



WIND TURBINE TECHNOLOGY PROGRAM

Alternative Energy Generation

- History of fossil fuels
- Environmental concerns
- Price convergence

Energy and Power

- Types of energy
- Potential and Kinetic energy
- Voltage and current
- Electrical loads

Wind Power Technology

- Global and localized wind patterns
- Windmills and electricity
- Measuring and scaling wind speed
- Calculating wind energy
- Wind farms

Wind Turbine Design

- Rotor blades and shaft design
- Pitch, flaps, yaw and furling
- Towers types and design
- Balance of design

Design & Installation of Residential Scale Wind Turbine Systems

- Site suitability
- System sizing
- Load determination
- Installation and safety
- Grid-tie metering

Troubleshooting Wind Turbine Systems

- Locating bad terminals, wiring and connectors
- DC storage control

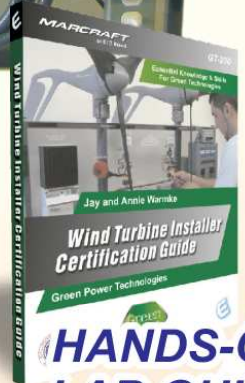
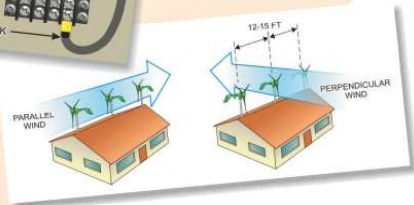
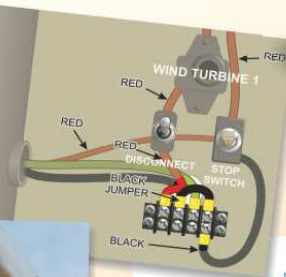
Building Codes and Compliance

- National Electrical Codes
- Underwriters Laboratories
- OSHA
- National Fire Protection Association

Understanding Blueprints

- Schematic drawings
- Working drawings
- Symbols and scaling

Reinforced with Hands-on Labs



HANDS-ON LAB GUIDE

