

# Aviation Maintenance Technology

Aircraft and avionics equipment mechanics and service technicians keep aircraft in peak operating condition, perform scheduled maintenance, make repairs, and complete inspections required by the Federal Aviation Administration (FAA). They inspect engines, landing gear, instruments, pressurized cabins, and accessories such as: brakes, valves, pumps, and air-conditioning systems. Inspections take place following a schedule based on the number of hours the aircraft has flown, calendar days since the last inspection, cycles of operation, or a combination of these factors. Mechanics specializing in repair work rely on pilots' descriptions of problems to find and fix faulty equipment. Some mechanics work on many different types of aircraft including jets, propeller-driven airplanes, and helicopters. Others specialize in one section of a particular type of aircraft, such as the engine, hydraulics, or electrical system.

## Skills and Competencies

Students considering a career in Aviation Maintenance Technology have many things to consider about the profession. Workers have great responsibility to maintain safety standards. A strong background in electronics is helpful as well as mechanical aptitude. Employers like to hire self-motivated, hard-working, enthusiastic people that are able to diagnose and solve complex mechanical problems. Mechanics have to work under time pressure. Work can be very stressful. Ear protection is necessary to protect hearing from the noise and vibration of aircraft engines. Knowledge about new as well as old aircraft technology is preferred. Ongoing training to update skills is required. Agility is important for the reaching and climbing necessary to do the job. A&P mechanics must be willing to work at heights exceeding 50 feet. Aviation Technology graduates have a 95% placement in the aviation industry.

## Course Work

This degree includes the following courses as part of the program requirements, and specific major requirements along with general education courses and graduation requirements.

### General Education Courses

Effective Communication (4 cr.)

Choose 11 credits; see Bulletin for details.

### Concentration

AMT101 Introduction to Aviation  
Maintenance (6 cr.)

AMT102 Aircraft Basic Science (6 cr.)

AMT103 Aviation Shop Practices (6 cr.)

AMT104 Aircraft Electrical Systems (6 cr.)

AMT200 Aircraft Sheet Metal/Non-Metallic  
Structures (6 cr.)

AMT201 Reciprocating Engines and  
Propellers (6 cr.)

AMT202 Aircraft Flight Control Systems (6 cr.)

AMT203 Reciprocating Engine Overhaul (6 cr.)

AMT204 Turbine Engines and Systems (6 cr.)

AMT205 Aircraft Fluid Power and Landing  
Gear (6 cr.)

AMT206 Cabin Atmosphere and Info Systems (6 cr.)

AMT207 Turbine Engine Maintenance and  
Inspection (6 cr.)

## Career Development

You should begin the resume-building process as soon as you can. The Academic and Career Advise-ment Center can assist you with career planning, while Career Services will help you fine tune your resume and look for jobs related to your field. In the meantime, the more hands-on experience you have, the better the chances are that you will find a job. Be-coming involved in a field-related internship is a way to develop your professional network, enhance your skills and proficiencies, and gain experience. Your academic course work is important as well, so be sure to maintain a high grade point average.

## Additional Considerations

Aviation Technology is an Associate of Applied Sci-ences degree that requires 89 credits, taking two and a half to three years to finish.

Technicians certified by the Federal Aviation Admin-istration (FAA) work as "airframe technicians," focusing on the structural part of a plane or as "power plant technicians," who are qualified to work on the engine. The training offered at NMU prepares the student to become a federally licensed Airframe and Powerplant (A&P) technician. The majority of mechanics working on civilian aircraft today are A&P mechanics. An A&P license is also a great practical preparation for an engineering career.

## Job Outlook

Industry wide, Aviation Technology careers are ex-pected to grow at an average rate of 6% in the next decade. Median earnings from those in the industry topped \$25 an hour, while those in elite jobs with additional training and experience have earned more than \$35 an hour.

# Potential Careers

NMU's Aviation Maintenance Technology Program prepares students for employment in the following careers:

Aircraft Assembly

Aircraft Maintenance Technician

Aircraft Mechanic

Armed Forces Mechanic

Aviation Maintenance Technician

Crew Chief

Field Inspector for the FAA

Shop Supervisor

# Additional Resources and Information

For Career Planning and Opportunities:  
Academic & Career Advisement Center  
3302.1 C.B. Hedgcock  
906-227-2971  
103 Jacobetti Complex  
906-227-2283  
[www.nmu.edu/acac](http://www.nmu.edu/acac)

Technology and Occupational Sciences  
101 Jacobetti Complex  
906-227-2190  
[www.nmu.edu/tos](http://www.nmu.edu/tos)

For Job Search, Resume and Career Information:  
Career Services  
3302.3 C.B. Hedgcock  
906-227-2800  
[www.nmu.edu/careers](http://www.nmu.edu/careers)

For Information about NMU Student Organizations Associated with this Major Contact:  
Center for Student Enrichment  
1206 University Center  
906-227-2439  
[www.nmu.edu/cse](http://www.nmu.edu/cse)

Aviation Maintenance Club

Internet Resource Links:  
[www.careers.org](http://www.careers.org)  
[www.bls.gov](http://www.bls.gov)

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit:  
<http://www.nmu.edu/institutionalresearch/disclosure>

For Career Information with National Organizations:  
[www.pama.org](http://www.pama.org) -Prof Aviation Maintenance Assoc.  
[www.awam.org](http://www.awam.org) -Association for Women in Aviation Maintenance



**NORTHERN MICHIGAN  
UNIVERSITY**

The Academic & Career Advisement Center  
2018



What to do with  
a major in...

Aviation Maintenance  
Technology

Associate's Degree

