

## **WIND TURBINE TECHNICIAN SAFETY & TECHNICAL COURSE**

**Course Number: AS 1001**

**Duration of course: 20 days (8 hours each)**

**Ratio: 15 students to 1 instructor**

*This course is recommended for anyone interested in an entry-level wind turbine technician position.*

### **SYNOPSIS OF COURSE:**

This course offers a complete complement of safety and technical modules designed to prepare new wind turbine technicians for an entry-level position. Students will be able to safely troubleshoot, diagnose, service and maintain a wind turbine. Self and Assisted Tower Rescue and CPR/First Aid/AED is included in instruction.

### **TOPICS COVERED:**

- Intro to the Wind Industry and OSHA 10 Hour Construction Safety
- First Aid, CPR, Self and Assisted Tower Rescue
- Electrical Metering, Voltage Test Equipment, Voltage Test Procedures
- Schematics, Direct Current Theory, Alternating Current Theory
- Electric Static Discharge, Basic Hydraulics, Accumulator Charging
- Fiber Optics, Torquing, Fasteners and Equipment
- Control Algorithms, Substations, and Transformers
- Wind Turbine Mechanical Systems & Electrical Systems
- Drivetrain, Gearboxes, Yaw System
- Turbine Maintenance and Service Practices, Troubleshooting, Site Documentation and Reporting
- Rotor Construction, Blade Pitch and Balancing
- SCADA and Data Analysis, Meteorology, Wind Turbine Power Curves

**Certifications/Completion Cards Received After Successful Completion:** OSHA 10 Hour Construction Safety Card, Competent Climber Certification, CPR/First Aid/AED Card, Airstreams Renewables, Inc. Certification

**Required Equipment:** Work boots (steel-toed preferred), cotton pants and cotton long sleeve shirts. PPE will be provided.

*Note: Must have ability to climb 300 foot towers.*