

Carbon Capture, Utilization, and Storage (CCUS) Strategies

COURSE OVERVIEW

This strategic course gives a comprehensive introduction to the technologies, policies, and business models driving CCUS as a critical tool in the global effort to reduce greenhouse gas emissions. Covering the entire CCUS value chain from CO₂ capture at point sources, through transportation and long-term storage, to innovative utilization pathways. The course combines scientific principles with real-world applications and participants will gain insights into current and emerging technologies, regulatory frameworks, environmental considerations, and the economics behind CCUS deployment across various industries.

WHO SHOULD ATTEND?

This course is designed for professionals in energy, environmental science, chemical engineering, policy-making, and sustainability roles who are interested in understanding the role of CCUS in climate mitigation. It is also suitable for business leaders, project developers, and investors looking to explore the commercial and regulatory landscape of CCUS technologies. No prior specialized knowledge of CCUS is required, but a basic understanding of energy systems and climate science is recommended.

COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Comprehend the technical processes and components of CCUS systems.
- Evaluate the environmental and economic impacts of CCUS strategies.
- Analyze the regulatory and policy frameworks supporting CCUS globally.
- Identify opportunities for CO₂ utilization and commercialization.
- Assess the feasibility of CCUS deployment in various sectors, including power, industry, and bioenergy.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand:

- Deep dive into capture technologies (post-combustion, pre-combustion, oxy-fuel).
- Site selection and risk assessment for geological storage.
- Case studies from global CCUS projects and pilot programs.
- Insights into CO₂ conversion and utilization innovations (e.g., fuels, chemicals, materials).
- Discussion on financing, public perception, and future outlook of CCUS.

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

1. A GTC end-of-course certificate
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded