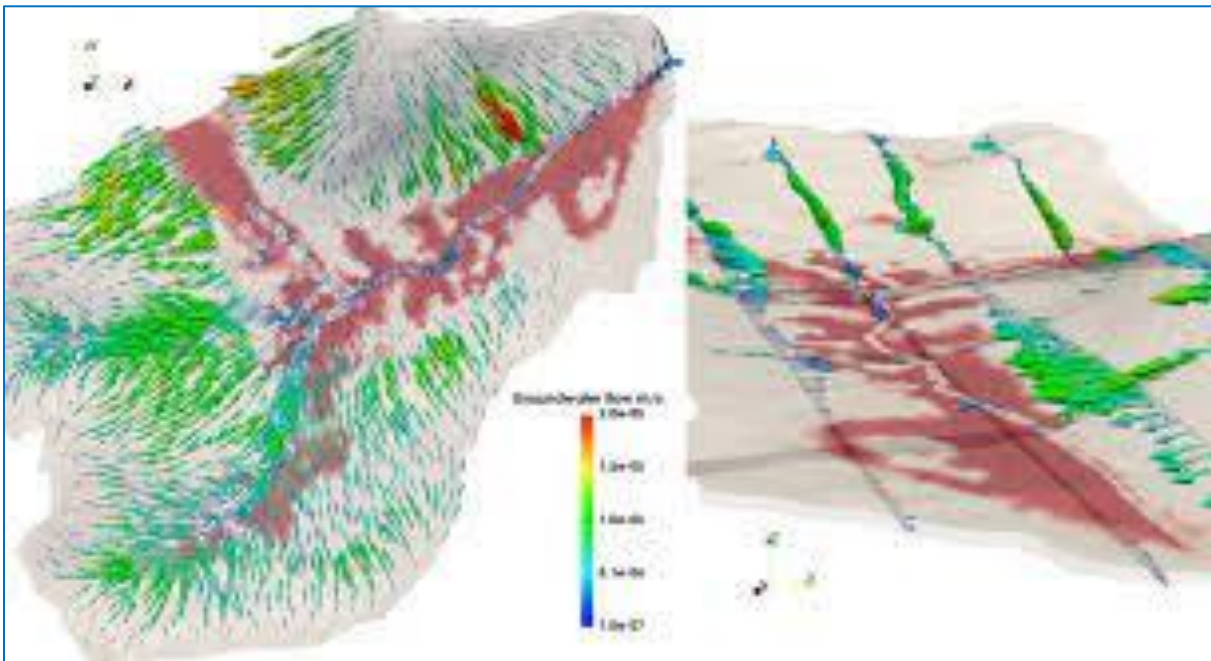




DE467: Surface / Subsurface Model Integration

Training Description & Objectives:

A production system is the system that transports reservoir fluid from the subsurface to the surface and separates it into oil, gas, and water. From there the oil and gas streams are treated if necessary and prepared for sale or transport from the field. Any water produced will also be treated and prepared for disposal or reinjection into the reservoir. The basic elements of a production system are the reservoir, perforations, production packer, production casing, tubing, wellhead, choke, flowline, separator, and tank.

This training course will provide participants with the knowledge of integrated subsurface surface production optimization. During this training course, participants will also learn about nodal analysis and the identification of major pressure losses from the reservoir to separator. The use of specialized software to identify constraints and to propose recommendations to optimize the field will also be covered.

Training Objectives:

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

- ✓ Learn about the different production completions, lifting methods, gathering and separation systems, and production well tests
- ✓ Learn about nodal analysis, to include the different main components of pressure drops, such as static, friction, and acceleration
- ✓ Identification of added value to business, available and operated production, performance management, control and follow up systems
- ✓ Learn about the used in the oil industry for integrated production system
- ✓ Learn about the technological trends for integrated production optimization. The trends discussed will include smart wells, well instrumentation technology, and smart fields

Who Should Attend?

This training course is intended for Engineers working in oil and gas fields, to include Reservoir Engineers, Production Technology Engineers, Production Operation Engineers, and Production Managers.

Prerequisite:

Participants should have a basic knowledge of the production system.

Training Requirement:

"Hand's on practical sessions, equipment and software" will be applied during the course if required and as per the client's request." (This hands-on, highly-interactive training includes simulator, real-life case studies and exercises).

Contents can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client's learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Training Program:

DAY ONE:

- ❖ **Integrated Production Systems and Production Processes**
 - Production system loops
 - Well completion and production methods

- Production well test
- Gathering and processing facilities

DAY TWO:

❖ Nodal Analysis

- Main components of pressure drop
- Inflow Performance Relationship (IPR): reservoir, completion
- Subsurface to surface system
- Flow rates in pipes and restrictions

DAY THREE:

❖ Subsurface Surface Production Operation

- Identification of restrictions and correctives actions
- Performance management
- Advanced optimization applications
- Integrated subsurface surface automation concept

DAY FOUR:

❖ Integrated Application System and Production System Modeling

- Integrated application systems
- Software used in Industry
- Production system modeling
- Examples using PIPESIM

DAY FIVE:

❖ Technological Trends and Integrated Information Systems

- Well instrumentation technology
- Oil and gas production applications
- Smart wells and fields

❖ Course Conclusion

❖ POST-ASSESSMENT and EVALUATION

Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

Training Fees:

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

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:00 - 14:00	Last Session

For training registrations or in-house enquiries, please contact:

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