

NATIONAL BOARD OF ACCREDITATION

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

Program Name : Electrical and Electronics Engineering	Discipline : Engineering & Technology
Level : Under Graduate	Tier : 2
Application No : 11657	Date of Submission : 02-03-2026

PART A- Profile of the Institute

A1.Name of the Institute: GRT INSTITUTE OF ENGINEERING AND TECHNOLOGY	
Year of Establishment : 2008	Location of the Institute: Tiruttani
A2. Institute Address: GRT MAHALAKSHMI NAGAR CHENNAI - TIRUPATHI HIGH WAY TIRUTTANI - 631 209	
City:Tiruvallur	State:Tamil Nadu
Pin Code:631209	Website:www.grt.edu.in
Email:arumugam.s@grt.edu.in	Phone No(with STD Code):044-27887011
A3. Name and Address of the Affiliating University (if any):	
Name of the University : ANNA UNIVERSITY	City:
State :	Pin Code: 0
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: 7
- No. of PG programs: 1

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

Sr.No.	Discipline	Level of program	Name of the program	Year of Start	Year of Closed	Name of The Department
1	Engineering & Technology	UG	Artificial Intelligence and Data Science	2022	--	Artificial Intelligence and Data Science
2	Engineering & Technology	UG	Biomedical Engineering	2014	--	Biomedical Engineering
3	Engineering & Technology	UG	Computer Science and Engineering	2008	--	Computer Science and Engineering
4	Engineering & Technology	UG	Electrical and Electronics Engineering	2008	--	Electrical and Electronics Engineering
5	Engineering & Technology	UG	Electronics & Communication Engineering	2008	--	Electronics and Communication Engineering
6	Engineering & Technology	UG	Information Technology	2024	--	Information Technology
7	Engineering & Technology	UG	Mechanical Engineering	2009	--	Mechanical Engineering
8	Management	PG	Master of Business Administration	2009	--	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
Electronics and Communication Engineering	Yes	Electronics & Communication Engineering	UG
Biomedical Engineering	Yes	Biomedical Engineering	UG
Computer Science and Engineering	Yes	Computer Science and Engineering	UG
Mechanical Engineering	No	Mechanical Engineering	UG
Electrical and Electronics Engineering	No	Electrical and Electronics Engineering	UG

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

No Record

PART-B: Program information

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

Table No. B1: Program details.

A. List of the Programs Offered by the Department:

SR.NO.	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/DECREASE INTAKE (if any)	YEAR OF INCREASE/DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/COMPETENT AUTHORITY ARROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCREDITED	PROGRAM DURATION
1	Electrical and Electronics Engineering	UG	2008 / --	60	Yes	2023	30	2023	F.No. Southern/1-36255918696/2023/EOA	Applying first time	--	--	0	4

Sanctioned Intake for Last Five Years for the Electrical and Electronics Engineering

Academic Year	Sanctioned Intake
2025-26	30
2024-25	30
2023-24	30
2022-23	60
2021-22	60
2020-21	60

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. R. Ashok Kumar
B. Nature of appointment:	Regular
C. Qualification:	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)	30	30	30	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	17	15	18	24	22	8	14
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	6	5	2	1	5	2
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.	17	21	23	26	23	13	16

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)	30	17	0	56.67
2024-25 (CAYm1)	30	15	0	50.00
2023-24 (CAYm2)	30	18	0	60.00

Average [(ER1 + ER2 + ER3) / 3] = 55.56≅ 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	65.00	62.00
B=No. of students who graduated from the program in the stipulated course duration	22.00	12.00	17.00

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 27.32

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)
X=(Mean of 1st 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 1st year/10)	6.58	7.35	7.93
Y=Total no. of successful students	16.00	15.00	23.00
Z=Total no. of students appeared in the examination	15.00	18.00	24.00
API [X*(Y/Z)]	7.02	6.12	7.60

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 2nd year/10)	7.46	7.66	7.94
Y=Total no. of successful students	18.00	24.00	22.00
Z=Total no. of students appeared in the examination	20.00	25.00	22.00
API [X * (Y/Z)]	6.71	7.35	7.94

Average API [(AP1 + AP2 + AP3)/3] : 7.33

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)	8.45	7.98	7.69
Y=Total no. of successful students	23.00	22.00	12.00
Z=Total no. of students appeared in the examination	24.00	22.00	12.00
API [X*(Y/Z)]:	8.10	7.98	7.69

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

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	65.00	62.00
X=No. of students placed	22.00	12.00	17.00
Y=No. of students admitted to higher studies	0.00	0.00	0.00
Z= No. of students taking up entrepreneurship	0.00	0.00	0.00
Placement Index(P) = ((X + Y + Z)/FS) * 100):	36.07	18.46	27.42

Average Placement Index = (P_1 + P_2 + P_3)/3: 27.32 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. S. Arumugam	XXXXXXXX86G	Ph.D	Bharath University	Power Electronics	28/06/2013	12.7	Professor	Professor	28/06/2013	Regular	Yes		No
2	Dr. R. Ashok Kumar	XXXXXXXX80H	Ph.D	St Peters Institute for Higher Education and Research	Special Electrical Machines	03/06/2011	14.8	Assistant Professor	Associate Professor	03/02/2023	Regular	Yes		Yes
3	Dr. B. Swapna	XXXXXXXX53P	Ph.D	Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology	Special Electrical Machines	01/06/2011	13	Assistant Professor	Associate Professor	03/02/2023	Regular	No	31/05/2024	No
4	Mr. Rajesh Kumar Mohapatra	XXXXXXXX45J	M.Tech	Visvesvaraya Technological University	Computer application in Industrial Drive	20/12/2010	15.2	Assistant Professor	Assistant Professor		Regular	Yes		No
5	Ms. Ramadevi N	XXXXXXXX00N	M.E.	Sathyabama Institute of Science and Technology	Power Electronics for industrial drives	13/10/2010	15.4	Assistant Professor	Assistant Professor		Regular	Yes		No
6	Mr. Sarathy D	XXXXXXXX33R	M.E.	Anna University	Embedded System Technology	20/01/2016	8.4	Assistant Professor	Assistant Professor		Regular	No	31/05/2024	No
7	Mrs. Lavanya D	XXXXXXXX05K	M.E.	Anna University	Applied Electronics	27/01/2017	9	Assistant Professor	Assistant Professor		Regular	Yes		No
8	Mr. Govindarajan R	XXXXXXXX22B	M.E.	Anna University	Power Electronics for industrial drives	23/08/2021	4.6	Assistant Professor	Assistant Professor		Regular	Yes		No
9	Mr. Vinoth	XXXXXXXX39M	M.E.	Anna University	Embedded System Technology	01/06/2024	1.8	Assistant Professor	Assistant Professor		Regular	Yes		No
10	Ms. Kavya K	XXXXXXXX46Q	M.Tech	SRM Institute of Science and Technology	Power Electronics	24/06/2019	5.11	Assistant Professor	Assistant Professor		Regular	No	31/05/2025	No
11	Ms.SHOBANA T	XXXXXXXX81A	M.E.	ANNA UNIVERSITY	POWER ELECTRONICS & DRIVES	03/06/2024	1	Assistant Professor	Assistant Professor		Regular	No	06/06/2025	No

12	Mr. PRABHU V	XXXXXXXX83A	M.E.	ANNA UNIVERSITY	POWER ELECTRONICS AND DRIVES	05/05/2025	1	Assistant Professor	Assistant Professor		Regular	No	30/05/2026	No
13	Ms.M.DEVI	XXXXXXXX97A	M.E.	ANNA UNIVERSITY	POWER SYSTEM ENGINEERING	02/06/2023	1.1	Assistant Professor	Assistant Professor		Regular	No	05/07/2024	No

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

C2. Student-Faculty Ratio (SFR)

No. of UG(Engineering) programs in Department including allied departments/ clusters (UGn):

UG1=1st UG program

UGn=nth UG program

B= No. of Students in UG 2nd year (ST)

C= No. of Students in UG 3rd year (ST)

D= No. of Students in UG 4th year (ST)

No. of PG (Engineering) programs in Department including allied departments/ clusters (PGm):

PG1=1st PG program.

PGm=mth PG program

A= No. of Students in PG 1st year

B= No. of Students in PG 2nd year

Student Faculty Ratio (**SFR**) = S/F

S= No. of students of all programs in the Department including all students of allied departments/clusters.

No. of students (ST)=Sanctioned Intake (SA)+ Actual admitted students via lateral entry including leftover seats (L) if any (limited to 10 % of SA)

Students who admitted under supernumerary quotas (SNQ, EWS, etc) will not be considered in calculating SFR value. Those students are exempted.

F=Total no. of regular or contractual faculty members (Full Time) in the Department, including allied departments/clusters (excluding first year faculty (The faculty members who have a 100% teaching load in the first-year courses)).

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

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

Description	CAY(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
UG1.B	33	33	62
UG1.C	33	62	61
UG1.D	62	61	65
UG1: Electrical and Electronics Engineering	128	156	188
DS=Total no. of students in all UG and PG programs in the Department	128	156	188
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= 128	S2= 156	S3= 188
DF=Total no. of faculty members in the Department	8	9	10
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= 8	F2= 9	F3= 10
FF=The faculty members in F who have a 100% teaching load in the first-year courses	1	1	1
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1= 18.29	SFR2= 19.50	SFR3= 20.89
Average SFR for 3 years	SFR= 19.56		

C3. Faculty Qualification

- Faculty qualification index (FQ) = $2.5 * [(10X + 4Y)/RF]$ 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)	2	6	6.00	18.33
2024-25(CAYm1)	2	7	7.00	17.14
2023-24(CAYm2)	3	7	9.00	16.11

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	1.00	1.00	1.00	4.00	6.00
2024-25	1.00	1.00	1.00	1.00	5.00	7.00
2023-24	1.00	1.00	2.00	2.00	6.00	7.00
Average	RF1=1.00	AF1=1.00	RF2=1.33	AF2=1.33	RF2=5.00	AF2=6.67

C5. Visiting/Adjunct Faculty/Professor of Practice

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

(CAYm1)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr. Manav Dash	Quality Manager	Siemens	Electrical Measurements and Electromagnetic Fields	30.00
2	Mr. Manav Dash	Quality Manager	Siemens	Sensors	25.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr. Murali B A	Senior Lead Engineer	FLSmidth	Measurements and Instrumentation	30.00
2	Mr. Murali B A	Senior Lead Engineer	FLSmidth	Renewable Energy Systems	30.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr. Narendran C	Embedded software engineer	Spanidea systems private limited	Solid State Drives	30.00
2	Mr. Narendran C	Embedded software engineer	Spanidea systems private limited	Power Electronics	30.00

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	3	1	4
2	No. of peer reviewed conference papers published	4	5	6
3	No. of books/book chapters published	4	5	2

C7. Sponsored Research Project

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

(CAYm1)

(CAYm2)

(CAYm3)

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

Note*:

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

C8. Consultancy Work

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

(CAYm1)

(CAYm2)

(CAYm3)

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

Note*:

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

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

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

(CAYm1)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Dr. R. Ashok Kumar	Hybrid Propulsion System for Electric Vehicles	8 Months	0.10	0.10	PATENT PUBLISHED
Dr. R. Ashok Kumar	Overload Protector Design with LED Status Indicators	8 Months	0.10	0.10	PATENT GRANTED
Ms. N. Ramadevi	Aquatic Weeding Machine	7 Months	0.11	0.11	PATENT GRANTED
Dr. R. Ashok Kumar	IOT based feeder overload control system	5 Months	0.10	0.10	PUBLISHED IN IJARESM
Dr. R. Ashok Kumar	Development of smart environmental monitoring	7 Months	0.15	0.15	Challenges in Information, Communication and Computing Technology
Dr. R. Ashok Kumar	Reinforcement learning for autonomous control	4 Months	0.22	0.22	lcSMART GRID 2025
Dr. R. Ashok Kumar	Secure and scalable distributed power	4 Months	0.20	0.20	lcSMART GRID 2025
Dr. R. Ashok Kumar	AI powered optimization	4 Months	0.21	0.21	lcSMART GRID 2025
Dr. R. Ashok Kumar	IOT Based Feeder Overload Control System	4 Months	0.07	0.07	CONFERENCE ON NEXUS OF KNOWLWDGE
Dr. R. Ashok Kumar	Intelligent Transportation System	5 Months	0.14	0.14	ICRDICCT 25
Mr. Sarathy D	An energy management system for microgrids	5 Months	0.15	0.15	CHALLENGES IN INFORMATION, COMMUNICATION
Ms. Ramadevi N	A novel bald eagle search optimised ANFIS controlled high gain sepic converter	9 Months	0.25	0.25	PUBLISHED IN JOURNAL OF ELECTRICAL ENGINEERING
Ms. Ramadevi N	Digital Twin for Smart Building Management System	4 Months	0.10	0.10	PUBLISHED IN INTERNATIONAL CONFERENCE
Mrs. Lavenya D	Performance Comparison of Super-Lift Luo converter with filters for high voltage applications	5 Months	0.10	0.10	PUBLISHED IN IEEE CONFERENCE
Mrs. Lavenya D	Implement Budget Meter for Smart Homes	4 Months	0.10	0.10	PUBLISHED IN IJARESM
			Amount received (Rs.): 2.10		

(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. S. Swapna	Development of Energy Management System for Micro Grid Operation	8 Months	0.35	0.35	PUBLISHED IN TECH SCIENCE PRESS
Dr. S. Swapna	Characteristics of Bridgeless Boost Converter Fed Bldcm	5 Months	0.30	0.30	PUBLISHED IN INTELLIGENT TECHNOLOGIES FOR SCIENTIFIC RESEARCH AND ENGINEERING
Dr. S. Swapna	Prevention of over Current Consumption through IOT	4 Months	0.13	0.13	PUBLISHED IN IJIRSET
Mrs. Lavenya D	Driver Drowsiness Detection using Eye Blink Sensor	4 Months	0.12	0.12	PUBLISHED IN ICAICEESS-23
Dr. R. Ashok Kumar	IOT based battery energy management	5 Months	0.10	0.10	EPES 2024
Mr. Sarathy D	Detection of Parkinson's disease using CNN	5 Months	0.36	0.36	Int. J. Medical Engineering and Informatics
Mr. Rajesh Kumar Mohapatra	Raspberry PICO and QR	4 Months	0.12	0.12	EPES 2024
Mr. Rajesh Kumar Mohapatra	Solar PV Integrated Electric Vehicle	4 Months	0.12	0.12	ICCI2024
			Amount received (Rs.): 1.60		

(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. ASHOK KUMAR R	BUILDING & MONITORING A SMART SYSTEM BY USING IOT	7 Months	0.16	0.16	RESEARCH PAPER PUBLISHED IN IEEE CONFERENCE
Mrs. S. SWAPNA	Characteristics and performance of BLDC motor	8 Months	0.21	0.21	PUBLISHED IN AIP CONFERENCE PROCEEDINGS
Mrs. S. SWAPNA	A hybrid approach based energy management for building resilience against power outage	8 Months	0.30	0.30	PUBLISHED IN Renewable Energy JOURNAL
Mrs. S. SWAPNA	Optimal location determination for an EVPL	8 Months	0.24	0.24	PUBLISHED IN Journal of Intelligent & Fuzzy Systems
Mrs. S. SWAPNA	A PAPER COLLECTING DEVICE	7 Months	0.15	0.15	DESIGN PATENT GRANTED BY IPR
Mr. R. Ashok Kumar	Implementation of RF Controlled Solar Panel Based Robotic Vehicle	5 Months	0.08	0.08	PATENT PUBLISHED
Ms. N. Ramadevi	A System and Method for managing government affair on cloud computing for a smart city	6 Months	0.08	0.08	PATENT PUBLISHED
Mr. R. Ashok Kumar	Design and Implementation of a smart solar panel with auto rectification	6 Months	0.08	0.08	PATENT PUBLISHED
Mr. R. Ashok Kumar	LONG SHORT TERM MEMORY MODEL	3 Months	0.15	0.15	CONFERENCE PUBLISHED
Mr. R. Ashok Kumar	ELECTRICITY LEAKAGE DETECTION AND OVERVOLTAGE	3 Months	0.17	0.17	CONFERENCE PUBLISHED
Ms. RAMADEVI N	Improved Dynamic Response Of Interleaved Luo Converter	6 Months	0.15	0.15	ICRISEM 2022
Ms. RAMADEVI N	Detection of Cyber Attack in Electric Vehicles Using ALSTM	6 Months	0.38	0.38	Journal of Electrical Engineering and Automation
Ms. RAMADEVI N	A System and Method for Managing Government Affair on Cloud Computing	4 Months	0.08	0.08	PATENT PUBLISHED
Ms. RAMADEVI N	Safety enhanced electric vehicle	4 Months	0.10	0.10	International Conference on Recent Trends in Science, Engineering and Management
Ms. RAMADEVI N	Rooftop Solar Panel PV System	4 Months	0.15	0.15	International Conference on Recent Trends in Science, Engineering and Management
Ms. RAMADEVI N	Nanotechnology and Fractal Robots	4 Months	0.17	0.17	International Conference on Recent Trends in Science, Engineering and Management
Ms. RAMADEVI N	Automation of Waste Segregation System Using PLC	4 Months	0.15	0.15	International Conference on Recent Trends in Science, Engineering and Management
			Amount received (Rs.): 2.80		

Total amount (Lacs) received for the past 3 years : 6.50

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	Engineering Practice Lab	30	1. Switches, Fuse, Indicator, Lamp and 2. Energy meter 3. Fluorescent Lamp Wiring 4. Volt meter, Ammeter, Wattmeter, 5. Frequency meter, 6. Power Factor meter	30	Mr. Arulkumar V	Lab Technician	Diploma in ECE
2	Electrical Machines Laboratory-I	30	1. DC Shunt Motor with Loading Arrangement 2. DC Shunt Motor Coupled With Three phase Alternator 3. Single Phase Transformer 4. DC Series Motor with Loading Arrangement	6	Ms. Swetha K. R	Lab Technician	Diploma in EEE
3	Electrical Machines Laboratory-I	30	1.DC Shunt Motor with Loading 2.Arrangement DC Shunt Motor Coupled With Three phase Alternator 3.Single Phase Transformer 4.DC Series Motor with Loading Arrangement	6	Ms. Swetha K. R	Lab Technician	Diploma in EEE
4	C Programming and Data Structure Laboratory	30	1.INTEL based desktop PC with min. 8GB RAM and 500 GB HDD, 17" 2. Windows 10 or higher operating system (Ubuntu, Linux, OS) 3. IDE (Visual Studio, Eclipse, NetBeans) 4. Compiler (GCC, Clang, MSVC)	12	Ms. Swetha K. R	Lab Technician	Diploma in EEE
5	Control and Instrumentation Laboratory	30	1. Desktop 2. Mat Lab Latest Version	6	Mr. Arulkumar V	Lab Technician	Diploma in ECE
6	Power Electronics laboratory	30	1. Single phase Semi converter 2. Single phase Full converter 3. Step down chopper 4. Step up chopper 5. Single phase PWM Inverter 6. Three phase Inverter	6	Mr. Mani A	Lab Technician	Diploma in ECE
7	Power System Laboratory	30	1. Personal Computers (Intel Core i5 or i7, 500 GB, 8 GB RAM) 2. Software: EMTP / ETAP / CYME / MIPOWER / PSCAD / Simulink 3. Power system simulation software 4. MATLAB / Simulink	12	Mr. Mani A	Lab Technician	Diploma in ECE

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Engineering Practices Laboratory	1. Students must wear appropriate footwear and lab coats while working in the laboratory. 2. Burnt resistors and debris from breadboards should be cleaned and disposed of properly. 3. Personnel should be trained in the correct operation of fire extinguishers. 4. A properly equipped first aid kit must be readily available in the laboratory. 5. A suitable stand should be used to safely hold the soldering iron when not in use. 6. The soldering iron should be switched off if it will remain unused for an extended period (more than 10 minutes). 7. A heat sink should be employed while soldering temperature-sensitive components to prevent damage. 8. Miniature Circuit Breakers (MCBs) should be installed and used to protect against electric shock and overload conditions.
2	ELECTRICAL MACHINES LABORATORY – I	1. Laboratory work should not be carried out individually; proper supervision must be ensured at all times. 2. Appropriate personal protective equipment (PPE), such as insulated footwear and gloves, must be worn. 3. Loose clothing, jewelry, and handling equipment with wet hands should be strictly avoided. 4. The power supply must be switched OFF before establishing or modifying any electrical connections. 5. All wiring connections should be carefully verified prior to energizing the system. 6. Electrical machines must not be operated beyond their specified rated capacity. 7. Contact with moving components such as shafts and belts should be avoided during operation. 8. Equipment should be immediately shut down if abnormal noise or burning odor is detected. 9. The location and proper use of fire extinguishers, particularly CO ₂ types for electrical fires, should be known. 10. Adequate clearance must be maintained from high-voltage installations. 11. The laboratory environment should be kept clean and dry to prevent electrical hazards.

3	C PROGRAMMING AND DATA STRUCTURES LABORATORY	1. Data is safeguarded through uninterrupted power supply (UPS) backup systems. 2. Fire extinguishers are installed to handle emergency situations. 3. Students and faculty members are required to adhere to the safety instruction charts displayed in the laboratories. 4. All computer systems are regularly updated with antivirus software to ensure security. 5. Firewalls are enabled on all computers to protect against unauthorized access. 6. USB drives and pen drives must be scanned for potential threats before use. 7. Adequate passage width is maintained to ensure safe movement within the laboratory.
4	ELECTRICAL MACHINES LABORATORY – II	1. Laboratory activities must not be performed individually; appropriate supervision should always be ensured. 2. Suitable personal protective equipment (PPE), including insulated footwear and gloves, must be used. 3. Loose garments, jewelry, and handling equipment with wet hands should be strictly avoided. 4. The power supply should be turned OFF before making or altering any electrical connections. 5. All connections must be thoroughly checked prior to energizing the system. 6. Electrical machines should not be operated beyond their rated limits. 7. Direct contact with rotating components such as shafts and belts must be avoided. 8. Equipment should be immediately powered down if any abnormal sound or burning smell is observed. 9. The location and proper usage of fire extinguishers, particularly CO ₂ types for electrical fires, must be known. 10. A safe clearance should be maintained from high-voltage installations. 11. The laboratory should be kept clean and dry, as the presence of moisture can lead to electrical hazards.
5	Control and Instrumentation Laboratory	1. Appropriate footwear and laboratory coats must be worn at all times. 2. Burnt components and debris from breadboards should be cleaned and disposed of properly. 3. Personnel should be familiar with the correct use of fire extinguishers. 4. A well-equipped first aid box must be available in the laboratory. 5. A proper stand should be used to safely place the soldering iron when not in use. 6. The soldering iron should be switched off if it will not be used for more than 10 minutes. 7. A heat sink should be utilized while soldering temperature-sensitive components to prevent damage. 8. Miniature Circuit Breakers (MCBs) should be used to protect against electric shock and overcurrent conditions.
6	Power Electronics Laboratory	1. Proper footwear and laboratory coats should be worn during all lab activities. 2. Burnt resistors and residues from breadboards must be cleared and disposed of appropriately. 3. Users should be trained in the safe and effective operation of fire extinguishers. 4. A fully stocked first aid kit should be maintained within the laboratory. 5. A designated stand must be used for safely placing the soldering iron when not in use. 6. The soldering iron should be switched off if it remains unused for more than 10 minutes. 7. Heat sinks should be used while soldering temperature-sensitive components to prevent thermal damage. 8. Miniature Circuit Breakers (MCBs) should be employed to minimize the risk of electric shock and overcurrent.
7	Power System Laboratory	1. Data integrity is ensured through the use of UPS backup systems. 2. The facility is equipped with fire extinguishers for emergency response. 3. Students and faculty members are required to adhere to the safety instruction charts displayed in the laboratories. 4. All computer systems are regularly updated with antivirus software to maintain security. 5. Firewalls are enabled on every computer to prevent unauthorized access. 6. USB devices and pen drives must be scanned for malicious content before use. 7. Adequate passage width is maintained to facilitate safe movement within the laboratory. 8. Multiple access pathways are provided to ensure sufficient clearance and ease of evacuation.

D3. Project Laboratory/Research Laboratory

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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)	360	18	15	4	71
2024-25(CAYm1)	450	22	17	6	67
2025-26(CAY)	450	22	19	3	72

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

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

Items	Budgeted in 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Infrastructure Built-Up //	240	236.68	175	168.96	40	35.94	20	18.13
Library //	10	8.03	10	9.29	10	8.08	4	3
Laboratory equipment //	425	414.24	12	10.31	40	38.90	125	123.35
Teaching and non-teaching staff salary //	975	949.92	800	752.34	650	630.09	650	601.34
Outreach Programs //	2	1.07	4	3.77	3.50	2.06	7	6.33
R&D //	14	13.56	13	12.09	10	9.30	13	12.07
Training, Placement and Industry linkage //	35	33.10	25	22.87	15	13.63	10	8.34
SDGs //	55	52.06	60	58.59	80	75.45	85	79.99
Entrepreneurship //	1	0.31	1	0.38	1.50	0.45	1	0.40
Others, specify //	920	908.88	850	832.80	700	678.12	500	457.36
Total	2677	2617.85	1950	1871.40	1550.00	1492.02	1415	1310.31

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

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

Items	Budgeted in 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Laboratory equipment //	2500000	2410600	25000	0	25000	0	15000	0
Software //	25000	19261	25000	14659	10000	8687	20000	17371
SDGs //	125000	110200	250000	245000	250000	245000	15000	10000
Support for faculty development //	175000	170000	175000	165000	170000	161000	170000	163000
R & D //	275000	273500	230000	218250	180000	170000	300000	288000

Industrial Training, Industry expert, Internship //	175000	164710	125000	114912	70000	68867	50000	35272
Miscellaneous Expenses* //	50000	28210	50000	40862	75000	68795	110000	103881
Total	3325000	3176481	880000	798683	780000	722349	680000	617524