

Course Name: **Renewable Energy and Communications Tower Technician Program**

Course Number: **AS1007**

Duration of course: **30 days (8 hours each)**

Ratio: **Classroom: 24 students to 1 instructor**

**Lab: 8 students to 1 instructor**

*This course is recommended for anyone interested in an entry-level position in the energy or industrial sectors including, but not limited to, wind and communication towers.*

**Hours of Instruction:** 8 hours per day, 5 days per week, 40 hours per week, 6 weeks, for a total training period of 240 clock hours.

**Admission Requirements:** 18 Years of age. High School diploma or equivalent. Capable of climbing and working at heights of up to 300 feet. Student weight must not exceed 285 lbs. and must weigh a minimum of 120 lbs. due to equipment limitations.

**Synopsis of course:** This course offers a complete complement of safety and technical modules designed to prepare each student for an entry-level position in the wind, communication tower and many other industrial focused industries. Emphasis will be placed on working safely in all aspects of the technician job and the basic technical skills. Students will be able to explain, identify, and demonstrate safe troubleshooting and maintenance procedures utilized in the wind, cellular communication tower and other industrial based industries. Throughout the course students apply their knowledge during verbal reviews, quizzes, hands-on lab practical evaluation sessions, and final exams. The Airstreams program is taught in English and all student material is written in English.



**Required Equipment:** Sturdy work/hiking boots (composite or steel-toed preferred, but not required) steel or fiber glass shank with a defined heel; Cotton pants and cotton shirts; Form fitting, durable work gloves (examples: CLC 125 Handyman, Mechanix Wear, Iron Clad); Cold weather gear (examples: wind resistant lined work jackets, hooded sweatshirt, balaclava, insulated overalls or coveralls, natural fiber upper/lower "long johns"); PPE will be provided.

**Training Provided at:** 13681 Chantico Road  
Tehachapi, California 93561

Phone: 661-822-3963 Fax: 661-822-6966  
[www.air-streams.com](http://www.air-streams.com)

**Course curriculum consists of the following required modules:**

- Student Orientation
- Introduction to the Industries
- Resume and Cover Letter Workshop
- Interview Workshop
- CPR/First Aid/AED
- OSHA 10 Hour Construction Safety
- Authorized Climber and Rescue
- Crane Signalperson
- Level 1 Crane Rigging
- Basic Electrical Theory
- Intermediate Electrical Theory
- Voltage Test Procedures, Electrical Metering Safety, Voltage Test Equipment (Includes Multimeter, Amp Clamp, Megohmmeter, Infrared Tester, Phase Rotation Meter, Tic Tracer)
- Fasteners, Torque and Tension
- Basic Hydraulics
- Electrical Systems, Components, and Schematics
- Drivetrain Gearboxes
- Yaw Systems
- SCADA
- Maintenance Practices
- Hytorc Labs, Electrical Meters Labs, Electrical Troubleshooting Labs, Climbing Exercises and Labs, Telecommunication Basics Labs
- Cell Site Basics
- RF Safety Awareness
- Final Exams
- Homework Packets: Electric Static Discharge, Fiber Optics, Communication Tower Vocabulary

**Upon successful completion and demonstration of proficiency, students will earn the following certificates:**

Authorized Climber and Rescue Certificate and ID Card; Electrical Safety Certificate; Fasteners, Torque and Tension Certificate; OSHA 10 Hour Construction Safety Card; American Red Cross First Aid/CPR/AED Card; Level 1 Crane Rigging Certificate; Crane Signalperson Certificate; RF Safety Awareness Card; Telecommunication Basics Certificate; ARI Renewable Energy and Communications Tower Technician Certificate

