

Aviation Technician- Aircraft Maintenance

Program Learning Outcomes

Learning outcomes represent culminating demonstrations of learning and achievement. In addition, learning outcomes are interrelated and cannot be viewed in isolation of one another. As such, they should be viewed as a comprehensive whole. They describe performances that demonstrate that significant integrated learning by graduates of the program has been achieved.

The graduate has reliably demonstrated the ability to

1. Inspect and service aircraft systems on large or small, fixed or rotary wing aircraft utilizing current and relevant theories of aerodynamics; aircraft; and mechanical, electrical, electronic, and engineering principles.
2. Inspect, test, troubleshoot, service, repair and overhaul aircraft in a manner that ensures adherence to Canadian aviation and company regulations of aircraft safety and airworthiness.
3. Evaluate fixed wing and rotary aircraft structures including transparencies, materials and fasteners, furnishings and fabric coverings, and lines and conduits, to complete maintenance, assembly, fabrication and repair work on large and small aircraft.
4. Perform scheduled and unscheduled inspections on aircraft systems, structures, instruments, and related components to ensure they are in proper working order and meet standards of performance and safety.
5. Install aircraft engines, parts, components and structures as part of routine and unscheduled maintenance and replacement tasks.
6. Diagnose malfunctions or other problems in aircraft systems, structures, instruments, and related components using technical manuals, drawings, blueprints, and standards of performance and safety.
7. Complete structural and non-structural repairs and modifications by following applicable procedures and safety precautions, and meeting industry standards.
8. Perform component wear and fatigue analysis using appropriate measuring devices to determine necessary repair or replacement tasks in order to maintain the aircraft's airworthiness and safety.
9. Perform service, maintenance, repair, reconditioning, and modification procedures on aircraft systems, structures, instruments, and related components to maintain aircraft safety and airworthiness.
10. Dismantle airframes, aircraft engines and other systems for repair and overhaul.
11. Interpret written instructions, schematics, manufacturer's specifications, technical drawings, manuals, and computer based information correctly, effectively, and efficiently while performing routine and unscheduled tasks.
12. Maintain detailed inspection, repair, maintenance, and certification records and reports to meet industry regulations and logbook requirements.
13. Complete all work in a manner that enhances health, wellness, and personal well being; reduces the risk of occupational and workplace injury; meets related health, safety and environmental legislation; and conforms to occupational health and safety guidelines.