

COURSE CODE	COURSE TITLE	L	T	P	C
1154AE113	Aviation: Aircraft Instruments	1	0	0	1

Course Category:

University Elective

a. Preamble:

The course aims at providing an understanding of the issues associated with the design and provision of tactical electronic warfare systems on the modern battlefield. The course has its emphasis on presenting the students with the concepts of Electronic support measures and Electronic Counter measures.

b. Prerequisite Courses:

- Discrete Time Signal Processing
- Waveguides and Antennas

c. Related Courses:

- Major Project

d. Course Educational Objectives :

- To discuss in general the taxonomy of electronic warfare and their importance.
- To understand the principles of Electronic warfare system.
- To know about the current challenges and future developments of Electronic Warfare.

e. Course Outcomes :

Upon the successful completion of the course, students will be able to:

CO Nos.	Course Outcomes	Knowledge Level (Based on revised Bloom's Taxonomy)
CO1	CO 1: The history of space exploration and its cultural.	K2
CO2	CO 2: Fundamentals of aerospace engineering	K2
CO3	CO 3: The key aspects of space systems and the space environment	K3
CO4	CO 4: Current trends of Space Exploitation	K2
CO5	CO 5: Future projects in space exploration	K3

Correlation of COs with POs:

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	H											
CO2	H							H				
CO3	H					M		H			M	
CO4	H					M		H			M	
CO5	H									M		

H- High; M-Medium; L-Low

Course Contents

Course Contents:

Unit I Introduction **3 Hours**

Introduction – Part and functions of Aircraft - Types of Aircraft – basic aircraft control

Unit I Aircraft Systems **3 Hours**

Classification of aircraft systems & Instruments – Airborne and ground systems – Instrument panel

Unit III Airborne systems & Instruments **3 Hours**

Control systems – Communication systems – Navigation systems – Primary instruments

Unit I Ground systems **3 Hours**

ATC – ILS – Radar systems

Unit I Helicopter Systems and Instruments **3 Hours**

Introduction – Basic function of helicopter – Instruments – Squash plate - Instruments