



Dr. M. Sundararaj M.E. Ph.D  
Head

03/07/2020

Ref No: Cir/Aero/2020/010

CIRCULAR

This is to intimate the students that Value Added Program titled “Design of fixed wing Unmanned Aerial Vehicles” is scheduled to be conducted from 07/07/2020. The course will be for a duration of 30 hours and will be conducted during weekends. Further Details can contact the Course Coordinator Mr. M.Syedhaleem Assistant Professor Department of Aeronautical Engineering.

  
HoD-Aero

Copy to:

1. Copy to All school of Engineering
2. Copy to Dean Engineering
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### Department of Aeronautical Engineering

#### Value Added Course

#### online Courses on Design of fixed wing Unmanned Aerial Vehicles

#### Objective :

This course introduces the initial designing and sizing process for rapidly growing fixed – wing UAV technology, integrated with its performance and stability analysis and prototype testing.

Course Co-ordinator: M.Syedhaleem

#### COURSE LAYOUT

SNO	Date	Course Content	Duration	Instructor
1	07/07/2020 (FN)	Introduction to fixed-wing UAVs, Introduction to Design, Basic Design Parameters.	3 Hours	Mr.M.Ramakrishna Assistant Professor Tagore Engineering College Chennai
2	07/07/2020 (AN)	Basic Design Parameters contd., Design Algorithm: Case Study, Design Algorithm: Mission Requirements.	3 Hours	Mr.M.Ramakrishna Assistant Professor Tagore Engineering
3	08/07/2020 (FN)	Design Algorithm: Feasible Design Parameters, Configuration Layout: Airfoil Selection Configuration	3 Hours	Mr.M.Ramakrishna Assistant Professor Tagore Engineering College Chennai
4	08/07/2020 (AN)	Layout: Planform Geometry selection	3 Hours	Mr.M.Ramakrishna Assistant Professor Tagore Engineering College Chennai
5	09/07/2020 (FN)	Weight and CG Estimation Analytical Parameter Estimation	3 Hours	Mr.M.Ramakrishna Assistant Professor Tagore Engineering College Chennai
6	09/07/2020 (AN)	Analytical Parameter Estimation contd.	3 Hours	Mr.M.Ramakrishna Assistant Professor Tagore Engineering College Chennai
7	10/07/2020 (FN)	Performance and Stability Analysis contd.	3 Hours	Mr.M.Ramakrishna Assistant Professor Tagore Engineering College Chennai



8	10/07/2020 (AN)	Simulation, Detailed Sizing	3 Hours	Mr.M.Ramakrishna Assistant Professor Tagore Engineering College Chennai
9	11/07/2020 (FN)	Estimation of inertial properties using 3D modelling, Prototype Fabrication	3 Hours	Mr.M.Ramakrishna Assistant Professor Tagore Engineering College Chennai
10	11/07/2020 (AN)	Wind Tunnel Testing, Aerodynamic Characterization through Wind Tunnel Testing	3 Hours	Mr.M.Ramakrishna Assistant Professor Tagore Engineering College Chennai

#### BOOKS AND REFERENCES

1	Introduction to Flight by John D. Anderson
2	Performance, Stability, Dynamics, and Control of Airplanes by Bandu N. Pamadi
3	Aircraft performance and design by John D. Anderson
4	Unmanned Aircraft Design A review of fundamentals by Mohammad H. Sadraey
5	Aircraft Design : A Conceptual Approach by Daniel P. Raymer
6	Unmanned Aircraft Systems : UAVs Design Development and Deployment by Reg Austin
7	Small Unmanned Fixed-wing Aircraft Design: A Practical Approach by Andrew J. Keane and James P. Scanlan



*M. Sankar*



**Department of Aeronautical Engineering**

**Value Added Course**

**Course on Design of fixed wing Unmanned Aerial Vehicles**

**List of students Registered on 07.07.2020**

SNO	Reg NO	Name of the Student
1	U14AE001	ABDULLAH KHAN
2	U14AE003	ADARSH B R
3	U14AE007	ANANDILC
4	U14AE009	ANNAPAREDDY NAGA SAI SRINIVAS
5	U14AE011	BANDARU SANTHOSH KUMAR
6	U14AE014	BALASUBRAMANIAN PL
7	U14AE015	BALINENI ANVESH
8	U14AE018	BONALA KAMSALA RAGHAVENDRA
9	U14AE019	CHARLES SAMEER TOPPO
10	U14AE020	CHARUMATHI.P
11	U14AE047	NAKKALA KARUNAKAR
12	U14AE050	NARHARI RAMEKAR
13	U14AE051	NAVEEN KUMAR P
14	U14AE052	NISHANT SHUKLA
15	U14AE054	PALAKADA BHAVANA
16	U14AE058	POONAM SHARMA.G
17	U14AE059	PRAGATHY.D
18	U14AE060	PRATHIAP L
19	U14AE067	B.SATHISH KUMAR
20	U14AE068	SATHIYA SEELAN.E
21	U14AE069	SAYAN BHATTACHARJEE
22	U14AE071	SELVAGANAPATHY R
23	U14AE072	SHAIK KHADER SHARIEF
24	U14AE074	SHANMUGANANDAN.M
25	U14AE076	SIDHAREDDY MANIGANDAN
26	U14AE077	SIMGAVARJULA VEDAVYAS
27	U14AE078	SINGANA SRI ARAVIND
28	U14AE082	THOTA. MANIKANTA ANKARAO
29	U14AE083	THUPAKULA DEVA KRISHNA
30	U14AE084	VENKATASUBRAMANIAN.I
31	U14AE087	VIJAY RAJ SIVANGI
32	U14AE088	VISHWATEJA KUMAR REDDY.V
33	U14AE089	YALAMARTHI TULASI RAM
34	U14AE091	YOGRAJ SONAR
35	U14AE502	SYED SHAFATH R
36	U14AE702	CLEVIN ALBERT NEONGNENG
37	U14EC002	AARTHI.P



Handwritten signature or initials.

38	U14EC010	AMARJEET KUMAR
39	U14EC011	R AMULYA
40	U14EC012	MAHAMKALI VENKATA SAI NANDAANIRUDH.
41	U14EC017	ASARA ANITH RAO
42	U14EC024	CHANDRALEKA.K
43	U14EC025	CHEKURI.VENKATA MAHESH
44	U14EC031	DEEPAK.A
45	U14EC032	DESHI VENKATESH
46	U14EC039	GADE MALLA REDDY
47	U14EC040	GARAGA SIVA SURYA DEEPAK
48	U14EC042	GOURU VENKATA SAI PRAKASH
49	U14EC044	GUJJARI SHIVADURGA PRASAD



M. S. S. S. S.

# Participant Feedback Form

(On course completion)

Date ..... 11/07/2020 .....

Course ..... UNMANNED AERIAL VEHICLES .....

Student Name (optional) ..... ADARSH BR .....

Student ID (optional) ..... U14.AE003 .....

**a) Helpful and knowledgeable staff:**

Very satisfied       Satisfied       Somewhat satisfied       Not satisfied

**b) Staff friendliness:**

Very satisfied       Satisfied       Somewhat satisfied       Not satisfied

**c) Ease of registration:**

Very satisfied       Satisfied       Somewhat satisfied       Not satisfied

**2. Is there anything we can improve with our registration process?**

..... No need .....

## B. The Training Facility

**3. How satisfied were you with the training facility on the follow**

**a) Cleanliness of facility:**

Very satisfied       Satisfied       Somewhat satisfied       Not satisfied

**b) Comfort of training room:**

Very satisfied       Satisfied       Somewhat satisfied       Not satisfied

**4. Is there anything we can improve with any of the above?**

..... need more topic and courses .....



# Participant Feedback Form

(On course completion)

Date ..... 11/07/2020 .....

Course ... Design of Fixed wing Unmanned Aerial vehicles .....

Student Name (optional) ... Yograj Sonar .....

Student ID (optional) .....

## a) Helpful and knowledgeable staff:

Very satisfied       Satisfied       Somewhat satisfied       Not satisfied

## b) Staff friendliness:

Very satisfied       Satisfied       Somewhat satisfied       Not satisfied

## c) Ease of registration:

Very satisfied       Satisfied       Somewhat satisfied       Not satisfied

2. Is there anything we can improve with our registration process?

..... Nil .....

## B. The Training Facility

3. How satisfied were you with the training facility on the follow

### a) Cleanliness of facility:

Very satisfied       Satisfied       Somewhat satisfied       Not satisfied

### b) Comfort of training room:

Very satisfied       Satisfied       Somewhat satisfied       Not satisfied

4. Is there anything we can improve with any of the above?

..... No .....



# Bharath

INSTITUTE OF HIGHER EDUCATION AND RESEARCH  
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)

Department of Aeronautical Engineering

## Certificate of Participation

This acknowledges that

Chekuri. Venkata Mahesh  
U14EC025

Has undertaken 30 hours course on "DESIGN OF FIXED WING UNMANNED  
AERIAL VECHILES" Organized by DEPARTMENT OF AERONAUTICAL ENGINEERING,  
BIHER FROM 07.07.2020 TO 11.07.2020.

MR.M.SYEDHALEEM, PROGRAM  
COORDINATOR

HOD/AERO