

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: 10052	Date of Submission: 25-02-2025

PART A- Profile of the Institute

A1.Name of the Institute: VELAMMAL COLLEGE OF ENGINEERING AND TECHNOLOGY	
Year of Establishment : 2007	Location of the Institute: Madurai
A2. Institute Address: Velammal College of Engineering and Technology,Madurai Rameswaram High Road,Velammal Nagar, Viraganoor Madurai 625 009.	
City:Madurai	State:Tamil Nadu
Pin Code:625009	Website:www.vcet.ac.in
Email:principal@vcet.ac.in	Phone No(with STD Code):0452-2465289
A3. Name and Address of the Affiliating University (if any):	
Name of the University : ANNA UNIVERSITY CHENNAI	City: Madurai
State : Tamil Nadu	Pin Code: 625009
A4. Type of the Institution: Autonomous CAY(2021-22)	
A5. Ownership Status: Self financing	

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

- No. of UG programs: **9**
- No. of PG programs: **5**

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

Sr.No.	Discipline	Level of program	Name of the program	Year of Start	Year of Closed	Name of The Department
1	Engineering & Technology	UG	Artificial Intelligence and Data Science	2023	--	Artificial Intelligence and Data Science
2	Engineering & Technology	UG	Civil Engineering	2011	--	Civil Engineering
3	Engineering & Technology	PG	Communication Systems	2011	--	Electronics and Communication Engineering
4	Engineering & Technology	UG	Computer Science and Engineering	2007	--	Computer Science and Engineering
5	Engineering & Technology	PG	Computer Science and Engineering	2011	--	Computer Science and Engineering
6	Engineering & Technology	UG	Computer Science and Engineering (Cyber Security)	2024	--	Computer Science and Engineering (Cyber Security)
7	Engineering & Technology	UG	Electrical and Electronics Engineering	2007	--	Electrical and Electronics Engineering
8	Engineering & Technology	UG	Electronics & Communication Engineering	2007	--	Electronics and Communication Engineering

9	Engineering & Technology	UG	Electronics Engineering (VLSI Design and Technology)	2024	--	Electronics Engineering (VLSI Design and Technology)
10	Engineering & Technology	UG	Information Technology	2007	--	Information Technology
11	Engineering & Technology	PG	Manufacturing Engineering	2011	--	Mechanical Engineering
12	Engineering & Technology	UG	Mechanical Engineering	2008	--	Mechanical Engineering
13	Engineering & Technology	PG	Network Engineering	2012	--	Information Technology
14	Engineering & Technology	PG	Power Systems Engineering	2013	--	Electrical and Electronics 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
Mechanical Engineering	No	Mechanical Engineering	UG
Electronics and Communication Engineering	Yes	Electronics & Communication Engineering	UG
Computer Science and Engineering	Yes	Computer Science and Engineering	UG
Information Technology	Yes	Information Technology	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)

Allied Department/Cluster Name	Program Name	Program Level
Electronics and Communication Engineering	Electronics Engineering (VLSI Design and Technology)	UG

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 PROGRA ACCRED
1	Electronics & Communication Engineering	UG	2007 / --	60	Yes	2024	180	2024	Southern/1-43664989643/2024/EOA	Granted accreditation for 3 years for the period (specify period)	2022	2025	2

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 PROGRA ACCRED
Sanctioned Intake for Last Five Years for the Communication Systems													
Academic Year		Sanctioned Intake											
2024-25				180									
2023-24				120									
2022-23				120									
2021-22				120									
2020-21				120									
2019-20				120									

List of the Allied Departments/Cluster and Programs:

SR.NO.	ALLIED DEPARTMENT NAME	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
1	Electronics and Communication Engineering	Electronics Engineering (VLSI Design and Technology)	UG	2024 / --	60	No	NA	60	2024	Southern/1-43664989643/2024/EOA	Not eligible for accreditation	--	--

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

A. Name of the HoD :	Dr. S. Vasuki
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)	180	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	186	120	132	125	114	121	108

N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	1	4	5	5	0	2
N3=Separate division if any	0	0	0	0	0	0	0
N4=Total no. of students admitted in the 1st year via all supernumerary quotas	0	0	0	0	0	0	0
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	186	121	136	130	119	121	110

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)	180	0	0	103.33
2023-24 (CAYm1)	120	0	0	100.00
2022-23 (CAYm2)	120	0	0	110.00

Average [(ER1 + ER2 + ER3) / 3] = 104.44 ≈ 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	(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).)	118.00	121.00	112.00
B=No. of students who graduated from the program in the stipulated course duration	108.00	115.00	108.00
Success Rate (SR)= (B/A) * 100	91.53	95.04	96.43

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 94.33

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)	8.05	8.16	8.02
Y=Total no. of successful students	102.00	110.00	115.00
Z=Total no. of students appeared in the examination	119.00	131.00	121.00
API [X*(Y/Z)]	6.90	6.85	7.62

Average API[(AP1+AP2+AP3)/3] : 7.12

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 2nd year/10)	7.90	8.16	8.59
Y=Total no. of successful students	110.00	115.00	112.00

Z=Total no. of students appeared in the examination	114.00	120.00	118.00
API [X * (Y/Z)]	7.62	7.82	8.15

Average API [(AP1 + AP2 + AP3)/3] : 7.86

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)	7.97	8.21	8.61
Y=Total no. of successful students	115.00	108.00	115.00
Z=Total no. of students appeared in the examination	115.00	112.00	121.00
API [X*(Y/Z)]:	7.97	7.92	8.18

Average API [(AP1 + AP2 + AP3)/3] : 8.02

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	125.00	120.00	122.00
X=No. of students placed	81.00	88.00	103.00
Y=No. of students admitted to higher studies	3.00	4.00	1.00
Z=Total no. of students appeared in the examination	2.00	0.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	72.80	76.67	85.25

Average Placement Index = (P_1 + P_2 + P_3)/3: 78.24 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. Vasuki	XXXXXXXX03C	ME/M. Tech and PhD	Anna University, Chennai	Image Processing	02/05/2009	15.9	Professor	Professor		Regular	Yes		Yes
2	Dr. P. Suveetha Dhanaselvam	XXXXXXXX27F	ME/M. Tech and PhD	Anna University, Chennai	VLSI	01/06/2009	15.7	Assistant Professor	Professor	01/08/2023	Regular	Yes		No

3	Dr. P. Rajeswari	XXXXXXX44G	ME/M. Tech and PhD	Anna University, Chennai	EMI/EMC	02/05/2009	15.8	Assistant Professor	Professor	01/08/2023	Regular	Yes		No
4	Dr.P.Karthikeyan	XXXXXXX80B	ME/M. Tech and PhD	Anna University, Chennai	Image Processing	07/06/2010	14.7	Assistant Professor	Professor	01/08/2023	Regular	Yes		No
5	Dr. S. Palanivel Rajan	XXXXXXX41H	ME/M. Tech and PhD	Anna University, Chennai	Bio-medical Communication, Telemedicine	05/07/2024	0.6	Professor	Professor		Regular	Yes		No
6	Dr.K.Kavitha	XXXXXXX68E	ME/M. Tech and PhD	Anna University, Chennai	Signal Processing	15/12/2017	7.1	Assistant Professor	Associate Professor	01/04/2020	Regular	Yes		No
7	Dr.S.GandhimathaliasUsha	XXXXXXX49B	ME/M. Tech and PhD	Anna University, Chennai	Image Processing	07/06/2010	14.7	Assistant Professor	Associate Professor	01/04/2020	Regular	Yes		No
8	Dr. S. Murugan	XXXXXXX97Q	ME/M. Tech and PhD	Anna University, Chennai	Antenna Design	05/06/2024	0.7	Associate Professor	Associate Professor		Regular	Yes		No
9	Mr.G.Pradeep Kumar	XXXXXXX36H	M.E/M.Tech	Anna University, Chennai	Networks, Unmanned Systems	01/06/2009	15.7	Assistant Professor	Assistant Professor		Regular	Yes		No
10	Mr.A.Suban	XXXXXXX96Q	M.E/M.Tech	Anna University, Chennai	Signal Processing	01/06/2011	13.7	Assistant Professor	Assistant Professor		Regular	Yes		No
11	Dr. T. Venkatesh Kanna	XXXXXXX67N	ME/M. Tech and PhD	Anna University, Chennai	Bio Medical Image Processing	03/06/2024	0.7	Assistant Professor	Assistant Professor		Regular	Yes		No
12	Dr. S. Regina	XXXXXXX00M	ME/M. Tech and PhD	Anna University, Chennai	Antenna Design & Microwave circuits	03/06/2024	0.7	Assistant Professor	Assistant Professor		Regular	Yes		No
13	Mr.M.Sakthivel	XXXXXXX32P	M.E/M.Tech	Anna University, Chennai	VLSI	03/06/2013	11.7	Assistant Professor	Assistant Professor		Regular	Yes		No
14	Ms.A.Alaimahal	XXXXXXX31F	M.E/M.Tech	Anna University, Chennai	Image Processing	17/06/2013	11.7	Assistant Professor	Assistant Professor		Regular	Yes		No
15	Mr.K.Karthik	XXXXXXX93P	M.E/M.Tech	Anna University, Chennai	Communication & Networking	02/08/2016	8.5	Assistant Professor	Assistant Professor		Regular	Yes		No
16	Mr.B.Karthikeyan	XXXXXXX58E	M.E/M.Tech	Anna University, Chennai	Communication & Networking	03/07/2017	7.6	Assistant Professor	Assistant Professor		Regular	Yes		No
17	Dr.B.Muneeswari	XXXXXXX33G	ME/M. Tech and PhD	Anna University, Chennai	Networks	16/02/2021	3.11	Assistant Professor	Assistant Professor		Regular	Yes		No

18	Dr.N.Nagarani	XXXXXXX63L	ME/M. Tech and PhD	Anna University, Chennai	Image Processing	03/03/2021	3.10	Assistant Professor	Assistant Professor		Regular	Yes		No
19	Mrs. V. G. Janani	XXXXXXX97D	M.E/M.Tech	Anna University, Chennai	Image Processing	01/08/2022	2.5	Assistant Professor	Assistant Professor		Regular	Yes		No
20	Mr. R. Karthi Kumar	XXXXXXX55J	M.E/M.Tech	Anna University, Chennai	VLSI Design	01/06/2023	1.7	Assistant Professor	Assistant Professor		Regular	Yes		No
21	Dr. P. Uma Maheswari	XXXXXXX55G	ME/M. Tech and PhD	Anna University, Chennai	Medical Image Processing, Artificial Intelligence	01/08/2023	1.5	Assistant Professor	Assistant Professor		Regular	Yes		No
22	Mrs. J. Rajeswari	XXXXXXX59E	M.E/M.Tech	Anna University, Chennai	Machine Learning, IoT	24/01/2024	0.11	Assistant Professor	Assistant Professor		Regular	Yes		No
23	Mrs. A. Sakthi Preetha	XXXXXXX99F	M.E/M.Tech	Anna University, Chennai	Antenna, Networking	10/06/2024	0.7	Assistant Professor	Assistant Professor		Regular	Yes		No
24	Mr.V.Karthick	XXXXXXX76E	M.E/M.Tech	Anna University, Chennai	Image Processing	06/07/2011	11.10	Assistant Professor	Assistant Professor		Regular	No	31/05/2023	No
25	Mr. L. Vinoth Kumar	XXXXXXX18H	M.E/M.Tech	Anna University, Chennai	Control and Instrumentation	15/06/2017	6.6	Assistant Professor	Assistant Professor		Regular	No	30/12/2023	No
26	Mr.P.Anand	XXXXXXX41E	M.E/M.Tech	Anna University, Chennai	Image Processing	01/06/2011	12.7	Assistant Professor	Assistant Professor		Regular	No	30/12/2023	No
27	Dr.P.Kavitha	XXXXXXX83C	ME/M. Tech and PhD	Anna University, Chennai	Wireless Communication	09/08/2021	2.7	Associate Professor	Associate Professor		Regular	No	03/04/2024	No
28	Dr. J. Sivasankari	XXXXXXX55C	ME/M. Tech and PhD	Anna University, Chennai	Networks	15/09/2022	1.7	Assistant Professor	Assistant Professor		Regular	No	30/04/2024	No
29	Mr.S. Vijay Gokul	XXXXXXX78P	M.E/M.Tech	Anna University, Chennai	Antenna	15/09/2022	1.7	Assistant Professor	Assistant Professor		Regular	No	30/04/2024	No
30	Dr.K.Kavitha	XXXXXXX21C	ME/M. Tech and PhD	Anna University, Chennai	Antenna & Image Processing	18/01/2019	6	Professor	Professor		Regular	Yes		No

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

Sr.No	Name of the Faculty	PAN No.	APAAR faculty ID*(if any)	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.Raj Kumar	XXXXXXX84G	XXXXXXXXX429	ME/M. Tech and PhD	Anna University, Chennai	VLSI Device Modeling	03/06/2024	0.7	Assistant Professor	Assistant Professor		Regular	Yes		No

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(2024-25)	CAYm1 (2023-24)	CAYm2 (2022-23)
UG1.B	121	124	125
UG1.C	124	125	125
UG1.D	125	125	120
UG1: Electronics & Communication Engineering	370	374	370
UG2.B	0	0	0
UG2.C	0	0	0
UG2.D	0	0	0
UG2: Electronics Engineering (VLSI Design and Technology)	0	0	0
PG1.A	9	9	9
PG1.B	9	9	9
PG1: Communication Systems	18	18	18
DS=Total no. of students in all UG and PG programs in the Department	388	392	388

Description	CAY(2024-25)	CAYm1 (2023-24)	CAYm2 (2022-23)
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= 388	S2= 392	S3= 388
DF=Total no. of faculty members in the Department	23	20	20
AF= Total no. of faculty members in the allied Departments	1	0	0
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	F1= 24	F2= 20	F3= 20
FF=The faculty members in F who have a 100% teaching load in the first-year courses	2	0	0
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1= 17.64	SFR2= 19.60	SFR3= 19.40
Average SFR for 3 years	SFR= 18.88		

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)	14	11	19.00	24.21
2023-24(CAYm1)	11	9	19.00	19.21
2022-23(CAYm2)	10	10	19.00	18.42

C4. Faculty Cadre Proportion

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

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

Year	Professors		Associate Professors		Assistant Professors	
	Required RF1	Available AF1	Required RF2	Available AF1	Required RF3	Available AF3
2024-25	2.00	5.00	4.00	3.00	12.00	16.00
2023-24	2.00	5.00	4.00	2.00	13.00	13.00
2022-23	2.00	2.00	4.00	6.00	12.00	12.00
Average	RF1=2.00	AF1=4.00	RF2=4.00	AF2=3.67	RF2=12.33	AF2=13.67

C5. Visiting/Adjunct Faculty/Professor of Practice

Table No. C5.1: List of visiting/adjunct faculty/principal 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.U.Sankar Ganesh	Vice President	Elysium Group of Companies, Madurai	Cloud Computing and Wireless Networking	14.00
2	Mr.Ajmeer	CEO	Torcin robotics, Madurai	Cloud Computing and Wireless Networking	14.00
3	Mr.U.Sankar Ganesh	Vice President	Elysium Group of Companies, Madurai	Network Security	14.00
4	Mr.K.S.Pradeep	Technical Trainer	Elysium Academy, Madurai	Cloud Computing and Wireless Networking	14.00
5	Mr.K.S.Pradeep	Technical Trainer	Elysium Academy, Madurai	Network Security	14.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.S.Rajendran	CEO	Silicon Software Solutions	Frontend Development	35.00
2	Mr.R.Muralidharan	Director	Connect Training Solutions	Aptitude and Reasoning	28.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.R.Muralidharan	Director	Connect Training Solutions	Aptitude and Reasoning	35.00
2	Mr.K.Manibharathi	Founder	Csuite Tech Labs	Cybersecurity	21.00

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	12	7	6
2	No. of peer reviewed conference papers published	29	11	13
3	No. of books/book chapters published	24	12	0

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. K. Kavitha	Dr.N.Suresh Kumar Dr.P.Karthikeyan Dr.J.Sivasankari	ECE	Design And Development of An Indigenous Multianalyte Food Adulteration Detection Device	MSME	2 Years	8.93
Mr.G.Pradeep Kumar	Mr.L.Vinoth Kumar	ECE	Indigenously developed indoor drone for rapid stock management in warehouse	MSME	2 Years	7.44
						Amount received (Rs.):16.37

(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.P.Rajeswari	Ms.Siva Darshini Ms.Shruthika	ECE	Artificial Intelligence Enabled Assist for Visually Impaired Movements	MSME	2 Years	7.65
Dr. B. Sridevi	Dr.P.Suveetha Dhanaselvam Mr.G.Pradeep Kumar	ECE	Digital Mamallai	DST- SHRI	3 Years	0.00
						Amount received (Rs.):7.65

(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.P.Rajeswari	Dr.N.Suresh Kumar Mr.A.Gobinath	ECE	Investigation of Electromagnetic Phenomenon behind the Temple Kalasam in Indian Historic Temples	DST-SHRI	2 Years	31.00
Dr.P.Rajeswari	Dr.S.Vasuki Dr.N.SureshKumar	ECE	IoT Enabled Smart Cane for Enhancing Visually Impaired Mobility	AICTE-AQIS (RPS)	2 Years	10.25
						Amount received (Rs.):41.25

Total Amount (Lacs) Received for the Past 3 Years: 65.27**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. K. Kavitha	Dr.N.Suresh Kumar Dr.P.Karthikeyan Dr.J.Sivasankari	ECE	Design And Development of An Indigenous Multianalyte Food Adulteration Detection Device	MSME	2 Years	1.50
Mr.G.Pradeep Kumar	Mr.L.Vinod Kumar	ECE	Indigenously developed indoor drone for rapid stock management in warehouse	MSME	2 Years	0.52
						Amount received (Rs.):2.02

(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.P.Rajeswari	Ms.Siva Darshini Ms.Shruthika	ECE	Artificial Intelligence Enabled Assist for Visually Impaired Movements	MSME	2 Years	1.20
Dr.A.Babu Karuppiyah	Dr.P.Suveeetha Dhanaselvam	ECE	Lifesaving IoT based hazardous gas monitoring and drainage block detection system to prevent manual scavenging	MSME	2 Years	3.00
						Amount received (Rs.):4.20

(CAYm3)

Total amount (Lacs) received for the past 3 years: 6.22

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. K. Kavitha	Design And Development of An Indigenous Multianalyte Food Adulteration Detection Device	2 Years	2.25	2.25	working model
Mr.G.Pradeep Kumar	Indigenously developed indoor drone for rapid stock management in warehouse	2 Years	1.88	1.88	working model
			Amount received (Rs.): 4.13		

(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.P.Rajeswari	Artificial Intelligence Enabled Assist for Visually Impaired	2 Years	1.14	1.14	Prototype developed
Dr.A.Babu Karuppiyah	Lifesaving IoT based hazardous gas monitoring and drainage block detection system to prevent manual	2 Years	2.25	2.25	Prototype developed
			Amount received (Rs.): 3.39		

(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 : 7.52

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	Electron Devices Lab	3	a) CRO/DSO b) Function generator c) Dual Regulated Power Supply d)MSO	Odd Sem : 16 I	M. Muthumanikandan	Lab Instructor	DEIE
2	Electronic Circuits Lab	3	a) CRO b) Function generator c) Dual Regulated Power Supply d)DSO	Odd Sem : 16 I	M. Muthumanikandan	Lab Instructor	DEIE
3	Integrated Circuits Lab	3	a) CRO b) Function generator c) Dual Regulated Power Supply d) IC Tester e) IC Trainer f)DSO	Odd Sem : 32 I	M.Gunasekaran	Lab Instructor	DECE
4	Microprocessor&Microcontroller Lab	2	a) 8085 Microprocessor Trainer Kit b) 8086 Microprocessor Trainer Kit c) 8051 Micro controller Trainer Kit d) Interfacing of Microcontroller with 8051	Odd Sem : 40 I	M. Praveena	Lab Instructor	DECE
5	Signal & Image Processing Lab	2	a) TMS 320 C50 based DSP Trainer Kit b) TMS 320 E 5416-DSP Starter Kit (DSK) fixed Point DSP	Odd Sem : 16 I	N. Sangeetha	Lab Instructor	BE
6	Optical & Microwave Lab	3	a) OFT: Optical Fiber Trainer kit b) Single Mode Fiber Characteristics Setup c) Handheld Power	Odd Sem : 16	N. Sangeetha	Lab Instructor	BE
7	Network & Simulation Lab	2	a)BENCHMARK – LAN-T LAN Trainer with 3 NICs (emulates 6 nodes) b) "TETCOS" LT-01 & LT Soft	Odd Sem : 24 I	M.Gunasekaran	Lab Instructor	DECE
8	VLSI Lab	2	a) VLSI Trainer and Spartan 3E Piggy back b) VLSI Trainer Spartan 3 IM Trainer c) VLSI training	Odd Sem : 24 I	M.Gunasekaran	Lab Instructor	DECE
9	Communication Lab	3	a) CRO b) Function Generator c) Regulated Power Supply d) Communication Modulation Kits e)	Odd Sem: 16 I	M. Muthumanikandan	Lab Instructor	DEIE

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Electron Devices Laboratory	1.Avoid an earth ground when working with AC powered units. 2.Only work with powered units when necessary for troubleshooting. 3.Avoid pinching wires when putting equipment back together. 4.Double check circuits for proper connections and polarity prior to applying the power. 5.Observe polarity when connecting polarized components or test equipment into a circuit. 6.Make sure test instruments are set for proper function and range prior to taking a measurement. 7.When measuring uncertain qualities, start with the range switch on the highest setting. 8.Keep the intensity on oscilloscopes as low as possible when in use and all the way down when not in use to avoid burning out the screen. 9.Always observe polarity when connecting components into a circuit, especially with electrolytic capacitors.

2	Microprocessor & Microcontroller Laboratory	1.Know where the fire extinguisher is located and how to use it. 2.Do not reboot, turn OFF/ move any workstation/PC. 3.Do not load any software on any lab computer. Only lab operators and technical support personnel are authorized to carry out these tasks. 4.Do not reconfigure the cabling/equipment without prior permission. 5.Assure that the Trainer /Evaluation hardware kit connected properly, then switch it ON 6.Do not leave a PC or a login unattended. 7.Do not leave processes in the background without prior approval from the systems administrator. 8.Do not lock your workstation for more than 20 minutes. 9.Unauthorized users are not permitted in the computer labs. 10.Do not use virus infected pen drives. 11.Don't touch the display of computer monitor. 12.Never open a CPU unit of PC. 13.Always print with permission.
3	Electronic Circuits Laboratory	1.Avoid an earth ground when working with AC powered units. 2.Only work with powered units when necessary for troubleshooting. 3.Avoid pinching wires when putting equipment back together. 4.Double check circuits for proper connections and polarity prior to applying the power. 5.Observe polarity when connecting polarized components or test equipment into a circuit. 6.Make sure test instruments are set for proper function and range prior to taking a measurement. 7.When measuring uncertain qualities, start with the range switch on the highest setting. 8.Keep the intensity on oscilloscopes as low as possible when in use and all the way down when not in use to avoid burning out the screen. 9.Always observe polarity when connecting components into a circuit, especially with electrolytic capacitors.
4	Integrated Circuits Laboratory	1.Avoid an earth ground when working with AC powered units. 2.Only work with powered units when necessary for troubleshooting. 3.Avoid pinching wires when putting equipment back together. 4.Double check circuits for proper connections and polarity prior to applying the power. 5.Observe polarity when connecting polarized components or test equipment into a circuit. 6.Make sure test instruments are set for proper function and range prior to taking a measurement. 7.When measuring uncertain qualities, start with the range switch on the highest setting. 8.Keep the intensity on oscilloscopes as low as possible when in use and all the way down when not in use to avoid burning out the screen. 9.Always observe polarity when connecting components into a circuit, especially with electrolytic capacitors.
5	Communication Laboratory	1.Avoid an earth ground when working with AC powered units. 2.Only work with powered units when necessary for troubleshooting. 3.Avoid pinching wires when putting equipment back together. 4.Double check circuits for proper connections and polarity prior to applying the power. 5.Observe polarity when connecting polarized components or test equipment into a circuit. 6.Make sure test instruments are set for proper function and range prior to taking a measurement. 7.When measuring uncertain qualities, start with the range switch on the highest setting. 8.Keep the intensity on oscilloscopes as low as possible when in use and all the way down when not in use to avoid burning out the screen. 9.Always observe polarity when connecting components into a circuit, especially with electrolytic capacitors.
6	Optical & Microwave Laboratory	1.Avoid an earth ground when working with AC powered units. 2.Only work with powered units when necessary for troubleshooting. 3.Avoid pinching wires when putting equipment back together. 4.Double check circuits for proper connections and polarity prior to applying the power. 5.Observe polarity when connecting polarized components or test equipment into a circuit. 6.Make sure test instruments are set for proper function and range prior to taking a measurement. 7.When measuring uncertain qualities, start with the range switch on the highest setting. 8.Keep the intensity on oscilloscopes as low as possible when in use and all the way down when not in use to avoid burning out the screen. 9.Always observe polarity when connecting components into a circuit, especially with electrolytic capacitors.
7	R&D Laboratory	1.Avoid an earth ground when working with AC powered units. 2.Only work with powered units when necessary for troubleshooting. 3.Avoid pinching wires when putting equipment back together. 4.Double check circuits for proper connections and polarity prior to applying the power. 5.Observe polarity when connecting polarized components or test equipment into a circuit. 6.Make sure test instruments are set for proper function and range prior to taking a measurement. 7.When measuring uncertain qualities, start with the range switch on the highest setting. 8.Keep the intensity on oscilloscopes as low as possible when in use and all the way down when not in use to avoid burning out the screen. 9.Always observe polarity when connecting components into a circuit, especially with electrolytic capacitors.
8	Signal & Image Processing Laboratory	1.Know where the fire extinguisher is located and how to use it. 2.Do not reboot, turn OFF/ move any workstation/PC. 3.Do not load any software on any lab computer. Only lab operators and technical support personnel are authorized to carry out these tasks. 4.Do not reconfigure the cabling/equipment without prior permission. 5.Assure that the Trainer /Evaluation hardware kit connected properly, then switch it ON 6.Do not leave a PC or a login unattended. 7.Do not leave processes in the background without prior approval from the systems administrator. 8.Do not lock your workstation for more than 20 minutes. 9.Unauthorized users are not permitted in the computer labs. 10.Do not use virus infected pen drives. 11.Don't touch the display of computer monitor. 12.Never open a CPU unit of PC. 13.Always print with permission.

9	Signal & Image Processing Laboratory	1.Know where the fire extinguisher is located and how to use it. 2.Do not reboot, turn OFF/ move any workstation/PC. 3.Do not load any software on any lab computer. Only lab operators and technical support personnel are authorized to carry out these tasks. 4.Do not reconfigure the cabling/equipment without prior permission. 5.Assure that the Trainer /Evaluation hardware kit connected properly, then switch it ON 6.Do not leave a PC or a login unattended. 7.Do not leave processes in the background without prior approval from the systems administrator. 8.Do not lock your workstation for more than 20 minutes. 9.Unauthorized users are not permitted in the computer labs. 10.Do not use virus infected pen drives. 11.Don't touch the display of computer monitor. 12.Never open a CPU unit of PC. 13.Always print with permission.
10	VLSI Laboratory	1.Know where the fire extinguisher is located and how to use it. 2.Do not reboot, turn OFF/ move any workstation/PC. 3.Do not load any software on any lab computer. Only lab operators and technical support personnel are authorized to carry out these tasks. 4.Do not reconfigure the cabling/equipment without prior permission. 5.Assure that the Trainer /Evaluation hardware kit connected properly, then switch it ON 6.Do not leave a PC or a login unattended. 7.Do not leave processes in the background without prior approval from the systems administrator. 8.Do not lock your workstation for more than 20 minutes. 9.Unauthorized users are not permitted in the computer labs. 10.Do not use virus infected pen drives. 11.Don't touch the display of computer monitor. 12.Never open a CPU unit of PC. 13.Always print with permission.
11	Network & Simulation Laboratory	1.Know where the fire extinguisher is located and how to use it. 2.Do not reboot, turn OFF/ move any workstation/PC. 3.Do not load any software on any lab computer. Only lab operators and technical support personnel are authorized to carry out these tasks. 4.Do not reconfigure the cabling/equipment without prior permission. 5.Assure that the Trainer /Evaluation hardware kit connected properly, then switch it ON 6.Do not leave a PC or a login unattended. 7.Do not leave processes in the background without prior approval from the systems administrator. 8.Do not lock your workstation for more than 20 minutes. 9.Unauthorized users are not permitted in the computer labs. 10.Do not use virus infected pen drives. 11.Don't touch the display of computer monitor. 12.Never open a CPU unit of PC. 13.Always print with permission.
12	RF Laboratory	1.Know where the fire extinguisher is located and how to use it. 2.Do not reboot, turn OFF/ move any workstation/PC. 3.Do not load any software on any lab computer. Only lab operators and technical support personnel are authorized to carry out these tasks. 4.Do not reconfigure the cabling/equipment without prior permission. 5.Assure that the Trainer /Evaluation hardware kit connected properly, then switch it ON 6.Do not leave a PC or a login unattended. 7.Do not leave processes in the background without prior approval from the systems administrator. 8.Do not lock your workstation for more than 20 minutes. 9.Unauthorized users are not permitted in the computer labs. 10.Do not use virus infected pen drives. 11.Don't touch the display of computer monitor. 12.Never open a CPU unit of PC. 13.Always print with permission.

D3. Project Laboratory/Research Laboratory

1. Centre of Excellence for Innovative Product Development:

A Centre of Excellence for Innovative Product Development has been established with an outlay of Rs. 21 Lakhs to encourage students and faculty members to engage in creative and research-driven activities. This center is equipped with modern tools and technology to support multidisciplinary projects, product development, and the exploration of new technologies. It serves as a platform for collaboration with industry partners and promotes innovation through research, thereby contributing to the academic growth of the institution.

Impact:

- Promotes research and innovation across departments.
- Fosters collaboration between industry and academia.
- Enhances the employability of students through skill development in emerging technologies.



Fig 7.5.1 3D Printing Maching

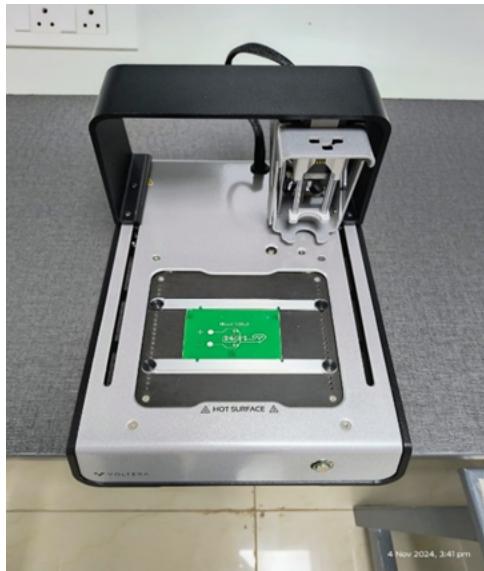


Fig 7.5.2 Printed Circuit Board Machine



Fig 7.5.3 Laser Cutting Machine

PO Mapping with Values

Centre Activity	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Idea Generation Workshops	2	3	3	0	0	0	0	0	2	3	0	3
Product Design and Modelling	3	2	3	2	3	0	0	0	2	0	0	2

Centre Activity	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Prototype Development	3	3	3	2	3	0	0	2	3	0	0	2
Industrial Projects	3	3	3	0	3	2	0	2	3	3	3	3
Innovation Competitions / Hackathons	3	3	3	0	3	0	2	0	3	3	0	3

2. Signal and Image Processing Laboratory

The **Signal and Image Processing Laboratory** focuses on the development of algorithms and techniques for analyzing, enhancing, and interpreting signals and images. It conducts research in areas like machine learning, computer vision, biomedical imaging, and remote sensing. The lab applies advanced mathematical and computational methods to extract meaningful information from data. Its applications span healthcare, security, robotics, and communication systems

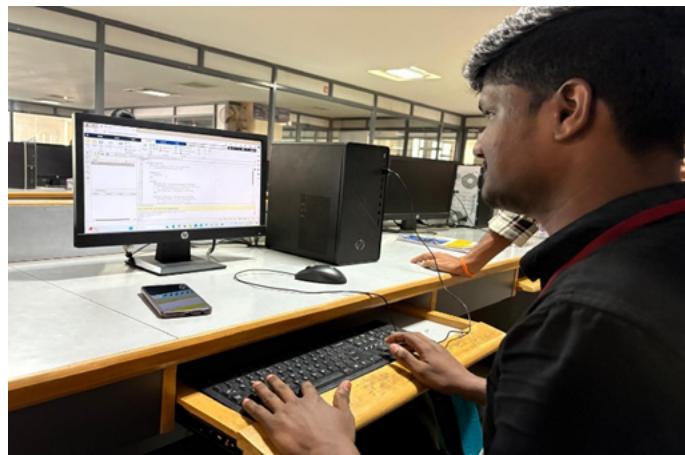


Fig 7.5.4 Signal Processing Laboratory

PO Mapping with Values

Project Lab Activity	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Signal Acquisition & Pre-processing	3	3	2	2	2	0	0	0	2	1	0	2
Image Enhancement Techniques	3	2	3	2	3	0	0	0	2	1	0	2
Frequency Domain Analysis (FFT, DCT)	3	3	3	3	3	0	0	0	1	1	0	2
Image Segmentation Techniques	3	3	3	2	3	0	0	0	2	2	0	2
Mini Projects (Signal/Image)	3	3	3	2	3	0	0	2	3	3	2	3

3. Centre of Excellence for Embedded systems and IoT

The **Centre of Excellence for Embedded Systems and IoT** specializes in research and development of smart, connected technologies. It focuses on designing embedded systems, IoT architectures, sensor networks, and real-time data processing. The lab integrates AI, automation, and edge computing to develop innovative solutions for industries like healthcare, smart cities, and agriculture. Its goal is to advance intelligent, efficient, and scalable embedded and IoT applications.



Fig 7.5.5 Center of Excellence for Embedded Systems and IOT

PO Mapping with Values

Project Lab Activity	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Microcontroller Programming	3	2	3	2	3	0	0	0	2	1	0	2
Sensor Interfacing and Testing	3	3	3	3	3	0	0	0	2	1	0	2
IoT Communication Protocol Implementation	3	2	3	2	3	0	0	0	2	2	1	2
Cloud Data Integration	2	2	3	2	3	0	1	1	2	2	2	2
Final IoT System Project	3	3	3	3	3	1	1	2	3	3	2	3

4. Microwave and Optical Laboratory, Anechoic Chamber

The **Microwave and Optical Laboratory** focuses on research in high-frequency electromagnetic waves, antennas, and photonics. It explores applications in wireless communication, radar systems, and optical signal processing. The **Anechoic Chamber** provides a controlled, reflection-free environment for precise testing of antennas, electromagnetic interference, and wave propagation. This lab supports advancements in satellite communication, defense, and next-generation wireless technologies.

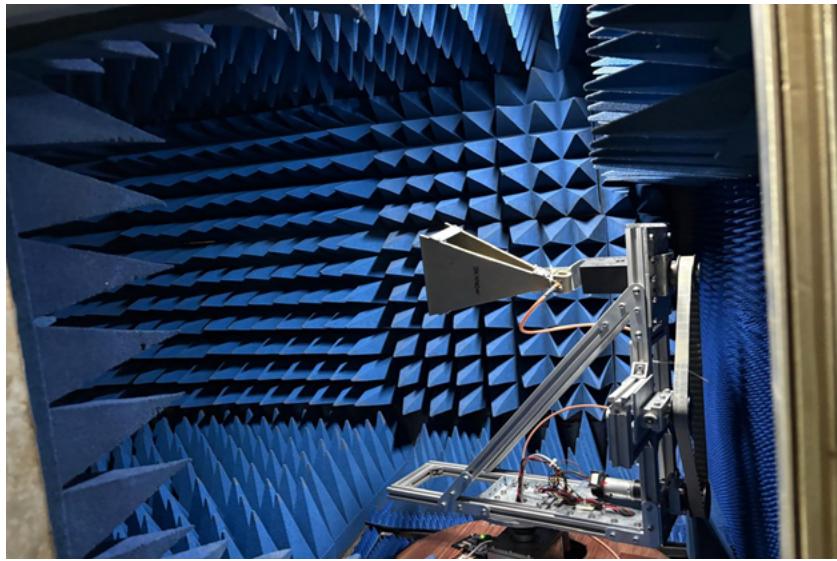


Fig 7.5.6 Anechoic Chamber

PO Mapping with Values

Lab Activity	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Microwave Component Testing	3	3	3	3	3	0	0	0	2	2	0	2
Optical Fiber Measurements	3	3	2	3	3	0	0	0	2	1	0	2
Antenna Radiation Pattern Measurement	3	2	3	3	3	0	0	0	2	2	0	2
Material Characterization (Microwave/Optical)	3	3	2	3	3	1	1	1	2	2	1	2
Mini Projects (Antenna / Optical Sensors)	3	3	3	3	3	1	1	1	3	3	2	3

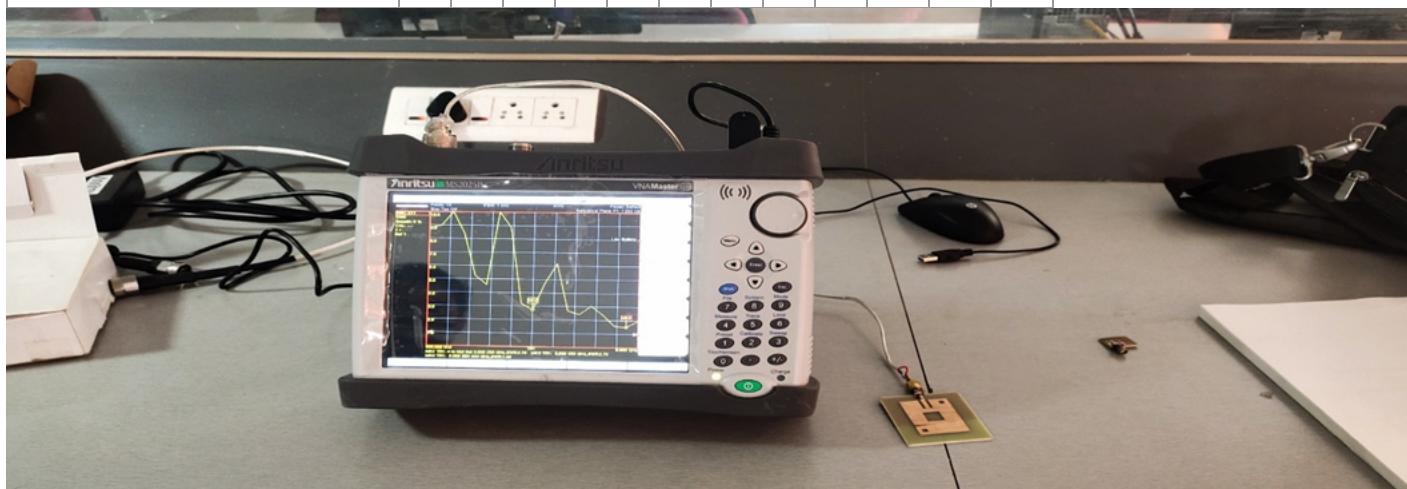


Fig 7.5.7 Microwave and Optical Lab

5. Network Laboratory

The **Network Laboratory** focuses on the design, analysis, and optimization of communication networks. It explores areas like network security, wireless communication, cloud computing, and software-defined networking (SDN). The lab conducts research on improving data transmission efficiency, scalability, and resilience in modern networks. Its applications include cyber security, IoT connectivity, and next-generation internet technologies.

PO Mapping with Values

Lab Activity	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Socket Programming (TCP/UDP)	3	2	3	2	2	0	0	0	2	2	0	2
Client-Server Applications (Chat/File Transfer)	3	2	3	2	2	0	0	0	3	2	0	2
Routing Algorithm Simulation	3	3	3	2	2	0	0	0	2	1	0	2
Protocol Analysis (Wireshark, NS2/NS3)	3	3	3	2	2	0	0	0	2	2	1	2
Network Security Basics	3	2	2	2	2	1	0	1	2	2	1	2
Mini Projects (IoT Networking/VPN Simulation)	3	3	3	3	3	1	1	1	3	3	2	3

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)	600	30	0	0	0
2023-24(CAYm1)	660	33	0	0	0
2024-25(CAY)	840	42	0	0	0

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	30000000	7500000	20000000	13567087	20000000	16276200	2000000	1033633

Library	2155000	1800000	2230000	1786589	1448000	974449	1833000	1344752
Laboratory equipment	60987795	10000000	5788461	5215310	22335412	10582939	9437318	443708
Teaching and non-teaching staff salary	130000000	122950689	122653013	111502739	98308624	89371477	91107566	82825060
Outreach Programs	70000	60350	80000	71500	100000	93000	62000	56650
R&D	5255000	0	2337560	2129609	296500	1422335	585500	1901137
Training, Placement and Industry linkage	0	0	0	0	0	0	0	0
SDGs	60000	50085	0	0	0	0	0	0
Entrepreneurship	0	0	0	0	0	0	0	0
Others, specify	0	0	0	0	0	0	0	0
Total	228527795	142361124	153089034	134272834	142488536	118720400	105025384	87604940

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	13329500	16737909	200000	40400	3432000	0	191600	88250
Software	1600000	0	0	0	1050000	924659	1200000	355000
SDGs	0	0	0	0	0	0	0	0
Support for faculty development	10000	0	10000	0	10000	0	10000	0
R & D	0	0	0	0	0	0	0	0
Industrial Training, Industry expert, Internship	10000	0	10000	0	10000	0	10000	0
Miscellaneous Expenses*	255000	42700	637000	531159	14500	434573.84	84500	676065
Total	15204500	16780609	857000	571559	4516500	1359232.84	1496100	1119315