



**Aviation Maintenance  
Training School**

**www.amtschool.com**

**A&P Written, Oral and Practical  
Exam Guaranteed Preparation Course**

(Revised with 10-01-2015 FAA Exam Changes)

**1-Week (7 Days)**

**Written, Oral and Practical Exam Preparation**

**One Price with No Hidden Fees**

(see web site for pricing)

**(Includes a Set of 3 ASA Q&A Books and AMT Study Material)**

**Guarantee: AMT Students registered for the 1-Week Oral & Practical A&P Exam Preparation Course will receive training for two (2) years upon failing any FAA Oral & Practical A&P Exam until they successfully pass the FAA Oral & Practical A&P Exam.**

**Course Schedule 1 Week**

**PLUS On-Line Written Exam Preparation**

(Course begins on the first Monday of every month)

- Monday through Friday 5:00 P.M. until 10:00 P.M.
- Saturday 9:00 A.M. until 6:00 P.M.
- Sunday 9:00 A.M. until 6:00 P.M.

**EDUCATION IS THE KEY TO SUCCESS**

Aviation Maintenance Training School (AMT School)

**www.amtmiami.com**

**www.amtschool.com**

Miami International Airport and Kendall Tamiami Airport

Robert E. Morales, School Director

Telephone: (305) 871-1233 & 439-4666 FAX: (305) 871-1232

**information@amtmiami.com**

**information@amtschool.com**



**A&P Written, Oral and Practical Exam Guaranteed Preparation Course**  
(Revised with 10-01-2015 FAA Exam Changes)

**Course Agenda**  
**General / Section I - AMG**

<b>Welcome, Introduction and Overview</b>	<b>Monday</b>
<b>A. Basic Electricity</b> DC & AC circuits. OHM's law. ID symbols. Measure voltage, current, resistance and continuity in a circuit. Multimeter use. Troubleshooting, opens and shorts circuits. Batteries lead acid & nicked. Resistors.	<b>Monday</b>
<b>B. Drawing</b> Symbols, sketches, schematics blueprints, graphs and charts.	<b>Monday</b>
<b>C. Weight &amp; Balance</b> Weight & balance problems, ballast, tare, datum, center of gravity. Weigh an aircraft.	<b>Monday</b>
<b>D. Fluid Lines &amp; Fittings</b> Construct a rigid line, and a flexible line. Identify fittings. ID defects In lines. Determine routing. ID fittings.	<b>Monday</b>
<b>E. Materials &amp; Processes</b> Inspect welds, torque, safety wire, DNT, ID hardware, heat treatments, precision measurements, micrometers and calipers, dye penetrant inspection, turnbuckle safety wire, heat treatment.	<b>Tuesday</b>
<b>F. Ground Operations</b> Start up procedures both recip and turbine, identify fuel select fuels, markings, hand signals, liquid lock clearing, fuel/water contamination.	<b>Tuesday</b>
<b>G. Cleaning &amp; Corrosion</b> Identify & remove corrosion, cleaning materials, plastic protection.	<b>Tuesday</b>
<b>H. Mathematics</b> Review of various mathematics problems decimals, percentages, volume, square root, area, volume, convert fraction to decimals, ratios.	<b>Tuesday</b>



**A&P Written, Oral and Practical Exam Guaranteed Preparation Course**  
(Revised with 10-01-2015 FAA Changes)

**Course Agenda**  
**General / Section I**

- |   |                |
|---|----------------|
| <b>I. Maintenance Forms &amp; Records</b>   | <b>Tuesday</b> |
| Complete aircraft records, logbooks, Form 337, inspection reports, 100 hour & annual inspection entry, AD's, MEL, IPC, discrepancy list following a 100 hour inspection.  |                |
| <b>J. Basic Physics</b>   | <b>Tuesday</b> |
| Simple machines, aerodynamics, flight theory, temperature conversion, force, area, pressure, lever advantages, incline planes, venturi pressure and velocity.   |                |
| <b>K. Maintenance Publications</b>  | <b>Tuesday</b> |
| Maintenance Manual, IPC, AD's, FAR's TCDS, AC, locate CG range, ATA codes for an item, aircraft gross weight and empty weight.  |                |
| <b>L. Aviation Mechanic's</b>   | <b>Tuesday</b> |
| Privileges and Limitations understanding of mechanic privileges and limitations per the FAA, FAR's, major repairs/alterations and minor repairs/alterations, address change, preventive maintenance, maintenance unction limits of an A&P mechanic. |                |



**A&P Written, Oral and Practical Exam Guaranteed Preparation Course**  
(Revised with 10-01-2015 FAA Exam Changes)

**Course Agenda**  
**Airframe Section II – Airframe Structures**

- |  |                                   |
|--|-----------------------------------|
| <b>A. Wood Structures</b><br>Knowledge of types and inspection of wood structures, glue selection<br>enlarged hole repairs, wood defects.  | <b>Wednesday</b>                  |
| <b>B. Aircraft Covering</b><br>Locate instructions for the inspection, testing and repair of coverings,<br>doped and lapped seams.   | <b>Wednesday</b>                  |
| <b>C. Aircraft Finishes</b><br>Knowledge of finishes, identification, finishing materials, “N” number<br>Requirements, ID paint, paint defect identification.  | <b>Wednesday</b>                  |
| <b>D. Sheetmetal</b><br>Fasteners, layout, composites, acrylic windows. Sheetmetal patch<br>layout, installation and removal. Rivet patterns given pitch, gauge<br>and edge distance. Metallic ring test on a bonded structure.<br>Inspect windshield. | <b>Wednesday</b>                  |
| <b>E. Welding</b><br>Soldering, welding methods and steps to include oxy-acetylene weld.<br>Welding repair procedure for tubular structure.  | <b>Wednesday</b><br><b>Sunday</b> |
| <b>F. Assembly &amp; Rigging</b><br>Balancing, rigging, cable tension rigging tools. Leveling methods,<br>Inspection of flight controls and swaged cables. Locate jacking<br>procedures and jacking points.  | <b>Wednesday</b><br><b>Sunday</b> |
| <b>G. Airframe Inspection</b><br>Inspect aircraft and make thorough and correct logbook entries.<br>Applicability of an AD, 100 hour entries, conformity checks,<br>100 checklist construction.  | <b>Wednesday</b><br><b>Sunday</b> |



**A&P Written, Oral and Practical Exam Guaranteed Preparation Course  
(Revised with 10-01-2015 FAA Changes)**

**Course Agenda**

**Airframe Section III / Airframe Systems**

- |  |                            |
|--|----------------------------|
| <b>K. Aircraft Landing Gear Systems</b><br>Landing gears, wheel and brake assemblies, tire inspection, brake lining and brake disk inspection, oleo struts, shimmy damper.   | <b>Thursday</b>            |
| <b>L. Hydraulic &amp; Pneumatic Systems</b><br>Fluids, hydraulic seals, compatibility of fluids and seals, reservoirs, selector valves, pressure regulators, filters, accumulators, pumps, pressure relief valves, pneumatic brakes. | <b>Thursday</b>            |
| <b>M. Cabin Atmosphere</b><br>Air conditioning both vapor cycle and air cycle, heaters, oxygen, pressurization systems, oxygen systems.  | <b>Thursday</b>            |
| <b>N. Aircraft Instruments</b><br>Vacuum systems and gyro systems, pitot static, compass, Instrument markings, fuel instruments, pitot static heat, manifold pressure, magnetic compass, turn & back indicator vacuum pumps.         | <b>Thursday</b>            |
| <b>O. Communication and Navigation</b><br>Transponders, ELTs, autopilot system, VHF, VOR, ILS, DME, Antennas, coaxial cables, static discharge wicks, transponders.  | <b>Thursday</b>            |
| <b>P. Aircraft Fuel Systems</b><br>Fuel system types, metal and bladder fuel tanks, fuel valves, strainers, fuel pressure warning systems, fuel selector & valves, quantity indicators.  | <b>Thursday</b>            |
| <b>Q. Electrical Systems</b><br>Troubleshooting, connectors, switches, circuit breakers, AC, DC Components generators, CSD's, IDG' aircraft lighting.  | <b>Thursday<br/>Sunday</b> |
| <b>R. Position and Warning</b><br>Configuration warning systems, antiskid, components, landing gear & flap position, brake control inspection and locations  | <b>Friday<br/>Sunday</b>   |
| <b>S. Ice and Rain Protection</b><br>Anti-ice and de-ice, inspection rubber boots, Pitot tube heat electrically operated windshield, pneumatic rain removal & repellent.   | <b>Friday<br/>Sunday</b>   |
| <b>T. Fire Protection</b><br>Smoke and carbon monoxide, fire detection, fire extinguishing.  | <b>Friday<br/>Sunday</b>   |



**A&P Written, Oral and Practical Exam Guaranteed Preparation Course**  
(Revised with 10-01-2015 FAA Exam Changes)

**Course Agenda**  
**Powerplant Section IV / Powerplant Theory**

- |  |                          |
|--|--------------------------|
| <b>A. Reciprocating Engines</b><br>Recip theory, operation, components, materials, inspection,<br>Cylinders, crankshafts, pins, rings. ID parts. Seals. Valve clearance,<br>Inspect engine mounts. Demonstrate engine starting procedures.<br>Locate top dead center. Compression check. | <b>Friday<br/>Sunday</b> |
| <b>B. Turbine Engines</b><br>Turbine theory, operation, components, materials, types.<br>ID airflow. Combustion liners. Rotor blades. Inle guide vanes and<br>Compressor vane inspection. Trimming procedures.   | <b>Friday</b>            |
| <b>C. Engine Inspection</b><br>Inspection of recip and turbine engines, 100 Hr, Annuals,<br>Phaze checks, FAR's and AD's. Over temperature inspections.  | <b>Friday<br/>Sunday</b> |



**A&P Written, Oral and Practical Exam Guaranteed Preparation Course**  
**(Revised with 10-01-2015 FAA Exam Changes)**

**Course Agenda**  
**Powerplant Section V / Powerplant Systems**

- |   |                            |
|---|----------------------------|
| <b>H. Engine Instrument Systems</b><br>Engine temperature, pressure, RPM, rate of flow instruments, tachometers, thermocouples, EGT, EPR, CHT, manifold pressure gages.   | <b>Saturday</b>            |
| <b>I. Engine Fire Protection</b><br>Types of fire protection and extinguishing systems, operation, insp. Carbon dioxide systems. Extinguishing blow out plugs, container pressures. Identify components in the systems. | <b>Saturday</b>            |
| <b>J. Engine Electrical</b><br>Engine electrical wiring, controls, switches, and protective devices. wire bundles. bonding jumpers, generators, CSD's and IDG's.  | <b>Saturday<br/>Sunday</b> |
| <b>K. Lubrication Systems</b><br>Identify lubricants and systems, inspect, check and service systems.   | <b>Saturday</b>            |
| <b>L. Ignition and Starting Systems</b><br>Magnetos, check engine timing, magneto switch, magneto points spark plugs, inspect a turbine engine system, starter generator.   | <b>Saturday<br/>Sunday</b> |
| <b>M. Engine Fuel Metering Systems</b><br>Identify and inspect metering systems, carburetors, injection systems, fuel controls. ID float carburetor parts.  | <b>Saturday<br/>Sunday</b> |
| <b>N. Engine Fuel System</b><br>Inspect a fuel selector valve, fuel filter, fuel valves, boost pumps.   | <b>Saturday</b>            |
| <b>O. Induction Systems</b><br>Inspect and identify engine ice control system and induction manifold systems, preheat systems, turbochargers.   | <b>Saturday</b>            |
| <b>P. Engine Cooling Systems</b><br>Inspect and identify cooling system components, cylinder head Baffles, cowl flaps, cooling fins, augmentor.   | <b>Saturday</b>            |
| <b>Q. Exhaust Systems</b><br>Inspect and identify an exhaust system, baffles and diffusers, heat exchangers, exhaust system leak checks.  | <b>Saturday</b>            |



**A&P Written, Oral and Practical Exam Guaranteed Preparation Course**  
(Revised with 10-01-2015 FAA Exam Changes)

**Course Agenda**  
**Powerplant Section V / Powerplant Systems**

**R. Propellers**

Propeller operation. Types of propellers. Inspect a propeller and propeller governor. Perform a minor repair and on a propeller. Use TCDS & determine minor propeller alterations that are acceptable. Propeller tracking. Pitch angle. Synchronization and ice control.

**Saturday**  
**Sunday**

**S. Turbine Powered APU**

Identify and understand an APU.

**Saturday**





## **A&P Written, Oral and Practical Exam Guaranteed Preparation Course (Revised with 10-01-2015 FAA Exam Changes)**

### **Course Agenda** **Sunday Hangar Projects**

**Sunday / Aircraft and Hangar projects @ Kendall Tamiami Airport**

**Sunday**

**Examples:**

- Piston engines, Magnetos timing / internal and engine timing, Propellers, Governors, Carburetor, Sheetmetal, Electrical troubleshooting, Aircraft inspection, Aircraft component identification, Engine component identification,

Students spend approximately 65% of the time participating in classroom / CBT activities and 35% in lab/shop activities. Students are issued a certificate upon successful completion of the course.

### **On-Line Written Exam Preparation**

The On-Line Written Exam Preparation Course allows the student the ability to prepare from any computer, smartphone or tablet worldwide with just an internet connection. No programs to install. This On-Line preparation saves the student time and money in hotel, food etc. less time away from family and work.



**A&P Written Oral and Practical Exam Guaranteed Preparation Course**  
(Revised with 10-01-2015 FAA Exam Changes)

**Course Agenda**  
**Powerplant Section V / Powerplant Systems**

**A&P EXAM GUARANTEED PREPARATION COURSE / 1 WEEK**

The FAA requires that all practical tests be conducted in accordance with the appropriate Aviation Mechanic Practical Test Standards and the policies and procedures set forth in the current FAA Order.

**Proficiency levels are defined as:**

**Level I**

Knowledge of general principles, but no practical application. No development of manipulative skills. Instruction by lecture, demonstration, and discussion.

**Level II**

Knowledge of general principles and limited practical application. Development of sufficient manipulative skills to perform basic operations. Instruction by lecture, demonstration, discussion, and limited practical application.

**Level III**

Knowledge of general principles and performance to a high degree of practical application. Development of sufficient manipulative skills to accomplish simulated return to service. Instruction by lecture, demonstration, discussion, and a high degree of practical application.

**The following terms are used in the objectives and defined as:**

<b>"Inspect"</b>	Means to examine by sight and touch.
<b>"Check"</b>	Means to verify proper operation.
<b>"Troubleshoot"</b>	Means to analyze and identify malfunctions.
<b>"Service"</b>	Means to perform functions that assure continued operation.
<b>"Repair"</b>	Means to correct a defective condition or repair of an airframe and/or powerplant system, including component replacement and adjustment, but not component repair.
<b>"Overhaul"</b>	Means to disassemble, inspect, repair as necessary, and check.