

IoT and Automation in Renewable Energy Infrastructure

COURSE OVERVIEW

This course on IoT and Automation in Renewable Energy Infrastructure provides participants with a comprehensive understanding of how Internet of Things (IoT) technologies and automation systems are revolutionizing the design, operation, and management of renewable energy assets. It explores the integration of smart sensors, data analytics, cloud computing, and AI-driven automation in solar, wind, and smart grid systems, focusing on real time monitoring, predictive maintenance, energy optimization, and enhanced efficiency.

WHO SHOULD ATTEND?

Energy professionals, engineers, project managers, renewable energy developers, policymakers, IT specialists in the energy sector, and decision makers seeking to leverage IoT and automation for improved efficiency, cost reduction, and scalability in renewable energy projects.

COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Understand the fundamentals of IoT and automation in the context of renewable energy.
- Gain insights into smart monitoring, control, and predictive maintenance systems.
- Learn how to integrate IoT devices with renewable energy assets for optimal performance.
- Explore cybersecurity and data management strategies in smart energy systems.
- Apply case study insights to real-world renewable energy infrastructure challenges.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand:

- Real-world case studies on IoT-enabled renewable energy projects.
- Hands-on demonstrations of smart sensors, monitoring platforms, and automation tools.
- Focus on predictive analytics and AI-driven energy optimization.
- Exploration of cybersecurity in connected energy infrastructure.
- Interactive simulations and group exercises for practical learning.

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