



# North Central Institute is accredited, approved and/or licensed by the following:









Commission of the Council on Occupational Education 7840 Roswell Road, Building 300, Suite 325, Atlanta, GA 30350 Telephone: 770-396-3898/Fax: 770-396-3790

#### www.council.org

The Federal Aviation Administration under Part 147 of the Federal Aviation Regulations for Aviation Maintenance Technician School.

#### www.faa.gov

Approved for the training of Veterans utilizing their educational benefits.

#### www.va.gov

The Department of Education administering Title IV funding for students loans and grants.

#### www.ed.gov

Member of the Aviation Technical Education Council (ATEC)

#### www.atec-amt.org

Tennessee Higher Education Commission for the purpose of coordination and supporting the efforts of post-secondary institutions in the state of Tennessee.

#### www.tn.gov/thec

# **Aviation Maintenance Technician** (AMT 147) Program



The wing-span of the A380 is longer than the aircraft itself. Wing-span is 80m, the length is 72.7m. The world-wide 747 fleet has logged more than 78 billion kilometers, equivalent to 101,500 trips to the moon and back.









Aviation Maintenance Mechanics (including Airframe and Powerplant Technicians, Avionics Technicians and Instrument Repairman) have the important responsibility of keeping airplanes in a safe condition to fly. In this effort they service, repair, and overhaul various aircraft components and systems including airframes, engines, electrical and hydraulic systems, propellers, avionics equipment, and aircraft instruments.

The successful aircraft mechanic should have an above average mechanical ability and a desire to work with his hands. He or she should also have an interest in aviation, appreciation of the importance of doing a job carefully and thoroughly, and the desire to learn throughout a career.

Aircraft mechanics generally work 40 hours a week on a variety of shifts; overtime work is common.



**Program Objective:** The Aviation Maintenance Technician (AMT 147) Program imparts knowledge and skills to those striving to become aircraft technicians or for career enhancement in aviation and related industries



The program is comprised of approximately 40% lecture and 60% handson training for a total of 56 semester hours. Overall program length is 1960 contact hours.

#### Job Placement

NCI offers job placement assistance to all students at no cost. Although successful placement cannot be guaranteed, NCI's staff makes every effort to assist students in obtaining desirable employment.

#### Financial Aid

State and Federal Programs are available to help students finance their education. NCI participates in the Pell Grant, William D. Ford Federal Direct Loan Program, and Parent Plus Loan Program, along with Tennessee State Programs (TSAC). Those eligible may also use their Veterans Educational Benefits towards financing the program.

#### **Tuition Assistance (TA)**

If you are planning on using TA our Admissions Department can walk you through the process, prior to registering for the program.

#### **Associates Degree**

Take the next step and earn an Associate Degree. Upon receiving certification, students will need only three additional courses (9 semester hours); one English, one Business and one Humanities course to complete an Associate of Applied Science Degree (AASD).

#### **Program Requirements**

The Federal Aviation Administration (FAA) requires students that enroll in the Aviation Maintenance Technician (AMT)147 Program must be able to read, write, speak, and understand the English Language and be at least eighteen (18) years of age prior to testing for A&P certification.

#### **North Central Institute's Mission:**

To provide quality education and motivation to all students, encourage the development of technical skills, professional values and knowledge pertinent to their chosen career field.

#### **COST BREAKDOWN**

Prices below are effective May 01, 2024

Total Program Credit:	56 courses				
(in semester hours)	1 SH each: 56 SH				
NCI Application Fee:	\$ 75				
Tuition (per course):	\$ 301				
Technology/Lab Fee	\$ 1,700				
General, Airframe, & Powerplant Textbooks:	Up to \$ 675				
Tuition for All Courses: (excluding books, tools, NCI fees, cost of Written and Oral & Practical Exams)	\$16,856				
Processing Fee Per Electronic Transaction	\$5				
Additional Cost					
FAA Written Exams:	Up to \$ 200				
FAA Oral & Practical Exams (Paid directly to Designated Mechanic Examiner) Prices are subject to	Up to \$ 2,000 change without notice				

All fees must be paid in US currency
NCI accepts cash, money orders, Visa, & MasterCard
For more information about gainful employment go to: www.nci.edu/GE

# AVIATION MAINTENANCE TECHNICIAN PROGRAM INFORMATION

## **Required Materials:**

Textbooks, tools and supplies as listed in the NCI Catalog www.nci.edu/catalog

## **Program Duration:**

17 months Full-Time and 34 months Part-Time

Term Start Date	Term End Date	Registration Deadline/ Orientation date
April 16, 2025	July 24, 2025	April 02, 2025 / April 04, 2025
July 29, 2025	Nov 04, 2025	July 15, 2025 / July 18, 2025
Nov 07, 2025	Feb 27, 2026	Oct 22, 2025 / Oct 24, 2025
Mar 04, 2026	June 10, 2026	Feb 18, 2026 / Feb 20, 2026

Schedule subject to change without notice.

Class Schedule: Monday - Friday 7:30 - 3:00 p.m. DAYS

Monday - Friday 6:00 - 9:30 p.m. NIGHTS

\*Night classes—subject to availability

### Escrow Program for AMT 147 students still in high school

School students in grades 9-12 have the opportunity to pursue an FAA Airframe and Powerplant certification. Admission requirements for the Escrow Program are described in the NCI Catalog.

The focus of NCI's program is on theory, concepts, and hands on skills essential for maintenance requirements and keeping aircraft in an airworthy condition. An Aviation Maintenance Technician, often referred to as an A&P, is responsible for maintaining aircraft in accordance with the Federal Aviation Administration's (FAA) standards. Employment opportunities are plentiful and while most often in the Aviation Industry, A&P's are sought after in other industries for the skills they possess.

# **FAA AMT 147 Curriculum**

#### **General Curriculum:**

General is prerequisite to Airframe and/or Powerplant. General requires 420 contact hours. General courses are the basic systems and knowledge needed to understand the certification sought in Airframe and Powerplant sections.

**GN110** Basic Mathematics

**GN111** Physics

**GN112** Weight and Balance

**GN120A** Basic Electricity

**GN120B** Advance Electricity

**GN130** Materials and Processes

**GN131** Fluid Lines and Fittings,

Cleaning & Corrosion

**GN140** Aircraft Drawings

**GN150** Ground Operations & Servicing

GN160 Mechanic Privileges & Limits

**GN161** Maintenance Publications

**GN300** Application of General Subject

Principles



#### Airframe Curriculum:

Airframe requires 770 contact hours and deals with all parts of an aircraft that house the Powerplant along with the operations of the aircraft.

AF215	Aircraft Structures and Basic Aerodynamics		Hydraulic and Pneumatic Power Landing Gear
AF220A	Basic Sheet Metal		Cabin Atmosphere Control
AF220B	Advanced Sheet Metal		Systems
AF221	Assembly and Rigging Aircraft	AF254	Airframe Fuel Systems
AF225	Welding	AF255	Fire Protection, Ice and Rain
AF230	Composite Structure and Repair		Control
AF231	Aircraft Fabric	AF256	Position & Warning
AF232	Aircraft Finishes	AF260A	Airframe Inspection I
AF233	Aircraft Wood	AF260B	Airframe Inspection II
AF240	Aircraft Instruments	AF260C	Airframe Inspection III
AF241	Aircraft Avionics	AF300	Application of Airframe Subject
AF245	Aircraft Electrical Systems		Principles

# **Powerplant Curriculum:**

Cooling

Powerplant is the operating system that enables the aircraft to fly and requires 770 contact hours.

PP214	PP214	Reciprocating Engine Theory, Desing & Construction	PP223	Engine Fire Protection
			PP224	Engine Electrical Systems
	PP215	Reciprocating Engine Carburetor	PP225	Powerplant Ignition
		Systems	PP226	Powerplant Starting Systems
	PP216	Reciprocating Engine Fuel Injection System	PP227	Powerplant Inspection
	PP217A	Reciprocating Engine Mainte- nance/Overhaul I	PP230	Turbine Engine Development, and Theory, Design & Construction
	PP217B	Reciprocating Engine Mainte-	PP231	Turbine Fuel Metering System
nance/Overhaul II		PP232A	Turbine Engine Maintenance and	
PP217C Reciprocating Engine Mainte-			Overhaul I	
		nance/Overhaul III	PP232B	Turbine Engine Maintenance and
	PP217D Reciprocating Engine Mainte-			Overhaul II
		nance/Overhaul IV	PP240A	Propellers I
	PP220	Lubrication Systems	PP240B	Propellers II
	PP221	Induction and Exhaust	PP300	Application of Powerplant
	PP222	Powerplant Instruments and		Subject Principles