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**: 1
Application No: 11147	**Date of Submission**: 31-10-2025

PART A- Profile of the Institute

A1.Name of the Institute: SENGUNTHAR ENGINEERING COLLEGE	
Year of Establishment : 2001	Location of the Institute: Tiruchengode
A2. Institute Address:Kosavampalayam Village, Kumaramangalam Post, Tiruchengode.	
City:Namakkal	State:Tamil Nadu
Pin Code:637205	Website:www.scteng.co.in
Email:principal@scteng.co.in	Phone No(with STD Code):4288-255715
A3. Name and Address of the Affiliating University (if any):	
Name of the University : Anna University	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: **12**
- No. of PG programs: **5**

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	2022	--	Artificial Intelligence and Data Science
2	Engineering & Technology	UG	Artificial Intelligence and Machine Learning	2025	--	Artificial Intelligence and Machine Learning
3	Engineering & Technology	UG	Civil Engineering	2004	--	Civil Engineering
4	Engineering & Technology	PG	Computer Science and Engineering	2010	--	Computer Science and Engineering
5	Engineering & Technology	UG	Computer Science and Engineering	2001	--	Computer Science and Engineering
6	Engineering & Technology	UG	Computer Science and Engineering (Cyber Security)	2022	--	Computer Science and Engineering (Cyber Security)
7	Engineering & Technology	UG	Electrical & Electronics Engineering	2001	--	Electrical and Electronics Engineering
8	Engineering & Technology	UG	Electronics & Communication Engineering	2001	--	Electronics and Communication Engineering
9	Engineering & Technology	UG	Information Technology	2022	--	Information Technology
10	Engineering & Technology	UG	Mechanical Engineering	2004	--	Mechanical Engineering
11	Engineering & Technology	UG	Medical Electronics	2022	--	Medical Electronics
12	Engineering & Technology	PG	Medical Electronics	2022	--	Medical Electronics
13	Engineering & Technology	UG	Pharmaceutical Engineering and Technology	2023	--	Pharmaceutical Engineering and Technology
14	Engineering & Technology	UG	Robotics and Automation	2022	--	Robotics and Automation
15	Engineering & Technology	PG	Structural Engineering	2011	--	Civil Engineering
16	Engineering & Technology	PG	VLSI Design	2010	--	Electronics and Communication Engineering
17	Management	PG	Master of Business Administration	2004	--	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
Mechanical Engineering	Yes	Mechanical Engineering	UG
Electronics and Communication Engineering	Yes	Electronics & Communication Engineering	UG
Electrical and Electronics Engineering	No	Electrical & Electronics Engineering	UG
Civil Engineering	No	Civil 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)

Allied Department/Cluster Name	Program Name	Program Level
Robotics and Automation	Robotics and Automation	UG

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	Mechanical Engineering	UG	2004 / --	60	No	NA	60	2004	1-41103764055	Applying first time	--	--	0	4

List of the Allied Departments/Cluster and Programs:

SR.NO.	ALLIED DEPARTMENT NAME	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	Robotics and Automation	Robotics and Automation	UG	2022 / --	60	Yes	2025	30	2025	1-10980920266	Eligible but not applied	--	--	0	4

Sanctioned Intake for Last Five Years for the Robotics and Automation	
Academic Year	**Sanctioned Intake**
2025-26	30
2024-25	60
2023-24	60
2022-23	60
2021-22	0
2020-21	0

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

A. Name of the HoD :	Dr.G.Kathiresan
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	53	14	25	16	11	16	13
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	2	4	3	1	21	1
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	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.	53	16	29	19	12	37	14

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	53	0	88.33
2024-25 (CAYm1)	60	14	0	23.33
2023-24 (CAYm2)	60	25	0	41.67

Average [(ER1 + ER2 + ER3) / 3] = 51.11≡ 8.00

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).	61.00	81.00	61.00
B=No. of students who graduated from the program in the stipulated course duration	9.00	15.00	11.00
Success Rate (SR)= (B/A) * 100	14.75	18.52	18.03

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 17.10

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)	7.26	7.34	6.46
Y=Total no. of successful students	14.00	21.00	15.00
Z=Total no. of students appeared in the examination	14.00	22.00	15.00
API [X*(Y/Z)]	7.26	7.01	6.46

Average API[(AP1+AP2+AP3)/3] : 6.91

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)	7.64	7.54	7.64
Y=Total no. of successful students	23.00	18.00	10.00
Z=Total no. of students appeared in the examination	25.00	18.00	11.00
API [X * (Y/Z)]	7.03	7.54	6.95

Average API [(AP1 + AP2 + AP3)/3] : 7.17

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)	7.55	7.83	7.58
Y=Total no. of successful students	18.00	10.00	20.00

Z=Total no. of students appeared in the examination	18.00	10.00	28.00
API [X*(Y/Z)]:	7.55	7.83	5.41

Average API [(AP1 + AP2 + AP3)/3] : 6.93

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	61.00	81.00	61.00
X=No. of students placed	12.00	20.00	11.00
Y=No. of students admitted to higher studies	0.00	0.00	1.00
Z= No. of students taking up entrepreneurship	0.00	0.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	19.67	24.69	19.67

Average Placement Index = (P_1 + P_2 + P_3)/3: 21.34 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.Selvakumar	XXXXXXX81D	M.E. and Ph.D.	Anna University	Composite Materials	01/06/2005	20.5	Lecturer	Professor	01/12/2021	Regular	Yes		No
2	Dr.B.Kirubakaran	XXXXXXX90B	M.E. and Ph.D.	Anna University	Mechanical Engineering	21/08/2025	0.2	Associate Professor	Associate Professor	21/08/2025	Regular	Yes		No
3	Mr.N.Thiru Senthil Adhiban	XXXXXXX90N	M.E.	Anna University	Engineering Design	13/06/2011	14.4	Assistant Professor	Assistant Professor		Regular	Yes		No
4	Mr.M.Vignesh	XXXXXXX96M	M.E.	Anna University	Energy Engineering	25/06/2025	0.4	Assistant Professor	Assistant Professor		Regular	Yes		No
5	Mr.R.Rajavel	XXXXXXX77C	M.E.	Anna University	Thermal Engineering	25/06/2025	0.4	Assistant Professor	Assistant Professor		Regular	Yes		No
6	Mr.P.Jagadeeswaran	XXXXXXX26B	M.E.	Anna University	CAD/CAM	14/07/2011	13.11	Assistant Professor	Assistant Professor		Regular	No	25/06/2025	No
7	Mr.D.Arumugam	XXXXXXX18G	M.E.	Anna University	Engineering Design	06/06/2014	11.4	Assistant Professor	Assistant Professor		Regular	Yes		No
8	Mr.C.Mohankumar	XXXXXXX39E	M.E.	Anna University	Thermal Engineering	22/06/2015	10.4	Assistant Professor	Assistant Professor		Regular	Yes		No
9	Mr.S.Murugesan	XXXXXXX09F	M.E.	Anna University	Manufacturing Engineering	04/11/2016	8.11	Assistant Professor	Assistant Professor		Regular	Yes		No
10	Mr.N.Saravanan	XXXXXXX34K	M.E.	Anna University	CAD/CAM	28/06/2018	7.4	Assistant Professor	Assistant Professor		Regular	Yes		No
11	Mr.C.Ramesh Kumar	XXXXXXX40M	M.E.	Anna University	Product Design and Development	12/12/2018	6.10	Assistant Professor	Assistant Professor		Regular	Yes		No
12	Mr.N.Ragunath	XXXXXXX68E	M.E.	Anna University	Manufacturing Engineering	12/11/2019	5.11	Assistant Professor	Assistant Professor		Regular	Yes		No
13	Mr.C.Jagadeesh	XXXXXXX70H	M.E.	Anna University	CAD/CAM	25/02/2020	5.4	Assistant Professor	Assistant Professor		Regular	No	25/07/2025	No
14	Mr.C.Karthik	XXXXXXX09A	M.E.	Anna University	Thermal Engineering	22/11/2021	3.6	Assistant Professor	Assistant Professor		Regular	No	13/06/2025	No
15	Mr.A.Anandaraman	XXXXXXX83J	M.E.	Anna University	Thermal Engineering	01/11/2022	2.7	Assistant Professor	Assistant Professor		Regular	No	13/06/2025	No
16	Mr.E.Sivakumar	XXXXXXX39G	M.E.	Anna University	Thermal Engineering	02/05/2023	2.2	Assistant Professor	Assistant Professor		Regular	No	25/07/2025	No
17	Mr.S.Sugumar	XXXXXXX46P	M.E.	Anna University	Manufacturing Engineering	02/05/2023	2.2	Assistant Professor	Assistant Professor		Regular	No	25/07/2025	No
18	Mr.T.T.Rameshkumar Raja	XXXXXXX21M	M.E.	Anna University	Industrial Engineering	03/07/2023	1.11	Assistant Professor	Assistant Professor		Regular	No	25/06/2025	No
19	Dr.G.Kathiresan	XXXXXXX85G	M.E. and Ph.D.	Anna University	Mechanical Engineering	07/07/2025	0.3	Professor	Professor		Regular	Yes		Yes
20	Dr.S.Kesavan	XXXXXXX35B	M.E. and Ph.D.	Anna University	Alternate Fuels	21/08/2024	1.2	Associate Professor	Associate Professor	21/08/2024	Regular	Yes		No

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

Sr.No	Name of the Faculty	PAN No.	APAAR faculty ID*(if any)	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.T.R.Chinnusamy	XXXXXXX11R	NA	M.E. and Ph.D.	Anna University	Mechanical Engineering	01/09/2022	3.1	Professor	Professor	01/09/2022	Regular	Yes		Yes
2	Dr.T.Murali	XXXXXXX18J	NA	M.E. and Ph.D.	VIT University	Mechanical Engineering	22/08/2025	0.2	Assistant Professor	Assistant Professor		Regular	Yes		No

3	Mr.A.Senthilkumar	XXXXXXX89P	NA	M.Tech	Sastra University	Thermal Plant Engineering	01/06/2006	19.5	Assistant Professor	Assistant Professor		Regular	Yes		No
4	Mr.A.B.Madhan	XXXXXXX91R	NA	M.E.	Anna University	CAD/CAM	14/02/2013	10.4	Assistant Professor	Assistant Professor		Regular	No	30/06/2023	No
5	Mrs.P.Saranya	XXXXXXX87F	NA	M.E.	Anna University	Power Systems Engineering	08/06/2009	16.4	Assistant Professor	Assistant Professor		Regular	Yes		No
6	Mr.P.Naveenkumar	XXXXXXX17H	NA	M.E.	Anna University	VLSI Design	04/06/2015	10.4	Assistant Professor	Assistant Professor		Regular	Yes		No
7	Mr.K.Saravanakumar	XXXXXXX63C	NA	M.E.	Anna University	Thermal Engineering	29/03/2016	9.7	Assistant Professor	Assistant Professor		Regular	Yes		No
8	Mr.N.Sathiyaraj	XXXXXXX15A	NA	M.E.	Anna University	Manufacturing Engineering	27/12/2021	3.10	Assistant Professor	Assistant Professor		Regular	Yes		No
9	Mrs.V.Divya	XXXXXXX76J	NA	M.E.	Anna University	Applied Electronics	02/01/2023	2.4	Assistant Professor	Assistant Professor		Regular	No	27/05/2025	No
10	Mr.A.Ananthkumar	XXXXXXX16J	NA	M.E.	Anna University	CAD/CAM	07/01/2023	2.9	Assistant Professor	Assistant Professor		Regular	Yes		No
11	Mr.A.Prabhu	XXXXXXX73G	NA	M.E.	Anna University	Production Engineering	02/05/2023	2.5	Assistant Professor	Assistant Professor		Regular	Yes		No
12	Mrs.C.Kalpana	XXXXXXX69L	NA	M.E.	Anna University	Power Systems Engineering	07/08/2023	2.2	Assistant Professor	Assistant Professor		Regular	Yes		No
13	Mrs.A.Arthi	XXXXXXX68N	NA	M.E.	Anna University	Power Electronics and Drives	19/01/2024	1.3	Assistant Professor	Assistant Professor		Regular	No	30/04/2025	No
14	Mr.S.Aswinth	XXXXXXX46F	NA	M.E.	Anna University	CAD/CAM	22/12/2020	3.4	Assistant Professor	Assistant Professor		Regular	No	30/04/2024	No
15	Mrs.M.E.Dhivya	XXXXXXX02Q	NA	M.E.	Anna University	Thermal Engineering	03/07/2024	1.3	Assistant Professor	Assistant Professor		Regular	Yes		No
16	Mr.P.Krishnamoorthi	XXXXXXX51Q	NA	M.E.	Anna University	Embedded System Technologies	09/12/2021	3.10	Assistant Professor	Assistant Professor		Regular	Yes		No
17	Mrs.B.Asfiya	XXXXXXX89J	NA	M.E.	Anna University	Power Systems Engineering	08/03/2021	3.7	Assistant Professor	Assistant Professor		Regular	No	18/10/2024	No
18	Mr.A.Ravi	XXXXXXX84D	NA	M.E.	Anna University	Product Design and Development	27/12/2021	2.8	Assistant Professor	Assistant Professor		Regular	No	31/08/2024	No
19	P.VIJAYAKUMAR	XXXXXXX24G	NA	M.E.	ANNA UNIVERSITY	POWER ELECTRONICS AND DRIVES	06/11/2024	0.6	Assistant Professor	Assistant Professor		Regular	No	27/05/2025	No

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	62	64	63
UG1.C	64	63	61
UG1.D	63	61	66
UG1: Mechanical Engineering	**189**	**188**	**190**
UG2.B	60	60	62
UG2.C	60	62	0
UG2.D	62	0	0
UG2: Robotics and Automation	**182**	**122**	**62**
DS=Total no. of students in all UG and PG programs in the Department	189	188	190
AS=Total no. of students of all UG and PG programs in allied departments	182	122	62
S=Total no. of students in the Department (DS) and allied departments (AS)	**S1=** 371	**S2=** 310	**S3=** 252
DF=Total no. of faculty members in the Department	13	16	15
AF= Total no. of faculty members in the allied Departments	12	13	14
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	**F1=** 25	**F2=** 29	**F3=** 29
FF=The faculty members in F who have a 100% teaching load in the first-year courses	5	9	4
Student Faculty Ratio (SFR)=S/(F-FF)	**SFR1= 18.55**	**SFR2= 15.50**	**SFR3= 10.08**
Average SFR for 3 years	**SFR= 14.71**		

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)	6	19	18.00	18.89

2024-25(CAYm1)	3	26	15.00	22.33
2023-24(CAYm2)	2	27	12.00	26.67

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	2.00	3.00	4.00	2.00	12.00	20.00
2024-25	1.00	2.00	3.00	1.00	10.00	26.00
2023-24	1.00	2.00	2.00	0.00	8.00	27.00
Average	RF1=1.33	AF1=2.33	RF2=3.00	AF2=1.00	RF2=10.00	AF2=24.33

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	V.Chandraprabhu	Professor	Adama Science and Technology University, Ethiopia	Air-Conditioning System	28.00
2	V.Chandraprabhu	Professor	Adama Science and Technology University, Ethiopia	Computational Fluid Dynamics	26.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	V.Chandraprabhu	Professor	Adama Science and Technology University, Ethiopia	Space Vehicle Design	27.00
2	V.Chandraprabhu	Professor	Adama Science and Technology University, Ethiopia	Propulsion Systems	26.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	S.Mahendran	Managing Director	Agnicut Machine Tools, Chennai	Laser Beam Machining	28.00
2	S.Mahendran	Managing Director	Agnicut Machine Tools, Chennai	Non Traditional Machining Techniques	26.00

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	1	10	14
2	No. of peer reviewed conference papers published	6	10	11
3	No. of books/book chapters published	0	0	0

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.N.Thiru Senthil Adhiban	Mr.C.Mohankumar	Mechanical	Development of a Safety Guard and Chip Collection System for Industrial Cutting Machines	Agnicut Machine Tool, No. 1A, J.J. Street, Ponniyamman Nagar, Kil Ayanambakkam village, Chennai – 600 095. Tamilnadu, India	8month	0.40
						Amount received (Rs.):0.40

(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.M.Selvakumar	Mr.N.Thiru Senthil Adhiban	Mechanical	Design and Development of a Low-Cost Precision Cutting Fixture for AgniCut Machine Tools	Agnicut Machine Tool, No. 1A, J.J. Street, Ponniyamman Nagar, Kil Ayanambakkam village, Chennai – 600 095. Tamilnadu, India	8month	0.58
						Amount received (Rs.):0.58

(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.C.Mohankumar	Nil	Mechanical	360 Rotating Fire Protection System	TNSCST	6 month	0.08
						Amount received (Rs.):0.08

Total Amount (Lacs) Received for the Past 3 Years: 1.06

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
Dr.M.Selvakumar	Mr.T.T.Rameshkumar Raja, Mr.C. Karthik, Mr.A. Anandharaman, Mr.D.Arumugam	Mechanical	Waterjet Sludge Removal system	Sakthi Waterjet, Sf no. 135/2A1, Pachainayagi street, NPS Nagar Road, Neelambur, Sulur (TK), Coimbatore Dist - 641 062	1 year	1.00
Dr.M.Selvakumar	Mr.N.Thiru Senthil Adhiban, Mr.P.Jagadeeswaran, Mr.C.Mohankumar,Mr.S.Murugesan	Mechanical	Economic Pulverizer Design	Sakthi Waterjet, Sf no. 135/2A1, Pachainayagi street, NPS Nagar Road, Neelambur, Sulur (TK), Coimbatore Dist - 641 062	1 year	0.50
						Amount received (Rs.):1.50

(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.P.Jagadeeswaran	Dr.T.R.Chinnusamy Mr.N.Thiru Senthil Adhiban	Mechanical	Design and Fabrication of smoke less stove	Veerana projects, Tiruchengode Namakkal	1 Year	1.20
						Amount received (Rs.):1.20

(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.P.Jagadeeswaran	Dr.T.R.Chinnusamy Mr.N.Thiru Senthil Adhiban	Mechanical	Design and Machining of Textile Parts	Sri Lakshmi Saraswathi Exports, tiruchengode Namakkal	1 Year	2.30
						Amount received (Rs.):2.30

Total amount (Lacs) received for the past 3 years: 5.00

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.A.Anandaraman	Design analysis and Fabrication of Hybrid Agriculture Weeder	1 Year	0.20	0.20	The hybrid agriculture weeder demonstrates enhanced efficiency in weeding operations, reducing manual labor and increasing the speed of weed removal
Mr.C.Karthik	Design analysis and Fabrication of Diy Air Powered Car	1 Year	0.20	0.20	This contributes to reducing carbon emissions and promoting green energy alternatives
Mr.D.Arumugam	Design analysis and Fabrication of Floor Mopping Robot	1 Year	0.20	0.20	This demonstrate the suspension system that operates without traditional coil or leaf springs, providing a novel approach to vehicle suspension
Mr.S.Murugesan	Design analysis and Fabrication of Spring less Car Suspension System	1 Year	0.20	0.20	This introduces a novel suspension system that eliminates traditional coil or leaf springs utilizing alternative mechanisms such as torsion bars
Mr.C.Ramesh kumar	Design anlysis and Fabrication of Hybrid Two Wheeler	1 Year	0.20	0.20	The hybrid two wheeler incorporates both conventional and alternative power sources allowing combined operation for optimized performance
			Amount received (Rs.): 1.00		

(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.C.Mohankumar	Design and Fabrication of Brush Cutter	1 Year	0.22	0.22	This machine offers strong performance cost savings and useful innovations for industries such as landscaping agriculture and forestry.
Mr.S.Murugesan	Design and Fabrication of Intelligent Breaking System	1 Year	0.21	0.21	The successful design and fabrication of the Intelligent Braking System show major improvements in vehicle safety automation and efficiency
Mr.C.Karthik	Design and Fabrication of Power Hacksaw Machine	1 Year	0.21	0.21	The machines performance economic benefits and innovative features make it a valuable asset for manufacturing construction and metalworking industries
			Amount received (Rs.): 0.64		

(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.P.Jagadeeswaran	Deign and Fabrication of Water Cane Cleaning Machine	1 Year	0.21	0.21	To achieve efficient time saving and hygienic cleaning of water cane with reduced manual effort
Mr.C.Mohankumar	Design and Fabrication of Chaff Cutter Machine	1 Year	0.22	0.22	The system increased productivity by 60 percent reduced labor costs created employment opportunities ensured consistent quality and minimized waste
Mr.S.Murugesan	Design and Fabrication of Automatic Vegetable Cutting Machine	1 Year	0.20	0.20	Improved vegetable quality enhanced safety reduced maintenance increased user satisfaction and enabled scalability for commercialization
Mr.C.Rameshkumar	Design and Fabrication of Paper Shreeder	1 Year	0.21	0.21	Unique cutting mechanism automatic paper feed jam detection auto reverse adjustable shredding size and integrated collection bin.
Mr.C.Karthik	Invention of Electro Magnetic Eddy Braking System	1 Year	0.21	0.21	Improved safety enhanced user experience reduced environmental impact increased satisfaction and enabled scalability for commercialization
			Amount received (Rs.): 1.05		

Total amount (Lacs) received for the past 3 years : 2.69

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	Reverse Engineering Laboratory	30	1.Two-Stroke Engine 2.Four-Stroke Engine 3.Refrigerator 4.Air Conditioner (Split) 5.Four-Wheeler	6 Hours	Mr.R.Sibiraj	Lab Instructor	B.E.
2	CAD /CAM Laboratory	30	1.Solid Edge 3D Modelling Software(35 Licence) 2.HP 1020 laser Jet Printer 3.CNC Lathe & Accessories and	6 Hours	P.Yogeshwaran	Lab Instructor	B.E.
3	Mechatronics Laboratory	30	1.Computer System 2.Process control trainer (VMBA 062) 3.Basic pneumatic Trainer kit with manual and	6 Hours	P.Yogeshwaran	Lab Instructor	B.E.
4	Dynamics Laboratory	30	1.Vibrating Table 2.Balancing of reciprocating Masses 4.Cam Analyzer 5.Motorized Gyroscope 6.Governor	6 Hours	Mr.R.Sibiraj	Lab Instructor	B.E.
5	Thermal Engineering Laboratory	30	1. 4-stroke Diesel Engine with mechanical loading 2. 4-stroke Diesel Engine with hydraulic loading 3. Multi-	6 Hours	P.Yogeshwaran	Lab Instructor	B.E.
6	Heat and Mass Transfer Laboratory	30	1.Guarded Plate apparatus 2.Lagged pipe apparatus with all aacessories 3.Natural convection - vertical	6 Hours	Mr.R.Sibiraj	Lab Instructor	B.E.
7	Metrology and Measurements Laboratory	30	1.Sine bar 2.Electrical comparator 3.Slip Guage set 4.Temparature measuring setup 5.Displacement	6 Hours	Mr.R.Sibiraj	Lab Instructor	B.E.
8	Manufacturing Technology Laboratory	30	1.Mouldingtable, Moulding equipments 2. Centre lathe with accessories 3. 3 Phase 300Amps oil cooled arc	6 Hours	K.P.Panneerselvam	Lab Technician	DIPLOMO
9	Engineering Practices Laboratory	30	1.Centre Lathes 2. Arc welding transformer with cables and holders. 3. Oxygen and acetylene gas cylinders,	6 Hours	K.P.Panneerselvam	Lab Technician	DIPLOMO

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Reverse Engineering Laboratory	☐ Always wear uniform , shoes and gloves for safety ☑ First aid box is available ☑ Fire extinguisher with proper refilling is provided ☑ Safety precaution is displayed
2	CAD/CAM Laboratory	☐ Always wear uniform and shoes. ☑ Do not insert metal objects such as clips, pins and needles in to the computer casings. ☐ First aid box is available ☑ Fire extinguisher with proper refilling is provided ☑ Safety precaution is displayed
3	Mechatronics Laboratory	☐ Always wear uniform , shoes and gloves for safety ☑ First aid box is available ☑ Fire extinguisher with proper refilling is provided Safety precaution is displayed
4	Thermal Engineering Lab	☐ Always wear uniform , shoes and gloves for safety ☑ First aid box is available ☑ Fire extinguisher with proper refilling is provided ☑ Safety precaution is displayed
5	Heat and Mass Transfer Laboratory	☐ Always wear uniform , shoes and gloves for safety ☑ First aid box is available ☑ Fire extinguisher with proper refilling is provided Safety precaution is displayed
6	Dynamics Laboratory	☐ Always wear uniform , shoes and gloves for safety ☑ First aid box is available ☑ Fire extinguisher with proper refilling is provided ☑ Safety precaution is displayed
7	Metrology and Measurements Laboratory	☐ Always wear uniform , shoes and gloves for safety ☑ First aid box is available ☑ Fire extinguisher with proper refilling is provided ☑ Safety precaution is displayed
8	Manufacturing Technology Laboratory	☐ Always wear uniform , shoes and gloves for safety ☑ First aid box is available ☑ Fire extinguisher with proper refilling is provided ☑ Safety precaution is displayed Goggles, shields, welding apron is provided
9	Engineering Practices Laboratory	☐ Always wear uniform , shoes and gloves for safety ☑ First aid box is available ☑ Fire extinguisher with proper refilling is provided ☑ Safety precaution is displayed ☑ Goggles, shields, welding apron is provided

D3. Project Laboratory/Research Laboratory

Project Laboratory:

- Project laboratory is exclusively provided to the students to carry out design & fabrication projects and major project work.
- Students are encouraged to utilize the laboratory for developing project works/products during and beyond the class hours.
- Domain specific faculty members and technical staff are available beyond working hours to support students for doing project work.
- Students are very much interested in doing some different products.
- For these events students doing these projects in the college itself by using this laboratory.
- Students are encouraged to do project work in domain wise with the support of the facilities available in the laboratories
- Previous batches working models / projects and projects reports are available in the laboratory.

Objective:

- To enable students to identify real engineering problems and develop solutions through design, experimentation, team work, and effective technical communication.

Outcome:

- Students will be able to plan and execute a mechanical engineering project by applying technical knowledge, using modern tools, analyzing results, and presenting their work professionally.

Utilization:

1. All final year students for Major Projects
2. All third year students for Mini Projects

List of Major Equipment available at Project Laboratory:

SI.NO	Name of the Equipment
1.	Arc Welding Machine
2.	Gas Welding
3.	CNC Lathe / CNC Milling Machine
4.	Metrology Instruments (Vernier calipers, micrometers, dial gauges, height gauges)
5.	Hand Tools and Power Tools (grinders, drills, cutters,
6.	Muffle Furnace
7.	Table Grinder

SAMPLE PHOTOGRAPHS FOR PROJECT LAB

Capstone Project Details Mapping with POs, PSOs, SDGs (Academic Year: 2024-2025 Major Projects)

Batch No	Register No	Name	Project Title	Guide Name	POs	PSOs	SDGs	Type	Justification	Impact Analysis
1	61232115009	Sonu Kumar	Design, Investigation and Analysis of Welding Strength in Carbon Steel	Mr.N.ThiruSenthil Adhiban	1, 2, 3, 4, 5,6,7, 8, 9, 10,11, 12	1,2	8,9,12	Analytical Project	Analyzes and improves welding strength in carbon steel for safe and reliable industrial applications.	Improves safety, supports industry needs, and benefits the community through better-quality products.
	61232115010	Sonu Kumar								
2	61232115003	Meiyappan G	Design, Analysis and Fabrication of Hybrid Agriculture Weeder	Mr.P.Jagadeeswaran	1, 2, 3, 4, 5,6,7, 8, 9, 10,11, 12	1,2	2,8,9,12,13	Capstone/ Application	Enhances farming efficiency and sustainability while reducing manual labor.	Improves farming efficiency, reduces labor and chemical use, enhances farmer safety, and promotes sustainable agriculture.
	61232115007	Sabarinathan S								
3	61232115501	Arman Ansari	Design, Analysis and Fabrication of Floor Mopping Robot	Mr.C.Mohankumar	1, 2, 3, 4, 5,6,7, 8, 9, 10,11, 12	1,2	7,9,11,12	Capstone/ Application	An autonomous floor mopping system is developed to automate cleaning, reduce human effort, and maintain hygienic environments efficiently.	Reduces human effort, improves hygiene, and supports people with mobility challenges.
	61232115502	Vinay Kumar								

4	61232115005 61232115301	Naveen G Ariraj P.G	Design, Analysis and Fabrication of Spring less Car Suspension System	Mr.S.Murugesan	1, 2, 3, 4, 5,6,7, 8, 9, 10,11, 12	1,2	9,11,12, 13	Capstone/ Application	A spring-less car suspension system is developed to enhance ride comfort, improve vehicle stability, and reduce maintenance by efficiently absorbing shocks.	Lightweight and efficient design reduces fuel consumption and materia waste.
5	61232115002 61232115011	Gopal G Vigneshwaran B	Design, Analysis and Fabrication of Hybrid Two Wheeler	Mr.C.Ramesh Kumar	1, 2, 3, 4, 5,6,7, 8, 9, 10,11, 12	1,2	7,9,11,12,13	Capstone/ Product	A hybrid two-wheeler is developed to improve fuel efficiency, reduce emissions, and provide an eco-friendly and sustainable transportation solution.	Provides a cleaner mobility option reducing air pollution.
6	61232115006 61232115008	Rohit Kumar Santosh Kumar	Design, Analysis and Fabrication of Dry Air Powered Car	Mr.C.Karthik	1, 2, 3, 4, 5,6,7, 8, 9, 10,11, 12	1,2	2,7,9,12	Capstone/ Application	A DIY air-powered car is developed to promote clean energy usage, reduce environmental pollution, and demonstrate sustainable transportation technology.	Reduces farmer fatigue, boosts rural livelihoods, and offers an affordable mechanized option for small farmers.

CENTRE OF EXCELLENCE – 3D PRINTING

OBJECTIVES

1. **Advanced Additive Manufacturing Facilities:**

Establish state-of-the-art infrastructure for design, fabrication, testing, and validation of components using additive manufacturing technologies.

2. **Industry-Aligned Skill Development:**

Bridge the gap between academic learning and industrial practices through hands-on training in 3D modeling, slicing software, materials selection, and printing processes.

3. **Innovation and Product Development:**

Encourage creative thinking, rapid prototyping, and product-oriented learning using 3D printing for mechanical engineering applications.

4. **Competency in Design and Manufacturing Tools:**

Enhance technical proficiency in CAD/CAE tools, design for additive manufacturing (DFAM), reverse engineering, and post-processing techniques.

5. **Interdisciplinary and Industry Collaboration:**

Support multidisciplinary projects, consultancy, internships, and collaborative research with industries and academic institutions.

OUTCOMES

1. **Practical Expertise in Additive Manufacturing:**

Students acquire hands-on experience in designing, fabricating, and testing functional mechanical components using 3D printing technologies.

2. **Capability to Develop Industry-Relevant Prototypes:**

Ability to design and produce rapid prototypes, proof-of-concept models, and customized mechanical parts for real-world applications.

3. **Improved Employability and Industrial Readiness:**

Enhanced job readiness through exposure to industry-standard design practices, materials, tools, and additive manufacturing workflows.

4. **Increased Innovation and Research Output:**

Greater student participation in product development, research publications, design competitions, funded projects, and startup initiatives.

5. **Pathway to Higher Studies and Entrepreneurship:**

Provides a strong foundation for advanced studies, research careers, and entrepreneurial ventures in additive manufacturing and advanced manufacturing domains.

Utilization of project laboratory/ research laboratory / centre of excellence

Project Count : 01

Sample Copy of Project Report

3D PRINTED BUILDING TECHNOLOGY REPORT

A PROJECT REPORT

Submitted by

SURIYANATH P (61232111006)

in partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

IN

CIVIL ENGINEERING WITH MINOR DEGREE

IN

3D PRINTING TECHNOLOGY

SENGUNTHAR ENGINEERING COLLEGE
(AUTONOMOUS)
TIRUCHENGODE
ANNA UNIVERSITY
CHENNAI - 600 025
November 2024

ANNA UNIVERSITY : CHENNAI 600 025

BONAFIDE CERTIFICATE

Certified that this project report **"3D PRINTED BUILDING TECHNOLOGY REPORT"** is the bonafide work of **"SURIYANATH P (61232111006)"** who carried out the Project Report under my supervision.

06/11/24

SIGNATURE
Dr.M.SEENIRAJAN,M.E.,Ph.D
HEAD OF THE DEPARTMENT
Professor,
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Tiruchengode-637205.

6.11.24

SIGNATURE
Mr.N.THIRU SENTHIL ADHIBAN,M.E,
SUPERVISOR
Professor,
Department of Mechanical Engineering,
Sengunthar Engineering College,
Tiruchengode-637205.

Submitted for the Project Work Viva-Voce examination held on 06/11/2024

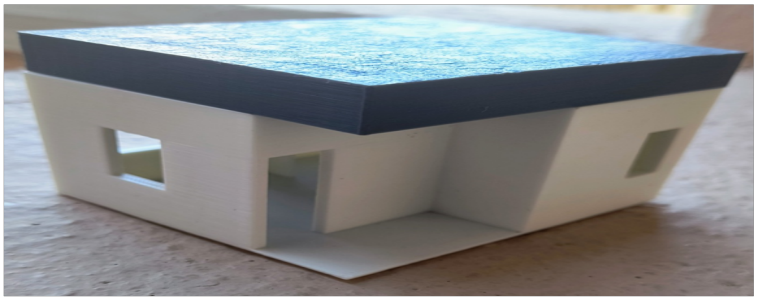
6.11.24
INTERNAL EXAMINER

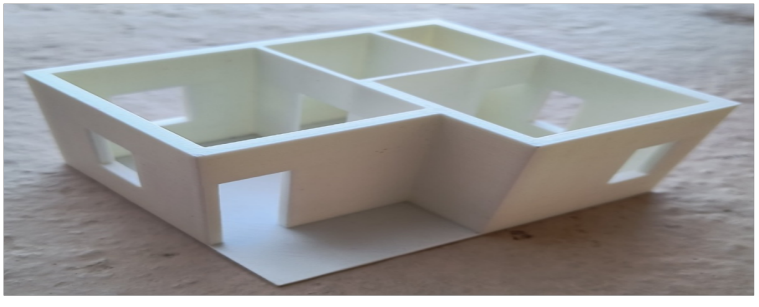
6/11/24
EXTERNAL EXAMINER

3D Printing Machine

3D Printing Laboratory

3D Printing House Model





LIST OF STUDENT PUBLICATIONS

S.NO	Name of the Student & Semester	Name of the Publisher	Name of the Journal/ Conference, etc.	Volume No. & Issue No.	Name of the Award if any
2023 -2024					
1	T.Elayaraja	AM Publications Hosur - 635109 Tamil Nadu, India	Interrnational Journal of Innovative Research in Advanced Engineering	Vol-11, Issue 4, April 2024	-
2	S.Sudharsan	AM Publications Hosur - 635109 Tamil Nadu, India	Interrnational Journal of Innovative Research in Advanced Engineering	Vol-11, Issue 4, April 2024	-
3	S.Kishore	AM Publications Hosur - 635109 Tamil Nadu, India	Interrnational Journal of Innovative Research in Advanced Engineering	Vol-11, Issue 4, April 2024	-
4	P.Naveenkumar	AM Publications Hosur - 635109 Tamil Nadu, India	Interrnational Journal of Innovative Research in Advanced Engineering	Vol-11, Issue 4, April 2024	-
5	Pankajkumarr	AM Publications Hosur - 635109 Tamil Nadu, India	Interrnational Journal of Innovative Research in Advanced Engineering	Vol-11, Issue 4, April 2024	-
6	K.Siiranjeevi	AM Publications Hosur - 635109 Tamil Nadu, India	Interrnational Journal of Innovative Research in Advanced Engineering	Vol-11, Issue 4, April 2024	-
7	S.Jayabharath	AM Publications Hosur - 635109 Tamil Nadu, India	International Journal of Innovative Research in Advanced Engineering	Vol-11, Issue 4, April 2024	-
8	M.Tamilvanan	AM Publications Hosur - 635109 Tamil Nadu, India	International Journal of Innovative Research in Advanced Engineering	Vol-11, Issue 4, April 2024	
2022-2023					
1	M.Vijay & VIII	AM Publications Hosur - 635109 Tamil Nadu, India	International Journal of Innovative Research in Advanced Engineering	07 July 2023 Vol. 10 Issue 07 576-580	-
2	S.V Bramoth & VIII	AM Publications Hosur - 635109 Tamil Nadu, India	International Journal of Innovative Research in Advanced Engineering	07 July 2023 Vol. 10 Issue 07 591-595	-
3	M. Hari Prasad, S. Sanjeev & VIII	AM Publications Hosur - 635109 Tamil Nadu, India	International Journal of Innovative Research in Advanced Engineering	07 July 2023 Vol. 10 Issue 07 572-575	-
4	S.Dinesh B.Kavinraj & VIII	AM Publications Hosur - 635109 Tamil Nadu, India	International Journal of Innovative Research in Advanced Engineering	07 July 2023 Vol. 10 Issue 07 572-575	-
5	M.Gowtham A.Nagaraj & VIII	AM Publications Hosur - 635109 Tamil Nadu, India	International Journal of Innovative Research in Advanced Engineering	07 July 2023 Vol. 10 Issue 07 596-600	-
6	S.Harisri E.Kavin & VIII	AM Publications Hosur - 635109 Tamil Nadu, India	International Journal of Innovative Research in Advanced Engineering	07 July 2023 Vol. 10 Issue 07 581-584	-
7	P.Maheswaran R Sabarinath & VIII	AM Publications Hosur - 635109 Tamil Nadu, India	International Journal of Innovative Research in Advanced Engineering	07 July 2023 Vol. 10 Issue 07 558- 566	-

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)	720	36	33	15	82
2024-25(CAYm1)	720	36	33	19	84
2025-26(CAY)	720	36	33	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 2024-2025	Actual Expenses in 2024-2025 till	Budgeted in 2023-2024	Actual Expenses in 2023-2024 till	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till
Infrastructure Built-Up	3500000	3186522	3000000	2589740	3800000	3503854	300000	90851
Library	500000	40570	400000	389939	680000	593907	550000	451508
Laboratory equipment	5975000	1316020	5485000	4545864	3835000	3126770	6000000	4999079
Teaching and non-teaching staff salary	95000000	62631356	90000000	86844107	88500000	77272829	52500000	45592328
Outreach Programs	650000	265341	600000	581647	700000	627340	425000	389236
R&D	5475000	2368954	4960000	4134123	745000	537650	125000	103800
Training, Placement and Industry linkage	3350000	1946766	2490000	2077966.32	2750000	2282424	1125000	926503
SDGs	17025000	12978585	13380000	11413298	14425000	12113531	17500000	14272122
Entrepreneurship	200000	48100	100000	12689	200000	176214	50000	10000
Others	58200000	35660073	44725000	41651893.68	33295000	31135505.24	34550000	31965516
Total	**189875000**	**120442287**	**165140000**	**154241267.00**	**148930000**	**131370024.24**	**113125000**	**98800943**

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 2024-2025	Actual Expenses in 2024-2025 till	Budgeted in 2023-2024	Actual Expenses in 2023-2024 till	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till
Laboratory equipment	375000	79600	375000	320400	200000	152800	400000	331000
Software	100000	15525	100000	83400	200000	174900	330000	276600
SDGs	500000	342840	400000	352650	450000	383300	670000	501450
Support for faculty development	25000	5100	25000	5030	25000	3190	20000	13700
R & D	500000	256000	425000	367325	75000	56350	350000	206100
Industrial Training, Industry expert, Internship	325000	210380	225000	184630	275000	239250	300000	199700
Miscellaneous Expenses - Repair and Maintenance	275000	222450	275000	225850	150000	133800	100000	192000
Total	**2100000**	**1131895**	**1825000**	**1539285**	**1375000**	**1143590**	**2170000**	**1720550**