



PETROLEUM GEOSCIENCE AND PETROPHYSICS

Carbonate Reservoir Geology and Characterisation

5 day course

Classroom, online or in-house

Course overview

Carbonate reservoirs routinely produce surprises: a well with modest matrix porosity that flows at huge rates through vugs and fractures, or a high porosity chalk that barely flows at all. Those surprises trace back to how the rock was built by organisms and then rearranged by diagenesis. Delegates start with carbonate factories, grain types and the Dunham and Embry and Klovan classification schemes, then cover platform, ramp, reef and pelagic settings. Diagenesis takes the central sessions: dolomitisation, dissolution, karst and cementation, and how each creates or destroys pore space. Pore type classification after Lucia and after Choquette and Pray links geology to rock typing. The course ends on fracture networks and how carbonate heterogeneity is captured in a model. Delegates leave able to describe carbonate rock, predict pore systems and define geologically meaningful rock types.

What you will learn

- Classify carbonate rocks using the Dunham and Embry and Klovan schemes
- Interpret carbonate depositional settings from core and thin section
- Explain how dolomitisation, dissolution and cementation modify porosity
- Recognise karst and its signature in drilling and log data
- Classify pore types and link them to permeability
- Define geologically based rock types for carbonate reservoirs
- Integrate fracture and vug systems into reservoir description

Who should attend

- Geologists working carbonate fields
- Development and reservoir geologists
- Geomodellers
- Core and thin section petrographers
- Reservoir engineers needing insight into carbonate heterogeneity

Course outline

- 01 Carbonate production and grain types
- 02 Classification of carbonate rocks
- 03 Platforms, ramps and reefs
- 04 Diagenetic processes and environments
- 05 Dolomitisation and karst
- 06 Pore systems and pore classification
- 07 Geological rock typing
- 08 Fractures and vugs
- 09 Modelling carbonate heterogeneity

Upcoming dates



Dates	Venue	Format	Fee per delegate
26 to 30 October 2026	Online	Online	R8,500
2 to 6 November 2026	Nairobi, Kenya	Classroom	USD 1,325
30 November to 4 December 2026	Pretoria, South Africa	Classroom	R19,950
4 to 8 January 2027	Addis Ababa, Ethiopia	Classroom	USD 1,325

Fees and how to register

This 5 day course is **R8,500** per delegate online, **R19,950** in the classroom in South Africa, Botswana, Namibia, Lesotho and Eswatini, and **USD 1,325** in the classroom elsewhere in Africa. In-house training is quotation on request. Book 2 or more delegates on this course and save 10%.

To register or request an in-house proposal, visit www.afrisciencegroup.com, email info@afriScience.co.za, or WhatsApp us on **+27 63 479 1136**.

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