



Digital Oil Field (IFM, IVM & MC)  
Engineering



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## Introduction

Everyone who wants to learn more about Digital Oilfield DOF, or comparable names, its concept, components, and numerous uses, notably in the upstream oil and gas industry, should take this course.

The course offers a high-level, thorough history of how digital technologies have been used in the Upstream E&P sector, starting with single-task technology such as for data collecting and/or monitoring and progressing via workflow automation to extremely complex integrated operations. It also provides some information on the techniques and technology utilized in current DOF initiatives. Because of their intricacy and practicality, it may be argued that comprehension of Digital Oilfield principles and implementations greatly vary from location to place and business to firm. As a result, the course covers the most popular DOF features in greater detail as well as how to apply DOF based on lessons gathered from diverse DOF projects throughout the world. Participants should leave the training session with a greater grasp of the ideas behind Digital Oilfield and how DOF will continue to have a significant influence on the E&P industry for years to come.

## Targeted Groups:

- Project Managers
- Production Operators
- Field Production Personnel / Supervisors / Superintendents
- Production Engineers
- Production Surveillance & Reliability Engineers
- Asset Managers
- Asset Support Engineers
- Reservoir Engineers
- Process Engineers
- Surface Facilities Engineers
- Planning Engineers
- Production Accountants

## Course Content

### Unit 1: DOF - Overview

- Conceptual Definition of DOF: DOF Drivers, Elements, and History
- A DOF Application Early Industry Example Current Adoption Status/Development

### Unit 2: Technologies and Tools for Digital Oilfield

- How disruptive technologies in hardware, software, infrastructure, communication, and data have affected the oil and gas business and how we have used them

### Unit 3: Methodologies

- Designing digital strategies and solutions

- Phased pilot approach: iterative roll-out strategy, pilot sides, and phased development

## **Unit 4: Framework for Architecture Integrated Operations**

- Data Analysis
- Information Transfer
- Monitoring and Surveillance
- Analyzing and Modeling
- Optimization

## **Unit 5: Fundamentals of Field Development Planning Optional**

- Undersea research
- Imaginative design
- Extensive planning
- Execution

## **Unit 6: Value Creation & Maintenance**

- Information Management and Data Acquisition
- Development of capabilities in people

## **Unit 7: The Road to Success: Other DOF Aspects**

- The Upstream E&P Industry and Data Science
- Aspects of Digital OilField Security
- Excellence in Operations OEx
- Assurance Engineering
- Review of Success Measures and Performance