

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 Communications Engineering	Discipline: Engineering & Technology
Level : Under Graduate	Tier: 1
Application No: 12177	Date of Submission: 19-09-2026

PART A- Profile of the Institute

A1.Name of the Institute: KCG COLLEGE OF TECHNOLOGY	
Year of Establishment : 1997	Location of the Institute: Chennai
A2. Institute Address: RAJIV GANDHI SALAI,KARAPAKKAM	
City:CHENNAI	State:Tamil Nadu
Pin Code:600097	Website:www.kcgcollege.ac.in
Email:PRINCIPAL@KCGCOLLEGE.COM	Phone No(with STD Code):044-28389001
A3. Name and Address of the Affiliating University (if any):	
Name of the University : NIL	City: Chennai
State : Tamil Nadu	Pin Code: 600025
A4. Type of the Institution: Self-Supported Institute	
A5. Ownership Status: Self financing	

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

- No. of UG programs: **15**
- No. of PG programs: **7**

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

Sr.No.	Discipline	Level of program	Name of the program	Year of Start	Year of Closed	Name of The Department
1	Computer Application	PG	Master of Computer Application	2025	--	Computer Application
2	Engineering & Technology	PG	Aeronautical Engineering	2022	--	Aeronautical Engineering
3	Engineering & Technology	UG	Aeronautical Engineering	2007	--	Aeronautical Engineering
4	Engineering & Technology	UG	Aerospace Engineering	2019	--	Aerospace Engineering
5	Engineering & Technology	UG	Artificial Intelligence and Data Science	2020	--	Artificial Intelligence and Data Science
6	Engineering & Technology	UG	Automobile Engineering	2018	--	Automobile Engineering
7	Engineering & Technology	UG	Biomedical Engineering	2026	--	Biomedical Engineering
8	Engineering & Technology	UG	Civil Engineering	2011	--	Civil Engineering
9	Engineering & Technology	PG	Communication Systems	2011	--	Electronics and Communication Engineering
10	Engineering & Technology	PG	Computer Science and Engineering	2010	--	Computer Science and Engineering
11	Engineering & Technology	UG	Computer Science and Engineering	1998	--	Computer Science and Engineering
12	Engineering & Technology	UG	Computer Science and Engineering (Artificial Intelligence & Machine Learning)	2025	--	Computer Science and Engineering (Artificial Intelligence and Machine Learning)
13	Engineering & Technology	UG	Computer Science and Engineering (Cyber Security)	2023	--	Computer Science and Engineering (Cyber Security)
14	Engineering & Technology	UG	Electrical & Electronics Engineering	1998	--	Electrical and Electronics Engineering

15	Engineering & Technology	UG	Electronics & Communication Engineering	1998	--	Electronics and Communication Engineering
16	Engineering & Technology	UG	Fashion Technology	2018	--	Fashion Technology
17	Engineering & Technology	UG	Information Technology	2001	--	Information Technology
18	Engineering & Technology	PG	Manufacturing Engineering	2013	--	Mechanical Engineering
19	Engineering & Technology	UG	Mechanical Engineering	1998	--	Mechanical Engineering
20	Engineering & Technology	UG	Mechatronics Engineering	2019	--	Mechatronics Engineering
21	Engineering & Technology	PG	Power Electronics & Drives	2013	--	Electrical and Electronics Engineering
22	Engineering & Technology	PG	VLSI Design	2026	--	Electronics and Communication Engineering

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

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

Name of the Department	Having Allied Departments	Name of the Program	Program Level
Electronics and Communication Engineering	No	Electronics & Communication Engineering	UG
Computer Science and Engineering	Yes	Computer Science and Engineering	UG
Artificial Intelligence and Data Science	Yes	Artificial Intelligence and Data Science	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)

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/COI AUTHORITY APPROVAL
1	Electronics & Communication Engineering	UG	1998 / --	40	Yes	2024	120	2024	FNo .South 436555333 . Date of Ap May 2024

Sanctioned Intake for Last Five Years for the Communication Systems	
Academic Year	Sanctioned Intake
2025-26	120
2024-25	120
2023-24	90
2022-23	90
2021-22	90
2020-21	120

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 Kavitha Balamurugan
B. Nature of appointment:	Regular
C. Qualification:	Ph.D

B3. Program Details

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

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2025-26 (CAY)	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)	2021-22 (CAYm4)	2020-21 (CAYm5)	2019-20 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	120	120	90	90	90	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	121	120	90	91	90	57	71
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	4	0	2	8	2	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	2	4	0	3	4	0	0
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	123	128	90	96	102	59	73

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

B4. Enrolment Ratio in the First Year

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

Year of entry	N (From Table 4.1)	N1 (From Table 4.1)	N4 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2025-26 (CAY)	120	121	2	102.50
2024-25 (CAYm1)	120	120	4	103.33
2023-24 (CAYm2)	90	90	0	100.00

Average [(ER1 + ER2 + ER3) / 3] = 101.94 $\approx$ 100

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

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

Item	(2021-22) LYG	(2020-21) LYGm1	(2019-20) LYGm2
A*= (No. of students admitted in the 1st year of that batch and those actually admitted in the 2nd year via lateral entry, plus the number of students admitted through multiple entry (if any) and separate division if applicable, minus the number of students who exited through multiple entry (if any).	102.00	122.00	122.00
B=No. of students who graduated from the program in the stipulated course duration	82.00	48.00	59.00
Success Rate (SR)= (B/A) * 100	80.39	39.34	48.36

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 56.03

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)	8.05	7.47	7.31
Y=Total no. of successful students	97.00	75.00	83.00
Z=Total no. of students appeared in the examination	124.00	90.00	93.00
API [X*(Y/Z)]	6.30	6.22	6.52

Average API[(AP1+AP2+AP3)/3] : 6.35

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)
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X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2rd year/10)	7.91	8.20	7.76
Y=Total no. of successful students	72.00	79.00	86.00
Z=Total no. of students appeared in the examination	75.00	85.00	102.00
API [X * (Y/Z)]	7.59	7.62	6.54

Average API [(AP1 + AP2 + AP3)/3] : 7.25

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)	8.10	7.70	7.77
Y=Total no. of successful students	77.00	83.00	49.00
Z=Total no. of students appeared in the examination	79.00	86.00	50.00
API [X*(Y/Z)]:	7.89	7.43	7.61

Average API [(AP1 + AP2 + AP3)/3] : 7.64

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	102.00	122.00	122.00
X=No. of students placed	78.00	40.00	56.00
Y=No. of students admitted to higher studies	2.00	8.00	3.00
Z= No. of students taking up entrepreneurship	3.00	2.00	1.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	81.37	40.98	49.18

Average Placement Index = (P_1 + P_2 + P_3)/3: 57.18 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)	CAY
1	Dr Uma Kumari C R	XXXXXXXX24R	Ph.D	SRM Institute of Science and Technology	Optical Communication	02/08/2021	5.1	Assistant Professor	Associate Professor	17/07/2023	Regular	Y€
2	Dr Kavitha Balamurugan	XXXXXXXX81N	Ph.D	Anna University	Applied Electronics	20/06/2001	25.3	Lecturer	Professor	01/07/2021	Regular	Y€
3	Dr B. Thyla	XXXXXXXX01P	Ph.D	Anna University	Communication Systems	01/06/2011	15.3	Assistant Professor	Assistant Professor		Regular	Y€
4	Dr Sridhathan C.	XXXXXXXX17Q	Ph.D	University Malaysia Pahang	Bio-Medical and Signal Processing	01/07/2024	2.2	Associate Professor	Associate Professor		Regular	Y€
5	Dr. Deepa Jose	XXXXXXXX24C	Ph.D	Anna University	VLSI Design	22/06/2015	11.2	Assistant Professor	Professor	01/07/2021	Regular	Y€
6	Dr. Thomas Leonid T.	XXXXXXXX07F	Ph.D	Anna University	VLSI Design	22/06/2009	17.2	Lecturer	Associate Professor	01/07/2024	Regular	Y€
7	Dr V Thulasi Bai	XXXXXXXX68K	Ph.D	Sathyabama University	Telemedicine	01/07/2016	10.2	Professor	Professor		Regular	Y€

8	Dr.Ebenezer Abishek.B	XXXXXXXX43F	Ph.D	Vels Institute of Science, Technology & Advanced Studies	RF and Antenna Design	01/07/2024	1.10	Associate Professor	Associate Professor		Regular	No
9	Dr. Jaraline Kirubavathy K	XXXXXXXX67B	Ph.D	Anna University	VLSI Design	05/12/2011	14.9	Assistant Professor	Assistant Professor		Regular	Yes
10	Dr.R Maheswari	XXXXXXXX31M	Ph.D	Anna University	Applied Electronics	02/08/2021	5.1	Assistant Professor	Assistant Professor		Regular	Yes
11	Mr. Mohamed Yaseen M	XXXXXXXX42J	M.E.	Anna University	Applied Electronics	12/05/2006	20.4	Lecturer	Assistant Professor		Regular	Yes
12	Ms Arul Flora T G	XXXXXXXX29J	M.E.	Anna University	Communication Systems	11/08/2022	4.1	Assistant Professor	Assistant Professor		Regular	Yes
13	Dr. Aaron Kevin Cameron Theoderaj	XXXXXXXX71B	Ph.D	Anna University	Optical fiber communication, Materials and Nano science	10/07/2023	2.9	Assistant Professor	Assistant Professor		Regular	No
14	Dr. K Karthika	XXXXXXXX07R	Ph.D	Vels Institute of Science, Technology & Advanced Studies	VLSI design, Image processing	05/07/2023	3.2	Assistant Professor	Assistant Professor		Regular	Yes
15	Mr M S Harish	XXXXXXXX22H	M.E.	Middlesex University (UK)	Machine Learning, Wireless Networks	10/07/2023	3.2	Assistant Professor	Assistant Professor		Regular	Yes
16	Dr Selva Priya E S	XXXXXXXX04B	Ph.D	Anna University	Cryptography, Low Power VLSI	21/02/2024	2.6	Assistant Professor	Assistant Professor		Regular	Yes
17	Ms K.Jayasakthi	XXXXXXXX50P	M.E.	Anna University	Applied Electronics	01/07/2024	2.2	Assistant Professor	Assistant Professor		Regular	Yes
18	Ms P. Vinotha	XXXXXXXX65L	M.E.	Anna University	VLSI Design	01/07/2024	1.11	Associate Professor	Assistant Professor		Regular	No
19	Ms. Priyanka Roy V.	XXXXXXXX36J	M.E.	Anna University	Communication Systems	10/07/2025	0.10	Assistant Professor	Assistant Professor		Regular	No
20	Dr.Aida Jones	XXXXXXXX32D	Ph.D	Anna University	Communication Systems	17/06/2013	13.3	Assistant Professor	Assistant Professor		Regular	Yes
21	Ms Ramya M	XXXXXXXX21H	M.E.	Anna University	Applied Electronics	14/06/2019	7.3	Assistant Professor	Assistant Professor		Regular	Yes
22	Dr.Jose Anand A	XXXXXXXX13G	Ph.D	Anna University	Embedded Systems	25/06/2012	13	Associate Professor	Professor	01/07/2019	Regular	No
23	Dr S Sadasivam	XXXXXXXX77L	Ph.D	Anna University	Embedded Systems	17/06/2013	11.6	Assistant Professor	Assistant Professor		Regular	No
24	Ms S Priyadharshini	XXXXXXXX73J	M.E.	Anna University	Communication Systems	01/07/2023	1.10	Assistant Professor	Assistant Professor		Regular	No
25	Dr.Balaji V	XXXXXXXX83H	Ph.D	Anna University	Applied Electronics	17/06/2019	4.11	Associate Professor	Associate Professor		Regular	No
26	Ms Lavanya M	XXXXXXXX35K	M.E.	Anna University	Applied Electronics	23/06/2014	9.11	Assistant Professor	Assistant Professor		Regular	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 yearStudent Faculty Ratio (**SFR**) = S/F

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

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

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

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

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

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

Description	CAY(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
UG1.B	124	90	92
UG1.C	90	92	97
UG1.D	92	97	122
UG1: Electronics & Communication Engineering	306	279	311
PG1.A	12	12	12
PG1.B	12	12	18
PG1: Communication Systems	24	24	30
DS=Total no. of students in all UG and PG programs in the Department	330	303	341
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= 330	S2= 303	S3= 341
DF=Total no. of faculty members in the Department	21	22	20
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= 21	F2= 22	F3= 20
FF=The faculty members in F who have a 100% teaching load in the first-year courses	0	0	0
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1= 15.00	SFR2= 13.17	SFR3= 17.05
Average SFR for 3 years	SFR= 15.07		

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 = $2.5 \times [(10X + 4Y) / RF]$
2025-26(CAY)	13	9	16.00	25.94
2024-25(CAYm1)	11	11	15.00	25.67
2023-24(CAYm2)	8	12	17.00	18.82

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	2.00	3.00	4.00	4.00	11.00	14.00
2024-25	2.00	4.00	3.00	4.00	10.00	14.00
2023-24	2.00	4.00	4.00	2.00	11.00	14.00
Average	RF1=2.00	AF1=3.67	RF2=3.67	AF2=3.33	RF3=10.67	AF2=14.00

C5. Visiting/Adjunct Faculty/Professor of Practice

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

(CAYm1)

(CAYm2)

(CAYm3)

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	18	14	17
2	No. of peer reviewed conference papers published	24	31	24
3	No. of books/book chapters published	14	12	15

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.Deepa Jose	NIL	ECE	Quantum Computing and Machine Learning Solutions: Pathways to Sustainable Development	DST-SERB	9.12.2024 to 13.12.2024	2.00
Dr.Deepa Jose	NIL	ECE	Air Cloud-Air purification system	MSME	2 years	15.00
Dr.Uma Kumari	Dr.Jeraline kirubavathy	ECE	Feasibility and PoC of FBG sensing Technology for Monitoring of Railway Structures of K- Rail.	Lab To Market Innovations Private Limited	1.5 years	2.00
						Amount received (Rs.):19.00

(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. Selva Priya ES	NIL	ECE	Luna, The Period Tracker Health Band	La Trobe University, Australia	1 year	0.20
Dr Kavitha Balamurugan	NIL	ECE	Seminar	CSIR	3 days	0.50
Dr.S.Kirubaveni, CEG Campus, Anna University	Dr.Deepa Jose	ECE	Inno-Crib: Integrating IoT, AI and Data Security for an Innovative Smart Incubator System for Premature neonatal Care	Anna University	1 year	1.00
Dr. Thomas Leonid	NIL	ECE	AquasaveX, Revolutionizing Laundry	LaTrobe university	1 year	0.54
						Amount received (Rs.):2.24

(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.Deepa Jose	NIL	ECE	Seminar Grant	DST- SERB	1 week	1.50
Dr Kavitha Balamurugan	NIL	ECE	IoT Enabled Risk Monitoring System for Cold Supply	Ethical Intelligent Technologies in Chennai	1.5 years	1.00
Dr T Thomas Leonid	NIL	ECE	Design of Drone System	SERTEL Electronics Chennai	1.5 years	1.00
Dr.Deepa Jose	NIL	ECE	Smart City	Ethical Intelligent Technologies in Chennai	6Months	0.25
Dr. Deepa Jose	NIL	ECE	Mother's Care Shield-Smart Health Care	Soliton	6 months	0.46
Dr. Deepa Jose	NIL	ECE	AEGISTIC	Latrobe University, Australia.	1 year	1.49
Dr Kavitha Balamurugan	Dr. Jaraline Kirubavathy	ECE	IoT-Based Perishable Goods Monitoring and Risk Management	SILIGENE PVT LTD Perungudi Chennai	1 year	0.08
						Amount received (Rs.):5.78

Total Amount (Lacs) Received for the Past 3 Years: 27.02

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.Maheswari	Ms.P.Vinotha	ECE	Remote OTDR Based Optical Fiber Monitoring with Automated SOR-to-CSV Data Extraction	Thejo consultancy	6 months	3.00
						Amount received (Rs.):3.00

(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.Deepa Jose	NIL	ECE	Image Processing -content based image retravel and automated web based online feature tracking system.	Smajo Consulting	12 months	1.00
Dr.Kavitha Balamurugan	NIL	ECE	Bluetooth enabled wireless level sensor	Thouway Technologies	12 months	3.50
Dr.Kavitha Balamurugan	NIL	ECE	Organ Donation APP	Mohan Foundation	12 months	2.60
						Amount received (Rs.):7.10

(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.Umakumari C R	Mr.Ashish C	ECE	EVTOL-Pusher type VTOL	Aviac Technologies private Limited	15 weeks	4.60
Dr.Deepa Jose	NIL	ECE	Evaluation of Glaucoma using OCT Analysis.	Appaswamy Associates Pvt Ltd	3.5 Months	0.75
Ms. R. Maheswari	NIL	ECE	Electronics & Hardware – Field Technician	TNSDC	6 months	4.71
						Amount received (Rs.):10.06

Total amount (Lacs) received for the past 3 years: 20.16

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. Aaron Kevin Cameron, Dr Uma Kumari	Mine Armour	1 year	75000.00	75000.00	Young Safety Innovator and felicitation by the Directorate of General Mines Safety, Jharkhand
Dr.Thulasi Bai, Ms.Arul Flora, Dr Kavitha Balamurugan	AI enhanced underwater Image Processing for Polymetallic Nodules Abundance in Deep Ocean Environment	1 year	100000.00	25000.00	Ongoing
Dr. Deepa Jose	Stenography Technique For secure data hiding capacity	1.5 years	120000.00	120000.00	Patent Applied and Granted
Dr. Deepa Jose Ms.K.Jayasakthi	Matlab-Analytical project using FPGA for 5G communication	2 years	100000.00	75000.00	Developed the proof of concept and Patent Applied
DrUmakumari C R, Dr Thulasi Bai, Dr Kavitha Balamurugan	Structural Monitoring of Coldwater Pipelines in Desalination Plant using Fiber Bragg Grating Sensor	2 years	75000.00	50000.00	Developing the proof of concept
			Amount received (Rs.): 470000.00		

(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 Thulasi Bai, Dr.Jaraline Kirubavathy	Study of the Earth Atmosphere Radiation Budget and its Linkage to Atmospheric Feedback	6 months	50000.00	50000.00	Developed the proof of concept
Dr. Deepa Jose	Under water submarine system for object detection	2 years	100000.00	100000.00	Developed the proof of concept Patent Applied
			Amount received (Rs.): 150000.00		

(CAYm3)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Dr. Umakumari C R Dr. Thyla B Dr.Karthika K	IoT Based Detecting Brain Disease with strong Image Processing and Segmentation Techniques	1.5 years	50000.00	50000.00	Developed the proof of concept Patent Applied, and Granted
Dr. Thomas Leonid T	Development of a Low Cost Device for Early Detection of Cardiac Amyloidosis Using Embedded Systems	1.2 years	50000.00	50000.00	Developed the proof of concept
			Amount received (Rs.): 100000.00		

Total amount (Lacs) received for the past 3 years : 720000.00

PART D: Laboratory Infrastructure in the Department

(Data to be filled in for the Department)

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

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

Sr. No	Name of the Laboratory	Number of students per set up(Batch Size)	Name of the Important Equipment	Weekly utilization status(all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical staff	Designation	Qualification
1	Dr S Chandrasekar – Electronic and Devices	30	Laboratory Equipment: Mixed-Signal Oscilloscope – 0–100 MHz	30 hrs per wee	Mr. T. Manim	Lab Instructo	M.E (Power E
2	Sir J J Thomas – Linear Integrated Circuits	30	Laboratory Equipment: Cathode Ray Oscilloscope (CRO) – 0–30 MHz	32 hrs per wee	Mr. D. Santh	Lab Instructo	B.E (EEE)
3	Dr Abdul Kalam – Digital Signal Processing	30	Laboratory Equipment: Analog Discovery 2 Kit TMS320C6748 DSP Development Kit, Computer	12 hrs per wee	Ms. Pavithra	Lab Instructo	B.E (ECE)
4	Srinivasa Ramanujan – Microprocessor and	30	Laboratory Equipment: 8085 Microprocessor Kit 8086 Microprocessor Kit 8086	24 hrs per wee	Mr. G. Gopi	Lab Instructo	B.E (ECE)
5	Dr Jagadish Chandra Bose – Communication	30	Laboratory Equipment: Mixed-Signal Oscilloscope 0 - 100 MHz	20 hrs per wee	Mr. T. Raja	Lab Instructo	B.E (EEE)
6	Sir C V Raman Optical and Microwave Laboratory	30	Hardware Specifications:- Laboratory Equipment: Advance	24 hrs per wee	Mr. G. Gopi	Lab Instructo	B.E (ECE)
7	Dr Gordon Moore – VLSI Laboratory (S05)	30	Laboratory Equipment: VLSI Trainer Kit (Spartan 3(xc3s400, 30000) ARM7 Trainer Kit	24 hrs per wee	Ms. Oviya	Lab Instructo	B.E (ECE)
8	Internet of Things Laboratory	30	12 Hours Per Week OCS352 23EC723	12 Hours Per V	Ms. Oviya	Lab Instructo	B.E (ECE)

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
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1	Dr. S. Chandrasekar – Electronic Devices and Circuits Laboratory	Laboratory Safety: 1. Verify the supply voltage (VCC) before energizing the circuit and ensure that it is within the specified operating limits. 2. Obtain faculty approval before switching ON the circuit. 3. Verify IC polarity and circuit connections before applying power. 4. Do not handle electrical/electronic equipment with wet hands. 5. Do not modify, dismantle, or repair equipment without authorization. 6. Ensure that the specified voltage and current ratings of electronic components and laboratory equipment are not exceeded. 7. Switch OFF the power supply before modifying or reconnecting circuit components. 8. Mobile phone usage is restricted during laboratory sessions. 9. One electrical protection tripper is provided for every eight systems. Electrical Safety: 1. MCB/electrical protection panel and proper earthing are provided. 2. Electrical protection trippers are provided for safe operation of laboratory systems. 3. Electrical power distribution is suitably protected. 4. Periodic inspection and maintenance of electrical wiring, sockets, switches, and protection devices are carried out by authorized personnel. Emergency & Security: 1. Fire extinguisher and first-aid box are provided in the laboratory. 2. CCTV surveillance is provided for safety and security. 3. Electrical faults and other safety-related issues shall be immediately reported to the laboratory in-charge. Common Do's and Don'ts Do's • Report to the laboratory on time and follow the instructions of the Faculty and Laboratory Staff. • Adhere to the prescribed laboratory dress code and safety requirements. • Keep bags, books, and personal belongings in the designated storage area. • Read and understand the experimental procedure before operating laboratory equipment. • Collect and return components and equipment through the Laboratory Staff as instructed. • Verify circuit connections, supply voltage, polarity, and grounding before switching ON the power supply. • Operate laboratory equipment only in accordance with the prescribed operating procedure. • Switch OFF the power supply before making or modifying circuit connections. • Maintain the laboratory work area in a clean and orderly condition. • Report damaged equipment, exposed wires, or other safety hazards immediately to the Faculty or Laboratory Staff. • Ensure that all equipment and power supplies are switched OFF before leaving the laboratory. • Be aware of the location of the fire extinguisher and emergency power switch. Don'ts • Do not operate laboratory equipment without proper instructions or authorization. • Do not switch ON the power supply before verifying the circuit connections. • Do not make or modify circuit connections while the power supply is switched ON. • Do not insert metal objects into electrical sockets or equipment. • Do not touch exposed wires, terminals, or high-voltage points. • Do not use damaged cables, plugs, components, or laboratory equipment. • Do not dismantle, remove, or alter any part of laboratory equipment without permission. • Do not overload electrical sockets or use unauthorized electrical connections. • Do not eat or drink inside the laboratory. • Do not run, play, or move around unnecessarily during laboratory sessions. • Do not use mobile phones or access unrelated websites, software, or applications during laboratory sessions. • Do not leave the laboratory without returning components and equipment to their designated places.
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2	Sir J. J. Thomas – Linear Integrated Circuits Laboratory	Laboratory Safety: 1. Verify the supply voltage (VCC) before energizing the circuit and ensure that it is within the specified operating limits. 2. Obtain faculty approval before switching ON the circuit. 3. Verify IC polarity, pin configuration, and circuit connections before applying power. 4. Do not handle electrical/electronic equipment with wet hands. 5. Do not modify, dismantle, or repair equipment without authorization. 6. Ensure that the specified voltage and current ratings of ICs and other electronic components are not exceeded. 7. Switch OFF the power supply before modifying or reconnecting circuit components. 8. Mobile phone usage is restricted during laboratory sessions. 9. One electrical protection tripper is provided for every eight systems. Electrical Safety: 1. MCB/electrical protection panel and proper earthing are provided. 2. Electrical protection trippers are provided for safe operation of laboratory systems. 3. Electrical power distribution is suitably protected. 4. Periodic inspection and maintenance of electrical wiring, sockets, switches, and protection devices are carried out by authorized personnel. Emergency & Security: 1. Fire extinguisher and first-aid box are provided in the laboratory. 2. CCTV surveillance is provided for safety and security. 3. Electrical faults and other safety-related issues shall be immediately reported to the laboratory in-charge. Common Do's and Don'ts Do's • Report to the laboratory on time and follow the instructions of the Faculty and Laboratory Staff. • Adhere to the prescribed laboratory dress code and safety requirements. • Keep bags, books, and personal belongings in the designated storage area. • Read and understand the experimental procedure before operating laboratory equipment. • Collect and return components and equipment through the Laboratory Staff as instructed. • Verify circuit connections, supply voltage, polarity, and grounding before switching ON the power supply. • Operate laboratory equipment only in accordance with the prescribed operating procedure. • Switch OFF the power supply before making or modifying circuit connections. • Maintain the laboratory work area in a clean and orderly condition. • Report damaged equipment, exposed wires, or other safety hazards immediately to the Faculty or Laboratory Staff. • Ensure that all equipment and power supplies are switched OFF before leaving the laboratory. • Be aware of the location of the fire extinguisher and emergency power switch. Don'ts • Do not operate laboratory equipment without proper instructions or authorization. • Do not switch ON the power supply before verifying the circuit connections. • Do not make or modify circuit connections while the power supply is switched ON. • Do not insert metal objects into electrical sockets or equipment. • Do not touch exposed wires, terminals, or high-voltage points. • Do not use damaged cables, plugs, components, or laboratory equipment. • Do not dismantle, remove, or alter any part of laboratory equipment without permission. • Do not overload electrical sockets or use unauthorized electrical connections. • Do not eat or drink inside the laboratory. • Do not run, play, or move around unnecessarily during laboratory sessions. • Do not use mobile phones or access unrelated websites, software, or applications during laboratory sessions. • Do not leave the laboratory without returning components and equipment to their designated places.
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3	Dr. Abdul Kalam – Digital Signal Processing Laboratory	Laboratory Safety: 1. Computers shall be properly shut down after laboratory sessions. 2. CCTV surveillance is provided for safety and security. 3. Hardware and software issues shall be reported to the laboratory in-charge. 4. Installation, debugging, and configuration changes shall be carried out only by authorized personnel. 5. User credentials and academic/research data shall be maintained confidentially. 6. Unauthorized copying or transfer of software/data using external storage devices is prohibited. Electrical Safety: 1. MCB/electrical protection panel and proper earthing are provided. 2. Electrical protection trippers are provided for safe operation of laboratory systems. 3. Electrical power distribution is suitably protected. 4. Periodic inspection and maintenance of electrical wiring, sockets, switches, and protection devices are carried out by authorized personnel. Emergency & Security: 1. Fire extinguisher and first-aid box are provided in the laboratory. 2. CCTV surveillance is provided for safety and security. Common Do's and Don'ts Do's • Report to the laboratory on time and follow the instructions of the Faculty and Laboratory Staff. • Adhere to the prescribed laboratory dress code and safety requirements. • Keep bags, books, and personal belongings in the designated storage area. • Read and understand the experimental procedure before operating laboratory equipment. • Collect and return components and equipment through the Laboratory Staff as instructed. • Verify circuit connections, supply voltage, polarity, and grounding before switching ON the power supply. • Operate laboratory equipment only in accordance with the prescribed operating procedure. • Switch OFF the power supply before making or modifying circuit connections. • Maintain the laboratory work area in a clean and orderly condition. • Report damaged equipment, exposed wires, or other safety hazards immediately to the Faculty or Laboratory Staff. • Ensure that all equipment and power supplies are switched OFF before leaving the laboratory. • Be aware of the location of the fire extinguisher and emergency power switch. Don'ts • Do not operate laboratory equipment without proper instructions or authorization. • Do not switch ON the power supply before verifying the circuit connections. • Do not make or modify circuit connections while the power supply is switched ON. • Do not insert metal objects into electrical sockets or equipment. • Do not touch exposed wires, terminals, or high-voltage points. • Do not use damaged cables, plugs, components, or laboratory equipment. • Do not dismantle, remove, or alter any part of laboratory equipment without permission. • Do not overload electrical sockets or use unauthorized electrical connections. • Do not eat or drink inside the laboratory. • Do not run, play, or move around unnecessarily during laboratory sessions. • Do not use mobile phones or access unrelated websites, software, or applications during laboratory sessions. • Do not leave the laboratory without returning components and equipment to their designated places.
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4	Srinivasa Ramanujan – Microprocessor and Microcontroller Laboratory	Laboratory Safety: 1. Trainer-kit connections shall be verified before applying power. 2. The power supply shall be switched ON only after all connections have been verified. 3. Microprocessor and microcontroller trainer kits shall be handled carefully. 4. Electrical/electronic equipment shall not be handled with wet hands. 5. Trainer-kit connections shall not be modified while the power supply is ON. Electrical Safety: 1. MCB/electrical protection panel and proper earthing are provided. 2. Electrical protection trippers are provided for safe operation of laboratory systems. 3. Electrical power distribution is suitably protected. 4. Periodic inspection and maintenance of electrical wiring, sockets, switches, and protection devices are carried out by authorized personnel. Emergency & Security: 1. Fire extinguisher and first-aid box are provided in the laboratory. 2. CCTV surveillance is provided for safety and security. Common Do's and Don'ts Do's • Report to the laboratory on time and follow the instructions of the Faculty and Laboratory Staff. • Adhere to the prescribed laboratory dress code and safety requirements. • Keep bags, books, and personal belongings in the designated storage area. • Read and understand the experimental procedure before operating laboratory equipment. • Collect and return components and equipment through the Laboratory Staff as instructed. • Verify circuit connections, supply voltage, polarity, and grounding before switching ON the power supply. • Operate laboratory equipment only in accordance with the prescribed operating procedure. • Switch OFF the power supply before making or modifying circuit connections. • Maintain the laboratory work area in a clean and orderly condition. • Report damaged equipment, exposed wires, or other safety hazards immediately to the Faculty or Laboratory Staff. • Ensure that all equipment and power supplies are switched OFF before leaving the laboratory. • Be aware of the location of the fire extinguisher and emergency power switch. Don'ts • Do not operate laboratory equipment without proper instructions or authorization. • Do not switch ON the power supply before verifying the circuit connections. • Do not make or modify circuit connections while the power supply is switched ON. • Do not insert metal objects into electrical sockets or equipment. • Do not touch exposed wires, terminals, or high-voltage points. • Do not use damaged cables, plugs, components, or laboratory equipment. • Do not dismantle, remove, or alter any part of laboratory equipment without permission. • Do not overload electrical sockets or use unauthorized electrical connections. • Do not eat or drink inside the laboratory. • Do not run, play, or move around unnecessarily during laboratory sessions. • Do not use mobile phones or access unrelated websites, software, or applications during laboratory sessions. • Do not leave the laboratory without returning components and equipment to their designated places.
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5	Dr. Jagadish Chandra Bose – Communication Laboratory	Laboratory Safety: 1. Mobile phone usage shall be restricted during laboratory sessions. 2. Circuit connections, supply voltage, and grounding shall be verified before switching ON the equipment. 3. Electrical/electronic equipment shall not be handled with wet hands. 4. Conductive jewellery and loose clothing shall be avoided while working with electrical/electronic circuits. 5. Equipment shall be operated only under the guidance of faculty or technical staff. Electrical Safety: 1. MCB/electrical protection panel and proper earthing are provided. 2. Electrical protection trippers are provided for safe operation of laboratory systems. 3. Electrical power distribution is suitably protected. 4. Periodic inspection and maintenance of electrical wiring, sockets, switches, and protection devices are carried out by authorized personnel. Emergency & Security: 1. Fire extinguisher and first-aid box are provided in the laboratory. 2. CCTV surveillance is provided for safety and security. Common Do's and Don'ts Do's • Report to the laboratory on time and follow the instructions of the Faculty and Laboratory Staff. • Adhere to the prescribed laboratory dress code and safety requirements. • Keep bags, books, and personal belongings in the designated storage area. • Read and understand the experimental procedure before operating laboratory equipment. • Collect and return components and equipment through the Laboratory Staff as instructed. • Verify circuit connections, supply voltage, polarity, and grounding before switching ON the power supply. • Operate laboratory equipment only in accordance with the prescribed operating procedure. • Switch OFF the power supply before making or modifying circuit connections. • Maintain the laboratory work area in a clean and orderly condition. • Report damaged equipment, exposed wires, or other safety hazards immediately to the Faculty or Laboratory Staff. • Ensure that all equipment and power supplies are switched OFF before leaving the laboratory. • Be aware of the location of the fire extinguisher and emergency power switch. Don'ts • Do not operate laboratory equipment without proper instructions or authorization. • Do not switch ON the power supply before verifying the circuit connections. • Do not make or modify circuit connections while the power supply is switched ON. • Do not insert metal objects into electrical sockets or equipment. • Do not touch exposed wires, terminals, or high-voltage points. • Do not use damaged cables, plugs, components, or laboratory equipment. • Do not dismantle, remove, or alter any part of laboratory equipment without permission. • Do not overload electrical sockets or use unauthorized electrical connections. • Do not eat or drink inside the laboratory. • Do not run, play, or move around unnecessarily during laboratory sessions. • Do not use mobile phones or access unrelated websites, software, or applications during laboratory sessions. • Do not leave the laboratory without returning components and equipment to their designated places.
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6	Sir C. V. Raman Microwave–Optical Laboratory	Laboratory Safety: 1. Direct viewing of optical fibre ends, laser sources, or optical outputs shall be strictly avoided. 2. Optical and microwave equipment shall be operated under appropriate supervision. 3. Proper grounding of electrically operated equipment shall be ensured before operation. 4. Electrical/electronic equipment shall not be handled with wet hands. 5. Appropriate safety precautions shall be followed while handling microwave and antenna equipment. 6. CCTV surveillance is provided for safety and security. 7. Safety Do's and Don'ts shall be displayed prominently in the laboratory. Electrical Safety: 1. MCB/electrical protection panel and proper earthing are provided. 2. Electrical protection trippers are provided for safe operation of laboratory systems. 3. Electrical power distribution is suitably protected. 4. Periodic inspection and maintenance of electrical wiring, sockets, switches, and protection devices are carried out by authorized personnel. Emergency & Security: 1. Fire extinguisher and first-aid box are provided in the laboratory. 2. CCTV surveillance is provided for safety and security. Common Do's and Don'ts Do's • Report to the laboratory on time and follow the instructions of the Faculty and Laboratory Staff. • Adhere to the prescribed laboratory dress code and safety requirements. • Keep bags, books, and personal belongings in the designated storage area. • Read and understand the experimental procedure before operating laboratory equipment. • Collect and return components and equipment through the Laboratory Staff as instructed. • Verify circuit connections, supply voltage, polarity, and grounding before switching ON the power supply. • Operate laboratory equipment only in accordance with the prescribed operating procedure. • Switch OFF the power supply before making or modifying circuit connections. • Maintain the laboratory work area in a clean and orderly condition. • Report damaged equipment, exposed wires, or other safety hazards immediately to the Faculty or Laboratory Staff. • Ensure that all equipment and power supplies are switched OFF before leaving the laboratory. • Be aware of the location of the fire extinguisher and emergency power switch. Don'ts • Do not operate laboratory equipment without proper instructions or authorization. • Do not switch ON the power supply before verifying the circuit connections. • Do not make or modify circuit connections while the power supply is switched ON. • Do not insert metal objects into electrical sockets or equipment. • Do not touch exposed wires, terminals, or high-voltage points. • Do not use damaged cables, plugs, components, or laboratory equipment. • Do not dismantle, remove, or alter any part of laboratory equipment without permission. • Do not overload electrical sockets or use unauthorized electrical connections. • Do not eat or drink inside the laboratory. • Do not run, play, or move around unnecessarily during laboratory sessions. • Do not use mobile phones or access unrelated websites, software, or applications during laboratory sessions. • Do not leave the laboratory without returning components and equipment to their designated places.
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7	Dr. Gordon Moore – VLSI Laboratory	Laboratory Safety: 1. Hardware and software problems shall be reported to the laboratory in-charge. 2. Installation, debugging, and configuration changes shall be carried out only by authorized personnel. 3. User credentials and project/research data shall be maintained confidentially. 4. Unauthorized copying or transfer of software/data is prohibited. Computers shall be properly shut down after use. Electrical Safety: 1. MCB/electrical protection panel and proper earthing are provided. 2. Electrical protection trippers are provided for safe operation of laboratory systems. 3. Electrical power distribution is suitably protected. 4. Periodic inspection and maintenance of electrical wiring, sockets, switches, and protection devices are carried out by authorized personnel. Emergency & Security: 1. Fire extinguisher and first-aid box are provided in the laboratory. 2. CCTV surveillance is provided for safety and security. Common Do's and Don'ts Do's • Report to the laboratory on time and follow the instructions of the Faculty and Laboratory Staff. • Adhere to the prescribed laboratory dress code and safety requirements. • Keep bags, books, and personal belongings in the designated storage area. • Read and understand the experimental procedure before operating laboratory equipment. • Collect and return components and equipment through the Laboratory Staff as instructed. • Verify circuit connections, supply voltage, polarity, and grounding before switching ON the power supply. • Operate laboratory equipment only in accordance with the prescribed operating procedure. • Switch OFF the power supply before making or modifying circuit connections. • Maintain the laboratory work area in a clean and orderly condition. • Report damaged equipment, exposed wires, or other safety hazards immediately to the Faculty or Laboratory Staff. • Ensure that all equipment and power supplies are switched OFF before leaving the laboratory. • Be aware of the location of the fire extinguisher and emergency power switch. Don'ts • Do not operate laboratory equipment without proper instructions or authorization. • Do not switch ON the power supply before verifying the circuit connections. • Do not make or modify circuit connections while the power supply is switched ON. • Do not insert metal objects into electrical sockets or equipment. • Do not touch exposed wires, terminals, or high-voltage points. • Do not use damaged cables, plugs, components, or laboratory equipment. • Do not dismantle, remove, or alter any part of laboratory equipment without permission. • Do not overload electrical sockets or use unauthorized electrical connections. • Do not eat or drink inside the laboratory. • Do not run, play, or move around unnecessarily during laboratory sessions. • Do not use mobile phones or access unrelated websites, software, or applications during laboratory sessions. • Do not leave the laboratory without returning components and equipment to their designated places.
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8	IoT Laboratory	Laboratory Safety: 1. Microprocessor, microcontroller, IoT development kits, and associated equipment shall be operated according to prescribed operating procedures. 2. Power supply connections shall be verified before energizing the equipment. 3. Supply voltage and polarity shall be checked before connecting development boards and interfacing modules. 4. Trainer kits and electronic components shall be handled carefully. 5. Circuit connections shall not be modified while the power supply is ON. 6. Hardware/software configuration changes shall be carried out only under appropriate supervision. Electrical Safety: 1. MCB/electrical protection panel and proper earthing are provided. 2. Electrical protection trippers are provided for safe operation of laboratory systems. 3. Electrical power distribution is suitably protected. 4. Periodic inspection and maintenance of electrical wiring, sockets, switches, and protection devices are carried out by authorized personnel. Emergency & Security: 1. Fire extinguisher and first-aid box are provided in the laboratory. 2. CCTV surveillance is provided for safety and security. Common Do's and Don'ts Do's • Report to the laboratory on time and follow the instructions of the Faculty and Laboratory Staff. • Adhere to the prescribed laboratory dress code and safety requirements. • Keep bags, books, and personal belongings in the designated storage area. • Read and understand the experimental procedure before operating laboratory equipment. • Collect and return components and equipment through the Laboratory Staff as instructed. • Verify circuit connections, supply voltage, polarity, and grounding before switching ON the power supply. • Operate laboratory equipment only in accordance with the prescribed operating procedure. • Switch OFF the power supply before making or modifying circuit connections. • Maintain the laboratory work area in a clean and orderly condition. • Report damaged equipment, exposed wires, or other safety hazards immediately to the Faculty or Laboratory Staff. • Ensure that all equipment and power supplies are switched OFF before leaving the laboratory. • Be aware of the location of the fire extinguisher and emergency power switch. Don'ts • Do not operate laboratory equipment without proper instructions or authorization. • Do not switch ON the power supply before verifying the circuit connections. • Do not make or modify circuit connections while the power supply is switched ON. • Do not insert metal objects into electrical sockets or equipment. • Do not touch exposed wires, terminals, or high-voltage points. • Do not use damaged cables, plugs, components, or laboratory equipment. • Do not dismantle, remove, or alter any part of laboratory equipment without permission. • Do not overload electrical sockets or use unauthorized electrical connections. • Do not eat or drink inside the laboratory. • Do not run, play, or move around unnecessarily during laboratory sessions. • Do not use mobile phones or access unrelated websites, software, or applications during laboratory sessions. • Do not leave the laboratory without returning components and equipment to their designated places.
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D3. Project Laboratory/Research Laboratory

1. Centre of Excellence in VLSI/FPGA/Hardware System Design – Capgemini Technology Services Ltd.



Figure 7.5.1 Centre of Excellence in VLSI/FPGA/Hardware System Design

Purpose:

To provide industry-oriented training and hands-on learning in VLSI, FPGA, Embedded Systems, and Hardware System Design through an industry-academia collaboration and Hire-and-Train model, bridging the gap between academic learning and industry.

Learning Outcomes:

- Develop practical skills in VLSI, FPGA, Embedded Systems, and digital hardware design.
- Provide hands-on exposure to industry-standard tools, hardware platforms, and design methodologies.
- Enable students to apply theoretical concepts in real-time hardware design and implementation.
- Enhance problem-solving, design, testing, and debugging skills through practical projects.
- Facilitate industry-oriented projects, training, internships, and placement opportunities, thereby improving students' employability and industry readiness.

2. Centre of Excellence in Medical Electronics – BOSCH



Figure 7.5.2 Centre of Excellence in Medical Electronics – BOSCH

Purpose:

To facilitate student and faculty research in Medical Image Analysis and Medical Electronics through hands-on experimentation, practical exposure, and project development using the sponsored Fundus Camera, bridging the gap between academic knowledge, biomedical applications, and research-oriented innovation.

Learning Outcomes:

- Develop practical skills in fundus image acquisition, processing, analysis, and interpretation.
- Provide hands-on exposure to medical imaging equipment, image-processing tools, and biomedical technologies.
- Enable students and faculty to apply theoretical concepts in Medical Image Analysis and Medical Electronics to real-world applications.
- Enhance research, problem-solving, experimentation, and project development skills through practical investigations using fundus images.
- Facilitate student and faculty research projects, publications, interdisciplinary collaboration, and innovation in medical imaging and healthcare applications.

3. Centre of Excellence in Satellite Communication – Technology Space Centre



Figure 7.5.3 Centre of Excellence in Satellite Communication – Technology Space Centre

Purpose:

To provide students with industry-oriented training, hands-on learning, and practical exposure in Satellite Communication and Space Technology, enabling them to understand satellite communication systems, technologies, and applications while bridging the gap between academic learning and the requirements of the space and communication industry.

Learning Outcomes:

- Develop practical knowledge of satellite communication systems, satellite technologies, and space-based communication networks.
- Provide hands-on exposure to satellite communication equipment, RF systems, antennas, communication links, and related technologies.
- Enable students to apply theoretical concepts in real-time satellite communication and space technology applications.
- Enhance technical, analytical, problem-solving, and system-design skills through practical experiments and projects.

4. AICTE IDEA Laboratory - Innovation, Design and Prototyping Facility



Figure 7.5.4 AICTE IDEA Laboratory

Purpose:

To provide students with a multidisciplinary platform for innovation, design thinking, hands-on experimentation, and prototype development, enabling them to transform ideas into functional solutions through practical exposure to emerging technologies, engineering tools, and fabrication facilities.

Learning Outcomes:

- Develop practical skills in design thinking, ideation, problem-solving, and innovation.
- Provide hands-on exposure to electronics, robotics, prototyping, fabrication, and emerging technologies.
- Enable students to apply multidisciplinary engineering concepts for designing, developing, and testing functional prototypes, also enhance creativity, critical thinking, teamwork, experimentation, and technical problem-solving skills through project-based learning.
- Facilitate innovative projects, student prototypes, hackathons, competitions, entrepreneurship, and interdisciplinary research, thereby strengthening students' innovation capabilities and industry readiness.

5. Centre of Excellence in CISCO Systems – Networking Academy

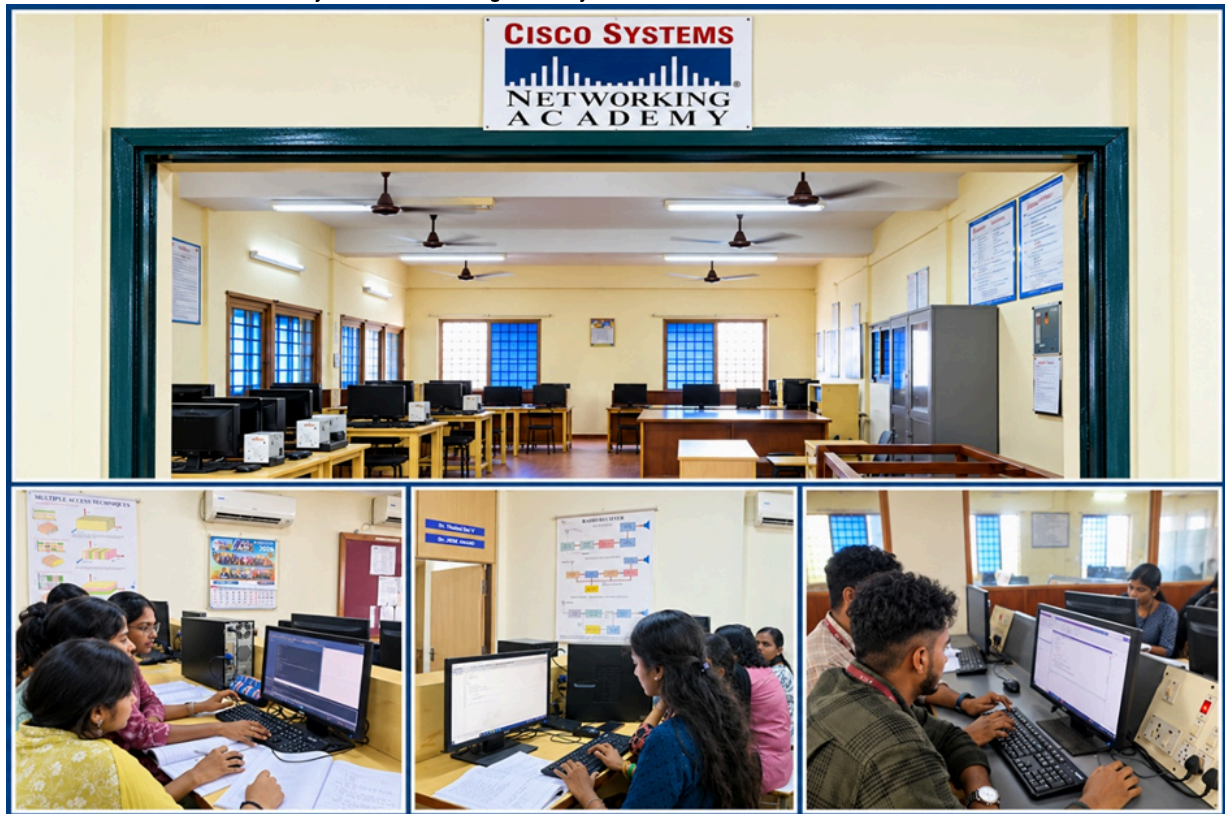


Figure 7.5.5 Centre of Excellence in CISCO Systems

Purpose:

To provide students with industry-oriented training and hands-on learning in computer networking, cyber security, and emerging digital technologies through the Cisco Train and Hire Program organized by EdCreate Foundation (EF) through Cisco Networking Academy (NetAcad), enabling them to develop industry-relevant technical skills and bridge the gap between academic learning and professional requirements.

Learning Outcomes:

- Develop practical skills in computer networking, cyber security, network infrastructure, and emerging digital technologies.
- Provide hands-on exposure to industry-standard networking tools, platforms, technologies, and practices.
- Enable students to apply theoretical concepts through practical exercises, real-world projects, and technology-based problem-solving activities.
- Enhance technical, analytical, communication, teamwork, and problem-solving skills through industry-oriented training and collaborative activities.
- Facilitate virtual internships, industry-oriented projects, hackathons, skill-development activities, certifications, and placement opportunities, thereby strengthening students' employability and industry readiness.

6. FANUC Industry supported Robotics laboratory



Figure 7.5.6 FANUC Laboratory

Purpose:

To provide students with industry-oriented training and hands-on learning in robotics, industrial automation, and advanced manufacturing technologies through the FANUC-supported Robotics Laboratory, enabling them to develop practical skills in robotic systems, automation, and industrial applications while bridging the gap between academic learning and industry requirements.

Learning Outcomes:

- Develop practical skills in industrial robotics, automation, robotic programming, and manufacturing processes.
- Enable students to apply theoretical concepts through robot programming, automation experiments, system integration, and real-world industrial applications.
- Enhance problem-solving, programming, system-design, troubleshooting, and interdisciplinary engineering skills through hands-on projects.
- Facilitate industry-oriented projects, training, internships, technical competitions, research, and placement opportunities and industry readiness.

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 $((NS1 \times 0.8) + (NS2 \times 0.2)) / (\text{No. of required faculty (RF4)})$; Percentage= $((NS1 \times 0.8) + (NS2 \times 0.2)) / RF$

2023-24(CAYm2)	810	40	29	71	94
2024-25(CAYm1)	870	44	32	57	84
2025-26(CAY)	1020	51	39	68	88

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	50000000	47971351	36000000	35925689	56000000	56163123	19000000	18729613
Library	10000000	10177352	2000000	1936280	3500000	3485117	1900000	1884910
Laboratory equipment	13000000	12851507	18000000	18012060	6500000	6354644	11000000	11651630
Teaching and non-teaching staff	215000000	217659576	185000000	185594081	155000000	153350809	142500000	141416661
Outreach Programs	10000000	10660677	0	0	3000000	2911763	3400000	3375312
R&D	7000000	7233231	5000000	5094808	3500000	3438811	1450000	1459483
Training, Placement and	22500000	22213129	26000000	26118718	18000000	18583528	8000000	8014359
SDGs	1200000	1190000	1100000	1100000	900000	880000	800000	774000
Entrepreneurship	1800000	1803993	1000000	997948	800000	762000	400000	375000
Others, specify	190000000	190074891	192000000	190888840	172500000	171452268	117500000	116536563
Total	520500000	521835707	466100000	465668424	419700000	417382063	305950000	304217531

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	1700000	1645958	2100000	1879073	1250000	1100000	1400000	1334614
Software	1100000	1025918	500000	492249	1300000	1298030	650000	438919
SDGs	90000	78300	90000	76543	75000	50500	80000	66720
Support for faculty	200000	191553	300000	343680	400000	303048	500000	422203
R & D	600000	490850	600000	570000	250000	194950	250000	197288
Industrial Training, Industry	300000	332656	300000	273000	200000	170000	200000	280600
Miscellaneous Expenses*	100000	93980	100000	89500	100000	97650	100000	93865
Total	4090000	3859215	3990000	3724045	3575000	3214178	3180000	2834209