






North Central Institute is proud to be accredited,  
approved and/or licensed by the following:

	<p>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</p>
	<p>The Federal Aviation Administration under Part 147 of the Federal Aviation Regulations for Aviation Maintenance Technician School. <a href="http://www.faa.gov">www.faa.gov</a></p>
	<p>Approved for the training of Veterans utilizing their educational benefits. <a href="http://www.va.gov">www.va.gov</a></p>
	<p>The Department of Education administering Title IV funding for students loans and grants. <a href="http://www.ed.gov">www.ed.gov</a></p>
	<p>Member of the Aviation Technical Education Council (ATEC) <a href="http://www.atec-amt.org">www.atec-amt.org</a></p>
<p><a href="http://www.tn.gov/thec">www.tn.gov/thec</a></p>	<p>Tennessee Higher Education Commission for the purpose of coordination and supporting the efforts of post-secondary institutions in the state of Tennessee.</p>

# North Central Institute



168 Jack Miller Blvd.  
Clarksville, TN 37042  
Phone: (931) 431-9700  
Fax: (931) 431-9771  
[www.nci.edu](http://www.nci.edu)

## 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

A quick glance of our lab here at NCI. Come in for a Tour!




### According to Avjobs.com:


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 eight-hour shifts around the clock, and overtime work is common.

Avjobs 2016 supplied a link for an updated look at salaries in the aviation industry. You can view this link at [AviationSalary.com](http://AviationSalary.com). Once you have arrived on the site, you can click to view salary or hourly projected wages.

 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% hands-on 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.

### **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.

### **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).

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

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

## AVIATION MAINTENANCE TECHNICIAN PROGRAM INFORMATION

### COST BREAKDOWN

Prices below are effective May 2020

<b>Total Program Credit:</b> <i>(in semester hours)</i>	56 courses 1 SH each: 56 SH
<b>NCI Application Fee:</b>	\$ 50
<b>Tuition (per course):</b>	\$ 292
<b>Technology/Lab Fee</b>	\$ 1,450
<b>General, Airframe, &amp; Powerplant Textbooks:</b>	\$ 524
<b>Tuition for All Courses:</b> <i>(excluding books, tools, NCI fees, cost of Written and Oral &amp; Practical Exams)</i>	\$16,352
<b>Additional Cost</b>	
<b>FAA Written Exams:</b>	\$ 480
<b>FAA Oral &amp; Practical Exams</b> <i>(paid directly to Designated Mechanic Examiner)</i>	\$ 800

Prices are subject to 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](http://www.nci.edu/GE)

### Required Materials:

Textbooks, tools and supplies as listed in the NCI Catalog

[www.nci.edu/catalog](http://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
30 Nov 20	17 Mar 21	12 Nov 20 / 13 Nov 20
22 Mar 21	28 Jun 21	11 Mar 21 / 12 Mar 21
01 Jul 21	07 Oct 21	17 Jun 21 / 18 Jun 21
13 Oct 21	28 Jan 22	30 Sep 21 / 01 Oct 21

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

### 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.

## Powerplant Curriculum:

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

- [PP214](#) Reciprocating Engine Theory, Design & Construction
- [PP215](#) Reciprocating Engine Carburetor Systems
- [PP216](#) Reciprocating Engine Fuel Injection Systems
- [PP217A](#) Reciprocating Engine Maintenance and Overhaul I
- [PP217B](#) Reciprocating Engine Maintenance and Overhaul II
- [PP217C](#) Reciprocating Engine Maintenance and Overhaul III
- [PP217D](#) Reciprocating Engine Maintenance and Overhaul IV
- [PP220](#) Lubrication Systems
- [PP221](#) Induction and Exhaust
- [PP222](#) Powerplant Instruments and Cooling
- [PP223](#) Engine Fire Protection

- [PP224](#) Engine Electrical Systems
- [PP225](#) Powerplant Ignition
- [PP226](#) Powerplant Starting Systems
- [PP227](#) Powerplant Inspection
- [PP230](#) Turbine Engine Development Theory, Design & Construction
- [PP231](#) Turbine Fuel Metering System
- [PP232A](#) Turbine Engine Maintenance and Overhaul I
- [PP232B](#) Turbine Engine Maintenance and Overhaul II
- [PP240A](#) Propellers I
- [PP240B](#) Propellers II
- [PP300](#) Application of Powerplant Subject Principles



Prepping



Working with Nickel-cadmium batteries, also known as NiCad.



The focus of NCI's program is on theory, concepts, and hands on skills essential for maintenance requirements and in 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
- [AF220A](#) Basic Sheet Metal
- [AF220B](#) Advanced Sheet Metal
- [AF221](#) Assembly & Rigging Aircraft
- [AF225](#) Welding
- [AF230](#) Composite Structure and Repair
- [AF231](#) Aircraft Fabric
- [AF232](#) Aircraft Finishes
- [AF233](#) Aircraft Wood
- [AF240](#) Aircraft Instruments
- [AF241](#) Aircraft Avionics
- [AF245](#) Aircraft Electrical Systems
- [AF250](#) Hydraulic and Pneumatic Power Systems
- [AF251](#) Landing Gear
- [AF253](#) Cabin Atmosphere Control Systems
- [AF254](#) Airframe Fuel Systems
- [AF255](#) Fire Protection, Ice and Rain Control
- [AF256](#) Position & Warning
- [AF260A](#) Airframe Inspection I
- [AF260B](#) Airframe Inspection II
- [AF260C](#) Airframe Inspection III
- [AF300](#) Application of Airframe Subject Principles