.
- Apply geological analysis techniques to enhance exploration efforts.
- Conduct petrophysical analyses to evaluate reservoir characteristics.
- Utilize production analysis methods for optimizing recovery strategies.
- Integrate various analytical results to inform decision-making processes.

Who Should Attend?

This course is intended for:-

- Geologists and geophysicists involved in exploration and development.
- Petroleum engineers and reservoir engineers.
- Data analysts and technicians in the oil and gas industry.
- Project managers and decision-makers in exploration and production.

Course Outline:

Day 1: Introduction to Analytical Methods

- Overview of the importance of analyses in the oil and gas industry
- Classification of analyses: geological, petrophysical, and production
- Key terminologies and concepts related to different types of analyses
- The role of data in driving analytical processes

Day 2: Geological Analysis

- Techniques for geological analysis: seismic, stratigraphic, and structural analysis
- Interpreting geological data and its implications for exploration
- The significance of geological models in reservoir characterization
- Case studies demonstrating geological analysis in action

Day 3: Petrophysical Analysis

- Overview of petrophysical properties: porosity, permeability, and saturation
- Methods for conducting petrophysical analyses: core analysis, well logs, and laboratory tests
- Interpreting petrophysical data for reservoir evaluation
- Applications of petrophysical analysis in field development planning

Day 4: Production Analysis

- Introduction to production data analysis techniques: decline curve analysis, material balance, and reservoir simulation
- Evaluating production performance and forecasting future production
- The importance of production analysis in optimizing recovery strategies
- Case studies showcasing successful production analysis applications

Day 5: Integrating Analyses for Decision Making

- Strategies for integrating geological, petrophysical, and production analyses
- Utilizing analytical results to inform reservoir management decisions
- Best practices for reporting and presenting analytical findings
- Future trends and advancements in analytical techniques in the oil and gas industry

Course Methodology:

A variety of methodologies will be used during the course that includes:

- (30%) Based on Case Studies
- (30%) Techniques
- (30%) Role Play
- (10%) Concepts
- Pre-test and Post-test
- Variety of Learning Methods
- Lectures
- Case Studies and Self Questionnaires
- Group Work

Course Fees:

To be advice as per course location. This rate includes participant's manual, Hands-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Certificate:

International Center for Training & Development (ICTD) will award an internationally recognized certificate(s) for each delegate on completion of training.

Course Timings:

Daily Course Timings:

08:00 - 08:20	Morning Coffee / Tea
08:20 - 10:00	First Session
10:00 - 10:20	Coffee / Tea / Snacks
10:20 - 12:20	Second Session
12:20 - 13:30	Lunch Break & Prayer Break
13:30 - 15:00	Last Session