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: 11000	**Date of Submission**: 22-09-2025

PART A- Profile of the Institute

A1.Name of the Institute: MCKV INSTITUTE OF ENGINEERING	
Year of Establishment : 1999	Location of the Institute: Liluah Howrah West Bengal Near Liluah Railway station
A2. Institute Address:243, G.T. ROAD (NORTH), LILUAH	
City:HOWRAH	State:West Bengal
Pin Code:711204	Website:www.mckvie.edu.in
Email:principal@mckvie.edu.in	Phone No(with STD Code):033-26549317
A3. Name and Address of the Affiliating University (if any):	
Name of the University :	City: Nadia
State : West Bengal	Pin Code: 741249
A4. Type of the Institution: Self-Supported Institute	
A5. Ownership Status: Self financing	

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

- No. of UG programs: **8**
- No. of PG programs: **2**

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

Sr.No.	Discipline	Level of program	Name of the program	Year of Start	Year of Closed	Name of The Department
1	Engineering & Technology	UG	Automobile Engineering	2003	--	Automobile Engineering
2	Engineering & Technology	UG	Computer Science and Engineering	1999	--	Computer Science and Engineering
3	Engineering & Technology	UG	Computer Science and Engineering (Artificial Intelligence & Machine Learning)	2021	--	Computer Science and Engineering
4	Engineering & Technology	UG	Computer Science and Engineering (Data Science)	2020	--	Computer Science and Engineering
5	Engineering & Technology	UG	Electrical Engineering	2010	--	Electrical Engineering
6	Engineering & Technology	UG	Electronics & Communication Engineering	1999	--	Electronics and Communication Engineering
7	Engineering & Technology	PG	Electronics & Communication Engineering	2008	--	Electronics and Communication Engineering
8	Engineering & Technology	UG	Information Technology	1999	--	Information Technology
9	Engineering & Technology	UG	Mechanical Engineering	2008	--	Mechanical Engineering
10	Management	PG	Master of Business Administration	2020	--	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
Electrical Engineering	No	Electrical Engineering	UG
Electronics and Communication Engineering	Yes	Electronics & Communication 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)

Allied Department/Cluster Name	Program Name	Program Level
Electronics and Communication Engineering	Electronics & Communication Engineering	PG

PART-B: Program information

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

Table No. B1: Program details.

A. List of the Programs Offered by the Department:

SR.NO.	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/DECREASE INTAKE (if any)	YEAR OF INCREASE/DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/COMPETENT AUTHORITY ARROVAL DETAILS	AC ST
1	Electronics & Communication Engineering	UG	1999 / --	60	No	NA	60	1999	F.No. Eastern/1-44639605966/2025/EOA DATED: 02-Apr-2025	Gr ac ye pe pe

List of the Allied Departments/Cluster and Programs:

SR.NO.	ALLIED DEPARTMENT NAME	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/DECREASE INTAKE (if any)	YEAR OF INCREASE/DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/CON AUTHORIT DETAILS
1	Electronics and Communication Engineering	Electronics & Communication Engineering	PG	2008 / --	18	No	NA	18	2008	F.No. Easte 446396059 DATED: 02

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

A. Name of the HoD :	Dr. Pubali Mukherjee
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)	2024-25 (CAY)	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)	2020-21 (CAYm4)	2019-20 (CAYm5)	2018-19 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	60	60	60	60	60	60	60
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	53	53	55	57	30	59	59
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	5	6	8	26	6	6
N3=Separate division if any	0	0	0	0	0	1	0
N4=Total no. of students admitted in the 1st year via all supernumerary quotas	3	3	3	3	2	3	3
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	56	61	64	68	58	69	68

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

B4. Enrolment Ratio in the First Year

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

Year of entry	N (From Table 4.1)	N1 (From Table 4.1)	N4 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2024-25 (CAY)	60	53	3	93.33
2023-24 (CAYm1)	60	53	3	93.33
2022-23 (CAYm2)	60	55	3	96.67

Average [(ER1 + ER2 + ER3) / 3] = 94.44≡ 20.00

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

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

Item	(2020-21) LYG	(2019-20) LYGm1	(2018-19) LYGm2
A*= (No. of students admitted in the 1st year of that batch and those actually admitted in the 2nd year via lateral entry, plus the number of students admitted through multiple entry (if any) and separate division if applicable, minus the number of students who exited through multiple entry (if any).	86.00	69.00	68.00
B=No. of students who graduated from the program in the stipulated course duration	56.00	67.00	67.00
Success Rate (SR)= (B/A) * 100	65.12	97.10	98.53

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 86.92

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

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

Academic Performance	CAYm1(2023-24)	CAYm2(2022-23)	CAYm3 (2021-22)
Mean of CGPA or mean percentage of all successful students(X)	8.14	8.17	8.47
Y=Total no. of successful students	55.00	57.00	60.00
Z=Total no. of students appeared in the examination	56.00	58.00	60.00
API [X*(Y/Z)]	8.00	8.04	8.19

Average API[(AP1+AP2+AP3)/3] : 8.08

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

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

Academic Performance	CAYm1 (2023-24)	CAYm2 (2022-23)	CAYm3 (2021-22)
X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2rd year/10)	8.27	8.11	8.94
Y=Total no. of successful students	63.00	68.00	58.00
Z=Total no. of students appeared in the examination	63.00	68.00	58.00
API [X * (Y/Z)]	8.27	8.11	8.94

Average API [(AP1 + AP2 + AP3)/3] : 8.44

B8. Academic Performance of the Third Year Students of the Program

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

Academic Performance	CAYm1 (2023-24)	CAYm2 (2022-23)	CAYm3 (2021-22)
X=(Mean of 3rd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 3rd year/10)	8.35	8.36	9.29
Y=Total no. of successful students	67.00	57.00	69.00
Z=Total no. of students appeared in the examination	68.00	58.00	69.00
API [X*(Y/Z)]:	8.22	8.21	9.29

Average API [(AP1 + AP2 + AP3)/3] : 8.57

B9. Placement, Higher Studies, and Entrepreneurship

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

Item	LYG (2020-21)	LYGm1(2019-20)	LYGm2(2018-19)
FS*=Total no. of final year students	86.00	69.00	67.00
X=No. of students placed	30.00	51.00	51.00
Y=No. of students admitted to higher studies	5.00	3.00	3.00
Z= No. of students taking up entrepreneurship	0.00	0.00	1.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	40.70	78.26	82.09

Average Placement Index = (P_1 + P_2 + P_3)/3: 67.02 Placement Index Points:

PART C: Faculty Details in Department and Allied Departments

(Data to be filled in for the Department and Allied Departments)

C1. Faculty details of Department and Allied Departments

Table No.C1: Faculty details in the Department for the past 3 years including CAY

Sr.No	Name of the Faculty	PAN No.	Highest degree	University	Area of Specialization	Date of Joining in this Institution	Experience in years in current institute	Designation at Time Joining in this Institution	Present Designation	The date on which Designated as Professor/ Associate Professor if any	Nature of Association (Regular/ Contract/ Ad hoc)	Currently Associated (Y/N)	In cas NO, D of Lea
1	Dr. Satadal Saha	XXXXXXX34N	Ph.D	JU	Image Processing	31/07/2004	21.1	Lecturer	Professor	01/07/2021	Regular	Yes	
2	Dr. Krishnendu Chattopadhyay	XXXXXXX54J	Ph.D	IIEST	Micro-strip Antenna	01/03/2001	24.6	Lecturer	Professor	03/07/2023	Regular	Yes	

3	Mr. Subhasish Banerjee	XXXXXXX32D	M.Tech	University of Calcutta	Optics & Optoelectronics	20/02/2007	18.7	Lecturer	Assistant Professor		Regular	Yes	
4	Dr. Atanu Banerjee	XXXXXXX81N	Ph.D	IIEST	Microwave Devices	15/03/2007	18.6	Lecturer	Associate Professor	03/07/2023	Regular	Yes	
5	Ms. Debasree Maity	XXXXXXX65L	M.Tech	University of Calcutta	RadioPhysics& Electronics	02/09/2008	17	Lecturer	Assistant Professor		Regular	Yes	
6	Dr. Kalyan Biswas	XXXXXXX45R	Ph.D	JU	Electronic Device	17/03/2009	16.6	Lecturer	Associate Professor	04/07/2022	Regular	Yes	
7	Mr. Soham Lodh	XXXXXXX66A	M.Tech	University of Calcutta	Radio Physics & Electronics	19/02/2011	14.7	Assistant Professor	Assistant Professor		Regular	Yes	
8	Dr. Rajarshi Sanyal	XXXXXXX59Q	Ph.D	MAKAUT	Ultra Wideband Microstrip Antenna	13/07/2011	14.2	Assistant Professor	Assistant Professor		Regular	No	09/09/
9	Ms. Mahua Raha Patra	XXXXXXX57F	M.Tech	IIEST	VLSI Design	02/01/2020	5.8	Assistant Professor	Assistant Professor		Regular	Yes	
10	Mr. Sekhar Rana	XXXXXXX90E	M.Tech	JU	VLSI Design & Microelectronics Technology	02/08/2011	14.1	Assistant Professor	Assistant Professor		Regular	Yes	
11	Ms. Susmita Sarkar	XXXXXXX32E	M.Tech	JU	VLSI Design & Microelectronics Technology	02/01/2020	5.8	Assistant Professor	Assistant Professor		Regular	Yes	
12	Ms. Sushmita Dey	XXXXXXX01A	M.Tech	JU	Electronics & Tele Communication Engineering	02/01/2020	5.8	Assistant Professor	Assistant Professor		Regular	Yes	
13	Ms. Sulagna Roy	XXXXXXX49E	M.Tech	IIEST	Communication Engineering	01/07/2021	4.2	Assistant Professor	Assistant Professor		Regular	Yes	
14	Dr. Swarup Kr. Mitra	XXXXXXX34F	Ph.D	JU	Wireless Sensor Network	01/03/2008	15.4	Lecturer	Professor	01/07/2021	Regular	No	07/07/
15	Dr. Joydeep Banerjee	XXXXXXX46R	Ph.D	IIEST	Microwave Semiconductor Device	10/02/2009	16.7	Lecturer	Associate Professor	03/07/2023	Regular	Yes	
16	Sankhyabrata Bandyopadhyay	XXXXXXX20E	M.Tech	University of Calcutta	Radio Physics & Electronics	17/07/2023	0.11	Assistant Professor	Assistant Professor		Contractual Fulltime	No	29/06/
17	Dr. Debabrata Datta	XXXXXXX63P	Ph.D	University of Mumbai	Physics	03/07/2023	0.11	Professor	Professor	03/07/2023	Contractual Fulltime	No	27/06/
18	Dr. Pubali Mukherjee	XXXXXXX32N	Ph.D	University of Calcutta	Applied Optics and Photonics	14/08/2007	18.1	Lecturer	Associate Professor	03/07/2023	Regular	Yes	

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

C2. Student-Faculty Ratio (SFR)

No. of UG(Engineering) programs in Department including allied departments/ clusters (UGn):
UG1=1st UG program
UGn=nth UG program
B= No. of Students in UG 2nd year (ST)
C= No. of Students in UG 3rd year (ST)
D= No. of Students in UG 4th year (ST)
No. of PG (Engineering) programs in Department including allied departments/ clusters (PGm):
PG1=1st PG program.
PGm=mth PG program
A= No. of Students in PG 1st year
B= No. of Students in PG 2nd year
Student Faculty Ratio **(SFR)** = S/F
S= No. of students of all programs in the Department including all students of allied departments/clusters.
No. of students (ST)=Sanctioned Intake (SA)+ Actual admitted students via lateral entry including leftover seats (L) if any (limited to 10 % of SA)
Students who admitted under supernumerary quotas (SNQ, EWS, etc) will not be considered in calculating SFR value. Those students are exempted.
F=Total no. of regular or contractual faculty members (Full Time) in the Department, including allied departments/clusters (excluding first year faculty (The faculty members who have a 100% teaching load in the first-year courses)).

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

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

Description	**CAY(2024-25)**	**CAYm1 (2023-24)**	**CAYm2 (2022-23)**
UG1.B	66	66	66
UG1.C	66	66	66
UG1.D	66	66	66
UG1: Electronics & Communication Engineering	**198**	**198**	**198**
PG1.A	18	18	18
PG1.B	18	18	18
PG1: Electronics & Communication Engineering	**36**	**36**	**36**

Description	CAY(2024-25)	CAYm1 (2023-24)	CAYm2 (2022-23)
DS=Total no. of students in all UG and PG programs in the Department	198	198	198
AS=Total no. of students of all UG and PG programs in allied departments	36	36	36
S=Total no. of students in the Department (DS) and allied departments (AS)	**S1=** 234	**S2=** 234	**S3=** 234
DF=Total no. of faculty members in the Department	15	17	16
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=** 15	**F2=** 17	**F3=** 16
FF=The faculty members in F who have a 100% teaching load in the first-year courses	0	0	0
Student Faculty Ratio (SFR)=S/(F-FF)	**SFR1= 15.60**	**SFR2= 13.76**	**SFR3= 14.63**
Average SFR for 3 years	**SFR= 14.66**		

C3. Faculty Qualification

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

Table No.C3.1: Faculty qualification.

Year	X	Y	RF	FQ = 2.5 x [(10X + 4Y) / RF)]
2024-25(CAY)	7	8	20.00	12.75
2023-24(CAYm1)	8	9	20.00	14.50
2022-23(CAYm2)	8	8	17.00	16.47

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 RF1	Available AF1	Required RF2	Available AF1	Required RF3	Available AF3
2024-25	2.00	2.00	4.00	4.00	13.00	9.00
2023-24	2.00	2.00	4.00	4.00	13.00	9.00
2022-23	1.00	2.00	3.00	2.00	11.00	12.00
Average	RF1=1.67	AF1=2.00	RF2=3.67	AF2=3.33	RF2=12.33	AF2=10.00

C5. Visiting/Adjunct Faculty/Professor of Practice

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

(CAYm1)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Sarmistha Shee Kanrar (Adjunct))	Junior Telecom Officer (Enterprise Business),	BSNL, Kolkata, Telephone Bhawan, 34, B B D Bag (S), Kol-1	1) Error Control Coding (PE-EC701B),2)Fibre Optic Communication (PE-EC801B)	50.00
2	Sohini Chakraborty(Visiting)	Assistant Professor,	Swami Vivekananda Institute of Modern Science	Biology for Engineers (BS-BIO 401)	16.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Sarmistha Shee Kanrar (Adjunct)	Junior Telecom Officer (Enterprise Business),	BSNL, Kolkata, Telephone Bhawan, 34, B B D Bag (S), Kol-1	1) Error Control Coding (PE-EC701B),2)Fibre Optic Communication (PE-EC801B)	51.00
2	Sohini Chakraborty(Visiting)	Assistant Professor,	Swami Vivekananda Institute of Modern Science	Biology for Engineers (BS-BIO 401)	19.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr. Rahul Dutta (Visiting)	Registered for PhD. in Biochemistry	Calcutta University	Biology for Engineers (BS-BIO 401)	14.00
2	MR. KAUSHIK DEY (Adjunct)	Manager	Accenture	Overview Of Industrial Exposure , Machine Learning	55.00

C6. Academic Research

Table No. C6.1: Faculty publication details.

S.No.	Item	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)
1	No. of peer reviewed journal papers published	5	7	15
2	No. of peer reviewed conference papers published	4	2	2
3	No. of books/book chapters published	1	1	3

C7. Sponsored Research Project

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

(CAYm1)

(CAYm2)

(CAYm3)

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

Note*:

- Only sponsored research projects will be considered. Infrastructure-based projects will not be considered here.

C8. Consultancy Work

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

(CAYm1)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
						Amount received (Rs.):0

(CAYm2)

(CAYm3)

Total amount (Lacs) received for the past 3 years: 0

Note*:

- Only consultancy projects will be considered. Infrastructure-based projects will not be considered here.

C9. Institution Seed Money or Internal Research Grant to its Faculty for Research Work

Table No. C9.1: List of faculty members received seed money or internal research grant from the Institution.

(CAYm1)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Mrs. Susmita Sarkar	Automated Solar Panel Cleaning System (Repairing of the RTGS)	4 yrs	0.00	0.00	Published one research Paper
			Amount received (Rs.): 0.00		

(CAYm2)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Mrs. Susmita Sarkar	Automated Solar Panel Cleaning System (Repairing of the RTGS)	4 yrs	0.00	0.00	Published one research paper
			Amount received (Rs.): 0.00		

(CAYm3)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Mrs. Susmita Sarkar	Automated Solar Panel Cleaning System (Repairing of the RTGS)	4 yrs.	0.91	0.91	Published one Research Paper.
			Amount received (Rs.): 0.91		

Total amount (Lacs) received for the past 3 years : 0.91

PART D: Laboratory Infrastructure in the Department

(Data to be filled in for the Department)

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

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

Sr. No	Name of the Laboratory	Number of students per set up(Batch Size)	Name of the Important Equipment	Weekly utilization status(all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical staff	Designation	Qualification
1	Basic Electronics Engg. Lab (B-104A	4	1. CRO 20 MHz (4) 2. CRO 25 MHz (3), 3. Function Generator 1MHz (5) 4.	Even Sem: 8 sl	Mr. Sudipta Cha	Lab Instructor(Se	B-Tech in ECE, I
2	Communication Lab (B-212)	4	1. CRO 30 MHz (4), 2. CRO 20 MHz (7) 3. DSO 50 MHz(4) 4. DSO 100 MHz, 5.	Even semester	Mr. Udaybhanu I	Lab Instructor(Se	Diploma in Elect
3	Digital Signal Processing Lab and Control Lab(B-102A)	1	1.Computers with MATLAB (36), 2. Function Generators 3. FPGA trainer	Odd Semester:	Mrs. Sulagna Ch	Lab Instructor(Se	AMIE (Electroni
4	Electromagnetic Waves Lab. (B-107)	4	1. Advance Microstrip Trainer Kit-900C, 2. Gunn Power Supply (6), 3. Gunn	Even Semeste	Mr. Ajoy Ghosal,	Lab Instructor(Se	B.Sc., Diploma i
5	Digital Electronics Lab and Computer Organization Lab,	4	1. Power supply (5V)(11), 2. Power supply (12V) (3), 3. Clock Generator	Odd semester:	Ms. Anindita Pau	Lab Instructor(Se	Diploma in Elect
6	Microprocessor & Microcontroller Lab, Analog	2	1. Fixed Power supply (0-5V/12V), 2. Microprocessor trainer kit (20), 3.	Odd semester	Mrs. Priyanka Na	Lab Instructor(Se	AMIETE In Elect
7	Analog Electronics Circuit Lab and Electronic Devices Lab	4	1. CRO 30 MHz (9), 2. CRO 20 MHz (4) 3. DSO 50 MHz (4) 4. Function	Odd semester:	Mrs. Sumita Bha	Lab Instructor(Se	AMIE (Electroni
8	Compute Network and Data Structure Lab (B102)	1	1. Hardware: Desktop PC (40), Integrated Rack with switch and Router	Even Sem : 8 s	Ms. Anindita Pau	Lab Instructor (S	Diploma in Elect
9	Wireless and Mobile Communication Lab(B-201A)	2	1. Cellular Mobile Communication Trainer ST2132, 2. Satellite	Odd Semester:	Mr. Ajoy Ghosal	Lab Instructor (S	B.Sc., Diploma i

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Analog Electronics Circuit Lab and Electronic Devices Lab (B101)	Circuit breaker present, Enclosed casing of high voltage & low voltage electrical lines, Proper earthing present, The instrument's circuits & its components are enclosed in proper casing having fuse for protection from high electrical hazards, DO'S & DON'Ts board present in the lab, Fire extinguisher present.
2	Electromagnetic Waves Lab (B107)	Circuit breaker present, Proper earthing present, The instrument's circuits & its components are enclosed in proper casing having fuse for protection from high electrical hazards, DO'S & DON'Ts board present in the lab, Fire extinguisher present.
3	Digital Electronics Lab, Computer Organization Lab and EMI Lab (B106)	Circuit breaker present, Enclosed casing of high voltage & low voltage electrical lines, Proper earthing present, The instrument's circuits & its components are enclosed in proper casing having fuse for protection from high electrical hazards, DO'S & DON'Ts board present in the lab, Fire extinguisher present
4	Basic Electronics Engineering Lab (B104A)	Circuit breaker present, Enclosed casing of high voltage & low voltage electrical lines, Proper earthing present, The instrument's circuits & its components are enclosed in proper casing having fuse for protection from high electrical hazards, DO'S & DON'Ts board present in the lab
5	Digital Signal Processing and Control Lab (B102A)	Circuit breaker present, Enclosed casing of high voltage & low voltage electrical lines, Proper earthing present, DO'S & DON'Ts board present in the lab, Fire extinguisher present.

6	Communication Lab (B212)	Circuit breaker present, Enclosed casing of high voltage & low voltage electrical lines, Proper earthing present, The instrument's circuits & its components are enclosed in proper casing having fuse for protection from high electrical hazards, DO'S & DON'Ts board present in the lab, Fire extinguisher present.
7	Microprocessor & Microcontroller Lab, Analog and Digital Electronics Lab and Automotive Electronics Lab (B210)	Circuit breaker present, Enclosed casing of high voltage & low voltage electrical lines, Proper earthing present, The instrument's circuits & its components are enclosed in proper casing having fuse for protection from high electrical hazards, DO'S & DON'Ts board present in the lab.
8	Computer Networks Lab and Data Structure Lab(B102)	Circuit breaker present, Enclosed casing of high voltage & low voltage electrical lines, Proper earthing present, DO'S & DON'Ts board present in the lab.
9	Wireless and Mobile Communication Lab (B201A)	Circuit breaker present, Enclosed casing of high voltage & low voltage electrical lines, Proper earthing present, DO'S & DON'Ts board present in the lab, Fire extinguisher present.
10	IOT Lab (B205)	Circuit breaker present, Enclosed casing of high voltage & low voltage electrical lines, Proper earthing present, DO'S & DON'Ts board present in the lab
11	Project Lab (B108)	Circuit breaker present, Enclosed casing of high voltage & low voltage electrical lines, Proper earthing present, The instrument's circuits & its components are enclosed in proper casing having fuse for protection from high electrical hazards, DO'S & DON'Ts board present in the lab, Fire extinguisher present.

D3. Project Laboratory/Research Laboratory

Name of Laboratory- Project Laboratory

Project laboratory provides an opportunity for the students to perform experiments related to their academic projects as well as participation in different in house/external competitions. The department recognizes that student's involvement in projects is effective and efficient way to develop competencies in applied technology and improve employability skills. Department has a dedicated project laboratory which is available to the students of the department as well as students from other departments, if required.

Project lab has sufficient space to accommodate specified numbers/batches of students with sufficient number of PCs/workstations/hardware

Hardware Project:

Hardware circuits or Hardware-software interface based projects are performed. All the equipment is maintained in very good working condition'. A specialized facility of robotics lab for designing, building and testing robots exists. In this lab, hands on projects using concepts of mechanical, electrical and computer engineering domain may be implemented. The robotics labs offer a practical environments for students to understand how robots function and to gain experience with various robotics components.

i) Do's and Don'ts boards are installed at appropriate places ii) All electrical equipment are protected against over-voltages and short-circuits using MCBs iii) Fire Extinguishers are installed at appropriate places iv) Safety instructions are demonstrated before entering the Project lab.

Depending on the area of specialization, student(s) are assigned laboratories where they undertake their respective projects with the guidance of their supervisors/laboratory in-charges.

Software Project:

Project based on simulation and modeling utilizing high end software like MATLAB, LTSPICE, Xilinx etc. are carried out by the students. Students need to access those facilities in concerned laboratories.

Project reports: The department keeps the student project reports of the passed-out batches in Departmental Library so that current students can easily access these reports to have some idea about previous year projects.

Students paper published in any conference/journal are displayed in the project laboratory and students are encouraged to publish their work in different national and international conferences / journals.

Utilization

B.Tech and M.Tech Academic Project work

Technotica, BITM, Hackathon and other Projects for students' participation in external events.

Circuit Design workshop or Skill Development Programme etc. also organized.

Available Important equipment:

1. DSO 60 MHz,
2. CRO 20 MHz (1)
3. CRO 25 MHz (5)
4. Function Generator 1 MHz (4)/20 MHz (5),
5. Fixed Power supply (15)
6. Variable Power supply (0-32V) (2A-4, 5A-1, 10A-1),
7. Microprocessor trainer kit (4)
8. Microcontroller trainer kit SDA with power supply (5)
9. RFID KIT
10. PIC Controller(2)
11. Dual stepper motor (1)
12. Tiva C Series Launch pad evaluation kit. (Texas Instrument) (20)
13. Computers (10)
14. Laser Printer
15. Soldering irons, bread boards and other discrete components.

PART E: First Year faculty and financial Resources

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

E1. First Year Student-Faculty Ratio (FYSFR)

Table No. E1.1: FYSFR details.

Year	Sanctioned intake of all UG programs (S4)	No. of required faculty (RF4= S4/20)	No. of faculty members in Basic Science Courses & Humanities and Social Sciences including Management courses (NS1)	No. of faculty members in Engineering Science Courses (NS2)	Percentage= No. of faculty members ((NS1*0.8) + (NS2*0.2))/(No. of required faculty (RF4)); Percentage= ((NS1*0.8) + (NS2*0.2))/RF
2022-23(CAYm2)	540	27	16	43	79
2023-24(CAYm1)	540	27	15	50	81
2024-25(CAY)	540	27	17	51	88

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

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

Items	Budgeted in 2024-2025	Actual Expenses in 2024-2025 till	Budgeted in 2023-2024	Actual Expenses in 2023-2024 till	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till
Infrastructure Built-Up	11500000	8624388	12000000	8792540	7000000	6975654	5000000	11715361
Library	2000000	1442205	1900000	1823608	1500000	1384589	1000000	879446
Laboratory equipment	8000000	6105323	6000000	4949265	6200000	3979427	3000000	2928821
Teaching and non-teaching staff salary	145000000	139880985	130000000	130735889	115000000	110252482	130000000	103677531
Outreach Programs	2300000	2193436	1400000	1382564	1000000	1386606	500000	247451
R&D	4500000	3924067	2500000	2268769	800000	488154	2000000	373495
Training, Placement and Industry linkage	2400000	2274923	2150000	1971970	1700000	1605137	2000000	956458
SDGs	5600000	3721672	6000000	5244407	6000000	5197065	4800000	3249384
Entrepreneurship	200000	96930	250000	56723	200000	62700	200000	15689
Others, specify	63880000	55325344	38550000	39432724	33100000	35868921	23500000	23980445
Total	**245380000**	**223589273**	**200750000**	**196658459**	**172500000**	**167200735**	**172000000**	**148024081**

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

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

Items	Budgeted in 2024-2025	Actual Expenses in 2024-2025 till	Budgeted in 2023-2024	Actual Expenses in 2023-2024 till	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till
Laboratory equipment	600000	535409	700000	631168	500000	460790	270000	185407
Software	100000	48970	100000	144746	100000	84591	100000	46600
SDGs	100000	21000	250000	383500	250000	255600	0	0
Support for faculty development	200000	70018	200000	70084	150000	155842	0	0
R & D	200000	190671	200000	118075	200000	217230	20000	12700
Industrial Training, Industry expert,	150000	156166	100000	89816	100000	60062	100000	51773
Miscellaneous	20000	4522	20000	16092	20000	9613	10000	0
Total	**1370000**	**1026756**	**1570000**	**1453481**	**1320000**	**1243728**	**500000**	**296480**