NATIONAL BOARD OF ACCREDITATION

Data Capturing Points of the Program Applied for NBA Accreditation– Tier I/II UG (Engineering) Institute Programs

Program Name : Aeronautical Engineering	**Discipline**: Engineering & Technology
Level : Under Graduate	**Tier**: 1
Application No: 11672	**Date of Submission**: 23-03-2026

PART A- Profile of the Institute

A1.Name of the Institute: HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY	
Year of Establishment : 1999-2000	Location of the Institute: SemiUrban
A2. Institute Address:HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY,OTHAKALMANDAPAM POST,COIMBATORE 641 032	
City:Coimbotore	State:Tamil Nadu
Pin Code:641032	Website:www.hicet.ac.in
Email:HINDUSTHAN107@GMAIL.COM	Phone No(with STD Code):0422-4242424
A3. Name and Address of the Affiliating University (if any):	
Name of the University : ANNA UNIERSITY CHENNAI	City: Chennai
State : Tamil Nadu	Pin Code: 600025
A4. Type of the Institution: Self-Supported Institute	
A5. Ownership Status: Self financing	

A6. Details of all Programs being Offered by the Institution:

- No. of UG programs: **17**
- No. of PG programs: **7**

Table No. A6.1: List of all programs offered by the Institute.

Sr.No.	Discipline	Level of program	Name of the program	Year of Start	Year of Closed	Name of The Department
1	Computer Application	PG	Master of Computer Application	2005	--	Computer Application
2	Engineering & Technology	UG	Aeronautical Engineering	2005	--	Aeronautical Engineering
3	Engineering & Technology	UG	Agricultural Engineering	2018	--	Agricultural Engineering
4	Engineering & Technology	PG	Applied Electronics	2009	2024	Electronics and Communication Engineering
5	Engineering & Technology	UG	Artificial Intelligence and Machine Learning	2020	--	Artificial Intelligence and Machine Learning
6	Engineering & Technology	UG	Automobile Engineering	2014	--	Automobile Engineering
7	Engineering & Technology	UG	Biomedical Engineering	2018	--	Biomedical Engineering
8	Engineering & Technology	PG	CAD/CAM	2006	--	Mechanical Engineering
9	Engineering & Technology	UG	Chemical Engineering	2019	--	Chemical Engineering
10	Engineering & Technology	UG	Civil Engineering	2009	--	Civil Engineering

11	Engineering & Technology	PG	Communication Systems	2006	--	Electronics and Communication Engineering
12	Engineering & Technology	UG	Computer Science and Business System	2025	--	Computer Science and Business System
13	Engineering & Technology	PG	Computer Science and Engineering	2011	--	Computer Science and Engineering
14	Engineering & Technology	UG	Computer Science and Engineering	2000	--	Computer Science and Engineering
15	Engineering & Technology	UG	Computer Science and Engineering (Cyber Security)	2024	--	Computer Science and Engineering (Cyber Security)
16	Engineering & Technology	UG	Electrical and Electronics Engineering	2002	--	Electrical and Electronics Engineering
17	Engineering & Technology	UG	Electronics & Communication Engineering	2000	--	Electronics and Communication Engineering
18	Engineering & Technology	UG	Electronics & Instrumentation Engineering	2011	--	Electronics and Instrumentation Engineering
19	Engineering & Technology	PG	Embedded Systems	2021	--	Electrical and Electronics Engineering
20	Engineering & Technology	UG	Food Technology	2018	--	Food Technology
21	Engineering & Technology	UG	Information Technology	2002	--	Information Technology
22	Engineering & Technology	UG	Mechanical Engineering	2000	--	Mechanical Engineering
23	Engineering & Technology	UG	Mechatronics Engineering	2011	--	Mechatronics Engineering
24	Management	PG	Master of Business Administration	2005	--	Management

A7. Programs to be considered for Accreditation vide this Application:

Table No. A7.1: List of programs to be considered for accreditation.

Name of the Department	Having Allied Departments	Name of the Program	Program Level
Aeronautical Engineering	No	Aeronautical Engineering	UG
Civil Engineering	No	Civil Engineering	UG
Automobile Engineering	Yes	Automobile Engineering	UG
Mechatronics Engineering	Yes	Mechatronics Engineering	UG

Table No. A7.2: Allied Department(s) to the Department of the program considered for accreditation as above.
Cluster ID. Name of the Department (in table no. A7.1) Name of allied Departments/Cluster (for table no. A7.1)

No Record

PART-B: Program information

B1. Provide the Required Information for the Program Applied For:

Table No. B1: Program details.
A. List of the Programs Offered by the Department:

SR.NO.	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/DECREASE INTAKE (if any)	YEAR OF INCREASE/DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/COMPETENT AUTHORITY ARROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCREDITED	PROGRAM DURATION
1	Aeronautical Engineering	UG	2005 / --	60	Yes	2021	60	2021	F.No. Southern/1-44641759947/2025/EOA	Granted accreditation for 3 years for the period (specify period)	2023	2026	1	4

Sanctioned Intake for Last Five Years for the Aeronautical Engineering	
Academic Year	**Sanctioned Intake**
2025-26	60
2024-25	60
2023-24	60
2022-23	60
2021-22	60
2020-21	120

List of the Allied Departments/Cluster and Programs:

B2. Detail of Head of the Department for the program under consideration:

A. Name of the HoD :	GOPINATHAN V T
B. Nature of appointment:	Regular
C. Qualification:	M.E. and Ph.D.

B3. Program Details

Table No.B3.1: Admission details for the program excluding those admitted through multiple entry and exit points.

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2025-26 (CAY)	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)	2021-22 (CAYm4)	2020-21 (CAYm5)	2019-20 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	60	60	60	60	60	120	120
N1=Total no. of students admitted in the 1st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program	60	58	60	59	60	66	70
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	1	1	1	3	15	6
N3=Separate division if any	0	0	0	0	0	0	0
N4=Total no. of students admitted in the 1st year via all supernumerary quotas	1	2	1	3	0	0	0
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	61	61	62	63	63	81	76

CAY= Current Academic Year. CAYm1= Current Academic Year Minus 1 CAYm2= Current Academic Year Minus 2. LYG= Last Year Graduate. LYGm1= Last Year Graduate Minus 1. LYGm2= Last Year Graduate Minus 2.

B4. Enrolment Ratio in the First Year

Table No. B4.1: Student enrolment ratio in the 1st year.

Year of entry	N (From Table 4.1)	N1 (From Table 4.1)	N4 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2025-26 (CAY)	60	60	1	101.67
2024-25 (CAYm1)	60	58	2	100.00
2023-24 (CAYm2)	60	60	1	101.67

Average [(ER1 + ER2 + ER3) / 3] = 101.11≡ 100

B5. Success Rate of the Students in the Stipulated Period of the Program

Table No.B5.1: The success rate in the stipulated period of a program.

Item	(2021-22) LYG	(2020-21) LYGm1	(2019-20) LYGm2
A*= (No. of students admitted in the 1st year of that batch and those actually admitted in the 2nd year via lateral entry, plus the number of students admitted through multiple entry (if any) and separate division if applicable, minus the number of students who exited through multiple entry (if any).	63.00	135.00	126.00
B=No. of students who graduated from the program in the stipulated course duration	50.00	58.00	64.00
Success Rate (SR)= (B/A) * 100	79.37	42.96	50.79

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 57.71

B6. Academic Performance of the First-Year Students of the Program

Table No.B6.1: Academic Performance of the First-Year Students of the Program.

Academic Performance	CAYm1(2024-25)	CAYm2(2023-24)	CAYm3 (2022-23)
Mean of CGPA or mean percentage of all successful students(X)	8.05	7.84	7.86
Y=Total no. of successful students	60.00	61.00	62.00
Z=Total no. of students appeared in the examination	60.00	61.00	62.00
API [X*(Y/Z)]	8.05	7.84	7.86

Average API[(AP1+AP2+AP3)/3] : 7.92

B7: Academic Performance of the Second Year Students of the Program

Table No.B7.1: Academic Performance of the Second Year Students of the Program.

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2rd year/10)	7.74	7.84	7.43
Y=Total no. of successful students	60.00	63.00	60.00
Z=Total no. of students appeared in the examination	62.00	63.00	63.00
API [X * (Y/Z)]	7.49	7.84	7.08

Average API [(AP1 + AP2 + AP3)/3] : 7.47

B8. Academic Performance of the Third Year Students of the Program

Table No.B8.1: Academic Performance of the Third Year Students of the Program

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 3rd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 3rd year/10)	7.76	7.60	7.93

Y=Total no. of successful students	61.00	58.00	76.00
Z=Total no. of students appeared in the examination	63.00	60.00	80.00
API [X*(Y/Z)]:	7.51	7.35	7.53

Average API [(AP1 + AP2 + AP3)/3] : 7.46

B9. Placement, Higher Studies, and Entrepreneurship

Table No.B9.1: Placement, higher studies, and entrepreneurship details.

Item	LYG (2021-22)	LYGm1(2020-21)	LYGm2(2019-20)
FS*=Total no. of final year students	63.00	135.00	126.00
X=No. of students placed	50.00	65.00	65.00
Y=No. of students admitted to higher studies	4.00	7.00	6.00
Z= No. of students taking up entrepreneurship	1.00	1.00	1.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	87.30	54.07	57.14

Average Placement Index = (P_1 + P_2 + P_3)/3: 66.17 Placement Index Points:

PART C: Faculty Details in Department and Allied Departments

(Data to be filled in for the Department and Allied Departments)

C1. Faculty details of Department and Allied Departments

Table No.C1: Faculty details in the Department for the past 3 years including CAY

Sr.No	Name of the Faculty	PAN No.	Highest degree	University	Area of Specialization	Date of Joining in this Institution	Experience in years in current institute	Designation at Time Joining in this Institution	Present Designation	The date on which Designated as Professor/ Associate Professor if any	Nature of Association (Regular/ Contract/ Ad hoc)	Currently Associated (Y/N)	In case of NO, Date of Leaving	IS HOD?
1	GOPINATHAN V T	XXXXXXX82A	M.E. and Ph.D.	Anna University	Aeronautical Engineering	02/07/2009	16.8	Lecturer	Professor	16/06/2025	Regular	Yes		Yes
2	PRADHAP RAJ M	XXXXXXX12A	M.E. and Ph.D.	Anna University	Energy Engineering	15/12/2008	15.5	Lecturer	Professor	22/06/2015	Regular	No	07/06/2024	No
3	KARTHIKEYAN P N	XXXXXXX68R	M.E. and Ph.D.	Anna University	Industrial Engineering	04/10/2004	21.5	Lecturer	Professor	10/06/2019	Regular	Yes		No
4	SELVAKUMAR S	XXXXXXX19E	M.E. and Ph.D.	Anna University	CAD/CAM	05/06/2023	1	Associate Professor	Associate Professor	05/06/2023	Regular	No	07/06/2024	No
5	GANESH M	XXXXXXX03J	M.E. and Ph.D.	Anna University	Aeronautical Engineering	08/01/2010	16.1	Lecturer	Associate Professor	10/07/2020	Regular	Yes		No

6	VEERAMANIKANDAN R	XXXXXXX37K	M.E.	Hindustan University	Aeronautical Engineering	04/06/2012	13.9	Assistant Professor	Assistant Professor		Regular	Yes		No
7	SARAVANAN R	XXXXXXX26C	M.E.	Hindustan University	Aeronautical Engineering	25/06/2012	13.8	Assistant Professor	Assistant Professor		Regular	Yes		No
8	SHABANA A	XXXXXXX35L	M.E.	Anna University	Industrial Engineering	25/06/2012	11.11	Assistant Professor	Assistant Professor		Regular	No	07/06/2024	No
9	ARUN RAJA K K	XXXXXXX99Q	M.Tech	Hindustan University	Aeronautical Engineering	24/06/2013	12.8	Assistant Professor	Assistant Professor		Regular	Yes		No
10	MANOJ KUMAR K	XXXXXXX36G	M.Tech	Hindustan University	Aeronautical Engineering	23/06/2014	11.8	Assistant Professor	Assistant Professor		Regular	Yes		No
11	SIVARAMAN S	XXXXXXX70A	M.Tech	Hindustan University	Aeronautical Engineering	22/06/2015	8.11	Assistant Professor	Assistant Professor		Regular	No	07/06/2024	No
12	ARULMOZHINATHAN T	XXXXXXX36K	M.E.	Anna University	Aeronautical Engineering	04/06/2018	7.8	Assistant Professor	Assistant Professor		Regular	Yes		No
13	MAGESH KUMAR M	XXXXXXX59G	M.E.	Anna University	Thermal Engineering	05/06/2018	7.8	Assistant Professor	Assistant Professor		Regular	Yes		No
14	SHYAMILA S P	XXXXXXX10B	M.E.	Anna University	Aerospace Technology	08/06/2018	6	Assistant Professor	Assistant Professor		Regular	No	07/06/2024	No
15	SARAVANA KUMAR V	XXXXXXX53G	M.E.	Anna University	CAD/CAM	12/06/2018	7.8	Assistant Professor	Assistant Professor		Regular	Yes		No
16	TAMIL VENDAN D	XXXXXXX30H	M.E.	Anna University	Aeronautical Engineering	05/09/2019	5.9	Assistant Professor	Assistant Professor		Regular	No	06/06/2025	No
17	PRAMODASS C	XXXXXXX11M	M.Tech	Jawaharlal Nehru Technological University	Aerospace Engineering	01/06/2020	4	Assistant Professor	Assistant Professor		Regular	No	07/06/2024	No
18	KATHIRVEL K	XXXXXXX85C	M.E.	Anna University	Thermal Engineering	01/07/2021	4.8	Assistant Professor	Assistant Professor		Regular	Yes		No

Table No.C2: Faculty details of Allied Departments for the past 3 years including CAY.

C2. Student-Faculty Ratio (SFR)

No. of UG(Engineering) programs in Department including allied departments/ clusters (UGn):
UG1=1st UG program
UGn=nth UG program
B= No. of Students in UG 2nd year (ST)
C= No. of Students in UG 3rd year (ST)
D= No. of Students in UG 4th year (ST)
No. of PG (Engineering) programs in Department including allied departments/ clusters (PGm):
PG1=1st PG program.
PGm=mth PG program
A= No. of Students in PG 1st year
B= No. of Students in PG 2nd year
Student Faculty Ratio **(SFR)** = S/F
S= No. of students of all programs in the Department including all students of allied departments/clusters.

No. of students (ST)=Sanctioned Intake (SA)+ Actual admitted students via lateral entry including leftover seats (L) if any (limited to 10 % of SA)
Students who admitted under supernumerary quotas (SNQ, EWS, etc) will not be considered in calculating SFR value. Those students are exempted.
F=Total no. of regular or contractual faculty members (Full Time) in the Department, including allied departments/clusters (excluding first year faculty (The faculty members who have a 100% teaching load in the first-year courses)).

No. of UG Programs in the Department1 No. of PG Programs in the Department0

Table No.C2.1: Student-faculty ratio.

Description	**CAY(2025-26)**	**CAYm1 (2024-25)**	**CAYm2 (2023-24)**
UG1.B	61	61	61
UG1.C	61	61	63
UG1.D	61	63	132
UG1: Aeronautical Engineering	**183**	**185**	**256**
DS=Total no. of students in all UG and PG programs in the Department	183	185	256
AS=Total no. of students of all UG and PG programs in allied departments	0	0	0
S=Total no. of students in the Department (DS) and allied departments (AS)	**S1=** 183	**S2=** 185	**S3=** 256
DF=Total no. of faculty members in the Department	11	12	18
AF= Total no. of faculty members in the allied Departments	0	0	0
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	**F1=** 11	**F2=** 12	**F3=** 18
FF=The faculty members in F who have a 100% teaching load in the first-year courses	1	1	1
Student Faculty Ratio (SFR)=S/(F-FF)	**SFR1= 18.30**	**SFR2= 16.82**	**SFR3= 15.06**
Average SFR for 3 years	**SFR= 16.73**		

C3. Faculty Qualification

- Faculty qualification index (FQI) = 2.5 * [(10X +4Y)/RF] where
- X=No. of faculty members with Ph.D. degree or equivalent as per AICTE/UGC norms.
- Y=No. of faculty members with M. Tech. or ME degree or equivalent as per AICTE/ UGC norms.
- RF=No. of required faculty in the Department including allied Departments to adhere to the 20:1 Student-Faculty ratio, with calculations based on both student numbers and faculty requirements as per section C2 of this documents: (RF=S/20).

Table No.C3.1: Faculty qualification.

Year	**X**	**Y**	**RF**	**FQ = 2.5 x [(10X + 4Y) / RF)]**
2025-26(CAY)	3	8	9.00	17.22
2024-25(CAYm1)	3	9	9.00	18.33
2023-24(CAYm2)	5	13	12.00	21.25

C4. Faculty Cadre Proportion

- Faculty Cadre Proportion is 1(RF1): 2(RF2): 6(RF3)
- RF1= No. of Professors required = 1/9 * No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per C2 of this documents:.
- RF2= No. of Associate Professors required = 2/9 * No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per section C2 of this documents:.
- RF3= No. of Assistant Professors required = 6/9 * No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per section C2 of this documents:.
- Faculty cadre and qualification and experience should be as per AICTE/UGC norms.

Table No.C4.1: Faculty cadre proportion details.

Year	Professors		Associate Professors		Assistant Professors	
	Required RF1	Available AF1	Required RF2	Available AF1	Required RF3	Available AF3
2025-26	1.00	2.00	2.00	1.00	6.00	8.00
2024-25	1.00	1.00	2.00	2.00	6.00	9.00
2023-24	1.00	2.00	2.00	3.00	8.00	13.00
Average	RF1=1.00	AF1=1.67	RF2=2.00	AF2=2.00	RF2=6.67	AF2=10.00

C5. Visiting/Adjunct Faculty/Professor of Practice

Table No. C5.1: List of visiting/adjunct faculty/professor of practice and their teaching and practical loads.

(CAYm1)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr. V Alaguraj	Founder	Mach Engineers	Aircraft Component Drawing Laboratory	24.00
2	Wg Cdr (Rtd) A Satish Kumar	Director	De Drone World Solutions Pvt. Ltd.	UAV and Aeromodelling Laboratory	18.00
3	Wg Cdr (Rtd) A Satish Kumar	Director	De Drone World Solutions Pvt. Ltd.	Aircraft Rules and Regulations	15.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr. V Alaguraj	Founder	Mach Engineers	Aircraft Component Drawing Laboratory	18.00
2	Wg Cdr (Rtd) A Satish Kumar	Director	De Drone World Solutions Pvt. Ltd.	UAV and Aeromodelling Laboratory	18.00
3	Wg Cdr (Rtd) A Satish Kumar	Director	De Drone World Solutions Pvt. Ltd.	Avionics	20.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr. V Alaguraj	Founder	Mach Engineers	Structural Simulation Laboratory	18.00
2	Mr. V Alaguraj	Founder	Mach Engineers	Aircraft Component Drawing Laboratory	18.00
3	Mr. Charath Chander Natarajan	Director	MaxCaDD	Additive Manufacturing and Tooling	20.00

C6. Academic Research

Table No. C6.1: Faculty publication details.

S.No.	Item	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)
1	No. of peer reviewed journal papers published	15	6	3
2	No. of peer reviewed conference papers published	9	9	3
3	No. of books/book chapters published	4	1	2

C7. Sponsored Research Project

Table No. C7.1: List of sponsored research projects received from external agencies.

(CAYm1)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Mr. Saravanan R	-	Aeronautical Engineering	Fabrication of UAV Wings	Mannschaft Engineering Solution Private Limited, Pondicherry	3 Months	1.10
Dr. Ganesh M	-	Aeronautical Engineering	Fabrication of Composite Storage Containers	Gayathri Matches Industries, Coimbatore	3 Months	0.90
Dr. Jaya J	-	Aeronautical Engineering	-	DST (Department of Science and Technology)	5 Years	40.00
						Amount received (Rs.):42.00

(CAYm2)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Mr. Saravana Kumar V	-	Aeronautical Engineering	Development of object dropping UAV	De Drone World Solutions Private Limited, Madurai	6 Months	0.78
Dr. Karthikeyan P N	-	Aeronautical Engineering	Development of Composite panel for commercial containers	RAK Containers Private Limited, Coimbatore	6 Months	1.65
Mr. Saravana Kumar V	-	Aeronautical Engineering	Development of Robotic NDT	Vibrant NDT Services Private Limited, Chennai	6 Months	1.13
						Amount received (Rs.):3.56

(CAYm3)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. Gopinathan V T	-	Aeronautical Engineering	Design and Analysis of Bio – Inspired wing models	Huromata, Coimbatore	6 Months	1.25
Dr. Ganesh M	-	Aeronautical Engineering	Design and Testing of various composite structure for drone frame	PlanetX Aerospace Services Private Limited, Coimbatore	6 Months	1.50
						Amount received (Rs.):2.75

Total Amount (Lacs) Received for the Past 3 Years: 48.31

Note*:

- Only sponsored research projects will be considered. Infrastructure-based projects will not be considered here.

C8. Consultancy Work

Table No. C8.1: List of consultancy projects received from external agencies.

(CAYm1)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Mr. Magesh Kumar M	-	Aeronautical Engineering	Development of a Real - time Pilot Sleep Monitoring and Alert System for enhanced Cockpit Safety	Yjet Services Pvt. Ltd., Bengaluru	12 Months	1.85
Mr. Manoj Kumar K	-	Aeronautical Engineering	Commercial aircraft wing structural simulation with load analysis	Mach Engineers, Coimabore	6 Months	1.40
Mr. Arun Raja K K	-	Aeronautical Engineering	Design and Development of low noise drone propeller	Wright Flyer and Hobby, Perambulur	6 Months	1.25
Mr. Saravanan R	-	Aeronautical Engineering	AI – driven autonomous inspection of NDT image analysis using CNN	Vibrant NDT Services Private Limited, Coimbatore	12 Months	2.10
Dr. Ganesh M	-	Aeronautical Engineering	Creo CAD Training	Mach Engineers, Coimabore	2 Months	0.32
						Amount received (Rs.):6.92

(CAYm2)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Mr. Tamil Vendan D	-	Aeronautical Engineering	Design and Development of Hand Gun Nozzle for Pneumatic Grease Dispenser	Falcon Endineers Pvt. Ltd., Coimbatore	3 Months	0.63
Mr. Saravanan R	-	Aeronautical Engineering	Optimization of wind Turbine blade for Improved efficiency urban area operations	Gayathri Industries, Coimbatore	6 Months	1.09
Mr. Arun Raja K K	-	Aeronautical Engineering	Design and fabrication of hybrid helium drone for long endurance applications	De Drone World Solutions Private Limited, Madurai	6 Months	1.83
Mr. Manoj Kumar K	-	Aeronautical Engineering	Design and Analysis of Electric fuselage	De Drone World Solutions Private Limited, Madurai	6 Months	1.75
Dr. Ganesh M	-	Aeronautical Engineering	Experimental Investigation on Pressure Distribution over propeller scale model	Avatar Aviation, Coimbatore	6 Months	0.81
Mr. Saravana Kumar V	-	Aeronautical Engineering	RPTO Training	De Drone World Solutions Private Limited, Coimbatore	12 Months	0.50
						Amount received (Rs.):6.61

(CAYm3)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Mr. Tamil Vendan D	-	Aeronautical Engineering	Design and development of drone for Aerial survey and mapping	Veerakumar Machine Tools, Coimbatore	3 Months	0.65
Mr. Veeramanikandan R	-	Aeronautical Engineering	Numerical Analysis of Patrol Boat Hull Structure	RAADS Marine, Puduchery.	3 Months	0.53
Mr. Saravana Kumar V	-	Aeronautical Engineering	Design and development of Multipurpose drone	De Drone World Solutions Private Limited, Madurai	12 Months	6.50
						Amount received (Rs.):7.68

Total amount (Lacs) received for the past 3 years: 21.21

Note*:

- Only consultancy projects will be considered. Infrastructure-based projects will not be considered here.

C9. Institution Seed Money or Internal Research Grant to its Faculty for Research Work

Table No. C9.1: List of faculty members received seed money or internal research grant from the Institution.

(CAYm1)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Mr. Saravana Kumar V	Drone Propeller Test Rig	12 Months	0.85	0.82	Product developed
			Amount received (Rs.): 0.85		

(CAYm2)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Mr. Tamil Vendan D	Development of eco-friendly composite material using natural fibre	6 Months	1.95	1.95	Journal published in SCI journal.
Mr. Saravanan R	Performance study of Vertical axis wind Turbine Blades	6 Months	0.90	0.60	Design patent granted
Mr. Arulmozhinathan T	Bio – Inspired landing gear for UAV's	6 Months	0.60	0.60	Product developed
			Amount received (Rs.): 3.45		

(CAYm3)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Dr. Ganesh M	Experimental investigation of aircraft wing spar to enhance the fatigue life	12 months	0.82	0.80	Product was developed
Mr. Arun Raja K K	Design, Analysis and Fabrication of 3D printed propeller for VTOL	6 Months	0.95	0.95	Journal was published in Scopus indexed journal
			Amount received (Rs.): 1.77		

Total amount (Lacs) received for the past 3 years : 6.07

PART D: Laboratory Infrastructure in the Department

(Data to be filled in for the Department)

D1. Adequate and Well-Equipped Laboratories, and Technical Manpower

Table No.D1.1: List of laboratories and technical manpower.

Sr. No	Name of the Laboratory	Number of students per set up(Batch Size)	Name of the Important Equipment	Weekly utilization status(all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical staff	Designation	Qualification
1	Aircraft Structures Laboratory	30	•Wagner Beam •Tension Beam Set up. •Constant strength Beam with Test Rig •Shear center for open	06 Hours	Mr.Krishnan R	Lab Technician	D.M.E.
2	Aerodynamics Laboratory	30	•Low Speed Wind Tunnel • Blower balance •Water Flow channel with models •Hele – shaw apparatus	06 Hours	Mr.Madhusoodhanan T K	Aircraft Technician	D.M.E.
3	Propulsion Laboratory	30	•Turbojet Engine •Free/ Forced Convective Heat transfer setup •Valve timing disc • Cascade Wind Tunnel	06 Hours	Mr. Krishnan R	Lab Technician	D.M.E.
4	Aero Engine and Airframe Laboratory	30	•Aircraft Piston engine with propeller •TIG welding machine •MIG Welding Machine •Spot Welding machine	06 Hours	Mr.Siva Kumar P	Lab Technician	I.T.I.
5	Aircraft Systems Laboratory	30	•Serviceable aircraft. •Adjustable spirit level •Hydraulic Jacks (Screw Jack) • Trestle adjustable •Cable	06 Hours	Mr.Madhusoodhanan T K	Aircraft Technician	D.M.E.
6	CAD Laboratory	30	•Computer nodes (HP 2480 DX/Elite 7100/HP 280 I5) •Modeling Packages (CATIA V5 / Ansys/CREO) •UPS	06 Hours	Mr. Senthil Kumar S	Hardware Engineer	D.C.E.
7	Strength of Materials Laboratory	30	•UTM of minimum 400 KN capacity •Rockwell Hardness Tester • Vicker's Hardness Tester •Brinnel Hardness	06 Hours	Mr.Siva Kumar P	Lab Technician	I.T.I.
8	Thermodynamics Laboratory	30	•Parallel and counter flow heat exchanger test rig •Bomb Calorimeter • Vapour compression refrigeration test rig	06 Hours	Mr. Krishnan R	Lab Technician	D.M.E.
9	UAV and Aeromodelling Laboratory	30	•Quadcopter kit •Hexacopter kit • Flight Controllers (KK board/Pixhawk /APM) •Multiple charger •RC Simulator	06 Hours	Mr. Senthil Kumar S	Hardware Engineer	D.C.E.

D2. Safety Measures in Laboratories

Table No. D2.1: List of various safety measures in laboratories.

Sr. No	Laboratory Name	Safety Measures
1	Aircraft Structures Laboratory	1.Fire safety (fire extinguisher) 2.First Aid Box

2	Aerodynamics Laboratory	1.Fire safety (fire extinguisher) 2.First Aid Box 3.Emergency power cutoff
3	Propulsion Laboratory	1.Fire safety (fire extinguisher) 2.First Aid Box 3.Check fuel lines, valves, and connections for leaks.
4	Aircraft Systems Laboratory	1.Fire safety (fire extinguisher) 2.First Aid Box 3.Ensure the aircraft is stable and secure before jacking
5	CAD Laboratory	1.Fire safety (fire extinguisher) 2.First Aid Box 3.UPS backup -30 kVA 4.Ensure Proper Electrical Earthing
6	Strength of Materials Laboratory	1.Fire safety (fire extinguisher) 2.First Aid Box 3.Handle impact testing equipment with caution 4.Inspect Universal Testing Machine before operation
7	Thermodynamics Laboratory	1.Fire safety (fire extinguisher) 2.First Aid Box 3.Follow proper startup and shutdown procedures
8	Aero Engine and Airframe Laboratory	1.Fire safety (fire extinguisher) 2.First Aid Box 3.Hand gloves 4.Welding goggles
9	UAV and Aero Modelling Laboratory	1.Fire safety (fire extinguisher) 2.First Aid Box 3.Use cutting tools, drills, and hand tools carefully 4.Inspect batteries for swelling, damage, or leakage before use 5.Disconnect batteries immediately after testing or flying operations
10	Project Laboratory	1.Fire safety (fire extinguisher) 2.First Aid Box 3.Emergency power cutoff

D3. Project Laboratory/Research Laboratory

The Project Laboratory is a dedicated facility designed to support experiential learning, innovation, and research activities in the field of Aeronautical Engineering. The laboratory provides a well-equipped and technology-enabled environment that enables students to apply theoretical concepts to real-time engineering problems, thereby enhancing their practical skills and creativity.

The laboratory plays a significant role in facilitating project-based learning, allowing students to conceptualize, design, develop, and validate engineering solutions aligned with program outcomes. It also supports final year projects, mini-projects, product development for Hackathons, interdisciplinary research, and consultancy activities, thereby fostering innovation and technical competency among students.

The facility is equipped with advanced tools and resources to cater to both fundamental and advanced applications, ensuring alignment with current industry practices and emerging technologies.

Facilities Available:

- Material development and testing facilities
- Software tools for design and analysis
- 3D Printers for rapid prototyping
- Welding machines (TIG, MIG, and ARC) for fabrication
- Subsonic wind tunnel for aerodynamic testing
- Drone development kits for UAV design and assembly
- Drone simulator for flight training and skill development

The laboratory is continuously upgraded to meet evolving technological requirements and to enhance students' exposure to industry-relevant tools and practices.

S.No	Name of the Laboratory
1.	Project Lab
2.	Center of Excellence in Drone Technology
3.	Center of Excellence in CAD
4.	Start ups 1. Flyers Drone Tech Pvt Ltd. 2. Magizh Engineering Services LLP.

Utilization of project laboratories/research laboratories /center of excellence:

S. No.	Facility	Utilization	Relevance to POs/PSOs
1	Project Laboratory	Final-year projects, Mini-projects, Prototype development, additive manufacturing, UAV fabrication, Hackathons, Product development, Consultancy activities, and Startup initiatives.	PO1, PO2, PO3, PO4, PO5, PO8, PO9, PO10, PO11; PSO1, PSO2
2	Centre of Excellence in Drone Technology	UAV design and development, Drone assembly, Flight testing, DGCA-RPTO training support, Disaster management drone projects, Agricultural drone applications, Competitions, internships, Faculty Development Programs and Research activities.	PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO9, PO10, PO11; PSO1, PSO2
3	Centre of Excellence in CAD	CAD modeling, Simulation, structural and Aerodynamic analysis, Reverse engineering, Product design, Certification training, Industry projects, Competitions, and Research work.	PO1, PO2, PO3, PO4, PO5, PO8, PO9, PO11; PSO1, PSO2

Centre of Excellence in Drone Technology

The **Centre of Excellence in Drone Technology** serves as a dedicated platform for advancing education, research, innovation, and skill development in Unmanned Aerial Systems (UAS). The centre is equipped with facilities for UAV design, fabrication, system integration, programming, simulation, flight testing, and autonomous operations. It supports student projects, interdisciplinary research, industry collaborations, consultancy activities, and entrepreneurship initiatives in domains such as surveillance, disaster management, precision agriculture, aerial mapping, inspection, and logistics. The centre enables experiential learning and fosters the development of industry-ready competencies in emerging drone technologies.

Centre of Excellence in CAD

The **Centre of Excellence in Computer-Aided Design (CAD)** provides a state-of-the-art environment for engineering design, product development, simulation, and digital manufacturing. Equipped with industry-standard CAD/CAE software tools, the centre facilitates advanced training in 3D modeling, assembly design, engineering analysis, drafting, reverse engineering, and design optimization. It supports student projects, research activities, prototyping, consultancy assignments, and industry-oriented training programs, thereby enhancing design proficiency and preparing students for contemporary engineering and manufacturing challenges.

Project Lab Outcome

S.No	Project Title	Laboratory Utilization
1.	Design, Fabrication, and Integration of Flight Components in a 3D-Printed and Aluminium Quadcopter Frame with Composite Canopy	CAD modeling using software, structural design, 3D printing of UAV components, aluminium frame fabrication, composite canopy manufacturing, integration of flight electronics, performance evaluation, and prototype testing.
2.	Solar Powered 3D Printed UAV to Enhance Flight Duration	Utilized for lightweight UAV design, additive manufacturing of airframe components, solar panel integration, endurance testing, and performance optimization for enhanced flight duration.
3.	Performance Study of Bio-inspired Propeller Geometry for Efficient Flight of Swarm Drones	Utilized for the design, modeling, fabrication, and experimental evaluation of bio-inspired drone propellers based on natural flight mechanisms such as bird wings and insect flight. The laboratory supported CAD modeling, aerodynamic analysis, 3D printing of propeller prototypes, thrust and efficiency testing using a propeller thrust testing rig, data acquisition, and performance comparison with conventional propellers, and optimization for swarm drone applications. Students investigated the effects of propeller geometry on thrust, power consumption, flight endurance, and swarm flight efficiency.

Photo of Center of Excellence in Drone Technology

PART E: First Year faculty and financial Resources

(Data to be filled in for the first year course faculty and budget allocation and utilization)

E1. First Year Student-Faculty Ratio (FYSFR)

Table No. E1.1: FYSFR details.

Year	Sanctioned intake of all UG programs (S4)	No. of required faculty (RF4= S4/20)	No. of faculty members in Basic Science Courses & Humanities and Social Sciences including Management courses (NS1)	No. of faculty members in Engineering Science Courses (NS2)	Percentage= No. of faculty members ((NS1*0.8) + (NS2*0.2))/(No. of required faculty (RF4)); Percentage= ((NS1*0.8) +(NS2*0.2))/RF
2023-24(CAYm2)	1230	62	59	29	85

2024-25(CAYm1)	1290	64	69	37	98
2025-26(CAY)	1440	72	69	37	87

E2. Budget Allocation, Utilization, and Public Accounting at Institute Level

Table No. E2.1: Budget and actual expenditure incurred at Institute level.

Items	Budgeted in 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Infrastructure Built-Up	110000000	108804118	100000000	105905724.4	100000000	109939166	110000000	118964822.4
Library	9600000	9288840	9000000	8993601	11500000	11390000	11500000	11305115
Laboratory equipment	23300000	22000407.31	21800000	21365726	18300000	17932180	11500000	11274625
Teaching and non-teaching staff salary	260000000	262430222	260000000	253357508	260000000	252639286	240000000	243340452
Outreach Programs	230000	225516	220000	213488	1350000	1323044	1500000	1400000
R&D	30000000	28588782	16000000	15863897	12500000	12376980	15000000	15110073
Training, Placement and Industry linkage	22000000	22223953	20000000	21633489.58	7000000	6538615	1500000	1506200
SDGs	2600000	2567279	2500000	2483205.1	2000000	1996698.09	800000	774168
Entrepreneurship	800000	800124	650000	667149	475000	483792	110000	113112
Others, specify	72500000	72744688.57	53100000	55254346.35	48500000	50524739.46	49300000	51349951.1
Total	**531030000**	**529673929.88**	**483270000**	**485738134.43**	**461625000**	**465144500.55**	**441210000**	**455138518.5**

E3. Budget Allocation, Utilization, and Public Accounting at Program Specific Level

Table No. E3.1: Budget and actual expenditure incurred at program level.

Items	Budgeted in 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Laboratory equipment	200000	184658	200000	174685	200000	175800	365000	353689
Software	275000	264500	275000	233680	250000	228400	450000	354884
SDGs	125000	122650	100000	98450	100000	83365	100000	63850
Support for faculty development	150000	135932	100000	90416	100000	95846	100000	84600

R & D	300000	286500	300000	280900	300000	268500	150000	145896
Industrial Training, Industry expert, Internship	250000	185400	250000	205460	250000	233258	40000	39568
Miscellaneous Expenses	75000	72460	75000	70120	75000	64815	75000	61550
Total	**1375000**	**1252100**	**1300000**	**1153711**	**1275000**	**1149984**	**1280000**	**1104037**