NATIONAL BOARD OF ACCREDITATION

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

Program Name : Electronics & Communication Engineering	**Discipline**: Engineering & Technology
Level : Under Graduate	**Tier**: 1
Application No: 11378	**Date of Submission**: 30-12-2025

PART A- Profile of the Institute

A1.Name of the Institute: NATIONAL ENGINEERING COLLEGE	
Year of Establishment : 1993	Location of the Institute: KOVILPATTI TAMILNADU
A2. Institute Address:NATIONAL ENGINEERING COLLEGE,K.R.NAGAR,KOVILPATTI	
City:Thoothkudi	State:Tamil Nadu
Pin Code:628503	Website:www.nec.edu.in
Email:PRINCIPAL@NEC.EDU.IN	Phone No(with STD Code):04632-222502
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(2011-12)	
A5. Ownership Status: Self financing	

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

- No. of UG programs: **8**
- No. of PG programs: **12**

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	Computer Application	PG	Master of Computer Application	2005	2015	Computer Science and Engineering
2	Engineering & Technology	UG	Artificial Intelligence and Data Science	2022	--	Artificial Intelligence and Data Science
3	Engineering & Technology	UG	Civil Engineering	2012	--	Civil Engineering
4	Engineering & Technology	PG	Communication and Networks	2014	2017	Information Technology
5	Engineering & Technology	PG	Communication Systems	2003	2017	Electronics and Communication Engineering
6	Engineering & Technology	PG	Computer & Communication Engineering	2004	2014	Electronics and Communication Engineering
7	Engineering & Technology	PG	Computer Science and Engineering	2001	--	Computer Science and Engineering
8	Engineering & Technology	UG	Computer Science and Engineering	1984	--	Computer Science and Engineering

9	Engineering & Technology	PG	Control & Instrumentation Engineering	2011	2019	Electronics and Instrumentation Engineering
10	Engineering & Technology	UG	Electrical & Electronics Engineering	1994	--	Electrical and Electronics Engineering
11	Engineering & Technology	UG	Electronics & Communication Engineering	1984	--	Electronics and Communication Engineering
12	Engineering & Technology	UG	Electronics & Instrumentation Engineering	1994	2019	Electronics and Instrumentation Engineering
13	Engineering & Technology	PG	Embedded Systems Technologies	2012	--	Electronics and Communication Engineering
14	Engineering & Technology	PG	Energy Engineering	2009	2024	Mechanical Engineering
15	Engineering & Technology	PG	High Voltage Engineering	2005	--	Electrical and Electronics Engineering
16	Engineering & Technology	UG	Information Technology	2001	--	Information Technology
17	Engineering & Technology	PG	Information Technology	2017	--	Information Technology
18	Engineering & Technology	PG	Manufacturing Engineering	2014	2017	Mechanical Engineering
19	Engineering & Technology	UG	Mechanical Engineering	1984	--	Mechanical Engineering
20	Engineering & Technology	PG	Production Engineering	2005	2014	Mechanical Engineering

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	No	Electronics & Communication 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	Electronics & Communication Engineering	UG	1984 / --	60	Yes	2006	120	2006	73D/52-238(E)/ET/97 dated 10.08.2006	Granted accreditation for 3 years for the period (specify period)	2023	2026	6	4

List of the Allied Departments/Cluster and Programs:

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

A. Name of the HoD :	Dr.S.Tamil Selvi
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)	120	120	120	120	120	120	120
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	125	123	124	121	125	114	120
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	8	10	11	10	15	9
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.	125	131	134	132	135	129	129

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)	120	125	0	104.17
2024-25 (CAYm1)	120	123	0	102.50

2023-24 (CAYm2)	120	124	0	103.33

Average [(ER1 + ER2 + ER3) / 3] = 103.33≡ 100

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).	135.00	135.00	129.00
B=No. of students who graduated from the program in the stipulated course duration	125.00	121.00	128.00
Success Rate (SR)= (B/A) * 100	92.59	89.63	99.22

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 93.81

B6. Academic Performance of the First-Year Students of the Program

Table No.B6.1: Academic Performance of the First-Year Students of the Program.

Academic Performance	CAYm1(2024-25)	CAYm2(2023-24)	CAYm3 (2022-23)
Mean of CGPA or mean percentage of all successful students(X)	7.88	7.79	8.02
Y=Total no. of successful students	114.00	116.00	118.00
Z=Total no. of students appeared in the examination	123.00	124.00	121.00
API [X*(Y/Z)]	7.30	7.29	7.82

Average API[(AP1+AP2+AP3)/3] : 7.47

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)	7.84	7.73	7.54
Y=Total no. of successful students	103.00	115.00	127.00
Z=Total no. of students appeared in the examination	126.00	129.00	128.00
API [X * (Y/Z)]	6.41	6.89	7.48

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

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)	7.86	7.72	8.13
Y=Total no. of successful students	110.00	126.00	122.00
Z=Total no. of students appeared in the examination	115.00	127.00	124.00
API [X*(Y/Z)]:	7.52	7.66	8.00

Average API [(AP1 + AP2 + AP3)/3] : 7.73

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	130.00	135.00	129.00
X=No. of students placed	118.00	110.00	98.00
Y=No. of students admitted to higher studies	4.00	5.00	4.00
Z= No. of students taking up entrepreneurship	1.00	0.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	94.62	85.19	79.07

Average Placement Index = (P_1 + P_2 + P_3)/3: 86.29 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.Tamil Selvi	XXXXXXX37R	Ph.D	MS University	Wireless Communication	02/07/1992	33.5	Lecturer	Professor	18/11/2009	Regular	Yes		Yes
2	Dr.A.Shenbagavalli	XXXXXXX52D	Ph.D	Anna University	Image Processing	04/07/1988	37.5	Lecturer	Professor	11/12/2009	Regular	Yes		No
3	Dr.T.S.Arun Samuel	XXXXXXX08E	Ph.D	Anna University	Semiconductor Device Modelling	03/08/2016	9.4	Assistant Professor	Professor	06/04/2022	Regular	Yes		No
4	Dr.V.Suresh	XXXXXXX67D	Ph.D	Anna University	Control and Instrumentation	07/08/2003	22.4	Lecturer	Associate Professor	28/08/2020	Regular	Yes		No
5	Dr.K.J.Prasanna Venkatesan	XXXXXXX59R	Ph.D	Anna University	Wireless Communication	21/11/2003	22.1	Lecturer	Associate Professor	27/07/2022	Regular	Yes		No
6	Dr.C.Balamurugan	XXXXXXX82R	Ph.D	Anna University	RF and Antenna	19/05/2008	17.7	Lecturer	Associate Professor	03/05/2023	Regular	Yes		No
7	Dr.I.Vivek Anand	XXXXXXX25A	Ph.D	Anna University	Semiconductor Device Modelling	02/06/2014	11.6	Assistant Professor	Associate Professor	10/06/2025	Regular	Yes		No
8	Mr.T.Devakumar	XXXXXXX79Q	M.E.	Anna University	Biosensor	20/06/2001	24.6	Lecturer	Assistant Professor		Regular	Yes		No
9	Mr.S.Cammillus	XXXXXXX57C	M.E.	Anna University	Networks	01/06/2007	18.6	Lecturer	Assistant Professor		Regular	Yes		No

10	Dr.K.Subramanian	XXXXXXX60C	Ph.D	Anna University	Wireless Sensor Networks	15/05/2009	16.7	Lecturer	Assistant Professor		Regular	Yes		No
11	Dr.R.Manjula Devi	XXXXXXX13C	Ph.D	Anna University	Image Processing	02/06/2010	15.6	Lecturer	Assistant Professor		Regular	Yes		No
12	Mr.M.Sathish Kumar	XXXXXXX64P	M.E.	Anna University	Semiconductor Device Modelling	13/05/2013	12.7	Assistant Professor	Assistant Professor		Regular	Yes		No
13	Mrs.S.Karthika	XXXXXXX66P	M.E.	Anna University	VLSI	13/06/2013	12.6	Assistant Professor	Assistant Professor		Regular	Yes		No
14	Mrs.C.Kalieswari	XXXXXXX23A	M.E.	Anna University	VLSI	15/05/2019	6.7	Assistant Professor	Assistant Professor		Regular	Yes		No
15	Ms.P.Arishenbagam	XXXXXXX23G	M.E.	Anna University	Embedded System	18/07/2022	3.5	Assistant Professor	Assistant Professor		Regular	Yes		No
16	Dr.S.Lavanya	XXXXXXX06N	Ph.D	Anna University	Wireless Communication	18/01/2023	2.11	Assistant Professor	Assistant Professor		Regular	Yes		No
17	Mrs.C.K.Balasundari	XXXXXXX77D	M.E.	Anna University	VLSI	05/07/2023	2.5	Assistant Professor	Assistant Professor		Regular	Yes		No
18	Mrs.S.Mugunthamala	XXXXXXX27N	M.E.	Anna University	RF and Antenna	04/12/2023	2	Assistant Professor	Assistant Professor		Regular	Yes		No
19	Dr.S.Subaselvi	XXXXXXX24P	Ph.D	Anna University	RF communication and networking	18/06/2024	1.6	Assistant Professor	Assistant Professor		Regular	Yes		No
20	Mrs.S. Pricilla Mary	XXXXXXX00A	M.E.	Anna University	Antenna design	25/07/2024	1.4	Assistant Professor	Assistant Professor		Regular	Yes		No
21	Mrs.E.Kirthiga@ Sridevi	XXXXXXX00M	M.E.	Anna University	Embedded Systems	02/09/2024	1.3	Assistant Professor	Assistant Professor		Regular	Yes		No
22	Mrs.G.Akalya Devi	XXXXXXX41R	M.E.	Anna University	Communication Systems	11/12/2024	1	Assistant Professor	Assistant Professor		Regular	Yes		No
23	Mrs.N.Pathmavathi	XXXXXXX83E	M.E.	Anna University	Embedded Systems	11/06/2025	0.6	Assistant Professor	Assistant Professor		Regular	Yes		No
24	Mrs V.Srirenga Nachiyar	XXXXXXX50B	M.E.	Anna University	Biomedical Signal Processing	18/06/2025	0.6	Assistant Professor	Assistant Professor		Regular	Yes		No
25	Mrs.S.Jenet	XXXXXXX40J	M.E.	Anna University	VLSI Design	18/06/2025	0.6	Assistant Professor	Assistant Professor		Regular	Yes		No
26	Mrs.S.Sulochana	XXXXXXX20L	M.E.	Anna University	Image Processing	08/05/2023	2.7	Assistant Professor	Assistant Professor		Regular	Yes		No
27	Mr.B.Ganapathy Ram	XXXXXXX03P	M.E.	Anna University	Wireless Communication	13/05/2013	12.7	Assistant Professor	Assistant Professor		Regular	Yes		No
28	Mrs.S.Malathi	XXXXXXX87G	M.E.	Anna University	Image Processing	08/05/2019	6.7	Assistant Professor	Assistant Professor		Regular	No	22/11/2025	No

29	Dr.N.Arumugam	XXXXXXX10F	Ph.D	Anna University	Wireless Sensor Networks	12/10/1988	36.7	Lecturer	Associate Professor	01/11/2011	Regular	No	30/05/2025	No
30	Dr.A.Saravanaselvan	XXXXXXX22A	Ph.D	Anna University	Wireless Sensor Networks	29/07/2004	20.9	Lecturer	Associate Professor	29/08/2023	Regular	No	17/05/2025	No
31	Ms.J.E.Jeyanthi	XXXXXXX55C	M.E.	Anna University	Semiconductor Device Modelling	07/05/2018	6.4	Assistant Professor	Assistant Professor		Regular	No	18/09/2024	No
32	Ms.A.Apsara	XXXXXXX28N	M.E.	Anna University	Embedded System	18/07/2022	2.9	Assistant Professor	Assistant Professor		Regular	No	30/04/2025	No
33	Ms.S.Sindhana	XXXXXXX75A	M.E.	Anna University	Wireless Communication	08/05/2023	0.11	Assistant Professor	Assistant Professor		Regular	No	30/04/2024	No
34	Dr.C.Lakshmi	XXXXXXX58C	Ph.D	Sathyabama University	Embedded System	22/07/2022	1.9	Assistant Professor	Assistant Professor		Regular	No	30/04/2024	No
35	Dr.I.Paulkani	XXXXXXX04J	Ph.D	Anna University	RF and Antenna	24/08/2020	3.8	Assistant Professor	Assistant Professor		Regular	No	30/04/2024	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 Department1
Table No.C2.1: Student-faculty ratio.

Description	**CAY(2025-26)**	**CAYm1 (2024-25)**	**CAYm2 (2023-24)**
UG1.B	128	130	131
UG1.C	130	131	130
UG1.D	131	130	132
UG1: Electronics & Communication Engineering	**389**	**391**	**393**
PG1.A	12	12	12
PG1.B	12	12	12

Description	CAY(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
PG1: Embedded Systems Technologies	**24**	**24**	**24**
DS=Total no. of students in all UG and PG programs in the Department	413	415	417
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=** 413	**S2=** 415	**S3=** 417
DF=Total no. of faculty members in the Department	27	26	27
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=** 27	**F2=** 26	**F3=** 27
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)	**SFR1= 15.30**	**SFR2= 15.96**	**SFR3= 15.44**
Average SFR for 3 years	**SFR= 15.57**		

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)	11	16	20.00	21.75
2024-25(CAYm1)	12	14	20.00	22.00
2023-24(CAYm2)	13	14	20.00	23.25

C4. Faculty Cadre Proportion

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

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

Year	Professors		Associate Professors		Assistant Professors	
	Required RF1	Available AF1	Required RF2	Available AF1	Required RF3	Available AF3
2025-26	2.00	3.00	4.00	4.00	13.00	20.00
2024-25	2.00	3.00	4.00	5.00	13.00	18.00
2023-24	2.00	3.00	4.00	5.00	13.00	19.00

Average	RF1=2.00	AF1=3.00	RF2=4.00	AF2=4.67	RF2=13.00	AF2=19.00

C5. Visiting/Adjunct Faculty/Professor of Practice

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

(CAYm1)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.V.Arun Janarthanan	Former Employee	Infosys	Principles of Operating Systems, Programming in Python	50.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.V.Arun Janarthanan	Former Employee	Infosys	Programming in Java, Web Application Development	50.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.C.Rajkumar	Former Employee (Group Director)	Cadence Systems Design	Network Analysis, Analog Circuits	50.00
2	Mr.V.Arun Janarthanan	Former Employee	Infosys	Programming in Java, Web Application Development	50.00

C6. Academic Research

Table No. C6.1: Faculty publication details.

S.No.	Item	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)
1	No. of peer reviewed journal papers published	9	11	10
2	No. of peer reviewed conference papers published	13	4	1
3	No. of books/book chapters published	7	3	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
Mr.T.Devakumar	Mrs.C.Kalieswari	ECE	In Campus Navigation Assistive System for Blind School Students	IIT Tirupati Navavishkar I-Hub Foundation	18 months	20.47
Mr.B.Ganapathy Ram	-	ECE	Peanut Qualifier for Price Fixation	AICTE-Grant Support to Innovations, MIC Scheme	1 year	2.50
						Amount received (Rs.):22.97

(CAYm2)

(CAYm3)

Total Amount (Lacs) Received for the Past 3 Years: 22.97

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
						Amount received (Rs.):0

(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.V.Suresh	-	ECE	Training consultancy work - Fundamental Programming for Industry 4.0	V. O. Chidambaram College, Thoothukudi	1 year	0.18
						Amount received (Rs.):0.18

(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.R.Manjula Devi	Dr.I.Vivek Anand	ECE	Smart TENG for Biomedical Monitoring	NEWGEN IEDC	1 year	0.25
Dr.S.Tamil Selvi	Mr.B.Ganapathy Ram	ECE	Portable Peanut Qualifier for Price Fixation	NEWGEN IEDC	1 year	0.17
Mr.T.Devakumar	Ms.C.Kalieswari, Mr.Gangadhara T.Venkatesh	ECE	Navic Signal based Guidance System	NEWGEN IEDC	1 year	0.25
						Amount received (Rs.):0.67

Total amount (Lacs) received for the past 3 years: 0.85

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
			Amount received (Rs.): 0		

(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.T.S.Arun Samuel, Mr.M.Sathish Kumar, Dr.I.Vivek Anand	TCAD software omni bundle	3 years	9.00	9.00	Published 3 SCI Journals, 10 Scopus Indexed Journals and conducted 1 workshop
Dr.I.Vivek Anand, Dr.C.Lakshmi	Smart Robotic Arm for Drainage Cleaning	5 months	0.99	0.75	Product developed
			Amount received (Rs.): 9.99		

(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.I.Paulkani	Establishment of PCB and Antenna fabrication Laboratory	from 25.08.2022	6.01	5.66	2 SCI indexed and 8 Scopus indexed journal publications, organization of 5 hands on workshops
			Amount received (Rs.): 6.01		

Total amount (Lacs) received for the past 3 years : 16.00

PART D: Laboratory Infrastructure in the Department

(Data to be filled in for the Department)

D1. Adequate and Well-Equipped Laboratories, and Technical Manpower

Table No.D1.1: List of laboratories and technical manpower.

Sr. No	Name of the Laboratory	Number of students per set up(Batch Size)	Name of the Important Equipment	Weekly utilization status(all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical staff	Designation	Qualification
1	Embedded Systems Laboratory	30	• Desktop Computers (i5 Processor) -25 Nos • ESP32 – 3 Nos • ESP8266 – 2 Nos. • NodeMCU 4 Nos. • Arduino Uno – 3 Nos. • Arduino Mega	40 Hours	Mrs.B.Santhi	Laboratory Technician	DECE., BCA., M.Sc(Elect
2	Networks Laboratory	44	• Desktop Computers (i5 Processor) – 40 Nos. • Benchmark LAN Trainer kit -2 Nos. • CISCO bundle Ethernet LAN trainer – 1 set • Wireless LAN trainer – 1	20 Hours	Mr.M.Boominathan	Senior Laboratory Technic	DECE., B.E.(ECE).,

3	Microprocessor Laboratory	44	• 8085 Microprocessor kit – 15 Nos. • 8086 Microprocessor kit – 15 Nos. • 8051 Microcontroller	28 Hours	Mr.M.Boominathan	Senior Laboratory Technic	DECE., B.E.(ECE).,
4	ElectronicsLaboratory	44	• Function Generator 3MHz – 15 Nos. • Variable DC power supply – 12 Nos. • DC Ammeter – 132 Nos. •	34 Hours	Ms.V.Gowsalya	Laboratory Technician	B.E.,
5	Integrated Circuits Laboratory	44	• IC Trainer Kit 8 I/O channels - 02 Nos. • IC Trainer Kit 10 I/O channels - 05 Nos. • IC Trainer Kit 16 I/O	34 Hours	Mr.G.RathinavelPandian	Laboratory Technician	B.Sc Electronics.,
6	VLSI Design Laboratory	44	• Desktop Computers i5 Processor – 39 Nos • FPGA zed board Zynq 7000– 1 No. • Cadence	30 Hours	Mrs.B.Santhi	Laboratory Technician	DECE., BCA., M.Sc(Elect
7	Microwave / Communication Laboratory	44	• Desktop Computers i5 - 08 GB RAM with CST Microwave Studio Suite (i5 Processor) – 20 User •	22 Hours	Mr.G.RathinavelPandian	Laboratory Technician	B.Sc Electronics.,
8	Digital Signal Processing Laboratory	44	• Desktop Computers (i5 Processor), 16GB RAM, 500 GB Hard disk- 40 Nos. • Campus licensed	24 Hours	Ms.V.Gowsalya	Laboratory Technician	B.E.,
9	Product Development Laboratory	44	• Desktop Computers (i5 Processor) – 1 No. • LPC2148 – 1 No. • Shield EKG EMG kit – 1No. •	20 Hours	Mr.S.Gangadhara T Venka	Instructor	M.Sc(Electronics & Comm

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Electronics Laboratory	• One powder type Fire extinguisher is kept in the laboratory. • One Sand Bucket along with stand is kept at the entrance of the laboratory. • Students must wear proper footwear and Lab Coats. • Hands must be dry before handling electrical equipment. • Never touch live circuits or exposed connections while the power supply is turned on. • All connections must be verified before switching ON the power supply. • Insulated probes and tools must be used for testing. • Power supply must be switched off after completing experiments.
2	Integrated Circuits Laboratory	• One powder type Fire extinguisher is kept in the laboratory. • One Sand Bucket along with stand is kept at the entrance of the laboratory. • Students must wear proper footwear and Lab Coats. • Hands must be dry before handling electrical equipment. • Laboratory instructions must be followed strictly. • Never touch live circuits or exposed connections while the power supply is turned on.
3	Microwave / Communication Laboratory	• One powder type Fire extinguisher is kept in the laboratory • Laboratory rules must be followed during practical sessions. • Food and liquids are strictly prohibited near computer systems. • Systems must be shut down properly after use. • Unauthorized installation or modification of software is strictly prohibited. • Important data and simulation files must be backed up regularly. • Systems must be protected from malware and unauthorized access. • Network resources must be used responsibly. • System settings must not be altered without permission. • External storage devices must be scanned before use.
4	Microprocessor Laboratory	• One Carbon di oxide type Fire extinguisher is kept in the laboratory. • One Sand Bucket along with stand is kept at the entrance of the laboratory. • Students must follow laboratory rules. • Hands must be kept dry while operating equipment. • Cables and connectors must not be forced. • Power must be switched off before modifying connections. • Pin configuration must be verified before powering the system. • Reverse polarity connections must be avoided.
5	Networks Laboratory	• One powder type Fire extinguisher is kept in the laboratory • Students must follow laboratory rules. • Unauthorized handling must be avoided. • Network configurations must be changed only with permission. • Data security guidelines must be followed. • Systems must be logged out after use.

6	VLSI Design Laboratory	• One powder type Fire extinguisher is kept in the laboratory. • One Sand Bucket along with stand is kept at the entrance of the laboratory. • Students must follow laboratory rules. • Systems must be logged out after use. • Unauthorized software installation is prohibited. • Design files must be backed up regularly. • Server access must be restricted. • Confidential data must be protected.
7	Embedded Systems Laboratory	• One Carbon di oxide type Fire extinguisher is kept in the laboratory. • Students must follow laboratory rules. • Power must be switched off before hardware changes. • Correct firmware must be loaded into controllers. • GPIO pins must be protected from short circuits. • Hand-plugging of modules must be avoided. • Standard interfacing procedures must be followed.
8	Digital Signal Processing Laboratory	• One powder type Fire extinguisher is kept in the laboratory • Handle the DSP kit carefully to prevent damage. • Switch off the power before connecting or disconnecting peripherals. • Do not expose DSP kits to open or uncontrolled environments. • Shut down the computer properly before turning off the main power.
9	Product Development Laboratory	• One powder type Fire extinguisher is kept in the laboratory. • One Sand Bucket along with stand is kept at the entrance of the laboratory. • Hands must be dry and clean before handling equipment and tools. • Prototypes must be tested using regulated power supplies only. • After the completion of experiment, turn off power supplies and disconnect equipment to ensure safety. • All designs must be verified before implementation. • Finished products and prototypes must be stored safely to prevent damage.
10	Centre for Antenna / PCB design and Fabrication	• One Water type Fire extinguisher is kept in the laboratory. • One Sand Bucket along with stand is kept at the entrance of the laboratory. • Hands must be dry and clean while handling equipment. • Power supply must be switched off after completing work. • PCB designing and simulation software must be used only with authorization. • Soldering irons and hot air guns must be handled carefully. • Prototype testing must be done using regulated power supplies.
11	Tessolve Semiconductor Test Engineering Laboratory	• One powder type Fire extinguisher is kept in the laboratory. • ESD mat attached floor is established in the laboratory. • Hands must be dry while handling equipment. • Power must be switched off after use. • Test instruments must be operated only after formal instructions. • Test boards must be connected using correct pin configurations. • Calibration of instruments must be checked periodically. • Unauthorized modification of test setups is prohibited. • Test results and reports must be recorded systematically.
12	Research & Development Laboratory	• One powder type Fire extinguisher is kept in the laboratory. • Equipment must be handled carefully. • Systems must be logged out after use. • Advanced instruments must be operated only after proper instructions. • ESD mat attached floor is established in the laboratory. • Research data must be backed up regularly. • Unauthorized access to systems and servers is prohibited.

D3. Project Laboratory/Research Laboratory

Apart from the regular laboratories that has been mentioned above, we have following additional laboratories.

Table7.5.1: Name of the Project Laboratories / Research Laboratory/Centre of Excellence

S.No	Name of the Laboratory	Relevant PO and PSO
1.	Research and Development Laboratory	PO2, PO5, PO7, PO8, PSO1, PSO2
2.	Tessolve Semiconductor Test Engineering Laboratory	PO2, PO3, PO4, PO5, PO7, PO8, PSO1, PSO2
3.	Centre for Antenna / PCB Design and Fabrication	PO2, PO3, PO4, PO5, PO7, PO8, PSO1, PSO2

1. **Research and Development Laboratory**

In the view of promoting innovation, advanced experimentation, and applied research among students and faculty members, by providing access to modern tools, software, and testing equipment Research and Development Laboratory has been set-up. It supports the development of high-quality projects, and research publications. The laboratory is primarily utilized for research-oriented project development, simulation, and analytical studies and strengthens industry and academic linkages, thereby creating a strong research culture and improving the overall quality of engineering education.

Name of the facility : Silvaco TCAD

Figure 7.5.1: Students working in TCAD

Name of the facility : NVIDIA Jetson Orin

Figure 7.5.2: Students working in Jetson Orin

Various projects have been carried out by our research scholars and students using TCAD and published in various journals as listed below. By utilizing TCAD Simulation facility, a national level workshop was organized.

Table 7.5.2: Outcome of utilizing TCAD software

S.No	Particlars	Number	Relevant PO and PSO
1.	**SCI** • International Journal of Numerical Modelling (wily) Impact factor: 1.6 • Micro and Nanostructures (Elsevier), Impact factor: 3.1	2	PO2, PO5, PO7, PO8, PSO1, PSO2
2.	IEEE publications	10	PO2, PO5, PO7, PO8, PSO1, PSO2
3.	National Level Workshop	1	PO2, PO5, PO7, PO8, PSO1, PSO2

Table 7.5.3 List of Publications TCAD software

S.No	Title of the Paper	Publication	Relevant PO and PSO
1.	Heterostructure performance evaluation: A numerical simulation and analytical modeling of the ferroelectric pocket doped double gate tunnel FET.		PO2, PO5, PO7, PO8, PSO1, PSO2
2.	Label-free biomolecule detection with dielectrically modulated double gate single cavity InGaAs/GaAsSb HTFET: Design considerations and performance evaluation		PO2, PO5, PO7, PO8, PSO1, PSO2
3.	Analysis of dielectric modulated triple gate heterostructure Vertical TFET biosensor for enhanced sensitivity and label-free detection		PO2, PO5, PO7, PO8, PSO1, PSO2
4.	Interfacing ADC and DAC module in FPGA Using I2C Protocol		PO2, PO5, PO7, PO8, PSO1, PSO2
5.	Simulation and Study of Heterojunction Device Structures with Multi-Metal Work Function Engineering		PO2, PO5, PO7, PO8, PSO1, PSO2
6.	Simulation-Based Analysis of Lateral TFET Biosensor for Bio-Molecule Detection		PO2, PO5, PO7, PO8, PSO1, PSO2
7.	Numerical Investigation of a Vertical TFET for High-Sensitivity Biosensing		PO2, PO5, PO7, PO8, PSO1, PSO2
8.	Design and Analysis of Germanium (Ge) and Gallium Nitride (GaN) Material-Based Vertical Nanowire Tunnel FET		PO2, PO5, PO7, PO8, PSO1, PSO2
9.	Device Parameter Variation for Gate Engineered Silicon Nanowire (SiNW) MOSFET		PO2, PO5, PO7, PO8, PSO1, PSO2
10.	Performance Analysis of Silicon Carbide Processing for Power MOSFET		PO2, PO5, PO7, PO8, PSO1, PSO2
11.	Investigation of Heterostructure Vertical HEMTs for Drain Current Improvement		PO2, PO5, PO7, PO8, PSO1, PSO2

12.	Enhancing ON Current and Electron Mobility in GaN-Based HEMTs: Integration of Advanced Materials and TCAD Simulation Approaches		PO2, PO5, PO7, PO8, PSO1, PSO2

2. Tessolve Semiconductor Test Engineering Laboratory:

The Semiconductor Test Engineering Laboratory was established in our department in the year 2017 technically sponsored by Tessolve Solutions Pvt. Ltd. And has various equipment like LG Lite ATE and MokuGO Kit.

The main objectives of establishing this lab are to enhance the industry-academia interaction, to bridge the academia-industry gap, to provide Hands-on training using MokuGo Kit for enhancing their practical competencies and thereby increasing the skill development for employability.

Development of industry ready skills in semiconductor device testing has improved the placement opportunities of students in core semiconductor companies.

Figure 7.5.3: Tessolve Semiconductor Test Engineering Laboratory Utilization

The following activities are carried out in the laboratory:

1. Foundation Training in Semiconductor Testing
2. Automatic Test Equipment (ATE) Concepts and Architecture
3. Test Program Development and Debugging
4. Manual and Documentation Preparation

Table 7.5.4: Placement achievements as a result of Tessolve Semiconductor Test Engineering Laboratory Utilization

S.No	Academic Year	Number of students placed in Tessolve Semiconductor Private Limited, Bangalore
1.	2023 - 2024	17
2.	2024 - 2025	14

Table 7.5.5: List of Students who got placed in Tessolve* Semiconductor Private Limited, Bangalore, *as a result of Tessolve Semiconductor Test Engineering Laboratory Utilization 2024 – 2025 Batch

S.No	Register NUmber	Student Name
1.	2111001	Yuvasri S
2.	2111002	Rahul R P
3.	2111007	Sneha Sherin R
4.	2111012	Siva Rama Krishnan S
5.	2111048	Arokiya Snowvi J
6.	2111050	Buvaneshwari V
7.	2111051	Divya T
8.	2111069	Yureka C
9.	2111076	Chobia Lakshmi J
10.	2111078	Ishwarya K
11.	2111079	Jaya Sakthi Vel G
12.	2111088	Samraj J
13.	2111091	Sreevarthiny S L
14.	2111095	Karthika K

Table 7.5.6: List of Students who got placed in Tessolve* Semiconductor Private Limited, Bangalore, *as a result of Tessolve Semiconductor Test Engineering Laboratory Utilization 2023 – 2024 Batch

S.No	Register Number	Student Name
1.	2011016	Abernha V
2.	2011032	Abiudh Durairaj R
3.	2011060	Ajithra S
4.	2011050	Allwin Joshua J
5.	2011055	Andrea Evangelune A
6.	2011030	Franklin J
7.	2011087	Hariharan A
8.	2011085	Iswarya S V

9.	2011069	Maheswari A
10	2011007	Merlin Deva Kiruba L
11.	2011082	Mithraa Sri G
12.	2011019	Noor Nisha V
13.	2011091	Revathi S
14.	2011063	Siva Arumugam R
15.	2011090	Suvetha S
16.	2011075	Valli Shri P
17.	2011107	Vijaya Harshitha S

3. Centre for Antenna / PCB Design and Fabrication:

The Antenna / PCB Design and Fabrication Laboratory serve as a specialized facility that enables students and faculty to design, simulate, fabricate, and test printed circuit boards and antenna structures for academic and research purposes. Equipped with industry-standard design software and prototyping tools, the lab provides hands-on exposure in circuit layout, RF and microwave design, impedance matching, fabrication processes. It supports mini-projects, final-year projects, research publications, and prototype development, while promoting innovation, technical competence, and problem-solving skills. It strengthens practical knowledge, enhancing employability, and aligning academic training with industry and research requirements.

Name of the facility / Equipment: PCBMATE (300W) PCB and Antenna Prototype Machine

Figure 7.5.4: PCB machine Utilization

Table 7.5.7: Outcome of utilizing PCBMATE (300W) Antenna and PCB Prototype machine

S.No	Particulars	Count	Relevant PO and PSO
1.	**SCI** • Wireless Personal Communication (Impact factor: 2.2) • Scientific Reports (Impact factor: 3.9)	2	PO2, PO3, PO5, PO7, PO8, PSO2
2.	Scopus publications	6	PO2, PO3, PO5, PO7, PO8, PSO2

3.	Inter College Worksop	2	PO2, PO3, PO4, PO5, PO7, PO8, PSO1, PSO2

Figure 7.5.8: SCI Publication using Centre for Antenna / PCE Design and Fabrication Laboratory

S.No	Title of the paper	Publication	Relevant PO and PSO
1.	A Low Profile Meta-Material Loaded Koch Fractal Antenna for Broadband Public Safety Applications		PO2, PO3, PO5, PO7, PO8, PSO2
2.	Enhancing Gain and Bandwidth in a Multiband Microstrip Patch Antenna through L-Slot and Partial Ground Plane Integration		PO2, PO3, PO5, PO7, PO8, PSO2
3.	Design of ultra wideband circular slot antenna for emergency communication applications		PO2, PO3, PO5, PO7, PO8, PSO2
4.	Meta-material inspired penta-band decagon fractal antenna for wireless applications		PO2, PO3, PO5, PO7, PO8, PSO2
5.	Multiband Microstrip Patch Antenna for C-Band Applications		PO2, PO3, PO5, PO7, PO8, PSO2
6.	Enhanced Gain and Bandwidth by using Hybrid Dielectric Resonator Antenna		PO2, PO3, PO5, PO7, PO8, PSO2
7.	A Compact Wearable Slots and Slit-Based Patch Antenna for Biomedical Application		PO2, PO3, PO5, PO7, PO8, PSO2
8.	Compact Bandwidth-Enhanced Honeycomb Fractal Antenna for Next-Gen Wireless and Radar Applications		PO2, PO3, PO5, PO7, PO8, PSO2

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	26	84	139
2024-25(CAYm1)	540	27	29	79	144
2025-26(CAY)	540	27	31	90	159

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	5000000	7796257	10000000	5428874	7000000	17560944	9500000	17323265
Library	350000	1993148	500000	2207183	3050000	2131403	2500000	2409621
Laboratory equipment	22000000	25313659	13000000	13428388	4400000	18020931	10000000	10046838
Teaching and non-teaching staff salary	167000000	164625884	150000000	152016918	140000000	140530351	135000000	123741098
Outreach Programs	1150000	1814436	1100000	1129832	1050000	1473616	1000000	2622683
R&D	2400000	3024712	10950000	8829760	7800000	4854527	5500000	6342162
Training, Placement and Industry linkage	1600000	1049351	1500000	1189792	1000000	478697	4000000	2482821
SDGs	10100000	10610331	8500000	8465137	7200000	8758637	4700000	5005436
Entrepreneurship	1000000	1101164	1900000	2067097	100000	495381	200000	47605
Others, specify	79207000	64171596	66965000	69166996	78640000	71318552	51533000	64001498
Total	**289807000**	**281500538**	**264415000**	**263929977**	**250240000**	**265623039**	**223933000**	**234023027**

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	1342500	1355047	1500000	1419599	1288000	1347490	500000	373955
Software	250000	280840	0	200000	0	200000	0	200000
SDGs	0	0	0	0	0	0	0	0
Support for faculty development	0	170078	0	156314	0	44230	0	27260
R & D	0	0	0	23100	900000	900000	566400	566400
Industrial Training, Industry expert, Internship	0	113419	0	275153	0	200372	0	142331
Miscellaneous Expenses*	75635	45738	100000	15201	100000	67693	50000	28500
Total	**1668135**	**1965122**	**1600000**	**2089367**	**2288000**	**2759785**	**1116400**	**1338446**