

Aviation Maintenance (AMNT)

AMNT 240 General Aeronautics and Applications 3 Credits (3,0)

General aeronautics; physical mathematics; weight and balance; government regulations on aircraft maintenance; tools, measuring devices, fluid lines, hardware; aircraft servicing; documentation.

Course Offered at: Worldwide

AMNT 260 Aircraft Electrical Systems Theory 3 Credits (3,0)

Aircraft electrical systems; principles of DC and AC electrical theory; magnetism; batteries; generators; motors; voltage regulators; circuit protection; electrical component installations.

Course Offered at: Worldwide

AMNT 265 Aeronautical Electronics for Aviation Maintenance Technicians 3 Credits (3,0)

Radio communication, radar systems, radio wave propagation, electronic principles; circuit components, signal emissions, radar systems, antennas; troubleshooting procedures.

Course Offered at: Worldwide

AMNT 270 Airframe Structures and Applications 3 Credits (3,0)

Airframe structures; applications and repairs; wood, dope, fabric, sheet metal, welding theory, fabrication methods.

Course Offered at: Worldwide

AMNT 271 Airframe Systems and Applications 3 Credits (3,0)

Airframe systems and applications; electrical, fuel, cabin atmosphere control, instrument, communication, navigation, ice/rain control, fire protection systems; aircraft inspection.

Course Offered at: Worldwide

AMNT 272 Fundamentals of Aircraft Avionics 3 Credits (3,0)

Aircraft avionics systems; solid-state devices, electronic bridges, synchros, servos, gyros, compass systems, navigation systems, instrument landing systems, autopilot controls, flight management computers, weather/airborne radar, communications systems.

Course Offered at: Worldwide

AMNT 280 Reciprocating Engine Theory and Applications 3 Credits (3,0)

Characteristics of reciprocating engines; theory of operation; construction; propeller systems; fuel metering; lubrication; exhaust; engine installation, overhaul, maintenance.

Course Offered at: Worldwide

AMNT 281 Turbine Engine Theory and Applications 3 Credits (3,0)

Jet propulsion systems and applications; theory, principles of operation, controls, and systems for propellers and turbine engines.

Course Offered at: Worldwide

AMNT 290 Introduction to Aerospace Composites 3 Credits (3,0)

Basic concepts of composite materials in aerospace; properties, advantages, disadvantages of composite systems; manufacturing, inspection, repair of composite structures; health and safety issues related to composites.

Course Offered at: Worldwide

AMNT 299 Special Topics in Aviation Maintenance 1-6 Credit (1-6,0)

Individual, independent, or directed studies of selected topics in aviation maintenance.

Course Offered at: Daytona Beach, Prescott, Worldwide

AMNT 322 Aircraft Inspection and Scheduled Maintenance Programs 3 Credits (3,0)

Aircraft inspection programs and scheduled maintenance processes; regulations governing aircraft inspection and maintenance; preflight, post-flight, hourly, calendar, cycles, annual, progressive, phase inspection programs; nondestructive inspection techniques; maintenance management, aircraft reliability, life cycle management, trend analysis.

Course Offered at: Worldwide, Asia

AMNT 399 Special Topics in Aviation Maintenance 1-6 Credit (1-6,0)

Individual, independent, or directed studies of selected topics in aviation maintenance.

Course Offered at: Daytona Beach, Prescott, Worldwide

AMNT 416 Aviation Maintenance Management: A Global Perspective 3 Credits (3,0)

Maintenance policies, procedures, practices in global aviation maintenance; management, planning, forecasting, cost control, reliability, flight scheduling, safety.

Course Offered at: Worldwide, Asia

AMNT 424 Maintenance Repair and Overhaul in Aviation 3 Credits (3,0)

Requirements, policies, procedures for operating Maintenance Repair and Overhaul (MRO) organizations; airline maintenance operations; MRO financing; regulatory requirements; logistics; supply chain support.

Course Offered at: Worldwide, Asia

AMNT 429 Advanced Technologies in Design and Production of Aircraft Structures and Systems 3 Credits (3,0)

Technologies in design, production, certification of aircraft structures and systems; structural materials, advanced composites, alloys; automated systems; national and international aviation regulations, airworthiness standards.

Course Offered at: Worldwide, Asia

AMNT 491 Operational Applications in Aviation Maintenance 3 Credits (3,0)

Culminating experience for Aviation Maintenance students; comprehensive examination of maintenance policies, programs, procedures; airworthiness, planning, reliability, safety, OpSpecs; proficiency in aviation maintenance operations; incorporates Flight Operations, Safety Science, Maintenance Management disciplines.

Course Offered at: Worldwide

**AMNT 499 Special Topics in Aviation
Maintenance 1-6 Credit (1-6,0)**

Individual, independent, or directed studies of selected topics in aviation maintenance.

Course Offered at: Daytona Beach, Prescott, Worldwide