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: 10526	**Date of Submission**: 26-04-2025

PART A- Profile of the Institute

A1.Name of the Institute: KARUNYA INSTITUTE OF TECHNOLOGY AND SCIENCES	
Year of Establishment : 1986/1990	Location of the Institute: Coimbatore
A2. Institute Address:KARUNYA NAGAR	
City:--Select--	State:Tamil Nadu
Pin Code:641114	Website:www.karunya.edu
Email:KU@KARUNYA.EDU	Phone No(with STD Code):0422-2614310
A3. Name and Address of the Affiliating University (if any):	
Name of the University : NIL	City:
State :	Pin Code: 0
A4. Type of the Institution: Deemed University	
A5. Ownership Status: Self financing	

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

- No. of UG programs: **15**
- No. of PG programs: **13**

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	PG	Advanced Manufacturing Technology	2015	2023	Mechanical Engineering
2	Engineering & Technology	UG	Aerospace Engineering	2009	--	Aerospace Engineering
3	Engineering & Technology	PG	Aerospace Engineering	2019	--	Aerospace Engineering
4	Engineering & Technology	UG	Artificial Intelligence and Data Science	2020	--	Data Science and Cyber Security
5	Engineering & Technology	UG	Biomedical Engineering	2014	--	Biomedical Engineering
6	Engineering & Technology	PG	Biomedical Instrumentation	2017	--	Biomedical Engineering
7	Engineering & Technology	UG	Biotechnology	2005	--	Biotechnology
8	Engineering & Technology	PG	Biotechnology	2007	--	Biotechnology
9	Engineering & Technology	UG	Civil Engineering	1986	--	Civil Engineering
10	Engineering & Technology	PG	Communication Systems	2009	2022	Electronics and Communication Engineering

11	Engineering & Technology	UG	Computer Engineering	2020	--	Data Science and Cyber Security
12	Engineering & Technology	PG	Computer Science and Engineering	2002	--	Computer Science and Engineering
13	Engineering & Technology	UG	Computer Science and Engineering	1994	--	Computer Science and Engineering
14	Engineering & Technology	UG	Computer Science and Engineering (Artificial Intelligence & Machine Learning)	2021	--	Artificial Intelligence and Machine Learning
15	Engineering & Technology	UG	Computer Science and Engineering (Artificial Intelligence)	2021	--	Artificial Intelligence and Machine Learning
16	Engineering & Technology	PG	Cyber Security	2019	--	Computer Science and Engineering
17	Engineering & Technology	UG	Electrical & Electronics Engineering	1994	--	Electrical and Electronics Engineering
18	Engineering & Technology	UG	Electronics & Communication Engineering	1986	--	Electronics and Communication Engineering
19	Engineering & Technology	UG	Electronics & Computer Engineering	2021	--	Electronics and Communication Engineering
20	Engineering & Technology	UG	Food Processing and Engineering	2005	--	Food Processing Technology
21	Engineering & Technology	PG	Food Processing and Engineering	2008	--	Food Processing Technology
22	Engineering & Technology	PG	Integrated Water Resources Management	2009	--	Civil Engineering
23	Engineering & Technology	UG	Mechanical Engineering	1986	--	Mechanical Engineering
24	Engineering & Technology	PG	Robotics & Automation	2020	--	Robotics Engineering
25	Engineering & Technology	UG	Robotics and Automation	2018	--	Robotics Engineering
26	Engineering & Technology	PG	Structural Engineering	1996	--	Civil Engineering
27	Engineering & Technology	PG	VLSI Design	2004	--	Electronics and Communication Engineering
28	Management	PG	Master of Business Administration	1994	--	Management

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

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

Name of the Department	Having Allied Departments	Name of the Program	Program Level
Biotechnology	No	Biotechnology	UG
Computer Science and Engineering	Yes	Computer Science and Engineering	UG
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	1986 / --	60	Yes	2001	120	2001	No.720-52-229(E)/ET/97 dated 25/01/2001	Granted accreditation for 3 years for the period (specify period)	2022	2025	2	4

Sanctioned Intake for Last Five Years for the Communication Systems	
Academic Year	**Sanctioned Intake**
2024-25	120
2023-24	120
2022-23	120
2021-22	240
2020-21	240
2019-20	240

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. JUDE HEMANTH D
B. Nature of appointment:	Regular
C. Qualification:	ME/M. Tech and PhD

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)	2024-25 (CAY)	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)	2020-21 (CAYm4)	2019-20 (CAYm5)	2018-19 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	120	120	120	240	240	240	240
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	79	91	114	102	130	169	139
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	4	4	2	5	3	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	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.	79	95	118	104	135	172	146

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]
2024-25 (CAY)	120	79	0	65.83
2023-24 (CAYm1)	120	91	0	75.83
2022-23 (CAYm2)	120	114	0	95.00

Average [(ER1 + ER2 + ER3) / 3] = 78.89≡ 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	(2020-21) LYG	(2019-20) LYGm1	(2018-19) 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).	245.00	243.00	247.00
B=No. of students who graduated from the program in the stipulated course duration	133.00	165.00	144.00
Success Rate (SR)= (B/A) * 100	54.29	67.90	58.30

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 60.16

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(2023-24)	CAYm2(2022-23)	CAYm3 (2021-22)
Mean of CGPA or mean percentage of all successful students(X)	6.96	6.95	6.99
Y=Total no. of successful students	91.00	114.00	103.00
Z=Total no. of students appeared in the examination	91.00	114.00	102.00
API [X*(Y/Z)]	6.96	6.95	7.06

Average API[(AP1+AP2+AP3)/3] : 6.99

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 (2023-24)	CAYm2 (2022-23)	CAYm3 (2021-22)
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)	6.96	6.92	6.93
Y=Total no. of successful students	117.00	104.00	135.00

Z=Total no. of students appeared in the examination	121.00	105.00	136.00
API [X * (Y/Z)]	6.73	6.85	6.88

Average API [(AP1 + AP2 + AP3)/3] : 6.82

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 (2023-24)	CAYm2 (2022-23)	CAYm3 (2021-22)
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)	6.94	6.99	7.02
Y=Total no. of successful students	103.00	133.00	168.00
Z=Total no. of students appeared in the examination	104.00	135.00	168.00
API [X*(Y/Z)]:	6.87	6.89	7.02

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

B9. Placement, Higher Studies, and Entrepreneurship

Table No.B9.1: Placement, higher studies, and entrepreneurship details.

Item	LYG (2020-21)	LYGm1(2019-20)	LYGm2(2018-19)
FS*=Total no. of final year students	245.00	243.00	247.00
X=No. of students placed	112.00	128.00	111.00
Y=No. of students admitted to higher studies	8.00	19.00	11.00
Z= No. of students taking up entrepreneurship	0.00	0.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	48.98	60.49	49.39

Average Placement Index = (P_1 + P_2 + P_3)/3: 52.95 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. D. NIRMAL	XXXXXXX40C	ME/M. Tech and PhD	Anna University	VLSI DESIGN	18/06/2007	17.10	Lecturer	Professor	02/11/2020	Regular	Yes		No
2	Dr. G. JOSEMIN BALA	XXXXXXX99R	ME/M. Tech and PhD	Anna University	COMMUNICATION SYSTEMS	07/12/1998	26.4	Lecturer	Professor	01/05/2009	Regular	Yes		No

3	Dr. NESASUDHAM	XXXXXXX14G	ME/M. Tech and PhD	Anna University	APPLIED ELECTRONICS	09/06/2000	24.10	Lecturer	Professor	02/08/2021	Regular	Yes		No
4	Dr. ANITHA J	XXXXXXX16D	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	APPLIED ELECTRONICS	18/11/2003	21.5	Lecturer	Professor	02/08/2021	Regular	Yes		No
5	Dr. N.M. SIVA MANGAI	XXXXXXX64Q	ME/M. Tech and PhD	Anna University	VLSI DESIGN	13/06/2012	12.10	Associate Professor	Associate Professor	13/06/2012	Regular	Yes		No
6	Dr. ABRAHAM CHANDY D.	XXXXXXX71B	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	APPLIED ELECTRONICS	13/07/1998	26.9	Lecturer	Associate Professor	01/03/2014	Regular	Yes		No
7	Dr. SHYLU D.S	XXXXXXX37Q	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	VLSI DESIGN	09/06/2005	19.10	Lecturer	Associate Professor	01/05/2017	Regular	Yes		No
8	Dr. ANITA JONES MARY T.	XXXXXXX26G	ME/M. Tech and PhD	Anna University	COMMUNICATION SYSTEMS	01/08/2002	22.8	Lecturer	Associate Professor	02/11/2020	Regular	Yes		No
9	Dr. IMMANUEL ALEX PANDIAN S.	XXXXXXX24N	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	APPLIED ELECTRONICS	15/09/2005	19.7	Lecturer	Associate Professor	02/11/2020	Regular	Yes		No
10	Dr. DIANA ANDRUSHIA	XXXXXXX03N	ME/M. Tech and PhD	Anna University	APPLIED ELECTRONICS	13/07/2009	15.9	Lecturer	Associate Professor	02/11/2020	Regular	Yes		No
11	Dr. D.SUGUMAR	XXXXXXX13J	ME/M. Tech and PhD	Anna University	COMMUNICATION SYSTEMS	07/08/2002	22.8	Lecturer	Associate Professor	02/08/2021	Regular	Yes		No
12	Dr. D. JASMINE DAVID	XXXXXXX31B	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	APPLIED ELECTRONICS	03/05/2010	14.11	Assistant Professor	Assistant Professor		Regular	Yes		No
13	Dr. SRIDEVI SATHYA PRIYA	XXXXXXX71G	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	VLSI DESIGN	18/08/2003	21.8	Lecturer	Assistant Professor		Regular	Yes		No
14	Dr. ROOPA JAYASINGH	XXXXXXX27P	ME/M. Tech and PhD	Anna University	APPLIED ELECTRONICS	15/06/2009	15.10	Assistant Professor	Assistant Professor		Regular	Yes		No
15	Dr. RAVEENA JUDIE DOLLY	XXXXXXX46M	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	APPLIED ELECTRONICS	02/03/2010	15.1	Lecturer	Assistant Professor		Regular	Yes		No
16	Dr. G MANOJ	XXXXXXX44G	ME/M. Tech and PhD	Anna University	VLSI DESIGN	04/06/2010	14.10	Assistant Professor	Assistant Professor		Regular	Yes		No

17	Dr. K. MARTIN SAGAYAM	XXXXXXX72D	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	COMMUNICATION SYSTEMS	01/07/2013	11.9	Assistant Professor	Assistant Professor		Regular	Yes		No
18	Dr. T. MARY NEEBHA	XXXXXXX80A	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	COMMUNICATION SYSTEMS	15/11/2010	14.5	Lecturer	Assistant Professor		Regular	Yes		No
19	Dr. D J.JAGANNATH	XXXXXXX24H	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	APPLIED ELECTRONICS	02/05/2008	16.11	Lecturer	Assistant Professor		Regular	Yes		No
20	Dr. D. NARAIN PONRAJ	XXXXXXX18Q	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	APPLIED ELECTRONICS	18/06/2007	17.10	Lecturer	Assistant Professor		Regular	Yes		No
21	Dr. G.SHINE LET	XXXXXXX59K	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	COMMUNICATION SYSTEMS	05/07/2007	17.9	Lecturer	Assistant Professor		Regular	Yes		No
22	Dr. I. THUSNAVIS BELLA MARY	XXXXXXX78A	ME/M. Tech and PhD	Anna University	APPLIED ELECTRONICS	15/06/2009	15.10	Lecturer	Assistant Professor		Regular	Yes		No
23	Dr.ALFRED KIRUBARAJ	XXXXXXX22E	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	VLSI DESIGN	13/07/2009	15.9	Lecturer	Assistant Professor		Regular	Yes		No
24	Dr. J. JENKIN WINSTON	XXXXXXX44B	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	COMMUNICATION ENGINEERING	19/06/2013	11.10	Assistant Professor	Assistant Professor		Regular	Yes		No
25	Dr. H. VICTOR DU JOHN	XXXXXXX83L	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	APPLIED ELECTRONICS	21/06/2013	11.10	Assistant Professor	Assistant Professor		Regular	Yes		No
26	Dr. SAMSON IMMANUEL J.	XXXXXXX94E	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	VLSI DESIGN	04/06/2010	14.10	Assistant Professor	Assistant Professor		Regular	Yes		No
27	Dr. M A P.MANIMEKALAI	XXXXXXX32H	ME/M. Tech and PhD	Anna University	APPLIED ELECTRONICS	02/05/2008	16.11	Lecturer	Assistant Professor		Regular	Yes		No
28	Dr. SHAJIN PRINCE	XXXXXXX75N	ME/M. Tech and PhD	Anna University	APPLIED ELECTRONICS	03/05/2010	14.11	Lecturer	Assistant Professor		Regular	Yes		No

29	Dr.A.AMIR ANTON JONE	XXXXXXX15A	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	VLSI DESIGN	07/08/2007	17.8	Lecturer	Assistant Professor		Regular	Yes		No
30	Dr. S. MERLIN GILBERT RAJ	XXXXXXX42C	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	COMMUNICATION SYSTEMS	15/06/2009	15.10	Lecturer	Assistant Professor		Regular	Yes		No
31	Dr. J. JOHN PAUL	XXXXXXX33E	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	POWER ELECTRONICS AND DRIVES	04/06/2012	12.10	Assistant Professor	Assistant Professor		Regular	Yes		No
32	Dr. P. MALIN BRUNTHA	XXXXXXX11P	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	APPLIED ELECTRONICS	18/06/2012	12.10	Assistant Professor	Assistant Professor		Regular	Yes		No
33	Dr. R. CATHERINE JOY	XXXXXXX11H	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	APPLIED ELECTRONICS	27/06/2013	11.9	Assistant Professor	Assistant Professor		Regular	Yes		No
34	Dr. NAVIN M GEORGE	XXXXXXX03N	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	COMMUNICATION SYSTEMS	27/01/2014	11.2	Assistant Professor	Assistant Professor		Regular	Yes		No
35	Dr. TONY JOSE	XXXXXXX05L	ME/M. Tech and PhD	University of Kerala	MICROWAVE AND TELEVISION ENGINEERING	06/06/2019	5.10	Assistant Professor	Assistant Professor		Regular	Yes		No
36	Ms. MISHAA MANIKANDAN M	XXXXXXX17D	M.E/M.Tech	Karunya Institute of Technology and Sciences	COMMUNICATION SYSTEMS	01/08/2023	1.8	Assistant Professor	Assistant Professor		Regular	Yes		No
37	Mrs. RAKHI R.A	XXXXXXX48G	M.E/M.Tech	APJ Abdul Kalam Technological university	Signal Processing	01/08/2023	1.8	Assistant Professor	Assistant Professor		Regular	Yes		No
38	Mrs. ANCY MICHEL M	XXXXXXX98F	M.E/M.Tech	Anna University	VLSI DESIGN	01/08/2023	1.8	Assistant Professor	Assistant Professor		Regular	Yes		No
39	Mrs. J. BLESSY ANNIE FLORA	XXXXXXX52L	M.E/M.Tech	Anna University	COMMUNICATION SYSTEMS	01/08/2023	1.8	Assistant Professor	Assistant Professor		Regular	Yes		No
40	Ms. SHERIL ANGEL J	XXXXXXX95D	M.E/M.Tech	Karunya Institute of Technology and Sciences	COMMUNICATION SYSTEMS	01/08/2023	1.8	Assistant Professor	Assistant Professor		Regular	Yes		No

41	Ms. EVANGELIN P S	XXXXXXX34H	M.E/M.Tech	Karunya Institute of Technology and Sciences	COMMUNICATION SYSTEMS	01/08/2023	1.8	Assistant Professor	Assistant Professor		Regular	Yes		No
42	Dr. A.S. AUGUSTINE FLETCHER	XXXXXXX10L	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	VLSI DESIGN	04/06/2012	12.1	Assistant Professor	Assistant Professor		Regular	No	04/07/2024	No
43	Ms. JULIA KARAL ADISAYA R	XXXXXXX32R	M.E/M.Tech	Karunya Institute of Technology and Sciences	VLSI DESIGN	01/08/2023	0.9	Assistant Professor	Assistant Professor		Regular	No	15/05/2024	No
44	Mr. AHATHIYAN G S	XXXXXXX84Q	M.E/M.Tech	Karunya Institute of Technology and Sciences	VLSI DESIGN	01/08/2023	0.9	Assistant Professor	Assistant Professor		Regular	No	15/05/2024	No
45	Dr. SHANTHINI PANDIARAJ	XXXXXXX59R	ME/M. Tech and PhD	Anna University	APPLIED ELECTRONICS	18/05/2000	23.7	Lecturer	Associate Professor	01/12/2020	Regular	No	04/01/2024	No
46	Dr. SOURAV GHOSH	XXXXXXX85H	ME/M. Tech and PhD	IIT, Kharagpur	VLSI DESIGN	23/08/2021	2.1	Associate Professor	Associate Professor	23/08/2021	Regular	No	27/09/2023	No
47	Dr. S. RADHA	XXXXXXX13D	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	VLSI DESIGN	18/06/2012	10.5	Assistant Professor	Assistant Professor		Regular	No	07/12/2022	No
48	Dr. C. SUGANTHI EVANGELINE	XXXXXXX39R	ME/M. Tech and PhD	Vellore Institute of Technology, Vellore	COMMUNICATION ENGINEERING	04/06/2012	11	Assistant Professor	Assistant Professor		Regular	No	09/06/2023	No
49	Dr. JUDE HEMANTH D	XXXXXXX88K	ME/M. Tech and PhD	Karunya Institute of Technology and Sciences	COMMUNICATION SYSTEMS	17/05/2004	20.11	Lecturer	Professor	02/11/2020	Regular	Yes		Yes

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 Department2 No. of PG Programs in the Department2

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

Description	**CAY(2024-25)**	**CAYm1 (2023-24)**	**CAYm2 (2022-23)**
UG1.B	121	120	61
UG1.C	120	61	0
UG1.D	61	0	0
UG1: Electronics & Computer Engineering	**302**	**181**	**61**
UG2.B	124	124	243
UG2.C	124	243	245
UG2.D	243	245	243
UG2: Electronics & Communication Engineering	**491**	**612**	**731**
PG1.A	0	0	12
PG1.B	0	12	20
PG1: Communication Systems	**0**	**12**	**32**
PG2.A	0	12	20
PG2.B	12	20	20
PG2: VLSI Design	**12**	**32**	**40**
DS=Total no. of students in all UG and PG programs in the Department	817	837	864
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=** 817	**S2=** 837	**S3=** 864
DF=Total no. of faculty members in the Department	42	45	40
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=** 42	**F2=** 45	**F3=** 40
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= 19.45**	**SFR2= 18.60**	**SFR3= 21.60**
Average SFR for 3 years	**SFR= 19.88**		

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)]
2024-25(CAY)	36	6	40.00	24.00
2023-24(CAYm1)	37	8	41.00	24.51
2022-23(CAYm2)	39	1	43.00	22.91

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
2024-25	4.00	5.00	9.00	7.00	27.00	30.00
2023-24	4.00	5.00	9.00	7.00	27.00	33.00
2022-23	4.00	5.00	9.00	9.00	28.00	26.00
Average	RF1=4.00	AF1=5.00	RF2=9.00	AF2=7.67	RF2=27.33	AF2=29.67

C5. Visiting/Adjunct Faculty/Professor of Practice

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

(CAYm1)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr. Anbalagan Thangavel	Senior Technical Project Manager	Robert Bosch Engineering and Business Solutions Ltd.	22EC2024-Cognitive IoT/21EC2016 -IoT/22EC2023-IoT for Security	3.00

(CAYm2)

(CAYm3)

C6. Academic Research

Table No. C6.1: Faculty publication details.

S.No.	Item	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)
1	No. of peer reviewed journal papers published	118	112	105
2	No. of peer reviewed conference papers published	70	67	66

3	No. of books/book chapters published	23	19	17

C7. Sponsored Research Project

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

(CAYm1)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. G. Manoj	Dr. D.S.Shylu Sam, Dr. Samson Immanuel, Dr. Thusnavis Bella mary	ECE	Configurable and Scalable IOT SoC for Automobile Applications	Ministry of Electronics and Information Technology	2023-2028	84.61
Dr. Aldin Justin Sundararaj	Mrs. Rakhi R A	Aero/ECE	Flame Acceleration Studies of Hydrocarbon Fuels using a Deflagaration-to-Detonation Transition Tube	Aeronautics R&D Board, DRDO	2024-2026	90.38
						Amount received (Rs.):174.99

(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. Dinesh peter	Dr. D.J. Jagannath Dr. Raveena Judie Dolly	CSE/ECE	DESIGN AND DEVELOPMENT OF A LOW-COST SMART SANITIZING DEVICE FOR HANDRAILS IN PUBLIC TRANSPORT TO CONTROL COVID-19	ICMR	2022-2023	10.68
						Amount received (Rs.):10.68

(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.D. Nirmal	Dr. H. Victor Du John - Exisiting Dr. Augustine Fletcher-Old	ECE	Design and Development of GaN HEMT for 18 GHz to 40 GHz	DRDO	2022-2025	27.75
Dr. Raveena Judie Dolly	Dr. D. J. Jagannath	ECE	Design And Development of A Low-Cost Medical Glove For Hand Tremor Management Caused By Parkinson's Disease	ICMR	2021-2022	10.20
						Amount received (Rs.):37.95

Total Amount (Lacs) Received for the Past 3 Years: 223.62

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 Sugumar D Dr Anita Jones		ECE	Design and Analysis of SIW slot array antenna for IOT applications, Dual Polarization FSS with absorptive and transmissive Band, AMC enhanced microstrip patch antenna	CIT- Coimbatore	1 Month	0.10
Dr Sugumar D Dr Anita Jones		ECE	Design of Patch Antenna using FR4 Substrate	ASM college of Engg-Chennai	1 Month	0.01
Dr Sugumar D Dr Anita Jones		ECE	Design and Analysis of wearable textile antenna on different body performance on bending, Single fed triple mode wideband circularly polarized antenna	Veltech - Chennai	1 Month	0.03
Dr Sugumar D Dr Anita Jones		ECE	Maple leaf shaped antenna	GCT-Coimbatore	1 Month	0.13
Dr Sugumar D Dr Anita Jones		ECE	MIMO Antenna	KCT-Coimbatore	1 Month	0.06
Dr Sugumar D Dr Anita Jones		ECE	1 X 2 Patch array antenna with rf filter	SRIT-Coimbatore	1 Month	0.02
Dr Sugumar D Dr Anita Jones		ECE	2x2 MIMO Antenna	NNRG College of Engineering - Hybd	1 Month	0.01
Dr Sugumar D Dr Anita Jones		ECE	FSS based patch antenna	Sri MKVNK- Puducherry	1 Month	0.04
Dr Sugumar D Dr Anita Jones		ECE	Dual Polarized Antipodal Vivaldi Antenna for SAR Applications	Kongu Engg - Perundurai	1 Month	0.01
Dr Sugumar D Dr Anita Jones		ECE	Design of UWB antenna	AMS- Chennai	1 Month	0.01
Dr Sugumar D Dr Anita Jones		ECE	Design of 5G MIMO Antenna	SREC-Coimbatore	1 Month	0.04
						Amount received (Rs.):0.46

(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 Sugumar D Dr Anita Jones		ECE	Metamaterial Antenna	Kongu Engg - Perundurai	4 Months	0.05
Dr Sugumar D Dr Anita Jones		ECE	A Compact Wi Max band- Notched UWB MIMO Antenna with High Isolation	GCT-Coimbatore	2 Months	0.03
Dr Sugumar D Dr Anita Jones		ECE	Development of KU band, SIW Band Pass Filter &design and development of RF Band pass filter for mm wave communication	CIET- Coimbatore	2 Months	0.04
Dr Sugumar D Dr Anita Jones		ECE	GSM band antenna	SRIT-Coimbatore	2 Months	0.04
Dr Sugumar D Dr Anita Jones		ECE	Monopole Antenna	KKIT-Coimbatore	3 Months	0.04
Dr Sugumar D Dr Anita Jones		ECE	Inverted U Slot Antenna	KL University - Andhra Pradesh	1 Month	0.02
Dr Sugumar D Dr Anita Jones		ECE	Exponentially tapered slot antenna & Design Of MPA (2Ghz-3Ghz)	Karpagam Institute of Technology Coimbatore	1 Month	0.04
Dr Sugumar D Dr Anita Jones		ECE	Testing of Multifrequency Antenna for WIFI applications	S Com Solutions Madurai	1 Month	0.05
Dr Sugumar D Dr Anita Jones		ECE	Dual Polarization FSS with Absorptive and Transmissive Band	CIT- Coimbatore	1 Month	0.01
Dr Sugumar D Dr Anita Jones		ECE	Falcon logo array Antenna	Sastra University	1 Month	0.02
Dr Sugumar D Dr Anita Jones		ECE	Circular Slot Monopole Antenna with FSS for microwave Imaging	Sri Manakula Vinayagar Engg, Puducherry	1 Month	0.08
Dr Sugumar D Dr Anita Jones		ECE	Antenna Fabrication	Karpagam Institute of Technology -Coimbatore	1 Month	0.15
Dr Sugumar D Dr Anita Jones		ECE	Dual Polaraized antenna	SREC-CBE	1 Month	0.01
						Amount received (Rs.):0.58

(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 Sugumar D Dr Anita Jones		ECE	Millimeter Wave Antenna	GCE-Salem	3 Months	0.05
Dr Sugumar D Dr Anita Jones		ECE	Dual band circular patch antenna for wireless energy harvesting	SONA Engg- Salem	1 Month	0.03
Dr Sugumar D Dr Anita Jones		ECE	Metamaterial Antenna	RVS Engg - Salem	1 Month	0.01
Dr Sugumar D Dr Anita Jones		ECE	MIMO	Sri Krishna Engg- Coimbatore	1 Month	0.03
Dr Sugumar D Dr Anita Jones		ECE	Double elliptical microstrip patch antenna	VELS University - Chennai	1 Month	0.02
Dr Sugumar D Dr Anita Jones		ECE	3.5GHz, 4 port MIMO Antenna	Bharathiar University, Coimbatore	3 Months	0.07
						Amount received (Rs.):0.21

Total amount (Lacs) received for the past 3 years: 1.25

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. Josemin Bala G.	Designing of a Smart IoT Solutions for Air Quality Monitoring System using LoRaWAN	7 Months	0.08	0.07	Published conference paper
Dr. J. John Paul	Assistive robot for medical applications	7 Months	0.09	0.09	Journal Submission
Dr. J. John Paul	Development of candid photo rover	7 Months	0.09	0.09	Submitted for Patent
Dr. K. Martin Sagayam	Spider robot using simple dynamics and dull kinematics	6 Months	0.10	0.10	Submitted for Patent
Dr. G. Shine Let	Development of Bluetooth Controlled Mobile Dispenser for Coffee and Tea	6 Months	0.10	0.10	Applied for patent
Dr. G. Shine Let Dr. D. Mercy Lydia	IoT Based Book Misplacement Avoidance System in The Library	6 Months	0.10	0.10	Patent Published
Dr. S. Merlin Gilbert Raj	ARM challenge	6 Months	0.09	0.09	Participated in competition
Ms. Blessy Annie Flora J	Rectangular Concentric Strip Antenna for IoT Applications	6 Months	0.03	0.03	Conference Paper
Dr. N.M. Sivamangai	Graphene Optical Data Storage using Nanoholes	One year	0.96	0.96	Patent Granted
Dr. Nesasudha	Step Impedance Resonator Structure Based Flexible Antenna For Wearable Applications	One year	0.89	0.89	Patent Granted
Dr. Nesasudha	Loop Structure Based Flexible Antenna For Medical Monitoring Applications	One year	0.92	0.92	Patent Granted
Dr. John Paul	Battery Charging Method and System	6 Months	0.91	0.91	Patent Granted
Dr. D. Nirmal	Biowaste Derived Carbon Electrode Supercapacitor	One year	0.68	0.68	Patent Granted
Dr. Tony Jose	An Automated Selective Circuit Breaking System To Selectively Break Electric Current on Wet Sensing	6 Months	0.38	0.38	Patent Published
Dr. J. John Paul	An Automated Self Guided Robot with a Single Reference Wheel Mechanism	6 Months	0.45	0.45	Patent Published
Dr. K. Martin Sagayam	IoT based monitoring system for soldiers	7 Months	0.10	0.00	Nil
			Amount received (Rs.): 5.97		

(CAYm2)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Dr. K. Martin Sagayam	Home Automation using IoT	6 Months	0.05	0.05	Conference Paper
Dr. Shine Let	Design of Flexible Wearable Antenna for Smart Watch Application	6 Months	0.05	0.04	Journal Published
Dr. S. Merlin Gilbert Raj	Vehicular Tracking and Assert Management System – Make in India	6 Months	0.05	0.05	Conference Paper
Dr Naveen George and Dr. S. Merlin Gilbert Raj	CANSAT	One year	0.32	0.32	Prototype developed and field trails tested at CANSAT grand finale 2024
Dr. D. Narain Ponraj	Motor Imagery classification Based Brain Computer Interface for Rehabilitation Applications	2 Months	0.18	0.18	Research publication
Dr. D. Nirmal	Design and Development of GaN HEMT for 18 GHz to 40 GHz	3 Years	0.32	0.32	Research publication
Ms. S. Rubeena Grace Tamilarasi	Low Cost Water Quality Monitoring System using LoRaWAN with cloud integration	6 Months	0.15	0.00	Nil
Dr. J. Jenkin Winston	Handheld ECG Analyzer for predicting abnormalities	6 Months	0.14	0.00	Nil
Dr. Amir Anton Jone	Development of Smart Wheelchair for Safety System	6 Months	0.05	0.00	Nil
Dr. M. Nesasudha	Design and Development of a Microstrip Patch Antenna for Salt and Sugar Contents in Water	6 Months	0.04	0.00	Nil
Dr. M. Nesasudha	Design of Flexible Antenna for Early Detection of Brain Stroke	6 Months	0.04	0.00	Nil
Dr. H. Victor Du John	Fabrication of a Metamaterial Absorber Structure for Biomedical Sensing Application	6 Months	0.05	0.00	Nil
Ms. S. Rubeena Grace Tamilarasi	Low-Cost Gesture based Robotic Hand	6 Months	0.05	0.00	Nil
			Amount received (Rs.): 1.49		

(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
			Amount received (Rs.): 0		

Total amount (Lacs) received for the past 3 years : 7.46

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	Microwave And optical Fiber laboratory Microwave Optical Fiber Communication	4	• X-Band Klystron Setup • X-Band Gunn Setup • Horn Antenna Setup • Link-A optical trainer • Link-	6 hours	Mr.J. Jebavaram	Lab Technician Gr. I	DECE
2	Microwave And optical Fiber laboratory Electromagnetic Waves Laboratory	4	• X-Band Klystron Setup • Directional Coupler • Magic Tee • E/H Plane Tee	6 hours	Mr.J. Jebavaram	Lab Technician Gr. I	DECE
3	Microwave And optical Fiber laboratory Electromagnetic & Radiation Laboratory	4	• CADFEKO • MIC C-Band Setup • MIC X-Band Setup	6 hours	Mr.J. Jebavaram	Lab Technician Gr. I	DECE
4	Microwave And optical Fiber laboratory Electronic Measurements Laboratory	4	• Lab View • VNA	4 hours	Mr.J. Jebavaram	Lab Technician Gr. I	DECE
5	Microwave And optical Fiber laboratory IoT for Communication Engineering	4	• ESP 8266 • Sensors • Raspberry Pi • Python	4 hours	Mr.J. Jebavaram	Lab Technician Gr. I	DECE
6	Microwave And optical Fiber laboratory Microwave & Optical Fiber Communication	4	• CADFEKO • MIC C-Band Setup • MIC X-Band Setup	4 hours	Mr.J. Jebavaram	Lab Technician Gr. I	DECE
7	Microwave And optical Fiber laboratory Microwave & Optical Fiber Communication	4	• X-Band Klystron Setup • X-Band Gunn Setup • Horn Antenna Setup • Link-A optical trainer • Link-	4 hours	Mr.J. Jebavaram	Lab Technician Gr. I	DECE
8	Microwave And optical Fiber laboratory	4	• CADFEKO • MIC C-Band Setup • MIC X-Band Setup	6 hours	Mr.J. Jebavaram	Lab Technician Gr. I	DECE
9	Signal Processing Laboratory Digital Signal Processing Lab	4	• TMS 320 C 6416 Processor • MATLAB	6 hours	Mr. G. Joseph Chinnadura	Lab Technician Gr. I	DECE
10	Signal Processing Laboratory MATLAB Programming for Engineers	4	• MATLAB	4 hours	Mr. G. Joseph Chinnadura	Lab Technician Gr. I	DECE
11	Signal Processing Laboratory Computer Network Laboratory (18EC2018)	4	• MATLAB	3 hours	Mr. G. Joseph Chinnadura	Lab Technician Gr. I	DECE
12	Signal Processing Laboratory Digital Signal Processing Lab	4	• TMS 320 C 6416 • Processor • MATLAB	4 hours	Mr. G. Joseph Chinnadura	Lab Technician Gr. I	DECE
13	Signal Processing Laboratory Voice & Vision Processing Lab	4	• MATLAB	3 hours	Mr. G. Joseph Chinnadura	Lab Technician Gr. I	DECE
14	Signal Processing Laboratory Digital Signal Processing Lab	4	• TMS 320 C 6416 Processor • MATLAB	4 hours	Mr. G. Joseph Chinnadura	Lab Technician Gr. I	DECE
15	Signal Processing Laboratory Machine Learning Laboratory	4	• Anaconda • Colab	2 hours	Mr. G. Joseph Chinnadura	Lab Technician Gr. I	DECE

16	Signal Processing Laboratory Digital Signal Processing Lab	4	• TMS 320 C 6748 Processor • MATLAB	4 hours	Mr. G. Joseph Chinnadura	Lab Technician Gr. I	DECE
17	Signal Processing Laboratory Machine Learning Laboratory	4	• Anaconda • Colab	4 hours	Mr. G. Joseph Chinnadura	Lab Technician Gr. I	DECE
18	Signal Processing Laboratory Signal Processing Laboratory	4	• TMS 320 C 6748 Processor • MATLAB	4 hours	Mr. G. Joseph Chinnadura	Lab Technician Gr. I	DECE
19	Signal Processing Laboratory Machine Learning Laboratory	4	• Anaconda • Colab	4 hours	Mr. G. Joseph Chinnadura	Lab Technician Gr. I	DECE
20	Signal Processing Laboratory Computer Network Laboratory	4	• MATLAB	4 hours	Mr. G. Joseph Chinnadura	Lab Technician Gr. I	DECE
21	Signal Processing Laboratory Electronics for Intelligent Machines Laboratory	4	• Proteus • Raspberry pi • Arduino	4 hours	Mr. G. Joseph Chinnadura	Lab Technician Gr. I	DECE
22	Signal Processing Laboratory Engineering Computations using Matlab	4	• MATLAB	4 hours	Mr. G. Joseph Chinnadura	Lab Technician Gr. I	DECE

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	VLSI Laboratory	•Specific Safety Rules like Do's and Don'ts are displayed in all the laboratories. •First aid box and fire extinguishers are kept in each laboratory. • Students follow their dress code for their lab safe operation. • Well trained technical supporting staff monitor the laboratory. • Repairs and maintenance of an equipment is done periodically. • Periodical calibration of the lab equipment's are done. • Students are instructed to ensure that all connections to the development boards are made correctly before powering on. • If manual soldering or chip programming is involved, work in a well-ventilated area or under a fume hood to avoid inhaling fumes from flux or solder, which may be hazardous.
2	Integrated Circuits Lab	• Specific Safety Rules like Do's and Don'ts are displayed and instructed for all students. • First aid box and fire extinguishers are kept in each laboratory • Students are informed to wear lab uniform. • Well trained technical supporting staff monitor the laboratory at all times. • Breakdown maintenance of an equipment is done as and when it is required. • Periodical calibration of the lab equipment's are regularly done. • Clean and organized laboratory is maintained. • Always check the orientation of ICs before inserting them into sockets or breadboards. Incorrect insertion can cause IC overheating, permanent damage, or even burns. • Use only the specified low voltage (typically 5V or 3.3V) power supplies for IC circuits. Applying higher voltage can destroy the IC and pose a risk of short circuits or electric shock.
3	Signal Processing Laboratory	•Specific Safety Rules like Do's and Don'ts are displayed in all the laboratories. •First aid box and fire extinguishers are kept in each laboratory. • Students follow their dress code for their lab safe operation. • Well trained technical supporting staff monitor the laboratory. • Repairs and maintenance of an equipment is done periodically. • Periodical calibration of the lab equipment's are done. • Ensure that input signals fed into DSP kits or data acquisition systems do not exceed specified voltage levels. • Always connect the signal generator, oscilloscope, and DSP board to a common ground to prevent signal distortion, noise coupling, or accidental damage to sensitive components.
4	Microprocessor Laboratory	•Specific Safety Rules like Do's and Don'ts are displayed and instructed for all students. • First aid box and fire extinguishers are kept in each laboratory. • Students are informed to wear lab uniform • Well trained technical supporting staff monitor the laboratory at all times. • Breakdown maintenance of an equipment is done as and when it is required. • Periodical calibration of the lab equipment's are regularly done. • Clean and organized laboratory is maintained. • Before powering microprocessor kits (like 8085/8086), verify all connections to avoid short circuits or irreversible damage to the microprocessor or peripherals. • When using assemblers, debuggers, or emulators, always verify the code for infinite loops or incorrect memory access, as these can cause the system to hang or behave unpredictably.

5	RF Laboratory	•Specific Safety Rules like Do's and Don'ts are displayed and instructed for all students. • First aid box and fire extinguishers are kept in each laboratory. • Students are informed to wear lab uniform • Well trained technical supporting staff monitor the laboratory at all times. • Breakdown maintenance of an equipment is done as and when it is required. • Periodical calibration of the lab equipment's are regularly done. • Clean and organized laboratory is maintained. • Never touch or come close to active RF transmitting antennas or open transmission lines. RF energy can cause burns or interfere with medical devices like pacemakers. • Always ensure that RF components and instruments are correctly impedance-matched to prevent signal reflections, equipment damage, and inaccurate measurements.
6	Electron Devices Laboratory	• Specific Safety Rules like Do's and Don'ts are displayed and instructed for all students. • First aid box and fire extinguishers are kept in each laboratory. • Students are informed to wear lab uniform. • Well trained technical supporting staff monitor the laboratory at all times. • Breakdown maintenance of an equipment is done as and when it is required. • Periodical calibration of the lab equipment's are regularly done. • Clean and organized laboratory is maintained. • Always use anti-static wrist straps, mats, and grounded tools when handling semiconductor devices and components to prevent electrostatic discharge (ESD), which can damage sensitive devices like transistors and diodes. • When working with power supplies or equipment that generate high voltages (such as vacuum tubes or oscillators), ensure proper insulation and follow safety protocols to prevent electric shock or burns.
7	Communication Laboratory	•Specific Safety Rules like Do's and Don'ts are displayed and instructed for all students. • First aid box and fire extinguishers are kept in each laboratory. • Students are informed to wear lab uniform. • Well trained technical supporting staff monitor the laboratory at all times. • Breakdown maintenance of an equipment is done as and when it is required. • Periodical calibration of the lab equipment's are regularly done. • Clean and organized laboratory is maintained • Ensure all connections are secure and correct before powering up communication trainer kits to prevent short circuits or component failure. •Do not exceed recommended input signal levels on communication modules or spectrum analysers, as this can lead to distortion, inaccurate results, or permanent damage to sensitive RF components.
8	Microwave & Optical Fiber Laboratory	•Specific Safety Rules like Do's and Don'ts are displayed and instructed for all students. • First aid box and fire extinguishers are kept in each laboratory. • Students are informed to wear lab uniform. • Well trained technical supporting staff monitor the laboratory at all times. • Breakdown maintenance of an equipment is done as and when it is required. • Periodical calibration of the lab equipment's are regularly done. • Clean and organized laboratory is maintained. • Never look directly into open waveguides or horn antennas when the microwave source is active. Invisible microwave radiation can cause serious eye or tissue damage. • Use safety goggles when cleaving or handling optical fibres. Broken fibre ends are sharp and can cause injury or become embedded in the skin or eyes if not handled properly.

D3. Project Laboratory/Research Laboratory

S.No.	Name of the Laboratory	Utilisation	PO,PSOs
1	IoT Centre	Project : 4Hrs/Week	PO1,PO4, PO8, PO5
2	VLSI Laboratory	Project :4Hrs/Week	PO1, PO4
3	Centre of Excellence in VLSI Design	Project :12Hrs/Week	PO1,PO4
4	Centre for Research in Semiconductor Devices	Project :12Hrs/Week	PO1,PO4
5	Chips to Startup Laboratory	Project :12Hrs/Week	PO1,PO4

1.IoT Centre:

Facilities:

- C-Band MIC Trainer
- X-Band MIC Trainer
- Eleven Lab –Antenna/PCB Fabrication Unit
- Programming Library Software(OTDR Hardware kit) User:1
- FEKO Server user : 1 no Client users : 9 nos
- FEKO up-graded (6.0 to 7.0) Server user : 1 no Client users : 9 nos
- Light Runner Microwave Workbench(X,J) Optical Trainer Kits

OUTCOMES:

Projects Carried out from the Lab

- Compact Multiband Rectangular Slotted Antenna for GNSS Applications.
- Reconfigurable Micro-strip Patch Antenna for X & C-Band Communication (Journal Publication by student: "Synthesis of linear antenna arrays using Jaya, self-adaptive Jaya and chaotic Jaya algorithms", in International Journal of Electronics and Communications - Elsevier, IF: 1.147.)
- Dispersion Compensation for Index- Guiding Photonic Crystal Fiber with Defected Core. Generation of High Intense Waves Using Fiber LASER Oscillator.

2. VLSI Laboratory

Facilities:

- VLSI EDA TOOLS -7.0
- Cadence- 2017
- TCAD -2018
- Mentor Graphics -2017
- Vivado-2013.3
- Virtex-5 open sparc EP
- Virtex-5 Genesys
- Virtex -4 –ML401
- XUP Virtex II Pro Board XUPV2 Pro
- Spartan 2E
- University Trainer Kits
- Zybo-zinq 7000
- Nexys-4 Video
- Basys 3

OUTCOMES:

Projects Carried out from the Lab

- Design of DC-DC Converter for Energy Harvesting Applications.
- Design and Fabrication of Graphene Oxide Based Flexible Super Capacitor.
- Performance Analysis of Double Gate Junction-less FET.
- Design and Implementation of Modified Tollbooth System Using FPGA.
- Implementation of Image Processing Algorithm on FPGA with Real time Data

3. Centre of Excellence in VLSI Design

Facilities:

- Cadence

OUTCOMES:

Projects Carried out from the Lab

- Industrial Trainings
- Internships
- Placements
- Workshops
- Industry Live Project (Verification of Serial Peripheral Interface)

4. Centre for Research in Semiconductor Devices

Facilities:

- Gas Cylinder
- Water Cooler
- Magnetron sputtering Unit (2")
- Silvaco TCAD

OUTCOMES:

Projects Carried out from the Lab

- Utilized by research scholars and ECE students.
- These equipment's and tools are used for the project work (22EC2998/22EC2999) which leads to the attainment of PO1, PO4.

5. Chips to Startup Laboratory

Facilities:

- Vivado 2024
- Synopsys
- Cadence
- Mentor Graphics
- Pynq z2 Board
- Pynq Zu Board
- Zynq MPSoc104 Board
- Boolean Boaed
- Kria Audio Board
- Kria Vedio Board
- Arty Board

OUTCOMES:

Projects Carried out from the Lab

- Utilized by ECE students.
- Design and Implementation of UART Using Pynq Z2 Board
- Workshop on Pynq, Zynq and Arty Boards
- Mini projects done by ECE students.

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
2022-23(CAYm2)	1380	69	62	65	91
2023-24(CAYm1)	1650	82	55	52	66
2024-25(CAY)	1650	82	49	56	61

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

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

Items	Budgeted in 2024-2025	Actual Expenses in 2024-2025 till	Budgeted in 2023-2024	Actual Expenses in 2023-2024 till	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till
Infrastructure Built-Up	15739250	15546677	14293000	46186347	22684500	48675115	11908000	73636311
Library	3225800	752858	2740000	371867.02	4035000	1857651	4625000	1517711
Laboratory equipment	193004686	69494419	195857557	94447319	160823754	99213351	148783639.4	86745796
Teaching and non-teaching staff salary	689880254	637062952	665563445	667552837.4	610809611	626635051	538001387	500411883
Outreach Programs	2740200	2200431	2626868	1515824	8316960	3169691	3040086	1445947
R&D	36367280	64991108	32637280	58448735	15882065	86405960	13632433	31184646
Training, Placement and Industry linkage	23135850	21646776	15751850	14253129	13582215	15502032	13514679	5362129
SDGs	12000000	10350519	7000000	6797754	15000000	14211361	3000000	2603928

Entrepreneurship	11023537	4122987	10950295	4046453	6662778	3987601	2851394	2807788
Others, specify	642932752	569296271	633907173	518871962	560333609	568593435	550185189	482604954
Total	**1630049609**	**1395464998**	**1581327468**	**1412492227.42**	**1418130492**	**1468251248**	**1289541807.4**	**1188321093**

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

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

Items	**Budgeted in 2024-2025**	**Actual Expenses in 2024-2025 till**	**Budgeted in 2023-2024**	**Actual Expenses in 2023-2024 till**	**Budgeted in 2022-2023**	**Actual Expenses in 2022-2023 till**	**Budgeted in 2021-2022**	**Actual Expenses in 2021-2022 till**
Laboratory equipment	10470700	5620819	13923400	5588695	5048000	8255756	7364200	9443665
Software	3143038	2626394	3375440	2698109	3815254	2854557	4030408	3460868
SDGs	701310	604910	439347	426653	1054326	998894	254659	221038
Support for faculty development	10000	15424	10000	21180	10000	115410	10000	43875
R & D	707500	672655	352500	4052353	322500	493792	297500	1473737
Industrial Training, Industry expert, Internship	47500	1290094	47500	526084	47500	386208	47500	121881
Miscellaneous Expenses*	18208794.29	14261199	18101877.45	14407339.17	15639364.08	16242053.19	18379920.77	15304578.01
Total	**33288842.29**	**25091495**	**36250064.45**	**27720413.17**	**25936944.08**	**29346670.19**	**30384187.77**	**30069642.01**