

COURSE CODE	COURSE TITLE	L	T	P	C
1154AE210	AERIAL PHOTOGRAPHY	1	0	2	2

Course Category:

a. Course Outcomes :

CO Nos.	Course Outcomes	Knowledge Level (Based on revised Bloom's Taxonomy)
CO1	Student must be able to operate a drone	K3
CO2	Student will be able to integrate gimbal system with drone	K3
CO3	Student will be able to control camera in flight	K3
CO4	Student will be able to plan a photo-shoot using drone	K3
CO5	Student will be able to execute a photo-shoot using drone	K2

b. Correlation of COs with POs:

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

H- High; M-Medium; L-Low

COURSE CONTENTS:

UNIT -1 INTRODUCTION OF UNMANNED AERIAL VEHICLE

Introduction to UAV operation, Parts and function of UAV, Types of UAV, Introduction of UAV Piloting, Application of UAV.

UNIT- II HISTROY OF AERIAL PHOTOGRAPHY

Early history, World War I, Commercial aerial photography, World War II, Platform

UNIT-III PRINCIPLE OF AERIAL PHOTOGRAPHY

Selection of sensor, Camera pixel, flying altitude, Introduction to Aerial survey, Geo- Tagging images

UNIT-IV TYPES OF AERIAL PHOTOGRAPHY

Oblique, Vertical, Combinations, Orthophotos

UNIT-V RULES AND REGULATION OF AERIAL PHOTOGRAPHY

India, Australia, United States, United Kingdom

List of Experiments:

1. Ground test of UAV
2. Transmitter set up
3. Mission Planning using GCS (Ground control station)
4. Integration of gimbal mount
5. Camera installation and ground testing
6. UAV piloting using simulator