

## Digital Technology & Innovation in Renewable Energy

### COURSE OVERVIEW

This dynamic course explores the intersection of digital technologies and renewable energy innovation by depicting how emerging digital technologies are transforming the development, management, and optimization of renewable energy systems. As the global energy sector shifts toward cleaner and more sustainable sources, digital tools such as data analytics, smart grids, artificial intelligence, and IoT are playing a critical role in improving efficiency, reliability, and decision-making. This course equips participants with practical insights into how digital innovation can enhance renewable energy generation, monitoring, integration, and performance management while supporting energy transition goals and sustainable development.

### WHO SHOULD ATTEND?

This course is designed for energy sector professionals, renewable energy project managers, engineers, policymakers, sustainability practitioners, digital transformation leaders, utility executives, and consultants involved in energy planning, infrastructure development, or innovation initiatives. It is also suitable for professionals seeking to understand how digital technologies can accelerate renewable energy deployment and improve operational performance in modern energy systems.

### COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Explain the role of digital technologies in advancing renewable energy systems and infrastructure.
- Identify key digital tools such as IoT, AI, and data analytics used in renewable energy operations.
- Analyse how smart grids and digital platforms improve energy generation, distribution, and monitoring.
- Evaluate opportunities for innovation and digital transformation in renewable energy projects.
- Apply digital solutions to enhance efficiency, reliability, and sustainability in energy systems.
- Assess emerging trends shaping the future of digitalisation in the renewable energy sector.

### KEY COURSE HIGHLIGHTS

At the end of the course, you will understand:

- Digital technologies and its ability to transform renewable energy generation and management.
- The importance of data-driven decision-making for optimizing renewable energy systems.
- Smart grids, IoT, and automation support for efficient energy distribution and monitoring.
- Digital platforms improvement on asset management, predictive maintenance, and system performance.
- Integrating digital innovation into renewable energy project planning and implementation.
- Emerging technologies shaping the future of sustainable energy systems and infrastructure.

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