

NATIONAL BOARD OF ACCREDITATION

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

Program Name : Electronics & Communication Engineering	Discipline: Engineering & Technology
Level : Under Graduate	Tier: 1
Application No: 10758	Date of Submission: 17-04-2026

PART A- Profile of the Institute

A1.Name of the Institute: St Joseph Engineering College	
Year of Establishment : 2002	Location of the Institute: Mangalore
A2. Institute Address: St Joseph Engineering College,Vamanjoor Post,Mangalore 575028,Karnataka State,India.	
City:Dakshina Kannada	State:Karnataka
Pin Code:575028	Website:www.sjec.ac.in
Email:dean.qa@sjec.ac.in	Phone No(with STD Code):824-2263732
A3. Name and Address of the Affiliating University (if any):	
Name of the University :Visvesvaraya Technological University	City: Belgaum
State : Karnataka	Pin Code: 590018
A4. Type of the Institution: Autonomous CAY(2021-22)	
A5. Ownership Status: Self financing	

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

- .No. of UG programs: **9**
- .No. of PG programs: **3**

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	2008	--	Computer Application
2	Engineering & Technology	UG	Artificial Intelligence and Machine Learning	2020	--	Artificial Intelligence and Machine Learning
3	Engineering & Technology	UG	Civil Engineering	2012	--	Civil Engineering
4	Engineering & Technology	UG	Computer Science and Business System	2021	--	Computer Science and Business System
5	Engineering & Technology	UG	Computer Science and Engineering	2002	--	Computer Science and Engineering
6	Engineering & Technology	UG	Computer Science and Engineering (Data Science)	2022	--	Computer Science and Engineering (Data Science)
7	Engineering & Technology	UG	Electrical and Electronics Engineering	2002	--	Electrical and Electronics Engineering
8	Engineering & Technology	UG	Electronics & Communication Engineering	2002	--	Electronics and Communication Engineering
9	Engineering & Technology	UG	Mechanical Engineering	2002	--	Mechanical Engineering
10	Engineering & Technology	UG	Electronics Engineering (VLSI Design and Technology)	2025	--	Electronics Engineering (VLSI Design and Technology)
11	Management	PG	Master of Business Administration	2007	--	Management
12	Management	PG	MBA (Innovation, Entrepreneur and Venture development)	2021	--	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
Mechanical Engineering	No	Mechanical Engineering	UG
Civil Engineering	No	Civil Engineering	UG
Electronics and Communication Engineering	No	Electronics & Communication Engineering	UG
Electrical and Electronics Engineering	No	Electrical and Electronics Engineering	UG

Table No. A7.2: Allied Department(s) to the Department of the program considered for accreditation as above. Cluster ID. Name of the department (in table no. A7.1) Name of allied Departments/Cluster (for table no. A7.1)

No record

PART-B: Program information

B1. Provide the Required Information for the Program Applied For:

Table No. B1: Program details.A. List of the Programs Offered by the Department:

SR. NO.	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/DECREASE INTAKE (if any)	YEAR OF INCREASE/DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/COMPETENT AUTHORITY APPROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCRED
1	Electronics & Communication Engineering	UG	2002 / --	60	Yes	2006	120	2002	F.No.South-West/1-44643507841/2025/EOA	Granted accreditation for 3 years for the period (specify period)	2022	2025	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 Dayakshini
B. Nature of appointment:	Regular
C. Qualification:	Ph.D

B3. Program Details

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

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2025-26 (CAY)	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)	2021-22 (CAYm4)	2020-21 (CAYm5)	2019-20 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	120	120	120	120	120	120	120
N1=Total no. of students admitted in the 1st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program	120	119	122	119	120	111	101
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	12	12	12	13	13	7
N3=Separate division if any	0	0	0	0	0	0	0
N4=Total no. of students admitted in the 1st year via all supernumerary quotas	6	6	6	6	6	6	6
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	126	137	140	137	139	130	114

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	120	6	105
2024-25 (CAYm1)	120	120	6	105
2023-24 (CAYm2)	120	122	6	107

$$\text{Average } [(ER1 + ER2 + ER3) / 3] = 105.6 \approx 100$$

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).	133.00	133.00	127.00
B=No. of students who graduated from the program in the stipulated course duration	136.00	104.00	108.00
Success Rate (SR)= (B/A) * 100	102.26	78.20	85.04

$$\text{Average SR of three batches } ((SR_1 + SR_2 + SR_3)/3): 88.50$$

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

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

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
Mean of CGPA or mean percentage of all successful students(X)	7.55	7.93	8.16
Y=Total no. of successful students	125.00	128.00	125.00
Z=Total no. of students appeared in the examination	125.00	128.00	125.00
API [X*(Y/Z)]	7.55	7.93	8.16

$$\text{Average API} [(AP1+AP2+AP3)/3] : 7.88$$

B7: Academic Performance of the Second Year Students of the Program

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

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2rd year/10)	7.5	7.63	7.65
Y=Total no. of successful students	137.00	137.00	138.00
Z=Total no. of students appeared in the examination	136.00	128.00	125.00
API [$X * (Y/Z)$]	7.56	8.17	8.45

Average API [$(AP1 + AP2 + AP3)/3$] : 8.06**B8. Academic Performance of the Third Year Students of the Program**

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

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 3rd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 3rd year/10)	7.6	7.81	7.97
Y=Total no. of successful students	137.00	136.00	129.00
Z=Total no. of students appeared in the examination	137.00	138.00	129.00
API [$X*(Y/Z)$]:	7.6	7.7	7.97

Average API [$(AP1 +AP2 + AP3)/3$] : 7.76

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	136.00	128.00	113.00
X=No. of students placed	70.00	94.00	90.00
Y=No. of students admitted to higher studies	4.00	5.00	5.00
Z= No. of students taking up entrepreneurship	0.00	0.00	0.00
Placement Index(P) = $\frac{(X + Y + Z)}{FS} * 100$:	54.41	77.34	84.07

Average Placement Index = $(P_1 + P_2 + P_3)/3$: 71.94 Placement Index Points:21.58

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 Dayakshini	XXXXXX XX86D	Ph.D	MAHE, Manipal	Bio Medical Image Processing	03/09/2004	21.8	Lecturer	Professor	01/11/2020	Regular	Yes		Yes
2	Dr Rohan Pinto	XXXXXX XX08E	Ph.D	MAHE, Manipal	VLSI Design & Embedded Systems	01/02/2019	7.2	Assistant Professor	Professor	13/03/2023	Regular	Yes		No
3	Dr Shama B N	XXXXXX XX11P	Ph.D	VTU	Biomedical Signal Processing	22/01/2007	19.3	Lecturer	Associate Professor	01/07/2025	Regular	Yes		No
4	Dr Aldrin Claytus Vaz	XXXXXX XX12A	Ph.D	MAHE, Manipal	Wireless Communication	08/11/2021	4.6	Assistant Professor	Assistant Professor GR-II		Regular	Yes		No
5	Ms Nandini Maninarayana	XXXXXX XX61L	M.Tech	NITK, Suratkal	Communication Engineering	16/08/2005	21	Lecturer	Assistant Professor		Regular	Yes		No
6	Ms Reshma K J	XXXXXX XX18P	M.Tech	VTU	Digital Electronics & Communication	22/02/2006	20.2	Lecturer	Assistant Professor		Regular	Yes		No
7	Ms Preetha D'Souza	XXXXXX XX08M	M.Tech	VTU	Digital Electronics & Communication	02/07/2012	13.10	Assistant Professor	Assistant Professor		Regular	Yes		No
8	Mr Prasad S M	XXXXXX XX52D	M.Tech	VTU	Microelectronic s & Control System	16/07/2012	13.9	Lecturer	Assistant Professor		Regular	Yes		No

9	Mr Vijay Ganesh P C	XXXXXX XX35Q	M.Tech	Kalasalingam University	VLSI Design	23/01/2013	13.4	Assistant Professor	Assistant Professor		Regular	Yes		No
10	Ms Chaitra U R	XXXXXX XX67P	M.Tech	VTU	Digital Electronics & Communication	15/07/2013	12.9	Lecturer	Assistant Professor		Regular	Yes		No
11	Ms Deepthi S R	XXXXXX XX41E	M.Tech	VTU	Microelectronics & Control System	15/07/2013	12.9	Lecturer	Assistant Professor		Regular	Yes		No
12	Ms K Aarya Shri	XXXXXX XX59E	M.Tech	VTU	Digital Communication & Networking	06/01/2014	12.3	Lecturer	Assistant Professor		Regular	Yes		No
13	Mr Keith R. Fernandes	XXXXXX XX43C	M.E.	University of Western Australia	Microelectronics	01/07/2014	11.10	Assistant Professor	Assistant Professor		Regular	Yes		No
14	Ms Padmini Bhat	XXXXXX XX81E	M.Tech	VTU	Digital Electronics & Communication	13/08/2007	18.9	Lecturer	Assistant Professor		Regular	Yes		No
15	Ms Priya Seema Miranda	XXXXXX XX46M	M.Tech	VTU	Power Electronics	18/07/2016	9.9	Assistant Professor	Assistant Professor		Regular	Yes		No
16	Ms Florence Nishmitha	XXXXXX XX15E	M.Tech	VTU	VLSI Design & Embedded Systems	13/09/2021	4.8	Assistant Professor	Assistant Professor		Regular	Yes		No
17	Ms Madhavi Gatty	XXXXXXX 80G	M.Tech	VTU	Power Electronics	30/05/ 2022	6	Assistant Professor	Assistant Professor		Regular	Yes		No
18	Ms Simi P Thomas	XXXXXX XX14G	M.E.	Anna University	Applied Electronics	01/12/2022	3.5	Assistant Professor	Assistant Professor		Regular	Yes		No
19	Ms Vinitha Pasanha	XXXXXX XX53Q	M.Tech	VTU	VLSI Design & Embedded Systems	11/09/2023	2.8	Assistant Professor	Assistant Professor		Regular	Yes		No
20	Ms Savitha J	XXXXXX XX16E	M.Tech	VTU	Microelectronics & Control System	16/10/2023	2.7	Assistant Professor	Assistant Professor		Regular	Yes		No
21	Ms Jane Maria Wilma Lasrado	XXXXXX XX64R	M.Tech	VTU	Digital Electronics & Communication	02/01/2024	2.5	Assistant Professor	Assistant Professor		Regular	Yes		No
22	Ms Avila Priya Pinto	XXXXXX XX87E	M.Tech	VTU	Electronics	05/07/2013	10.1	Lecturer	Assistant Professor		Regular	No	26/08/2023	No
23	Ms Rupal M D D'Souza	XXXXXX XX79C	M.Tech	VTU	Digital Electronics & Communication	06/01/2014	9.7	Assistant Professor	Assistant Professor		Regular	No	31/08/2023	No

24	Dr Arjun Sunil Rao	XXXXXX XX25M	Ph.D	VTU	Fuel Cells	13/02/2023	0.7	Assistant Professor	Assistant Professor		Regular	No	05/10/2023	No
25	Dr Roshan R Naik	XXXXXX XX90A	Ph.D	MAHE, Manipal	Bio Medical Image Processing	22/08/2022	1.11	Assistant Professor	Associate Professor	22/08/2023	Regular	No	31/07/2024	No
26	Mr Radhakrishna	XXXXXX XX34E	M.Tech	VTU	Digital Communication & Networking	06/11/2023	0.10	Assistant Professor	Assistant Professor		Regular	No	04/10/2024	No
27	Ms Vijayalaxmi H M	XXXXXX XX63G	M.Tech	VTU	Digital Electronics & Communication	16/08/2005	19.9	Lecturer	Assistant Professor		Regular	No	30/06/2025	No
28	Mr Glenson Toney	XXXXXX XX12G	M.Tech	VTU	VLSI Design & Embedded Systems	27/09/2021	3.8	Assistant Professor	Assistant Professor		Regular	No	12/07/2025	No
29	Ms Jayalakshmi K P	XXXXXX XX22B	M.Tech	VTU	Digital Electronics & Communication	16/07/2014	10.10	Lecturer	Assistant Professor		Regular	No	18/07/2025	No
30	Dr Jennifer Charlotte Saldanha	XXXXXX XX07F	Ph.D	VTU	Speech Processing & Machine Learning	28/01/2008	17.4	Lecturer	Assistant Professor		Regular	No	14/08/2025	No
31	Ms Aswathi T	XXXXXX XX36F	M.Tech	Amritha Vishwavidya peetham	Embedded Systems	26/12/2022	2.5	Assistant Professor	Assistant Professor		Regular	No	30/08/2025	No

C2. Student-Faculty Ratio (SFR)

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

UG1=1st UG program

UGn=nth UG program

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

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

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

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

PG1=1st PG program.

PGm=mth PG program

A= No. of Students in PG 1st year **B**= No. of Students in PG 2nd year Student Faculty Ratio (**SFR**) = S/F
S= No. of students of all programs in the Department including all students of allied departments/clusters.

No. of students (ST)=Sanctioned Intake (SA)+ Actual admitted students via lateral entry including leftover seats (L) if any (limited to 10 % of SA) Students who admitted under supernumerary quotas (SNQ, EWS, etc) will not be considered in calculating SFR value. Those students are exempted.

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

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

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

Description	CAY (2025-26)	CAYm1 (2024- 25)	CAYm2 (2023- 24)
UG1.B	132	132	132
UG1.C	132	132	132
UG1.D	132	132	132
UG1: Electronics & Communication Engineering	396	396	396
DS=Total no. of students in all UG and PG programs in the Department	396	396	396
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= 396	S2= 396	S3= 396
DF=Total no. of faculty members in the Department	21	25	23
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= 25	F3= 23
FF=The faculty members in F who have a 100% teaching load in the first-year courses	3	3	3
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1= 22.00	SFR2= 18	SFR3= 19.80
Average SFR for 3 years	SFR= 19.93		

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)	4	17	19.00	14.21
2024-25(CAYm1)	4	21	19.00	16.32
2023-24(CAYm2)	3	20	19.00	14.47

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 AF2	Required RF3	Available AF3
2025-26	2	2	4	1	13	18
2024-25	2	2	4	0	13	21
2023-24	2	2	4	1	13	18
Average	RF1=2	AF1=2	RF2=4	AF2=0.66	RF3=13	AF3=19

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 Pavan Raj	Adjunct faculty	Karmic Design Pvt Ltd	Advanced VLSI Design CMOS VLSI	52.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	-	-	-	-	0.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	-	-	-	-	0.00

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	14	11	5
2	No. of peer reviewed conference papers published	14	8	4
3	No. of books/book chapters published	1	2	4

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 Jennifer Charlotte Saldanha		Department of Electronics and Communication Engineering	IEEE DEIAB Activities	IEEE	1 Year	\$1000(0.93)
Dr Jennifer Charlotte Saldanha		Department of Electronics and Communication Engineering	IEEE GRSS	IEEE	1 Year	\$2400(2.23)
Ms Priya Miranda	Mr Vijay Ganesh	Department of Electronics and Communication Engineering	Green Sakhi: Empowering Women Through Verified Climate Action	MRPL	1 Year	1.00
Dr Jennifer Charlotte Saldanha		Department of Electronics and Communication Engineering	Smart-Steer: Advanced Driver Assistance Using Lane and Collision Detection	KSCST	1 Year	0.045
Ms Vijayalaxmi H Manjunatha		Department of Electronics and Communication Engineering	Dry Solar Panel Cleaning System	KSCST	1 Year	0.045
Ms Jayalakshmi K P		Department of Electronics and Communication Engineering	Multi Terrain Industrial Patrolling and Monitoring Robot	KSCST	1 Year	0.045
Ms Florence Nishmitha		Department of Electronics and Communication Engineering	Sahay- Smart Assistant Bot	KSCST	1 Year	0.040
Ms Shama B N		Department of Electronics and Communication Engineering	Ai Physiotherapy Assistant for Breast Cancer Patients	KSCST	1 Year	0.045
Mr Glenson Toney			Hivelink	Azim Premji University	2 Years	0.70
Mr Glenson Toney			Hivelink	Udyam Saathi	2 Years	0.25
Amount Received (Rs.) 5.33						

(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
Mr Keith R Fernandes	Dr Dayakshini	Department of Electronics and Communication Engineering	Implementation of Post Quantum Cryptography Algorithm using Ring Learning with Errors	VGST	1 Year	3.00
Mr Glenson Toney		Department of Electronics and Communication Engineering	An Autonomous Agricultural Machinery for enhancing Plant Disease Detection and Real Time Analysis	Central Manufacturing Technology Institute (CMTI)	6 Months	1.672
Ms. Aswathi T		Department of Electronics and Communication Engineering	Hand tremor suppression gloves for Parkinson's patients	KSCST	1 Year	0.06
Dr. Roshan R. Naik		Department of Electronics and Communication Engineering	Projection matrix estimation in 3D-2D ICP registration	KSCST	1 Year	0.05
Ms. Nandini Maninarayana, Mr. Suresh M		Department of Electronics and Communication Engineering	High-speed internet connectivity using li-fi	KSCST	1 Year	0.05
Mr. Radhakrishna		Department of Electronics and Communication Engineering	Non-invasive blood glucometer	KSCST	1 Year	0.05
Dr. Jennifer Charlotte Saldanha		Department of Electronics and Communication Engineering	Hear ally app for enhancing hearing health through mobile solutions for meniere's disease	KSCST	1 Year	0.05
Amount received (Rs.):4.927						

(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
Ms Deepthi S R		Department of Electronics and Communication Engineering	Automated rubber tapping & rubber milk mixing machine	KSCST	1 Year	0.45
Ms. Jayalakshmi K P, Ms. Priya Seema Miranda		Department of Electronics and Communication Engineering	Nystagmus detection in vertigo patients using balance eye detector	KSCST	1 Year	0.06
Mr. Glenson Toney		Department of Electronics and Communication Engineering	Smart health monitoring system for pregnant - AMIE	KSCST	1 year	0.06
Ms. Jennifer Charlotte Saldanha		Department of Electronics and Communication Engineering	Rainfall prediction and measurement for enhancing crop-yield based on machine learning and artificial intelligence	KSCST	1 Year	0.05
Mr. Prasad S M		Department of Electronics and Communication Engineering	Real time solid waste monitoring and construction of a power electronic source for cold plasma generation	KSCST	1 Year	0.04
Amount received (Rs.):0.66						

Total Amount (Lacs) Received for the Past 3 Years: 10.917

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)
-	-	-	-	-	-	0.00
						Amount received (Rs.):0.00

(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
-	-	-	-	-	-	0.00
						Amount received (Rs.):0.00

(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
-	-	-	-	-	-	0.00
						Amount received (Rs.):0.00

Total amount (Lacs) received for the past 3 years: 0.00

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 the activity	Duration	Amount (Lacs)	Amount Utilized (Lacs)	Outcomes of the project
Ms Padmini Bhat	AI - Powered Medical Imaging for Brain Hemorrhage identification	1 year	0.40	0.0903	Data Collection completed, ML algorithm is implemented
Ms Nandini Maninarayana Mr Vijay Ganesh P C	Wireless device for Dynamic Assessment of Motor Function of Lower Limbs in patients	2 years	1.5486	1.03	Testing Phase
Amount Received (Rs.) 1.94865					

(CAYm2)

Faculty name	Project title/ Support for Activity	Duration	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Ms Nandini Maninarayana, Mr Vijay Ganesh P C	Wireless device for Dynamic Assessment of Motor Function of Lower Limbs in patients	2 Years	1.5486	1.03	In the process of applying for Patent
Dr Aldrin Claytus Vaz , Mr Glenson Toney	Optimization of Visible Light Communication Framework using 5G	2 Years	0.93	0.27	Hardware Prototype Completed
Amount Received (Rs.): 2.4786					

(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
-	-	-	0.00	0.00	-
Amount received (Rs.): 0.00					

Total amount (Lacs) received for the past 3 years : 4.4272

PART D: Laboratory Infrastructure in the Department

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

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

SI No	Name of the Laboratory	No.of students per setup (Batch Size)	Name of the major Equipment	Weekly Utilization status (all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical Staff	Designation	Qualification
1	Analog Circuits Lab/ Analog Communication Lab	24	Digital Storage scilloscopes (100MHz)	2 Hrs (6 Batches per Week) /(12 hrs per week)	Ms Saritha	Lab Instructor	Diploma in ECE
			60MHz 2 Channel MSO				
			Signal Generators (25MHz)				
			Arbitrary Function Generator (2MHz)				
			Fixed Power Supply (+/- 15V)				
			Variable Power Supply (0 – 32V)				
			Power Supply (5V)				
			Analog IC Tester				
			Decade R,L,C boxes				
			DSBSC Kits				
			Frequency Mixer Kits				
			Pulse Position Modulator & Demodulator kit				
SSB system Trainer kit							

			Pulse Width Modulator & Demodulator kit Digital Multimeters Desktop Computers (Intel i7, 8GB RAM, 500GB HDD, 240GB SSD, Windows 10) MATLAB Software R2026a NI Multisim Software 14.2 LCD Projector Printer				
2	Digital Design Lab	24	Desktop Computers (Intel i5, 14th Gen, 16GB RAM, 512GB SSD, Windows 11) NI Multisim Software 14.2 MATLAB Software R2026a LCD Projector Printer Digital Trainer Kits Digital IC Tester Digital Multimeter	2 Hrs (6 Batches per Week) /(12 hrs per week)	Ms Divya D'Souza	Foreman	Diploma in ECE, AMIE
3	VLSI Lab/SJEC Karmic IOT Lab	24	Cadence VLSI Design Tool MATLAB Software R2026a Dell T-440 Tower Server, Intel Xeon 16GB, 8GB RDIMM, 2TB HDD Desktop Computers (Intel i5, 8GB/16GB RAM, 500GB Harddisk, 512 GB SSD, Redhat/ Windows 11) LCD Projector	2 Hrs (6 Batches per week)/ (12 hrs per week)	Ms Radhika	Lab Instructor	Diploma in ECE,(AMIE)

			Printer				
4	Digital Signal/ Image Processing Lab	24	MATLAB Software R2026a Desktop Computers (Intel i5 11th Gen, 16GB RAM, 1TB Hard disk, 512GB SSD, Windows 11) DSP TMS320C674810MAP L138L LCDK kits DSK-6713 kits with Code Composer Studio LCD Projector Printer Amplifier set BTA 550	2 Hrs (6 Batches per week) /(12 hrs per week)	Ms Harshitha	Lab Instructor	Diploma in ECE
5	Digital Design Using Verilog HDL Lab/ Arm Processor and Microcontroller Lab	24	Xilinx Vivado software 2018.2 Nexys 4 DDR-Artix-7 FPGA Boards MATLAB software R2026a Keil μ -vision 5 Software Desktop Computers (Intel i5 11th Gen, 16GB RAM, 1TB Harddisk, 512GB SSD, Windows 11) Analog Discovery Kits TIVA TM4C123G Based Starter Kits ARM CORTEX-M3 LPC1768 Trainer Kits & Accessories Pattern Generator/ Logic Analyzer Kits And Interface Cards Aplab Hardware Description Language Kits LCD Projector	2 Hrs (6 Batches per week) / (12 hrs per week)	Ms Bhagya	Lab Instructor	Diploma in ECE

			Printer				
6	Digital Communication Lab	24	Microwave Test Bench Setups	2 Hrs (6 Batches per week) /(12 hrs per week)	Ms Divya K V	Lab Instructor	Diploma in ECE
			Micro Strip Setups				
			Advanced Communication Kits				
			Optical Fiber Kits				
			Analog Communication Kits				
			Digital Storage Oscilloscopes (DSO),100MHz				
			Digital Dual AFO				
			Analog & Digital AFO				
			Dual Power Supplies (+/- 15V)				
			Variable Power Supplies				
			Decade R, C boxes				
			Analog IC Tester				
			LCR Meter				
Digital Multimeter							
7	Computer Communication Networks Lab/ Network Theory Lab	24	Desktop Computers (Intel i5, 8GB RAM, 1TB HDD, Fedora/ Windows 11)	2 Hrs (6 Batches per week) /(12 hrs per week)	Ms Rajitha	Lab Instructor	Diploma in ECE, (AMIE)
			NS3 Software				

			GNU C-Compiler				
			MATLAB Software R2026a				
			NI Multisim Software 14.2				
			LCD Projector				
			Printer				

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

SI No	Name of the Laboratory	Safety Measures
1	Analog Circuits Lab/ Analog Communication Lab	First Aid Kit
		All experiments are conducted on the wooden tables
		Instructions for Safety measures are displayed
		Fire Extinguisher
		Fire Hydrants
2	Digital Design Lab / Project Lab-I	CCTV cameras are installed for surveillance
		First Aid Kit
		All experiments are conducted on the wooden tables
		Instructions for Safety measures are displayed
		Fire Extinguisher
3	VLSI Lab/Project Lab-II /SJEC Karmic IOT Lab	Fire Hydrants
		CCTV cameras are installed for surveillance
		First Aid Kit
		Instructions for Safety measures are displayed
		Fire Extinguisher
4	Digital Signal/ Image Processing Lab	Fire Hydrants
		CCTV cameras are installed for surveillance
		First Aid Kit
		Instructions for Safety measures are displayed
		Fire Extinguisher

5	Digital Design Using Verilog HDL Lab/ Arm Processor and Microcontroller Lab	First Aid Kit
		Instructions for Safety measures are displayed
		Fire Extinguisher
		Fire Hydrants
		CCTV cameras are installed for surveillance
6	Digital Communication Lab	First Aid Kit
		All experiments are conducted on the wooden tables
		Instructions for Safety measures are displayed
		Fire Extinguisher
		Fire Hydrants
CCTV cameras are installed for surveillance		
7	Computer Communication Networks Lab/ Network Theory Lab	First Aid Kit
		Fire Extinguisher
		Fire Hydrants
		Instructions for Safety measures are displayed
8	PCB Lab	First Aid Kit
		Fire Extinguisher
		Fire Hydrants
		Instructions for Safety measures are displayed
9	Bio Medical Electronics Lab/Samarthya club	First Aid Kit
		Fire Extinguisher
		Fire Hydrants
		Instructions for Safety measures are displayed
10	Research Center	First Aid Kit
		Fire Extinguisher
		Fire Hydrants
		Instructions for Safety measures are displayed

D3. Project Laboratory/Research Laboratory

The Department of ECE has established the project lab for the benefit of the students and faculty to carry out their project and research work. The project laboratory offers the students the opportunity to gain valuable hands-on experience in a state-of-the-art environment where students become proficient in the skills needed in the field of Electronics and Communication Engineering. Various equipment and laboratories of the department are used by students for completion of their projects.

Students are provided with necessary components such as Raspberry Pi, sensors, motors, and other equipment available in the lab to carry out their projects. These components are issued to students at the beginning of the semester and are returned after project completion.

Table D3.1 shows the facilities of Project Laboratory/Research Laboratory

Name of the Lab	Area in Sq m	Capacity	Major Equipments
Project Lab I	132	70	Raspberry Pi4 8GB ultimate Kit and accessories
			MS. EXP430G2MSP430 LaunchPad
			Arduino UNo R3 Board Compatible and Accessories
			Arduino UNo R3 ATmega and Accessories
			MSP 430 Lunchbox
			ALS PCI07 IO Interfacing cards
			8051 Microcontroller Trainer Kits
			Microcontroller VT-8051-4.1 Kits & accessories
			Microcontroller 89C61X2 Flash Kits & interface Cards
			Microcontroller Assembling Kits with accessories
			MSP430 Kits & Software with accessories
LCD Display Module			

			7 Segment Display Module
			LED Display Module
			ADC Interfacing Module
			DAC Interfacing Module
			HEX Keypad Interfacing Module
			Toggle Switch Interfacing Module
			Stepper motor Interfacing Module
			DC Motor Interfacing Module
Project Lab-II	109	60	Desktop Computers (Intel i5,16GB/8GB RAM,500GB HDD,512GB SSD, Red hat/Windows 11
			Embedded Starter Kit
			Embedded C Kit
			Raspberry PI 3 B+ and its Accessories
			UNO R3 & its Accessories
			PIC Starter Kit
			PIC C Kit
			ARM Kit
			RTOS Learner Kit
			RFID-Arm Project Kit
			RFID 8051 Project Kit

			ARM Version 2
			EVAT Kit
			Canon LBP 2900 Printer
			MATLAB R2026a software
			5V Power Supply
			Pulse Position Modulator & Demodulator kit
			SSB system Trainer kit
			Pulse Width Modulator & Demodulator kit
			Digital Storage Oscilloscopes (DSO)-100MHz
			60MHz 2+16 Channel MSO
			LCR Q Meter
			Arbitrary Function Generator(25Mhz)
			Evaluation Board (Arm Processor)
			Universal Programmer
Research Lab	40	12	Xilinx artix-7 FPGA AC701 Evaluation kit
			FPGA Development Board -Zed board Zynq-7000 ARM
			ZYBO Z7 Zynq -7010 ARM/FPGA SoCPlatform+SDSoC
			Analog Discovery Kit

			Dell Power edge T20 Tower server
			Intel Xeon E3-1225V3 16 GB RAM,2 TB x 2 HDD
			Desktop Computers(Intel i7,16 GB RAM,1 TB Harddisk,512 GB SSD, Windows 11)
			RSoft OptSIM v 2020-9 Software
			MATLAB R2026a software
			Pmod WiFi, Bluetooth, GPS Receiver Interface
			Rees 52 Raspberry Pi Touch Screen (3.5 inch)
			Sony ICD-UX560F Digital Voice Recorder with inbuilt USB
			NI Multisim Software 14.2.

Below Figure D3.2.shows the sample pictures of major equipment of Project Laboratory.



Figure No D3.2: Major equipment of Project Laboratories.

Below Figure D3.3 shows the sample pictures of major equipment of the Research Laboratory.

BALANCE EYE DETECTOR

Balance Eye – Clinical Diagnostic System For Diagnosing Vertigo And Balance Disorders.
Cost Involved: Rs. 2,24,000/-



SPECIFICATIONS

❑ Interface	USB
❑ Power Supply	Input 100-240V AC - 50/60 Hz Output 5V DC
❑ Camera	2 eye tracking camera
❑ Illumination	1R LED
❑ Software	Windows 10 and higher
❑ Goggles dimension	21cm * 10cm * 9cm
❑ Goggle weight	320 gms with cable
❑ Multi interface unit dimension	16cm * 10cm * 3cm
❑ Multi interface unit weight	125 gms



Xilinx Artix – 7 FPGA AC701

Project Title : Implementation of PQC Algorithm using Ring- LWE
Cost Involved : 2,18,300/-
Major Equipment : Xilinx Artix – 7 FPGA AC701 Evaluation Kit

SPECIFICATIONS

- ❑ Artix®-7 devices provide the highest performance-per-watt fabric, transceiver line rates, DSP processing, and AMS integration in a cost-optimized FPGA.
- ❑ Featuring the Micro Blaze soft processor and 1,066Mb/s DDR3 support
- ❑ Power-sensitive applications including software-defined radio, machine vision cameras, and low-end wireless backhaul.
- ❑ 64-Channel Portable Ultrasound
- ❑ Wireless Backhaul: Point-to-Point 1024QAM Microwave Modem
- ❑ Multi-Protocol Machine Vision Camera
- ❑ Programmable Logic Controller
- ❑ Battery Powered Software Defined Radio





FPGA Development Board :ZYBO Z7 Zynq -
7010 ARM/FPGA SoCPlatform+SDSoC



FPGA Development Board :Zed board
Zynq-7000 ARM

Figure No D3.3: Major equipment of Research Laboratory

LIST OF FUNDED PROJECTS

Below Table D3.4 shows the details of List of funded projects during the year 2023-2024

Table No: D3.4: Details of funded projects during the year 2023-2024

Sl. No.	Name of the Guide	Project Title	Funding Agency	Amount Sanctioned (in Rs.)
1	Ms. Nandini Maninarayana	High-speed internet connectivity using li-fi	KSCST	5000
2	Mr. Radhakrishna	Non-invasive blood glucometer	KSCST	5000
3	Dr. Jennifer Charlotte Saldanha	Hear ally app for enhancing hearing health through mobile solutions for meniere's disease	KSCST	5000
4	Ms. Aswathi T	Hand tremor suppression gloves for parkinson's patients	KSCST	5500
5	Dr. Roshan R. Naik	Projection matrix estimation in 3D-2D ICP registration	KSCST	5000
6	Mr Aldrin Claytus Vaz & Mr Glenson Toney	Optimization of Visible Light Communication Framework using 5G Forward Error Correction Coding techniques for Application towards Vehicle-to-Vehicle Communication	SJEC Seed Money	93,000
7	Ms Nandini Maninarayana & Mr Vijay Ganesh P C	Wireless device for Dynamic Assessment of Motor Function of Lower Limbs in patients	SJEC Seed Money	1,54,860
8	Mr Keith R Fernandes	Implementation of Post Quantum Cryptography Algorithm using Ring Learning with Errors	VGST	3,00,000
9	Mr Glenson Toney	An Autonomous Agricultural Machinery for enhancing Plant Disease Detection and Real Time Analysis	Central Manufacturing Technology Institute (CMTI)	1,67,200

Below Table D3.5 shows the details of List of funded projects during the year 2024-2025

Table No: D3.5: Details of funded projects during the year 2024-2025

Sl. No.	Name of the Guide	Project Title	Funding Agency	Amount Sanctioned (in Rs.)
1	Dr. Jennifer Charlotte Saldanha	Smart-Steer: Advanced Driver Assistance Using Lane and Collision Detection	KSCST	4500
2	Ms. Vijayalaxmi H M	Dry Solar Panel Cleaning System	KSCST	4500
3	Ms. Jayalakshmi K P	Multi Terrain Industrial Patrolling And Monitoring Robot	KSCST	4500
4	Ms. Florence Nishmitha	Sahay- Smart Assistant Bot	KSCST	4500
5	Ms. Shama B N	HER-ALLY: AI Physiotherapy Assistant For Breast Cancer Patients	KSCST	4500
6	Ms. Padmini Bhat	AI - Powered Medical Imaging for Brain Hemorrhage identification	SJEC Seed Money	40,000
7	Mr Glenson Toney	Hivelink	Azim Premji University	70,000
8	Mr Glenson Toney	Hivelink	Udyam Saathi	25,000

Below Table D3.6 shows the details of List of funded projects during the year 2025-2026

Table No: D3.6: Details of funded projects during the year 2025-2026

Sl. No.	Name of the Guide	Project Title	Funding Agency	Amount Sanctioned (in Rs)
1	Ms. Priya Miranda & Mr Vijay Ganesh P C	Green Sakhi (Empowering Women Through verified Climate Action)	MRPL	100000
2	Ms. Florence Nishmitha	Real-Time IOT-Based Monitoring And AI-Driven Insights For Bee Colony Management	KSCST	5000
3	Dr. Shama B N	EEG-Based Assistive Communication System for Aphasic Patients	KSCST	5000
4	Ms. Padmini Bhat	Aquatron- A Smart Tank Cleaning System	KSCST	5000

Prize Winning Projects

Below Figure: D3.7 shows the few prize winning projects



ST. JOSEPH ENGINEERING COLLEGE MANGALURU
AN AUTONOMOUS INSTITUTION

Proudly announces the launch of the Project
Green Sakhi
Empowering Women Through Verified Climate Action

An initiative by the
Department of Electronics & Communication Engineering at SJEC

Green Sakhi supports women in doing **CLIMATE-FRIENDLY ACTIVITIES** and recording them through a **CUSTOMIZED SJEC MOBILE APP** to show their impact on the environment.

The Project is Sponsored by
Mangalore Refinery and Petrochemicals Limited (MRPL)

UN Sustainable Development Goals:

STUDENT LEADERS:
Mr Kishan Kumar - III Year ECE
Mr Mohammed Shaheed - III Year ECE

FACULTY MENTORS
Ms Priya Miranda - ECE | Dr Binu K G - ME | Dr Ashwin Shetty - ME
| Mr Vijay Ganesh - ECE | Mr Roopesh - MBA



मंगलूर रिफाइनरी एण्ड पेट्रोकेमिकल्स लिमिटेड
MANGALORE REFINERY AND PETROCHEMICALS LIMITED

अनुसूची 'ए' के अंतर्गत भारत सरकार का उपक्रम, SCHEDULE 'A' GOVT. OF INDIA ENTERPRISE
(सीएस एवं नेचुरल गैस इंफ्रस्ट्रक्चर लिमिटेड की सहायक कंपनी, A SUBSIDIARY OF OIL AND NATURAL GAS CORPORATION LIMITED)
आईएसओ 9001, 14001 एवं 50001 प्रमाणित कंपनी, AN ISO 9001, 14001 AND 50001 CERTIFIED COMPANY.

सौभाग्यपुर: L1520NKA1MNGC0888999 / वेबसाइट: www.mrpl.co.in | फ़ोन: Mangalore: 0824-2279400, E-mail: mrpl@mrpl.co.in

रिलीज ऑर्डर Release Order

CC/4-696 -- 06.03.2026 --

सेवा में To
Professor,
St Joseph Engineering College, Mangaluru, --

प्रिय महोदय Dear Sir,

विषय : ग्रीन सखी के लिए प्रायोजन
Sub: Sponsorship for Green Sakhi: Empowering Women through Verified Climate Action--

कृपया अपने पत्र दिनांक 24 फरवरी 2026 के संदर्भ में आपको बहुत आनंदक खुशी हो रही है। एचआरटीएस ने आपके द्वारा आयोजित होने वाले ग्रीन सखी में प्रायोजक होने का निर्णय लिया है। आपको इस कार्यक्रम के दौरान एचआरटीएस का लोगो/बैनर प्रदर्शित करना होगा। Reference is made to your letter dated 24th February, 2026, you would be happy to know that MRPL will sponsor the Green Sakhi : Empowering Women Through Verified Climate Action to be organized by you. This sponsorship is in lieu of display of MRPL Logo/Banner during the event. --

कृपया Rs. 1,00,000/- (एक लाख मात्र) का बीजक बैचलर कर, डिफरेंसिबल के समर्थन में प्रमाण संलग्न करने हुए, विवरित बताने हुए बिल चर्च (संलग्न) सहित हमारे कार्यालय पर पत्र के साथ प्रेषित करने की कृपा करें। Kindly raise an invoice for Rs. 1,00,000/- (Rupees Thirty Thousand only) and submit the same along with the duly filled Vendor Form (enclosed) and supporting proofs for the following:

- कार्यक्रम स्थल पर MRPL के लोगो / बैचलर का प्रदर्शनी प्रदर्शन
Effective display of MRPL's logo/banners at the venue --
- सोशल मीडिया कवरेज से संबंधित प्रमाण
Proof of media coverage --
- डिजिटल माध्यम में फ्लैगशिप / खुशी का प्रदर्शन
Display of creatives/movie in digital format --
- प्रचार सामग्री में MRPL के नाम का उल्लेख
Display of MRPL's name in publicity materials --
- सोशल मीडिया कवरेज
Social media coverage --

उपरोक्त सभी के समर्थन में प्रमाण प्रोटोफॉलस एवं/वा वीडियो क्लिपिंग्स के रूप में प्रस्तुत किए जाने आवश्यक हैं।
All the above proofs shall be submitted in the form of photographs and/or video clippings.





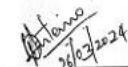
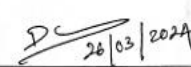
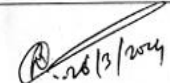
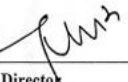
Figure No: D3.7: Sample pictures of Prize Winning Projects

Centre of Excellence

Support for Biomedical Projects

A significant number of students work on biomedical projects. For data collection and validation, they are supported by **Father Muller Medical College** and **KMC Hospital Mangaluru**, with which we have established MOUs. These collaborations provide students with access to clinical data and resources, further enhancing the quality of their projects.

Below Figure D3.8 shows the MOUs with Father Muller Medical College and KMC Hospital Mangaluru

St Joseph Engineering College Mangaluru-575028		
MOU Metadata Sheet		MOU No: SJEC/CO/MoU/2019/07
1. Collaborator:	Father Muller Charitable Institutions	
2. Prime Purpose:	To promote academic co-operation and exchange of domain knowledge of materials in education and research, publications and academic information.	
3. MOU Type:	Research	
4. Date of Signing:	12-03-2024 (Renewed)	
5. Signatories:	Director of SJEC and Director of FMCI, Mangaluru	
6. Date of Expiry:	11-02-2029	
7. Notice Period:	One month	
8. Anchoring Department:	Electronics and Communication Engineering	
9. Contact Person:	Dr Dayakshini, HOD of ECE	
10. Departments for Collaboration:		
Name of the Department	Role/Scope	Coordinators
ECE	Coordinating with Father Muller Charitable Institutions to explore mutual research interests.	Dr Dayakshini
11. Reporting Requirements:	Annual report is to be submitted	
12. Special Terms & Conditions:	If the agreement is not renewed by mutual consent, the agreement will conclude at the end of the specific time period, or after activities in progress have concluded.	
 Collaborations Officer		 Faculty Coordinator
 Principal		 Director


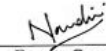

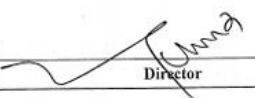
St Joseph Engineering College Mangaluru-575028		
MOU Metadata Sheet		MOU No: SJEC/CO/MoU/2023/11
1. Collaborator:	Manipal Academy of Higher Education, Manipal, (KMC) Mangaluru	
2. Prime Purpose:	Is to promote academic cooperation like exchange of materials in education and research, publications and academic information, faculty as well as research scholars and students	
3. MOU Type:	Joint research projects, teacher & student exchange programs	
4. Date of Signing:	30 October 2023	
5. Signatories:	Director of SJEC and Dean, Professor Community Medicine, KMC	
6. Date of Expiry:	30 June 2028	
7. Notice Period:	Four months	
8. Anchoring Department:	Electronics and Communication Engineering	
9. Contact Person:	Ms Nandini Maninarayana, Assistant Professor	
10. Departments for Collaboration:		
Name of the Department	Role/Scope	Coordinators
ECE	Coordinate the interventions and other plans of actions on SJEC campus.	Ms Nandini Maninarayana
11. Reporting Requirements:	Six Months	
12. Special Terms & Conditions:	The term of this agreement shall be 5 years from the date of execution of this MoU. In case party wants to terminate this MoU, a written notice shall be given to the other party 6 months before the termination of the MoU. If notice of the termination has been given under this clause, the parties will agree in writing a mechanism ensuring that the ongoing activities, course or programs are completed.	
 Collaborations Officer		 Faculty Coordinator
 Principal		 Director

Figure No : D3.8: MOUs with Father Muller Medical College and KMC Hospital Mangalore

Below Figure D3.9 shows the students took advantages of MOUs

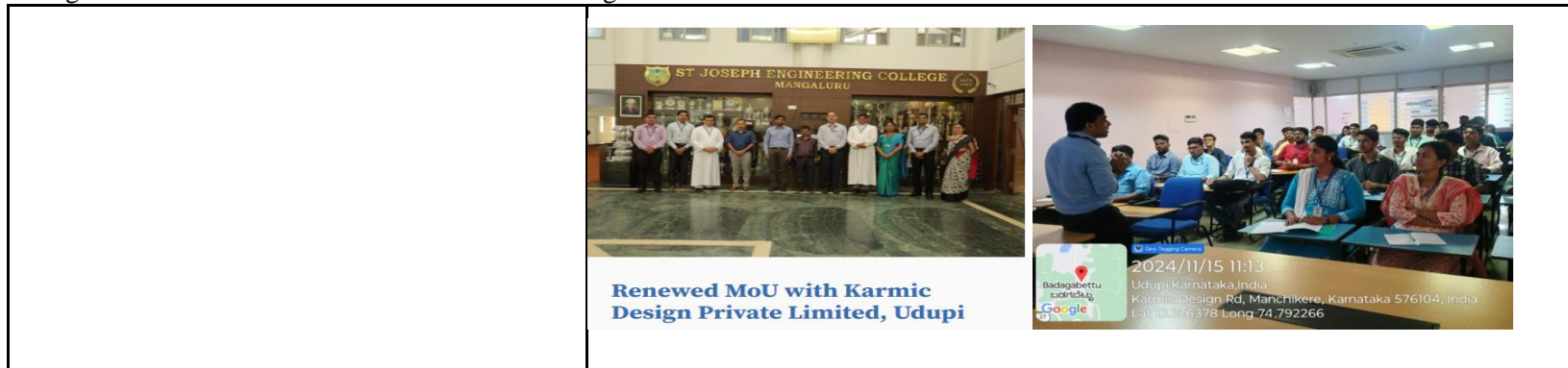


Figure No: D3.9: Sample pictures of students who took advantages of MOUs

Support for VLSI-Based Projects

Some students take up projects based on **VLSI design**. To support them, we have an MOU with **Karmic Design Pvt. Ltd.**, a semiconductor-based industry. This collaboration provides students with the necessary industry exposure.

Below Figure D3.10 shows the MOUs with Karmic Design Pvt. Ltd. and Students use of MOUs



**ARTICLE 7
NOTICES**

- 7.1 Any communication made by one party to the other under this MOU shall be in writing in the English language and shall be addressed to the party's authorized office as is designated in writing.
- 7.2 Appointment and change of the SPOC will be informed by the authorized representative of SJEC in writing.
- 7.2 Authorized representatives of SJEC and KarMic shall sign two original Memorandum of Understanding documents. Each party shall hold one original signed MoU, with both documents being equally authentic.

For SJEC:

Authorized Representative : Rev. Fr Wilfred Prakash D'Souza

Address : Director, St Joseph Engineering College,
Vamanjoor, Mangaluru - 575028

Tel. No. : +91-824-2263753

E-mail id : sjec@siec.ac.in

For KarMic Design Pvt. Ltd.

Authorized Representative : Mr. Gajanan Shanbhag

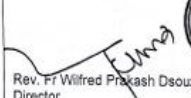

Address : Member Technical Staff, KarMic Design Pvt.
Ltd, 4/505(C&C1), 80 Badagabettu, Rajeev
Nagar, Alevoor Road, Manipal – 576104

Tel. No. : +91-820-2593702

E-mail id : gajanans@karmic.co.in

IN WITNESS WHEREOF, the parties hereto have caused this MoU to be executed by their duly authorized representatives.

Signed on Behalf of St Joseph Engineering College, Vamanjoor, Mangaluru

Rev. Fr Wilfred Prakash Dsouza
Director

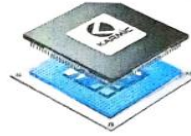
Date:

Signed on Behalf of KarMic Design Pvt. Ltd.



Mr. Gajanan Shanbhag
Member Technical Staff, KarMic Design Pvt. Ltd.

Date: 12/08/2024



KARMIC DESIGN PRIVATE LIMITED
AN ISO 9001-2015 CERTIFIED COMPANY

Ref. No.: KDPL/INTRN/CER/23-24/41

Date: 05-April-2023

INTERNSHIP CERTIFICATE

This is to certify that **Mr. Samyak Chandra** (USN No. **4SO19EC080**) Electronics & Communication Department, St. Joseph Engineering College, Mangalore has undergone project training entitled "**Basics of digital design and verification using verilog HDL**" at KarMic Design Private Limited, 4/505(C&C1),80 Badagabettu, Rajeev Nagar, Alevoor Road, Manipal, Udupi district, Karnataka- 576104 under our guidance from 02nd February 2023 to 03rd March 2023.

For KARMIC DESIGN PRIVATE LIMITED,


Gururaj L Bankapur
Director



Figure No: D3.10: MOUs with Karmic Design Pvt. Ltd. and Students Utilization

Design and Fabrication Facilities

Facilities for designing PCBs and 3D printing are available to students, supported by the AICTE IDEA Lab.

Below Figure: D3.11 shows students using AICTE IDEA Lab



Figure No : D3.11: Students using AICTE IDEA Lab

Samarthya Club

The Samarthya Club Lab serves as an active and vibrant space for students to engage in hands-on project development and innovation. This dedicated lab has become a hub for creativity, experimentation, and teamwork, where students work on real-time technical and interdisciplinary projects beyond their regular curriculum. With a separate area of 57 square meters, the lab is well-equipped with essential tools, components, and workstations that support various electronics, robotics, and embedded system-based projects.

The structured environment of the Samarthya Lab encourages peer learning, skill-building, and mentorship, providing students with the confidence and practical exposure required for competitive platforms. As a result, students who actively utilize the lab have consistently participated in national and inter-college competitions, showcasing their innovative solutions and technical proficiency. Their efforts have been recognized with numerous awards and accolades, reflecting the lab's positive impact on student development and institutional reputation. The Samarthya Club thus plays a vital role in nurturing talent and promoting a strong culture of innovation and excellence within the department.

Below Table D3.12 shows the facilities available in the Samarthya Club

Table No : D3.12: Facilities available in the Samarthya Club

Sl. No.	Description
1	Desktop Computers(Intel i3,4GB RAM , Windows 10)
2	LCD DISPLAY 16*2 with 12C)
3	GSM Module SIM900A
4	O LED Display
5	ESP8266/1
6	L298N Motor Driver Module
7	Motors Medium
8	Glue Gun 07
9	Soldering Iron Micro strip
10	Soldering Stand
11	ATMEGA328 UNO Board with cable
12	Stepper Motors
13	Digital Multimeter

Below Figure: D3.13 shows the sample picture of activities conducted by Samarthyua Club

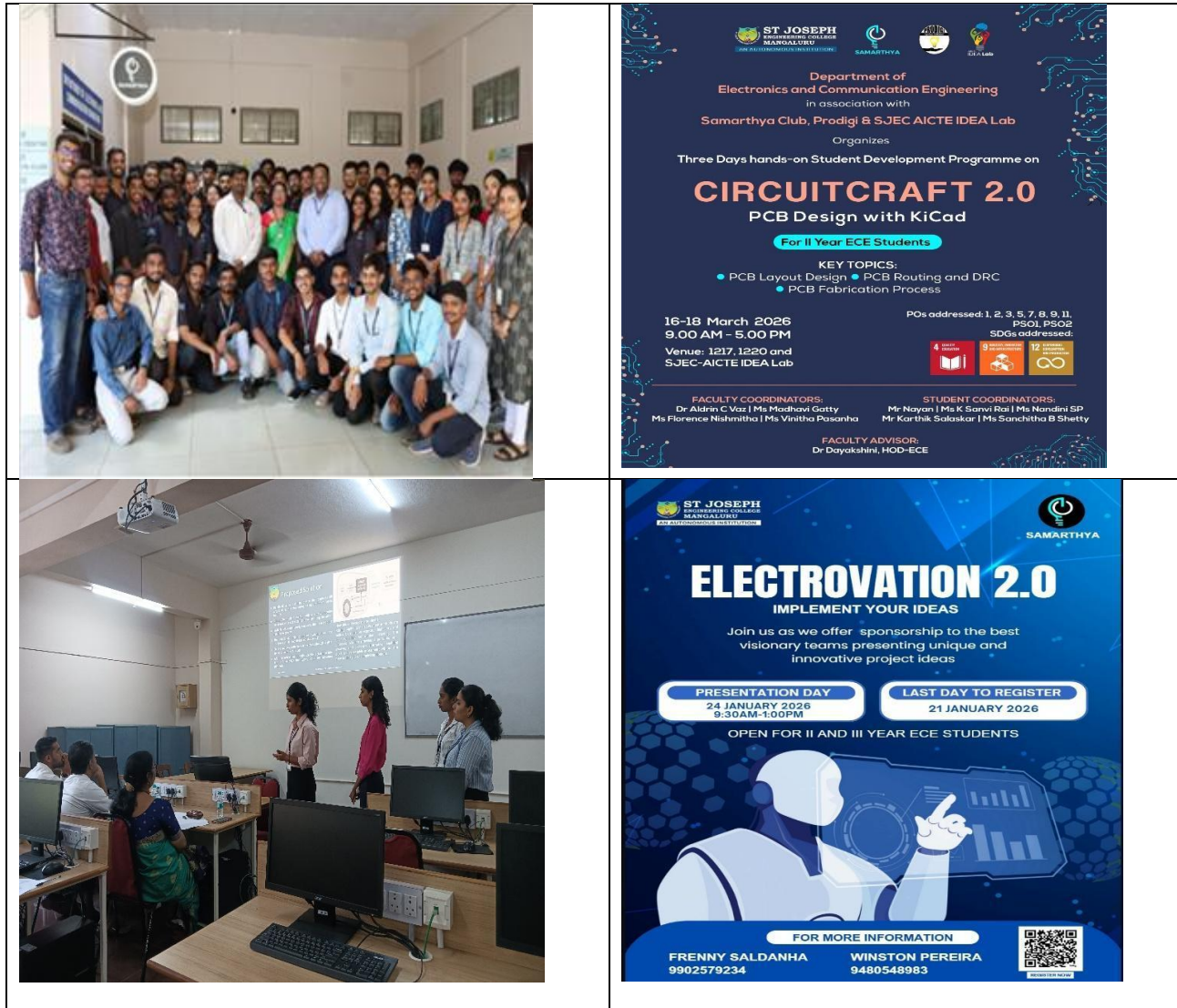


Figure No D3.13: Sample pictures of Samarthyua Club Activities

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)	780	39	32.69	10.64	72.51
2024-25(CAYm1)	780	39	35.95	11.27	79.52
2025-26(CAY)	840	42	24.61	15.08	54.05

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

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

Items	Budgeted	Actuals	Budgeted	Actuals	Budgeted	Actuals	Budgeted	Actuals
	2025-26	2025-26	2024-25	2024-25	2023-24	2023-24	2022-23	2022-23
Infrastructure Build-Up	9,82,50,000	2,21,74,435	4,02,00,000	4,02,02,708	4,77,50,000	25,87,465	11,05,00,000	0
Library - Books and Journals	60,90,000	52,09,620	51,80,000	51,30,342	57,20,000	44,91,845	40,05,000	36,56,963
Laboratory equipment	2,75,00,000	1,91,04,274	3,68,25,000	2,42,54,802	2,80,00,000	2,82,77,859	2,60,84,000	1,82,72,736
Teaching-Non-Teaching Staff Salary	26,94,02,000	25,92,99,278	21,46,94,000	21,69,32,815	19,30,18,000	18,84,87,743	15,56,00,000	16,94,16,458
Outreach Programs	4,00,000	22,191	133000	25479	500000	75089	500000	10634
R & D	1,04,86,000	49,47,109	1,07,91,000	59,13,387	98,16,000	26,86,421	62,78,500	35,02,518

Training, Placement and Industry linkage	27,00,000	13,14,737	1881000	2517801	1848000	1790301	1100000	2689745
SDGs	15,00,000	1,62,687	1200000	456070	5200000	1732223	0	0
Skill training expenses	1,54,63,000	93,32,378	1,88,95,000	1,66,57,044	1,37,50,000	1,26,64,348	1,30,00,000	1,17,38,042
Others, specify (Laboratory Consumables, Maintenance and Spares, Staff Benefits, Internet Charges, Extracurricular Expenses, University Payments, Miscellaneous Assets)	21,67,49,000	19,60,93,503	19,89,95,000	19,44,60,681	136811000	163930327	122866000	139503057
Total	64,85,40,000	51,76,60,212	528794000	506551129	442413000	406723621	439933500	348790153

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

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

Items	Contents to include	Budgeted in	Actual	Budgeted	Actual	Budgeted	Actual	Budgeted	Actual
		CFY	expenses in CFY	in CFY -m1	expenses in CFY-m1	in CFY -m2	expenses in CFY-m2	in CFY-m3	expenses in CFY -m3
		2025-26		2024-25		2023-24		2022-23	
Laboratory Equipment	Repairs & maintenance of lab equipment	52,500	27,907	11,30,000	14,86,800	1,65,000	22,656	2,10,000	36,935
	Computers, Softwares And Lab Equipment under capital expenditure for dept	55,71,650	50,37,481	32,64,100	3,63,104	32,94,098	0	21,17,195	0
	Computers, Softwares And Lab Equipment under capital expenditure for research centre of dept			0	0	0	0	17,438	0
	Total	56,24,150	50,65,388	43,94,100	18,49,904	34,59,098	22,656	23,44,633	36,935
Software	Software Licences			0	11,21,000	0	14,25,320	0	13,37,366

SDGs	Association expenses	1,00,000		1,00,000	64,125	48,000	0	1,00,000	30,067
	Student Innovation Projects			0	6,623	0	45,009	0	8,124
	Student Activities			0	23,049	0	0	0	0
	Samarthya Club			1,05,000	0	1,14,282	0	0	0
	Total	1,00,000	0	2,05,000	93,797	1,62,282	45,009	1,00,000	38,191
Support for faculty development	Seminar Workshop Expenses	1,00,000		1,00,000	28,309	50,000	78,153	1,00,000	27,372
	Faculty Development	2,00,000		2,00,000	27,594	2,00,000	5,930	50,000	16,263
	Conference Expenses	625000		22,50,000	75,857	3,00,000	38,960	2,00,000	25,361
	Seminars/ Workshops under research centre	1,25,000		7,50,000	0	1,00,000	0	1,00,000	0
	Total	10,50,000	0	33,00,000	1,31,760	6,50,000	1,23,043	4,50,000	68,996
R & D	Research Incentives			0	26,332	0	21,332	0	11,000
	Fellowships			0	1,91,097	0	0	0	0
	Research Awards			0	25,000	0	0	0	0
	Seed Money			0	69,534	0	2,47,860	2,00,000	66,450
	Total	0	0	0	3,11,963	0	2,69,192	2,00,000	77,450
Industrial training, Industrial expert internship	Student Training Programs			-	70,741	-	-	-	-
Miscellaneous expenses *	Computer Maintenance	2,92,500	1,24,254	3,12,500	1,24,254	26,000	2,76,120	3,12,000	3,86,212
	Furniture & Fixtures	10,00,000		50,000	59,026	0	71,326	50,000	6,25,130
	Server Maintenance	25,000		50,000	20,190	50,000	3,27,703	0	0
	Other Assets		13,137	2,87,000	66,005	0	23,226	0	99,840
	Server Maintenance (research Centre)			50,000	0	50,000	0	0	0
	Furniture & Fixtures (research Centre)	15,000							
	Total	13,32,500	1,37,391	7,49,500	2,69,475	1,26,000	6,98,375	3,62,000	11,11,182
Grand Total		81,06,650	52,02,779	86,48,600	38,48,640	43,97,380	25,83,595	34,56,633	26,70,120