Jai Narain College of Technology, Bhopal

Program Name – Electronics and Communication Engineering

NATIONAL BOARD OF ACCREDITATION

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

PART-A: Profile of the Institute

Name of the Program Applied for:

A1:	**Name of the Institute: - Jai Narain College of Technology, Bhopal**	
	Year of Establishment : 2003	Location of the Institute: Latitude: 23.3194^0 N Longitude: 77.4131^0 E
A2:	**Institute Address: -**	
	City: Bhopal Pin Code: 462038 E-mail: principal@jnctbhopal.ac.in	State: Madhya Pradesh Website: www.jnctbhopal.ac.in Phone No (with STD Code):0755-6615608

A3: Name and Address of the Affiliating University (If any): -

Name of the University: Rajiv Gandhi Proudyogiki Vishwavidyalaya (RGPV) City: Bhopal

State: Madhya Pradesh Pin Code: 462033

A4: Type of the Institution: - (Tick the applicable choice)

Institute of National Importance	☐	Deemed University	☐
University	☐	Autonomous	☐
Non-Autonomous (Affiliated)	☑	Any other (Please specify) *	☐

***Provide Details:** _____

A5: Ownership Status: - (Tick the applicable choice)

Central Government	☐	State Government	☐
Government Aided	☐	Self-financing	☑
Any Other (Please specify) *	☐	***Provide Details:**	_____

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

- No. of UG programs: 06
- No. of PG programs: 02

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Program Name – Electronics and Communication Engineering

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

S. No.	Level of the Program (UG/PG)	Name of the Program	Year of start	Year of Close*	Name of the Department
1	UG	B. Tech.	2003	_	Electronics & Communication Engineering
2	UG	B. Tech.	2003	_	Mechanical Engineering
3	UG	B. Tech.	2003	_	Computer Science Engineering
4	UG	B. Tech.	2005	_	Electrical & Electronics Engineering
5	UG	B. Tech.	2021	_	Artificial Intelligence & Machine Learning
6	UG	B. Tech.	2021	_	Artificial Intelligence & Data Science
7	PG	M. Tech.	2012	_	M. Tech. (Computer Science Engineering)
8	PG	M.B.A.	2008	_	MBA (HR, Finance, Marketing, Retail Management, Banking Mgmt.)

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

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

Cluster ID.	Name of the Department	Name of the Program
1	Electronics and Communication Engineering	B.Tech.- Electronics and Communication Engineering (UG)
2	Mechanical Engineering	B.Tech. - Mechanical 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)
1.	–	–
...	–	–

PART-B: Program information

(Data to be filled in for the program applied for Accreditation)

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

Table No. B1: Program details.

S. No.	Program Name	Year of start	Sanctioned Intake	Increase/ decrease in intake, if any	Year of increase/ decrease	AICTE/ Approval details	Accreditation Status*	No. of times program accredited
1	B. Tech. (Electronics & Communication Engineering)	2003	60	120	2006	F. No. 06/01/MP/ENGG/2003/020/16-05-2006	Applying First Time	-
				90	2018	F. No. Central/1-3509696619/2018/EOA		
				30	2022	F. No. Central/1-10975129954/2022/EOA		
2	B. Tech. (Mechanical Engineering)	2003	60	120	2012	F. No. Central/1-743561132/2012/EOA	Applying First Time	
				180	2013	F .No. Central/1-473630443/2013/EOA/Corrigendum-1		
				90	2018	F. No. Central/1-3509696619/2018/EOA		
				30	2021	F. No. Central/1-9317660884/2021/EOA		
3	B. Tech. (Computer Science Engineering)	2003	60	90	2006	F. No. 06/01/MP/ENGG/2003/020/16-05-2006	Granted accreditation for 3 years for the period (2025-2028)	1
				120	2013	F.No. Central/1-473630443/2013/EOA/Corrigendum-1		
				180	2022	F. No. Central/1-10975129954/2022/EOA		
4	B. Tech. (Electrical & Electronics Engineering)	2005	60	90	2009	F. No. 06/01/MP/ENGG/2003/020/26-06-2009	Not eligible for accreditation	-
				120	2012	F. No. Central/1-743561132/2012/EOA		

				90	2018	F. No. Central/1-3509696619/2018/EOA		
				30	2021	F. No. Central/1-9317660884/2021/EOA		
5	Master of Business Administration	2008	60	180	2020	F. No. Central/1-7022241004/2020/EOA	Eligible but not applied	-
				300	2024	F. No. Central/1-43657818369/2024/EOA		
6	M. Tech. (Computer Science Engineering)	2012	18	24	2013	F. No. Central/1-1473630443/2013/EOA/Corrigendum-1	Not eligible for accreditation	-
				12	2019	F. No. Central/1-4266845541/2019/EOA		
				18	2021	F. No. Central/1-9317660884/2021/EOA		
				30	2022	F. No. Central/1-10975129954/2022/EOA		
7	B. Tech. (Artificial Intelligence & Data Science)	2021	60	-	-	F. No. Central/1-9317660884/2021/EOA	Not eligible for accreditation	-
8	B. Tech. (Artificial Intelligence & Machine Learning)	2021	60	90	2022	F. No. Central/1-10975129954/2022/EOA	Not eligible for accreditation	-

* Write applicable one:

- ❖ Applying first time
- ❖ Granted accreditation for 2/3 years for the period (specify period)
- ❖ Granted accreditation for 5/6 years for the period (specify period)
- ❖ Not accredited (specify visit dates, year).
- ❖ Withdrawn (specify visit dates, year)
- ❖ Not eligible for accreditation.

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

A. Name of the HoD:

B. Nature of appointment: (Tick the applicable choice)

- ❖ **Regular** ☑
- ❖ **Contract** ☐
- ❖ **Ad hoc** ☐

C. Qualification: (Tick the applicable choice)

- ❖ **Ph.D.** ☑
- ❖ **ME/M.Tech** ☐
- ❖ **Any other*** ☐

***Please provide details:** _____

B3: Program Details

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

Item (Information is to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	**CAY** 2025-26	**CAYm1** 2024-25	**CAYm2** 2023-24	**CAYm3** 2022-23	**CAYm4 (LYG)** 2021-22	**CAYm5 (LYGm1)** 2020-21	**CAYm6 (LYGm2)** 2019-20
N= Sanctioned intake of the program (as per AICTE /Competent authority)	30	30	30	30	90	90	90
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	35	35	30	34	54	31	0
N2= Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	NIL	1	2	2	6	1	0
N3= Separate division if any	NIL	NIL	NIL	NIL	NIL	NIL	NIL
N4= Total no. of students admitted in the 1st year via all supernumerary quotas	NIL	NIL	NIL	NIL	NIL	NIL	NIL
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	35	36	32	36	60	32	0

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.

Item (Students enrolled in the First Year on average over 3 academic years (CAY, CAYm1, and CAYm2))	**CAY** 2025-26	**CAYm1** 2024-25	**CAYm2** 2023-24
N= Sanctioned intake of the program in the 1st year (as per AICTE/Competent authority)	30	30	30
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	35	35	38
N4= Total no. of students admitted in the 1st year via all supernumerary quotas			
Enrolment Ratio (ER)= (N1+N4)/N	1.16	1.16	1.26
Average ER= (ER_1+ ER_2+ ER_3)/3	**1.19**		

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	LYG 2021-22	LYGm1 2020-21	LYGm2 2019-20
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).	60	32	0
B=No. of students who graduated from the program in the stipulated course duration	33	15	0
Success Rate (SR)= (B/A)*100	55	46.87	0
Average SR of three batches ((SR_1+SR_2+ SR_3)/3)	33.95		

Note *: If the value of A in Table No. B5.1 is less than the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2), then the value of A in Table No.B5.1 should be the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2) of Table No.B3.1.

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
X= (Mean of 1st 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 1st year/10)	6.16	6.22	5.97
Y= Total no. of successful students	24	29	27
Z = Total no. of students appeared in the examination	32	32	32
API = X* (Y/Z)	4.62	5.63	5.03
Average API = (API_1 + API_2 + API_3)/3	5.63		

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)	6.24	6.33	6.90
Y= Total no. of successful students	26	29	37
Z =Total no. of students appeared in the examination	32	29	43
API = X* (Y/Z)	5.07	6.33	5.93
Average API = (API_1 + API_2 + API_3)/3	5.77		

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)	6.97	7.09	7.17
Y= Total no. of successful students	25	40	18
Z= Total no. of students appeared in the examination	28	42	19
API = X* (Y/Z)	6.22	6.75	6.79
Average API = (API_1 + API_2 + API_3)/3	6.58		

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	33	15	0
X= No. of students placed	10	05	0
Y= No. of students admitted to higher studies	04	05	0
Z= No. of students taking up entrepreneurship	04	05	0
X + Y + Z =	18	15	0
Placement Index (P) = (((X + Y + Z)/FS) * 100)	54.54	100	0
Average placement index = (P_1 + P_2 + P_3)/3	51.51		

Note *: If the value of FS in Table No. B9.1 is less than the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2), then the value of FS in Table No. B9.1 should be the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2) of Table No.B3.1.

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

S.N.	Name of the Faculty	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)	If contractual mention Full time or (Part time or hourly based)	Currently Associated (Y/N)	Date of Leaving if any (In case Currently Associated is "No")
1													
:													

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

S.N.	Name of the Faculty	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)	If contractual mention Full time or (Part time or hourly based)	Currently Associated (Y/N)	Date of Leaving if any (In case Currently Associated is "No")
1													
:													

C2: Student-Faculty Ratio (SFR)

- No. of UG(Engineering) programs in Department including allied departments/ clusters (UG_n):
  - UG_1=1st UG program
  - UG_n=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 (PG_m):

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- PG_1=1st PG program.
- PG_m=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)).

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Table No. 5A: Faculty details CAY (2025-26)

S. No.	Name of the Faculty	Highest Degree	University	Area of Specialization	Date of Joining in this Institute	Experience in Years in Current Institute	Designation at Time Joining in this Institution	Present Designation	Date on which Designated as Professor/ Associate Professor	Nature of Association (Regular/ Contract/ Adhoc)	If Contractual mention (Full Time/ Part Time)	Currently Associated (Y/N)	Date of Leaving (If Any)
1	DR.AMZAD QUAZI	PhD (Electronics & Communication)	RNTU	DIGITAL COMM-	18/07/23	2 Year 3 Month	ASSO PROF	ASSO PRO	18/07/23	REG	NA	Y	
2	DR.ASHUTOSH SINGH	PhD (Electronics & Communication)	SRU	VLSI	15/07/23	2Year 3Month	ASSO PROF	ASSO PROF	15/07/23	REG	NA	Y	
3	AMIT SAWASKADE	M.TECH (Electronics & Communication)	RGPV	DIGITAL COMM	15/01/2007	18 Year 09 Month	ASSIS PROF	ASSIS PROF	15/01/2007	REG	NA	Y	
4	SAMEER PUROHIT	M.TECH (Electronics & Communication)	RGPV	CCN	16/07/2012	13 Years 03 months	ASSIS PROF	ASSIS PROF	16/07/2012	REG	NA	Y	
5	SANJAY KUMAR GUPTA	M.TECH (Electronics & Communication)	RGPV	DIGITAL COMM	17/06/2022	3 Years 02 month	ASSIS PROF	ASSIS PROF	17/06/2022	REG	NA	Y	
6	POONAM JOUNJARE	M.TECH (Electrical & Electronics)	RGPV	POWER ELECTRONICS	06/07/2023	2Years 03 Month	ASSIS PROF	ASSIS PROF	06/07/2023	REG	NA	Y	
7	SHASHIKANT GUPTA	M.TECH (Electronics & Communication)	RGPV	DIGITAL COMM	06/07/2023	2Years 03 Month	ASSIS PROF	ASSIS PROF	06/07/2023	REG	NA	Y	
8	SACHIN RAI	M.TECH (Electronics & Communication)	RGPV	VLSI DESIGN	06/07/2023	2Years 03 Month	ASSIS PROF	ASSIS PROF	06/07/2023	REG	NA	Y	

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Table No. 5B: Faculty details CAY (2024-25)

S. No.	Name of the Faculty	Highest Degree	University	Area of Specialization	Date of Joining in this Institute	Experience in Years in Current Institute	Designation at Time Joining in this Institution	Present Designation	Date on which Designated as Professor/ Associate Professor	Nature of Association (Regular/ Contract/ Adhoc)	If Contractual mention (Full Time/ Part Time)	Currently Associated (Y/N)	Date of Leaving (If Any)
1	DR.AMZAD QUAZI	PhD (Electronics & Communication)	RNTU	DIGITAL COMM-	18-07-2023	2Year 3 Month	ASSO PROF	ASSO PRO	18-07-2023	REG	NA	Y	
2	DR.ASHUTOSH SINGH	PhD (Electronics & Communication)	SRU	VLSI	15-07-2023	2Year 3Month	ASSO PROF	ASSO PROF	15-07-2023	REG	NA	Y	
3	AMIT SAWASKADE	M.TECH (Electronics & Communication)	RGPV	DIGITAL COMM	15-01-2007	18 Year 09 Month	ASSIS PROF	ASSIS PROF	15-01-2007	REG	NA	Y	
4	SAMEER PUROHIT	M.TECH (Electronics & Communication)	RGPV	CCN	16-07-2012	13 Years 03 months	ASSIS PROF	ASSIS PROF	16-07-2012	REG	NA	Y	
5	SANJAY KUMAR GUPTA	M.TECH (Electronics & Communication)	RGPV	DIGITAL COMM	17-06-2022	3 Years 02 month	ASSIS PROF	ASSIS PROF	17-06-2022	REG	NA	Y	
6	POONAM JOUNJARE	M.TECH (Electrical & Electronics)	RGPV	POWER ELECTRONICS	06-07-2023	3 Years 02 month	ASSIS PROF	ASSIS PROF	06-07-2023	REG	NA	Y	
7	SHASHIKANT GUPTA	M.TECH (Electronics & Communication)	RGPV	DIGITAL COMM	06-07-2023	2Years	ASSIS PROF	ASSIS PROF	06-07-2023	REG	NA	Y	
8	SACHIN RAI	M.TECH (Electronics & Communication)	RGPV	VLSI DESIGN	06-07-2023	3 Years 02 month	ASSIS PROF	ASSIS PROF	06-07-2023	REG	NA	Y	

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Table No. 5C: Faculty details CAY (2023-24)

. No.	Name of the Faculty	Highest Degree	University	Area of Specialization	Date of Joining in this Institute	Experience in Years in Current Institute	Designation at Time Joining in this Institution	Present Designation	Date on which Designated as Professor/ Associate Professor	Nature of Association (Regular/ Contract/ Adhoc)	If Contractual mention (Full Time/ Part Time)	Currently Associated (Y/N)	Date of Leaving (If Any)
1	DR.AMZADQUAZI	PhD (Electronics & Communication)	RNTU	DIGITAL COMM-	18-07-2023	2Yea 3Month	ASSO PROF	ASSO PRO	18-07-2023	REG	NA	Y	
2	DR.ASHUTOSH SINGH	PhD (Electronics & Communication)	SRU	VLSI	15-07-2023	2Year 3Month	ASSO PROF	ASSO PROF	15-07-2023	REG	NA	Y	
3	AMIT SAWASKADE	M.TECH (Electronics & Communication)	RGPV	DIGITAL COMM	15-01-2007	18 Year 09 Month	ASSIS PROF	ASSIS PROF	15-01-2007	REG	NA	Y	
4	SAMEER PUROHIT	M.TECH (Electronics & Communication)	RGPV	CCN	16-07-2012	13 Years 03 months	ASSIS PROF	ASSIS PROF	16-07-2012	REG	NA	Y	
5	SANJAY KUMAR GUPTA	M.TECH (Electronics & Communication)	RGPV	DIGITAL COMM	17-06-2022	3 Years 02 month	ASSIS PROF	ASSIS PROF	17-06-2022	REG	NA	Y	
6	POONAM JOUNJARE	M.TECH (Electrical & Electronics)	RGPV RGPV	POWER ELECTRONICS	06-07-2023	2Years 03 Month	ASSIS PROF	ASSIS PROF	06-07-2023	REG	NA	Y	
7	SHASHIKANT GUPTA	M.TECH (Electronics & Communication)	RGPV	DIGITAL COMM	06-07-2023	2Years 03 Month	ASSIS PROF	ASSIS PROF	06-07-2023	REG	NA	Y	
8	SACHIN RAI	M.TECH (Electronics & Communication)	RGPV	VLSI DESIGN	06/07/20233	2Years 03 Month	ASSIS PROF	ASSIS PROF	06/07/20233	REG	NA	Y	

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

Year of Study	CAY (2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
u1.1 (2nd Year)	31	32	32
u1.2 (3rd Year)	32	32	96
u1.3 (4th Year)	32	96	91
Total no. of students in the Department (S)	95	160	219
No. of Faculty in the Department (F)	8	8	8
No. faculty members who have a 100% teaching load in the first-year courses (FF)	0	0	0
Student Faculty Ratio (SFR=S/F-FF)	95/(8-0) = 11	160/(8-0) = 20	219/(8-0) = 27
Average SFR for 3 years	(11 + 20 + 27)/3 = 19		

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Score	22

Year	**CAY**	**CAYm1**	**CAYm2**
UG_1. B // 2nd year students of UG_1 program			
UG_1. C // 3nd year students of UG_1 program			
UG_1. D // 4th year students of UG_1 program			
UG_1 // Total no.of students(2nd, 3rd, 4th) in UG_1 program	UG_1.B+ UG_1.C+ UG_1.D	UG_1.B+ UG_1.C+ UG_1.D	UG_1.B+ UG_1.C+ UG_1.D
…			
UG_n. B // 2nd year students of UG_n program			
UG_n. C // 3nd year students of UG_n program			
UG_n. D // 4th year students of UG_n program			
UG_n // Total no.of students(2nd, 3rd, 4th) in UG_n program	UG_n.B+UG_n.C+UG_n.D	UG_n.B+UG_n.C+UG_n.D	UG_n.B+UG_n.C+UG_n.D
PG_1. A // 1st year students of PG_1 program			
PG_1. B // 2nd year students of PG_1 program			
PG_1 // Total no.of students(1st, 2nd) in PG_1 program	PG_1.A+ PG_1.B	PG_1.A+ PG_1.B	PG_1.A+ PG_1.B
…..			
PG_m. A // 1st year students of PG_m program			
PG_m. B // 2nd year students of PG_m program			
PG_m // Total no.of students(1st, 2nd) in PG_m program	PG_m.A+ PG_m.B	PG_m.A+ PG_m.B	PG_m.A+ PG_m.B
DS=Total no. of students in all UG and PG programs in the Department	…..	…..	…..
AS=Total no. of students of all UG and PG programs in allied departments	…..	…..	…..
S=Total no. of students in the Department (DS) and allied departments (AS)	S1=UG_1+UG_2+.. +UG_n+PG_1 + …PG_m	S2=UG_1+UG_2+.. +UG_n+PG_1 + …PG_m	S3=UG_1+UG_2+.. +UG_n+PG_1 + …PG_m
DF=Total no. of faculty members in the Department	…..	…..	…..
AF= Total no. of faculty members in the allied Departments	…..	…..	…..
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	F1	F2	F3
FF=The faculty members in F who have a 100% teaching load in the first-year courses	FF1	FF2	FF3
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1= S1/(F1-FF1)	SFR2=S2/(F2-FF2)	SFR3=S3/(F3-FF3)
Average SFR for 3 years	Average SFR=(SFR1+SFR2+SFR3)/3		

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).

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Table No.C3.1: Faculty qualification.

Year	X	Y	RF	FQI= 2.5 * [(10X +4Y)/RF]
CAY (2025-26)	2	6	95/20 = 4.7	2.5*[(10*2)+(4*6)/4.7] = 23.40
CAYm1 (2024-25)	2	6	160/20 = 8	2.5*[(10*2)+(4*6)/8] = 13.75
CAYm2 (2023-24)	2	6	219/20 = 10.95	2.5*[(10*2)+(4*6)/10.95] = 10.04
Average Assessment				(23.40 + 13.75 + 10.04)/3 = 15.73

C4: Faculty Cadre Proportion

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

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

Year	Professors		Associate Professors		Assistant Professors	
	Required Faculty (RF1)	**Available Faculty (AF1)**	**Required Faculty (RF2)**	**Available Faculty (AF2)**	**Required Faculty (RF3)**	**Available Faculty (AF3)**
CAY (2025-26)	1/9*11 = 1.22	0	2/9*11 = 2.44	2	6/9*11 = 7.33	6
CAYm1 (2024-25)	1/9*20 = 2.22	0	2/9*20 = 4.44	2	6/9*20 = 13.33	6
CAYm2 (2023-24)	1/9*27 = 3	0	2/9*27 = 6	2	6/9*27= 18	6
Average Numbers	RF1= (1.22+2.22+3)/3 = 2.14	AF1= (0+0+0)/3 = 0	RF2= (2.44+4.44+6)/3 = 4.29	AF2= (2+2+2)/3 = 2	RF3= (7.33+13.33+18)/3 = 12.88	AF3= (6+6+6)/3 = 6
Faculty Cadre Proportion Marks	5.62					

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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.

S.N.	Name of the Person	Designation & Organization	Name of the Course	No. of Hours hand
CAYm1 (2024-25)				
1	Dr.Robin Tiwari	Visiting Professor	Simulation Lab (EC-406)	10
			Matlab Programming (EC-506)	12
			Advance communication EC-804	16
			IOT Lab EC 705	16
CAYm2 (2023-24)				
1	Dr.Robin Tiwari	Visiting Professor	Simulation Lab (EC-406)	10
			Matlab Programming (EC-506)	12
			Advance communication EC-804	16
			IOT Lab EC 705	16
CAYm3 (2022-23)				
1	Dr.Robin Tiwari	Visiting Professor	Simulation Lab (EC-406)	10
			Matlab Programming (EC-506)	12
			Advance communication EC-804	16
			IOT Lab EC 705	16

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C6: Academic Research

Table No. C6.1: Faculty publication details.

S.N.	Item	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
1	No. of peer reviewed journal papers published	02	02	01
2	No. of peer reviewed conference papers published	04	04	03
3	No. of books/book chapters published	01	01	-

C7: Sponsored Research Project

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

S.N.	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)
CAYm1							
1							
..							
Amount received (Rs.)							
CAYm2							
1							
...							
Amount received (Rs.)							
CAYm3							
1							
..							
Amount received (Rs.)							
Total Amount (Lacs) Received for the Past 3 Years							

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C8: Consultancy Work

Table No. C8.1: List of consultancy projects received from external agencies.

S.N.	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)
CAYm1 (2024-25)							
1	Dr.Bushra Fatima	Prof. Poonam Jounjare	ECE	RF Signal Measurement and Antenna Performance Analysis	Ananjay pharmaceuticals private limited	12 Months	187000.00
2	Dr.Amzad Quazi	Prof.Amit Sawaskade	ECE	Design Review and Optimization of IoT-Based Monitoring Systems	Vitmax healthcare private limited	10 Months	289655.00
Amount received (Rs.)							476655.00
CAYm2 (2023-24)							
1	Dr.Amzad Quazi	Prof.Amit Sawaskade	ECE	Design and Validation of IoT-Based Remote Patient Health Monitoring System	Vitmax healthcare private limited	13 Months	378950.00
Amount received (Rs.)							378950.00
CAYm3 (2022-23)							
NA							
Amount received (Rs.)							378950.00
Total Amount (Lacs) Received for the Past 3 Years							8,55,605.00

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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.

S.N.	Faculty name	Project title/ Support for Activity	Duration	Amount (Lacs)	Amount Utilized (Lacs)	Outcomes of the project
CAYm1						
1						
..						
Amount received (Rs.)						
CAYm2						
1						
..						
Amount received (Rs.)						
CAYm3						
1						
..						
Amount received (Rs.)						
Total amount (Lacs) received for the past 3 years						

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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.

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Table No.7.1.1a: List of Laboratories and Technical Manpower.

Sr. No.	Name of the Laboratory					No. 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 Man power support		
	Room no.	Laboratory Odd Sem		Laboratory Even Sem					Name of the technical staff	Designation	Qualification
										Designation	Qualification
Lab-1	F-16	3rd Sem - EC-303 Digital System Design	2 Hrs per Week	4th sem EC-403 Analog communication	2 Hrs Per Week	30 /30	Annexure I	12 / 42	Disha Saxsena	Lab Technician	B.Tech(EC)
								28%			
		BT-107 Internship-I	4 Hrs per Week	8th sem EC-804 Advance communication	6 Hrs Per Week	30 / 30					
		3rd Sem - EC-306 EMI Lab	4 Hrs per Week	6th sem EC-606 Microcontroller and Embedded system	4 Hrs Per Week	30 / 30					
Lab-2	S-15	3rd Sem EC - 304 Electronics Devices & Circuits	2 Hr Per Week	4th sem EC-405 Analog Circuit	4 Hrs Per Week	30 / 30	Annexure I	18 / 42	Disha Saxsena	Lab Technician	B.Tech(EC)
		V Sem EC-505 CNTL LAB	4 Hr Per Week			30 / 30		42%			
		BT-407 Internship II									

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		7th Sem - EC-704	**6 Hrs Per Week**	**8th sem EC-801 Optical Communication**	**2 Hrs Per Week**	30 / 30					
		Microwave Lab									
Lab-3	F-21	**3rd Sem EC-305 Network Analysis**	**2 Hr Per Week**		**4 Hrs Per Week**	30 / 30	Annexure I	**10 / 42**	Sumit Tiwari	Lab Technician	B.tech.(Ex)
								24%			
		V Sem EC-502 Digital Communication	**2 Hr Per Week**	**6th sem EC–605 Data Comminication**	**6 Hrs Per Week**	30 / 30					
				6th Sem EC-602 Antenna & Wave Propagation	**2 Hrs Per Week**	30 / 30					
		7th Sem EC-607	6 Hrs Per Week			30					
		Internship-lll									
Lab-4	F-24		**4 Hr Per Week**	**4th sem EC-404 Control Engineering**	**2 Hrs Per Week**	30 /30	Annexure I	**14/ 42**	Vijay Sahu	Lab Technician	MCA
		5th Sem - EC-501 Microprocessor and its Application						**33%**			
		5th Sem - EC 506 Matlab Programming	4 Hr Per Week	6th Sem EC-601	2 Hrs Per Week	30 / 30					
				DSP							
			6 Hr Per Week	**4th sem EC-406 Simulation Lab**		30					
		7th Sem - EC-701 VLSI Design									
						30					

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Lab 5	S-14	**Minor Project -I V Sem EC 508** **Major project I VII Sem EC706**	**8 Hrs Per Week**	**4th sem EC -402 Signals and Systems** **Minor Project -II V Sem EC 608** **Major project II VIII Sem EC-805**	**2 Hr Per Week** **8 Hrs Per Week**		Annexure I		Vinay Thakur	Lab Technician	Diploma EX
Lab 6	F-17	**IOT Lab EC 705**	**6 Hrs Per Week**				Annexure I		Vijay Sahu	Lab Technician	MCA

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D2: `Safety Measures in Laboratories

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

Sr. No.	Name of the Laboratory	Safety measures
1	Analog And Digital Communication	1. Equipment Failure -If a piece of equipment fails while being used, report it immediately to your lab instructor. 2. Never try to fix the problem yourself because you could harm yourself and others. 3. Do not work on energized electronics equipment with both hands.
2	Antenna and Wave Propagation	1. Avoid contacting circuits with wet hands or wet materials. 2. Mobile phones and similar devices which could cause distraction or become contaminated during laboratory operations should be switched off.
3	Communication Network And Transmission Line	1. Do not unplug the cable while the power is switched on. 2. Avoid contacting circuits with wet hands or wet materials.
4	Data Communication	1. Data network connections should not be altered. Personal equipment may not be connected to the data network without first obtaining permission. 2. All the connections made as per the circuit diagram of a particular experiment should be quite tight.
5	Digital Circuits and Systems	1. Power supply terminals connected to any circuit are only energized with the presence of the Instructor or Lab Staff. 2. Do not allow any loose connections. 3. No loose wires or metal pieces should be lying on table or near the circuit ,to cause shorts and sparking.

D3: Project Laboratory/Research Laboratory

Table No. D3.1: List of project laboratory/research laboratory /Centre of Excellence.

S.No.	Name of the Laboratory
1	COE – Innovative IoT Lab
2	Drone and Robotics Research Laboratory

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PART E: Fist 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))/RF4
CAY (2025-26)	420	= 420/20 = 21	18	10	= {(18*0.8)+(10*0.2)}/21 = 78.09 %
CAYm1 (2024-25)	420	= 420/20 = 21	16	11	={(16*0.8)+(11*0.2)}/21 = 71.42 %
CAYm2 (2023-24)	420	= 420/20 = 21	16	12	= {(16*0.8)+(12*0.2)}/21 = 72.38
Average Percentage					= (78.09+71.42+72.38)/3 = 73.96 %

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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 CFY 2025-26	Actual expenses in CFY 2025-26 (till 15/12/2025)	Budgeted in CFYm1 2024-25	Actual Expenses in CFYm1 2024-25	Budgeted in CFYm2 2023-24	Actual Expenses in CFYm2 2023-24	Budgeted in CFYm3 2022-23	Actual Expenses in CFYm3 2022-23
Infrastructure Built-Up	3250000	1102724	2800000	2485629	22000000	17000000	1950000	1355936
Library	300000	70295	200000	132347	300000	293250	750000	651907
Laboratory equipment	5500000	3510130	200000	66090	1500000	1179340	4260000	3539135
Teaching and non-teaching staff salary	75000000	48329203	70000000	65903459	62500000	60546522	55000000	52319093
Outreach Programs	300000	12000	250000	298984	200000	119197	150000	209291
R&D	2500000	258890	2000000	1770426	1700000	1522130	1000000	142000
Training, Placement and Industry linkage	250000	59850	160000	67890	115000	61436	75000	55650
SDGs	175000	91020	150000	120500	150000	106050	125000	97500
Entrepreneurship	225000	72300	150000	99245	125000	84450	100000	72000
Others*, pl. specify	60000000	46947683	55000000	53949720	50000000	50404301	60000000	54555840
Total amount	147500000	100454095	130910000	124894290	138590000	131371576	123410000	112998352

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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 CFY (2025-26)	Actual expenses in CFY (2025-26) (till 15/12/2025)	Budgeted in CFYm1 (2024-25)	Actual Expenses in CFYm1 (2024-25)	Budgeted in CFYm2 (2023-24)	Actual Expenses in CFYm2 (2023-24)	Budgeted in CFYm3 (2022-23)	Actual Expenses in CFYm3 (2022-23)
Laboratory equipment	900000	0	300000	0	300000	0	1900000	1775004
Software	100000	34248	80000	21412	70000	14936	50000	39759
SDGs	50000	17500	50000	23450	50000	20546	50000	18300
Support for faculty development	50000	14100	50000	16500	50000	16100	50000	13100
R & D	450000	15900	500000	400334	450000	320668	400000	15500
Industrial Training, Industry expert, Internship	30000	10389	25000	18257	25000	18162	20000	16149
Miscellaneous expenses *	170000	40837	195000	53874	190000	48633	150000	45810
Total amount	**1750000**	**132974**	**1200000**	**533829**	**1135000**	**439045**	**2620000**	**1923622**

Annexure - I

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Department of Electronics & Communication Engineering

List of Laboratories and Important Equipment

Sr.	Semester / Code	Laboratory	Important Equipment
1	3rd Sem **EC 303**	Digital Systems Design	• Digital workstation • Breadboard with power supply • Adders and subtractor trainer • De Morgan's theorem trainer • 4/8-bit analog-to-digital trainer • Universal gates trainer • Logic gates trainer
2	3rd Sem **EC 304**	Electronic Devices	• Workstation • PN, Zener and photodiode kits • Digital workstation • Operational amplifier trainer • Transistor characteristics kit • Rectifier kit • Function generator
3	3rd Sem **EC 305**	Network Analysis	• Thevenin's, Superposition, Norton's, Millman's, Maximum Power Transfer and Reciprocity theorem trainer kits • KCL and KVL kit • Cascaded two-port network kit
4	3rd Sem **EC 306**	Electronic Measurements & Instrumentation	• Thermocouple (ITK-04) • LVDT (ITK-01) • RTD PT-100 (ITK-05) • Strain gauge / load cell (ITK-03) • Angular displacement kit (ITK-010) • Level indicator kit (ITK-07) • LDR trainer kit (ITK-06)
5	4th Sem **EC 402**	Signals and Systems	*Software lab*

Sr.	Semester / Code	Laboratory	Important Equipment
6	4th Sem **EC 403**	Analog Communication	• Superheterodyne receiver • PLL study kit • Pre-emphasis and de-emphasis kit • DSB/SSB AM (ST-2202) • FM transmitter and receiver (ST-2203) • DSB/SSB AM transmitter trainer (ACT-08) • DSB/SSB AM receiver trainer (ACT-09) • QAM/DQAM (ADCT-05) • CRO • Function generator
7	4th Sem **EC 404**	Control Systems	*Software lab*
8	4th Sem **EC 405**	Analog Circuits	• Inverting and non-inverting op-amp kit • Op-amp applications kit • 555 timer IC applications kit
9	4th Sem **EC 406**	Simulation Lab	*Software lab*
10	5th Sem **EC 501**	Microprocessor and Its Applications	• Universal programmer (USB interface) • Advanced 8086 microprocessor trainer • Microcontroller development board
11	5th Sem **EC 502**	Digital Communication	• TDM PCM transmitter (ST-2103) • TDM PCM receiver (ST-2104) • Delta adaptive modulation kit (ST-2105) • PAM/PPM/PWM modulation and demodulation kit (ST-2110) • QAM/DQAM (ADCT-05) • ASK/PSK/FSK modulator and receiver • Digital storage oscilloscope • Analog signal sampling kit • Power supply • CRO • Function generator
12	5th Sem **EC 505**	CNTL Lab	• BPF/BSF kit • Chebyshev filter kit • Transmission line trainer • Passive filter kits: T-type, Pi-type, M-derived T-type, RC circuit • Digital storage oscilloscope • CRO • Function generator
13	5th Sem **EC 506**	MATLAB	*Software lab*
14	6th Sem **EC 601**	Digital Signal Processing	*Software lab*
15	6th Sem **EC 602**	Antenna and Wave Propagation	• ATS05 with 22 antennas and folding telescopic stand • Antenna trainer ST-2261 with 23 antennas • Personal computer system • CRO

Sr.	Semester / Code	Laboratory	Important Equipment
16	6th Sem **EC 605-A**	Data Communication	*Software lab*
17	6th Sem **EC 606**	Microcontroller and Embedded Systems	• Universal programmer (USB interface) • Advanced 8051 microcontroller trainer • Microcontroller development board
18	7th Sem **EC 701**	VLSI Design	• Personal computer system • CPLD trainer board • FPGA trainer board
19	7th Sem **EC 704**	Microwave Lab	• Microwave Training System SX-9000 • Microwave Training System SX-9004 • Microwave bench with Klystron tube • Microwave bench with Gunn diode • VSWR meter • Frequency meter • CRO
20	7th Sem **EC 705**	IoT Lab	• IoT trainer kits • Digital storage oscilloscope GDS-1102A (100 MHz) • Function generator (20 MHz) • Function generator (3 MHz)
21	8th Sem **EC 801**	Optical Communication	• OTDR • Fiber optic trainer kit • Optical power meter • DSO • Function generator • CRO
22	8th Sem **EC 804**	Advanced Communication Engineering Lab	• TDM PCM transmitter and receiver • Fiber optic trainer kit • IoT trainer kits
23	Minor / Major Project **EC-508** **EC-608** **EC-706** **EC-805**	Project Lab (Minor and Major Project)	• PCB cutting machine • Photo-etch etching machine • PCB drilling machine • PCB shearing machine • Workstation • Soldering station • IC tester • Power supply