## WIND TURBINE TECHNICIAN

## PROGRAM DESCRIPTION

Wind Turbine Technician's perform maintenance, repair, diagnosis, and adjustments on wind turbine equipment. Students will gain introductory knowledge on resolving electrical, mechanical, and hydraulic malfunctions to the various systems on a wind turbine. Students will also learn the required safety standards for working on site with emphasis on fall protection, height rescue, first aid and electrical safety. They will learn procedures involving record keeping, creating reports, and submitting documentation pertinent to the job. Testing systems, component repair and troubleshooting equipment are core requirements to the student's hands on competencies where they will utilize hand and power tools to perform simulated turbine work.

## **PROGRAM OBJECTIVE**

Our wind turbine program provides knowledge in Technical, Tactile, and Theory based competencies for students to obtain employment as a Wind Turbine Technician. They will learn key aspects of extreme height work safety, construction fundamentals, and job skills required by a wind technician. Technician skills include electrical, hydraulic, blade repair, and other mechanical competencies.

## PROGRAM BREAKDOWN

Course Code	Course Title	Clock Hours	Lab Hours
21WT-1	Introduction to the Wind Turbine Industry	5	2
21WT-2	Introduction to Hand and Power Tools	5	2
21WT-3	Basic AC/DC Electrical Theory	40	16
21WT-4	Mechanical and Hydraulic Theory	15	6
21WT-5	Maintenance of Wind Turbine Equipment	10	4
21WT-6	Commissioning New Turbines	5	2
21WT-7	Major Wind Turbine Repair and Replacement	10	4
21WT-8	Job Safety and Hazard Analysis	5	2
21WT-9	Introduction to Fiber in Wind Farms	5	2
21WT-10	Fundamentals of Reading Schematics and Trouble	15	6
	Shooting		
21WT-11	Fundamentals of Web Applications	5	2
21WT-12	Comprehensive Fall Protection and Rescue Training	40	16
21WT-13	Bolting Theory	10	4
21WT-14	Rigging Methodologies	10	4
21WT-15	At Height Work Safety Standards and Regulations	15	6
21WT-16	Uses of Ropes and Knots for at Height Work	10	4
21WT-17	Troubleshooting and Testing Wind Turbine	20	8
	Components		
21WT-18	Electrical Measuring Safety	15	6
	TOTAL:	240	96