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| **Institution:** | Texas State Technical College Harlingen Texas | **Award Title:** | Wind Energy and Turbine Technology AAS Degree |
| **Program:** | Wind Energy & Turbine Technology | **Award CIP Code:** | 15.0403 |

| **Key Activities to WECM Courses Matrix** | | | | | | | | | | | | |
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| **Key Activity #/Statement** | **WECM Course Rubric, Number and Title** | | | | | | | | | | | |
| WIND 1300 Introduction to Wind | WIND 1302 Wind Safety | ENER 2325 SCADA and Networking | WIND 2310 Wind Turbine Materials and Electro-mechanical Equipment | WIND 2455 Wind Trubine Troubleshooting and Repair | WIND 2459 Wind Power Delivery System | INMT 1317/1417 Industrial Automation | ELMT 1305 Basic Fluid Power |  |  |  |  |
| 1.1 Assist with installation/commissioning of wind turbines | X |  |  |  |  |  |  |  |  |  |  |  |
| 1.2 Start up wind turbine operation |  |  |  |  |  | X |  |  |  |  |  |  |
| 1.3 Monitor wind turbine operation |  |  | X |  |  | X |  |  |  |  |  |  |
| 1.4 Maintain and repair wind turbine parts and equipment |  |  | X |  | X |  |  |  |  |  |  |  |
| 2.1 Conduct condition analysis |  |  |  | X | X |  |  |  |  |  |  |  |
| 2.2 Troubleshoot electrical/electronic system malfunctions |  |  |  |  | X |  | X |  |  |  |  |  |
| 3.1 Conduct scheduled maintenance on structural components and rotating equipment |  |  |  |  | X |  |  |  |  |  |  |  |
| 3.2 Conduct material condition inspections |  |  |  | X |  |  |  |  |  |  |  |  |
| 3.3 Conduct facilities maintenance |  |  |  |  | X |  |  |  |  |  |  |  |
| 3.4 Keep records and maintain documentation | X |  | X |  |  |  |  |  |  |  |  |  |
| 4.1 Operate and maintain hydraulic systems |  |  |  |  |  |  |  | X |  |  |  |  |
| 4.2 Operate and maintain heating/cooling system |  |  |  |  |  |  |  | X |  |  |  |  |
| 4.3 Diagnose and repair mechanical malfunctions |  |  |  |  | X |  |  |  |  |  |  |  |
| 5.1 Assemble and maintain electronic, electrical, or electromechanical equipment |  |  |  |  |  |  | x |  |  |  |  |  |
| 5.2 Conduct electrical inspection and testing |  |  |  |  |  |  | X |  |  |  |  |  |
| 5.3 Service wiring and circuitry components |  |  |  |  | X |  | X |  |  |  |  |  |
| 6.1 Communicate site safety information |  | X |  |  |  |  |  |  |  |  |  |  |
| 6.2 Respond to emergencies |  | X |  |  |  |  |  |  |  |  |  |  |
| 6.3 Conduct site safety inspections |  | X |  |  |  |  |  |  |  |  |  |  |
| 6.4 Maintain tools and equipment |  |  |  | X |  |  |  |  |  |  |  |  |
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