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| **Institution:** | Texas State Technical College | **Award Title:** | Associate of Applied Science |
| **Program:** | Electrical Lineworker Technology | **Award CIP Code:** | 46.0303 |

|  | **Key Activities to WECM Courses Matrix** | | | | | | | | | | | | | |  | |  |
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| **Transmission Line Worker skill standards**  **Competency Statement** | |  | **WECM Course Rubric, Number and Title** | | | | | | | | | | | |  | |  |
|  | |  |  |  |  |  |  |  |  |  |  |  | |  | |
| Orientation and Line Skills Fundamentals  LNWK 1301 | | Climbing Skills  LNWK 1311 | Rigging for Electrical Lineworker  LNWK 1370 | Work Procedures & Safety in Electrical Lineworker  LNWK 2372 | Distribution Operations  LNWK 1241 | Electrical Safety, Tools and Calculations  LNWK 1470 | Live Line Safety  LNWK 2321 | Special Topics in Lineworker  LNWK 1391 | Distribution Line Construction  LNWK 2322 | OSHA Regulations – Construction Industry  OSHT 1305 | Troubleshooting Distribution Systems  LNWK 2324 | Transmission and Underground Utilities  LNWK 2370 | | Maintenance, Testing, and Reconducting for Lineworker  LNWK 2371 | |
| 1.A: Properly uses and maintains tool and equipment including saws, digging equipment, drills, wrenches, compressors, presses, crimpers and dies | | x | |  |  |  |  |  |  |  |  |  |  |  | |  | |
| 1.B: Properly uses and maintains electrical measuring and testing equipment such as voltage meters, multi-meters, phase sequence indicators, etc. | |  | |  |  |  |  |  | x |  |  |  |  |  | |  | |
| 1.C: Properly assembles and uses ropes and rigging (handlines, hoisting equipment, slings, shackles, etc.) to ensure personal safety and to move equipment and materials | |  | |  | x |  |  |  |  |  |  |  |  |  | |  | |
| 1.D: Operates vehicular equipment properly, including trucks, diggers, and aerial lifts | |  | |  |  |  |  |  | x |  |  |  |  |  | |  | |
| 1.E: Plans job tasks and prepares work sites properly including communicating plan to crew and identifying hazards | |  | |  |  |  |  | x |  |  |  |  |  |  | |  | |
| 1.F: Adheres to safety requirements including safety of the site, personal safety and the safety of other workers and the community | |  | |  |  |  |  |  |  |  |  | x |  |  | |  | |
| 2.A: Provides job site protection for the general public | |  | |  |  |  |  |  |  | x |  |  |  |  | |  | |
| 2.B: Performs hazard assessment and controls powerline hazards | |  | |  |  | x |  |  |  |  |  |  |  |  | |  | |
| 2.C: Controls environmental hazards | |  | |  |  |  |  |  |  |  |  | x |  |  | |  | |
| 2.D: Participates in workplace safety activities | |  | |  |  |  |  | x |  |  |  |  |  |  | |  | |
| 2.E: Utilizes personal protective devices and safety equipment properly and consistently (body harness, lanyard, anchor sling, etc.) | |  | | x |  |  |  |  |  |  |  |  |  |  | |  | |
| 2.F: Utilizes positioning devices and equipment properly (gaff, body belt, pole-choker, secondary lanyard, etc.) | |  | | x |  |  |  |  |  |  |  |  |  |  | |  | |
| 3.A: Frames and sets power poles properly | |  | |  |  |  | x |  |  |  |  |  |  |  | |  | |
| 3.B: Installs pole guys and anchors; attachments; breakers/rods; etc. | |  | |  |  |  | x |  |  |  |  |  |  |  | |  | |
| 3.C: Installs and assembles steel structures | |  | |  |  |  |  |  |  |  |  |  |  | x | |  | |
| 3.D: Installs steel structure guy wires and anchors | |  | |  |  |  |  |  |  |  |  |  |  | x | |  | |
| 4.A: (Overhead) Strings overhead conductors properly and safely | |  | |  |  |  |  |  |  |  |  |  |  |  | | x | |
| 4.B: (Overhead) Sags overhead conductors | |  | |  |  |  |  |  |  |  |  |  |  |  | | x | |
| 4.C: (Overhead) Ties in overhead conductors | |  | |  |  |  |  |  |  |  | x |  |  |  | |  | |
| 4.D: (Overhead) Splices overhead conductors | | x | |  |  |  |  |  |  |  |  |  |  |  | |  | |
| 4.E: (Underground) Digs trenches appropriately, using correct equipment and safety precautions – direct buried cables, ducted method, surface troughs, deep bore tunnels, cut and cover tunnels | |  | |  |  |  |  |  |  |  |  |  |  | x | |  | |
| 4.F: (Underground) Selects appropriate components, cable sealants and compounds, joint bays, top joints, water cooling systems (if applicable), using correct methods for insulating components and wires | |  | |  |  |  |  |  |  |  |  |  |  | x | |  | |
| 4.G: (Underground) Identifies environmental hazards and barriers and plans/carries out appropriate mitigation strategies | |  | |  |  |  |  |  |  |  |  | x |  |  | |  | |
| 4.H: (Underground) Identifies and mitigates land use restrictions | |  | |  |  |  |  |  |  |  |  |  |  | x | |  | |
| 4.I: (Underground) Inspects, replaces, and maintains cables and cable insulation at appropriate intervals and using correct materials and procedures | |  | |  |  |  |  |  |  |  |  |  |  | x | |  | |
| 5.A: Operates overhead and/or underground transmission systems | |  | |  |  |  |  |  |  |  |  |  |  | x | |  | |
| 5.B: Operates overhead and/or underground distribution systems | |  | |  |  |  | x |  |  |  |  |  |  |  | |  | |
| 5.C: Performs station switching | | x | |  |  |  |  |  |  |  |  |  |  |  | |  | |
| 5.D: Inspects distribution and transmission systems | | x | |  |  |  |  |  |  |  |  |  |  |  | |  | |
| 5.E: Maintains poles and steel structures | |  | |  | x |  |  |  |  |  |  |  |  |  | |  | |
| 5.F: Maintains system components | |  | |  |  |  |  |  |  |  |  |  |  |  | | x | |
| 5.G: Identifies and mitigates environmental hazards (i.e. tree trimming, rodent infestations, erosion, etc.) | |  | |  |  |  |  |  |  |  |  | x |  |  | |  | |
| 5.H: Repairs overhead and/or underground distribution systems | |  | |  |  |  |  |  |  |  | x |  |  |  | |  | |
| 5.I: Repairs overhead and/or underground transmission systems including components (cross arms, conductors, poles, and insulators), switches, terminations, and other devices | |  | |  |  |  |  |  |  |  | x |  |  |  | |  | |
| 6.A: Uses appropriate personal and environmental protective devices and techniques to secure the work area and protect human safety | |  | |  |  |  |  | x |  |  |  |  |  |  | |  | |
| 6.B: Identifies and reviews appropriate repair manuals or policies and procedures based on observed or reported fault | |  | |  |  |  |  |  |  |  |  |  | x |  | |  | |
| 6.C: Applies diagnostic tools and skills to identify and repair sources of fault; installs updated equipment or components; or performs preventative maintenance | |  | |  |  |  |  |  |  |  |  |  | x |  | |  | |
| 6.D: Confirms power restoration after repairs | |  | |  |  | x |  |  |  |  |  |  |  |  | |  | |
| 6.E: Communicates effectively with first responders, dispatchers, and members of the public to coordinate activities appropriately | |  | |  |  |  |  |  | x |  |  |  |  |  | |  | |
| 6.F: Accurately documents work performed, equipment or parts used, and notes deferred maintenance needs | |  | |  |  |  |  |  | x |  |  |  |  |  | |  | |