

AIRCRAFT MAINTENANCE ELECTRICAL BASIC COURSE

COURSE OBJECTIVES:

To provide the electrical engineer the basic knowledge of the A/c Systems & prepare them to have the A/C Type rating

WHO SHOULD ATTEND:

Newly hired electrical and instrument engineers and high school certificated technicians with good command of English

DURATION:

6 months.

COURSE CONTENTS

A- Electrical

1-Elementary electricity:

- a. Matter and magnetism.
- b. Production of an electromotive force.
- c. Direct current fundamentals.
- d. Alternating current fundamentals.

2-Electrical energy conversion:

- a. Transformers.
- b. Vacuum tubes.
- c. Transistors.
- d. Dry-disc rectifiers.
- e. Transformer rectification.

3-Electrical meters and their use:

- a. Galvanometers
- b. Voltmeter.
- c. Ammeter.
- d. Ohmmeter.

- e. Thermocouple thermometer.
- f. AC measuring instruments.
- g. Using electrical meters.

4- Aircraft batteries.

5- Circuit protective and control devices:

- a. Protective devices.
- b. Control devices.

6- Generators:

- a. AC generators.
- b. DC generators.
- c. Single-phase generator.
- d. Three-phase generator.
- e. Maintenance of generators.
- f. Voltage regulators.
- g. Paralleling and trouble shooting.

7- Motors:

- a. DC motors.
- b. AC motors.
- c. Inverters.
- d. Starters and starting systems.
- e. External power supply

8-Aircraft systems:

- a. Lighting systems.
- b. Ignition systems.
- c. Control systems.

9- Warning systems.

