

NATIONAL BOARD OF ACCREDITATION

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

Program Name : ELECTRONICS AND COMMUNICATION ENGINEERING	Discipline : Engineering & Technology
Level : Under Graduate	Tier : 1
Application No : 11629	Date of Submission : 14-03-2026

PART A- Profile of the Institute

A1.Name of the Institute : St. Joseph's Institute of Technology	
Year of Establishment : 2011	Location of the Institute: Semmancherry Old Mamallapuram Road Chennai 600119
A2. Institute Address :The Principal, St.Joseph's Institute of Technology, Old Mamallapuram Road, Chennai600119Tamilnadu	
City:Kancheepuram	State:Tamil Nadu
Pin Code:600119	Website:www.stjosephstechnology.ac.in
Email:principal@stjosephstechnology.ac.in	Phone No(with STD Code):044-24503132
A3. Name and Address of the Affiliating University (if any) :	
Name of the University : ANNA UNIVERSITY CHENNAI	City: Chennai
State : Tamil Nadu	Pin Code: 600020
A4. Type of the Institution : Autonomous CAY(2022-23)	
A5. Ownership Status : Self financing	

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

- No. of UG programs: 8
- No. of PG programs: 1

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	2021	--	Artificial Intelligence and Data Science
2	Engineering & Technology	UG	Computer Science and Engineering	2011	--	Computer Science and Engineering
3	Engineering & Technology	UG	Computer Science and Engineering (Artificial Intelligence & Machine Learning)	2025	--	Computer Science and Engineering (Artificial Intelligence and Machine Learning)
4	Engineering & Technology	UG	Computer Science and Engineering (Cyber Security)	2024	--	Computer Science and Engineering (Cyber Security)
5	Engineering & Technology	UG	Electrical and Electronics Engineering	2011	--	Electrical and Electronics Engineering
6	Engineering & Technology	UG	ELECTRONICS AND COMMUNICATION ENGINEERING	2011	--	Electronics and Communication Engineering
7	Engineering & Technology	UG	Information Technology	2011	--	Information Technology
8	Engineering & Technology	UG	Mechanical Engineering	2011	--	Mechanical Engineering
9	Management	PG	Master of Business Administration	2022	--	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
Computer Science and Engineering	Yes	Computer Science and Engineering	UG
Information Technology	Yes	Information Technology	UG
Electronics and Communication Engineering	No	ELECTRONICS AND COMMUNICATION ENGINEERING	UG

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 AND COMMUNICATION ENGINEERING	UG	2011 / --	60	Yes	2018	180	2018	F.No. Southern/1-3512941670/2018/EOA Dated: 30-Apr-2018	Granted accreditation for 3 years for the period (specify period)	2017	2026	3	4

List of the Allied Departments/Cluster and Programs:

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

A. Name of the HoD :	Dr.P.G.V.RAMESH
B. Nature of appointment:	Regular
C. Qualification:	M.Tech and Ph.D.

B3. Program Details

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

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2025-26 (CAY)	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)	2021-22 (CAYm4)	2020-21 (CAYm5)	2019-20 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	180	180	180	180	180	180	180
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	180	178	180	179	178	134	161
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	2	0	2	2	0	0
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	18	11	6	3	8	0	0
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	198	191	186	184	188	134	161

CAY= Current Academic Year. CAYm1= Current Academic Year Minus 1 CAYm2= Current Academic Year Minus 2. LYG= Last Year Graduate. LYGm1= Last Year Graduate Minus 1. LYGm2= Last Year Graduate Minus 2.

B4. Enrolment Ratio in the First Year

Table No. B4.1: Student enrolment ratio in the 1st year.

Year of entry	N (From Table 4.1)	N1 (From Table 4.1)	N4 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2025-26 (CAY)	180	180	18	110.00
2024-25 (CAYm1)	180	178	11	105.00
2023-24 (CAYm2)	180	180	6	103.33

B5. Success Rate of the Students in the Stipulated Period of the Program

Table No.B5.1: The success rate in the stipulated period of a program.

Item	(2021-22) LYG	(2020-21) LYGm1	(2019-20) LYGm2
A*= (No. of students admitted in the 1st year of that batch and those actually admitted in the 2nd year via lateral entry, plus the number of students admitted through multiple entry (if any) and separate division if applicable, minus the number of students who exited through multiple entry (if any).	186.00	180.00	180.00
B=No. of students who graduated from the program in the stipulated course duration	111.00	81.00	116.00
Success Rate (SR)= (B/A) * 100	59.68	45.00	64.44

Average SR of three batches $((SR_1 + SR_2 + SR_3)/3)$: 56.37**B6. Academic Performance of the First-Year Students of the Program**

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

Academic Performance	CAYm1 (2024-25)	CAYm2(2023-24)	CAYm3 (2022-23)
Mean of CGPA or mean percentage of all successful students(X)	8.01	8.30	8.14
Y=Total no. of successful students	147.00	137.00	144.00
Z=Total no. of students appeared in the examination	191.00	186.00	182.00
API $[X*(Y/Z)]$	6.16	6.11	6.44

Average API $[(AP1+AP2+AP3)/3]$: 6.24**B7: Academic Performance of the Second Year Students of the Program**

Table No.B7.1: Academic Performance of the Second Year Students of the Program.

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2nd year/10)	8.31	8.16	8.32
Y=Total no. of successful students	127.00	122.00	111.00
Z=Total no. of students appeared in the examination	137.00	146.00	118.00
API $[X * (Y/Z)]$	7.70	6.82	7.82

Average API $[(AP1 + AP2 + AP3)/3]$: 7.45**B8. Academic Performance of the Third Year Students of the Program**

Table No.B8.1: Academic Performance of the Third Year Students of the Program

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 3rd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 3rd year/10)	8.37	8.11	8.60
Y=Total no. of successful students	122.00	111.00	81.00
Z=Total no. of students appeared in the examination	122.00	111.00	81.00

Average API $[(AP1 + AP2 + AP3)/3]$: 8.21**B9. Placement, Higher Studies, and Entrepreneurship**

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

Item	LYG (2021-22)	LYGm1(2020-21)	LYGm2(2019-20)
FS*=Total no. of final year students	182.00	180.00	180.00
X=No. of students placed	153.00	122.00	145.00
Y=No. of students admitted to higher studies	5.00	7.00	12.00
Z= No. of students taking up entrepreneurship	1.00	1.00	1.00
Placement Index(P) = $((X + Y + Z)/FS) * 100$:	86.26	72.22	87.78

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.P.G.V.RAMESH	XXXXXXXX18L	M.Tech and Ph.D.	Anna University	Optical Networks	02/05/2016	9.10	Associate Professor	Professor	01/12/2016	Regular	Yes		Yes
2	Dr.G.ROHINI	XXXXXXXX72P	M.E. and Ph.D.	Anna University	VLSI	02/06/2014	11.9	Professor	Professor	02/06/2014	Regular	Yes		No
3	Dr.M.V.KARTHIKEYAN	XXXXXXXX14D	M.E. and Ph.D.	Anna University	Wireless Body Area Networks	01/06/2015	10.9	Associate Professor	Professor	02/06/2025	Regular	Yes		No
4	Dr.G.S.UTHAYAKUMAR	XXXXXXXX67A	M.E. and Ph.D.	Anna University	Medical Electronics	01/06/2019	6.9	Associate Professor	Associate Professor	01/06/2019	Regular	Yes		No
5	Dr.J.JEBA JOHANNAH	XXXXXXXX49G	M.E. and Ph.D.	Anna University	VLSI	01/06/2018	7.9	Associate Professor	Associate Professor	01/06/2018	Regular	Yes		No
6	Dr.M.SENTHIL MURUGAN	XXXXXXXX50G	M.E. and Ph.D.	Sathayabama University	Networks	17/08/2011	14.6	Assistant Professor	Associate Professor	01/06/2021	Regular	Yes		No
7	Dr.S.TEPHILLAH	XXXXXXXX20C	M.E. and Ph.D.	Anna University	Cognitive Radio Networks	15/06/2015	10.9	Associate Professor	Associate Professor	15/06/2015	Regular	Yes		No
8	Dr.R.KANGEYAN	XXXXXXXX80R	M.E. and Ph.D.	VELLORE INSTITUTE OF TECHNOLOGY	Biomedical antenna design and Healthcare communication	05/08/2024	1.7	Assistant Professor	Associate Professor	02/06/2025	Regular	Yes		No
9	Dr.N.ABDUR RAHMAN	XXXXXXXX54A	M.Tech and Ph.D.	Anna University	VLSI DESIGN	30/06/2025	0.8	Associate Professor	Associate Professor	30/06/2025	Regular	Yes		No
10	Dr.C.MOHAN	XXXXXXXX38C	M.E. and Ph.D.	Anna University	ANTENNA	07/03/2022	4	Assistant Professor	Assistant Professor		Regular	Yes		No
11	Mrs.G.AKILANDESWARY	XXXXXXXX58K	M.E.	Anna University	IOT	13/06/2012	13.9	Assistant Professor	Assistant Professor		Regular	Yes		No
12	Mr.T.SIVA	XXXXXXXX93M	M.E.	Anna University	Optical Communication	01/07/2013	12.8	Assistant Professor	Assistant Professor		Regular	Yes		No
13	Mr.D.SURESH	XXXXXXXX33Q	M.E.	Anna University	Communication Systems	01/07/2013	12.8	Assistant Professor	Assistant Professor		Regular	Yes		No
14	Mr. A.DINESH KUMAR	XXXXXXXX03D	M.E.	Anna University	Antenna	03/08/2015	10.7	Assistant Professor	Assistant Professor		Regular	Yes		No
15	Mr.K.IMMANUEL	XXXXXXXX02K	M.E.	Anna University	Image Processing	29/06/2016	9.8	Assistant Professor	Assistant Professor		Regular	Yes		No
16	Mr.J.BINO	XXXXXXXX68L	M.E.	Anna University	Cognitive Radio Networks	01/06/2019	6.9	Assistant Professor	Assistant Professor		Regular	Yes		No

17	Mrs.J.SILVA DEENA	XXXXXXX67Q	M.Tech	Anna University	Optical Communication	02/08/2021	4.7	Assistant Professor	Assistant Professor		Regular	Yes		No
18	Mrs.G.SNEHA	XXXXXXX28R	M.E.	Anna University	Networking	02/08/2021	4.7	Assistant Professor	Assistant Professor		Regular	Yes		No
19	Ms.A.JEMIMA HALVIA CATHERINE	XXXXXXX82R	M.E.	Anna University	Image Processing	02/08/2021	4.7	Assistant Professor	Assistant Professor		Regular	Yes		No
20	Mrs.B.SREE DEVI	XXXXXXX14K	M.E.	Anna University	ANTENNA	11/07/2022	3.8	Assistant Professor	Assistant Professor		Regular	Yes		No
21	Mrs.S.SWETHA	XXXXXXX86J	M.Tech	KARUNYA UNIVERSITY	Networking	11/07/2022	3.8	Assistant Professor	Assistant Professor		Regular	Yes		No
22	Mr.V.RAGHUL	XXXXXXX36A	M.E.	Anna University	Image Processing	11/07/2022	3.8	Assistant Professor	Assistant Professor		Regular	Yes		No
23	Dr.G.THENNARASI	XXXXXXX05M	M.Tech and Ph.D.	SRM UNIVERSITY	ANTENNA	16/08/2023	2.6	Assistant Professor	Assistant Professor		Regular	Yes		No
24	Ms.S.SINDHUKAVI	XXXXXXX75C	M.E.	Anna University	Communication and Networking	16/08/2023	2.6	Assistant Professor	Assistant Professor		Regular	Yes		No
25	Dr.R.NIROSHA	XXXXXXX56G	M.E. and Ph.D.	SRM UNIVERSITY	Semiconductor Devices	05/08/2024	1.7	Assistant Professor	Assistant Professor		Regular	Yes		No
26	Ms. S.YUVASHREE	XXXXXXX19B	M.E.	ANNA UNIVERSITY	Communication Systems	05/08/2024	1.7	Assistant Professor	Assistant Professor		Regular	Yes		No
27	Dr.R.SHANTHAPRIYA	XXXXXXX75N	M.E. and Ph.D.	Anna University	Networking	30/06/2025	0.8	Assistant Professor	Assistant Professor		Regular	Yes		No
28	Mrs.S.SHEKINAH ARCHITA	XXXXXXX42M	M.E.	Anna University	Embedded Systems	05/08/2024	0.9	Assistant Professor	Assistant Professor		Regular	No	30/05/2025	No
29	Mr.A.ANIST	XXXXXXX90A	M.E.	Anna University	Embedded Systems	16/08/2023	1.9	Assistant Professor	Assistant Professor		Regular	No	24/05/2025	No
30	Dr.C.GNANA KOUSALYA	XXXXXXX84G	M.E. and Ph.D.	Anna University	Wireless Sensor Networks	01/06/2013	11.11	Professor	Professor	01/06/2013	Regular	No	24/05/2025	No
31	Mr. S.MANOJ KUMAR	XXXXXXX39B	M.E.	Anna University	Optical Communication	01/06/2020	4	Assistant Professor	Assistant Professor		Regular	No	17/06/2024	No
32	Mr. K.SASIKUMAR	XXXXXXX51E	M.Tech	Hindustan University	VLSI	01/06/2020	4	Assistant Professor	Assistant Professor		Regular	No	17/06/2024	No
33	Dr.M.SAMAYARAJ MURALI KISHANLAL	XXXXXXX60D	M.E. and Ph.D.	ANNA UNIVERSITY	Optical Communication	13/06/2012	11.11	Assistant Professor	Associate Professor	01/06/2013	Regular	No	31/05/2024	No
34	Dr.A.MARIA CHRISTINA BLESSY	XXXXXXX68C	M.E. and Ph.D.	Anna University	Vehicle Adhoc Networks	01/08/2013	11.10	Assistant Professor	Assistant Professor		Regular	No	30/05/2025	No
35	Dr.C.T.KAVITHA	XXXXXXX41L	M.E. and Ph.D.	Anna University	Image Processing	01/06/2017	8	Associate Professor	Associate Professor	01/06/2017	Regular	No	31/05/2025	No
36	Dr.B.P.BHUVANA	XXXXXXX79G	M.E. and Ph.D.	Vellore Institute of Technology	VLSI DESIGN	02/08/2021	2.9	Assistant Professor	Assistant Professor		Regular	No	31/05/2024	No

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

C2. Student-Faculty Ratio (SFR)

No. of UG(Engineering) programs in Department including allied departments/ clusters (UGn):

UG1=1st UG program

UGn=nth UG program

B= No. of Students in UG 2nd year (ST)

C= No. of Students in UG 3rd year (ST)

D= No. of Students in UG 4th year (ST)

No. of PG (Engineering) programs in Department including allied departments/ clusters (PGm):

PG1=1st PG program.

PGm=mth PG program

A= No. of Students in PG 1st year

B= No. of Students in PG 2nd year

Student Faculty Ratio (SFR) = S/F

S= No. of students of all programs in the Department including all students of allied departments/clusters.

No. of students (ST)=Sanctioned Intake (SA)+ Actual admitted students via lateral entry including leftover seats (L) if any (limited to 10 % of SA)

Students who admitted under supernumerary quotas (SNQ, EWS, etc) will not be considered in calculating SFR value. Those students are exempted.

F=Total no. of regular or contractual faculty members (Full Time) in the Department, including allied departments/clusters (excluding first year faculty (The faculty members who have a 100% teaching load in the first-year courses)).

No. of UG Programs in the Department1 No. of PG Programs in the Department0

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

Description	CAY(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
UG1.B	182	180	182
UG1.C	180	182	182
UG1.D	182	182	180
UG1: ELECTRONICS AND COMMUNICATION ENGINEERING	544	544	544
DS=Total no. of students in all UG and PG programs in the Department	544	544	544
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= 544	S2= 544	S3= 544
DF=Total no. of faculty members in the Department	27	30	30
AF= Total no. of faculty members in the allied Departments	0	0	0
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	F1= 27	F2= 30	F3= 30
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= 20.15	SFR2= 18.13	SFR3= 18.13
Average SFR for 3 years	SFR= 18.80		

C3. Faculty Qualification

- Faculty qualification index (FQI) = $2.5 * [(10X + 4Y)/RF]$ where
- X=No. of faculty members with Ph.D. degree or equivalent as per AICTE/UGC norms.
- Y=No. of faculty members with M. Tech. or ME degree or equivalent as per AICTE/ UGC norms.
- RF=No. of required faculty in the Department including allied Departments to adhere to the 20:1 Student-Faculty ratio, with calculations based on both student numbers and faculty requirements as per section C2 of this documents: (RF=S/20).

Table No.C3.1: Faculty qualification.

Year	X	Y	RF	FQ = 2.5 x [(10X + 4Y) / RF]
2025-26(CAY)	13	14	27.00	17.22
2024-25(CAYm1)	14	16	27.00	18.89
2023-24(CAYm2)	12	18	27.00	17.78

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
2025-26	3.00	3.00	6.00	6.00	18.00	18.00
2024-25	3.00	3.00	6.00	6.00	18.00	21.00
2023-24	3.00	3.00	6.00	7.00	18.00	20.00
Average	RF1=3.00	AF1=3.00	RF2=6.00	AF2=6.33	RF2=18.00	AF2=19.67

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	Mr.S.N.Hemchander	CEO	Aptitude Guru Hem	MERN Full Stack	30.00
2	Mr.Ashok Kumar M	Director	Praya Labs	Integration of Robotics and AI	30.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.Arun Kumar M	Director	Retech Solutions Pvt.Ltd.	Electronics in 3D printing and its applications	25.00
2	Mr.SREERAJ S V	Director	Emcog Solutions Pvt. Ltd.	Embedded System and its applications	30.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.Malaiappan M	DIRECTOR	Pantech eLearning Pvt.Ltd	Machine Learning and its applications	50.00

C6. Academic Research

Table No. C6.1: Faculty publication details.

S.No.	Item	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)
1	No. of peer reviewed journal papers published	19	16	9
2	No. of peer reviewed conference papers published	81	27	23
3	No. of books/book chapters published	4	1	9

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
R.Moniica V.Nandhini Dr. G.S. Uthayakumar Dr.R.Nirosha	-	ECE	Smart Adaptive FES Transforming Foot Drop Management through Sensor Integration and AI	MSME 4.0	1 Year	15.00
						Amount received (Rs.):15.00

(CAYm2)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr.G.Rohini Ms.Nandhini	-	ECE	Design and Optimization of Quantum Computing Circuits Using VLSI Techniques	MSME (Women)	1 Year	15.00
Dr.C.Gnana Kousalya	Ms.Priyanka.J	ECE	Autonomous Marine time Monitoring System	Tamilnadu State Govt Niral Thiru villa	-	0.10
Mrs.G.Akilandeshwari	-	ECE	An Autonomous Upper Limb Using Electromyography Signals and Microcontroller	Tamilnadu State Govt Niral Thiru villa	-	0.10
						Amount received (Rs.):15.20

(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
Gnana Kousalya C	-	ECE	Passageway Devices of Fishing Vessels	MSME	1 Year	12.50
						Amount received (Rs.):12.50

Total Amount (Lacs) Received for the Past 3 Years: 42.70**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.G.Rohini	Dr.M.V.Karhikeyan Mr.D.Suresh	ECE	Real- Time Fault Diagnosis System for Electric Vehicles using Embedded Predictive Analytics	Pantech eLeaning Pvt., Ltd	12 Weeks	0.18
Dr.P.G.V.Ramesh	Dr.S.Tephilla Ms.S.Sindhukavi	ECE	Wearable health Monitoring Device for Elderly Care	Pantech eLeaning Pvt., Ltd.	12 Weeks	0.30
Dr.Jeba Johannah samuel	Dr.Senthil Murugan	ECE	FPGA-Based Real-Time image Processing for Smart Surveillance	Pantech eLeaning Pvt., Ltd.	12 Weeks	0.22
						Amount received (Rs.):0.70

(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.G.V.Ramesh	Mr.D.Suresh Mrs.B.Sreedevi	ECE	GSM Based Asset Tracking System	EMCOG	3 Months	0.37
Dr.J.Jeba Johannah	Ms.Jemmima Havila Catherine	ECE	Advancements In Analog Circuit Design for Low Pwer Sensor Nodes	RETECH	3 Months	0.12
Dr.C.Gnana Kousalya	Mrs.G.Akilandeswary Ms.Sneha	ECE	Advanced Signal Processing Techniques Biomedical Electronics	RETECH	3 Months	0.33
Dr.G.Rohini	Mr.J.Bino Mrs. Maria Christina Blessy	ECE	Performance Comparison of STM32 Microcontroller in Laser Engraving Applications	RETECH	3 Months	0.34
						Amount received (Rs.):1.16

(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.C.Gnana Kousalya	Dr.J.Jeba Johannah Dr.G.Rohini Samuel Dr.S.Tephillah Mr.J.Bino	ECE	Internet of Things for Medical & Smart City Application and Autonomous Vehicle	Pantech eLeaning Pvt., Ltd	3 Months	0.28
Dr.C.Gnana Kousalya	Dr.G.S.Uthayakumar Dr.C.T.Kavitha Dr.Samayaraj Murali Kishanlal Dr.M.V.Karthikeyan	ECE	IoT Based Smart plug with Remote Energy Monitoring and Energy Statistics	EMCOG Solution	3 Months	0.15
Dr.G.Rohini	Dr.P.G.V.Ramesh Dr.M.Senthil Murugan Dr.B.P.Bhuvana Dr.C.Mohan	ECE	AI and Computer Vision Integrated System for Smart Agriculture	Pantech eLeaning Pvt., Ltd	3 Months	0.36
						Amount received (Rs.):0.79

Total amount (Lacs) received for the past 3 years: 2.65

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 Ramesh PGV Dr. C.Mohan, Mrs.S.Swetha	AAntenna performance Improvement for RF applications	1year 6months	1.23	1.00	Paper publication patent
Dr.G.Rohini Dr.M.V.Karthikeyan Dr. G.S. Uthayakumar	Mental Stress Assessment in Working Environment for an Individual Using Wearable Sensor	2 year	1.47	1.45	Paper publication , patent and PhD Registration
Dr. M. Senthil Murugan Dr. S.Tephillah Mr.T.Siva Mr.D.Suresh	Design and Analysis of Microwave Filter for Sub-6GHz 5G Applications	1 year	1.98	1.49	Paper publication , patent
Mr. J. Bino Mrs.B.Sree Devi	Future Frame Predictor for Oceanography	1 year	1.42	1.30	Paper publication , patent
Dr. J. Jeba Johannah Dr.C.T.Kavitha Mrs.G.Akilandeswary	Deep Learning and Medical Imaging for Automatic Detection of Pancreatic Cancer	1 year	0.85	0.70	Paper publication , patent
Mr. A.Dineshkumar	Accelerating Unstructured Text Search with Grover's Algorithm	1.5 year	0.33	0.30	Publication , Professional activity
			Amount received (Rs.): 7.28		

(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. C. Gnana Kousalya, Dr.M.V.Karthikeyan Dr.G.Rohini	Multimodal Deep Learning for Activity Detection	9 months	0.96	1.00	Publication and Patent
Dr. G.S. Uthayakumar Dr. C.Mohan,	A Miniaturised Dual-Band Hexagonal-Shaped Frequency Selective Surface with Slot Loading	1 year	0.43	0.40	Publication and Patent
Dr. G. Rohini, Ms.Maria Christina Blessy Dr. J. Jeba Johannah	Multimodal Deep Learning for Activity Detection from IoT Sensors	10 months	0.47	0.42	Publication and Patent
Dr Ramesh PGV Dr. M. Senthil Murugan Mr.D.Suresh	Integrating Blockchain Deep Learning and Ensemble Methods for Optimized MQTT Protocol	1 year	0.18	0.10	Publication and Patent
Mr. J. Bino Dr. S.Tephillah	IoT Enabled RFID Based Smart Billing System	7 months	0.21	0.20	Publication and Patent
			Amount received (Rs.): 2.25		

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 Ramesh PGV Dr. G.S. Uthayakumar Dr.C.T.Kavitha	Performance Analysis of Fiber-Optic DWDM System	1 year	0.85	0.80	Publication and patent
Dr. C. Gnana Kousalya, Dr. G. Rohini, Mr. Bino J	Detection of Spoofing Vulnerability in Revolutionary IoT networks to Augment Security Mechanism	8 months	0.40	0.35	Publication Patent Registered Copyright
			Amount received (Rs.): 1.25		

Total amount (Lacs) received for the past 3 years : 10.78

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	Programming in C Laboratory	60	Desktop Computers with C Compiler	18 periods/week	Mr.P.Prakash	Technical Assistant	B.E.IT
2	Physics and Chemistry Laboratory	30	Ultrasonic Interferometer-Pico, Travelling Microscope- Weswox, Spectrometer – Weswox, Spectrophotometer, Post office Box- Pico- Digital Digital	9 periods/week	Mr.R.Babu Mrs.K.Madhusud	Technical Assistant	B.Sc. Chemistry B.Sc.Physik
3	Integrated Engineering Laboratory	30	Arduino, dht11sensor , ultrasonic sensor , PIR sensor, Dual Regulated Power Supply, 30 MHz dual channel CRO	27 periods/week	Mr. G.Balaji	Technical Assistant	B.E.ECE
4	Circuits and Devices Laboratory	30	Dual Regulated Power Supply, 30 MHz dual channel CRO, FG, SCR characteristics Trainer, Wein Bridge oscillator kit, DSO, PSpice, CoCAD, Computer (Intel Core i3 2430 CPU 4GB	27 periods/week	Mr.G. Balaji	Technical Assistant	B.E.ECE
5	Analog and Digital Circuits Laboratory	30	Digital IC Trainer kit, 30 MHz dual channel CRO, FG, Dual Regulated Power Supply, Linear IC Power Supply, Digital IC Tester, Analog IC Tester, PSpice, CoCAD, Computer (Intel Core	18 periods/week	Mr.A.Anbarasan	Technical Assistant	D.EEE
6	DATA STRUCTURES USING C LABORATORY	60	Desktop Systems with C Compiler	18 periods/week	Mr.S.Abdul Kalam	Technical Assistant	D.CSE
7	Communication Systems Laboratory	30	Communication Trainer Kits (PCM, DM, TDM, ASK,FSK, PSK,DQPSK,PAM,PPM,PWM), DSO, MSO, Line Coding Trainer kit, Amplitude modulator course	18 periods/week	Mr.A.Saran	Technical Assistant	B.E.ECE, MBA
8	Linear Integrated Circuits Laboratory	30	Digital IC Trainer kit, 30 MHz dual channel CRO, FG, Dual Regulated Power Supply, Linear IC Supply, IC Tester, PSpice- CoCAD, Computer (Intel Core i3 2430 CPU 4GB DDR3 4GB	18 periods/week	Mr.A.Anbarasan	Technical Assistant	D.EEE
9	Professional Skills Lab	30	Computers, Audio-Visual Systems	18 periods/week	Mr.A.Saran	Technical Assistant	B.E.ECE, MBA
10	VLSI Laboratory	30	Computers (Intel Core i5-4570S 2.9G 6M HD 4600 CPU, 8GB DDR3-1600 DIMM (1x8GB) RAM), FPGA Trainer Kit (CRAFTMAN 2012b) with Xilinx 14.1 ICL DSO, CRO, Trainer	18 periods/week	Mr.A.Madasamy	Technical Assistant	D.ECE
11	Digital Signal Processing Laboratory	30	DSP TMS 320C6745, MATLABORATORY R 2012b & its tool kits, MATLABORATORY R 2016a & its tool kits	18 periods/week	Mr.A.Madasamy	Technical Assistant	D.ECE

12	Embedded and IoT Laboratory	30	Computers (Intel Core i5-4570S 2.9G 6M HD 4600 CPU, 8GB DDR3-1600 DIMM (1x8GB) RAM),ARM Cortex M4 LPC 4088, 4004175	18 periods/week	Mr.M.Jegan	Technical Assistant	D.EEE
13	Advanced Communication Laboratory	30	Fiber optic Trainer Kit, Fiber Optic Power Source, Fiber Optic Power Meter, Laser Trainer Kit, PIN Diode, Klystron Mount with	18 periods/week	Mr.A.Madasamy	Technical Assistant	D.ECE
14	Robotics Laboratory	30	AI/ML Based Mobile Robot, Multifunctioning 6DOF Pick & place BOT, Quadcopter Drone Combo Kit, SCARA Robot, Self -	18 periods/week	Mr.A.Saran	Technical Assistant	B.E.ECE, MBA
15	Mini Project	30	Desktop Computers	18 periods/week	Mr.A.Madasamy	Technical Assistant	D.ECE

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Integrated Engineering Lab / Circuits & Devices Lab	<ul style="list-style-type: none"> • Fire extinguishers are installed, regularly inspected, and maintained. • Use a proper stand for soldering irons when not in use. • Switch off soldering irons if idle for more than 10 minutes. • Never leave a heated soldering iron unattended. • Avoid touching the soldering tip until it is fully cooled. • Hold wires firmly while cutting to prevent injury. • Ensure correct power supply connections to IC pins. • Follow all safety instructions strictly.
2	Electronics Lab / Circuits Simulation & Integrated Lab	<ul style="list-style-type: none"> • Ensure proper grounding of equipment. • Use simulation tools carefully to avoid incorrect configurations. • Avoid handling circuits with wet hands. • Follow lab instructor guidelines during experiments.
3	Analog & Digital Circuits Lab	<ul style="list-style-type: none"> • Fire extinguishers are installed, regularly inspected, and maintained. • Verify circuit connections before powering. • Use regulated power supplies only. • Avoid short circuits and improper wiring. • Handle components carefully to prevent damage. • Maintain proper insulation and grounding.
4	Linear & Digital Integrated Circuits Lab	<ul style="list-style-type: none"> • Check IC orientation before insertion. • Avoid static discharge while handling ICs. • Use proper sockets instead of direct soldering when possible. • Ensure correct voltage levels to prevent IC damage. • Follow lab manuals strictly.
5	Microprocessor & Microcontroller Lab	<ul style="list-style-type: none"> • Keep electrical panels accessible at all times. • Maintain clean, dry, and clutter-free worktables. • Disconnect power before servicing systems. • Use anti-static precautions while handling hardware. • Keep workspace organized for safe operations.
6	VLSI / DSP Lab	<ul style="list-style-type: none"> • Use anti-static measures (ESD protection). • Handle boards with care. • Follow standard operating procedures. • Fire extinguishers are installed, regularly inspected, and maintained.
7	Computer Networks Lab / Communication Systems Lab	<ul style="list-style-type: none"> • Ensure proper cable management. • Avoid stepping on network cables. • Use correct ports and configurations. • Prevent overheating of networking devices. • Follow safe handling of communication equipment.
8	Embedded System and IoT Design Lab	<ul style="list-style-type: none"> • Verify connections before powering circuits. • Use proper power ratings for components. • Avoid loose wiring and short circuits. • Handle microcontrollers and sensors carefully. • Follow programming and hardware safety guidelines.

9	Optical & Microwave Lab	<ul style="list-style-type: none"> • Do not touch the klystron oscillator setup while it is powered on, as it operates at high voltage and may pose serious safety risks. • Ensure adequate ventilation and airflow around the klystron oscillator setup to prevent overheating and to maintain stable operation. • Set the repeller control knob to its maximum specified position before switching on the power supply, as per standard operating procedure. • Handle optical fiber cables with extreme care during insertion and removal to avoid damage to connectors and ensure signal integrity. • Avoid bending or twisting optical fibers beyond permissible limits to prevent signal loss or breakage. • Follow all standard operating procedures and safety instructions while handling microwave and optical communication equipment to ensure safe and efficient laboratory practices.
10	Robotics Lab	<ul style="list-style-type: none"> • Ensure all robotic systems and equipment are properly installed, grounded, and inspected before operation. • Maintain a safe distance from moving parts of robots during operation to avoid accidental injury. • Never operate robots without proper supervision or authorization from the lab instructor. • Always switch off the power supply and disconnect the robot before performing maintenance, adjustments, or wiring changes. • Verify correct connections and programming before powering the robotic system to prevent malfunction or damage. • Use appropriate personal protective equipment (PPE) such as safety glasses and closed footwear while working in the lab. • Keep the workspace clean and free from obstacles to ensure smooth robot movement and prevent tripping hazards. • Avoid loose clothing, jewellery, or long hair being exposed near moving components of robotic systems. • Ensure emergency stop (E-stop) buttons are functional and easily accessible during robot operation. • Handle sensors, actuators, and electronic components carefully to prevent damage and ensure accurate functioning. • Follow standard operating procedures and safety instructions while working with robotic systems to maintain a safe and efficient laboratory environment.
11	All Laboratories (General Safety Measures)	<ul style="list-style-type: none"> • All individuals must enter the laboratory wearing appropriate lab coats and closed, protective footwear to ensure personal safety. • Only essential materials and items required for laboratory work should be brought into the lab to maintain a safe and organized environment. • Any equipment malfunction or irregularity must be reported immediately to the lab assistant or concerned authority. • Unauthorized attempts to repair or handle faulty equipment are strictly prohibited, as they may pose safety risks to individuals and others in the lab. • Ensure clear and unobstructed access to all emergency exits, fire extinguishers, and electrical panels at all times. • When leaving the laboratory unattended, switch off all power sources and securely lock the premises. • Proper earthing and grounding systems are implemented and regularly checked in all laboratories to ensure electrical safety.
12	All Laboratories (Do's and Don'ts)	<p>DO's</p> <ul style="list-style-type: none"> • Carefully read and understand all written instructions and verbal guidelines provided by the instructor before starting any experiment. • Immediately report any equipment malfunction, damaged plugs, or exposed electrical wiring to the instructor or lab personnel. • Follow proper shutdown and log-off procedures when using computers or electronic systems. • In case of an emergency, promptly access the fire extinguisher and first aid kit available in the laboratory. • Maintain discipline, follow safety protocols, and use equipment only as instructed. <p>DON'Ts</p> <ul style="list-style-type: none"> • Do not damage, remove, or tamper with any equipment components, connections, or cables. • Avoid touching exposed wires, electrical sockets, or live circuits. • Do not step on or place objects over electrical wires or communication cables. • Never attempt to open or handle the rear panel of computers or electronic devices while they are powered on. • Do not insert metal objects such as clips, pins, or needles into computer systems or electrical equipment. • Do not leave any ongoing experiment or active setup unattended. • Avoid spilling liquids on computers or electronic equipment to prevent electrical hazards and damage.

D3. Project Laboratory/Research Laboratory

Apart from regular laboratories, Project Laboratory with computers and modern software tools and Industry supported Laboratory with High end equipment is utilized by the students / research scholars/ faculties for carrying out projects, developing prototypes and research work and shown in Fig. 7.1.

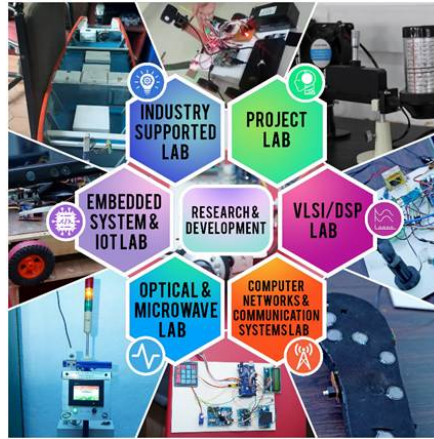


Fig. 7.1. Project Laboratories

- Embedded System Lab, Computer Networks/Communication Systems Lab, VLSI/DSP Lab, Optical and Microwave Lab and the additional facilities created for research work mentioned in Table 7.2 are also utilized for carrying out the project work. Project Laboratory has access to reputed journals inclusive of IEEE, Journals indexed by Web of Science, Scopus etc. The facilities of various Project Laboratories and their Outcomes are listed below.

Table 7.5.1 Project Laboratory Details

S. No.	Name of the Lab	Facility available in Lab for Project	Utilization	Outcomes
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1.	Research & Development Lab	<ul style="list-style-type: none"> • Standalone PCs (Intel Core i7-6500 3.2G 6M 2133 4C CPU, 8GB DDR4-2133 DIMM (1x8GB) RAM, 1TB 7200 RPM SATA 6G 3.5 HDD) • NI Lab View • ARM cortex M4 with ZIGBEE Board • PSpice(Student's Version) • Keil µvision (OEM with ARM Cortex M4) • MP Lab (Hitech C)(Open Source) • Scilab(Open Source) • NS2 Simulator(Open Source) • MATLAB R2016a & its tool kits • OPNET(Academic Version) • Xilinx (OEM with Spartan Kit) • MultiSim (Academic Version) • Moovs IVP Tool • Spartan 6 		<ul style="list-style-type: none"> • Faculty Journal / Conference Publications – 6
2.	Project Lab	<ul style="list-style-type: none"> • Computer • ElectronicComponents • Keil • MPLAB • Proteus • PIC Controller • Raspery Pi Kit • Arduino kit (Arudino UNO +ArudinoPromicro) • Nuvoton ARM Processor • MSP 430 Launch Board • NVIDIA Jetson Nano Development Kit- B01 	<ul style="list-style-type: none"> • UG End Semester Projects • Project Prototype Development • Ph.D Scholars • Mini Projects 	<ul style="list-style-type: none"> • Faculty Journal / Conference Publications – 6 • Students Journal / Conference Publications - 4 • Projects won - 6 • Prototype Developed – 10
3.	VLSI/DSP Lab	Computers(Intel Core i5-4570S 2.9G 6M HD 4600 CPU, 8GBDDR3-1600 DIMM (1x8GB)RAM),DSP TMS 320C6745,MATLAB R 2012b & its tool kits,MATLAB R 2016a & its tool kits,FPGA Trainer Kit (SPARTAN 3 Primer) with Xilinx tool, RPS, CRO,Tanner Tools(T-Spice Pro,L-Edit, Complete Pro)		<ul style="list-style-type: none"> • Faculty Journal / Conference Publications – 2 • Students Journal / Conference Publications – 2
4.	Computer Networks Lab / Communication Systems Lab	Communication Trainer Kits(PCM, DM, TDM,ASK,FSK,PSK,DQPSK,PAM,PPM,PWM),DSO, MSO, Line Coding Trainer kit,Amplitude modulator source,Computers (Intel Core i3-2120 CPU 4GB DDR3-1333 (1x4GB)RAM), LAN Trainer with Protocol simulator and analysis software,WLAN with Access Point, NS2 simulator (2.42 version)		<ul style="list-style-type: none"> • Faculty Journal / Conference Publications – 4 • Students Journal / Conference Publications - 2
5.	Optical & Microwave Lab	Fiber optic Trainer Kit, Fiber Optic Power Source, Fiber Optic Power Meter, Laser Trainer Kit, PIN Diode, Klystron Mount with Tube, Gunn Oscillator with 3BNC Cables, Isolator, Variable Attenuator,CRO, FG,Frequency Meter, VSWR Meter, Microwave Power Meter, Transmit/Receive of NI USRP-2920 Transceivers with LAB VIEW Academic Site License		<ul style="list-style-type: none"> • Faculty Journal / Conference Publications – 3 <p>Students Journal / Conference Publications - 3</p>
6.	Embedded System and IoT Design Lab	Computers (Intel Core i5-4570S 2.9G 6M HD 4600 CPU, 8GB DDR3-1600 DIMM (1x8GB) RAM),ARM Cortex M4 LPC 4088, 120MHZ frequency with built-inNested Vectored Interrupt controller (NVIC), Zigbee Board, CRO, Keil µvision		<ul style="list-style-type: none"> • Faculty Journal / Conference Publications – 3 • Students Journal / Conference Publications - 3



Industry Supported Labs:

Centre of Excellence in collaboration with Pantech Prolabs India Pvt. Ltd. is established which serve as the arena where budding engineers develop and design their own ideas as projects useful to the society.

Table 7.5.2 Industry Supported Labs

S. No.	Name of the Lab	Facility available in Lab for Project	Outcome	Relevance to POs/PSOs
1.	Centre of Excellence (PantechProlabs India Pvt. Ltd.	<ul style="list-style-type: none"> • Node MCU • ESP 8266 Wifi Module • Arduino Uno • Raspberry Pi 3 • Interface & Relay boards • Different Sensors • WSN Device 	Students utilize the CoE lab to develop prototypes for competing in various competitions, to carry out mini projects, for their end semester project work and also for carrying out consultancy work	PO:1,2,3,4,5,12 PSO: 1,2,3

OUTCOMES:

Table 7.5.3: Faculty Publications

S. No	Author Name	Title of the Paper	Journal name / Conference Volume, Issue, Page No. and DOI	Indexing
Research and Development Lab				
2024-2025				
1.	Balamurugan K.; Rohini G.; Chandrasekar L.B.; Sundaram P.S.	Resonant Tunneling of Holes in Si0.75Ge0.25/Si Heterostructures with Rashba Spin-orbit Interaction for Spin Filter Application: Effect of in-plane Wave Vector and Barrier Width	Springer, Volume 59, pages 858–866, (2025) DOI:10.1134/S1063782625600366 (https://doi.org/10.1134/S1063782625600366)	Wos

2.	Mahesh P.C.S.; Palaniappan N.; Ganapathi R.; Kuppusamy S.; Raj V.P.; Alagarsamy M.	Cybersecurity in Agriculture 5.0: Monitoring Agricultural Threats Through Digital Twin Technology	IGI Global, 3D Printing and Digital Twins in Smart Agriculture (pp.179-202), 2025, DOI:10.4018/979-8-3373-7077-4.ch008 (https://doi.org/10.4018/979-8-3373-7077-4.ch008)	Scopus
2023-2024				
3.	Uthayakumar G.S.; Kulanthaivel G.; Ulagamuthalvi V.	Characterization of rigid electromagnetic interference shielding composite using biomass-derived musa fiber and industry waste functional filler	Springer Science and Business Media Deutschland GmbH Volume 14, pages 13457–13467, (2024) DOI:10.1007/s13399-024-05459-8 (https://doi.org/10.1007/s13399-024-05459-8?urlappend=%3Futm_source%3Dresearchgate.net%26utm_medium%3Darticle)	WoS
4.	Sudharsanan R.; Rekha M.; Pritha N.; Ganapathy G.; Arokia Nerling Rasoni G.; Uthayakumar G.S.	Intruder identification using feed forward encasement-based parameters for cybersecurity along with IoT devices	<ul style="list-style-type: none"> Elsevier Ltd Volume 32 (https://www.sciencedirect.com/journal/measurement-sensors/vol/32/suppl/C), April 2024 https://doi.org/10.1016/j.measen.2024.101035 (https://doi.org/10.1016/j.measen.2024.101035) 	Scopus
2022-2023				
5.	Dr. G. Rohini, Dr.C.Gnana Kousalya, Mr. J. Bino	Intrusion Detection System with an Ensemble Learning and Feature Selection Framework for IoT Networks	IETE Journal of Research, DOI: https://doi.org/10.1080/03772063.2022.2098187 (https://doi.org/10.1080/03772063.2022.2098187)	WoS
6.	Ms. Sneha G	Planar Edged UWB Antenna for water Quality management	Progress in Electromagnetics Research C, Vol. 130, 83-93, 2023, doi:10.2528/PIERC22122701 (http://dx.doi.org/10.2528/PIERC22122701)	Scopus
Project Lab				
2024-2025				
1.	Mahalakshmi M.; Diana D.C.; Ramachandran R.; Ravva S.K.; Illuri B.; Johannah J.J.; Manikandan T.; Anand A.J.	Review on Carbon-Based Micro and Nano Electro-Mechanical Systems for Biotechnological Application	Bentham Science Publishers, Volume 19, Number 4, 2025, pp. 468-482(15) DOI: https://doi.org/10.2174/0118722105293232240826135124 (https://doi.org/10.2174/0118722105293232240826135124)	Scopus
2023-2024				
2.	Yamini B.; G P.; D K.; M J.; G J.; G S U.	Theoretical study and analysis of advanced wireless sensor network techniques in Internet of Things (IoT)	Elsevier Ltd, Volume 33 (https://www.sciencedirect.com/journal/measurement-sensors/vol/33/suppl/C), June 2024 DOI: https://doi.org/10.1016/j.measen.2024.101098 (https://doi.org/10.1016/j.measen.2024.101098)	Wos
3.	sudha K.; Mercy Theresa M.; Vinayagam P.; Suganthi R.; Sripriya T.; uthayakumar G.S.	Efficient IOT based COVID patient healthcare control system using arduino with mobile app	Elsevier Ltd Volume 33, June 2024 DOI: https://doi.org/10.1016/j.measen.2024.101161 (https://doi.org/10.1016/j.measen.2024.101161)	Scopus
2022-2023				
4.	K Naresh Kumar Thapa; G Vishnupriya; G Manisha; Omar S Saleh; T Lakshmibai; G S Uthayakumar	Block Chain Based Identity Authentication System for a Wireless Sensor Networks	International Conference on Intelligent Computing, Instrumentation and Control Technologies, 2022 DOI:10.1109/ICCCI56745.2023.10128299 (https://doi.org/10.1109/ICCCI56745.2023.10128299)	Scopus

5.	Uthayakumar G.S.; Jackson B.; Ramesh Babu Durai C.; Kalaimani A.; Sargunavathi S.; Kamatchi S.	Systematically efficiency enabled energy usage method for an IOT based WSN environment	Elsevier Ltd Volume 25 (https://www.sciencedirect.com/journal/measurement-sensors/vol/25/suppl/C), February 2023 https://doi.org/10.1016/j.measen.2022.100615 (https://doi.org/10.1016/j.measen.2022.100615)	Scopus
6.	Rohini G.; Gnana Kousalya C.; Bino J.	Intrusion Detection System with an Ensemble Learning and Feature Selection Framework for IoT Networks	Taylor and Francis Ltd. Pages 8859-8875 Published online: 01 Aug 2022 DOI: https://doi.org/10.1080/03772063.2022.2098187 (https://doi.org/10.1080/03772063.2022.2098187)	Scopus
VLSI / DSP Lab				
2024-2025				
1.	Senthil Murugan M.; Sandhya T.; Siva T.; Venika R.J.	Design and Implementation of a Low-Power 4-Bit Synchronous Up Counter Using Gate-Diffusion Input Technology	<ul style="list-style-type: none"> Frontier Technologies and Solutions (ICFTS) , 2025 DOI:10.1109/ICFTS62006.2025.11031998 (https://doi.org/10.1109/ICFTS62006.2025.11031998) 	Scopus
2022-2023				
2.	Dr. G. Rohini	Ring Cross-over Based GA for DFMB Chip Design and Medical Image Compression	Current Signal Transduction Therapy, DOI:10.2174/1574362414666191018114534 (http://dx.doi.org/10.2174/1574362414666191018114534)	Scopus
Computer Networks/Communication Systems Lab				
2024-2025				
1.	Patil B.; Singh K.; Ganapathi R.; Asudani D.S.; Sharma K.D.; Sindhwani N.; Singh E.	CRNN-KHO: hybrid deep learning optimization framework for enhancing energy efficiency in IoT-enabled wireless networks	Springer Science and Business Media B.V., DOI:10.1007/s41870-025-02792-7 (https://doi.org/10.1007/s41870-025-02792-7)	Scopus
2023-2024				
2.	Ramesh P.; Mohan B.; Viswanath L.; Stephen B.J.	Software Defined Network Architecture Based Network Slicing in Fifth Generation Networks	Informacije MIDEM - Journal of Microelectronics Electronic Components and Materials 51(3):123-130, 2024. DOI:10.33180/InfMIDEM2024.205 (https://doi.org/10.33180/InfMIDEM2024.205)	Scopus
2022-2023				
3.	Dr.C.Gnana Kousalya	Novel Real-Time Decision-Based Carrier Tracking for Software-Defined Radios Using M-ARY QAM Modulation	International Journal of Decision Support System Technology, Vol. 15(1), http://doi.org/10.4018/IJDSST.317332	WoS
4.	Dr. G. S. Uthayakumar	Design Criteria for enhanced energy constraint MAC protocol for WSN	Measurement of Sensors, https://doi.org/10.1016/j.measen.2022.100642 (https://doi.org/10.1016/j.measen.2022.100642)	Scopus
Optical and Microwave Lab				
2024-2025				

Sowmiya K.; Kanimozhi R.; Uthayakumar G.S.; Muzammil P.; Issaoui N.; Ramesh P.; Al-Dossary O.M.; Rajesh P.	Optical materials enhancing the chemical reactivity characteristics of N-benzyloxycarbonyl-L-phenylalanine: Spectroscopic, electronic properties, natural bond orbital, stability, electron-hole, Topology and molecular docking analyses	Elsevier B.V. Volume 159 (https://www.sciencedirect.com/journal/optical-materials/vol/159/suppl/C), February 2025 DOI:10.1016/j.optmat.2024.116504 (https://doi.org/10.1016/j.optmat.2024.116504)	Scopus	
2023-2024				
Siva T.; Manickam M.L.	Low Power Optical and Gate for Photonic Integrated Circuits	International Conference on Innovative Computing, Intelligent Communication and Smart Electrical Systems (ICES), 2024 DOI:10.1109/ICES63760.2024.10910382 (https://doi.org/10.1109/ICES63760.2024.10910382)	Scopus	
2022-2023				
1.	Dr. M. Samayaraj Murali Kishanlal	A Novel DWDM based Comb Source for Future Optical Network	Journal of Nonlinear Optical Physics & Materials, DOI: https://doi.org/10.1142/S0218863523500546 (https://doi.org/10.1142/S0218863523500546)	WoS
Embedded System and IoT Design Lab				
2024-2025				
1.	Rajendran A.; Dhasinamurthi A.; Uthayakumar G.S.	Hybrid Deep Learning-Based Fault Detection for IoT Sensors	International Conference on Advances in Modern Age Technologies for Health and Engineering Science (AMATHE) DOI:10.1109/AMATHE65477.2025.11080925 (https://doi.org/10.1109/AMATHE65477.2025.11080925)	Scopus
2023-2024				
2.	Shingare S.P.; Suresh D.; Verma C.K.; Lakshminarasimhan S.; Raghunandan K.R.; Krishnan R.N.	Machine Learning for Network Traffic in Home Automation IoT Systems	IEEE Transactions on Automation Science and Engineering PP(99):1-12 DOI:10.1109/TASE.2024.3424458 (https://doi.org/10.1109/TASE.2024.3424458)	Scopus
2022-2023				
3.	Dr. Kavitha C T	Vehicle speed limiter for accident avoidance based on LIFI	International conference on Emerging Trends in Engineering Design and Manufacturing (ETEDM-22)	=

Table7.5.4 - Student Publications

S. No	Author Name	Title of the Paper	Journal / Conference	Table7.5.5: Projects Won in Competition					
				SI.No.	Event Name	Project Title	Batch / Names	Batch	Result
Project Lab				PROJECT LAB					
2024-2025				PROJECT LAB					

1.	Harini D.; Vaishnavi R.;	Enhanced Fetal Health Monitoring: Implementation of Django Server for Comprehensive Tracking and Analysis	B-HTC 2025 - 2025 IEEE Bangalore Humanitarian Technology Conference: Sustainable Development Goal 11: Sustainable Cities and Communities DOI: 10.1109/B-HTC64616.2025.11116590 (https://doi.org/10.1109/B-HTC64616.2025.11116590)	Scopus	1.	Vizhichudar-Project Expo	Smart Scent Innovators	Subashri M, Samyuktha B, Sushmitha V, Varshini G.	2023 - 2026	Won Rs.1,000/-
2.	Wilfred J.J.; Pavan B	Real-Time Stress Detection and Management Using IoT Sensors and Virtual Reality Technology	International Conference on Trends in Electronics and Informatics, ICOEI 2025 DOI:10.1109/ICOEI65986.2025.11013460	Scopus	2.	National Level Technical Symposium	Robo-Line Follower	Evangelin Emeema S Barun Balaji C Jestina Kiruba Rani M	2023 - 2026	Won Rs. 1000/-
2023-2024										
3.	Rohini G.; Abdul Rahman M.; Bharath Krishna S.	Integrating Blockchain Deep Learning and Ensemble Methods for Optimized MQTT Protocol in IoT Networks	International Conference on Innovative Computing, Intelligent Communication and Smart Electrical Systems, ICSES 2024 DOI: 10.1109/ICSES63760.2024.10910569	Scopus	3.	National Level Technical Symposium	Circuit Wars	Navina R Nithin Visva M Nandha A	2023 - 2026	Won Rs.2,000/-
4.	Mohamed Faisal M.; Jithesh R.	Public Human Assault Prediction Using Human Activity Recognition with AI	International Conference on Advances in Data Engineering and Intelligent Computing Systems, ADICS 2024 DOI:10.1109/ADICS58448.2024.10533461 (https://doi.org/10.1109/ADICS58448.2024.10533461)	Scopus	4.	National Level Technical Symposium	Paper Presentation	1.Deepak Kumaran A 2.Devatharsan S K 3.Balachander D	2023 - 2026	Won Rs.2,000/-
VLSI/DSP Lab										
2024-2025										
1.	Senthil Murugan M.; Varsha M.; Suresh D.; Sri Ranjani G.	Design and Optimization of a Low-Power Phase-Locked Loop Using 18nm FinFET Technology for High-Performance Applications	International Conference on Frontier Technologies and Solutions, ICFTS 2025 DOI:10.1109/ICFTS62006.2025.11031884 (https://doi.org/10.1109/ICFTS62006.2025.11031884)	Scopus	5.	National Level Technical Symposium	Radio Wheels (RC Racing)	Aswin K Balaji B	2023 - 2026	Won Rs.2,000/-
2022-2023										
2.	Divyabharathi.J,Sakthi.G	Machine Learning Based Epileptic Seizure Detection in EEG Signals	Gradiva Journal, Vol.9(3), p. No. 873-880, 2023	-	6.	The Thiran CTF Quest 2025	Internship offer from Traboda Labs	1. Shyamalavannan G, 2. Karthik D,	2023 - 2026	Won Rs. 15,000/-



Event Name: Vizhichudar-Project Expo
Project Title: AI Powered E-Nose

Table 7.5.6: Project Prototype Development (Hackathon Won in Competition)

S. No	Name of the students	Title	Domain	Event	Result
Centre of Excellence					

Optical & Microwave Lab			
2024-2025			

1.	Shanthini S.; Sharmila Devi S.B.;	Design and Analysis of Microwave Filter for Sub-6GHz 5G Applications	International Conference on Frontier Technologies and Solutions, ICFTS 2025 DOI:10.1109/ICFTS62006.2025.11031731	Scopus	1.	Kalidass L, Keerthanaa N, Lathika B,	Coimbatore Accident Detection & Emergency Response System with Hazard Detection, Hotspot Prediction and Prevention	Embedded Systems and IoT	UYIR Road Safety Hackathon 2025	First Prize with Cash Award of Rs. 1,00,000/-
2023-2024										
2.	Manickam M.L.	Low Power Optical and Gate for Photonic Integrated Circuits	International Conference on Innovative Computing, Intelligent Communication and Smart Electrical Systems, ICSES 2024 DOI:10.1109/ICSES63760.2024.10910382	Scopus	2.	Kalidass L, Keerthana N, Pravinesh K,	Smart Urban Waste Management System	Embedded Systems	INVENTIFY '24 – "Hardware Innovation a 24 Hours Challenge"	Won Rs. 10,000/-
2022-2023										
3.	SanthanaPriya G, Sangeetha V	Designing of Micropatch antenna for Microwave Imaging of Bone Fracture	International Conference on Emerging Technologies in Communication and Signal Processing (ICETCSP 2023)	-	3.	Balasubramani E, Bavasri K	IOT based bank security system	Internet of Things	Blaze A Trial 1.0 a 24 Hours Hackathon	Won Rs. 7,000/-
Embedded System and IoT Design Lab										
2024-2025										
1.	Shriram S.; SenthilKumar D.	AI-Driven Smart Water Bottle with Adaptive Temperature Control	International Conference on Intelligent Embedded, MicroElectronics, Communication and Optical Networks, IEMECON 2025 DOI:10.1109/IEMECON69302.2025.11365739	Scopus	5.	Mohamed Rifay S, Naga Vinay Avvaru, Nehanitha S,	AI-Powered Swarm Drone System for Human-Elephant Conflict Mitigation	Embedded Systems and IoT	Human-Animal Conflict (HAC-Kathon '25), a National Level 36-Hours Hackathon	Won Rs. 15,000/-
2023-2024										
2.	Ganesh V.; Shyam H.;	Blockchain-Enabled Geospatial Health Platforms for Smart Living	2nd IEEE International Conference on Trends in Quantum Computing and Emerging Business Technologies TQCEBT 2024. DOI: 10.1109/TQCEBT59414.2024.10545214	Scopus	6.	Chandra Sekaran S, Chandrakiran, Risikesvar G,	Build A Soc: The Tiny MCU	VLSI Design	INFINEON LAUNCHPAD HACKATHON, a National Level 36-Hours Hackathon	Won Rs. 15,000/-
2022-2023										
3.	Gifty, Delin,	Dry hand hygiene system using fog disinfectant to prevent infection	Second National Conference on "Recent Advancements in Science, Engineering & Technologies (RASET 2023)" 2023.	Scopus	7.	Balachandhar D, Deepak Kumaran A,	Automated Smart IV Drip Monitoring for Patient	Embedded Systems	NEXATHON'25 a 24-Hour National Level Hackathon	Won Rs. 3,000/-
Computer Networks/Communication Systems Lab										
2024-2025										
					8.	Parimelazhagan S, Vigneshwaran S , Sahana S ,	Develop a Mobile Application for Agriculture	Internet of Things	HACK-O-MANIA-2K24 "Software edition a 24 Hrs coding contest"	Won Rs. 3,000/-
					9.	VimalanS, Vasanth S, Sanjay T, Walter Viwin J,	The Volans MAP	Internet of Things	VORTEX Hackathon 2025	Won Rs. 4,000/-





1	Prasanna R.; Prasanth M.	Design of a Dual band Star Shaped Electromagnetic Bandgap (EBG) for 5G Communication	6th International Conference on Mobile Computing and Sustainable Informatics, ICMCSI 2025 – Proceedings DOI:10.1109/ICMCSI64620.2025.10883634	Scopus		
2	Steeriff M.J.; Bhuvana B.P.; Monica M.M.; Murugan S.M.;	A Miniaturised Dual-Band Hexagonal-Shaped Frequency Selective Surface with Slot Loading	2024 15th International Conference on Computing Communication and Networking Technologies, ICCCNT 2024 DOI:10.1109/ICCCNT61001.2024.10726195	Scopus		
						

Table 7.5.8: Consultancy details

S.No	Name of the Faculty	Name of the Consultancy Firm	Project Work Title	Project Value (INR)	Duration
Centre of Excellence					
2024-2025					
1.	Dr.P.G.V.Ramesh Dr.S.Tephilla Ms.S.Sindhukavi	Pantech e-Learning Pvt Ltd	Real- Time Fault Diagnosis System for Electric Vehicles using Embedded Predictive Analytics	Rs. 30,100	3 Months

2.	Dr.G.Rohini Dr.M.V.Karthikeyan Mr.D.Suresh	Pantech e- Learning Pvt Ltd	Real- Time Fault Diagnosis System for Electric Vehicles using Embedded Predictive Analytics	Rs. Rs.18000	3 Months
3.	Dr.Jeba Johannah Samuel Dr.Senthil Murugan	Pantech eLeaning Pvt., Ltd.	FPGA-Based Real- Time image Processing for Smart Surveillance	Rs.22.000	3 Months
2023-2024					
4.	Dr.P.G.V.Ramesh Mr.D.Suresh Mrs.B.Sreedevi	EMCOG Solutions Pvt Ltd	GSM Based Asset Tracking System	Rs.36,500	3 Months
5.	Dr.J.Jeba Johannah Ms.Jemmima Havila Catherine	RETECH Solutions Pvt Ltd	Advancements In Analog Circuit Design for Low Pwer Sensor Nodes	Rs.12,000	3 Months
6.	Dr.C.Gnana Kousalya Mrs.G.Akilandeswary Ms.Sneha	RETECH Solutions Pvt Ltd	Advanced Signal Processing Techniques Biomedical Electronics	Rs.32,500	3 Months
7.	Dr.G.Rohini Mr.J.Bino Mrs. Maria Christina Blessy	RETECH Solutions Pvt Ltd	Performance Comparison of STM32 Microcontroller in Laser Engraving Applications	Rs.34,000	3 Months
2022-2023					
8.	Dr.C.Gnana Kousalya Dr.J.Jeba Johannah Dr.G.Rohini Samuel Dr.S.Tephillah Mr.J.Bino	Pantech Pro Labs Pvt Ltd	Internet of Things for Medical & Smart City Application and Autonomous Vehicle	Rs.27,880	3 Months
9.	Dr.G.Rohini Dr.P.G.V.Ramesh Dr.M.Senthil Murugan Dr.B.P.Bhuvana Dr.C.Mohan	Pantech eLeaning Pvt., Ltd.	AI and Computer Vision Integrated System for Smart Agriculture	Rs.36,490	3 Months

10.	Dr.C.Gnana Kousalya Dr.G.S.Uthayakumar Dr.C.T.Kavitha Dr.Samayaraj Murali Kishanlal Dr.M.V.Karthikeyan	EMCOG Solution Pvt., Ltd.	IoT Based Smart plug with Remote Energy Monitoring and Energy Statistics	Rs.15,000	3 Months
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Table 7.5.9: Sponsored Research Project

S.No	Name of the Faculty	Name of the Funding agency	Project Title	Project Value (Lacs)	Duration
2024-2025					
1.	R.Moniica V.Nandhini Dr. G. S. Uthayakumar Dr.R.Nirosha	MSME 4.O	Smart Adaptive FES Transforming Foot Drop Management through Sensor Integration and AI	15 L (Sanctioned)	1 Year
2023-2024					
2.	Dr.G.Rohini Ms.Nandhini	MSME (Women)	Design and Optimization of Quantum Computing Circuits Using VLSI Techniques	15 L	1 Year (Ongoing)
3.	Dr.C.Gnana Kousalya Ms.Priyanka.J	Tamilnadu State Govt Niral Thiru villa	Autonomous Marine time Monitoring System	Rs.10,000	-
4.	Mrs.G.Akilandeswari	Tamilnadu State Govt Niral Thiru villa	An Autonomous Upper Limb Using Electromyography Signals and Microcontroller	Rs.10,000	-
2022-2023					
5.	Gnana Kousalya C (IDEATN003847)	MSME	Passageway Devices of Fishing Vessels	12.5 L (completed)	1 year (Completed)

PART E: First Year faculty and financial Resources

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

E1. First Year Student-Faculty Ratio (FYSFR)

Table No. E1.1: FYSFR details.

Year	Sanctioned intake of all UG programs (S4)	No. of required faculty (RF4=S4/20)	No. of faculty members in Basic Science Courses & Humanities and Social Sciences including Management courses (NS1)	No. of faculty members in Engineering Science Courses (NS2)	Percentage= No. of faculty members ((NS1*0.8) + (NS2*0.2))/(No. of required faculty (RF4)); Percentage=((NS1*0.8) +(NS2*0.2))/RF
2023-24(CAYm2)	960	48	32	86	89
2024-25(CAYm1)	1020	51	36	99	95
2025-26(CAY)	1020	51	35	104	96

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

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

Items	Budgeted in 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Infrastructure Built-Up	125500000	84757105	50000000	44935333	20000000	23113703	59860000	54425570
Library	15000000	14849232	5720000	2140780	5110000	4653743	5300000	4870271
Laboratory equipment	7000000	7038753	11008000	6244352	6220000	5658624	7110000	6470885
Teaching and non-teaching staff salary	320400000	337485736	337500000	304046226	237300000	215784217	192200000	174743151
Outreach Programs	780500	717750	192000	181792	3346000	3041993	1010000	2032872
R&D	755000	748838	50000	4162900	119000	0	79000	72342
Training, Placement and Industry linkage	30820800	30186548	6373000	18987295	24240000	22037209	198000	180000
SDGs	2800000	2903539	700300	690201	3040000	2041715	2052000	152826
Entrepreneurship	450500	490547	801000	769893	1260000	1152417	1413000	1041528
Others, specify	22300000	27872571	17500000	82240027	129000000	84129309	23700000	22400076
Total	525806800	507050619	429844300	464398799	429635000	361612930	292922000	266389521

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

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

Items	Budgeted in 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Laboratory equipment	1545500	837800	698000	901197	376000	337869	1021960	113870
Software	0	0	0	0	0	0	0	0
SDGs	600000	603263	540000	451177	300000	257841	300000	261900

Support for faculty development	780000	887695	270000	159000	340000	159000	345000	140530
R & D	110000	78000	110000	96000	110000	147000	110000	215000
Industrial Training, Industry expert, Internship	1761250	1926300	1457000	1369694	1841800	1699708	1825800	1353959
Miscellaneous Expenses*	330000	283183	323000	281158	313000	286106	313000	276335
Total	5126750	4616241	3398000	3258226	3280800	2887524	3915760	2361594