# **Work Process Schedule**

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| Transit Bus Technician |
| **Job Description:** Diagnose, adjust, repair, maintain, and overhaul buses and bus equipment. They typically work in municipal transit repair shops. |
| **RAPIDS Code:** 2073CB | **O\*NET Code:** 49-3031.00 |
| **Estimated Program Length:** 1 year |
| **Apprenticeship Type:** [x]  Competency-Based [ ]  Time-Based [ ]  Hybrid |

Suggested On-the-Job Learning Outline

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| Demonstrates mastery of fundamental skills |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Follows safe procedures
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| 1. Correctly applies hand tools, power tools, and fasteners
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| 1. Demonstrates basic rigging and hoisting ability
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| 1. Demonstrates ability to apply basic industrial mathematics
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| 1. Demonstrates basic mechanical ability
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| 1. Demonstrates basic hydraulic and pneumatic ability
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| 1. Demonstrates basic electrical and electronic ability
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| 1. Demonstrates basic welding precautions
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| 1. Demonstrates basic vehicle towing
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| Maintains and repairs low voltage electrical and electronic systems |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Follows safe procedures
 |  |  |
| 1. Performs general electrical/electronic diagnosis
 |  |  |
| 1. Performs battery diagnosis and repair
 |  |  |
| 1. Performs starting system diagnosis and repair
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| 1. Performs charging system diagnosis and repair
 |  |  |
| 1. Performs lighting systems diagnosis and repair
 |  |  |
| 1. Performs gauge and warning device diagnosis and repair
 |  |  |
| 1. Diagnoses and repairs related electrical/electronic systems
 |  |  |
| 1. Maintains, diagnoses, and repairs data communications systems (CAN, J1939, J 1708, etc.)
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| 1. Maintains, diagnoses, and repairs multiplex systems
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| 1. Maintains, diagnoses, and repairs fire suppression/ detection systems
 |  |  |
| 1. Maintains, diagnoses, and repairs (electronic) signage systems
 |  |  |
| 1. Maintains, diagnoses, and repairs fare collection equipment
 |  |  |
| 1. Maintains, diagnoses, and repairs radio communications systems
 |  |  |
| 1. Maintains, diagnoses, and repairs automatic stop announcement systems
 |  |  |
| 1. Maintains, diagnoses, and repairs video surveillance equipment
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| 1. Maintains, diagnoses, and repairs automatic passenger counters
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| 1. Maintains, diagnoses, and repairs wireless communication systems
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| Maintains and repairs brake and air systems |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Follows safe procedures
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| 1. Maintains, diagnoses, and repairs air supply and service systems
 |  |  |
| 1. Maintains, diagnoses, and repairs mechanical/foundation disc and drum brakes
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| 1. Maintains, diagnoses, and repairs parking brakes
 |  |  |
| 1. Maintains, diagnoses, and repairs wheel bearings
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| Maintains, diagnoses, and repairs propulsion systems |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Follows safe procedures
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| 1. Maintains, diagnoses, and repairs internal combustion (IC) bus engines (note: applies generally to diesel, CNG and gasoline engines – see unique competencies below for each propulsion type)
 |  |  |
| 1. Maintains, diagnoses, and repairs items specific to diesel engines
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| 1. Maintains, diagnoses, and repairs items specific to gasoline engines
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| 1. Maintains, diagnoses, and repairs items specific to CNG engines and related systems
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| 1. Maintains, diagnoses, and repairs items specific to hybrid propulsion systems
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| 1. Maintains, diagnoses, and repairs items specific to electric propulsion systems
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| 1. Maintains, diagnoses, and repairs items specific to fuel cell propulsion systems
 |  |  |
| 1. Overhaul of engine
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| Maintains, diagnoses, and repairs automatic transmissions and drivetrains |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Follows safe procedures
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| 1. Maintains, diagnoses, and repairs automatic transmissions
 |  |  |
| 1. Maintains, diagnoses, and repairs drive shafts and universal joints
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| 1. Maintains, diagnoses, and repairs drive axles
 |  |  |
| 1. Overhaul of transmission
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| Maintains, diagnoses, and repairs steering and suspension systems |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Follows safe procedures
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| 1. Maintains, diagnoses, and repairs steering systems
 |  |  |
| 1. Maintains, diagnoses, and repairs independent front suspensions
 |  |  |
| 1. Maintains, diagnoses, and repairs straight/I-beam axles
 |  |  |
| 1. Maintains, diagnoses, and repairs rear suspensions
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| 1. Diagnoses, adjusts, and repairs wheel alignment
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| 1. Maintains, diagnoses, and repairs wheels and tires
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| Maintains, diagnoses, and repairs heating, ventilation and air conditioning (HVAC) systems  |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Follows safe procedures
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| 1. Performs basic HVAC system verifications and testing
 |  |  |
| 1. Maintains, diagnoses, and repairs a/c system and related components
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| 1. Maintains, diagnoses, and repairs heating and engine cooling systems
 |  |  |
| 1. Maintains, diagnoses, and repairs HVAC operating systems and related controls
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| Maintains, diagnoses, and repairs body and chassis equipment and systems |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Follows safe procedures
 |  |  |
| 1. Maintains, diagnoses, and repairs operator and passenger seating
 |  |  |
| 1. Maintains, diagnoses, and repairs stanchions, grab rails and modesty panels
 |  |  |
| 1. Maintains, diagnoses, and repairs windows
 |  |  |
| 1. Maintains, diagnoses, and repairs door systems
 |  |  |
| 1. Maintains, diagnoses, and repairs flooring, paneling and roof hatches
 |  |  |
| 1. Maintains, diagnoses, and repairs wheelchair lifts, ramps and restraints
 |  |  |
| 1. Maintains, diagnoses, and repairs passenger signaling (stop request) systems
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| 1. Inspects and repairs frame/chassis members
 |  |  |
| 1. Welding
 |  |  |
| 1. Collision repair and paint refinishing
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| Conducts preventive maintenance inspections |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Follows safe procedures
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| 1. Inspects engine systems
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| 1. Inspects body interior and exterior
 |  |  |
| 1. Inspects electrical/electronic systems
 |  |  |
| 1. Inspects frame and chassis
 |  |  |
| 1. Conducts road test
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| Maintains, diagnoses, and repairs articulated bus systems |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Follows safe procedures
 |  |  |
| 1. Maintains, diagnoses, and repairs mechanical components of the articulation joint
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| 1. Maintains, diagnoses, and repairs hydraulic components of the articulation joint
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| 1. Maintains, diagnoses, and repairs the electronic control system
 |  |  |
| 1. Maintains, diagnoses, and repairs articulation bellows
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Suggested Related Instruction Outline

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| Provider |
| **Name:**  |
| **Address:**  |
| **Email:** | **Phone Number:** |
| **Suggested Related Instruction Hours:** 144 |

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