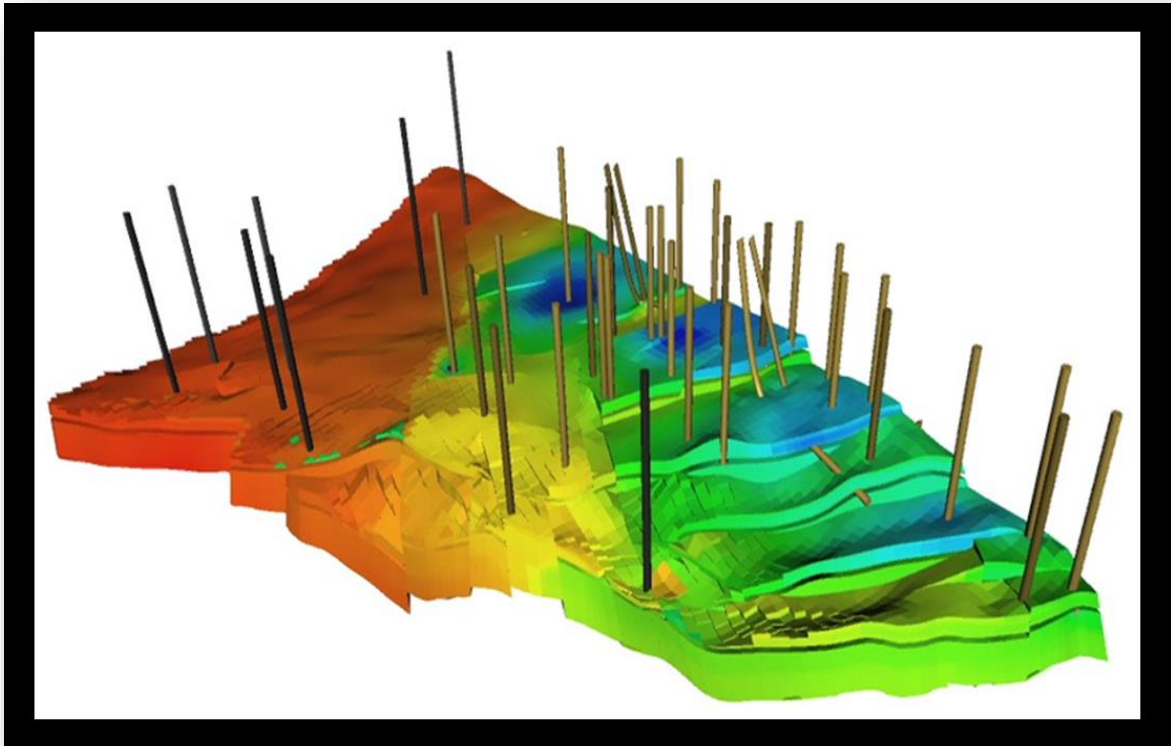




DE103

Reservoir Surveillance Management

Course Introduction:

Modern day reservoir management process involves goal setting, planning, implementation, monitoring, evaluation, and revising plans. It requires a clear understanding of the alternative mechanisms of oil recovery and the tools available to predict reservoir performance under alternative exploitation plans. Proper management requires the early diagnosis of anomalous performance and the evaluation of alternative remedial options. In order to select the best plan, the profitability of the alternative plan has to be established.

This five-day course is oriented towards the selection, implementation, monitoring and updating exploitation plan for a better reservoir management. It presents sound reservoir management concepts and methods including a team approach based on integration of geo scientific and engineering professionals, tools, technology, and data.

Course Objectives:

Upon successful completion of this course, the delegates will be able to:

- ✓ Will learn about reservoir monitoring including reservoir surveillance (objects, short term, and mid-term planning) and pressure profiling in the developed reservoirs
- ✓ Will learn about advanced decline curve analysis, material balance application, and water flooding
- ✓ Will learn Project selection and revision
- ✓ Will learn about the reservoir model, specifically the dynamics well model, during the second day of this course
- ✓ Will also learn about the concepts, sources of expertise, data acquisition and data use in respect to reservoir management

Who Should Attend?

This course is intended for all Petroleum Engineers, Geoscientists, Math and Science Graduates, Operations and Technical Supervisors and Managers, particularly those who will become members of reservoir management or surveillance teams.

Course Outline:

Day 1:

Reservoir Management: Processes, Concepts, and Analysis

- Reservoir management process
- Concepts, sources of expertise, data acquisition, and data use

- Cycle, integration, analysis, and modeling
- Data Analysis, models, and Geo-Sciences Static Model

Day 2:

Reservoir Model, Operations, and Facilities

- Reservoir model – Dynamics Well Model
- Production operations
- Surface facilities

Day 3:

Financial Management

- Project evaluation
- Economics
- Net cash flow and time value of money
- Investment decisions
- Project selection and revision

Day 4:

Reservoir Monitoring

- Reservoir Surveillance
- Pressure profiling
- Production logging, measurements, and interpretation
- Saturation monitoring
- Water control

Day 5:

Reservoir Management Application

- Plan for a mature field and reservoir life cycle
- Reservoir environment and formation properties
- Quick Data analysis methods
- Reservoir modeling
- Advanced decline curve analysis, material balance application, and water flooding
- Applying reservoir management in a newly discovered field

Course Certificate:

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

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
- Discussion
- Presentation

Course Fees:

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

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