

# AMNT271e Airframe Systems and Applications

**Level:** 2

**Credit Units:** 5 Credit Units

**Language:** ENGLISH

**Presentation Pattern:** EVERY JAN

**E-Learning:** BLENDED - Learning is done MAINLY online using interactive study materials in Canvas. Students receive guidance and support from online instructors via discussion forums and emails. This is supplemented with SOME face-to-face sessions. If the course has an exam component, this will be administered on-campus.

## Synopsis:

A study of airframe systems such as aircraft electrical system, fuel systems, cabin atmosphere control systems, instrument systems, communication and navigation systems, ice and rain control systems, fire protection systems, and aircraft inspection. (FAR Part 65.)

## Topics:

- Aircraft Electrical Systems
- Aircraft Fuel Systems
- Cabin Atmosphere Control Systems
- Aircraft Instrument Systems
- Communication and Navigation Systems
- Ice and Rain Control
- Fire Protection Systems
- Aircraft Inspections

## Learning Outcome:

- Understand and apply aircraft electrical system components and application requirements.
- Understand and describe reciprocating and turbine engine airplane's fuel components and systems requirement.
- Relate the laws of flight physiology involved in various aircraft systems.
- Understand and apply the laws of basic fluid and pressure physics as they apply to aircraft systems.
- Identify the principles of aircraft oxygen, pressurization, and air conditioning control systems.
- Discuss the development, classification, design, installation, and operations of aircraft instruments.
- Compare and contrast fundamentals of aircraft avionics, radio communications and components.
- Evaluate aircraft ice systems, rain systems and their applications.
- Evaluate fire protection systems and their applications.
- Examine and develop an understanding of applicable FARs, AC 43.13 and various data pertaining to aircraft inspections, maintenance, repair, and troubleshooting.
- Perform as a mechanic in regard to the obligations, privileges and limitations of the mechanic during aircraft inspections, maintenance, repair, and troubleshooting.

## Assessment Strategies:

Continuous Assessment Component	Weightage (%)
TUTOR-MARKED ASSIGNMENT	100
<b>Sub-Total</b>	<b>100</b>

Examinable Component	Weightage (%)
Sub-Total	

**Weightage Total**

**100**