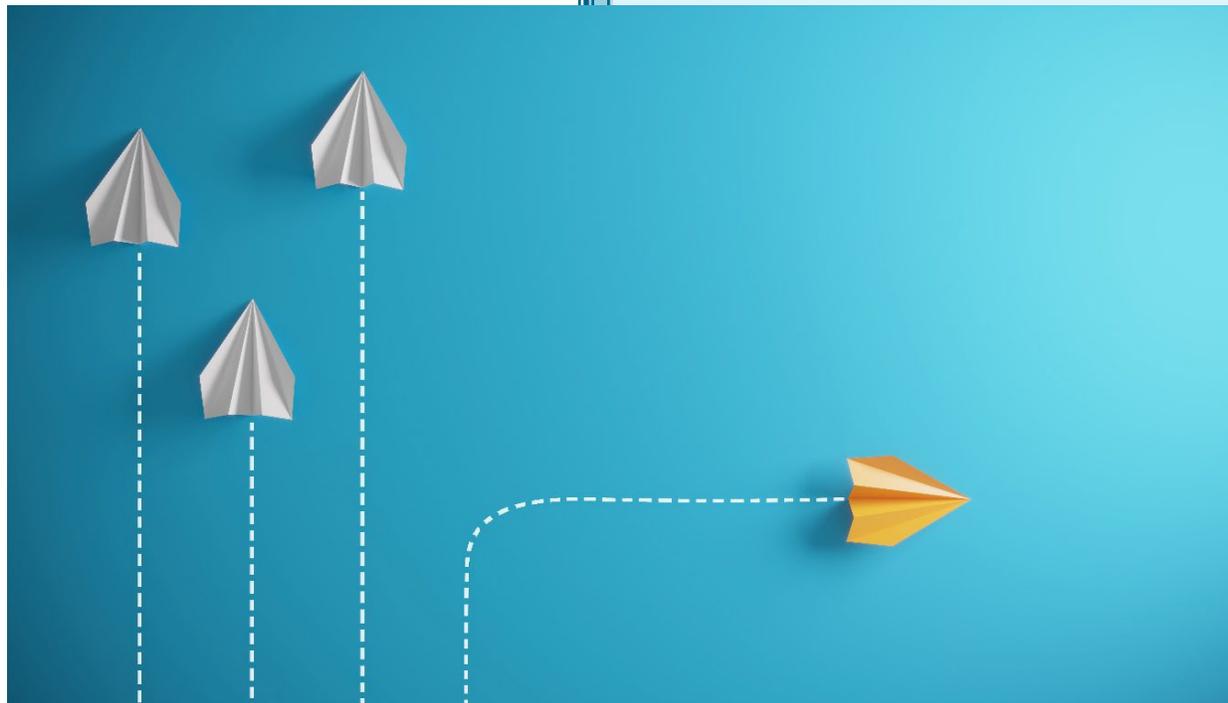


2026

*CCAA Foundational Training Program  
(FTP) Course Catalogue*



**ccaa**  
Canadian Council for **Aviation & Aerospace**  
*Workforce advancement*

CCAA FTP Training Department  
R9.4 3/2/2026



## Table of Contents

.....	1
Table of Contents.....	2
1 Adapting to Change: 1.5 hours.....	5
2 Additive Manufacturing: ½ hour.....	5
3 Air Operations: 1 hour.....	5
4 Aircraft Engines and Propulsion Systems: 20 hours.....	5
5 Aircraft Hardware: 2 hours.....	6
6 Aircraft Materials: 2 hours.....	6
7 Aircraft Recovery: 2 hours.....	6
8 Aircraft Structures: 20 hours.....	7
9 Aircraft Towing Procedures: 2 hours.....	7
10 Airport Authority Operations: 2 hours.....	7
11 Airport Lighting: 1 hour.....	7
12 Airport Markings, Signs, and Indicators: 1 hour.....	7
13 Aviation Cybersecurity Foundations: Safeguarding the Digital Horizon: 3 hours.....	8
14 Aviation Refueling: 45 minutes.....	8
15 Avionics Fundamental: 60 hours.....	8
16 Basic Electrical Components: 1 hour.....	8
17 Basics of Aviation Physics: 2 hours.....	9
18 Basics of Hand and Power Tools: 2 hours.....	9
19 Bearing Fundamentals and Inspection Procedures: 2 hours.....	9
20 Borescope General Familiarization: 6 hours.....	10
21 Cabin Interiors for Large Commercial Aircraft: 2 hours.....	10
22 Canadian Aviation Regulations (CARs): Performing Work in a Shop: 6 hours.....	10
23 Careers in Aviation and Aerospace: 2 hours.....	11
24 Coaching for Success: OJT Mentorship: 2 hours.....	11
25 Common Acronyms and Initialisms in Aviation and Aerospace: Resource.....	11
26 Communicating for Results: 1.5 hours.....	11
27 Control Systems Overview: 1 ½ hours.....	12
28 Critical and Creative Thinking: 2 hours.....	12
29 Data Privacy: 1 hour.....	12
30 Drones in Aviation: 2 hours.....	12
31 Emotional Intelligence and Self-Management: 1.5 hours.....	13



## Foundational Training Course Descriptions

---

32	Essential Skills: Document Use: 1 hour.....	13
33	Essential Skills: Numeracy: 3 hours .....	13
34	Essential Skills: Reading: 1 hour .....	13
35	Flight Dispatch: From A to B: 2 hours.....	14
36	Foreign Object Debris/Damage (F.O.D.) Awareness: 1 hour .....	14
37	Gears - Mechanical Power Transmissions: ½ hours .....	14
38	Generation and Storage of Electricity: 1 hour .....	15
39	Ground Operations and Servicing: 1 hour.....	15
40	Health & Safety for Aircraft Technicians: 6 hours .....	15
41	Hoists and Lifts: 1 hour.....	15
42	Human Factors: 6 hours.....	16
43	Indigenous Cultural Sensitivity and Respect, an introduction – Part 1 (Module 1): 3 hours.....	16
44	Indigenous Cultural Sensitivity and Respect, an Introduction– Part 2 (Module 2-8): 3 hours.....	16
45	Introduction to Analytical Thinking & Trouble Shooting: 10 hours .....	16
46	Introduction to Business and Technical Writing: 2 hours .....	17
47	Lean Thinking Module 1 - Fundamentals of Lean Thinking: 1 hour.....	17
48	Lean Thinking Module 2 - Introduction to Lean Thinking: 1 hour .....	17
49	Lean Thinking Module 3 - Primary Tools of Lean: 1 hour .....	17
50	Lean Thinking Module 4 - Kaizen: Learn by Doing: 1 hour.....	18
51	Lean Thinking Module 5 - Thinking Value Stream: 1 hour.....	18
52	Making Teamwork Work: 2 hours .....	18
53	Managing Conflict: 1.5 hours.....	18
54	Managing Time and Stress: 1.5 hours .....	18
55	Manuals and Documentation: 1 hour .....	19
56	Marshalling Signals: 1 hour .....	19
57	Optimal Service Delivery & Customer Relations: 2 hours.....	19
58	Precision Measurement and Interpreting Drawings: 1 hour.....	20
59	Performance Improvement: 2 hours .....	20
60	Problem Solving and Decision Making: 2 hours .....	20
61	Radio Communications: 1 hour.....	20
62	Restricted Operator Certificate with Aeronautical Qualification (ROC-A) Study Guide: 3 hours.....	21
63	Robotics and Advance Motion Systems: ½ hour.....	21
64	Safe and Respectful Workplace: 1 hour .....	21
65	Safe Lifting and Carrying: 2 hours .....	22



## Foundational Training Course Descriptions

---

66	Skilled Trades in Advanced Manufacturing – an exciting career choice: ½ hour .....	22
67	Special Processes: 1.5 hours .....	22
68	Supply Chain in Aviation and Aerospace: 1 hour .....	23
69	Theory of Flight: 20 hours .....	23
70	Torque, Lockwire, and Locking Devices: 2 hours .....	23
71	Transportation of Dangerous Goods: 2 hours .....	23
72	Weight and Balance: 1 hour .....	24
73	WHMIS 2015: 2 hours .....	24
74	Winter Operations: 2 hours .....	24
75	Working Across Generations: 1 hour .....	25
76	Working and Interacting with Different People: 1 hour .....	25
77	Working at Heights: 2 hours .....	25
78	Workplace Fall Prevention 1 hour .....	25



## 1 Adapting to Change: 1.5 hours

PRICE: \$49

Change in today's workplace is a reality. Organizational leaders and employees alike must understand what change is, why it needs to happen, and how to manage it successfully. This core skill course provides the learner with foundational knowledge in preparation for how to adapt to changes inside and outside of the workplace.

## 2 Additive Manufacturing: ½ hour

PRICE: \$49

What is additive manufacturing? This course explores this technology, better known as 3D printing, as it relates to the future of manufacturing. The participant will review how additive manufacturing can produce more complex and profitable products with smaller batches and lower inventory levels while reducing waste and improving product quality. They will explore the current state of additive manufacturing and discover what is common in modern manufacturing facilities, and how additive manufacturing will affect a career in manufacturing in the coming decade.

## 3 Air Operations: 1 hour

PRICE: \$49

Are you ready to take your aviation knowledge to new heights? Look no further! It is designed to empower you with essential skills and insights into the world of aviation, ensuring you're prepared for a successful career in this dynamic industry. Learn how to read and write positions with precision, crucial for safely navigating the skies. Gain in-depth knowledge of the Canadian Airspace Structure, ensuring you're always



on the right path. Explore the division of Flight Information Services, ensuring you have access to crucial data when you need it most. Summarize the differences between Terminal Control Areas, Low-Level Airways, Control Area Extensions, Control Zones, and Transition Areas, enhancing your situational awareness. Master the art of reading and writing positions using latitudes and longitudes, a fundamental skill for safe and precise aviation. Get a deep understanding of the Canadian Airspace Structure, ensuring you can navigate with

confidence in any situation. Demystify Flight Level, Altitude, Elevation, and Height, and choose the perfect cruising altitude like a pro. Learn why Airspace Classifications matter and understand the unique requirements for each classification.

## 4 Aircraft Engines and Propulsion Systems: 20 hours

PRICE: \$375



The Aircraft Engines and Propulsion Systems training module is designed to provide technicians with a solid understanding of aircraft powerplants. This training covers various topics, including the types and principles of aircraft engines, engine maintenance and inspection procedures, engine systems and controls, engine performance monitoring, troubleshooting and diagnostics, and propulsion systems. By completing this training, future technicians will gain the foundational knowledge and skills necessary to effectively maintain, diagnose, and troubleshoot aircraft engines, contributing to the safety and reliability of aircraft operations.

### 5 Aircraft Hardware: 2 hours

PRICE: \$49

The Aircraft Hardware training module provides technicians with essential knowledge and practical skills for aircraft hardware components. This foundational course covers fasteners, rivets, connectors, electrical hardware, brackets, hinges, mounts, structural hardware, and corrosion prevention and treatment. By completing this training, participants will be equipped to identify, inspect, maintain, and replace aircraft hardware components safely and professionally, ensuring the structural integrity, safety, and airworthiness of aircraft at a basic level.

### 6 Aircraft Materials: 2 hours

PRICE: \$49

The Aircraft Materials training module provides future technicians with a comprehensive understanding of the various materials used in aircraft construction. This foundational course covers topics such as metals and alloys, composite materials, non-metallic materials, material identification and testing, and material handling and safety. By completing this training, technicians will gain the foundational knowledge and skills necessary to identify, handle, and maintain aircraft materials effectively, contributing to the safety, reliability, and airworthiness of aircraft operations. This training will also provide the skills required to handle materials appropriately for cleaning and repair.



### 7 Aircraft Recovery: 2 hours

PRICE: \$49

This course explores various situations that can lead to an aircraft recovery. The learning will discover how aircraft recovery may impact aviation operations. The learning will examine training requirements for aircraft recovery personnel, review the environmental and hazardous factors associated with aircraft recovery, and teach them to recognize procedures for dealing with aircraft incidents.



### 8 Aircraft Structures: 20 hours

PRICE: \$375

The Aircraft Structures training module provides future technicians with comprehensive knowledge and skills related to aircraft structural maintenance. This foundational course covers topics such as aircraft structural components, inspection techniques, repair and maintenance procedures, fatigue and stress analysis, structural integrity management, and composite structures. By completing this training, participants will be sufficiently proficient in conducting general visual inspections, identifying structural issues, and performing necessary repairs, ensuring the structural integrity and airworthiness of the aircraft.

### 9 Aircraft Towing Procedures: 2 hours

PRICE: \$49

This course will provide the participants with the opportunity to look at how aircraft are moved around the airport and within hangars with the aid of a tug or tow. Safety is the number one priority in all operations. Choosing the appropriate aircraft equipment and operating by applying the operations as identified within the standards and regulations is the best way to help ensure this safety. Before anyone can use tug or tow equipment, they must be trained, and this course is a great starting place to begin that training.

### 10 Airport Authority Operations: 2 hours

PRICE: \$49

This course is designed to provide a comprehensive overview of the duties and responsibilities that fixed-based operator personnel have and how they relate to the effective functions and day-to-day operations of the airport organization. Line service technicians will be able to define the duties and responsibilities of personnel and demonstrate safety protocol amongst various departments. This course provides a clear understanding of how to rely on information and accurately navigate safely on the runway.

### 11 Airport Lighting: 1 hour

PRICE: \$49

In this exciting course, the learner gets a sneak peek into how airports implement safe practices using lighting. Standardized lighting is important for both the pilots and the ground crew. Have you ever wondered about all the lights and the reason behind them? This course provides the opportunity for the participant to become familiar with airport lighting, commonly used lights, runways, taxiways, heliports, and emergency lighting.

### 12 Airport Markings, Signs, and Indicators: 1 hour

PRICE: \$49

Airport markers and markings are used as visual representation aids in aerodromes, airports, and heliports. In this course, we will discuss specific airport markings, markers, signs, and indicators that allow ground transportation to effectively communicate with aircraft, whether in take-off, landing, or navigating on the



runway. Identification of airport markings, signs, and indicators is key to the safety of all people working within an aerodrome, airport, or heliport. Participants will learn to recognize and use these to aid them in safely navigating.

### 13 Aviation Cybersecurity Foundations: Safeguarding the Digital Horizon: 3 hours

PRICE: \$49

In an era where digital skies are as busy as the physical ones, understanding cybersecurity in aviation is not just crucial; it is a responsibility. Our workplaces are as diverse as the threats we face. Every layer of aviation and aerospace requires cybersecurity awareness. In recent years, airline data breaches have caused serious disruptions and raised concerns about the security of passengers' personal information. This course will introduce the participants to common cybersecurity threats in aviation and the importance of cybersecurity in aviation. It will help the participants to identify various frequent cybersecurity threats, and preventive measures and mitigation strategies when dealing with cyber threats.

### 14 Aviation Refueling: 45 minutes.

PRICE: \$49

This course provides the learner with basic knowledge of fuel types, safe refueling operations, daily inspections, misfuelling prevention, and the safety measures required with fuel tankers. After completion, the learner will have a better understanding of the types of fuels used in aviation, where they are used, the importance of daily walk-around inspections, and the steps in the refueling process. Learners will also learn about key elements to prevent misfuelling. Safety is a number one priority; this course will help to keep employees safe during refueling operations.

### 15 Avionics Fundamental: 60 hours

PRICE: \$799



The role of the Aircraft Maintenance Technician (AMT) is changing in part due to the rapid changes in technology. The day-to-day activities of AMTs now also require significant expertise in avionics.

This course provides AMTs with a clear understanding of avionics to expand their abilities and competency in the following areas: Basic Electronics (a review), Basic Digital Computer Systems and Software Avionics, Specialized Skills, Communications Systems, Navigation Systems, Indicating and Recording Systems, Auto Flight System, Integrated Modular Avionics Systems, Central Maintenance and Information Systems, Cabin Systems.

### 16 Basic Electrical Components: 1 hour

PRICE: \$49

In this course, we'll look at the basic electrical components you will need to know as well as the safety protocols and procedures required to work with these components. The course covers circuit control



devices such as manual, automatic, and multi-contact switches. We will delve into the importance and procedures to maintain switches, recognize when a switch needs to be replaced, and how to replace it. The participant will learn to identify circuits and fuses and follow the steps to safely replace them. The importance of resistance will be discussed, and the participant will learn to identify, select, check, remove, and replace resistors.

### 17 Basics of Aviation Physics: 2 hours

PRICE: \$49

The Basics of Aviation Physics course focuses on enhancing the mathematical and scientific skills of individuals entering the aviation industry. Topics covered include basic mathematical operations, fractions, units and measurements, forces and motion, principles of flight, aerodynamics and fluid mechanics, and weather and meteorology. By completing this course, participants will develop a foundation in mathematical techniques, including fractions, and gain an understanding of key physics principles relevant to aviation. This training equips individuals with the necessary skills to perform accurate calculations and apply scientific principles in aviation operations.

### 18 Basics of Hand and Power Tools: 2 hours

PRICE: \$49

The Basics of Hand and Power Tools course provides technicians with the knowledge and skills necessary for the proper selection, handling, and maintenance of tools used in aircraft maintenance. Participants will learn about various hand tools, power tools, precision measurement tools, and specialized equipment utilized in aviation maintenance tasks. The course emphasizes safety practices, tool control, and the prevention of Foreign Object Debris/Damage (FOD). By completing this course, technicians will enhance their ability to work efficiently and safely with tools and equipment, ensuring the accuracy and reliability of maintenance operations in the aviation industry.

### 19 Bearing Fundamentals and Inspection Procedures: 2 hours

PRICE: \$49

The Bearing Fundamentals and Inspection Procedures course is designed for learners who have minimal experience with, and/or exposure to, working with bearings but who are interested in learning more about them. Through three fully asynchronous, easy-to-navigate interactive modules, learners will explore the fundamentals of bearings – their definition, purpose, and function – and best practices for installing, cleaning, removing, inspecting, and storing them. This course will also ways to identify common damage and damage classifications.





### 20 Borescope General Familiarization: 6 hours

PRICE: \$99

Imagine you have X-ray vision that lets you look inside an airplane engine without taking it apart. That's what a borescope inspection is like. It's a way to inspect the inside parts of an engine using a special tool called a borescope. This is extremely important for keeping planes safe and making sure everything runs smoothly. This course will help the learner understand where and how a borescope may be used, and some key safety elements in using borescope equipment. At the end of the journey, you won't be the expert, but you will be confident to learn how to use a borescope with the help of a mentor.

### 21 Cabin Interiors for Large Commercial Aircraft: 2 hours

PRICE: \$49

The Cabin Interiors course focuses on creating attractive and comfortable cabin environments that enhance the passenger experience. Participants will learn about cabin interior design principles, repair of furnishings, materials, color schemes, and lighting design. The course emphasizes the importance of maintaining aesthetically pleasing cabins that align with the airline's brand while prioritizing passenger comfort and safety. By completing this course, participants will gain the skills to design inviting, visually appealing cabin repair schemes and spaces that enhance the overall passenger experience.

### 22 Canadian Aviation Regulations (CARs): Performing Work in a Shop: 6 hours

PRICE: \$220

This stream is intended for individuals performing maintenance activities, primarily on aeronautical components in an approved maintenance organization. This course details the applicable CARs specific to the roles and responsibilities of individuals performing maintenance activities, primarily on aeronautical components in an approved maintenance organization. Understanding the regulations and their applicability to the work being performed is a key characteristic of a technician. This course provides the foundational learning needed for individuals starting their career and a thorough refresher for those individuals already advanced in their career as a technician. For other CAR streams, see the online catalogue.



### 23 Careers in Aviation and Aerospace: 2 hours

PRICE: *FREE*

The Careers in Aviation and Aerospace provides a comprehensive introduction to the diverse career fields of aviation and aerospace. This exploratory style course covers a wide variety of career opportunities where participants are invited to explore aviation and aerospace in the current state and to examine what opportunities may be available to them in the future. The participants will gain a broad understanding of the industry, its key sectors, and future trends, preparing them for further exploration and potential career paths within the dynamic world of aviation and aerospace.



### 24 Coaching for Success: OJT Mentorship: 2 hours

PRICE: \$49

Understanding the way people learn, and what tools will be helpful to the mentee, provides the mentor the ability to tailor fit the approach used for each mentee. This course explores learning styles, learning principles, gaps in generational learning, and tools to provide to the learner while participating in Work Integrated Learning (WIL) or just being mentored. This course specifically focuses on coaching the mentor to be knowledgeable and confident in providing feedback and reaching the learning goals.

### 25 Common Acronyms and Initialisms in Aviation and Aerospace: Resource

PRICE: \$129

Are you new to the industry and feel like you are trying to learn a new language? Maybe you have been in the industry for a while but can't remember what an acronym means. If you said, "yes," or nodded your head in agreement, this course, or more correctly described as an online dictionary, is for you. In aviation and aerospace, there are many terms and acronyms used, and it can often feel overwhelming at first. We have put together a comprehensive list of 550+ commonly used acronyms and made a reference guide to help navigate this aviation and aerospace language.

### 26 Communicating for Results: 1.5 hours

PRICE: \$49

Effective Communication is a key success factor in organizations today. This module looks at the communication process and how to overcome communication barriers. Communication, or rather miscommunication, can lead to interpersonal and organizational challenges. This course helps the learner to become more effective in their communication and enhances their ability to understand communication with others present.



### 27 Control Systems Overview: 1 ½ hours

PRICE: \$49

Programmable logic controllers (PLCs) are efficient and practical devices used in control systems for the textile industry. Compared with traditional relay logic circuits, they deliver considerable time and cost savings. In this course, you will learn about the background of the development of PLCs and their advantages. You will then learn about applications and input/output devices used with PLCs.

### 28 Critical and Creative Thinking: 2 hours

PRICE: \$49



Critical thinking and creative thinking skills are valued skills in every organization. In this module, you will define and consider the similarities between both and consider how to troubleshoot problems. Participants will enhance their critical and creative thinking by learning the principles of critical thinking, exploring and applying techniques to troubleshoot problems, and understanding predispositions towards critical thinking.

### 29 Data Privacy: 1 hour

PRICE: \$49

In today's world, where technology and data are a core part of doing business, everyone must know how their data can be used and how they may be consenting to the use of that personal data. This course provides the learner with general information on data privacy, an explanation of types of personal information, helps the individual to provide valid consent for the use of personal information, explains the difference between data subject, controller, and regulator, and explains data live cycle within the context of privacy.

### 30 Drones in Aviation: 2 hours

PRICE: \$49

The exciting world of drones is gaining momentum as the capabilities of drones, or unmanned aircraft, become more readily available, and their uses continue to increase. There are operational requirements for



each type of drone. It is important to understand the roles and responsibilities of following the certification. In this course, we will explore licensing requirements for various drone operations and the associated terminology associated with the uses of drones. Safety should always be made a priority, and this remains true when operating drones. Learn more about this emerging world of drones through the completion of this course.

### 31 Emotional Intelligence and Self-Management: 1.5 hours

PRICE: \$49

Emotional Intelligence is increasingly recognized as a crucial factor for personal and professional success, often considered more significant than IQ. Today's most successful individuals are those who possess a high level of emotional competence, regardless of their IQ. With the growing emphasis on soft skills, the ability to engage effectively with others, both within and outside the workplace, is a sought-after trait that employers prioritize and promote. In this module, we will define emotional intelligence and explore its benefits in the workplace context.

### 32 Essential Skills: Document Use: 1 hour

PRICE: \$49

This course will provide the participant with strategies for searching for information within documents. The participant will practice reading tables, lists, schematics, and assembly drawings. There is a focus on the interpretation of the relevant information within the documentation and on how to extract the important information from the document.



### 33 Essential Skills: Numeracy: 3 hours

PRICE: \$49

Performing calculations quickly and accurately is a critical skill for Aircraft Maintenance Technicians. The Numeracy course focuses on understanding and applying foundational mathematical skills like conversions between imperial and metric units and fractions to decimals.

### 34 Essential Skills: Reading: 1 hour

PRICE: \$49

This course provides the participant with basic knowledge of how to read documents related to the aviation and aerospace industry. Participants will learn the basic principles of building a strong vocabulary and apply reading techniques to effectively interpret various documentation and information.



### 35 Flight Dispatch: From A to B: 2 hours

PRICE: \$49

A flight dispatcher develops the flight plan for every aircraft route. Collaborating with the captain/pilot in charge, the flight dispatcher's job is to get the aircraft to its destination safely at the scheduled time, and at the lowest reasonable operating cost. In this course, the learner will peek behind the curtain of what goes on in preparation for a flight from the point of view of a dispatcher. Upon successful completion of this course, learners will be able to define the roles and responsibilities of a Flight Dispatcher in preparation for a flight, list the steps needed to safely dispatch an aircraft on a mission, and describe situations that could arise on route for a Flight Dispatcher.

### 36 Foreign Object Debris/Damage (F.O.D.) Awareness: 1 hour

PRICE: \$49

The Civil Aviation Authority (CAA) has found that an alarmingly high percentage of Foreign Object Damage occurs due to the forgetfulness and oversight of aircraft maintenance workers. This could include tools or supplies left behind in the workspace, improperly installed parts, or neglect to clear the workspace upon job completion. This course reviews real-life examples of each of these. An aircraft and aerospace maintenance team's priority are the safety of thousands of passengers. Vigilance and heightened awareness are crucial in avoiding mistakes caused by forgetfulness and oversight. In aircraft and aerospace maintenance, this is a matter of life and death. This course provides information on how to avoid making careless mistakes and ensure the safety of aircraft employees and passengers.

### 37 Gears - Mechanical Power Transmissions: ½ hours

PRICE: \$49

This course provides an overview of gears, examines common places gears are used in aviation and aerospace, defines gears and their functions, and their characteristics. The learner will learn how to identify gear malfunctions and how to perform proper maintenance. This basic course provides a wealth of foundational knowledge in preparation for the participants to explore careers such as assembly, dismantling, or inspection of gearboxes, and landing gear.





### 38 Generation and Storage of Electricity: 1 hour

PRICE: \$49

Participants in this course will learn about batteries, generators, and alternators. After completion of the course, participants will be confident in identifying the differences between primary cell and secondary cell batteries, explaining various battery types, their use, and the general maintenance required for nickel-cadmium batteries. This course will compare different types of voltage regulators and inverters and cover the basic operation and construction of alternators and functions.

### 39 Ground Operations and Servicing: 1 hour

PRICE: \$49

Participation in this captivating course will help you develop a comprehensive understanding of safety protocols and procedures, ensuring the safe execution of ground operations, and servicing while minimizing hazards. As you work your way through, you will learn how to tie various knots used in tie-down procedures and master the aircraft tie-down procedures for various aircraft types, ensuring the aircraft are properly secured to prevent movement or damage during servicing. You will learn the safe starting and operation procedures for reciprocating and turbine engines, including precautions, checklist use, and fire extinguishing techniques. Within the course, you will have the opportunity to download sample checklists as a training aid for future reference. You will learn about key safety topics on how to prevent personal injury while performing ground operations such as towing, taxiing, fueling, servicing tires, and using ground support equipment. By completing this course, you will understand the purpose and procedures of engine run-up, ensuring safe pre-flight checks, and acquire the skills and knowledge needed to service aircraft components such as oil, hydraulic fluids, and tires, and procedures for safely servicing aircraft with fuel and oxygen, adhering to safety standards and regulations.



### 40 Health & Safety for Aircraft Technicians: 6 hours

PRICE: \$129

This course focuses on Workplace Hazards Recognition and Control, Personal Protective Equipment (PPE), Fall Protection Fundamentals, Environmental and Situational Safety, including Hangar Safety, Safety Management System (SMS), Hazardous Materials, and Airside and Hangar Safety Hazards. The course is specifically designed for the Aircraft Technicians' work environment.

### 41 Hoists and Lifts: 1 hour

PRICE: \$49

This engaging three-part course explores hoists and lifts used for various applications in aviation and aerospace. The participant will be introduced to multiple types of hoists, lifts, and their application. As with



all equipment, safety must come first. The course will guide the learner through tooling and operations to keep them safe from harm and prevent product damage.

### 42 Human Factors: 6 hours

PRICE: \$99

This course delves into the twelve human factors that impact us all. Upon completion, participants will gain a comprehensive understanding of the connection between human factors and safety management. Successful students who pass the final exam will receive a certificate of achievement, valid for three years.

### 43 Indigenous Cultural Sensitivity and Respect, an introduction – Part 1 (Module 1): 3 hours

PRICE: \$79

This course Denise Halfyard, a Wet'suwet'en, Tsimshian, and Gitksan woman from the Laksilyu clan, which means Small Frog in Wet'suwet'en, will guide the learners. Join this journey of learning as she explains how there is diversity amongst the First Nation cultures. The importance of avoiding stereotypes when addressing First Nation cultures, and how inclusive language and behaviors can show respect for Indigenous values and knowledge systems. In this module, we will introduce key concepts and considerations to create mutually respectful relationships both at home and at work.



For more detailed information on this topic consider also taking Part 2 (Module 2-8), a more advanced course, to delve deeper into each topic covered in this introduction.

### 44 Indigenous Cultural Sensitivity and Respect, an Introduction– Part 2 (Module 2-8): 3 hours

PRICE: \$79

Continue the journey with Join Denise Halfyard, a Wet'suwet'en, Tsimshian, and Gitksan woman from the Laksilyu clan, as she explores the diversity of First Nation cultures. This course dives deeper into the importance of avoiding stereotypes and using inclusive language to respect Indigenous values. We will introduce key concepts for fostering mutually respectful relationships at home and work.

### 45 Introduction to Analytical Thinking & Trouble Shooting: 10 hours

PRICE: \$219

Aircraft maintenance includes scheduled and unscheduled maintenance. Scheduled maintenance includes the combined actions taken to reduce or eliminate failure and to prolong the life of the aircraft, aircraft systems, and components. Unscheduled maintenance includes the process of troubleshooting an aircraft, aircraft systems, and/or a failed component, resulting in a resolution. As an Aircraft Maintenance Technician (AMT), you will spend considerable time troubleshooting throughout your career. The skill of locating system defects through a logical process is an important asset and requires critical and logical



thinking. This course will help AMTs to develop and enhance logical and critical thinking by focusing on reasoning skills that enable more efficient and effective troubleshooting.

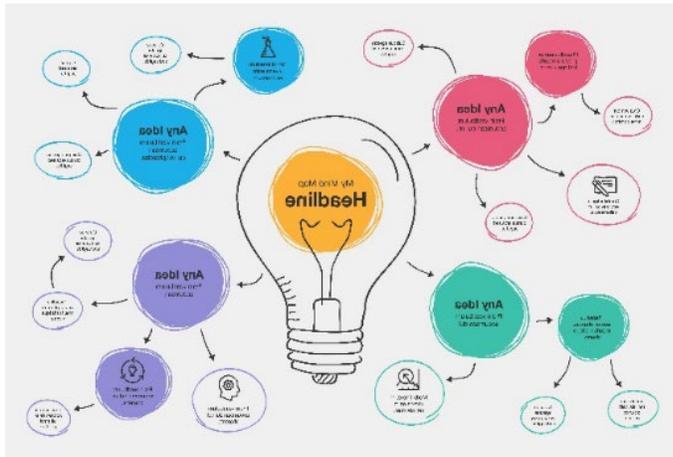
### 46 Introduction to Business and Technical Writing: 2 hours

PRICE: \$49

With written communication, whether by letter, email, memo, technical instructions, or social media, it is important to use an approach consistent with your intended audience. The more removed the receiver is from you, the greater your correspondence will reflect on your professionalism and the impression you make. Accuracy and interpretation are also critical components of effective correspondence; all correspondence should be typed to avoid any misinterpretation of handwriting and to provide a professional appearance.

### 47 Lean Thinking Module 1 - Fundamentals of Lean Thinking: 1 hour

PRICE: \$49



This course builds on the learning taken in the Introduction to Lean Thinking course and will highlight the four fundamentals of Lean Thinking: Takt Time, One Piece Flow, Standard Work, and Pull Systems. By understanding these fundamentals and using them together, organizations can harness the power of Lean Thinking to deliver products of the highest quality at lower costs and with shorter lead times.

### 48 Introduction to Lean Thinking: 1 hour

PRICE: \$49

This course will introduce you to Lean Thinking, which is a methodology that can help you work smarter, not harder. Lean Thinking helps prepare you for employment in manufacturing, participate as a member of a Lean or Continuous Improvement team, and further the skills to become a Lean Leader. Lean Thinking aims to deliver the highest quality at the lowest cost, in the shortest lead time. To do this, company processes need to be closely examined and inefficiencies, or waste, weeded out not just by management, but by every worker in the organization.

### 49 Lean Thinking Module 2 -



### 49 Lean Thinking Module 3 - Primary Tools of Lean: 1 hour

PRICE: \$49

After taking the introduction to Lean Thinking and learning the fundamental concepts, this course will build on the teachings



so far. The lessons introduce participants to the tools used by lean-thinking companies, including Setup Time Reduction, the 5S Method, and Visual Control. These are simple, effective tools used by Lean thinkers to create process capacity, and process capability and make problems visible for further improvement. As part of the course topics, we will also discuss the topic of philosophy driving Lean thinking and how to begin implementing it.

### 50 Lean Thinking Module 4 - Kaizen: Learn by Doing: 1 hour

PRICE: \$49

When we looked at value streams, we learned that when we map out our desired future state, it often becomes clear that some processes need improvement. Kaizen is a method that helps us to make those improvements by focusing on everyday changes in our workspaces. It is about identifying problems and implementing better ways to do work by simplifying tasks. If our future state maps show us where we want to get to, then Kaizen is how we can begin implementing it!

### 51 Lean Thinking Module 5 - Thinking Value Stream: 1 hour

PRICE: \$49

Anytime you have a product or a service that you provide to a customer, there is a value stream associated with that product. Simply put, a value stream is the steps in a process, both value-added and non-value added, to turn raw materials or information into products or services. Once you understand how to apply the primary tools of Lean Thinking, learning the use of value streams and understanding value streams can be particularly helpful in lean manufacturing transformations. This is because thinking in value streams can help to combat waste as it appears in more traditional batch processing operations.

### 52 Making Teamwork Work: 2 hours

PRICE: \$49

Whether working in a technical, office, or production environment, specific skills are required to help both the organization and individuals achieve success. Understanding how a team is formed and the challenges to overcome is key to leading an effective team. Being part of a team is also an important role. In this course, the participant will be learning how to work within a team and understand the importance of and benefits of teams.

### 53 Managing Conflict: 1.5 hours

PRICE: \$49

Conflicts are realities in life and many workplaces. Workplace conflict can lead to stressful situations that need to be managed to prevent errors and distractions and mitigate the potential for stress. This module considers the nature and causes of conflict and examines ways to respond to or resolve them. This module also discusses mentor-mentee relationships and introduces an approach to conflict resolution.

### 54 Managing Time and Stress: 1.5 hours

PRICE: \$49

Managing your time effectively is not just about doing more; it is about increasing personal and job-related productivity, enhancing the quality of your work with less stress, and attaining a sense of personal



satisfaction and accomplishment. This module considers some foundation time management strategies to help you achieve those outcomes.

### 55 Manuals and Documentation: 1 hour

PRICE: \$49

This course covers key topics on the hierarchy of documentation and what information is contained within the documents, such as Original Equipment Manufacturer (OEM) documentation and understanding of the Air Transportation Association (ATA). The learner will review how to fill out documentation accurately and how to select applicable information from those documents. This course reviews how to navigate the vast world of aviation and aerospace documentation and aims to make it a less daunting process for the technician.

### 56 Marshalling Signals: 1 hour

PRICE: \$49

This interactive course provides the learner with explanations for the reasons behind the use of marshaling signals, explains the importance of recognizing marshaling signals as they apply to their role, and provides identification of specific marshaling signals. Within this course, the use of video illustrations allows the learner to view firsthand what signals should be and how they are to be used. On completion of the course, the learner will also be able to list common pitfalls to be aware of when it comes to aircraft marshaling.

### 57 Optimal Service Delivery & Customer Relations: 2 hours

PRICE: \$49

The Optimal Service Delivery & Customer Relations course focuses on equipping professionals in the aviation industry with the skills needed to provide excellent service and build strong customer relationships. Topics covered include customer-centricity, effective communication, customer needs assessment, problem-solving, service recovery, and cultural sensitivity. By completing this course, participants will enhance their ability to deliver exceptional service, handle customer concerns, and exceed customer expectations. This training aims to foster a customer-centric culture and contribute to the success of aviation organizations in providing an outstanding customer experience.



### 58 Precision Measurement and Interpreting Drawings: 1 hour

PRICE: \$49



The Precision Measurement and Interpreting Drawings course focuses on developing the skills of professionals within the aviation industry to ensure accurate measurements and interpretation of engineering drawings. Topics covered include precision measurement techniques, proper usage of measurement tools, interpretation of technical drawings, inspection and quality control, and best practices for precision measurement. By completing this course, professionals will acquire an

understanding necessary to maintain accuracy and adherence to specifications, contributing to the overall quality and safety of aircraft components.

### 59 Performance Improvement: 2 hours

PRICE: \$49

The Performance Improvement course focuses on enhancing efficiency and effectiveness in aviation operations. Participants will learn key principles and methodologies for performance improvement, including process analysis and mapping, data analysis and performance metrics, root cause analysis and problem-solving, continuous improvement and Lean principles, and performance tracking and evaluation. By completing this course, new entrants professionals will be equipped to identify areas for improvement, implement solutions, and foster a culture of continuous improvement, ultimately contributing to the success and competitiveness of aviation organizations.

### 60 Problem Solving and Decision Making: 2 hours

PRICE: \$49

Understanding how to make effective decisions is an important application and career-developing skill in today's business environment. This module addresses problem-solving and decision-making. It looks at various models of decision-making, including a rational choice model that provides a structured approach to problem-solving.

### 61 Radio Communications: 1 hour

PRICE: \$49

The Radio Communications course focuses on developing effective communication skills for professionals in the aviation industry. Topics covered include radio procedures, phraseology, protocols, air traffic control



communications, non-towered airports, and flight service communications. By completing this course, participants will acquire the knowledge and skills necessary to communicate clearly and efficiently using radio systems in various aviation contexts. This training aims to enhance safety, coordination, and effective communication among aviation professionals, contributing to the overall efficiency of aviation operations.

### 62 Restricted Operator Certificate with Aeronautical Qualification (ROC-A) Study Guide: 3 hours

PRICE: \$99

This course is designed to provide study information in preparation for writing the ROC-A exam. Transport Canada requires an ROC-A for operators of radiotelephone equipment on board aircraft and at aeronautical land (fixed and mobile) radio stations using aeronautical mobile frequencies. The radio telephone equipment at such stations shall be of a type that requires only simple external switching and has a power output not exceeding 250 watts effective radiated power (e.r.p.) – equivalent to 400 watts peak envelope power (PEP) – and where all frequency-determining elements are within the transceiver. This course will not provide a TC exam but rather prepares the learner to write the exam.



### 63 Robotics and Advance Motion Systems: ½ hour

PRICE: \$49

The use of robots in manufacturing isn't a novel concept, but “cobots” represent a significant advancement in this field. This new category of robots is designed to work safely alongside humans, thereby broadening the applications of robotics in manufacturing. In this course, we will investigate the current landscape of robotics and other coordinated motions in manufacturing. This exploration will highlight the common characteristics of modern manufacturing facilities and examine how robotics will influence careers in manufacturing over the next decade.

### 64 Safe and Respectful Workplace: 1 hour

PRICE: \$49

This course focuses on the important and sensitive topic of workplace violence. The intention is to educate Canadian workers and employers on creating a safe and respectful workplace. This course applies to Canada Labour Code, Part II Workplace Violence and Harassment as well as Ontario Bill 132. On completion of the course, the learner will understand the requirements of new legislation governing workplace



violence and harassment, promote awareness of employer and employee responsibilities, recognize harmful effects of violence and harassment, understand bullying as a form of harassment, be able to outline the employer obligations regarding domestic violence, will comprehend the definition of violence and harassment, be aware of the right to refuse unsafe work, understand how to apply learning to actual cases arising at the workplace and be aware of what to do and how to get help.

### 65 Safe Lifting and Carrying: 2 hours

PRICE: \$49

In Canada, musculoskeletal disorders (MSDs) account for the most lost-time injuries, the highest lost-time claim costs, and the most lost-time workdays of any type of workplace injuries. This important look at how to be safe when lifting or carrying will help the learner define safe lifting and carrying as it relates to manual materials handling. In this course, the learner will examine the federal regulations that inform safe lifting and carrying in the aviation and aerospace industry. They will learn about the best equipment MMHs practices to support safe lifting and carrying/Manuals for Materials Handling (MMHs), explore risks associated with lifting and carrying/ MMHs, and identify types of injuries that may occur in manual materials handling and the actions needed to treat and report them.

### 66 Skilled Trades in Advanced Manufacturing – an exciting career choice: ½ hour

PRICE: \$49

This course explores how to start working in an innovative industry. Learn about interesting work that has a real impact on the world and how it is part of aviation and aerospace. The learning will review the opportunities to gain knowledge, grow, advance, and enjoy a stable, fulfilling long-term career. Enroll in this course to consider if you should begin a career in the skilled trades in advanced manufacturing.

### 67 Special Processes: 1.5 hours

PRICE: \$49

There are specialized processes that contribute support to the aviation and aerospace industry. We often think first of the mechanics and technicians that work on the aircraft or engines, but what about all the work that goes into preparing parts for serviceable condition? This course explores various processes used to ensure safe and airworthy aircraft. Learners will look at various forms of manufacturing, robotics, welding, heat treatment, balance, machining, plating/thermal spray, painting, waterjet, cleaning, non-destructive testing/inspection, and more! This course will give insight into the processes for those wanting to understand a little bit more or help those looking for inspiration for their career path.



### 68 Supply Chain in Aviation and Aerospace: 1 hour

PRICE: \$49

This course is to provide the participant with an overview of how supply chains work in general, as well as how it relates to the importance of smooth flow of products in the aviation and aerospace industry. On completion of the course, the participant will understand key terminology, be able to define traceability of materials, understand vendor selection, receipt and verification of inventory, inventory control, and be able to discuss shared challenges within the supply chain. This course is an overview of an extraordinarily complex process and is an introduction to various careers within the industry.



### 69 Theory of Flight: 20 hours

PRICE: \$379

The Theory of Flight course covers a wide range of topics related to aircraft performance. Participants will learn about the composition of the atmosphere, fixed-wing theory of flight, pressure gas laws, lift equation, aspect ratio calculation, aircraft controls, high-speed flight, aircraft design and structure, rotary-wing flight control, autorotation, and weight and balance considerations for both fixed-wing and rotary-wing aircraft. This course provides a crucial understanding of the principles and factors influencing flight, allowing participants to enhance their knowledge of aircraft operations, performance optimization, and safety.

### 70 Torque, Lockwire, and Locking Devices: 2 hours

PRICE: \$49

connection points necessitate the installation of hardware, each assigned a specific torque value. It is essential to determine the correct torque value beforehand to prevent complications arising from both over-torquing and under-torquing. Moreover, even after achieving the appropriate torque, utilizing locking devices to secure the hardware is crucial for ensuring that components remain securely in place. Upon completing this course, participants will be well-prepared to translate their theoretical knowledge into practical application.

### 71 Transportation of Dangerous Goods: 2 hours

PRICE: \$49



The Dangerous Goods Handling and Safety course focuses on training participants in the proper handling, storage, and transportation of hazardous materials in the aviation industry. Participants will learn about the classification and identification of dangerous goods, packaging requirements, documentation, labeling, and emergency response procedures. The course emphasizes compliance with regulations and best practices to ensure the safe handling of dangerous goods. By completing this course, participants will gain the knowledge and skills necessary for the handling of dangerous goods safely, mitigate risks, and ensure regulatory compliance.

### 72 Weight and Balance: 1 hour

PRICE: \$49

The Weight and Balance course focuses on ensuring proper reporting of weight distribution changes and proper balancing in the aircraft for stability and safety. Participants will learn about weight and balance terminology, load planning and distribution, documentation procedures, and safety considerations. The course also covers weight and balance amendments and addendums to industry regulations, ensuring compliance with the latest guidelines. By completing this course, technicians will acquire the skills needed to perform accurate weight and balance calculations and adhere to safety practices, contributing to the overall stability and safety of aircraft operations.



### 73 WHMIS 2015: 2 hours

PRICE: \$34.50

The Workplace Hazardous Materials Information System (WHMIS) 2015 course updates training to the revised standard for hazardous materials in Canada, designed to align with the GHS (Globally Harmonized System). This online course covers new WHMIS 2015 regulations. It consists of interactive training modules, including these key components: hazard identification, product classification, labeling, safety data sheets, and workplace education and training.

### 74 Winter Operations: 2 hours

PRICE: \$49

Canada and many other parts of the world experience freezing conditions, snow, and sleet for several months of the year. To ensure the equipment and aircraft are in good and safe working order, proper precautions must be taken. This course covers the operations of an airport, hanger, heliport, taxiways, runways, etc. during winter conditions. Learners will understand the hazards associated with ice, snow, and



frost on both the aircraft and the vehicles used to maintain the aircraft and the airport. On completion of this course, participants will be aware of the safety procedures required during winter operations.

### 75 Working Across Generations: 1 hour

PRICE: \$49

At no time in history have so many different generations with such different views, values, and approaches been asked to work together. This module explores generational characteristics, behaviours, and motivational differences, intending to discover the opportunities and address potential challenges in multi-generational workplace environments.

### 76 Working and Interacting with Different People: 1 hour

PRICE: \$49

Just as we each have our unique appearance, skills, and talents, we all have our unique ways of doing things and relating to others; we all have our patterns of behaviours. This module examines four different personality types and strategies for increasing your effectiveness and reducing your frustrations when working with others.

### 77 Working at Heights: 2 hours

PRICE: \$49

Safety is the key factor to consider despite the job. Often, employees work at heights; to do so safely, this course examines the federal regulations that inform safe lifting practices in the aviation and aerospace industry. At the end of the course, the participant will be able to describe the best equipment, and practices to work safely at heights, explore risks associated with working at heights, and identify some of the types of injuries that may be sustained when working at heights and the actions needed to treat and report them.

### 78 Workplace Fall Prevention 1 hour

PRICE: \$49

Every day in Canada, over 42,000 people are injured due to falls that happen at work, accounting for over 20% of allowed lost-time claims. When we hear about a severely injured individual or a death that occurred from falling, we often think of falling from the top of a building, a ladder, scaffold, or other above-ground-level structure. From a statistical perspective, injury or death is more common from a fall at ground level or less than 10 feet above ground. Preventing slips and falls is the responsibility of everyone in the workplace. Awareness is essential in accident prevention. By participating in this training, you will develop a greater understanding of the impact of slips, trips, and falls, the legislative requirements as they pertain to slips, trips, and falls, the different types of slips, trips, and falls, explanation of slips, trips, and falls, causes and contributing factors of slips, trips, and falls, and learn prevention strategies to avoid injuries from slips, trips, and falls from occurring.



For more information about the Foundational Training Program, courses, or other programs, be sure to visit our website: <https://avaerocouncil.ca>