

This comprehensive 5-day professional training course will equip you with the essential skills to effectively describe and interpret drill cores from both siliciclastic and carbonate reservoirs

Designed for aspiring and experienced geologists, geophysicists, and reservoir engineers, this course will provide you with a comprehensive understanding of the principles, techniques, and applications of core description for these two fundamental reservoir types

Through hands-on core examination, interactive lectures, and in-depth discussions, you will gain a profound understanding of the characteristics, diagnostic features, and reservoir implications of sedimentary structures and textures in both siliciclastic and carbonate environments

Course Objectives

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

- Thoroughly examine, describe, and classify drill cores from siliciclastic and carbonate reservoirs using standardized geological methods and terminology
- Identify and interpret a wide range of sedimentary structures, textures, and fabrics in siliciclastic and carbonate environments
- Reconstruct depositional environments and paleogeographic settings based on core descriptions
- Utilize core descriptions to assess reservoir potential, facies distribution, and fluid flow properties in siliciclastic and carbonate reservoirs
- Apply core descriptions to address geological challenges in hydrocarbon exploration, groundwater assessment, and environmental investigations

Course Agenda

Day 1: Introduction to Drill Core Description and Siliciclastic Reservoirs

- Explore the significance of drill cores in geological investigations and their role in subsurface exploration
- Understand the principles of drill core sampling, handling, and preparation for description
- Delve into the characteristics and diagnostic features of siliciclastic sedimentary structures, textures, and fabrics

Day 2: Hands-on Description of Siliciclastic Drill Cores

- Engage in hands-on examination of siliciclastic drill cores, identifying and describing sedimentary structures, textures, and fabrics
- Utilize field guides and reference materials to accurately classify and interpret siliciclastic core features
- Master the art of translating siliciclastic core descriptions into meaningful geological information

Day 3: Interpretation of Siliciclastic Core Descriptions and Reservoir Implications

- Unravel the environmental and reservoir significance of siliciclastic sedimentary structures, textures, and fabrics
- Reconstruct depositional environments and paleogeographic settings based on siliciclastic core descriptions
- Apply core descriptions to assess reservoir potential, facies distribution, and fluid flow properties in siliciclastic reservoirs

Day 4: Introduction to Carbonate Reservoirs and Drill Core Description

- Explore the unique characteristics and depositional environments of carbonate reservoirs
- Delve into the classification and diagnostic features of carbonate sedimentary structures, textures, and fabrics
- Understand the diagenetic processes that influence carbonate reservoir quality

Day 5: Hands-on Description of Carbonate Drill Cores and Reservoir Applications

- Engage in hands-on examination of carbonate drill cores, identifying and describing sedimentary structures, textures, and fabrics
- Utilize field guides and reference materials to accurately classify and interpret carbonate core features
- Apply core descriptions to assess reservoir potential, facies distribution, and fluid flow properties in carbonate reservoirs

Case Studies and Applications of Core Descriptions

- Analyze real-world case studies to apply core descriptions to address geological challenges in siliciclastic and carbonate reservoirs
- Evaluate the role of core descriptions in hydrocarbon exploration, groundwater assessment, and environmental investigations
- Explore the future of drill core description and its integration with advanced technologies and data integration

Who Should Attend

This course is designed for:

- Aspiring geologists seeking hands-on experience in drill core description and interpretation
- Geophysicists involved in subsurface exploration and interpretation of geological data
- Petroleum engineers utilizing drill core information for reservoir characterization and well planning
- Environmental scientists applying drill core data to assess groundwater resources and environmental conditions
- Individuals interested in gaining a comprehensive understanding of drill core description and its applications in various geological disciplines

Course Benefits

- Develop a comprehensive skill set in drill core description, interpretation, and reservoir implications for both siliciclastic and carbonate environments
- Enhance your ability to extract valuable geological information from drill cores for diverse applications
- Expand your knowledge of sedimentary structures, textures, and fabrics in siliciclastic and carbonate settings
- Apply drill core descriptions to address real-world geological challenges in various fields
- Stay updated on the latest advancements and techniques in drill core description and interpretation