

Wind Turbine Technician Skill Sets

Electronic Control Systems and Troubleshooting			
Dept.		Course Title	Sem. Hrs.
CIS	114	Introduction to Computer Applications & Concepts	3
ELM	210	PLC Fundamentals*	3
WTT	230	Supervisory Control and Data Acquisition**	4

*Course requires WTT 150 or permission of instructor as a prerequisite.

**Course requires WTT 210 or permission of instructor as a prerequisite.

Upon successful completion of the skill set, the graduate will be able to:

- Demonstrate basic knowledge of Microsoft Windows® and Office applications
- Use, program, analyze, and troubleshoot Programmable Logic Controllers (PLC's) in remote process monitoring and control systems
- Use discrete and analog input and output devices in ladder logic programs and schematic diagrams
- Use PLC's in SCADA (Supervisory Control & Data Acquisition) systems
- Utilize critical thinking skills and software to analyze remote process monitoring and control systems

Electromechanical Systems & Troubleshooting			
Dept.		Course Title	Sem. Hrs.
ELM	121	Fundamentals of Hydraulics & Pneumatics	4
WTT	210	Wind Turbine Mechanical Systems*	4
WTT	260	Wind Turbine Troubleshooting and Repair*	4

*Course requires WTT 210 as prerequisite.

Upon successful completion of the skill set, the graduate will be able to:

- Construct electrically-controlled hydraulic and pneumatic circuits from schematic diagrams
- Utilize wind turbine training simulators to learn and operate system components and to demonstrate critical thinking skills when troubleshooting various wind turbine electromechanical systems
- Explain flow states of a turbine control system, analyze schematic diagrams, and use multimeters and other diagnostic equipment
- Discuss mechanical failures and their probable causes
- Discuss the importance and functions of Lockout/Tagout (LOTO), Personal Protective Equipment (PPE), and safety protection systems