

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 : 1
Application No : 11700	Date of Submission : 13-03-2026

PART A- Profile of the Institute

A1.Name of the Institute: P. A. COLLEGE OF ENGINEERING AND TECHNOLOGY	
Year of Establishment : 2008	Location of the Institute: Pollachi
A2. Institute Address: PALLADAM ROAD, POLLACHI - 642 002.	
City:Coimbatore	State:Tamil Nadu
Pin Code:642002	Website:www.pacolleges.org
Email:pacollege@yahoo.com	Phone No(with STD Code):04259-221386
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: Autonomous CAY(2019-20)	
A5. Ownership Status: Self financing	

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

- No. of UG programs: 6
- No. of PG programs: 2

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	--	Computer Science and Engineering
2	Engineering & Technology	PG	Computer Science and Engineering	2011	--	Computer Science and 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 AND COMMUNICATION ENGINEERING	2008	--	Electronics and Communication Engineering
6	Engineering & Technology	UG	Information Technology	2022	--	Computer Science and Engineering
7	Engineering & Technology	UG	Mechanical Engineering	2009	--	Mechanical Engineering

8	Engineering & Technology	PG	Power Electronics & Drives	2012	--	Electrical and Electronics Engineering
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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
Computer Science and Engineering	Yes	Computer Science and Engineering	UG
Electronics and Communication Engineering	No	ELECTRONICS AND COMMUNICATION ENGINEERING	UG
Electrical and Electronics Engineering	No	Electrical and Electronics Engineering	UG
Mechanical Engineering	No	Mechanical Engineering	UG

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

No Record

PART-B: Program information**B1. Provide the Required Information for the Program Applied For:**

Table No. B1: Program details.

A. List of the Programs Offered by the Department:

SR.NO.	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/DECREASE INTAKE (if any)	YEAR OF INCREASE/DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/COMPETENT AUTHORITY ARROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCREDITED	PROGRAM DURATION
1	Electrical and Electronics Engineering	UG	2008 / --	60	Yes	2025	30	2025	F.No. Southern/1-44643084712/2025/EOA	Granted accreditation for 3 years for the period (specify period)	2023	2026	3	4

Sanctioned Intake for Last Five Years for the Power Electronics & Drives	
Academic Year	Sanctioned Intake
2025-26	30
2024-25	60
2023-24	60
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.S.Vijayabaskar
B. Nature of appointment:	Regular

C. Qualification:	Ph.D
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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	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	30	32	49	54	42	8	19
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	18	9	10	18	33	7
N3=Separate division if any	0	0	0	0	0	0	0
N4=Total no. of students admitted in the 1st year via all supernumerary quotas	1	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.	31	50	58	64	60	41	26

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	30	1	103.33
2024-25 (CAYm1)	60	32	0	53.33
2023-24 (CAYm2)	60	49	0	81.67

Average [(ER1 + ER2 + ER3) / 3] = 79.44≅ 14.00

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).	78.00	93.00	67.00
B=No. of students who graduated from the program in the stipulated course duration	53.00	37.00	25.00
Success Rate (SR)= (B/A) * 100	67.95	39.78	37.31

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 48.35

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)
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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)	7.79	7.72	7.65
Y=Total no. of successful students	30.00	47.00	49.00
Z=Total no. of students appeared in the examination	32.00	49.00	54.00
API [X*(Y/Z)]	7.30	7.40	6.94

Average API[(AP1+AP2+AP3)/3] : 7.21

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)	7.68	7.50	7.63
Y=Total no. of successful students	56.00	56.00	58.00
Z=Total no. of students appeared in the examination	56.00	59.00	60.00
API [X * (Y/Z)]	7.68	7.12	7.38

Average API [(AP1 + AP2 + AP3)/3] : 7.39

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)	7.70	7.49	7.83
Y=Total no. of successful students	54.00	56.00	40.00
Z=Total no. of students appeared in the examination	56.00	58.00	40.00
API [X*(Y/Z)]:	7.43	7.23	7.83

Average API [(AP1 + AP2 + AP3)/3] : 7.50

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	78.00	93.00	67.00
X=No. of students placed	54.00	37.00	25.00
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):	69.23	39.78	37.31

Average Placement Index = (P_1 + P_2 + P_3)/3: 48.77 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.Vijayabaskar	XXXXXXXX11P	Ph.D	ANNA UNIVERSITY	POWER SYSTEM	06/12/2013	12.3	Associate Professor	Professor	01/12/2015	Regular	Yes		Yes
2	Dr.P.Mariaraja	XXXXXXXX12F	Ph.D	ANNA UNIVERSITY	POWER SYSTEM	04/05/2011	14.10	Assistant Professor	Associate Professor	01/02/2022	Regular	Yes		No
3	Dr.S.ARUN	XXXXXXXX85D	Ph.D	ANNA UNIVERSITY	CONTROL SYSTEM	19/05/2010	15.9	Assistant Professor	Associate Professor	01/06/2023	Regular	Yes		No
4	Mr.P.PRAKASH	XXXXXXXX24A	M.E.	ANNA UNIVERSITY	VLSI DESIGN	24/05/2010	15.9	Assistant Professor	Assistant Professor		Regular	Yes		No
5	Mr.A.KUPPUSWAMY	XXXXXXXX89H	M.E.	ANNA UNIVERSITY	Power Electronics and Drives	02/05/2011	14.10	Assistant Professor	Assistant Professor		Regular	Yes		No
6	Mr.A.VINOTHKUMAR	XXXXXXXX81J	M.E.	ANNA UNIVERSITY	POWER ELECTRONICS AND DRIVES	16/11/2011	14.3	Assistant Professor	Assistant Professor		Regular	Yes		No
7	Mr.M.Vigneshkumar	XXXXXXXX08C	M.E.	Karpagam University	Power Electronics and Drives	19/06/2009	16.8	Assistant Professor	Assistant Professor		Regular	Yes		No
8	Mr.S.Hari	XXXXXXXX43C	M.E.	Anna University	VLSI Design	08/01/2024	2.2	Assistant Professor	Assistant Professor		Regular	Yes		No
9	Mr.A.T.Rajadurai	XXXXXXXX08M	M.E.	Anna University	Power Electronics and Drives	04/05/2022	3.10	Assistant Professor	Assistant Professor		Regular	Yes		No
10	Dr.T.Manigandan	XXXXXXXX85A	Ph.D	Anna University	Control Systems	01/06/2011	14.9	Professor	Professor	01/06/2011	Regular	Yes		No
11	Dr.K.Senthilkumar	XXXXXXXX13N	Ph.D	Anna University	Applied Electronics	01/10/2020	3.8	Assistant Professor	Assistant Professor		Regular	No	26/06/2024	No
12	Mr.V.Aiyasamy	XXXXXXXX16C	M.E.	Anna University	Power Electronics and Drives	02/09/2020	3.9	Assistant Professor	Assistant Professor		Regular	No	26/06/2024	No
13	Mr.M.Gnamamurugan	XXXXXXXX73C	M.E.	Anna University	Power Electronics and Drives	26/05/2022	2.1	Assistant Professor	Assistant Professor		Regular	No	28/06/2024	No
14	Mrs.K.Bhuvaneshvari	XXXXXXXX46R	M.E.	Anna University	Power Electronics and Drives	14/08/2023	2.6	Assistant Professor	Assistant Professor		Regular	Yes		No
15	Ms.M.S.Aarthi	XXXXXXXX00A	M.E.	Anna University	Power Systems	21/08/2023	1.10	Assistant Professor	Assistant Professor		Regular	No	04/07/2025	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 Department1

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

Description	CAY(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
UG1.B	66	66	66
UG1.C	66	66	66
UG1.D	66	66	66
UG1: Electrical and Electronics Engineering	198	198	198
PG1.A	9	9	9
PG1.B	9	9	9
PG1: Power Electronics & Drives	18	18	18
DS=Total no. of students in all UG and PG programs in the Department	216	216	216
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= 216	S2= 216	S3= 216
DF=Total no. of faculty members in the Department	11	12	14
AF= Total no. of faculty members in the allied Departments	0	0	0
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	F1= 11	F2= 12	F3= 14
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= 21.60	SFR2= 19.64	SFR3= 16.62
Average SFR for 3 years	SFR= 19.29		

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)	4	7	10.00	17.00
2024-25(CAYm1)	4	8	10.00	18.00
2023-24(CAYm2)	5	9	10.00	21.50

C4. Faculty Cadre Proportion

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

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

Year	Professors		Associate Professors		Assistant Professors	
	Required RF1	Available AF1	Required RF2	Available AF1	Required RF3	Available AF3
2025-26	1.00	2.00	2.00	2.00	7.00	7.00
2024-25	1.00	2.00	2.00	2.00	7.00	8.00
2023-24	1.00	2.00	2.00	2.00	7.00	10.00
Average	RF1=1.00	AF1=2.00	RF2=2.00	AF2=2.00	RF2=7.00	AF2=8.33

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	Dr.Raguram Arjunan	Director	Cares Renewable Pvt Ltd., Coimbatore	Renewable Energy Systems	30.00
2	Mr.R.Karthik	Director	Taark Equipments Pvt Ltd., Coimbatore	Electric Vehicle Technology	30.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr.Raguram Arjunan	Director	Cares Renewable Pvt Ltd., Coimbatore	Renewable Energy Technology	30.00
2	Mr.R.Karthik	Director	Taark Equipments Pvt Ltd., Coimbatore	Battery Management System	30.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.R.Karthik	Director	Taark Equipments Pvt Ltd., Coimbatore	Electric Vehicle Technology	30.00
2	Dr.Raguram Arjunan	Director	Cares Renewable Pvt Ltd., Coimbatore	Renewable energy Systems	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	22	16	12
2	No. of peer reviewed conference papers published	2	0	0
3	No. of books/book chapters published	2	4	1

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
0	0	0	0	0	0	0.00
						Amount received (Rs.):0.00

(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
0	0	0	0	0	0	0.00
						Amount received (Rs.):0.00

(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
0	0	0	0	0	0	0.00
						Amount received (Rs.):0.00

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)

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. S. Vijayabaskar	Vinothkumar.A Vigneshkumar M Prakash P	Electrical and Electronis Engineering	Commissioning of Automatic power factor controller	Muthu coirs	06 Months	0.35
						Amount received (Rs.):0.35

(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. S. Vijayabaskar	Vigneshkumar M Prakash P	Electrical and Electronis Engineering	Commissioning of Automatic power factor controller	Kalpna Coirs	06 Months	0.40
						Amount received (Rs.):0.40

(CAYm3)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. S. Vijayabaskar	Vinothkumar.A Kuppuswamy A	Electrical and Electronis Engineering	Implementation of Integrated security System Design	Super Safe	06 Months	0.37
						Amount received (Rs.):0.37

Total amount (Lacs) received for the past 3 years: 1.12

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.P.Mariaraja	Implementation of an Automatic Incinerator in Real Time for Safe Disposal of Sanitary Waste	6 Months	0.10	0.10	Published in IEEE International conference
			Amount received (Rs.): 0.10		

(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.Vijayabaskar	Study of Artificial Ripening Banana and Mango using Histogram Technique	6 Months	0.10	0.10	Published in International Journal of Electrical and Computer System Design
			Amount received (Rs.): 0.10		

(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.S.Arun	Pole Clustering based Modified Reduced order Model for Boiler System	6 Months	0.10	0.10	Published in IETE journal of Research
			Amount received (Rs.): 0.10		

Total amount (Lacs) received for the past 3 years : 0.30

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	Electrical Machines Laboratory	33	• Alternator • Synchronous Motor • Induction Motors (Squirrel Cage, Slip Ring Induction Motor) • Industrial Load • 3-Phase Transformer • 4-Quadrant	12 Hours/ weel	Mr. K. Bharanidharan	Lab Assistant	DEEE
2	Power System and Renewable Energy Laboratory	33	• Personal Computer-36Nos. • LCD projector • Laser Printer • MATLAB • Solar PV Emulator • Micro-Grid Emulator • MATLAB/Simulink •	06 Hours/ weel	Ms. G. K. Shanmathi	Lab Assistant	M. Com IB
3	Electronic Devices and Circuits Laboratory	33	• Power Meter • Function Generator • Power Supply (Variable/Fixed) • CRO • Ammeters, Voltmeter • Multimeter • LCR Meter	06 Hours/ weel	Mr. R. Sakthivel	Lab Assistant	ITI
4	Power Electronics Laboratory	33	• DSO,CRO • Single Phase and Three Phase Cyclo Converter. • Single Phase and Three Phase - SCR Bridge Rectifier • Three Phase AC Bridge Rectifier	06 Hours/ weel	Mr. K. Bharanidharan	Lab Assistant	DEEE
5	Control and Instrumentation Laboratory	33	• AC &DC Servo motor • DC motor & Generator • DSO,CRO • P-PI-PID Controller • Lead-Lag Compensator • Servo Controller •	06 Hours/ weel	Mr. B. Kathirvel	Lab Assistant	BE
6	Micro Processor and Micro Controller Laboratory	33	• 8085, 8086 Microprocessor Trainer Kit, • 8051 Micro controller Kit	06 Hours/ weel	Mr. B. Kathirvel	Lab Assistant	BE
7	Engineering Practices Laboratory	33	• Function Generators • CRO's • Regulated Power Supply • Personal Computer	18 Hours/ weel	Mr. M. Thiruneelakandan	Lab Assistant	ITI
8	Power Electronics and Drives Laboratory	9	• Spartan 3E FPGA Trainer Kit's • Xilinx Software • Three Phase Induction Motor • BLDC Motor • Switched Reluctance Motor	04 Hours/ weel	Mr. R. Sakthivel	Lab Assistant	ITI

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures

1	Project Laboratory / Research Laboratory	1. First aid kits and fire extinguishers are available in the laboratory. 2. Specific safety rules are displayed and explained to all students. 3. Individual user IDs are provided to ensure secure data access. 4. Active antivirus software is installed on all computers. 5. Laboratories are supported with 20 kVA Uninterruptible Power Supply (UPS). 6. Do's and Don'ts are clearly displayed in the laboratory. 7. Intercom facilities are available in all laboratories
2	Power System and Renewable Energy Laboratory	1. First aid kits and fire extinguishers are available in the laboratory. 2. Safety instructions and operational procedures are displayed for students. 3. Proper earthing and insulated wiring are maintained for all equipment. 4. Students are instructed not to handle equipment without faculty/lab staff supervision. 5. Emergency power shutdown facilities are provided. 6. Laboratory is maintained with proper ventilation and illumination
3	Electrical Machines Laboratory	1. First aid kits and fire extinguishers are available in the laboratory. 2. Fire extinguishers are provided for emergency situations. 3. Specific safety rules and Do's and Don'ts are displayed and instructed to students. 4. Lab power tables are equipped with fuses to protect equipment from voltage spikes. 5. Students are instructed not to alter circuits or wiring when power is ON. 6. Students are advised not to wear loose-fitting clothing, jewelry, or ID cards while performing experiments. 7. While taking measurements, students are instructed to use only one hand at a time and avoid touching live circuits directly. 8. All accidents and hazardous conditions must be reported immediately to the laboratory staff. 9. Laboratories remain locked outside working hours. 10. Students performing experiments after working hours must work under staff supervision.
4	Power Electronics Laboratory	1. First aid kits and fire extinguishers are facilitated in the laboratory 2. Fire Extinguisher is available in case of fire emergency 3. Always handle electrical equipment carefully and follow all laboratory safety instructions strictly. 4. Avoid direct contact with live wires, terminals, and power supply lines to prevent electric shock. 5. Wear rubber-soled shoes and ensure your hands are dry before working with electrical circuits. 6. Wear a laboratory coat and avoid loose clothing, metallic ornaments, watches, or chains while in the laboratory. 7. Students with long hair should tie it properly or keep it tucked inside the laboratory coat. 8. Ensure that the power supply is switched OFF before making or changing circuit connections. 9. Connect the circuit only according to the approved circuit diagram and with the permission of the instructor. 10. Check all wires, plugs, and connection leads for insulation damage before use. 11. Never bypass safety devices such as fuses, MCBs, or circuit breakers. 12. Switch ON the power supply only after the instructor has checked and approved the setup. 13. In case of sparks, smoke, overheating, or any abnormal condition, immediately switch OFF the power supply and inform the instructor 14. Laboratory shall remain locked other than laboratory hours 15. While performing experiments after working hours, students are under supervision of laboratory staff
5	Control and Instrumentation Laboratory	1. First aid kits and fire extinguishers are facilitated in the laboratory 2. Fire Extinguisher is available in case of fire emergency 3. Always handle electrical equipment carefully and follow all laboratory safety instructions strictly. 4. Avoid direct contact with live wires, terminals, and power supply lines to prevent electric shock. 5. Wear rubber-soled shoes and ensure your hands are dry before working with electrical circuits. 6. Wear a laboratory coat and avoid loose clothing, metallic ornaments, watches, or chains while in the laboratory. 7. Students with long hair should tie it properly or keep it tucked inside the laboratory coat. 8. Ensure that the power supply is switched OFF before making or changing circuit connections. 9. Connect the circuit only according to the approved circuit diagram and with the permission of the instructor. 10. Check all wires, plugs, and connection leads for insulation damage before use. 11. Never bypass safety devices such as fuses, MCBs, or circuit breakers. 12. Switch ON the power supply only after the instructor has checked and approved the setup. 13. In case of sparks, smoke, overheating, or any abnormal condition, immediately switch OFF the power supply and inform the instructor 14. Laboratory shall remain locked other than laboratory hours 15. While performing experiments after working hours, students are under supervision of laboratory staff
6	Microprocessors and Microcontrollers Laboratory	1. First aid kits and fire extinguishers are facilitated in the laboratory 2. Fire Extinguisher is available in case of fire emergency 3. Always handle electrical equipment carefully and follow all laboratory safety instructions strictly. 4. Avoid direct contact with live wires, terminals, and power supply lines to prevent electric shock. 5. Wear rubber-soled shoes and ensure your hands are dry before working with electrical circuits. 6. Wear a laboratory coat and avoid loose clothing, metallic ornaments, watches, or chains while in the laboratory. 7. Students with long hair should tie it properly or keep it tucked inside the laboratory coat. 8. Ensure that the power supply is switched OFF before making or changing circuit connections. 9. Connect the circuit only according to the approved circuit diagram and with the permission of the instructor. 10. Check all wires, plugs, and connection leads for insulation damage before use. 11. Never bypass safety devices such as fuses, MCBs, or circuit breakers. 12. Switch ON the power supply only after the instructor has checked and approved the setup. 13. In case of sparks, smoke, overheating, or any abnormal condition, immediately switch OFF the power supply and inform the instructor 14. Laboratory shall remain locked other than laboratory hours 15. While performing experiments after working hours, students are under supervision of laboratory staff

7	Engineering Practices Laboratory	<p>1. First aid kits and fire extinguishers are facilitated in the laboratory 2. Fire Extinguisher is available in case of fire emergency 3. Always handle electrical equipment carefully and follow all laboratory safety instructions strictly. 4. Avoid direct contact with live wires, terminals, and power supply lines to prevent electric shock. 5. Wear rubber-soled shoes and ensure your hands are dry before working with electrical circuits. 6. Wear a laboratory coat and avoid loose clothing, metallic ornaments, watches, or chains while in the laboratory. 7. Students with long hair should tie it properly or keep it tucked inside the laboratory coat. 8. Ensure that the power supply is switched OFF before making or changing circuit connections. 9. Connect the circuit only according to the approved circuit diagram and with the permission of the instructor. 10. Check all wires, plugs, and connection leads for insulation damage before use. 11. Never bypass safety devices such as fuses, MCBs, or circuit breakers. 12. Switch ON the power supply only after the instructor has checked and approved the setup. 13. In case of sparks, smoke, overheating, or any abnormal condition, immediately switch OFF the power supply and inform the instructor 14. Laboratory shall remain locked other than laboratory hours 15. While performing experiments after working hours, students are under supervision of laboratory staff</p>
8	Electronic Devices and Circuits Laboratory	<p>1. First aid kits and fire extinguishers are facilitated in the laboratory 2. Fire Extinguisher is available in case of fire emergency 3. Always handle electrical equipment carefully and follow all laboratory safety instructions strictly. 4. Avoid direct contact with live wires, terminals, and power supply lines to prevent electric shock. 5. Wear rubber-soled shoes and ensure your hands are dry before working with electrical circuits. 6. Wear a laboratory coat and avoid loose clothing, metallic ornaments, watches, or chains while in the laboratory. 7. Students with long hair should tie it properly or keep it tucked inside the laboratory coat. 8. Ensure that the power supply is switched OFF before making or changing circuit connections. 9. Connect the circuit only according to the approved circuit diagram and with the permission of the instructor. 10. Check all wires, plugs, and connection leads for insulation damage before use. 11. Never bypass safety devices such as fuses, MCBs, or circuit breakers. 12. Switch ON the power supply only after the instructor has checked and approved the setup. 13. In case of sparks, smoke, overheating, or any abnormal condition, immediately switch OFF the power supply and inform the instructor 14. Laboratory shall remain locked other than laboratory hours 15. While performing experiments after working hours, students are under supervision of laboratory staff</p>
9	Power Electronics and Drives Laboratory	<p>1. First aid kits and fire extinguishers are facilitated in the laboratory 2. Fire Extinguisher is available in case of fire emergency 3. Always handle electrical equipment carefully and follow all laboratory safety instructions strictly. 4. Avoid direct contact with live wires, terminals, and power supply lines to prevent electric shock. 5. Wear rubber-soled shoes and ensure your hands are dry before working with electrical circuits. 6. Wear a laboratory coat and avoid loose clothing, metallic ornaments, watches, or chains while in the laboratory. 7. Students with long hair should tie it properly or keep it tucked inside the laboratory coat. 8. Ensure that the power supply is switched OFF before making or changing circuit connections. 9. Connect the circuit only according to the approved circuit diagram and with the permission of the instructor. 10. Check all wires, plugs, and connection leads for insulation damage before use. 11. Never bypass safety devices such as fuses, MCBs, or circuit breakers. 12. Switch ON the power supply only after the instructor has checked and approved the setup. 13. In case of sparks, smoke, overheating, or any abnormal condition, immediately switch OFF the power supply and inform the instructor 14. Laboratory shall remain locked other than laboratory hours 15. While performing experiments after working hours, students are under supervision of laboratory staff</p>

D3. Project Laboratory/Research Laboratory

A. Availability of project laboratories/research laboratories

The department has well-equipped Project Laboratories and Research Laboratories that support student projects, faculty research, and industry collaboration. These laboratories facilitate hands-on learning and foster innovation in Embedded Systems, IoT applications, and PLC-based automation systems.

Table No. 7.5.1: List of project laboratory/research laboratory /Centre of Excellence.

S.No.,	Name of the Laboratory
1	Project Laboratory
2	Research Laboratory
3	Centre of Excellence for PLC Laboratory

B. Availability of Centre of excellence

The department has established two Centre of Excellence (CoE) to enhance industry- academia collaboration and provide students with hands-on experience in emerging technologies.

1.Centre of Excellence for PLC

- Focuses on the development of skills in industrial automation and control engineering practices.
- Provides practical exposure to PLC-based system design, programming, and troubleshooting.
- Enables students to work on real-time control applications such as motor control, process automation, and sequential operations.
- Encourages students to undertake projects related to automated systems used in industries.
- Enhances competency in designing reliable and efficient control systems for industrial applications.

C. Utilization of project laboratories/research laboratory /Centre of excellence

The department ensures that these laboratories and Centre of Excellence are effectively utilized for academic and research purposes through:

1.Project-Based Learning:

- Students use these labs for final-year projects, mini-projects, and innovative research.
- Participation in national and international hackathons and technical competitions.

2.Industry-Oriented Training & Certifications:

- Hands-on training sessions on PLC programming, IoT applications, industrial automation, and real-time monitoring.
- Certification programs in collaboration with industry partners.

3.Research & Innovation Support:

- Research projects in automation, smart systems, and IoT applications.
- Faculty and students collaborate on funded research projects.

4.Skill Development & Employability Enhancement:

- Students gain practical exposure through lab-based learning and industry projects.
- Enhances job opportunities in automation, IoT, and industrial control systems.

D. Utilization of project laboratories/research laboratory /Centre of excellence**Table No. 7.5.2: Laboratory Utilization**

S. No.	Name of the Laboratory	Name of the Major Equipment/Software	Purpose for creating facility	Utilization	Relevance to POs/PSOs
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1.	Project Laboratory	Arduino UNO controller and Ethernet shield, ESP 8266 (Node MCU), Raspberry Pi-4 Module, Ultimate Electronics Lab Kit, Mini Soldering Station Digital Display, Digital Storage Oscilloscope	To provide practical exposure for students in embedded systems, IoT applications, circuit design, and prototype development through hands-on learning.	Student project development, mini and major projects, consultancy work, prototype fabrication, and skill development activities.	PO1, PO2, PO3, PO4, PO5, PO9, PO10, PSO1, PSO2
2.	Research Laboratory	Power quality Analyzer, Open source software Personal Computers, Solar PV Emulator	To facilitate advanced research activities, power quality analysis, renewable energy system studies, simulation, and product design development.	Research work, simulation studies, product modeling, technical design and analysis, publication activities and interdisciplinary research projects.	PO1, PO2, PO3, PO4, PO5, PO12, PSO1, PSO2, PSO3
3.	Centre of Excellence for PLC Laboratory	PLC Trainer Kits (S7 -1200) [VPLCT-03SIE], Siemens, Simatic S7 Family	To provide hands-on experience in industrial automation, PLC programming, IoT-enabled smart systems, embedded programming, and sensor-based industrial applications.	Hands-on training, industrial automation projects, value-added courses, workshops, internship activities, and research-oriented application development.	PO1, PO2, PO3, PO5, PO9, PO10, PO11, PSO1, PSO2, PSO3

PART E: First Year faculty and financial Resources

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

E1. First Year Student-Faculty Ratio (FYSFR)

Table No. E1.1: FYSFR details.

Year	Sanctioned intake of all UG programs (S4)	No. of required faculty (RF4= S4/20)	No. of faculty members in Basic Science Courses & Humanities and Social Sciences including Management courses (NS1)	No. of faculty members in Engineering Science Courses (NS2)	Percentage= No. of faculty members ((NS1*0.8) + (NS2*0.2))/(No. of required faculty (RF4)); Percentage= ((NS1*0.8) +(NS2*0.2))/RF
2023-24(CAYm2)	540	27	19	14	67

2024-25(CAYm1)	570	28	23	14	76
2025-26(CAY)	390	20	19	10	86

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	2000000	1500000	150000	121000	2800000	2558604	3000000	2788366
Library	900000	859398	450000	424463	850000	778529	100000	913985
Laboratory equipment	3400000	3180000	15000000	13678000	16000000	14286790	3200000	2934513
Teaching and non-teaching staff salary	53000000	50292452	54000000	52233128	42000000	40915087	38000000	35103475
Outreach Programs	600000	564000	870000	830000	1100000	725000	120000	105000
R&D	1000000	860000	1000000	935000	2000000	1180000	120000	107290
Training, Placement and Industry linkage	1000000	953158	2000000	2568559	1700000	1440197	400000	388100
SDGs	600000	578000	370000	341000	800000	1180000	0	0
Entrepreneurship	200000	100000	150000	100000	150000	100000	200000	100000
Others, specify	28000000	22149633	22000000	19339735	25000000	22840149	25000000	20451537
Total	90700000	81036641	95990000	90570885	92400000	86004356	70140000	62892266

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	300000	150000	1500000	1132800	1000000	600000	170000	127000
Software	0	0	300000	240000	0	0	100000	0
SDGs	100000	75000	100000	57000	100000	70000	0	0
Support for faculty development	100000	64000	180000	110000	100000	80000	0	67000

R & D	250000	145000	150000	90000	250000	180000	30000	18200
Industrial Training, Industry expert, Internship	150000	87000	250000	172000	200000	120000	90000	64241
Miscellaneous Expenses*	230000	170000	190000	160000	110000	60000	160000	131329
Total	1130000	691000	2670000	1961800	1760000	1110000	550000	407770