# **Work Process Schedule**

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| Wind Turbine Technician  |
| **Job Description:** Install, inspect, maintain, and repair wind turbines. |
| **RAPIDS Code:** 2000CB | **O\*NET Code:** 49-9081.00 |
| **Estimated Program Length:** 2-3 years |
| **Apprenticeship Type:** [x]  Competency-Based [ ]  Time-Based [ ]  Hybrid |

Suggested On-the-Job Learning Outline

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| Maintains a safe and secure work environment |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Maintains a clean and safe work area
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| 1. Follows company and job-specific safety procedures and federal, state, and local regulations, including applicable safety, health, and environmental regulations
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| 1. Follows ESD (electro-static discharge) procedure
 |  |  |
| 1. Handles HAZMATS and materials according to MSDS requirements
 |  |  |
| 1. Follows electrical safety procedures (low, medium, or high voltage)
 |  |  |
| 1. Performs safety inspections
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| 1. Follows environmental protection and hazardous chemical control procedures
 |  |  |
| 1. Maintain personal protective equipment
 |  |  |
| 1. Follows lock-out/tag-out procedures (energy flow/isolation)
 |  |  |
| 1. Participates in Job Safety Analysis (JSA)
 |  |  |
| 1. Stays up to date on company safety policy regulations
 |  |  |
| 1. Interacts with customers and vendors in a professional manner
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| 1. Participates in job or equipment-specific training and maintains technical skills
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| 1. Performs work required to maintain a well-kept appearance of wind turbines
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| Maintains specialized equipment |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Follows the established calibration schedule
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| 1. Runs performance checks
 |  |  |
| 1. Red-tags malfunctioning and out-of-calibration equipment
 |  |  |
| 1. Performs preventive maintenance on specialized equipment
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| 1. Maintains the test equipment, where possible
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| 1. Evaluates the usefulness of current equipment and the need for new equipment
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| Commissions new turbines |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Ensures proper fluid levels
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| 1. Inspects fasteners
 |  |  |
| 1. Terminates and tests components
 |  |  |
| 1. Performs diagnostic checks
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| 1. Performs reliability checks
 |  |  |
| 1. Performs proper start-up and break-in procedures according to manufacturer’s recommendations and specifications
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| Assists with major component repair and replacement |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Troubleshoots, repairs, and replaces hydraulic systems
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| 1. Aligns shafts using laser-alignment equipment and procedures
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| 1. Performs mechanical shaft alignments
 |  |  |
| 1. Repairs and replaces generators
 |  |  |
| 1. Installs, repairs, and replaces equipment using hoists and rigging techniques
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| 1. Follows accepted standards and practices for mechanical and electrical assembly
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| 1. Installs and replaces bearings
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| Performs preventive and predictive maintenance |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Selects, controls, and inspects required tools and test equipment
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| 1. Follows operating procedures and controls check sheets
 |  |  |
| 1. Inspects rotors and air coils
 |  |  |
| 1. Lubricates bearings, gears, and top offs
 |  |  |
| 1. Selects and replaces torque and tension fasteners
 |  |  |
| 1. Inspects bonding and grounding points (including lightning protection) inside and outside of turbine
 |  |  |
| 1. Repairs and replaces consumable wear components
 |  |  |
| 1. Works in small groups and teams to accomplish work tasks
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| 1. Follows manufacturer specifications in the operation and maintenance of equipment
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| 1. Monitors and uses site computer hardware and software systems
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| Troubleshoots and tests systems and components |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Reviews the equipment and product information (e.g., manuals, schematics)
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| 1. Performs inspection (visual, audio, smell, touch, measurements)
 |  |  |
| 1. Traces circuits
 |  |  |
| 1. Generates a nonconformance report
 |  |  |
| 1. Maintains detailed records and logs
 |  |  |
| 1. Replaces circuit boards
 |  |  |
| 1. Loads new control system software
 |  |  |
| 1. Interprets sketches, schematics, and blueprints
 |  |  |
| 1. Tests and replaces motors
 |  |  |
| 1. Replaces PLCs and controllers
 |  |  |
| 1. Troubleshoots, calibrates, installs, and repairs components and instrumentation
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| Maintains records and creates reports |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Completes required reports
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| 1. Maintains open communication with supervisor
 |  |  |
| 1. Completes daily logs
 |  |  |
| 1. Operates basic System Control and Data Acquisition (SCADA) control system functions
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| 1. Maintains electronic documents and records
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| 1. Revises and edits documents
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Suggested Related Instruction Outline

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| Provider |
| **Name:**  |
| **Address:**  |
| **Email:** | **Phone Number:** |
| **Suggested Related Instruction Hours:** 288-432 |

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| **Course Number** | **Course Title** | **Contact Hours** |
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