NATIONAL BOARD OF ACCREDITATION

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

Program Name : Mechanical Engineering	**Discipline**: Engineering & Technology
Level : Under Graduate	**Tier**: 2
Application No: 11542	**Date of Submission**: 05-02-2026

PART A- Profile of the Institute

A1.Name of the Institute: AAA COLLEGE OF ENGINEERING AND TECHNOLOGY	
Year of Establishment : 2013	Location of the Institute: Near Amathur Sivakasi Tamil Nadu
A2. Institute Address:AAA COLLEGE OF ENGINEERING AND TECHNOLOGY,AMATHUR VILLAGE,SIVAKASI,VIRUDHUNAGAR DISTRICT,TAMILNADU, 626 005.	
City:Virudhunagar	State:Tamil Nadu
Pin Code:626005	Website:www.aaaenggcoll.ac.in
Email:aaaengineeringcollege@gmail.com	Phone No(with STD Code):04562-251111
A3. Name and Address of the Affiliating University (if any):	
Name of the University : ANNA UNIVERSITY CHENNAI	City: Chennai
State : Tamil Nadu	Pin Code: 600025
A4. Type of the Institution: Non-Autonomous (Affiliated)	
A5. Ownership Status: Self financing	

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

- No. of UG programs: **8**
- No. of PG programs: **1**

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	Engineering & Technology	UG	Artificial Intelligence and Data Science	2023	--	Artificial Intelligence and Data Science
2	Engineering & Technology	UG	Civil Engineering	2013	--	Civil Engineering
3	Engineering & Technology	PG	Computer Science and Engineering	2025	--	Computer Science and Engineering
4	Engineering & Technology	UG	Computer Science and Engineering	2013	--	Computer Science and Engineering
5	Engineering & Technology	UG	Computer Science and Engineering (Cyber Security)	2023	--	Computer Science and Engineering (Cyber Security)
6	Engineering & Technology	UG	Electrical & Electronics Engineering	2013	--	Electrical and Electronics Engineering
7	Engineering & Technology	UG	Electronics & Communication Engineering	2013	--	Electronics and Communication Engineering
8	Engineering & Technology	UG	Information Technology	2023	--	Information Technology
9	Engineering & Technology	UG	Mechanical Engineering	2013	--	Mechanical Engineering

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
Mechanical Engineering	No	Mechanical 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
1	Mechanical Engineering	UG	2013 / --	60	No	NA	60	2013	Southern/1-44639934036 /2025/EOA	Granted accreditation for 3 years for the period (specify period)	2023	2026	1

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 :	Dr.S.S.Saravanakumar
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	60	60
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	57	47	53	44	37	32	36

N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	3	11	12	5	17	9
N3=Separate division if any	0	0	0	1	1	3	1
N4=Total no. of students admitted in the 1st year via all supernumerary quotas	0	0	0	0	0	0	0
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	57	50	64	57	43	52	46

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	57	0	95.00
2024-25 (CAYm1)	60	47	0	78.33
2023-24 (CAYm2)	60	53	0	88.33

Average [(ER1 + ER2 + ER3) / 3] = 87.22≡ 17.00

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).	65.00	77.00	69.00
B=No. of students who graduated from the program in the stipulated course duration	24.00	32.00	31.00
Success Rate (SR)= (B/A) * 100	36.92	41.56	44.93

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 41.14

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)	6.04	5.63	6.11
Y=Total no. of successful students	41.00	45.00	40.00
Z=Total no. of students appeared in the examination	47.00	53.00	44.00
API [X*(Y/Z)]	5.27	4.78	5.55

Average API[(AP1+AP2+AP3)/3] : 5.20

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)	5.40	5.08	6.30
Y=Total no. of successful students	51.00	49.00	39.00

Z=Total no. of students appeared in the examination	56.00	52.00	39.00
API [X * (Y/Z)]	4.92	4.79	6.30

Average API [(AP1 + AP2 + AP3)/3] : 5.34

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)	6.90	7.09	6.61
Y=Total no. of successful students	49.00	39.00	48.00
Z=Total no. of students appeared in the examination	49.00	39.00	48.00
API [X*(Y/Z)]:	6.90	7.09	6.61

Average API [(AP1 + AP2 + AP3)/3] : 6.87

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	65.00	77.00	69.00
X=No. of students placed	37.00	44.00	31.00
Y=No. of students admitted to higher studies	1.00	0.00	1.00
Z= No. of students taking up entrepreneurship	1.00	1.00	1.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	60.00	58.44	47.83

Average Placement Index = (P_1 + P_2 + P_3)/3: 55.42 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	Dr.M.Sekar	XXXXXXX53L	M.E. and Ph.D.	Kyungpook National University, South Korea	Production Engineering	02/07/2018	7.6	Professor	Professor	02/07/2018	Regular	Yes		No
2	Dr.G.Vairamuthu	XXXXXXX19G	M.E. and Ph.D.	Anna University	Thermal Engineering	10/07/2017	8.6	Associate Professor	Associate Professor	10/07/2017	Regular	Yes		No

3	Dr.P.S.R.Senthil Maharaj	XXXXXXX69R	M.E. and Ph.D.	Anna University	CAD / CAM	20/06/2014	11.7	Assistant Professor	Associate Professor	01/08/2024	Regular	Yes		No
4	Dr.R.Meby Selvaraj	XXXXXXX48M	M.E. and Ph.D.	Anna University	CAD / CAM	03/06/2015	10.7	Assistant Professor	Assistant Professor		Regular	Yes		No
5	Dr.M.Kaliraj	XXXXXXX77L	M.E. and Ph.D.	Anna University	CAD / CAM	11/06/2014	11.7	Assistant Professor	Assistant Professor		Regular	Yes		No
6	Mr.P.C.Rajarajan	XXXXXXX61M	M.E.	Anna University	Manufacturing Engineering	01/06/2015	10.7	Assistant Professor	Assistant Professor		Regular	Yes		No
7	Dr.S.S.Saravanakumar	XXXXXXX22F	M.E. and Ph.D.	Anna University	Manufacturing Engineering	02/01/2026	0	Professor	Professor	02/01/2026	Regular	Yes		Yes
8	Mr.S.Balamurugan	XXXXXXX30A	M.E.	Anna University	CIM	03/06/2016	9.7	Assistant Professor	Assistant Professor		Regular	Yes		No
9	Dr.R.Selvabharathi	XXXXXXX41D	M.E. and Ph.D.	Anna University	Engineering Design	22/08/2022	3.4	Associate Professor	Professor	25/09/2023	Regular	No	31/12/2025	No
10	Mr.A.Vignesh Moorthy Pandian	XXXXXXX83H	M.E.	Anna University	Thermal Engineering	03/07/2017	8.6	Assistant Professor	Assistant Professor		Regular	Yes		No
11	Mr.M.Nagendran	XXXXXXX14G	M.E.	Anna University	CAD	03/01/2020	6	Assistant Professor	Assistant Professor		Regular	Yes		No
12	Mr.M.Karthikeyan	XXXXXXX47D	M.E.	Anna University	Manufacturing Engineering	19/04/2023	2.9	Assistant Professor	Assistant Professor		Regular	Yes		No
13	Mr.V.S.Chakravarthy	XXXXXXX49G	M.E.	Anna University	Energy Engineering	10/06/2024	1.7	Assistant Professor	Assistant Professor		Regular	Yes		No
14	Mrs.V.S.Lakshmi Priya	XXXXXXX48R	M.Tech	SRM UNIVERSITY	CAD	11/12/2024	1.1	Assistant Professor	Assistant Professor		Regular	Yes		No
15	Mr.M.S.Zakir Hussain	XXXXXXX15G	M.E.	Anna University	Production Engineering	21/12/2019	4.5	Assistant Professor	Assistant Professor		Regular	No	15/06/2024	No
16	Dr.G.Manikandaraja	XXXXXXX07M	M.E. and Ph.D.	Anna University	CAD / CAM	01/06/2016	8	Assistant Professor	Assistant Professor		Regular	No	28/06/2024	No
17	Dr.P.Seeni Kannan	XXXXXXX11E	M.E. and Ph.D.	Anna University	Thermal Engineering	27/09/2017	6.4	Professor	Professor	27/09/2017	Regular	No	22/02/2024	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	64	66	66
UG1.C	66	66	65
UG1.D	66	65	66
UG1: Mechanical Engineering	**196**	**197**	**197**
DS=Total no. of students in all UG and PG programs in the Department	196	197	197
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=** 196	**S2=** 197	**S3=** 197
DF=Total no. of faculty members in the Department	12	12	13
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=** 12	**F2=** 12	**F3=** 13
FF=The faculty members in F who have a 100% teaching load in the first-year courses	2	2	3
Student Faculty Ratio (SFR)=S/(F-FF)	**SFR1= 19.60**	**SFR2= 19.70**	**SFR3= 19.70**
Average SFR for 3 years	**SFR= 19.67**		

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)	5	7	9.00	21.67
2024-25(CAYm1)	5	7	9.00	21.67
2023-24(CAYm2)	5	8	9.00	22.78

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	1.00	2.00	2.00	6.00	9.00
2024-25	1.00	2.00	2.00	2.00	6.00	8.00
2023-24	1.00	1.00	2.00	2.00	6.00	10.00
Average	RF1=1.00	AF1=1.33	RF2=2.00	AF2=2.00	RF2=6.00	AF2=9.00

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.A.Balachandar	Manager	Devendran Plastic Private Limited, Sivakasi	ME3393-Manufacturing Processes	8.00
2	Mr.A.Balachandar	Manager	Devendran Plastic Private Limited, Sivakasi	OIM353 - Production Planning and Control	8.00
3	Mr.A.Balachandar	Manager	Devendran Plastic Private Limited, Sivakasi	ME3493 - Manufacturing Technology	8.00
4	Mr.A.Balachandar	Manager	Devendran Plastic Private Limited, Sivakasi	ME3492 - Hydraulics and Pneumatics	8.00
5	Mr.A.Balachandar	Manager	Devendran Plastic Private Limited, Sivakasi	Plastic Engineering	20.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.B.Gopalakrishnan	Founder	MS Fire & Safety Private Limited, Rajapalayam	GE3792 - Industrial Management	8.00
2	Mr.B.Gopalakrishnan	Founder	MS Fire & Safety Private Limited, Rajapalayam	ME3391 – Engineering Thermodynamics	8.00
3	Mr.B.Gopalakrishnan	Founder	MS Fire & Safety Private Limited, Rajapalayam	CME355 - Material handling and solid processing Equipment	8.00
4	Mr.B.Gopalakrishnan	Founder	MS Fire & Safety Private Limited, Rajapalayam	MX3089 - Industrial Safety	6.00
5	Mr.B.Gopalakrishnan	Founder	MS Fire & Safety Private Limited, Rajapalayam	Risk Assessment and Emergency Management	20.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.A.Balachandar	Manager	Devendran Plastic Private Limited, Sivakasi	ME3393-Manufacturing Processes	8.00
2	Mr.A.Balachandar	Manager	Devendran Plastic Private Limited, Sivakasi	OIM353 - Production Planning and Control	8.00
3	Mr.A.Balachandar	Manager	Devendran Plastic Private Limited, Sivakasi	ME3493 - Manufacturing Technology	8.00
4	Mr.A.Balachandar	Manager	Devendran Plastic Private Limited, Sivakasi	ME3492 - Hydraulics and Pneumatics	8.00
5	Mr.A.Balachandar	Manager	Devendran Plastic Private Limited, Sivakasi	Plastic Engineering	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	18	15	13
2	No. of peer reviewed conference papers published	13	11	10
3	No. of books/book chapters published	4	1	1

C7. Sponsored Research Project

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

(CAYm1)

(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
Dr.G.Vairamuthu		Mechanical Engineering	Design and fabrication of eco-friendly and cost effective portable air cooler	TNSCST	1 year	0.08
						Amount received (Rs.):0.08

(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.A.Vigneshmoorthypandian		Mechanical Engineering	Affordable and water conservation dishwasher	TNSCST	1 year	0.08
						Amount received (Rs.):0.08

Total Amount (Lacs) Received for the Past 3 Years: 0.16

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)

(CAYm2)

(CAYm3)

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

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
Dr.R.Meby Selvaraj	Conversion of a Scrap IC Engine Bike into a Solar-Powered Electric Bike	6 Months	0.15	0.15	Development of prototype and enhancement of students' knowledge in renewable energy systems.
Mr.P.C.Rajarajan	Design and Development of a Chat Communication System Using ESP32	6 Months	0.08	0.08	Development of prototype and enhancement of students' knowledge in IoT
Dr.G.Vairamuthu	Design and Fabrication of a Portable Air Cooler with Energy Efficient Cooling Mechanism	6 Months	0.13	0.13	Development of prototype and enhancement of students' knowledge in thermal systems and energy-efficient design
Mr.P.C.Rajarajan	Surface Modification of Steel through Laser Cladding Techniques	12 Months	0.12	0.12	Publication of research article
Mr.S.Balamurugan	Laser-Based Surface Texturing of Ti-6Al-4V for Functional Surface Enhancement	12 Months	0.12	0.12	Publication of research article
Mr.M.Karthikeyan	Microstructural and Mechanical Property Enhancement of WAAM-Fabricated Alloys	12 Months	0.12	0.12	Publication of research article
Mr.M.Nagendran	Investigation of Compressive Properties in Fiber-Reinforced Composite Pipes	5 Months	0.12	0.12	Publication of research article
Mr.V.S.Chakravarthy	Development of Plasma Electrolytic Oxide Coatings on Magnesium Alloys	5 Months	0.12	0.12	Publication of research article
Dr.P.S.R.Senthil Maharaj	Structural Performance of Composite Pipes under Compression	12 months	0.48	0.48	Publication of research article
Dr.R Selvabharathi	Tribological and Microstructural Analysis of Dip-Coated SW/PVA/PE/AlN Nanocomposites	8 months	0.20	0.20	Publication of research article
Dr.R Selvabharathi	Mechanical Enhancement of Ni Alloy after Laser Welding and Cryogenic Treatment	8 months	0.10	0.10	Publication of research article
Dr.R Selvabharathi	Microstructure and Tribological Behavior of Plasma-Sprayed Ti/Mg Aluminum Alloy	8 months	0.20	0.20	Publication of research article
Dr.P.S.R.Senthil Maharaj	FEA and Experimental Study of Patient-Specific 3D Printed Finger Splints	8 months	0.20	0.20	Publication of research article
Dr.P.S.R.Senthil Maharaj	Microstructural Analysis of SiC-Reinforced Basalt Fabric Composites	8 months	0.20	0.20	Publication of research article
Dr.P.S.R.Senthil Maharaj	Eco-Friendly Methylene Blue Removal Using Prosopis juliflora Stem Carbon	8 months	0.10	0.10	Publication of research article
Dr.R.Meby Selvaraj	Surface-Grafted Pineapple Fiber on Drilling Damage in Aged Composites	8 months	0.10	0.10	Publication of research article
Dr.M.Kaliraj	Valorization of Ceiba pentandra Shell Waste in PLA Biofilms	8 months	0.20	0.20	Publication of research article
Mr. M.Nagendran	Mechanical and Thermal Enhancement of Glass Fabric/Epoxy Composites via Nanosilica	8 months	0.20	0.20	Publication of research article
			Amount received (Rs.): 2.94		

(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.M.Nagendran	Development of a Solar-Assisted Electric Utility Vehicle Using Dual Photovoltaic Panels.	6 Months	0.18	0.18	Development of prototype and enhancement of students' knowledge in solar energy systems.
Dr.P.S.R.Senthil Maharaj	Design and Development of a Lightweight Prosthetic Femur Bone Using Advanced Materials	6 Months	0.12	0.12	Development of prototype and enhancement of students' knowledge in biomedical materials and product design.
Mr.S.Balamurugan	Design and Performance Analysis of a Vertical Axis Wind Turbine for Low Wind Speed Applications	6 Months	0.10	0.10	Development of prototype and enhancement of students' knowledge in wind energy systems.
Mr.P.C.Rajarajan	Surface Engineering of Steel through Laser Cladding Methods	4 Months	0.04	0.04	Publication of research article
Mr.S.Balamurugan	Micro-Texture Formation on Ti-6Al-4V Using Laser Processing	4 Months	0.04	0.04	Publication of research article
Mr.M.Karthikeyan	Improving Strength and Ductility of WAAM-Fabricated Components	4 Months	0.04	0.04	Publication of research article
Dr.R Selvabharathi	Influence of Dip Coating on IAF/TiO_2/ZrO_2/CNT Nanocomposite Materials	8 months	0.10	0.10	Publication of research article
Dr.R Selvabharathi	Effect of Severe Shot Peening and Ni58Cr20Fe5Mo10 Coating on WAAM Duplex Stainless Steel 2205	8 months	0.20	0.20	Publication of research article
Dr.G.Vairamuthu	Enhancing Daily Yield and Performance of Solar Desalination Systems	8 months	0.10	0.10	Publication of research article
Mr.M.Karthikeyan	Superhydrophobic Surface Engineering of Mild Steel via a Facile Method	8 months	0.10	0.10	Publication of research article
Dr.G.Manikandaraja	Mechanical Behavior of Graphene Oxide–Polymer Blend Nanocomposites	8 months	0.20	0.20	Publication of research article
Mr.M.Kaliraj	Biodegradable Composite Films Reinforced with Ceiba pentandra Shell Powder	8 months	0.20	0.20	Publication of research article
Dr.P.S.R.Senthil Maharaj	Development of Carbon–Flax Bioepoxy Hybrid Composite Bone Plates	8 months	0.20	0.20	Publication of research article
Dr.P.S.R.Senthil Maharaj	Prediction of Tool Wear in AISI 4140 Hard Turning Using LS-SVM	8 months	0.10	0.10	Publication of research article
Dr.P.S.R.Senthil Maharaj	Experimental and Numerical Investigation of Porous PCL Bone Scaffolds	8 months	0.20	0.20	Publication of research article
			Amount received (Rs.): 1.92		

(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
Mr.A.Vignesh Moorthy pandian	Development of an Intelligent Water Monitoring System with GSM-Based Alert Mechanism	6 Months	0.10	0.10	Development of prototype and enhancement of students' practical knowledge in IoT.
Dr.M.Kaliraj	Design and Development of a Self-Balancing Hoverboard with Integrated Safety Handle Mechanism	6 Months	0.12	0.12	Development of prototype and enhancement of students' design, fabrication, and control system skills.
Dr.G.Vairamuthu	Performance Evaluation of a Nanocoated Solar Water Heater	6 Months	0.14	0.14	Prototype development and student learning in solar thermal energy systems
Mr.S.Balamurugan	Development of a Mechanical Pantograph System for Copying and Scaling of Shapes	6 Months	0.16	0.16	Prototype development and student understanding of machine design and mechanisms
Dr.R Selvabharathi	Effect of Low-Pressure Shot Peening on Laser-Welded Ni–4Cu–3Mo/Super Austenitic Steel Joints	8 months	0.20	0.20	Publication of research article
Dr.P.S.R.Senthil Maharaj	Investigation of Fused Zone Mechanics in 3D Pen Printed Components	8 months	0.20	0.20	Publication of research article
Dr.R Selvabharathi	Mechanical and Free Vibration Behavior of Silane-Treated Aluminum–Glass Fiber/Epoxy Laminates	8 months	0.20	0.20	Publication of research article
Dr.R Selvabharathi	Tribological Behavior of Double Shot-Peened and TiAlCr/AlCrSi Plasma-Coated Pure Aluminum Alloy	8 months	0.10	0.10	Publication of research article
Dr.R Selvabharathi	Influence of WCCrCNi Plasma Coating and Shot Peening on AZ31 Magnesium Alloy	8 months	0.10	0.10	Publication of research article
Mr.M.Kaliraj	Mechanical Characterization of Treated Teak Wood–Tamarind Seed Particle Composites	8 months	0.10	0.10	Publication of research article
			Amount received (Rs.): 1.42		

Total amount (Lacs) received for the past 3 years : 6.28

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	Mechatronics Laboratory	30	1. Reciprocating air compressor 2. Numeric UBS 3. 8051 microcontroller trainer kit 4.	6 hours per we	Mr.M.Vijaya Kumar	Lab Technician	DME.
2	Manufacturing Technology Laboratory	30	1. Centre Lathes– 7 Nos 2. Horizontal Milling Machine – 2 No 3. Vertical Milling Machine – 1 No	6 hours per we	Mr.K.Jayabalan	Lab Technician	I.T.I.

3	Fluid Mechanics Laboratory	30	1. Orifice meter 2. Venturimeter 3. Rotometer 4. Pipe friction Apparatus 5. Single	6 hours per we	Mr.M.Vijaya Kumar	Lab Technician	DME.
4	IC Engines Laboratory	30	1. I.C Engine – 2 stroke and 4 stroke model 1 set 2. Apparatus for Flash and Fire Point 1 No. 3.	6 hours per we	Mr.A.Kamal	Lab Technician	ITI., DME.
5	Strength of Materials Laboratory	30	1. UTM of minimum 400 kN capacity 2. Torsion testing machine 3. Hardness testing	6 hours per we	Mr.M.Vijaya Kumar	Lab Technician	DME.
6	Dynamics Laboratory	30	1. Turn table 2. Flywheel and axle system 3. Compound pendulum 4. Bifilar suspension 5.	6 hours per we	Mr.M.Vijaya Kumar	Lab Technician	DME.
7	Metrology & Measurement Laboratory	30	1. Micrometer 2. Vernier Caliper 3. Vernier Height Gauge 4. Vernier depth Gauge 5. Slip	6 hours per we	Mr.K.Jayabalan	Lab Technician	I.T.I.
8	CAD Laboratory	30	1. Intel Core I9 - computer, with suitable graphics facility. 2. A3 size plotter 3. Laser Printer 4.	12 hours per w	Mr.S.Saravanakumar	Lab Technician	DME.
9	CAM Laboratory	30	1. Intel Core I7 - computer, with suitable graphics facility. 2. CNC Lathe 3. CNC milling machine 4.	6 hours per we	Mr.S.Saravanakumar	Lab Technician	DME.
10	Heat & Mass Transfer Laboratory	30	1. Guarded plate apparatus 1 No. 2. Lagged pipe apparatus 1 No. 3. Natural convection-	6 hours per we	Mr.A.Kamal	Lab Technician	ITI., DME.
11	Engineering Practices Laboratory	30	1. Arc welding transformer with cables and holders 2. Welding booth with exhaust facility	20 Hour per W	Mr.K.Jayabalan, Mr.A.K	Lab Technician	I.T.I., ITI., DME.

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Mechatronics Laboratory	• Specific Safety rules in the form of Do's and Don'ts are displayed in the Laboratory. • Students are supposed to wear Lab Coat, Shoes and avoid loose clothing. • First aid box. • Fire extinguishers. • Proper earthing • Electrical Wires are protected by Miniature Circuit Breaker • UPS to control voltage fluctuations
2	Manufacturing Technology Laboratory	• Specific Safety rules in the form of Do's and Don'ts are displayed in the Laboratory. • Students are supposed to wear Lab Coat, Shoes and avoid loose clothing. • First aid box. • Fire extinguishers. • Sand bucket. • Proper earthing
3	Fluid Mechanics Laboratory	• Specific Safety rules in the form of Do's and Don'ts are displayed in the Laboratory. • Students are supposed to wear Lab Coat, Shoes and avoid loose clothing. • First aid box. • Fire extinguishers. • Proper earthing
4	IC Engines Laboratory	• Specific Safety rules in the form of Do's and Don'ts are displayed in the Laboratory. • Students are supposed to wear Lab Coat, Shoes and avoid loose clothing. • First aid box. • Fire extinguishers. • Sand bucket. • UPS to control voltage fluctuations • Proper earthing

5	Strength of Materials Laboratory	• Specific Safety rules in the form of Do's and Don'ts are displayed in the Laboratory. • Students are supposed to wear Lab Coat, Shoes and avoid loose clothing. • First aid box. • Fire extinguishers. • Sand bucket. • Proper earthing
6	Dynamics Laboratory	• Specific Safety rules in the form of Do's and Don'ts are displayed in the Laboratory. • Students are supposed to wear Lab Coat, Shoes and avoid loose clothing. • First aid box. • Fire extinguishers. • Proper earthing
7	Metrology & Measurement Laboratory	• Specific Safety rules in the form of Do's and Don'ts are displayed in the Laboratory. • Students are supposed to wear Lab Coat, Shoes and avoid loose clothing. • First aid box. • Fire extinguishers. • Electrical Wires are protected by Miniature Circuit Breaker • Proper earthing
8	CAD Laboratory	• Specific Safety rules in the form of Do's and Don'ts are displayed in the Laboratory. • Students are supposed to wear Lab Coat, Shoes and avoid loose clothing. • First aid box. • Fire extinguishers. • Anti-Virus • Proper earthing • Electrical Wires are protected by Miniature Circuit Breaker • UPS to control voltage fluctuations
9	CAM Laboratory	• Specific Safety rules in the form of Do's and Don'ts are displayed in the Laboratory. • Students are supposed to wear Lab Coat, Shoes and avoid loose clothing. • First aid box. • Fire extinguishers. • Anti-Virus. • Proper earthing • Electrical Wires are protected by Miniature Circuit Breaker • UPS to control voltage fluctuations
10	Heat & Mass Transfer Laboratory	• Specific Safety rules in the form of Do's and Don'ts are displayed in the Laboratory. • Students are supposed to wear Lab Coat, Shoes and avoid loose clothing. • First aid box. • Fire extinguishers. • Sand bucket. • Proper earthing
11	Engineering Practices Laboratory	• Specific Safety rules in the form of Do's and Don'ts are displayed in the Laboratory. • Students are supposed to wear Lab Coat, Shoes and avoid loose clothing. • First aid box. • Fire extinguishers. • Sand bucket. • Proper earthing

D3. Project Laboratory/Research Laboratory

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)	540	27	23	12	77

2024-25(CAYm1)	600	30	25	12	75
2025-26(CAY)	660	33	30	17	83

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	6400000	6371018	5450000	5431427	3100000	2958794	9000000	8608272
Library	750000	690013	1500000	1554307	900000	802388	700000	654410
Laboratory equipment	6700000	5218340	6700000	6630041	8400000	8367314	6000000	5966550
Teaching and non-teaching staff salary	55000000	54179537	46500000	46760295	37600000	37557197	31000000	30935351
Outreach Programs	1000000	829257	1000000	1185359	2200000	2174073	500000	300242
R&D	400000	348920	400000	362623	2120000	2119972	300000	225928
Training, Placement and Industry linkage	3000000	2981257	2900000	2853423	2500000	2430991	900000	835512
SDGs	300000	36133	280000	273845	20000	19136	300000	352196
Entrepreneurship	1000000	761103	200000	190875	200000	150845	200000	180143
Others, specify	35000000	31245288	42380000	41871999	33480000	32014733	28300000	28232982
Total	**109550000**	**102660866**	**107310000**	**107114194**	**90520000**	**88595443**	**77200000**	**76291586**

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	600000	148000	990000	937200	0	0	160000	144043
Software	700000	677162	730000	727929	3000000	3085500	250000	220087
SDGs	50000	47400	35000	32300	25000	27700	25000	24500
Support for faculty development	45000	44000	20000	16000	141000	42000	141000	57500

R & D	75000	50000	350000	329200	985500	247970	960000	247092
Industrial Training, Industry expert, Internship	30000	36000	30000	28399	100000	45650	100000	62500
Miscellaneous Expenses*	6160000	6186493	6886700	6892274	6252000	5767724	6325500	7165054
Total	**7660000**	**7189055**	**9041700**	**8963302**	**10503500**	**9216544**	**7961500**	**7920776**