BLACKBIRD FOR TRAINING

Applied Deep-Water Sedimentology and Stratigraphy

23 – 27 November 2026
Barcelona (Spain)

UK Traininig
PARTNER



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Introduction

This comprehensive course on Advanced Sedimentology and Stratigraphy is tailored for professionals and researchers aiming to delve into the latest advancements in deep-water depositional systems. With a focus on applied sedimentology and the principles of stratigraphy, this course explores the intricate geological settings of deep-water environments and their practical applications across the energy, mining, and environmental sectors. Participants will gain an in-depth understanding of how sedimentology and stratigraphy are applied in real-world scenarios to tackle geological challenges effectively.

This course combines theoretical foundations with hands-on applications, equipping participants with the skills needed to interpret, analyze, and integrate data for exploration and development in deep-water depositional systems. Whether you are a geologist, geophysicist, engineer, or environmental scientist, this course is your gateway to mastering sedimentology techniques and stratigraphy methods for professional excellence.

Course Objectives

By the end of this course, participants will be able to:

- Understand and apply the principles of sedimentology and stratigraphy to deep-water depositional systems.
- Analyze sedimentary facies, architectural elements, and depositional environments to build accurate geological models.
- Integrate sedimentological and stratigraphic data with seismic, core, and well log analyses to develop exploration strategies.
- Apply advanced sedimentology techniques such as seismic geomorphology and numerical modeling to characterize reservoirs.
- Utilize the importance of stratigraphy in mining, energy exploration, and environmental monitoring.
- Communicate complex geological concepts effectively to multidisciplinary teams and stakeholders.



Course Outlines

Day 1: Introduction to Deep-Water Sedimentology and Stratigraphy

- Overview of sedimentology and its applications in deep-water systems.
- Key principles of stratigraphy and their role in understanding geological formations.
- Deep-water depositional environments: Processes and tectonic controls.
- Recognition of architectural elements and their stratigraphic significance.

Day 2: Deep-Water Clastic Depositional Systems

- Understanding turbidity currents and their associated deposits turbidites, debris flows, hybrid beds.
- Stratigraphic analysis of submarine fans and channel-levee complexes.
- Techniques for analyzing overbank deposits and sediment distribution patterns.

Day 3: Deep-Water Carbonate Depositional Systems

- Carbonate sedimentology: From platform-to-basin transitions to slope deposits.
- Processes and stratigraphy of contourite drifts and bottom currents.
- Case studies on carbonate depositional systems and their reservoir potential.

Day 4: Integrating Sedimentology and Stratigraphy Data

- Techniques in seismic facies analysis and seismic geomorphology for deep-water systems.
- Core analysis, well log interpretation, and reservoir characterization.
- Utilizing advanced sedimentology methods such as numerical modeling for depositional systems.

Day 5: Applications and Case Studies

- Exploration and development of hydrocarbon reservoirs using sedimentology and stratigraphy methods.
- Application of sedimentology in deep-sea mining and environmental monitoring.
- Real-world case studies to demonstrate the importance of stratigraphy in resource management.

Why Attend this Course: Wins & Losses!

- Professional Advancement: Gain expertise in applied sedimentology and stratigraphy to enhance your career in geology, mining, or energy sectors.
- Hands-On Learning: Learn advanced sedimentology techniques through practical workshops and case studies.
- Interdisciplinary Knowledge: Understand the integration of sedimentology with geophysics, engineering, and environmental science.
- Certification: Receive a professional certificate that validates your skills in sedimentology and stratigraphy.



Conclusion

This Advanced Sedimentology and Stratigraphy course bridges the gap between theoretical knowledge and practical application, empowering participants to excel in their professional roles. From mastering the basic principles of stratigraphy to applying sedimentology techniques in real-world projects, this course provides a solid foundation for tackling complex geological challenges.

Enroll today to take the first step toward mastering sedimentology and stratigraphy, and unlock your potential in deep-water exploration, mining, and resource management!

