



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

03/07/2020

Head

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

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- 5. Copy to IQAC



🕹 No.173, Agharam Road, Selaiyur, Chennai-600073.





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 xed - 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 xed-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, Conguration Layout: Airfoil Selection Conguration	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
ı	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

N. 5983









		Department of Aeronautical Engineering
		Value Added Course
		Course onDesign 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	
4	U14AE009	ANNAPAREDDY NAGA SAI SRINIVAS
5	U14AE011	BANDARU SANTHOSH KUMAR
6	U14AE014	
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	PRATHAP 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		SIMGAVARJULA VEDAVYAS
27	U14AE078	SINGANA SRI ARAVIND
28	U14AE082	THOTA, MANIKANTA ANKARAO
29		THUPAKULA DEVA KRISHNA
30		VENKATASUBRAMANIAN.I
31	U14AE087	VIJAY RAJ SIVANGI
32	U14AE088	VISHWATEJA KUMAR REDDY.V
33	U14AE089	YALAMARTHI TULASI RAM
34		YOGRAJ SONAR
35		SYED SHAFATH R
36		CLEVIN ALBERT NEONGNENG
37		AARTHI.P





38	U14EC010	AMARJEET KUMAR	
39	U14EC011	R AMULYA	
40	U14EC012	MAHAMKALI VENKATA SAI NANDAANIRUDH.	
41	U14EC017	ASARA ANITH RAO	
42	U14EC024	CHANDRALEKA.K	<u></u>
43	U14EC025	CHEKURI.VENKATA MAHESH	
44	U14EC031	DEEPAK.A	
45	U14EC032	DESHI VENKATESH	
46	U14EC039	GADE MALLA REDDY	
47	U14EC040	GARAGA SIVA SURYA DEEPAK	<u></u>
48	U14EC042	GOURU VENKATA SAI PRAKASH	
49	U14EC044	GUJJARI SHIVADURGA PRASAD	(3)
/	Higher Education of the Control of t		M. Barrens



Date!! (07.12626							
Course	Course						
Student Name (option	ial)AOAR.stlG	S.R.	vi .				
Student ID (optional) .	UILLAEODE	3	*				
a) Helpful and knowledg	eable staff:						
		Computat satisfied	Not satisfied				
Very satisfied	Satisfied	Somewhat satisfied	Not satisfied				
b) Staff friendliness:							
Very satisfied	Satisfied	Somewhat satisfied	Not satisfied				
C) Face of registrations							
C) Ease of registration: Very satisfied	Satisfied	Somewhat satisfied	Not satisfied				
2. Is there anything we c	an improve with our regi	stration process?					
	No and						
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B. The Training Faci	lity						
3. How satisfied were yo	ou with the training facilit	y on the follow					
a) Cleanliness of facility		Pro-					
Very satisfied	Satisfied	Somewhat satisfied	Not satisfied				
b) Comfort of training ro	oom: Satisfied	Somewhat satisfied	Not satisfied				
4. Is there anything we can improve with any of the above?							
need move tolic and courses							

Date							
Course Dosign of Fixed Wing Unmanned Perial Vehicles							
Student Name (optional)							
Student ID (optional)							
a) Helpful and knowledge	eable staff:						
Very 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 c	an improve with our regi	stration process?					
KIL							
B. The Training Faci	lity						
3. How satisfied were yo	u with the training facilit	y on the follow					
a) Cleanliness of facility Very satisfied	: Satisfied	Somewhat satisfied	Not satisfied				
b) Comfort of training ro Very satisfied	oom: Satisfied	Somewhat satisfied	Not satisfied				
4. Is there anything we can improve with any of the above?							
No							







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

05/01/2021

Head

Ref No:Cir/Aero/2021/005

CIRCULAR

This is to intimate the students that Value Added Program titled "Course on RC Aircraft Design " is scheduled to be conducted from 15/02/2021. The course will be for a duration of 30 hours and will be conducted during weekends. Further Details can contact the Course Coordinator Dr. M.Sundararaj Professor and Head, Department of Aeronautical Engineering.

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Department of Aeronautical Engineering

Value Added Course Online Course on RC Aircraft Design

Objective:

This course will presents the entire process of aircraft conceptual design- from requirements definition

to initial sizing, configuration layout, analysis, sizing, optimization, and trade studies.

Course Co-ordinator: Dr.M.Sundararaj

COURSE LAYOUT

ONO	Date	Course Content	Duration	Instructor
IVO	Date			Ms.Vimalambigai,
		Overview of the Design Process, Airfoil		Design Executive, Big
		and Geometry Selection, Thrust-to-		Bang Boom Solutions
1	15/02/2021 (FN)	Weight Ratio and Wing Loading	3 Hours	private limited
	13/02/2021 (111)	O 1 C Caring		Ms.Vimalambigai,
		Initial Sizing, Control-Surface Sizing,		Design Executive, Big
2	20/02/2021 (FN)	Configuration Layout	3 Hours	Bang Boom Solutions
	2010212021 (114)	Ct. Ct. ct. con		Ms.Vimalambigai,
		Aerodynamic Considerations, Structural		Design Executive, Big
		Considerations, Vulnerability		Bang Boom Solutions
2	20/02/2021 (AN)	Considerations	3 Hours	private limited
3	20/02/2021 (ATT)			Ms.Vimalambigai,
		1		Design Executive, Big
		Crew Station, Passengers, and Payload		Bang Boom Solutions
	21/02/2021 (FN)	2000	3 Hours	private limited
4	21/02/2021 (FIV)			Ms.Vimalambigai,
				Design Executive, Big
		Propulsion and Fuel System Integration, Fu	el	Bang Boom Solutions
_	21/02/2021 (AN)	System, Landing Gear Arrangements	3 Hours	private limited
5	21/02/2021 (AIN)	System, canang ever a g		Ms.Vimalambigai,
		Step-by-Step Development of a New		Design Executive, Big
		Design, Aerodynamics, Propulsion		Bang Boom Solutions
	27/02/2021 (EN)	Design, Acrodynamics, 117	3 Hours	
6	27/02/2021 (FN)			Ms.Vimalambigai,
		Structures and Loads, Weights, Group		Design Executive, Big
		Weights Method		Bang Boom Solutions
	07/00/0001 / 4315		3 Hours	private limited
7	27/02/2021 (AN)			

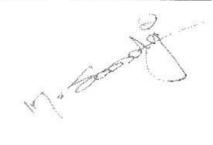




8	28/02/2021 (FN)	Stability, Control, and Handling Qualities, Longitudinal Static Stability and Control, Lateral-Directional	3 Hours	Ms.Vimalambigai, Design Executive, Big Bang Boom Solutions private limited
9	28/02/2021 (AN)	Performance and Flight Mechanics, Equations of Motion, Operating Envelope	3 Hours	Ms.Vimalambigai, Design Executive, Big Bang Boom Solutions private limited
10	05/03/2021 (FN)	Cost Analysis, Operations and Maintenance Costs, Aircraft and Airline Economics	3 Hours	Ms.Vimalambigai, Design Executive, Big Bang Boom Solutions private limited

	BOOKS AND REFERENCES
1	Aircraft performance and design by John D. Anderson
2	Unmanned Aircraft Systems: UAVs Design Development and Deployment by Reg Austin
3	Small Unmanned Fixed-wing Aircraft Design: A Practical Approach by Andrew J. Keane and James P. Scanlan











	CORPORATION /	Department of Aeronautical Engineering
		Value Added Course
DOMESTIN - 101		Online Course on RC Aircraft Design
		List of students Registered on 15.02.2021
SNO	Reg NO	Name of the Student
1	U15AE004	ARAVINDAN A
2	U15AE022	KM JUHI GUPTA
3	U15AE023	KOLA JOHN HANNA JAYASHREE
4	U15AE034	PULUSU PARDHU SREE
5	U15AE041	SANJAY V
6	U15AE047	VALMIKI MANOJ KUMAR
7	U15AE050	YANAMADHALA AVINASH CHOWDARY
8	U15AE702	MOHD AMIR
9	U15AE062	SANDEEP G M
10	U15AE055	VASU P
11	U14AE004	AFSANA BANU
12	U14AE006	ANAND,M
13	U14AE008	ANBU KUMAR.P
14	U14AE011	BANDARU SANTHOSH KUMAR
15	U14AE015	BALINENI ANVESH
16	U14AE018	BONALA KAMSALA RAGHAVENDRA
17	U14AE022	M.DEVA
18	U14AE024	GANGIPELLI VINEETH
19	U14AE025	GODDU RAMESH
20	U14AE027	GUMMADI SANTOSH KUMAR
21	U14AE028	JAGANRAJ
22	U14AE030	JAVEED THAMEEM ANSARI.M.S
23	U14AE035	KAMAGONDA PRASAD
24	U14AE041	MARIAM AFRAH.A
25	U14AE043	MOHDREHAN
26	U14AE044	M UDAY TEJA
27	U14AE046	M KRISHNA VAMSI
28	U14AE047	NAKKALA KARUNAKAR
29	U14AE049	NAND KISHOR BHARTI
30	U14AE051	NAVEEN KUMAR P
31	U14AE053	SUSMITHA PADAMATI
32	U14MT005	BALAJI.P
33	U14MT014	PREMKUMAR.V
34	U14MT022	SHALIN MORAY.S
35	U14MT026	VIGNESH.R
36	U14EC002	AARTHI.P
37	U14EC006	ADDUGALA RAMA DEVI





Date .05-03-202							
Course RC Piverall Design.							
Student Name (optional))M. Deva		s.				
Student ID (optional)	UIHAE O22						
a) Helpful and knowledgeal	ble 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 regi	stration process?					
	No god only	·····					
B. The Training Facility	y						
3. How satisfied were you	with the training facilit	y on the follow					
a) Cleanliness of facility: Very satisfied	Satisfied	Somewhat satisfied	Not satisfied				
b) Comfort of training room Very satisfied	n: Satisfied	Somewhat satisfied	Not satisfied				
4. Is there anything we can improve with any of the above?							
No god only							

Participant Feedback Form

(On course completion)

Date05.19.3 29.21				
Course	Course RC AIRCRAFT DESIGN			
Student Name (optiona) AARTH	1. P		
Student ID (optional)	UILECOC	5.2		
a) Helpful and knowledgea	ıble 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?				
	O <i>M</i>			
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 root Very satisfied	m: Satisfied	Somewhat satisfied	Not satisfied	
4. Is there anything we can improve with any of the above?				
Vey Usefull				





(Declared as Deemed-to-be-University under section 3 of UGC Act 1956) BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY DEPARTMENT OF AERONAUTICAL ENGINEERING



Dr. M. Sundararaj M.L. Ph.D. Head

04/01/2021

Ref No:Cir/Aero/2021/003

CIRCULAR

This is to intimate the students that Value Added Program titled "Course on Quadcopter Design " is scheduled to be conducted from 11/01/2021. The course will be for a duration of 30 hours and will be conducted during weekends. Further Details can contact the Course Coordinator Mr. S.R. Vimalraj Assistant Professor, Department of Aeronautical Engineering.

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No.173, Agharam Road, Selaiyur, Chennal-600073.



Department of Aeronautical Engineering

Value Added Course on line Course on Quadcopter Design

Objective:

This course introduces the designing and sizing process (Simulation/Experimental) for fixed ? wing UAV technology, integrated with its performance and stability analysis (Static & Dynamic) and prototype testing

Course Co-ordinator: S.R.Vimalraj

COURSE LAYOUT

SNO	Date	Course Content	Duration	Instructor
1	11/01/2021 (FN)	Review of the concepts of Quadcopter Design	3 Hours	Ms.Kavya, Managing Director, Big Bang Boom Solutions private limited
2	16/01/2021 (FN)	Understanding the static stability of various UAVs.	3 Hours	Ms.Kavya, Managing Director, Big Bang Boom Solutions private limited
3	16/01/2021 (AN)	Significance of location of Neutral point	3 Hours	Ms.Kavya, Managing Director, Big Bang Boom Solutions private limited
4	17/01/2021 (FN)	Centre of gravity for a stable flight	3 Hours	Ms.Kavya, Managing Director, Big Bang Boom Solutions private limited
5	17/01/2021 (AN)	Approach for wing design and airfoil selection with examples	3 Hours	Ms.Kavya, Managing Director, Big Bang Boom Solutions private limited
6	23/01/2021 (FN)	Tail sizing, control surface sizing and significance of tail volume ratio with examples	3 Hours	Ms.Kavya, Managing Director, Big Bang Boom Solutions private limited
7	23/01/2021 (AN)	Developing subroutine for design process	3 Hours	Ms.Kavya, Managing Director, Big Bang Boom Solutions private limited





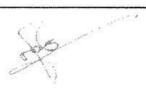






		Department of Aeronautical Engineering
		Value Added Course
		online Course on Quadcopter Design
	T	List of students Registered on 11.01.2021
SNO	Reg NO	Name of the Student
1	U15AE004	ARAVINDAN A
	U15AE008	CHILAKALAPUDI YASHWANTH TEJA
3	U15AE012	
4	U15AE022	KM JUHI GUPTA
5	U15AE014	EDWIN PRAKASH F
6	U15AE023	KOLA JOHN HANNA JAYASHREE
7	U15AE031	PARASA MAHENDRA
8	U15AE034	PULUSU PARDHU SREE
9	U15AE040	SANGEETHA N
10	U15AE041	SANJAY V
11	U15AE047	VALMIKI MANOJ KUMAR
12	U15AE050	YANAMADHALA AVINASH CHOWDARY
13	U15AE702	MOHD AMIR
14	U15AE062	SANDEEP G M
15	U15AE055	VASU P
16	U15AE053	PALLEKONDU SIRISHA
17	U14AE059	PRAGATHY.D
18	U14AE060	PRATHAP 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	U14EC002	AARTHI.P
28	U14EC010	AMARJEET KUMAR
29	U14EC011	R AMULYA
30	U14EC012	MAHAMKALI VENKATA SAI NANDAANIRUDH.
31	U14EC017	ASARA ANITH RAO
32	U14EC024	CHANDRALEKA.K
33	U14EC025	CHEKURI. VENKATA MAHESH
34	U14EC031	DEEPAK.A
35	U14CS171	SHARSHI KANT PRASAD
36	U14CS186	SURIYA.A.





Date 23 /. 0.1 2021				
Course	Course Quad carten Derign			
Student Name (option	1al)	A	••	
Student ID (optional) .	WHY.CS	.18.6		
a) Helpful and knowledg	eable staff:			
Very satisfied	Satisfied	Somewhat satisfied	Not satisfied	
h) Staff friendlinger				
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?				
nud arline Registration				
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 ro	Satisfied	Somewhat satisfied	Not satisfied	
4. Is there anything we can improve with any of the above?				
	Sod.			

Participant Feedback Form

(On course completion)

Date 2.3.la.1.l.2021			
Course VAP an anaparten Design			
Student Name (option	al)VAsu.:.P.		
Student ID (optional)			
a) Helpful and knowledge	eable staff:		
Very satisfied		Somewhat satisfied	Not satisfied
U very satisfied		1 Comewhat Satisfied	THO Sausined
b) Staff friendliness: Very satisfied	- 0-W-6-4	[Community of anting of	Not objected
Very satisfied	Satisfied	Somewhat satisfied	Not satisfied
C) Ease of registration: Very satisfied	_1	ing integrals	processing .
Very satisfied	∠ Satisfied	Somewhat satisfied	Not satisfied
2. Is there anything we can improve with our registration process?			
Need more Program Co-ordition			
B. The Training Facility			
3. How satisfied were you with the training facility on the follow			
a) Cleanliness of facility:		pulsers .	processing the second
Very satisfied	Satisfied	Somewhat satisfied	Not satisfied
b) Comfort of training roo Very satisfied	om: Satisfied	Somewhat satisfied	Not satisfied
4. Is there anything we can improve with any of the above?			
Regularly we need this HAPC ST Program			

