

NITEC IN AEROSPACE TECHNOLOGY

Electives (Course Specific)

TIG Welding

On completion of the module, students should be able to join sheet metal and rebuild metal using TIG welding process.

Non-Destructive Testing

On completion of the module, students should be able to apply the working principles of non-destructive testing (NDT) methods used for detecting defects in the aircraft components / structures.

Basic Principle of Helicopter

On completion of the module, students should be able to interpret the basic principles of aerodynamics in helicopters and the various types of rotors used to achieve lift. They should also be able to identify the various parts of the helicopter and mechanism and controls used in changing of blade pitch.

Composite Structure Repairs

On completion of the module, students should be able to perform cold and hot bonding on honeycomb structures using fibreglass wet and epoxy resin material (cold bonding) and wet lay-up pre-preg, metal kin materials and foam core material. Students will also be trained on inspection of damaged structures and post bonding inspection and testing.

Applied Aviation Science and Mathematics

On completion of the module, students should be able to apply fundamentals of mathematics, law of physics and basic aerodynamics principles to solve engineering related problems which are applicable to aircraft flight and ground operations.

Electives (Inter-disciplinary)

Unmanned Aircraft System

On completion of the module, students should be able to maintain an unmanned aircraft system including associated ground control station and sensors.