

**NORTHERN LIGHTS COLLEGE
REGISTRAR'S OFFICE
PROGRAM INFORMATION AND COMPLETION GUIDE**

Program Name: Aircraft Maintenance Technician
Credential/Certification: Aircraft Maintenance Technician Diploma
Date Submitted: June 2020
Effective Date: **September 2020**

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Program Description:

“Aircraft Maintenance Technician” means a person who performs inspections and troubleshooting of an aircraft, including airframe structures, engines and aircraft systems, disassembles and removes defective parts, assembles and installs replacement parts, interprets technical manuals, drawings and blueprints, tests aircraft systems, records problems and actions taken to rectify them, and maintains an accurate statement of the maintenance history of the aircraft.

For detailed information on the scope of knowledge and skills taught and assessed in this program refer to the Program Outline, available on the ITA website.

Pathways to Certification

In BC, an individual can obtain a Certificate of Apprenticeship as an Aircraft Maintenance Technician by completing the required hours and recording a sponsor attestation. Apprenticeship programs are for individuals who have an employer to sponsor them.

There is no challenge pathway for this program.

Note: Licensing for Aircraft Maintenance Engineer (AME) “M” rating is separate from certification as an ITA Aircraft Maintenance Technician. AME licensing is issued by Transport Canada. There are no transferable credits between the two programs. Please visit www.tc.gc.ca for details. This program has Transport Canada accreditation for Basic M training.

Canadian Armed Forces Accreditation Certification Equivalency approved, Fast track your Career in the armed forces with this program.

Admission Requirements: Provide British Columbia secondary school transcripts or equivalent (Alberta/NWT equivalent course numbers in brackets) indicating successful completion of:

English 11 or equivalent (one of):

- BC Communications 11, English 11, Composition 11, Creative Writing 11, Literary Studies 11, New Media 11, or Spoken Languages 11 with a C or better;
- BC Communications 12, English 12 with a C or better;
- Alberta English Language Arts ELA 20-2, or ELA 20-1 with a C or better;
- Alberta English Language Arts ELA 30-2, or ELA 30-1 with a C or better;
- NLC ENGL-040 with a C (60%) or better
- NLC ENGL-050 with a C or better
- NLC EASL-050
- IELTS score of 6.0 overall with no band less than 5.5

Math 11 or equivalent (one of):

- BC Applications of Mathematics 11, Apprenticeship and Workplace Math 11, Workplace Mathematics 11, Foundations of Mathematics 11, Principles of Mathematics 11, or Pre-Calculus Mathematics 11 with a C or better;
- Alberta Applied Math 20, Math 20-3, Math 20-2, Pure Math 20, or Math 30-1 with a C or better;
- NLC MATH 040 with a C (60%) or better

OR

ESTR 047 (Advanced-Level Essential Skills for Trades) with 67% or higher

OR

Applicants may also complete the Canadian Adult Achievement Test (CAAT) to demonstrate program readiness. Minimum requirements are:

- Reading Comprehension: 12.0 grade equivalent or higher
- Number Operations: 11.0 grade equivalent or higher
- Problem Solving: 11.0 grade equivalent or higher
- Mechanical Reasoning: 51/70 (6th Stanine) or higher.

Dual Credit (BC's ACE IT program)

- Dual credit students must complete Grade 11 prior to the start of the program.

Completion includes Grade 11 English or Grade 11 Communications, Grade 11 Math, and a Grade 11 core science (preferably physics) equivalent, all with (C) or higher. One Grade 10 level shop class is also recommended.

• Applicants who have successfully completed the NLC Aircraft Mechanic Basics Certificate program may enter at Semester 3 and complete Semesters 3 and 4.

Okanagan College Transfer students:

Successful completion of equivalent coursework to Semesters 1, 2, and 3 at Okanagan College with attendance of 95% and higher or no more than 68.25 hours missed and a minimum of 70% in all courses.

Work experience and transcripts of grades from subjects other than those listed above will also be considered for admission support upon review and approval by the Associate Dean AMT.

For International Education Requirements (English as a Second Language) please contact the International Education Department at Northern Lights College (Inted@nlc.bc.ca) for details.

Length of Program: (weeks and total hours)
Approximately 76 weeks, 1820 hours; over 4 semesters

Program Intake: (start/finish dates)
Please refer to the Trades and Apprenticeship, Apprenticeship Intake Schedule on our website.

Available Seats: 16

Application Deadline: All completed applications must be received one month prior to start of the program. Completed applications received after this date will be reviewed based on seat availability.

Career Prospects: The industry and government demographic studies carried out have proven true, and Industry is experiencing a large short fall in Aircraft Maintenance Technician apprentices and engineers.

Affiliations/Partnerships:

In Partnership with Okanagan College Vernon Campus.
Northern Lights College Aircraft Maintenance Technician theory and practical curriculum is delivered under Transport Canada approval in Vernon, BC. by Northern Lights College instructional staff. Students accomplish 1.5 years of training at the Vernon Campus and the final semester of training at the Dawson Creek campus in the 24000 square foot hangar with 15 aircraft to work on sharing the extensive complement of aircraft available in the Dawson Creek Aerospace Centre at Northern Lights College.

Location: Northern Lights College Dawson Creek Campus and Okanagan College Vernon Campus

Additional Requirements/Supplies: (fees, supplies, materials)

Two pairs of full-sleeved coveralls, footwear having CSA safety-toe protection with soft soles for climbing on aircraft, and CSA approved safety glasses with clear lenses. Students are required to bring their own laptop capable of accessing the NLC wireless network.

Textbooks.

For Student Residence Fees on campus in Dawson Creek see website information at <https://www.nlc.bc.ca/Admissions/Student-Residences/Dawson-Creek-Campus>

Eligibility for Canada Student Loans: (Yes or No)

Yes

Required Minimum Grade: (overall and/or minimum within a course)

Student who achieve 70% minimum course grade in all courses and do not exceed 5% absenteeism 91 hours over the entire program, broken down per semester at 22.75 hours per semester will receive accreditation with Transport Canada (noted on transcript and diploma with a Transport Canada approval number). Student who achieves between 60% and 70% in all courses, or students who exceed 5% absenteeism over the entire program, will not receive accreditation with Transport Canada (noted on transcript and diploma as NON ACCREDITED).

Residency Requirement: (percentage of courses which must be taken at NLC)

100% at an approved Northern Lights College Training Facility:

- Dawson Creek, BC
- Okanagan College, Vernon BC: refer to affiliations/partnerships explanation

Required Courses: (list courses required to complete credential and total hours for each course)

Semester 1

- AMT101 General Introduction -10hrs
- AMT102 Aerodynamics Fixed Wing Aircraft -25hrs
- AMT103 Materials Aircraft Structures -40hrs
- AMT104 Aircraft Hardware Approved Parts -24hrs
- AMT105 Aircraft Hydraulic Pneumatic Systems -20hrs
- AMT106 Aircraft Equipment Introduction -8hrs
- AMT107 Basic Aircraft Electricity DC -30hrs
- AMT108 Blueprint Design -14hrs
- AMT109 Hand Tools -24hrs
- AMT110 Aviation Math -10hrs
- AMT111 Canadian Aviation Regulations 1 -24hrs
- AMT112 Flight Controls Fixed Wing and Rigging -8hrs
- AMT114 Practical Projects -218hrs

Semester 2

- AMT121 Canadian Aviation Regulations 2 -24hrs
- AMT122 Non Destructive Testing Corrosion -24hrs
- AMT123 Aircraft Aerodynamics Rotary -16hrs
- AMT124 Human Factors in Aviation -8hrs
- AMT125 Aircraft Maintenance Inspections -32hrs
- AMT126 Basic Electricity AC -16hrs

AMT127 Turbine Engine Theory -24hrs
AMT128 Piston Engines 1- 32hrs
AMT129 Reciprocating Components -54hrs
AMT130 Electrical Systems -37hrs
AMT132 Practical Projects 2 -188hrs

Semester 3

AMT210 Instrumentation and Avionics -40hrs
AMT211 Dynamic Systems -30hrs
AMT212 Aircraft Protection Systems -48hrs
AMT213 Weight and Balance -8hrs
AMT214 Piston Engines 2 -36hrs
AMT215 Propellers -24hrs
AMT216 Turbine Engine Systems -32hrs
AMT217 Landing Gear -24hrs
AMT218 Rotary Flight Controls and Rigging -16hrs
AMT219 Turbine Engine Systems -24hrs
AMT220 Practical Projects 3 -173hrs

Semester 4

AMT221 Canadian Aviation Regulations 3 -16hrs
AMT222 Practical Projects 4 -439hrs