



EMERGING TECHNOLOGIES TRAINING

Carbon Capture, Utilisation and Storage

3 day course

Classroom, online or in-house

Course overview

Carbon capture is proposed for the industries that cannot decarbonise by switching fuel, principally cement, steel and refining, and it consumes energy to do it, which is the central difficulty. This course covers the technology and its economics. Delegates work through capture routes including post combustion, pre combustion and oxyfuel, solvent and adsorption systems and their energy penalty, and the retrofit constraints on an existing plant. Transport by pipeline and ship is covered. Geological storage, site characterisation and monitoring follow, along with the long term liability question that storage raises. Utilisation pathways are assessed honestly, since most consume the captured carbon again quickly. The course closes on cost, carbon pricing and the conditions under which a project makes sense.

What you will learn

- Compare post combustion, pre combustion and oxyfuel capture routes
- Assess solvent and adsorption systems and their energy penalty
- Evaluate retrofit constraints on an existing plant
- Plan transport by pipeline or ship
- Characterise a geological storage site and design monitoring
- Assess utilisation pathways honestly against permanence
- Model cost against carbon pricing and policy support

Who should attend

- Process and environmental engineers
- Cement, steel and refining technical staff
- Energy and climate policy officers
- Project developers and investment analysts
- Sustainability and reporting professionals

Course outline

- 01 Industries that cannot switch fuel
- 02 Post combustion, pre combustion and oxyfuel
- 03 Solvents, adsorption and the energy penalty
- 04 Retrofit constraints
- 05 Transport by pipeline and ship
- 06 Geological storage and site characterisation
- 07 Monitoring and long term liability
- 08 Utilisation pathways, cost and carbon pricing

Upcoming dates

Dates	Venue	Format	Fee per delegate
12 to 14 October 2026	Durban, South Africa	Classroom	R14,950
9 to 11 December 2026	Lusaka, Zambia	Classroom	USD 995
6 to 8 January 2027	Online	Online	R6,500
11 to 13 January 2027	Addis Ababa, Ethiopia	Classroom	USD 995



Fees and how to register

This 3 day course is **R6,500** per delegate online, **R14,950** in the classroom in South Africa, Botswana, Namibia, Lesotho and Eswatini, and **USD 995** 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@afiscience.co.za, or WhatsApp us on **+27 63 479 1136**.

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