

NATIONAL BOARD OF ACCREDITATION

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

Program Name : Electrical & Electronics 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)

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 CLOSED	SANCTIONED INTAKE	INCREASE/ DECREASE INTAKE (if any)	YEAR OF INCREASE/ DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/ COMPETENT AUTHORITY ARROVAL DETAILS	ACREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCREDITED	PROGRAM DURATION
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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			NO. OF TIMES PROGRAM ACCREDITED	PROGRAM DURATION
											FROM	TO		
1	Electrical & Electronics Engineering	UG	2001 / --	60	Yes	2004	60	2004	1-41103764/2023/EOA	Applying first time	--	--	0	4

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.K.UMADEVI
B. Nature of appointment:	Regular
C. Qualification:	M.Tech 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	90	90	90	90
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	27	28	36	17	20	10
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	4	4	9	1	36	0
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	2	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.	62	31	32	45	18	56	10

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	2	103.33
2024-25 (CAYm1)	60	27	0	45.00
2023-24 (CAYm2)	60	28	0	46.67

Average [(ER1 + ER2 + ER3) / 3] = 65.00 ≈ 11.00

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).	91.00	126.00	90.00
B=No. of students who graduated from the program in the stipulated course duration	13.00	29.00	9.00
Success Rate (SR)= (B/A) * 100	14.29	23.02	10.00

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 15.77

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)	7.62	7.80	6.97
Y=Total no. of successful students	25.00	28.00	34.00
Z=Total no. of students appeared in the examination	27.00	28.00	36.00
API [X*(Y/Z)]	7.06	7.80	6.58

Average API[(AP1+AP2+AP3)/3] : 7.15

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 2nd year/10)	7.64	7.39	7.78
Y=Total no. of successful students	32.00	40.00	18.00

Z=Total no. of students appeared in the examination	32.00	43.00	18.00
API [X * (Y/Z)]	7.64	6.87	7.78

Average API [(AP1 + AP2 + AP3)/3] : 7.43

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)	7.61	7.95	7.90
Y=Total no. of successful students	40.00	18.00	33.00
Z=Total no. of students appeared in the examination	40.00	18.00	39.00
API [X*(Y/Z)]:	7.61	7.95	6.68

Average API [(AP1 + AP2 + AP3)/3] : 7.41

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	91.00	126.00	90.00
X=No. of students placed	16.00	27.00	6.00
Y=No. of students admitted to higher studies	0.00	1.00	0.00
Z= No. of students taking up entrepreneurship	2.00	1.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	19.78	23.02	6.67

Average Placement Index = (P_1 + P_2 + P_3)/3: 16.49 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.K.UMADEVI	XXXXXXX52C	M.Tech and Ph.D.	ANNA UNIVERSITY	ELECTRICAL ENGINEERING	02/05/2015	10.5	Professor	Professor	02/05/2015	Regular	Yes		Yes
2	Dr. S. THANGAPRAKASH	XXXXXXX33A	M.E. and Ph.D.	ANNA UNIVERSITY	ELECTRICAL ENGINEERING	01/04/2022	3.6	Professor	Professor	01/04/2022	Regular	Yes		No
3	Dr. P. MADHUMATHI	XXXXXXX20M	M.E. and Ph.D.	ANNA UNIVERSITY	ELECTRICAL ENGINEERING	26/06/2025	0.4	Assistant Professor	Assistant Professor		Regular	Yes		No
4	Mrs. R. GOHILA	XXXXXXX14H	M.Tech	NIT	POWER SYSTEMS	11/12/2006	18.10	Lecturer	Assistant Professor		Regular	Yes		No
5	Mr. G. SENTHILRAJAN	XXXXXXX32N	M.E.	ANNA UNIVERSITY	POWER ELECTRONICS AND DRIVES	08/01/2007	18.9	Lecturer	Assistant Professor		Regular	Yes		No
6	Mr. N. SIVAKUMAR	XXXXXXX68M	M.E.	ANNA UNIVERSITY	POWER ELECTRONICS AND DRIVES	28/06/2018	7.4	Assistant Professor	Assistant Professor		Regular	Yes		No
7	Mr. D. SATHIYARAJ	XXXXXXX60L	M.E.	ANNA UNIVERSITY	POWER ELECTRONICS AND DRIVES	26/05/2006	19.5	Lecturer	Assistant Professor		Regular	Yes		No
8	Mr. V. NANTHAKUMAR	XXXXXXX71G	M.E.	ANNA UNIVERSITY	POWER ELECTRONICS AND DRIVES	01/06/2012	13.4	Assistant Professor	Assistant Professor		Regular	Yes		No
9	Mrs. B. BOMMIRANI	XXXXXXX72J	M.E.	ANNA UNIVERSITY	POWER SYSTEMS ENGINEERING	20/01/2014	11.9	Assistant Professor	Assistant Professor		Regular	Yes		No
10	Mr. R. PANDIYAN	XXXXXXX07F	M.E.	ANNA UNIVERSITY	POWER ELECTRONICS AND DRIVES	19/06/2015	10.4	Assistant Professor	Assistant Professor		Regular	Yes		No
11	Mrs. G. KAVITHA	XXXXXXX94D	M.E.	ANNA UNIVERSITY	POWER ELECTRONICS AND DRIVES	09/12/2021	3.10	Assistant Professor	Assistant Professor		Regular	Yes		No
12	Mr. K. PRASHANTH	XXXXXXX37D	M.E.	ANNA UNIVERSITY	POWER SYSTEMS ENGINEERING	15/03/2022	3.7	Assistant Professor	Assistant Professor		Regular	Yes		No
13	Mr. R. PRABHU	XXXXXXX65M	M.E.	ANNA UNIVERSITY	POWER SYSTEMS ENGINEERING	13/07/2022	3.3	Assistant Professor	Assistant Professor		Regular	Yes		No
14	Ms. T. DIVIJA	XXXXXXX14Q	M.E.	ANNA UNIVERSITY	POWER SYSTEMS ENGINEERING	10/08/2022	3.2	Assistant Professor	Assistant Professor		Regular	Yes		No
15	Mr. I. KAMALRAJ	XXXXXXX10F	M.E.	ANNA UNIVERSITY	POWER ELECTRONICS AND DRIVES	23/11/2023	1.11	Assistant Professor	Assistant Professor		Regular	Yes		No

16	Mrs. K. DEEPA	XXXXXXX87P	M.E.	ANNA UNIVERSITY	POWER SYSTEMS ENGINEERING	02/12/2019	5.9	Assistant Professor	Assistant Professor		Regular	No	25/09/2025	No
17	Dr. S. SARANYA	XXXXXXX04L	M.E. and Ph.D.	VIT	ELECTRICAL ENGINEERING	02/08/2023	1.9	Assistant Professor	Assistant Professor		Regular	No	02/05/2025	No
18	Mr. S. RAVICHANDRAN	XXXXXXX34N	M.E.	ANNA UNIVERSITY	POWER ELECTRONICS AND DRIVES	20/01/2014	11.3	Assistant Professor	Assistant Professor		Regular	No	02/05/2025	No
19	Mr. P. VIJAYAKUMAR	XXXXXXX24G	M.E.	ANNA UNIVERSITY	POWER ELECTRONICS AND DRIVES	09/12/2021	3.4	Assistant Professor	Assistant Professor		Regular	No	02/05/2025	No
20	Mrs. K. SANTHIYA	XXXXXXX46M	M.E.	ANNA UNIVERSITY	POWER SYSTEMS ENGINEERING	09/12/2021	2.6	Assistant Professor	Assistant Professor		Regular	No	01/07/2024	No
21	Mr. P. KRISHNAMOORTHI	XXXXXXX51K	M.E.	ANNA UNIVERSITY	EMBEDDED SYSTEMS TECHNOLOGIES	09/12/2021	2.6	Assistant Professor	Assistant Professor		Regular	No	01/07/2024	No
22	Ms. V. PARIMALA	XXXXXXX32C	M.E.	ANNA UNIVERSITY	EMBEDDED SYSTEMS TECHNOLOGIES	08/06/2016	7.11	Assistant Professor	Assistant Professor		Regular	No	30/05/2024	No
23	Mrs. V. SHINDUJAA	XXXXXXX73R	M.E.	ANNA UNIVERSITY	VLSI Design	04/01/2021	3.4	Assistant Professor	Assistant Professor		Regular	No	30/05/2024	No
24	Dr.M.Kalyanasundaram	XXXXXXX76H	M.E. and Ph.D.	ANNA UNIVERSITY	ELECTRICAL ENGINEERING	28/08/2025	0.2	Associate Professor	Associate Professor	28/08/2025	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	64	64	99
UG1.C	64	99	91
UG1.D	99	91	99
UG1: Electrical & Electronics Engineering	227	254	289
DS=Total no. of students in all UG and PG programs in the Department	227	254	289
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= 227	S2= 254	S3= 289
DF=Total no. of faculty members in the Department	16	18	21
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= 16	F2= 18	F3= 21
FF=The faculty members in F who have a 100% teaching load in the first-year courses	2	2	2
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1= 16.21	SFR2= 15.88	SFR3= 15.21
Average SFR for 3 years	SFR= 15.77		

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 = $2.5 * [(10X + 4Y) / RF]$
2025-26(CAY)	4	12	11.00	20.00
2024-25(CAYm1)	3	15	12.00	18.75
2023-24(CAYm2)	3	18	14.00	18.21

C4. Faculty Cadre Proportion

- Faculty Cadre Proportion is 1(RF1): 2(RF2): 6(RF3)
- RF1= No. of Professors required = $1/9 * \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per C2 of this documents:}$
- RF2= No. of Associate Professors required = $2/9 * \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per section C2 of this documents:}$
- RF3= No. of Assistant Professors required = $6/9 * \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per section C2 of this documents:}$
- 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	7.00	13.00
2024-25	1.00	2.00	2.00	0.00	8.00	16.00
2023-24	1.00	2.00	3.00	0.00	9.00	19.00
Average	RF1=1.00	AF1=2.00	RF2=2.33	AF2=0.33	RF2=8.00	AF2=16.00

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	GOWTHAM RAJMOHAN	TECHNICAL MANAGER - MATLAB	ARK Infosolution Private Limited, Chennai	Power Electronics and Applications	26.00
2	GOWTHAM RAJMOHAN	TECHNICAL MANAGER - MATLAB	ARK Infosolution Private Limited, Chennai	Power Electronics and Renewable Energy Systems	25.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	GOWTHAM RAJMOHAN	TECHNICAL MANAGER - MATLAB	ARK Infosolution Private Limited, Chennai	Analog Electronics and Circuits	26.00
2	GOWTHAM RAJMOHAN	TECHNICAL MANAGER - MATLAB	ARK Infosolution Private Limited, Chennai	Discrete Time System and Signal Processing	25.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr. M. Kalayanasundaram	Executive Engineer	SRM Construction & Contracting PVT LTD, Athur, Salem (Dt) - 636 116	Renewable Energy System	26.00
2	Dr. M. Kalayanasundaram	Executive Engineer	SRM Construction & Contracting PVT LTD, Athur, Salem (Dt) - 636 116	Power System Operation and Control	25.00

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	9	22	2
2	No. of peer reviewed conference papers published	9	12	13
3	No. of books/book chapters published	11	1	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
Dr.K.Umadevi	-	EEE	Electricity generation using non bio degradable waste	MSME idea hackathon 4.0	6 Month	12.00
						Amount received (Rs.):12.00

(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.N.SIVAKUMAR	Nil	EEE-TNSDC - Niral Thiruvizha	Enhance thermo electric generator and cooler efficiency improvement	TNSDC - Niral Thiruvizha	6 Months	0.10
Mrs.R.GOHILA	Nil	EEE-TNSDC - Niral Thiruvizha	Lora based coal mine safety monitoring and security system using smart helmet	TNSDC - Niral Thiruvizha	6 Months	0.10
Mrs.B.BOMMIRANI	Nil	EEE-TNSDC - Niral Thiruvizha	Real time electric vehicle monitoring and tracking system using LORA technology	TNSDC - Niral Thiruvizha	6 Months	0.10
						Amount received (Rs.):0.30

(CAYm3)

Total Amount (Lacs) Received for the Past 3 Years: 12.30

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. G. Senthilrajan, M.E Mr. N. Sivakumar, M.E	Mr. V. Nanthakumar, M.E Mr. R. Prabhu, M.E	EEE	Solar Panel Erection and Commissioning	Sri Surya Agencies, D376, Sampath Nagar, Erode, Tamil Nadu 638011.	1 Year	2.00
						Amount received (Rs.):2.00

(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. G. Senthilrajan, Mr. D. Sathiyaraj	Mr. K.Prashanth, Mr. R. Prabhu	EEE	Trouble shooting and loop testing of automation panels	Sky Power Switchgears 3/97D, Sarkarkolla patty,Salem, 636030.	6 Month	2.50
						Amount received (Rs.):2.50

(CAYm3)

Total amount (Lacs) received for the past 3 years: 4.50

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
Mrs.B.Bommirani	Simulation Driven Design of an Intelligent Battery Management system	8 Months	0.20	0.20	Developed a simulation
Mrs.K.Deepa	Exploring Closed Loop Speed Control for Geared DC Motor	8 Months	0.20	0.20	Gained hands-on experience in DC motor modeling, control, and MATLAB simulation
Mr.K.Prashanth	Tricycle with Modified E- Vehicle Lead Acid Battery System	8 Months	0.20	0.20	Ensured safety, reliability, and optimized energy utilization
Mr. R. Prabhu	Controller Optimization for Urban E-Rickshaws	8 Months	0.20	0.20	Enhanced energy efficiency and reduced battery consumption
Ms. T. Divija	Modelling And Control Of Three Phase Bldc Motors Driven Electric Vehicle	8 Months	0.20	0.20	Modeled and controlled a three-phase BLDC motor for EV applications
			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
Dr.K.Umadevi	An Integrated Smart Metering System using LORA technology	8 Months	0.15	0.15	Improved energy management, billing efficiency, and anomaly detection.
Mrs.R.Gohila	Real Time Electric Vehicle Monitoring and Tracking System Using LORA Technology	8 Months	0.18	0.18	Enabled long-range wireless communication for vehicle data and location tracking.
Mr.G.Senthilrajan	Mr.G.Senthilrajan	8 Months	0.17	0.17	Developed an intelligent home automation system integrating solar and grid power
Mr.N.Sivakumar	Enhanced Thermo Electric Generator and Cooler for Boiler Cooling efficiency Improvement	8 Months	0.20	0.20	Utilized waste heat for auxiliary power generation
Mr.D.Sathiyaraj	Smart and intelligent Weather Adaptive Street Lighting System Using IoT	8 Months	0.15	0.15	Developed a smart IoT- based weather-adaptive street lighting system
Mr.V.Nanthakumar	Hybridized Optimization Technique for Speed Control of PMLDC	8 Months	0.15	0.15	Achieved improved dynamic and steady-state speed performance.
			Amount received (Rs.): 1.00		

(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.K.Umadevi	Hybrid Wireless Electric Vehicle Charging System	8 Months	0.22	0.22	Analyzed charging performance and power transfer efficiency
Mrs.R.Gohila	Intelligence Based Power Quality Enhancement in Hybrid Renewable Source Micro-Grid Connected System	8 Months	0.20	0.20	Developed an intelligent- controlled hybrid renewable micro-grid system
Mr.G.Senthilrajan	Smart IoT Based Water Distribution System	8 Months	0.19	0.19	Developed a smart IoT- based water distribution system.
Mr.D.Sathiyaraj	Automatic Solar Dryer Machine	8 Months	0.21	0.21	Improved product quality and reduced drying time
Mr.V.Nanthakumar	Solar Power Drone Using LUO Converter	8 Months	0.18	0.18	Developed a solar- powered drone using a LUO DC-DC converter
			Amount received (Rs.): 1.00		

Total amount (Lacs) received for the past 3 years : 3.00

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	Electric Circuit Analysis/Circuit theory	30	1. Dual Regulated Power Supply (0-30)V DC 2. FunctionGenerator1MHZ 3. Oscilloscope	6 hours	Mr. R. T. Muralidharan	Lab Technician	ITI - Ele., B.A., M.A.,
2	Basic Electrical and Electronics Engineering	30	1. Regulated Power Supply (0- 15 V DC) 2. Dc Shunt Motor with Loading Arrangement 3. DC Shunt Motor With Loading Arrangement	36 hours	1. Mr. R. T. Muralidhar	1. Lab Technician, 2. I	1. ITI - Ele., B.A., M.A
3	DC Machines and Transformers	30	1. DC Shunt Motor With Loading Arrangement 2. Single Phase Transformer 3. DC Series	3 hours	Mr. R. T. Muralidharan	Lab Technician	ITI - Ele., B.A., M.A.,
4	Analog Electronics and Circuits	30	1. Dual Regulated Power Supply (0-30)V DC 2. FunctionGenerator1 MHZ 3. Oscilloscope	3 hours	Mr. R. T. Muralidharan	Lab Technician	ITI - Ele., B.A., M.A.,
5	Electrical Drives	30	1. Personal Computers Intel I3 80 GB 2GB RAM 2. PLC Based Single and Three Phase Inverter	3 hours	Mr. R. T. Muralidharan	Lab Technician	ITI - Ele., B.A., M.A.,
6	Renewable Energy and Energy Storage System	30	1. Personal Computers Intel I3 80 GB 2GB RAM 2. PV Emulator 3. PV Panel 100W 24V 4.	6 hours	Mr. R. Ramanan	Lab Instructor	B.E., (EEE)
7	Power System Operation and Control	30	1. Personal Computers with Software Package 2. Printer Laser	3 hours	Mr. R. Ramanan	Lab Instructor	B.E., (EEE)
8	Renewable Energy Systems	30	1. Personal Computers Intel I3 80 GB 2GB RAM 2. CRO 30MHZ 3. PV Emulator 4. PV	3 hours	Mr. G. Gokul	Lab Instructor	B.E., (EEE)
9	Reverse Engineering	30	1. Mixie 2. Grinder 3. Table fan 4. Ceiling Fan 5. Iron Box 6. LED 7.	6 hours	Mr. G. Gokul	Lab Instructor	B.E., (EEE)
10	Induction and Synchronous Machines	30	1. Synchronous Induction Motor 2. DC Shunt Motor Coupled with Three Phase Alternator 3. DC	3 hours	Mr. R. T. Muralidharan	Lab Technician	ITI - Ele., B.A., M.A.,

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	1. Laboratory coats and closed shoes are worn at all times inside the laboratory. 2. A first-aid box is available and maintained in the laboratory. 3. Fire extinguishers are provided at appropriate locations in the laboratories. 4. Loose conductive jewellery and accessories, including rings, chains, and bracelets, are removed to avoid accidental contact with exposed circuits. 5. Long hair of girl students is properly tied and kept inside the laboratory coat. 6. Proper earthing is provided for all electrical equipment and installations. 7. Safety rules and "Dos and Don'ts" charts are displayed prominently in the laboratory. 8. All electrical connections are thoroughly checked by the faculty before the commencement of experiments. 9. Experiments are conducted by students only under the proper supervision of faculty members. 10. Fire extinguisher operation and safety training are provided to all laboratory assistants.
2	Basic Electrical and Electronics Engineering Laboratory/ Electric Circuit Analysis Laboratory	1. Laboratory coats and closed shoes are worn at all times inside the laboratory. 2. A first-aid box is available and maintained in the laboratory. 3. Fire extinguishers are provided at appropriate locations in the laboratories. 4. Loose conductive jewellery and accessories, including rings, chains, and bracelets, are removed to avoid accidental contact with exposed circuits. 5. Long hair of girl students is properly tied and kept inside the laboratory coat. 6. Proper earthing is provided for all electrical equipment and installations. 7. Safety rules and "Dos and Don'ts" charts are displayed prominently in the laboratory. 8. All electrical connections are thoroughly checked by the faculty before the commencement of experiments. 9. Experiments are conducted by students only under the proper supervision of faculty members. 10. Fire extinguisher operation and safety training are provided to all laboratory assistants.
3	Engineering Practices Laboratory PART II-Electrical Engineering Practices	1. Laboratory coats and closed shoes are worn at all times inside the laboratory. 2. A first-aid box is available and maintained in the laboratory. 3. Fire extinguishers are provided at appropriate locations in the laboratories. 4. Loose conductive jewellery and accessories, including rings, chains, and bracelets, are removed to avoid accidental contact with exposed circuits. 5. Long hair of girl students is properly tied and kept inside the laboratory coat. 6. Proper earthing is provided for all electrical equipment and installations. 7. Safety rules and "Dos and Don'ts" charts are displayed prominently in the laboratory. 8. All electrical connections are thoroughly checked by the faculty before the commencement of experiments. 9. Experiments are conducted by students only under the proper supervision of faculty members. 10. Fire extinguisher operation and safety training are provided to all laboratory assistants.
4	DC Machines and Transformers/ Induction and Synchronous Machines	1. Laboratory coats and closed shoes are worn at all times inside the laboratory. 2. A first-aid box is available and maintained in the laboratory. 3. Fire extinguishers are provided at appropriate locations in the laboratories. 4. Loose conductive jewellery and accessories, including rings, chains, and bracelets, are removed to avoid accidental contact with exposed circuits. 5. Long hair of girl students is properly tied and kept inside the laboratory coat. 6. Proper earthing is provided for all electrical equipment and installations. 7. Safety rules and "Dos and Don'ts" charts are displayed prominently in the laboratory. 8. All electrical connections are thoroughly checked by the faculty before the commencement of experiments. 9. Experiments are conducted by students only under the proper supervision of faculty members. 10. Fire extinguisher operation and safety training are provided to all laboratory assistants.
5	Power Electronics and Applications Laboratory/ Control Systems Laboratory	1. Laboratory coats and closed shoes are worn at all times inside the laboratory. 2. A first-aid box is available and maintained in the laboratory. 3. Fire extinguishers are provided at appropriate locations in the laboratories. 4. Loose conductive jewellery and accessories, including rings, chains, and bracelets, are removed to avoid accidental contact with exposed circuits. 5. Long hair of girl students is properly tied and kept inside the laboratory coat. 6. Proper earthing is provided for all electrical equipment and installations. 7. Safety rules and "Dos and Don'ts" charts are displayed prominently in the laboratory. 8. All electrical connections are thoroughly checked by the faculty before the commencement of experiments. 9. Experiments are conducted by students only under the proper supervision of faculty members. 10. Fire extinguisher operation and safety training are provided to all laboratory assistants.
6	Electronics Laboratory	1. Laboratory coats and closed shoes are worn at all times inside the laboratory. 2. A first-aid box is available and maintained in the laboratory. 3. Fire extinguishers are provided at appropriate locations in the laboratories. 4. Loose conductive jewellery and accessories, including rings, chains, and bracelets, are removed to avoid accidental contact with exposed circuits. 5. Long hair of girl students is properly tied and kept inside the laboratory coat. 6. Proper earthing is provided for all electrical equipment and installations. 7. Safety rules and "Dos and Don'ts" charts are displayed prominently in the laboratory. 8. All electrical connections are thoroughly checked by the faculty before the commencement of experiments. 9. Experiments are conducted by students only under the proper supervision of faculty members. 10. Fire extinguisher operation and safety training are provided to all laboratory assistants.
7	Power System Operation and Control/ Renewable Energy Systems/ Renewable Energy and Energy Storage System	1. Laboratory coats and shoes are worn at all times in the laboratory. 2. A first-aid box is kept and maintained in the laboratory. 3. Fire extinguishers with proper refilling are provided in the laboratory. 4. Safety precautions are displayed prominently in the laboratory. 5. All loose conductive jewellery and trinkets, including rings, which may come in contact with exposed circuits, are removed. 6. Long hair of girl students is kept properly secured inside the laboratory coat. 7. Proper earthing is provided for all electrical equipment and installations. 8. Safety rules and "Dos and Don'ts" charts are displayed in the laboratory. 9. Fire extinguisher operation training is provided to all laboratory assistants.

8	Renewable Energy Systems/ Renewable Energy and Energy Storage System	1. Students are strictly instructed to wear laboratory coats and shoes, and loose hair is avoided. 2. First-aid boxes are provided in the laboratories. 3. Fire extinguishers with proper refilling are provided in the laboratories. 4. Safety rules and "Dos and Don'ts" charts are displayed in the laboratories. 5. All loose conductive jewellery and trinkets, including rings, which may come in contact with exposed circuits, are removed. 6. Proper earthing is provided for all electrical equipment and installations. 7. All electrical connections are thoroughly checked by the faculty before the commencement of experiments. 8. All experiments are conducted by students under the proper supervision of faculty members. 9. Fire extinguisher operation and safety training are provided to all laboratory assistants.
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D3. Project Laboratory/Research Laboratory

Project Laboratory:

- Students utilize the available hardware facilities to successfully complete their projects.
- The project laboratory serves as a collaborative space where innovative ideas for micro and final-year projects are discussed, developed, and implemented.
- The laboratory is fully equipped to support both hardware and software projects, with facilities such as PCBs, soldering tools, desktop computers, breadboards, and advanced project platforms like Arduino.
- Students are permitted to dismantle obsolete kits and equipment and develop projects from the ground up.
- The following hardware and software resources are exclusively available in the project laboratory for research and project-related activities.

List of Major Equipment available at Project Laboratory

Sl. No.	Name of the Equipment
1.	Regulated Power Supply
2.	Oscilloscopes
3.	Function/ Signal Generator
4.	Auto transformers
5.	Isolation Transformers
6.	Spot Welder
7.	IR Tester
8.	Smart Battery Balancer
9.	24V Electric Cycle Setup
10.	Multimeter
11.	Soldering Iron
12.	Electric Tools Box
13.	Bread Board
14.	PCB Board

Software Resources Available:

1. MATLAB

Project Laboratory:

Objective:

- To foster student involvement in cutting-edge projects and interdisciplinary research that provide practical solutions to real-world societal and industrial problems.



Outcome:

- Almost all batches have designed hardware-based projects in the Project Laboratory, and their project work has been published in peer-reviewed journals and patented.

Utilization:

- All final-year students for Major Projects
- All third-year students for Mini Projects

Research Laboratory:

Objective:

- To conduct high-quality, innovative, and ethically responsible scientific research that advances knowledge, supports experimental learning, and contributes to technological or scientific solutions for real-world problems.
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Outcomes of the Research Laboratory:

Academic Year	Major Project	Mini Project
2025 - 2026	13	-
2024 - 2025	9	13
2023 - 2024	10	9
2022 - 2023	5	15

Outcome:

- Students and researchers are trained in laboratory techniques, scientific writing, data analysis, and safety practices.

Utilization:

- All final-year students for major projects
- All third-year students for mini projects
- UG students, research scholars, and faculty for activities leading to journal publications and conference papers




Center for Excellence:

SRI SURIYA AGENCIES

List of Experiments

- Solar panel
- Different types of Cables
- Solar mini Inverter setup
- Solar Street Light
- Solar water heater

Objective:

- To foster an ecosystem that promotes advanced learning and innovation in renewable (solar) energy through industry collaboration and exposure to emerging technologies.
- Strong partnerships with industries are established to facilitate internships, sponsored projects, and technology transfer opportunities.

Outcome:

- Students and researchers acquire practical expertise in solar energy system design, installation, maintenance, and optimization.

Student involvement in cutting-edge projects and interdisciplinary research is fostered to provide practical solutions to real-world societal and industrial problems.



Utilization:

- All EEE students.

S.NO	NAME OF THE LABORATORY	Lab In charge	Designation
1	Project Laboratory	Dr. S. Thangaprakash, Ph.D.,	Prof/ EEE
2	Project Laboratory	Mrs. B. Bommirani, M.E.,	AP/ EEE
3	Project Laboratory	Mr. R. Ramanan B.E.,	Skill Instructor

- The project laboratory is exclusively provided for students to carry out design, fabrication, and major project work.
- Computing facilities with a sufficient number of personal computers installed with MATLAB and high-speed internet connectivity are available.
- Students are encouraged to utilize the laboratory for developing project work and products during and beyond class hours.
- Domain-specific faculty members and technical staff are available beyond working hours to support students in carrying out project work.
- The project laboratory is equipped with advanced solar and wind energy systems for model development and advanced design activities.
- Students carry out their projects within the college using the project laboratory.
- Students are encouraged to undertake domain-wise project work with the support of facilities available in the laboratories and the Research Center established in solar and wind energy.
- Working models, project reports, and projects from previous batches are available in the laboratory for reference.

1. Projects completed in Project Lab

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

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

Name of the Student	Project Title	Guide name	POs	PSOs	SDGs	Type	Justification
Madhan Kumar E	Simulation Driven-Design of an Intelligent Battery Management system for 24V Li-Ion Packs In Electric Vehicles	Dr.K.Umadevi Professor & HOD/ EEE	PO1, PO2, PO3, PO4, PO5, PO7, PO11, PO12	PSO1, PSO2	7,9,13	Capstone, Application	It enables the safe, efficient, and sustainable operation of 24V Li-Ion battery packs in electric vehicles through simulation-driven intelligent battery management design.
Arjun M	Wireless Audio Amplifier	Dr.S.Thangaprakash Professor/EEE	PO1, PO3, PO5, PO10, PO12	PSO1, PSO2	7,9	Capstone, Application	To design and develop a wireless audio amplifier , enabling high-quality sound transmission without the need for physical connections, enhancing convenience and mobility in audio systems.
Karna M	Smart Solar Based Home Audio System	Dr.S.Saranya AP/EEE	PO1, PO3, PO5, PO7, PO10, PO12	PSO1, PSO2	7,9,11	Capstone, Application	To offer a sustainable, energy-efficient solution for audio entertainment while reducing reliance on grid power and promoting eco-friendly living .
Janani V	Exploring Closed Loop Speed Control for Geared DC Motor in Matlab Software	Mrs.R.Gohila ASP/EEE	PO1, PO2, PO3, PO4, PO5, PO10, PO12	PSO2	7,9	Capstone, Simulation	It utilizes MATLAB-based closed-loop control to achieve precise, stable, and efficient speed regulation of a geared DC motor for practical automation and mechatronic applications.
Dhanaseelan G	Modified Tricycle with Lead-Acid Battery System in E-Vehicle	Mr.G.Senthilrajan ASP/EEE	PO1, PO2, PO3, PO6, PO7, PO11, PO12	PSO1, PSO2	7,9,11	Product, Capstone	To enhance the performance and sustainability of electric vehicles by integrating a lead-acid battery system into a modified tricycle , offering an affordable, eco-friendly solution for urban mobility.
Ajay V							

Dinesh B	Design and Fabrication of an Eco-Friendly Electric Tricycle: Harnessing 48V BLDC Technology for Sustainable Urban Transport	Mr.N.Sivakumar AP/EEE	PO1, PO2, PO3, PO4, PO6, PO7, PO11, PO12	PSO1	7,9,11,13	Capstone, Application	To develop an eco-friendly electric tricycle by utilizing 48V BLDC technology, providing a sustainable, cost-effective solution for urban transportation while contributing to reduced carbon emissions.	
Anil Kumar	Modelling and Control of Three Phase BLDC motor driven Electric Vehicle	Mr.D.Sathiyaraj AP/EEE	PO1, PO2, PO3, PO4, PO5, PO7, PO12	PSO1, PSO2	7,9,11	Capstone, Application	It aims to model and control a three-phase BLDC motor for an electric vehicle, optimizing performance, efficiency, and reliability while advancing electric mobility and sustainable transport solutions.	
Naveen Prasanth M	Seamless Solar UPS and Grid Integration for Reliable Energy Supply	Mr.V.Nanthakumar AP/EEE	PO1, PO2, PO3, PO5, PO6, PO7, PO12	PSO1, PSO2	7,13	Capstone, Application	To provide a seamless integration of solar power UPS systems, and grid connectivity, ensuring reliable, sustainable, and efficient energy supply for both residential and commercial applications.	
Kirubakaran M	Intelligent MPPT Control for Solar Powered Uninterruptible Power Supplies	Mrs.B.Bommirani AP/EEE	PO1, PO2, PO3, PO4, PO5, PO7, PO12	PSO1, PSO2	9,8	Capstone, Application	It focuses on implementing intelligent MPPT control for solar-powered UPS systems, maximizing solar energy efficiency and ensuring uninterrupted power supply for critical applications, while reducing reliance on conventional energy sources.	
S.No	Name of the Student	Project Title	Guide name	POs	PSOs	SDGs	Type	Working models / Prototype/ Journal Publication
1	Madhan Kumar E	Simulation Driven-Design of an Intelligent Battery Management system for 24V Li-Ion Packs In Electric Vehicles	Dr.K.Umadevi Professor /EEE	PO1 , PO2, PO3, PO4 , PO5, PO7, PO8, PO9, PO10 PO11, PO12	PSO2	7,9,13	Capstone, Application	Prototype
2	Arjun M	Wireless Audio Amplifier	Dr.S.Thangaprakash Professor/EEE	PO1 , PO2, PO3, PO4 , PO5, PO7, PO8, PO9, PO10 PO11, PO12	PSO1, PSO2	7,9	Capstone, Application	Prototype
3	Karna M							
4	Gokulnath M							

5	Kavin V	Smart Solar Based Home Audio System	Dr.S.Saranya AP/EEE	PO1, PO2, PO3, PO4, PO5, PO7, PO8, PO9, PO10 PO11, PO12	PSO1, PSO2	7,9,11	Capstone, Application	Working Model	
6	Sanjay R								
7	Janani V	Exploring Closed Loop Speed Control for Geared DC Motor in Matlab Software	Mrs.R.Gohila AsP/EEE	PO1, PO2, PO3, PO4, PO5, PO7, PO8, PO9, PO10 PO11, PO12	PSO1, PSO2	7,9	Capstone, Simulation	Simulation/ Prototype	
8	Gokulakrishnan K								
9	Dhanaseelan G	Modified Tricycle with Lead-Acid Battery System in E-Vehicle	Mr.G.Senthilrajan AsP/EEE	PO1, PO2, PO3, PO4, PO5, PO7, PO8, PO9, PO10 PO11, PO12	PSO1, PSO2	7,9,11	Product, Capstone	Working Model	
10	Ajay V								
11	Dinesh B	Design and Fabrication of an Eco-Friendly Electric Tricycle: Harnessing 48V BLDC Technology for Sustainable Urban Transport	Mr.N.Sivakumar AP/EEE	PO1, PO2, PO3, PO4, PO5, PO7, PO8, PO9, PO10 PO11, PO12	PSO1, PSO2	7,9,11, 13	Capstone, Application	Working Model	
12	Hari Vallabha S								
13	Anil Kumar	Modelling and Control of Three Phase BLDC motor driven Electric Vehicle	Mr.D.Sathyaraj AP/EEE	PO1, PO2, PO3, PO4, PO5, PO7, PO8, PO9, PO10 PO11, PO12	PSO1,PSO2	7,9,11	Capstone, Application	Simulation and Prototype	
14	Kavin M								
15	Naveen Prasanth M	Seamless Solar UPS and Grid Integration for Reliable Energy Supply	Mr.V.Nanthakumar AP/EEE	PO1, PO2, PO3, PO5, PO7, PO8, PO9, PO10 PO11, PO12	PSO1, PSO2	7,13	Capstone, Application	Prototype	
16	Raja V								
17	Kirubakaran M	Intelligent MPPT Control for Solar Powered Uninterruptible Power Supplies	Mrs.B.Bommirani AP/EEE	PO1, PO2, PO3, PO4, PO5, PO7, PO8,PO9, PO10 PO11, PO12	PSO1, PSO2	9,8	Capstone, Application	Working Model	
18	Marimuthu A								

1. Publications in Research Lab	
Academic Year	Paper Published
2024 - 2025	5
2023 - 2024	10
2022 - 2023	3

Sl. No	Name of the Author	Title	Journal Name	Volume	Year of Publication
1	V.Nanthakumar,AP/EEE T. Divija, AP/EEE D. Dineshkumar, UG Scholar P. Vijay Varman, UG Scholar S. Vijay, UG Scholar R. Vigneshwaran, UG Scholar	Whale Optimization Algorithm With Solar Power Drone	Humanities and Social Science Studies,	Vol. 13, Issue 1, No. 4, PP – 30 – 34	January – June: 2024
2	Dr. K.Umadevi, Prof & Head/ EEE R. Gohila, AsP/EEE K. Prashanth, AP/EEE V. Sri Nivashini Priya, UG Scholar S. Rajamani, UG Scholar S.R.Ritick Kumar, UG Scholar	Wireless Charging For Electric Vehicle Using Hybrid Energy	Journal of Foundational Research	ISSN: 2395-5635 Volume XXXII, No.1 (V) PP – 76 – 81	January–June : 2024
3	G.Senthilrajan, AsP/EEE D.Sathyaraj, AP/EEE R.prabhu, AP/EEE K.R.Pravein, UG Scholar A.Kousik, UG Scholar S.Mageshvaran, UG Scholar	Water Management System based on IoT	Journal of Nonlinear Analysis and Optimization	Vol. 15, Issue. 1, No.1 PP – 29 – 34	2024
4	Dr.K.Umadevi, Prof & Head, I.Gunasekaran, UG Scholar D.Jaya Surya, UG Scholar P.Boopathi, UG Scholar	An Integrated Smart Metering System Using LORA Technology	International Journal of Innovative Research in Advanced Engineering	Volume 11, Issue 04 PP – 381 – 385	April 2024
5	T.Divija, AP/EEE, M.Kavya, UG Scholar K.Lalithaasri, UG Scholar M.Suthi, UG Scholar	Women Panic Stun Jacket for Self Defense Using ESP32	International Journal of Innovative Research in Advanced Engineering	Volume 11, Issue 04 PP – 386 – 390	April 2024
6	B.Bommirani, AP/EEE P.Kalaiselvi, UG Scholar R.Kowsalya, UG Scholar K.Vindhiya, UG Scholar	Lora Based Coal Mine Safety Monitoring and Security System Using Smart Helmet	International Journal of Innovative Research in Advanced Engineering	Volume 11, Issue 04 PP – 310 -314	April 2024
7	R. Gohila, AsP/EEE R.Gowtham, UG Scholar P.Mohanraj, UG Scholar R.Arun Prasath, UG Scholar	Real Time Electric Vehicle Monitoring and Tracking System Using LORA Technology	International Journal of Innovative Research in Advanced Engineering	Volume 11, Issue 04 PP – 283 – 287	April 2024
8	K.Prashanth, AP/EEE Durgesh Kumar Yadav, UG Scholar MD Saif, UG Scholar T Praveen, UG Scholar	Automated Solar Grass Cutter	International Journal of Innovative Research in Advanced Engineering	Volume 11, Issue 04 PP – 315 – 320	April 2024
9	P. Gukan, R. Gowtham, M. Logeshwaran, M. Suthi, R. Dhasarathan, T. Praveen	DC to DC Boost converter with optimized speed control for BLDC motors	International Journal of Progressive Research in Engineering Management and Science (IJPREMS)	Vol. 04, Issue 04, pp: 2591-2601	April 2024
10	Gunasekaran. I, M. Kavya, R. Kowsalya, P. Nishanth, R. Arun Prasath, R. Mahendran	An Integrated Smart Metering System Using Lora Technology	International Journal of Progressive Research in Engineering Management and Science (IJPREMS)	Vol. 04, Issue 04, pp: 2611-2615	April 2024
11	J. R. Sudharsan, S. Balamurugan, K. Lalithaasri, S. Srisanth, P. Boopathi, P. Manikandan	A New Intelligent Home Automation with Integration of Solar and Grid	International Journal of Progressive Research in Engineering Management and Science (IJPREMS)	Vol. 04, Issue 04, pp: 2605-2610	April 2024

12	T. Venkatajalapathi, P. Kalaiselvi, P. Mohanraj, K. Vindhya, T. Kiruthik Varshan, N. Venkatesh	Automated Fire Detection and Suppression Robot using Proteus	International Journal of Progressive Research in Engineering Management and Science (IJPREMS)	Vol. 04, Issue 05, pp: 569-573	May 2024	
13	Durgesh Kumar Yadav, D. Jayasurya, Md Saif, M. Vairavamoorthi, A. Karthick, R. Premnath	Solar-Powered Autonomous Grass Cutting System	International Journal of Progressive Research in Engineering Management and Science (IJPREMS)	Vol. 04, Issue 05, pp: 574-578	May 2024	
14	N.Sivakumar AP/EEE and R.Prabhu AP/EEE B.Dinesh,V.Raja,S.Hari Vallabha,M.Karna UG Students,	Design and Fabrication of an Eco-Friendly Electric Tricycle: Harnessing 48v BLDC Technology for Sustainable Urban Transport	IJIRIS: International Journal of Innovative Research in Information Security	Volume 11, Issue 02 PP- 157 – 161.	April 2025	
15	D. Sathiyaraj AP/EEE, K.Prashanth AP/EEE M. Kavin, V. Kavin, R. Sanjay, UG Students	Solar based Home Audio System	IJIRIS: International Journal of Innovative Research in Information Security	Volume 11, Issue 02 PP- 164 – 168.	April 2025	
16	Dr.K.Umadevi Professor/EEE V.Nantha Kumar, AP/EEE, E.Madhan Kumar,Anil kumar, M.Arjun UG Students,	Intelligent Battery Management System Design for 24V Li-Ion EV Packs Using Simulation Approach	IJIRIS: International Journal of Innovative Research in Information Security	Volume 11, Issue 02 PP- 164 – 168.	April 2025	
17	R.Gohila AsP/EEE, B.Bommirani AP/EEE V.Janani, K.Gokulakrishnan, M.Kirubakaran, A.Marinuthu UG Students	Modeling and Analysis of Geared DC Motor Speed Control with MATLAB-Based Closed Loop	IJIRIS: International Journal of Innovative Research in Information Security	Volume 11, Issue 02 PP- 112 – 115.	April 2025	
18	Prof.G.Senthilrajan, AsP/ EEE T.Divija, AP/EEE M.Naveen Prasanth,G.Dhanaseelan,V.Ajay UG Student	Modified Tricycle with Lead-Acid Battery System in E-Vehicle	IJIRIS: International Journal of Innovative Research in Information Security	Volume 11, Issue 02 PP- 116 – 120.	April 2025	

1. Patents in Research Lab

Academic Year	Patent Published
2024 - 2025	2
2023 - 2024	1

S.No	Name of Department utilized	Title of the Innovation	Name of the Applicant
1.	EEE	Integrated Solar-Powered Electric Vehicle Charging Hub with Energy Storage System	Dr. K. Umadevi
2.		Simulation-Driven Design of an Intelligent Battery Management System for 24V Lithium Iron Packs in Electric Vehicles	Dr. K. Umadevi Mrs. R. Gohila Dr. S. Thangaprakash Mr. V. Nanthakumar Mrs. B. Bommirani Mr. K. Prashanth Ms. T. Divija Madhan Kumar E Arjun M Janani V Gokulakrishnan K Naveen Prasanth M

			3.	Modelling and control of three phase BLDC motor driven Electric Vehicle	Mr. N. Sivakumar Mr. G. Senthilrajan Mr. D. Sathiyaraj Mr. R. Prabhu Dinesh B Hari Vallabha S Dhanaseelan G Ajay V Anil Kumar Kavin M Gokulnath M	
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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	32	15	79
2024-25(CAYm1)	720	36	32	19	82
2025-26(CAY)	720	36	32	17	81

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	3500000.00	3186522.00	3000000.00	2589740.00	3800000.00	3503854.00	300000.00	90851.00
Library	500000.00	40570.00	400000.00	389939.00	680000.00	593907.00	550000.00	451508.00
Laboratory equipment	5975000.00	1316020.00	5485000.00	4545864.00	3835000.00	3126770.00	6000000.00	4999079.00
Teaching and non-teaching staff salary	95000000.00	62631356.00	90000000.00	86844107.00	88500000.00	77272829.00	52500000.00	45592328.00
Outreach Programs	650000.00	265341.00	600000.00	581647.00	700000.00	627340.00	425000.00	389236.00
R&D	5475000.00	2368954.00	4960000.00	4134123.00	745000.00	537650.00	125000.00	103800.00
Training, Placement and Industry linkage	3350000.00	1946766.00	2490000.00	2077966.32	2750000.00	2282424.00	1125000.00	926503.00
SDGs	17025000.00	12978585.00	13380000.00	11413298.00	14425000.00	12113531.00	1750000.00	14272122.00
Entrepreneurship	200000.00	48100.00	100000.00	12689.00	200000.00	176214.00	50000.00	10000.00
Others, specify	58200000.00	35660073.00	44725000.00	41651893.68	33295000.00	31135505.24	34550000.00	31965516.00
Total	189875000.00	120442287.00	165140000.00	154241267.00	148930000.00	131370024.24	113125000.00	98800943.00

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	475000.00	94850.00	475000.00	399350.00	225000.00	188100.00	450000.00	360250.00
Software	125000.00	27500.00	125000.00	104000.00	250000.00	215350.00	360000.00	301000.00
SDGs	700000.00	607400.00	650000.00	598900.00	800000.00	674650.00	850000.00	650800.00
Support for faculty development	25000.00	9100.00	25000.00	8550.00	25000.00	5600.00	25000.00	17800.00
R & D	600000.00	305100.00	550000.00	457750.00	85000.00	69350.00	375000.00	207250.00
Industrial Training, Industry expert, Internship	375000.00	250650.00	275000.00	230100.00	350000.00	294550.00	300000.00	209750.00
Miscellaneous Expenses*	325000.00	265000.00	325000.00	281500.00	200000.00	164750.00	125000.00	196850.00
Total	2625000.00	1559600.00	2425000.00	2080150.00	1935000.00	1612350.00	2485000.00	1943700.00