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

| COREDITIED COREDITIED COREDITIED COREDITIED | 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 |
|--|---|
| AV270 | 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 |
| JAN ()E | Member of the Aviation Technical Education Council (ATEC) www.atec-amt.org |
| www.tn.gov/thec | Tennessee Higher Education Commission for the purpose of coordination and support- ing the efforts of post-secondary institutions in the state of Tennessee. |

North Central Institute



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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. 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

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 | Term End | Registration Deadline/ |
|------------|-----------|------------------------|
| Date | Date | Orientation date |
| | | |
| 13 Oct 21 | 28 Jan 22 | 30 Sep 21 / 01 Oct 21 |
| 02 Feb 22 | 11 May 22 | 20 Jan 22 / 21 Jan 22 |
| 16 May 22 | 23 Aug 22 | 28 Apr 22 / 29 Apr 22 |
| 26 Aug 22 | 07 Dec 22 | 11 Aug 22 / 12 Aug 22 |

Schedule subject to change without notice.

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

COST BREAKDOWN

Prices below are effective Sept 2021

| Total Program Credit: (in semester hours) | 56 courses 1 SH each: 56 SH | |
|---|--------------------------------|--|
| NCI Application Fee: | \$ 50 | |
| Tuition (per course): | \$ 292 | |
| Technology/Lab Fee | \$ 1,450 | |
| General, Airframe, & Powerplant Textbooks: | \$ 524 | |
| Tuition for All Courses: (excluding books, tools, NCI fees, cost of Written and Oral & Practical Exams) | \$16,352 | |
| Additional Cost | | |
| FAA Written Exams: | \$ 175 each | |
| FAA Oral & Practical Exams (paid directly to Designated Mechanic Examiner) | \$ 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

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 System 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

<u>PP224</u> Engine Electrical Systems
<u>PP225</u> Powerplant Ignition
<u>PP226</u> Powerplant Starting Systems
<u>PP227</u> Powerplant Inspection
<u>PP230</u> Turbine Engine Development, Theory, Design & Construction
<u>PP231</u> Turbine Fuel Metering System
<u>PP232A</u> Turbine Engine Maintenance and Overhaul I
<u>PP232B</u> Turbine Engine Maintenance and Overhaul II
<u>PP240A</u> Propellers I
<u>PP240B</u> Propellers II
<u>PP300</u> Application of Powerplant Subject Principles 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 | GN131 Fluid Lines and Fittings, Cleaning & Corrosion |
|------------------------------|--|
| GN111 Physics | <u>GN140</u> Aircraft Drawings |
| GN112 Weight and Balance | GN150 Ground Operations & Servicing |
| GN120A Basic Electricity | GN160 Mechanic Privileges & Limits |
| GN120B Advance Electricity | GN161 Maintenance Publications |
| GN130 Material and Processes | 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 AF245 Aircraft Electrical Systems Aerodynamics AF250 Hydraulic and Pneumatic Power AF220A Basic Sheet Metal System AF220B Advanced Sheet Metal AF251 Landing Gear AF221 Assembly & Rigging Aircraft AF253 Cabin Atmosphere Control Systems AF254 Airframe Fuel Systems AF225 Welding AF230 Composite Structure and Repair AF255 Fire Protection, Ice and Rain 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 Principles



Prepping



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

