

NATIONAL BOARD OF ACCREDITATION
Data Capturing Points of the Program Applied for
NBA Accreditation - Tier I UG (Engineering) Institute Programs
PART A: Profile of the Institute

Name of the Program Applied for: B.E. ELECTRONICS AND COMMUNICATION ENGINEERING

A1. Name of the Institute : **K.L.N. College of Engineering (Autonomous)**

Year of Establishment : **1994**

Location of the Institute:
Madurai – Nedunkulam Road,
Pottapalayam- 630612
Sivagangai District
Tamil Nadu

A2. Institute Address:-

City : Pottapalayam, Sivagangai State : Tamil Nadu

Pin Code :630612 Website: www.klnce.edu

E-mail : info@klnce.edu Phone No (with STD Code):0452-2090184

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 : (Tick the applicable choice)

Institute of National Importance

Deemed to be University

University

Autonomous

Non –Autonomous (affiliated)

Any other (Please specify)*

A5. Ownership Status : (Tick the applicable Choice)

Central Government

State Government

Grant-in-Aid

Self- Financing Trust

Any other (Please Specify*)

*Provide Details:

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

❖ **No. of UG programs: 8**

❖ **No. of PG programs: 5**

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

S. No	Level of Program (UG/PG)	Name of the Program	Year of Start	Year of close	Name of the Department
1	UG	B.E. Mechanical Engineering	1994	-	Mechanical Engineering
2	UG	B.E. Electrical and Electronics Engineering	1994	-	Electrical and Electronics Engineering
3	UG	B.E. Electronics and Communication Engineering	1994	-	Electronics and Communication Engineering
4	UG	B.E. Computer Science and Engineering	1997	-	Computer Science and Engineering
5	UG	B. Tech. Information Technology	1999	-	Information Technology
6	UG	B.Tech. Artificial Intelligence and Data Science	2021	-	Artificial Intelligence and Data Science
7	UG	B.E. Computer Science and Engineering (Cyber Security)	2022	-	Computer Science and Engineering (Cyber Security)
8	UG	B.E. Computer Science and Engineering (Internet of Things)	2023	-	Computer Science and Engineering (Internet of Things)
9	PG	M.E. Communication Systems	2004	-	Electronics and Communication Engineering
10	PG	M.E. Power System Engineering	2005	-	Electrical and Electronics Engineering
11	PG	M.E. CSE (With Specialization in Networks)	2013	-	Information Technology
12	PG	Master of Computer Application (MCA)	1997	-	Master of Computer Application
13	PG	Master of Business Administration (MBA)	1997	-	Master of Business Administration

A7. Programs to be considered for Accreditation vide this Application:

Table No. A7.1: List of programs to be considered for accreditation.

S.No.	Name of the Department	Name of the Program
1.	Mechanical Engineering	B.E. Mechanical Engineering
2.	Electrical and Electronics Engineering	B.E. Electrical and Electronics Engineering
3.	Electronics and Communication Engineering	B.E Electronics and Communication Engineering
4.	Computer Science and Engineering	B.E. Computer Science and Engineering
5.	Information Technology	B.Tech. Information Technology

Table No. A7.2: Allied Department(s) to the Department of the programs considered for accreditation as above.

S. No.	Name of the Department (in table no. A7.1)	Name of allied Departments / Cluster (for table no.A7.1)
1.	Mechanical Engineering	---
2.	Electrical and Electronics Engineering	---
3.	Electronics and Communication Engineering	---
4.	Computer Science and Engineering	Information Technology
		Artificial Intelligence and Data Science
		Computer Science and Engineering (Cyber Security)
		Computer Science and Engineering (Internet of Things)
5.	Information Technology	Computer Science and Engineering
		Artificial Intelligence and Data Science
		Computer Science and Engineering (Cyber Security)
		Computer Science and Engineering (Internet of Things)

PART - B: Program information

(Data to be filled in for the program applied for Accreditation)

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

Table No. B1: Program details.

S.No.	Program Name	Year of start	Sanctioned Intake	Increase/decrease in intake, if any	Year of increase/decrease	AICTE Approval Details	Accreditation Status*	No. of times program accredited
1.	B.E. Electronics and Communication Engineering	1994	120	40 seats to 60 seats 60 seats to 90 seats 90 seats To 120 seats	1996 2000 2002	F.No. Southern/ 1- 43661823668/ 2024/EOA dated 20/05/2024	Granted accreditation for 3 years for the period 2022-2025	4

* Write applicable one:

- ❖ Applying first time
- ❖ Granted accreditation for 2/3 years for the period (specify period)
- ❖ Granted accreditation for 5/6 years for the period (specify period)
- ❖ Not accredited (specify visit dates, year).
- ❖ Withdrawn (specify visit dates, year)
- ❖ Not eligible for accreditation.

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

A. Name of the HoD: Dr.V.Kejalakshmi

B. Nature of appointment: (Tick the applicable choice)

- ❖ Regular
- ❖ Contract
- ❖ Ad hoc

C. Qualification: (Tick the applicable choice)

- ❖ Ph.D
- ❖ ME / M.Tech
- ❖ Ad hoc

***Please provide details:** _____

B3: Program Details

Table No. B3.1: Admission details for the program excluding those admitted through multiple entry and exit points.

Item (Information is to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	CAY 2024 - 2025	CAYm1 2023 - 2024	CAYm2 2022 - 2023	CAYm3 2021 - 2022	CAYm4 (LYG) 2020 - 2021	CAYm5 (LYGm1) 2019 - 2020	CAYm6 (LYGm2) 2018 - 2019
N = Sanctioned intake of the program (as per AICTE / competent authority)	120	120	120	120	120	120	120
N1 = Total number of students admitted in the 1 st year minus the no. of students, who migrated to other programs / institutions plus no. of students, who Migrated to this program	120	118	103	106	87	71	56
N2 = Number of students admitted in 2 nd year in the same batch via lateral entry including left over seats	0	3	8	5	8	6	2
N3 = Separate division if any	0	0	0	0	0	0	0
N4 = Total no. of students admitted in the 1 st year via all super numerary 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.	120	121	111	111	95	77	58

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
 LYGm2 = Last Year Graduate Minus 2.

B4: Enrolment Ratio in the First Year**Table No. B4.1:** Student enrolment ratio in the 1st year.

Item (Students enrolled in the First Year on average over 3 academic years (CAY, CAYm1 and CAYm2))	CAY 2024 - 2025	CAYm1 2023 - 2024	CAYm2 2022 - 2023
N = Sanctioned intake of the program in the 1 st year (as per AICTE / Competent authority)	120	120	120
N1 = Total no. of students admitted in the 1 st year minus the no. of students, who migrated to other programs / institutions plus no. of students, who migrated to this program	120	118	103
N4 = Total no. of students admitted in the 1 st year via all supernumerary quotas	0	0	0
Enrolment Ratio (ER) = (N1 + N4) / N	100	98.33	85.83
Average ER = (ER_1 + ER_2 + ER_3) / 3	94.72		

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	LYG 2023 - 2024	LYGm1 2022 - 2023	LYGm2 2021 - 2022
A* = (No. of students admitted in the 1 st year of that batch and those actually admitted in the 2 nd 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))	94	75	56
B = No. of students who graduated from the program in the stipulated course duration	91	71	56
Success Rate (SR) = (B / A) * 100	96.81	94.66	100
Average SR of three batches ((SR_1 + SR_2 + SR_3) / 3)	97.16		

Note *: If the value of A in Table No. B5.1 is less than the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2), then the value of A in Table No. B5.1 should be the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2) of Table No. B3.1.

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 2023 - 2024	CAYm2 2022 - 2023	CAYm3 2021 - 2022
X = (Mean of 1 st 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 1 st year / 10)	8.12	8.16	8.08
Y = Total no. of successful students	88	74	74
Z = Total no. of students appeared in the examination	118	103	106
API = X * (Y / Z)	6.06	5.86	5.64
Average API = (AP1 + AP2 + AP3) / 3	5.85		

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 2023 - 2024	CAYm2 2022 - 2023	CAYm3 2021 - 2022
X = (Mean of 2 nd 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 2 nd year/10)	8.12	7.92	8.91
Y = Total no. of successful students	80	92	77
Z = Total no. of students appeared in the examination	111	106	95
API = X * (Y / Z)	5.85	6.87	7.22
Average API = (AP1 + AP2 + AP3) / 3	6.65		

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 2023 - 2024	CAYm2 2022 - 2023	CAYm3 2021 - 2022
X = (Mean of 3 rd 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 3 rd year/10)	7.89	8.56	8.50
Y = Total no. of successful students	97	68	66
Z = Total no. of students appeared in the examination	106	94	76
API = X * (Y / Z)	7.22	6.19	7.38
Average API = (AP1 + AP2 + AP3) / 3	6.91		

B9: Placement, Higher Studies, and Entrepreneurship**Table No. B9.1:** Placement, higher studies, and entrepreneurship details.

Item	LYG 2023 - 2024	LYGm1 2022 - 2023	LYGm2 2021 - 2022
FS* = Total no. of final year students	94	75	56
X = No. of students placed	58	44	45
Y = No. of students admitted to higher studies	4	1	1
Z = No. of students taking up entrepreneurship	0	1	0
X + Y + Z =	62	46	46
Placement Index (P) = (((X + Y + Z) / FS) * 100)	65.9 6	61.33	82.14
Average placement index = (P_1 + P_2 + P_3) / 3	69.81		

Note *: If the value of FS in Table No. B9.1 is less than the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2), then the value of FS in Table No. B9.1 should be the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2) of Table No. B3.1.

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

S.No	Name of the Faculty	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)	If contractual mention Full time or Part time	Currently Associated (Y/N)	Date of Leaving if any (In case currently Associated is "No")
1.	Dr.A.V.RAMPRASAD	Ph.D.,	Anna University	Microwave and Optical Communication	26.02.1997	27.10	Lecturer	Professor & Principal	Principal 15.04.2011 Professor 18.08.2008	Regular	---	Y	---
2.	Dr.V.KEJALAKSHMI	Ph.D.,	Anna University	Wireless Communication Systems	18.07.1996	28.5	Lecturer	Professor & HOD/ECE	Prof. &HOD 01.03.2011	Regular	---	Y	---
3.	Dr.S.C.SIVAPRAKASH	Ph.D.,	Anna University	Microwave and Optical Communication	27.08.2004	20.4	Assistant Professor	Professor	Professor 01.06.2011	Regular	---	Y	---
4.	Dr.R.JEYANTHI	Ph.D.,	Anna University	Wireless Communication Systems	23.07.1998	26.5	Lecturer	Professor	Professor 15.05.2013	Regular	---	Y	---
5.	Dr.N.JANAKIRAMAN	Ph.D.,	Anna University	VLSI and Embedded Systems	01.07.2005	19.6	Lecturer	Professor	Professor 02.01.2017	Regular	---	Y	---
6.	Mr.S.R.NARESH	M.E.,	Anna University	Communication Systems	22.03.2004	20.9	Lecturer	Associate Professor 1	ASP 01.01.2010	Regular	---	Y	---
7.	Dr.P.KARPAGAVALLI	Ph.D.,	Anna University	Computer Vision	03.07.2001	23.6	Lecturer	Associate Professor 1	ASP 01.03.2011	Regular	---	Y	---
8.	Dr.S.SUBHA	Ph.D.,	Anna University	Computer Vision	01.07.2010	14.6	Lecturer	Associate Professor 1	ASP 01.07.2021	Regular	---	Y	---
9.	Dr.P.S.KUMARESH	Ph.D.,	Anna University	Wireless Sensor Networks	03.06.2009	15.7	Lecturer	Associate Professor 1	ASP 01.08.2023	Regular	---	Y	---
10.	Ms.T.R.MUTHU	Ph.D.,	Anna University	Wireless Technologies	20.06.2011	13.6	Assistant Professor 2	Associate Professor 1	ASP 01.08.2023	Regular	---	Y	---

S.No	Name of the Faculty	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)	If contractual Full time or Part time	Currently Associated (Y/N)	Date of Leaving if any (In case currently Associated is "No")
11.	Ms.R.THILAGAVATHY	M.E.,	Anna University	Communication Systems	26.12.2007	17.0	Lecturer	Assistant Professor (Sr. Gr.)		Regular	---	Y	---
12.	Ms.L.MEENAKSHI	M.E.,	Anna University	Wireless Technologies	16.07.2008	16.6	Lecturer	Associate Professor 1	ASP 01.11.2024	Regular	---	Y	---
13.	Ms.M.AMUDHA	M.E.,	Anna University	Applied Electronics	06.07.2009	15.6	Lecturer	Assistant Professor (Sr. Gr.)		Regular	---	Y	---
14.	Mr.S.RAVI SANKAR	M.E.,	Anna University	Applied Electronics	04.01.2010	15.0	Lecturer	Assistant Professor 2		Regular	---	Y	---
15.	Mr.D.ANAND	M.E.,	Anna University	Communication Systems	26.05.2010	14.7	Assistant Professor 2	Assistant Professor 2		Regular	---	Y	---
16.	Ms.R.PAVITHRA	M.E.,	Anna University	Wireless Technologies	14.12.2011	13.1	Assistant Professor 2	Assistant Professor 2		Regular	---	Y	---
17.	Mr.S.SELVAKUMAR	M.E.,	Anna University	Communication Systems	01.06.2012	12.7	Assistant Professor 2	Assistant Professor 2		Regular	---	Y	---
18.	Ms.C.SASIREKHA	M.E.,	Anna University	Communication Systems	02.08.2021	3.5	Assistant Professor 2	Assistant Professor 2		Regular	---	Y	---
19.	Ms.T.SUGUMARI	M.E.,	Anna University	Communication Systems	02.08.2021	3.5	Assistant Professor 2	Assistant Professor 2		Regular	---	Y	---
20.	Ms.R.ANGAYARKANNI	M.E.,	Anna University	VLSI Design	01.08.2022	2.5	Assistant Professor 2	Assistant Professor 2		Regular	---	Y	---
21.	Mr.B.BALAN	M.E.,	Anna University	Embedded System Technology	01.08.2022	2.5	Assistant Professor 2	Assistant Professor 2		Regular	---	Y	---
22.	Ms.U.DHIVYA	M.E.,	Anna University	Communication Systems	01.08.2022	2.5	Assistant Professor 2	Assistant Professor 2		Regular	---	N	29.10.2024
23.	Dr.B.BUVANESWARI	Ph.D.,	Anna University	VLSI Design	30.12.2004	19.10	Lecturer	Associate Professor 1	ASP 01.12.2012	Regular	---	N	09.11.2024

S.No	Name of the Faculty	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)	If contractual mention Full time or Part time	Currently Associated (Y/N)	Date of Leaving if any (In case currently Associated is "No")
24.	Ms.S.INDUMATHI	M.E.,	Anna University	Communication Systems	13.08.2007	16.11	Lecturer	Assistant Professor 2		Regular	---	N	13.07.2024
25.	Dr.R.MOHAN KUMAR	Ph.D.,	Anna University	Embedded Systems	25.06.2007	16.9	Lecturer	Associate Professor 1	ASP 02.01.2017	Regular	---	N	30.03.2024
26.	Ms.A.MEENA	M.E.,	Anna University	Software Programming Techniques	07.12.2011	12.7	Assistant Professor 2	Assistant Professor 2		Regular	---	N	30.06.2024

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

S.No.	Name of the Faculty	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 / Adhoc)	If contractual mention Full time or (Part time or hourly based)	Currently Associated (Y/N)	Date of Leaving if any (In case Currently Associated is "No")
1													
:													

C2: Student-Faculty Ratio (SFR)

- ❖ No. of UG(Engineering) programs in Department including allied departments/ clusters (UG_n):
 - UG₁ = 1st UG program
 - UG_n = 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 (PG_m):
 - PG₁ = 1st PG program.
 - PG_m = 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)).

Table No. C2.1: Student-faculty ratio

Year	CAY (2024-2025)	CAYm1 (2023-2024)	CAYm2 (2022-2023)
UG1. 2nd Year	123	128	125
UG1. 3rd Year	128	125	128
UG1. 4th Year	125	128	126
UG ₁ . Total no. of students (2 nd , 3 rd , 4 th) in UG ₁ program	376	381	379
PG ₁ . 1 st Year	9	9	9
PG ₁ . 2 nd Year	9	9	9
PG ₁ . Total no. of students (1 st , 2 nd) in PG ₁ program	18	18	18
DS=Total no. of students in all UG and PG programs in the Department	394	399	397
AS=Total no. of students of all UG and PG programs in allied departments	-	-
S=Total no. of students in the Department (DS) and allied departments (AS)	394	399	397
DF=Total no. of faculty members in the Department	21	25	26
AF= Total no. of faculty members in the allied Departments	-	-	-
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	21	25	26
FF=The faculty members in F who have a 100% teaching load in the first-year courses	0	0	0
Student Faculty Ratio (SFR)=S/(F-FF)	18.76	15.96	15.27
Average SFR for 3 years	SFR = (SFR 1 + SFR 2 + SFR 3) / 3 16.66		

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 M.E. 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	FQI = $2.5 * [(10X + 4Y) / RF]$
2024-25 (CAY)	9	12	20	17.25
2023-24 (CAYm1)	10	15	20	20.00
2022-23 (CAYm2)	11	15	20	21.25

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 Faculty (RF1)	Available Faculty (AF1)	Required Faculty (RF2)	Available Faculty (AF2)	Required Faculty (RF3)	Available Faculty (AF3)
CAY (2024-25)	2	5	4	4	13	12
CAYm1 (2023-24)	2	5	4	5	13	15
CAYm2 (2022-23)	2	5	4	4	13	17
Average Numbers	RF1 = 2	AF1 = 5	RF2 = 4	AF2 = 4	RF3 = 13	AF3 = 15

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

S.No.	Name of the Person	Designation & Organization	Name of the Course	No. of hours handled
CAYm1 (2023-24)				
1.	Dr. S. Angeline Grace Stella	Free Lancer	Communicating Embedded Systems	45 hours per Semester
Total no. of hours:				45 hours
CAYm2 (2022-23)				
1.	Dr. Arun Kumar Sivaraman	Project Manager, Digital Engineering Solution Center, Photon Infotech Ltd., Chennai	Aptitude Training	15 days per Semester
Total no. of hours:				45 hours
CAYm3 (2021-22)				
1.	Mr. R. Murali Dharan	Director & CONNECT Training Solutions Private Limited	Aptitude Training	15 days per Semester
Total no. of hours:				45 hours

C6: Academic Research**Table No. C6.1:** Faculty publication details

S.No.	Item	CAYm1 (2023-24)	CAYm2 (2022-23)	CAYm3 (2021-22)
1.	No. of peer reviewed journal papers published	19	22	11
2.	No. of peer reviewed conference papers published	39	26	9
3.	No. of books/book chapters published	2	2	2

C7: Sponsored Research Project

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

S.No.	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)
CAYm1 (2023-24)							
Amount received (Rs.)							
CAYm2 (2022-23)							
Amount received (Rs.)							
CAYm3 (2021-22)							
1.	Dr.S.Parthasarathy	Dr.A.V.Ramprasad Prof./ECE & Principal S.Nallathambi AP/Mech.	EEE / ECE / Mech	Laser based hydraulic controlled variable length land leveler cum plough device with remote monitoring system	Department of Science and Technology, New Delhi	2 Years 3 Months	Sanctioned 85.35 Lacs Received during 2021-22 14 Lacs
Amount received (Rs.)							14 Lacs
Total Amount (Lacs) Received for the Past 3 Years							14 Lacs

C8: Consultancy Work

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

S.No.	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)
CAYm1 2023- 24							
1.	R.Mohan Kumar	N.Janakiraman	Electronics and Communication Engineering	Real-Time Embedded Control Systems for Autonomous Vehicles	Pentaxial Technologies, Software company in Madurai, Tamil Nadu.	6 Months	1.1
Amount received (Rs.)							1.1 Lacs
CAYm2 2022-2023							
1.	R.Mohan Kumar	N.Janakiraman	Electronics and Communication Engineering	Embedded System Security and Compliance: A Consultancy Framework	Pentaxial Technologies, Software company in Madurai, Tamil Nadu.	6 Months	1.2
Amount received (Rs.)							1.2 Lacs
CAYm3 2021-2022							
Total amount (Lacs) received for the past 3 years							2.3 Lacs

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.

S.No.	Faculty name	Project title / Support for Activity	Duration	Amount (Lacs)	Amount Utilized (Lacs)	Outcomes of the project
CAYm1 (2023-24)						
1.	S.Selvakumar	Load Man's Stair climber	6 Months	0.17	0.17	<ul style="list-style-type: none"> ➤ The design successfully minimizes the manual effort required to lift and move heavy loads up stairs. ➤ By using a specialized wheel arrangement (often a tri-wheel configuration in a triangular pattern), the device achieves stable and smooth stair-climbing performance. ➤ An integrated anti-slippage and locking mechanism enhances safety during operation, preventing accidental rollback or instability.
2.	S.C.Sivaprakash S.R.Naresh S.Selvakumar B.Balan	Innovative Ventilated Seats	18 Months	0.23	0.14	<ul style="list-style-type: none"> ➤ The redesigned ventilation system provided more effective localized cooling (or heating) at the seat surface, leading to improved comfort for occupants. ➤ The improvements were integrated with minimal changes to the existing seat design, making the solution cost-effective and easier to implement.
3.	M.Amudha S.Ravisankar T.Sugumari R.Angayarkanni	Momordica charantia leaf disease detection and treatment using agricultural mobile robot	18 Months	0.404	0.404	<ul style="list-style-type: none"> ➤ The system successfully utilized image processing and machine learning to detect disease symptoms on Momordica charantia leaves in real time. ➤ The robot was able to apply treatment (e.g., pesticides or fungicides) precisely on the affected areas, reducing overall chemical usage. ➤ Early detection and targeted treatment contribute to improved plant health and potentially higher yields.
Amount received (Rs.)					0.714	

S.No.	Faculty name	Project title / Support for Activity	Duration	Amount (Lacs)	Amount Utilized (Lacs)	Outcomes of the project
CAYm2 (2022-23)						
1.	S.Subha	Car safety system using ML techniques	3 Months	0.08	0.08	<ul style="list-style-type: none"> ➤ The system effectively identified potential safety risks (e.g., collisions, lane departures) using machine learning algorithms on sensor data. ➤ The use of advanced ML techniques resulted in higher detection accuracy and reduced false alarms compared to traditional rule-based systems. ➤ The system provided timely alerts and, in some cases, automatic interventions, thereby supporting safer driving decisions.
2.	R.Pavithra	Smart Energy Management system using IoT	3 Months	0.08	0.08	<ul style="list-style-type: none"> ➤ The system provided continuous, real-time tracking of energy usage across different nodes, enabling instant insights. ➤ Using IoT sensor data, the system automatically adjusted energy consumption to optimize efficiency and reduce wastage. ➤ Collected data was analyzed to predict usage patterns and support informed decisions, leading to better load balancing.
3.	R.Jeyanthi	IOT based smart poultry system	12 Months	0.375	0.235	<ul style="list-style-type: none"> ➤ Continuous tracking of critical parameters such as temperature, humidity, and ammonia levels to ensure optimal conditions in poultry houses. ➤ The system automatically adjusts ventilation, lighting, and feeding/watering schedules based on sensor data, maintaining an ideal environment for poultry health. ➤ Farmers can remotely monitor conditions and receive timely alerts for any deviations, facilitating prompt corrective actions.

S.No.	Faculty name	Project title / Support for Activity	Duration	Amount (Lacs)	Amount Utilized (Lacs)	Outcomes of the project
4.	T.R.Muthu B.Buveneswari	Smart Shopping Cart	12 Months	0.131	0.131	<ul style="list-style-type: none"> ➤ The cart provided an interactive interface for product information and personalized recommendations, making shopping more engaging and user-friendly. ➤ Integrated sensors and barcode readers allowed automatic detection of items, updating inventory in real time. ➤ The system collected shopping behavior data to help optimize store layout, promotions, and overall inventory management.
Amount received (Rs.)					0.526	
CAYm3 (2021-22)						
Total amount (Lacs) received for the past 3 years					1.24	

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.

S.No.	Name of the Laboratory	No. of students per setup (Batch Size)	Name of the Major equipment	Weekly utilization status (all the courses for which the lab is utilized)		Technical Manpower support		
				Odd semester	Even Semester	Name of the technical staff	Designation	Qualification
1.	Electronics and Simulation Laboratory	3	System: Wipro i-value desktop, HP LaserJet 1020 printer, Major equipment: 50MHz DSO, Dual trace CRO, Single trace CRO, Function generator, Single/Dual Regulated power supply, Linear IC Trainer kit, Digital IC trainer kit, IC Tester, Digital Multimeter, Ammeter, Voltmeter, Digital LCR Meter, DRB, DIB, DCB.	20EC3L1 Analog Circuits Laboratory (ECE / III Sem.)	20EC4L1 Analog Integrated Circuits Laboratory (ECE / IV Sem.)	E.S.Shyamala	Senior Lab Instructor	Diploma in Electronics and Communication Engineering
2.	Communication Laboratory	3	DSO, Function Generator, Cathode Ray Oscilloscope, Tube Light frame, Transformer, Dual and Single RPS, Multimeter, Ammeter, IC Trainer Kit, Delta/Sigma Modulation and Demodulation Kit, 100MHz Mixed Signal Oscilloscope, Line coding trainer kit, Adaptive delta modulation & demodulation kit, DPCM Kit, Time Division Multiplexing and Demultiplexing kit, PAM, PPM, PWM modulation and Demodulation kit.	20EC5L1 Communication System Lab (ECE / V Sem.) 20GE1L2 Industrial Practices workshop Lab (ECE / I Sem.)	20EC2L1 Circuits and Devices Lab (ECE / II Sem.)	V.S.Premudha	Senior Lab Instructor	Diploma in Electronics and Communication Engineering

S.No.	Name of the Laboratory	No. of students per setup (Batch Size)	Name of the Major equipment	Weekly utilization status (all the courses for which the lab is utilized)		Technical Manpower support		
				Odd semester	Even Semester	Name of the technical staff	Designation	Qualification
3.	Microprocessor and Microcontroller Laboratory	3	System: HP core i3 Desktop systems Major equipment: 8086 Microprocessor Kit, 8051 Microcontroller Kit, Interface devices like Stepper Motor, DC Motor controller, 8279 Keyboard and display, 8253-Programmable Interface Timer, 8251-USART Interface, 8255-Programmable Peripheral Interface, 8259-Programmable Interrupt Controller, ADC, DAC Traffic Light controller, Cathode Ray Oscilloscope, Digital Multimeter, MASM software, Raspberry pi 3B+ (IOT)	20EC5L4 Microprocessor and Microcontroller Lab (ECE / V Sem.) 20EC704 Embedded Lab (ECE / VII Sem.)	20ECV54 Machine learning and Application (ECE / VI Sem.) 20EC6L1 Mini Project (ECE / VI Sem.)	T.D.Preethi Mai	Lab Instructor	Diploma in Electronics and Communication Engineering
4.	Microwave Laboratory	3	Microwave X-Band Test bench, Optical Trainer Kit, Cathode Ray Oscilloscope, Function Generator, Klystron Power Supply, Gunn Power Supply, Gunn Oscillator, PIN modulator Frequency Meter, Microwave passive components like directional coupler, isolator, circulator, Tees and Slotted line section.	20EC7L1 Optical and Microwave lab (ECE / VII Sem.)	20EC8L1 Project (ECE / VIII Sem.)	C.Banumathi	Lab Assistant	Diploma in Electronics and Communication Engineering

S.No.	Name of the Laboratory	No. of students per setup (Batch Size)	Name of the Major equipment	Weekly utilization status (all the courses for which the lab is utilized)		Technical Manpower support		
				Odd semester	Even Semester	Name of the technical staff	Designation	Qualification
5.	Digital Signal Processing Laboratory	3	Systems: P-IV Computer Systems, HPLaserJet1020 Printer Major equipment: Cathode Ray Oscilloscope, Function Generator, TMS320C50 Processor Kits, TMS320C5416 Processor Kits. Software: MATLAB	20CS304 OOPS and Data Structures Laboratory (ECE / III Sem.)	20EC602 Communication Networks TCP (ECE / VI Sem.) 20EC405 Principles Digital Signal Processing TCP (ECE/ IV Sem.)	M.Abdul Malick Jailani	Lab Assistant	Diploma in Electronics and Communication Engineering
6.	VLSI & Embedded Laboratory	3	Systems: Intel Core i5 3 rd generation, Intel Core i3 3 rd Generation Major equipment: Nexys 4 Artix 7 with DDR FPGA Development Board, Scanner, Printer-1, Mini ARM 7 kit & Interfaces Software: Turbo C Software, Unix, Redhat Linux Software, Xilinx12.2 System Edition, Xilinx Vivado 2015.2 System Edition Software, Cadence University Bundle	20EC505 VLSI Design TCP (ECE / V Sem.)	20ECV53 Digital Image Processing (ECE / VI Sem.) 20CS604 Machine Learning (ECE / VI Sem.) 20ECV54 Machine Learning and Application (ECE / VI Sem.)	E.D.Kamalesh Kumar	Lab Instructor	MSc., MCA., B.Ed., HDSE

S.No.	Name of the Laboratory	No. of students per setup (Batch Size)	Name of the Major equipment	Weekly utilization status (all the courses for which the lab is utilized)		Technical Manpower support		
				Odd semester	Even Semester	Name of the technical staff	Designation	Qualification
7.	Communication Systems Laboratory	3	System: WIPRO Core i3 value desktop, HP Scan Jet 2400, HP Printer Major equipment: Digital IC Trainer Kit, TMS 5416 DSP Processor kit, TMS 6713 DSP Processor kit, Dual Trace oscilloscope, Function Generator, Single/Dual Power Supply, IC Tester, Pattern Generator, Pulse Generator, Spectrum Analyzer with Tracking Generator, Signal Generator with Detector, Digital Multimeter Software: MATLAB	20EC3L2 Digital System design Laboratory (ECE / III Sem.) 20CS3L1 Digital Laboratory (Cyber / III Sem.)	20EC2L1 Circuits and Devices Lab (ECE / II Sem.)	K.Shanmugapriya	Lab Assistant	Diploma in Electronics and Communication Engineering

D2: Safety Measures in Laboratories

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

S.No.	Name of the Laboratory	Safety measures
1.	Electronics and Simulation Lab	<ul style="list-style-type: none">➤ Proper Earthing, Servo Stabilizer First Aid Box and Fire Extinguisher are available.➤ All students should wear shoes during Lab hours.
2.	Communication Lab	<ul style="list-style-type: none">➤ Proper Earthing, Servo Stabilizer First Aid Box and Fire Extinguisher are available.➤ All students should wear shoes during Lab hours.
3.	Microprocessor and Microcontroller Lab	<ul style="list-style-type: none">➤ Proper Earthing, Vinyl Sheet, First Aid Box and Fire Extinguisher are available.
4.	Microwave Lab	<ul style="list-style-type: none">➤ Proper Earthing, Servo Stabilizer, Vinyl Sheet, First Aid Box and Fire Extinguisher are available.➤ All students should wear shoes during Lab hours.
5.	Digital Signal Processing Lab	<ul style="list-style-type: none">➤ Proper Earthing, First Aid Box and Fire Extinguisher are available.
6.	VLSI and Embedded Lab	<ul style="list-style-type: none">➤ Proper Earthing, First Aid Box and Fire Extinguisher are available.
7.	Project Lab	<ul style="list-style-type: none">➤ Proper Earthing, Vinyl Sheet, First Aid Box and Fire Extinguisher are available.
8.	Communication Systems Lab	<ul style="list-style-type: none">➤ Proper Earthing, First Aid Box and Fire Extinguisher are available.➤ All students should wear shoes during Lab hours.
9.	Research & Development Laboratory	<ul style="list-style-type: none">➤ Proper Earthing, First Aid Box and Fire Extinguisher are available.➤ All students should wear shoes during Lab hours.

D3: Project Laboratory / Research Laboratory

Table No. D3.1: List of project laboratory/research laboratory / Centre of Excellence

S.No.	Name of the Laboratory
1.	Project Laboratory
2.	Research and Development Laboratory

PART E: First Year faculty and financial Resources.

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

E1: First Year Student-Faculty Ratio (FYSFR)

Table No. E1.1: FYSFR details

Year	Sanctioned intake of all UG programs (S4)	No. of required faculty (RF4 = S4 / 20)	No. of faculty members in Basic Science Courses & Humanities and Social Sciences including Management courses (NS1)	No. of faculty members in Engineering Science Courses (NS2)	Percentage= No. of faculty members ((NS1 * 0.8) + (NS2 * 0.2)) / (No. of required faculty (RF4)); Percentage = ((NS1 * 0.8) + (NS2 * 0.2)) / RF4
CAY (2024-25)	630	$630/20 = 31.5$	31	6	$(31*0.8) + (6*0.2)/32 = 26/32 = 81\%$
CAYm1 (2023-24)	630	$630/20 = 31.5$	30	6	$(30*0.8) + (6*0.2)/32 = 25/32 = 79\%$
CAYm2 (2022-23)	540	$540/20 = 27$	28	6	$(28*0.8) + (6*0.2)/27 = 24/27 = 87\%$

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 CFY 2024-25	Actual expenses in CFY 2024-25 Till 28.02.25	Budgeted in CFYm1 2023-24	Actual Expenses in CFYm1 2023-24	Budgeted in CFYm2 2022-23	Actual Expenses in CFYm2 2022-23	Budgeted in CFYm3 2021-22	Actual Expenses in CFYm3 2021-22
Infrastructure Built-Up	500000	234242	500000	445366	500000	5124057	120000	432390
Library	1100000	0	1100000	1068759	1000000	973422	615000	847680
Laboratory equipment	12872000	12081434	13754000	10402064	12338169	14463545	4975000	2010568
Teaching and non-teaching staff salary	163000000	90457367	151500000	112865318	129514000	104042255	81418000	73206939
Outreach Programs	110000	37811	205000	96299	150000	201788	175000	99995
R & D	200000	328964	200000	217805	600000	485982	130000	182500
Training, Placement and Industry linkage	375000	1745449	375000	237984	375000	293563	310000	335824
SDGs	200000	150405	0	0	0	0	0	0
Entrepreneurship	65000	26250	25000	63750	12500	66000	14000	25000
Others*, pl. specify	10400000	10343586	9600000	12534414	8410000	9668063	6630000	5785114
Total amount	188822000	115405508	177259000	137931759	152899669	135318675	94387000	82926010

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 CFY 2024-25 (in Lakhs)	Actual expenses in CFY 2024-25 Till 28.02.25 (in Lakhs)	Budgeted in CFYm1 2023-24 (in Lakhs)	Actual Expenses in CFYm1 2023-24 (in Lakhs)	Budgeted in CFYm2 2022-23 (in Lakhs)	Actual Expenses in CFYm2 2022-23 (in Lakhs)	Budgeted in CFYm3 2021-22(in Lakhs)	Actual Expenses in CFYm3 2021-22 (in Lakhs)
Laboratory equipment	19.4	18.4	5.7	2.21	14.8	11.65	---	---
Software	---	---	2.5	2.2	---	---	10.0	7.67
SDGs	0.4	0.3	---	1.86	---	---	---	---
Support for faculty development	0.2	0.1	0.2	0.19	0.2	0.2	0.2	0.23
R & D	3.4	3.31	1.1	1.12	1.4	1.35	---	---
Industrial Training, Industry expert, Internship	0.2	0.18	0.3	0.23	0.4	0.14	0.4	0.1
Miscellaneous expenses *	0.9	0.87	2.0	1.92	1.0	0.70	4.0	3.95
Total amount	24.5	23.16	11.8	9.73	17.8	14.04	14.6	11.95