Aircraft Maintenance Engineer Technician Guide to Course Content

2023



DESCRIPTION OF THE AIRCRAFT MAINTENANCE ENGINEER TECHNICIAN TRADE

Aircraft Maintenance Engineer Technicians maintain, replace and repair all components of all types of aircraft; perform scheduled inspections; and check avionic systems.

Training Requirements: To graduate from each level of the apprenticeship program, an apprentice must successfully complete the required technical training and compile enough on-the-job experience to total at least 1800 hours each year. Total trade time required is 7200 hours and at least 4 years in the trade.

There are four levels of technical training delivered by Stevenson Aviation & Aerospace Training Centre, Red River College, Winnipeg and Southport, Manitoba:

Level One: 9 weeks Level Two: 9 weeks Level Three: 9 weeks Level Four: 9 weeks

All individuals interested in indenturing in this trade must contact: Registrar, Apprenticeship Manitoba at (204) 945-4647 for information regarding registration and training.

The information contained in this document serves as a guide for employers and apprentices and briefly summarizes the training delivered at each level of apprenticeship training. An apprentice spends approximately 15% of the apprenticeship term in a technical training institute learning the technical and theoretical aspects of the trade. The hours and percentages of technical and practical training may vary according to class needs and progress.

The content of the technical training components is subject to change without notice.

Entrance Requirements for Apprenticeship Training

Your grade twelve transcripts (with no modified classes) or GED 12 is your guarantee that you meet the educational entrance requirements for apprenticeship in Saskatchewan. In fact, employers prefer and recommend apprentices who have completed high school. This ensures the individual has all of the necessary skills required to successfully complete the apprenticeship program, and receive journeyperson certification.

Individuals with "modified" or "general" classes in math or science do not meet our entry requirements. These individuals are required to take an entrance assessment prescribed by the SATCC.

English is the language of instruction in all apprenticeship programs and is the common language for business in Saskatchewan. Before admission, all apprentices and/or "upgraders" must be able to understand and communicate in the English language. Applicants whose first language is not English must have a minimum Canadian Language Benchmark Assessment of six (CLB6).

Note: A CLB assessment is valid for a one-year period from date of issue.



	Minimum Class Requirements		Recommended
Designated Trade Name	Mathematics (one of the following)	Science	/Assets
Aircraft Maintenance Technician	WA 10 or F 10 or P 10 or Math 10	10	⊘ , ⊙ ,

WA - Workplace and Apprenticeship; **F** – Foundations; **P** – Pre-calculus; **①** Biology 10; **②** Chemistry 20; **③** Physics 20; **②** Biology 30; **⑤** Chemistry 30; **③** Physics 30; **②** English and Math at Level 30

TRAINING PROFILE CHART

This Training Profile Chart represents Stevenson Aviation and Aerospace Training Centre technical training at the topic level.

Level One	Transcript Code
Ground Handling	AMEG-1015
Aviation Math and Physics	AMEG-1017
Tools and Equipment	AMEG-1018
Airframe Fuel Systems	AMEG-1019
Aircraft Hardware	AMEG-1020
Hydraulic/Pneumatic Systems	AMEG-1022
Landing Gear	AMEG-1023
Structures Assembly and Rigging	AMEG-1025
Rotary Wing Theory of Flight	AMEG-1026
Human Factors	AMEG-1027
Weight and Balance	AMEG-1029

Level Two	Transcript Code
Composites	AMEG-2001
Reciprocating Engines	AMEG-2002
Propellers	AMEG-2003
Aircraft Structural Materials	AMEG-2004
Wood and Fabric	AMEG-2005
Dynamic Drive Systems	AMEG-2006
Vibration Analysis	AMEG-2007

Level Three	Transcript Code
Drawings	AMEG-3001
Metallic Structures	AMEG-3002
Maintenance Procedures	AMEG-3003
Turbine Engines	AMEG-3004
Environmental Systems	AMEG-3005

Level Four	Transcript Code
Canadian Aviation Regulations	AMEG-4001
Instruments	AMEG-4002
Avionics	AMEG-4003
Ice and Rain Protection	AMEG-4004
Electrical	AMEG-4005
Non Destructive Testing	AMEG-4006

TECHNICAL TRAINING COURSE CONTENT

Technical Training is delivered out of province by Stevenson Aviation and Aerospace Training Centre. For more information about Aircraft Maintenance Engineer Technician training, please visit https://www.rrc.ca/stevenson/programs/apprentice-aircraft-maintenance-journeyperson

Level One 9 weeks 308 hours

Ground Handling

Aviation Math and Physics

Tools and Equipment

Airframe Fuel Systems

Aircraft Hardware

Hydraulic and Pneumatic Systems

Landing Gear

Structures/Assembly and Rigging

Rotary Wing Theory of Flight

Level Two 9 weeks 308 hours

Composites

Reciprocating Engines

Propellers

Aircraft Structural Materials

Wood and Fabric

Dynamic Drive Systems

Vibration Analysis



Level Three 9 weeks 308 hours

Drawings

Metallic Structures

Maintenance Procedures

Turbine Engines

Environmental Systems

Level Four 9 weeks 308 hours

Canadian Aviation Regulations

Instruments

Avionics

Ice and Rain Protection

Electrical

Non-destructive Testing

