

Renewable Training Bundles

According to Global Energy Review 2021, 2020 was the fastest year-on-year growth in renewables since the 1970s. As the use of renewable energy grows, your operators and workers need to understand its impact on the grid.

Our renewable training curriculum is packaged specifically to prepare your workers for the future, so they can manage an evolving system.

Overview:

Renewable Energy Resources
Renewable Energy Integration

Module One – Technology-Specific *(pick one or more)*

WIND

585-01	Basic Wind Turbine Design
585-02	Wind Farm Development
585-03	Horizontal Wind Turbine Design and Operation
585-04	Wind Energy Production

SOLAR

589-01	Introduction to Solar Energy
589-03	Solar Energy - Photovoltaic
589-05	Solar Energy - Thermal Applications

BESS

588-01	Introduction to Battery Energy Storage Systems (BESS)
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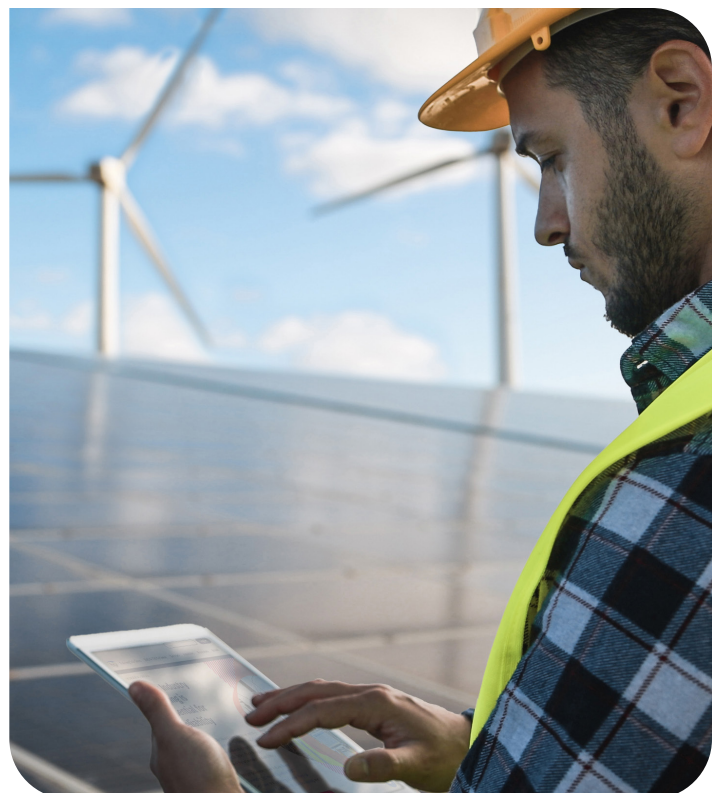
Module Two – Plant Science

170-01	Introduction to Industrial Math
170-02	Measurements and Calculations
170-03	Fractions, Percentages, and Ratios
171-10	Physics – Force and Motion
171-11	Physics – Energy, Work and Power
201-01	Working Principles of Simple Machines

Module Three – Plant Drawings

611-01	P&ID Basics
611-02	Reading a P&ID
611-03	Electrical Drawings
611-04	Logic Diagrams
611-05	Industrial Print Reading Overview

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Module Four – Plant Electricity

401-01	Electron Theory
401-02	Magnetism and Electromagnetism Explained
401-03	Ohm's and Kirchhoff's Laws in DC Circuits
401-04	Evaluating Series and Parallel DC Circuits
402-01	Introduction to Alternating Current (AC)
402-02	Ohm's and Kirchhoff's Laws in AC Circuits
402-03	Inductance in AC Circuits
402-04	Capacitance in AC Circuits
402-05	Impedance in AC Circuits
402-06	AC Power
402-07	Fundamentals of 3-Phase AC
405-01	Power Quality
405-02	Harmonics
405-03	High-voltage AC
409-01	AC Induction Motors
409-02	AC Generators
409-07	Generator Systems
415-01	Transformer Basic Operation and Theory
416-01	Battery Basics
416-02	Electrical Backup Systems
416-03	Uninterruptable Power Supplies
418-01	Electrical Faults and Current Ratings
418-02	Overcurrent Protection, Fuses, and Breakers
418-03	Protection Relays
418-04	Transformer, Generator, and Motor Protection
418-05	Grounding and Bonding

Module Five – Plant Instrumentation and Control

565-01	Distributed Control System Fundamentals
565-02	Distributed Control System Components
603-02	Principles of Temperature
603-06	Temperature Instruments
621-01	Programmable Logic Controllers (PLC)

Module Six – Intro to Plant Equipment

203-01	Introduction to Bearings
213-01	Lubrication Basics
243-01	Introduction to Hydraulics
271-01	Vibration Introduction
271-02	Vibration Causes and Characteristics
271-03	Basic Vibration Troubleshooting Techniques
417-01	Switchgear
417-02	Low Voltage Breakers
417-03	Medium and High Voltage Switchgear
417-04	General Switchgear Maintenance
417-05	Switchgear Specific Maintenance Procedures
417-06	Circuit Breaker Time Travel
560-03	Fuses and Circuit Breakers
560-04	Protective Relays & Instrument Transformers
560-05	Equipment Disconnects and Grounding



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