**Work Process Schedule**

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| FARM EQUIPMENT MECHANIC I | | | |
| Job Description: Diagnose, adjust, repair, or overhaul farm machinery and vehicles, such as tractors, harvesters, dairy equipment, and irrigation systems. | | | |
| RAPIDS Code: 0187 | | **O\*NET Code:** 49-3041.00 | |
| Estimated Program Length: 4975 - 7300 hours | | | |
| Apprenticeship Type: | | | |
| Competency-Based | Time-Based | | Hybrid |

On-the-Job Learning Outline

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|  | Minimum Hours | Maximum Hours |
| 1. Cal OSHA, EPA Regulations, Shop and Machinery Safety procedures  • Demonstrate proper knowledge of current OSHA standards and safe forklift operation  * Cal OSHA | 25 | 50 |
| 1. Diesel Engine Repair  • Diagnosis &amp repair of general engine, cylinder head &amp valve train, engine block, lubrication &amp cooling systems, &amp intake, fuel and exhaust systems.  * Diesel Engine Repair | 500 | 750 |
| 1. Hydraulic Systems  • Diagnosis and repair of hydraulic systems and components in mobile agricultural equipment applications.  * Hydraulic Systems  • Diagnosis and repair of hydraulic systems and components in mobile agricultural equipment applications. | 750 | 1000 |
| 1. Electrical Systems  • Diagnosis and repair of mobile equipment starting, charging and lighting systems.  * Electrical Systems  • Diagnosis and repair of mobile equipment starting, charging and lighting systems. | 500 | 1000 |
| 1. Clutches, Torque Converters and Transmissions:  • Testing and adjusting, disassembly and assembly of mobile agricultural equipment transmissions and torque converters.  * Clutches, Torque Converters and Transmissions:  • Testing and adjusting, disassembly and assembly of mobile agricultural equipment transmissions and torque converters. | 500 | 750 |
| 1. Differentials, Brakes, Final Drives, Undercarriage  • Test, disassemble, assemble and adjust mobile equipment power train components and undercarriage.  * Differentials, Brakes, Final Drives, Undercarriage  • Test, disassemble, assemble and adjust mobile equipment power train components and undercarriage. | 500 | 750 |
| 1. Electronic Controls:  • Identify, test and repair analog, digital and electronic systems and components  * Electronic Controls:  • Identify, test and repair analog, digital and electronic systems and components | 500 | 750 |
| 1. Computer Research and Record Keeping  • Use proprietary software to research problems, identify and purchase parts and complete effective service reports.  * Computer Research and Record Keeping  • Use proprietary software to research problems, identify and purchase parts and complete effective service reports. | 500 | 750 |
| 1. Diagnostics, Troubleshooting and Tune-up   Diagnose, troubleshoot and repair common equipment related items and perform common tune-ups  * Diagnostics, Troubleshooting and Tune-up   Diagnose, troubleshoot and repair common equipment related items and perform common tune-ups | 1000 | 1250 |
| 1. Welding • General flame cutting and arc welding applications. Fabricate tooling as required from schematic or engineering drawings.  * Welding • General flame cutting and arc welding applications. Fabricate tooling as required from schematic or engineering drawings. | 200 | 250 |
| **Total Hours** | **4975** | **7300** |