

NATIONAL BOARD OF ACCREDITATION

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

Program Name : Electrical and Electronics Engineering	Discipline : Engineering & Technology
Level : Under Graduate	Tier : 2
Application No : 11383	Date of Submission : 17-12-2025

PART A- Profile of the Institute

A1. Name of the Institute: Katihar Engineering College	
Year of Establishment : 2016	Location of the Institute: 25569388 87539429
A2. Institute Address: Katihar Engineering College, Hridayganj, Hajipur Katihar, Bihar-854109, India	
City:Katihar	State:Bihar
Pin Code:854109	Website:www.keck.ac.in
Email:principal@keck.ac.in	Phone No(with STD Code):-
A3. Name and Address of the Affiliating University (if any):	
Name of the University : Bihar Engineering University	City: Patna
State : Bihar	Pin Code: 800001
A4. Type of the Institution: Non-Autonomous (Affiliated)	
A5. Ownership Status: State Government	

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

- No. of UG programs: 7
- 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	Civil Engineering	2016	--	Civil Engineering
2	Engineering & Technology	UG	Computer Science and Engineering	2016	--	Computer Science and Engineering
3	Engineering & Technology	UG	Electrical & Electronics Engineering	2020	--	Electrical and Electronics Engineering

4	Engineering & Technology	PG	Electronics and Communication (VLSI Design)	2023	--	Electronics and Communication Engineering
5	Engineering & Technology	UG	Electronics Engineering (VLSI Design and Technology)	2023	--	Electronics and Communication Engineering
6	Engineering & Technology	UG	Food Processing and Preservation	2022	2025	Food Processing and Preservation
7	Engineering & Technology	PG	Manufacturing Engineering	2024	--	Mechanical Engineering
8	Engineering & Technology	UG	Mechanical and Smart Manufacturing	2023	--	Mechanical Engineering
9	Engineering & Technology	UG	Mechanical Engineering	2016	--	Mechanical Engineering

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

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

No Record

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:
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 :	Alauddin Ansari
B. Nature of appointment:	Regular
C. Qualification:	M.Tech

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)	60	60	60	60	60	60	0
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	49	40	29	42	46	55	0
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	21	9	17	7	12	0
N3=Separate division if any	0	0	0	0	0	0	0
N4=Total no. of students admitted in the 1st year via all supernumerary quotas	0	0	0	0	0	0	0
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	49	61	38	59	53	67	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.

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)	60	49	0	81.67
2024-25 (CAYm1)	60	40	0	66.67
2023-24 (CAYm2)	60	29	0	48.33

Average [(ER1 + ER2 + ER3) / 3] = 65.56≅ 11.00

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	(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).	67.00	72.00	0.00
B=No. of students who graduated from the program in the stipulated course duration	37.00	59.00	0.00
Success Rate (SR)= (B/A) * 100	55.22	81.94	0.00

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 68.58

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)	6.58	6.58	7.26
Y=Total no. of successful students	40.00	21.00	36.00
Z=Total no. of students appeared in the examination	40.00	29.00	40.00
API [X*(Y/Z)]	6.58	4.76	6.53

Average API[(AP1+AP2+AP3)/3] : 5.96

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

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

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2nd year/10)	6.98	7.06	6.68
Y=Total no. of successful students	30.00	45.00	39.00
Z=Total no. of students appeared in the examination	30.00	53.00	44.00
API [X * (Y/Z)]	6.98	5.99	5.92

Average API [(AP1 + AP2 + AP3)/3] : 6.30

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)	7.36	7.01	7.21

Y=Total no. of successful students	45.00	37.00	60.00
Z=Total no. of students appeared in the examination	45.00	39.00	60.00
API [$X*(Y/Z)$]:	7.36	6.65	7.21

Average API [(AP1 + AP2 + AP3)/3] : 7.07

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	67.00	72.00	0.00
X=No. of students placed	11.00	10.00	0.00
Y=No. of students admitted to higher studies	5.00	8.00	0.00
Z= No. of students taking up entrepreneurship	1.00	0.00	0.00
Placement Index(P) = $((X + Y + Z)/FS) * 100$:	25.37	25.00	0.00

Average Placement Index = $(P_1 + P_2 + P_3)/3$: 25.18 Placement Index Points:

PART C: Faculty Details in Department and Allied Departments

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

C1. Faculty details of Department and Allied Departments

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

Sr.No	Name of the Faculty	PAN No.	Highest degree	University	Area of Specialization	Date of Joining in this Institution	Experience in years in current institute	Designation at Time Joining in this Institution	Present Designation	The date on which Designated as Professor/ Associate Professor if any	Nature of Association (Regular/ Contract/ Ad hoc)	Currently Associated (Y/N)	In case of NO, Date of Leaving	IS HOD?
1	Alauddin Ansari	XXXXXXXX81A	M.Tech	A.M.U Aligarh	Instrumentation and Control	26/03/2018	7.8	Assistant Professor	Assistant Professor		Regular	Yes		Yes
2	Dr. Ranjana Kumari	XXXXXXXX03R	Ph.D	T.M.B.U. Bhagalpur	Optimal Control	04/09/2018	7.3	Associate Professor	Associate Professor		Regular	Yes		No

3	Dr. Ram Kumar	XXXXXXXX97F	Ph.D	N.I.T. Silchar	Microelectronics and VLSI	26/03/2018	7.8	Assistant Professor	Assistant Professor		Regular	Yes		No
4	Raju Rajak	XXXXXXXX34B	M.Tech	A.K.T.U. Lucknow	Power Systems	12/07/2024	1.5	Assistant Professor	Assistant Professor		Regular	Yes		No
5	Manan Jee	XXXXXXXX49L	M.Tech	B.I.T. Mesra	Power Electronics Engineering	25/06/2022	3.5	Assistant Professor	Assistant Professor		Regular	Yes		No
6	Amit Kumar Suman	XXXXXXXX94D	M.Tech	N.I.T. Patna	Control System Engineering	26/03/2018	7.8	Assistant Professor	Assistant Professor		Regular	Yes		No
7	Rakesh Choudhary	XXXXXXXX00C	M.Tech	M.D.U. Rohtak	Electronics and Communication Engineering	03/07/2024	1.5	Assistant Professor	Assistant Professor		Regular	Yes		No
8	Rajeev Ranjan Sinha	XXXXXXXX33H	M.Tech	N.I.T. Patna	Power System Engineering	22/05/2019	6.6	Assistant Professor	Assistant Professor		Regular	Yes		No
9	Abhijeet Kumar	XXXXXXXX48G	M.Tech	M.N.I.T. Jaipur	Power Systems	31/03/2018	7.8	Assistant Professor	Assistant Professor		Regular	Yes		No

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

C2. Student-Faculty Ratio (SFR)

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

UG1=1st UG program

UGn=nth UG program

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

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

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

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

PG1=1st PG program.

PGm=mth PG program

A= No. of Students in PG 1st year

B= No. of Students in PG 2nd year

Student Faculty Ratio (**SFR**) = S/F

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

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

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

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

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

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

Description	CAY(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
UG1.B	66	66	66
UG1.C	66	66	66
UG1.D	66	66	66
UG1: Electrical & Electronics Engineering	198	198	198
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	0	0	0
S=Total no. of students in the Department (DS) and allied departments (AS)	S1= 198	S2= 198	S3= 198
DF=Total no. of faculty members in the Department	9	9	7
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= 9	F2= 9	F3= 7
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= 22.00	SFR2= 22.00	SFR3= 28.29
Average SFR for 3 years	SFR= 24.10		

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)	2	7	9.00	13.33
2024-25(CAYm1)	2	7	9.00	13.33

2023-24(CAYm2)	2	5	9.00	11.11
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C4. Faculty Cadre Proportion

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

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

Year	Professors		Associate Professors		Assistant Professors	
	Required RF1	Available AF1	Required RF2	Available AF1	Required RF3	Available AF3
2025-26	1.00	0.00	2.00	1.00	6.00	8.00
2024-25	1.00	0.00	2.00	1.00	6.00	8.00
2023-24	1.00	0.00	2.00	1.00	6.00	6.00
Average	RF1=1.00	AF1=0.00	RF2=2.00	AF2=1.00	RF2=6.00	AF2=7.33

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	Dr. Taranand Mandal	Retired HOD	Inter College BMP-7 Katihar	Biology for Engineers	50.00

(CAYm2)

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr. Taranand Mandal	Retired HOD	Inter College BMP-7 Katihar	Biology for Engineers	50.00

C6. Academic Research

Table No. C6.1: Faculty publication details.

S.No.	Item	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)
1	No. of peer reviewed journal papers published	5	6	2
2	No. of peer reviewed conference papers published	3	0	2
3	No. of books/book chapters published	0	1	2

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)

(CAYm2)

(CAYm3)

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

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)

(CAYm2)

(CAYm3)

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

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 Electrical Engineering Lab	35	1. Single Phase Transformer, 2. DC Motor-Generator Set, 3. RC & LC Circuit Kit, 4. Universal Breadboard Trainer Kit 4 Kits	12 Hours	Md. Maqshood AI	Lab Assistant	B.Tech
2	Electrical Machines-I Lab	35	1. Panel of DC Shunt Motor to perform various Experiments, 2. Panel of DC Series Motor to perform various	12 hours	Mr. Ashish Kumar	Lab Assistant	Diploma
3	Analog Electronics Laboratory	35	1. Universal Breadboard Trainer Kit 2. Diode and Zener Diode 3. Clipper & Clamper Trainer Kit 4. Transistor	12 Hours	Md. Maqshood AI	Lab Assistant	B.Tech
4	Digital Electronics & Microprocessor Lab	35	1. 8085 Microprocessor Trainer kit 2. 8086 Microprocessor Trainer kit 3. 8051 Study card for speed control for stepper	12 Hours	Md. Maqshood AI	Lab Assistant	B.Tech
5	Electrical Machines-II Lab	35	1. Computer Interface Panel to measure OCC and SCC of Synchronous Generator 2. Computer Interface Panel	12 Hours	Mr. Jayant Kumar	Lab Assistant	Diploma
6	Analog & Digital Communication System Lab	35	1. GSM Study Kit 2. CDMA Study Kit 3. AM Transmitter Trainer Kit 4. AM Receiver Trainer Kit 5. Computer based	12 Hours	Md. Maqshood AI	Lab Assistant	B.Tech
7	Control Systems Lab	35	1. Linear System Simulator Trainer 2. A.C Position Control System 3. D.C Speed Control System 4. Panel for	12 Hours	Mr. Ashish Kumar	Lab Assistant	Diploma

8	Power Electronics Lab	35	1. Panel to Study and Demonstration of V-I characteristics of SCR, TRIC, DICE, IGBT, IUT 2. Half Wave & Full Wave	12 Hours	Mr. Ashish Kumar	Lab Assistant	Diploma
9	Power Systems - I Lab	35	1. Transmission Line Trainer 2. String Insulator with Guard Ring 3. Cable Fault Location Trainer 4. DC Network Analyzer	12 Hours	Mr. Jayant Kumar	Lab Assistant	Diploma
10	Professional Elective Lab-I	35	1. Desktop Computers with Latest Configuration 2. Licensed Operating System 3. UPS and Power Backup 4.	12 Hours	Mr. Ashish Kumar	Lab Assistant	Diploma
11	Electrical Circuit Analysis Lab	35	1. Kit to Measure Three Phase Power Using Two Wattmeter Methods 2. Various Kits for the Verification of Ohm's Law	12 Hours	Mr. Sumit Kumar	Lab Instructor	ITI
12	Digital Signal Processing Lab	35	1. DSP Trainer Kit 2. 1. Desktop Computers with Latest Configuration	12 Hours	Mr. Jayant Kumar	Lab Assistant	Diploma
13	Electronics Design Laboratory	35	1. 32 Bit Embedded ARM7 Processor Trainer 2. PCB Fabrication and Design Kit 3. WCN KIT 4. Robotics KIT 5.	12 Hours	Mr. Jayant Kumar	Lab Assistant	Diploma
14	Introduction to VLSI Design Lab	35	2. VLSI - EMBEDDED SYSTEM TRAINER [FPGA-SPARTAN-III] 3. B2 Crisp (Analog Digital & Mixed Signal)	12 Hours	Md. Maqshood AI	Lab Assistant	B.Tech
15	Measurement and Instrumentation	35	1. LCR METER 2. Hey's Bridge Trainer Kit 3. Kelvin's Bridge Trainer Kit 4. Anderson bridge Trainer Kit 5.	12 Hours	Mr. Jayant Kumar	Lab Assistant	Diploma

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Basic Electrical Engineering Lab	<ul style="list-style-type: none"> • Proper earthing of all equipment and work tables is ensured. • Use of MCBs/fuses and operation within rated limits • All live parts properly insulated and enclosed • Use of calibrated and well-maintained instruments. • Students wear rubber-soled shoes and avoid wet hands • Fire extinguishers, first-aid kit, and emergency switches provided • Experiments conducted under instructor supervision • Safety instructions, standard operating procedures (SOPs), and warning signboards displayed inside the laboratory. • Students are provided with pre-lab safety briefing and are instructed to follow laboratory manuals and safety protocols.

2	Electrical Machines Lab	<ul style="list-style-type: none"> • Proper earthing of all machines, panels, and workbenches • Use of MCBs, fuses, and overload relays for protection • Guards provided for rotating parts; safe distance maintained • Students wear rubber-soled shoes and avoid loose clothing • Emergency stop switches and fire extinguishers available • Experiments conducted under faculty/technician supervision • Safety instructions, SOPs, and warning signs displayed • Students are provided with pre-lab safety briefing and are instructed to follow laboratory manuals and safety protocols.
3	Analog Electronics Lab	<ul style="list-style-type: none"> • Proper earthing of power supplies, CROs, and test benches • Use of regulated low-voltage DC supplies for experiments • Use of proper probes and insulated leads • Fire extinguishers and first-aid kit available • Experiments conducted under faculty supervision • Safety instructions, SOPs, and warning signs displayed • Students are provided with pre-lab safety briefing and are instructed to follow laboratory manuals and safety protocols.
4	Digital Electronics & Microprocessor Lab	<ul style="list-style-type: none"> • Proper earthing of power supplies, trainers, and workbenches • Use of regulated low-voltage DC supplies. • ICs and microprocessors handled with ESD precautions • Use of proper probes, insulated leads, and connectors • Fire extinguishers and first-aid kit available • Experiments conducted under faculty supervision • Safety instructions, SOPs, and warning signs displayed • Students are provided with pre-lab safety briefing and are instructed to follow laboratory manuals and safety protocols.
5	Analog & Digital Communication Lab	<ul style="list-style-type: none"> • Proper earthing of communication trainers, CROs, and power supplies • Use of regulated low-voltage DC supplies for experiments • Use of shielded cables and proper connectors to avoid signal leakage • Use of proper probes, insulated leads, and connectors • Fire extinguishers and first-aid kit available • Experiments conducted under faculty supervision • Safety instructions, SOPs, and warning signs displayed • Students are provided with pre-lab safety briefing and are instructed to follow laboratory manuals and safety protocols.
6	Control Systems Lab	<ul style="list-style-type: none"> • Proper earthing of control panels, trainers, and workbenches • Use of regulated low-voltage power supplies • Emergency stop switches and fire extinguishers and first-aid kit are available in the lab • Experiments conducted under faculty supervision • Safety instructions, SOPs, and warning signs displayed • Students are provided with pre-lab safety briefing and are instructed to follow laboratory manuals and safety protocols.

7	Power Electronics Lab	<ul style="list-style-type: none"> • All power electronic equipment, trainer kits, and work benches are properly earthed to prevent electrical shock and equipment damage. • MCBs, fuses, and protective switches are installed for protection against overloads, short circuits, and fault conditions. • Insulated wiring, shielded terminals, and standard connectors are used for all experimental connections to avoid accidental contact with live parts. • Low-voltage control circuits are employed for triggering and gate control of power electronic devices to enhance user safety. • Emergency power cut-off switches and main isolation switches are provided and clearly marked for immediate disconnection during emergencies. • Insulated wiring, covered terminals, and standardized connectors used to prevent accidental contact with live circuits. • Low-voltage control circuits implemented to ensure student safety during experimentation. • Main switches and emergency power cut-off facilities available and easily accessible in the laboratory. • Fire extinguishers (CO₂/DCP type) suitable for electrical fires are installed and maintained in the laboratory. • Experiments conducted under instructor supervision • Safety instructions, SOPs, and warning signs displayed • Students are provided with pre-lab safety briefing and are instructed to follow laboratory manuals and safety protocols.
8	Power Systems - I Lab	<ul style="list-style-type: none"> • All relay panels, CTs, PTs, and testing equipment are properly earthed to ensure operator safety. • MCBs, fuses, and overload protection devices are installed to safeguard against short circuits and abnormal operating conditions. • Experiments involving high voltage and high current are conducted strictly under the supervision of faculty members and trained laboratory staff. • MCBs, fuses, and protective devices installed for protection against overload, short circuit, and fault conditions. • Insulated wires, terminals, and connectors are used for all experimental connections to avoid accidental contact with live parts. • Emergency power cut-off and main isolation switches are provided and clearly marked for immediate disconnection during emergencies. • Fire extinguishers (CO₂/DCP type) suitable for electrical fires are installed and maintained in the laboratory. • Safety instructions, standard operating procedures (SOPs), and warning signboards displayed inside the laboratory. • Regular inspection and maintenance of relays, protection panels, and wiring are carried out to ensure safe operation. • Students are provided with pre-lab safety briefing and are instructed to follow laboratory manuals and safety protocols.
9	Electrical Circuit Analysis Lab	<ul style="list-style-type: none"> • Proper earthing of all equipment and work tables is ensured. • Use of MCBs/fuses and operation within rated limits • All live parts properly insulated and enclosed • Use of calibrated and well-maintained instruments. • Students wear rubber-soled shoes and avoid wet hands • Fire extinguishers, first-aid kit, and emergency switches provided • Experiments conducted under instructor supervision • Safety instructions, standard operating procedures (SOPs), and warning signboards displayed inside the laboratory. • Students are provided with pre-lab safety briefing and are instructed to follow laboratory manuals and safety protocols.

10	Professional Elective Lab-I	<ul style="list-style-type: none"> • Proper electrical wiring, earthing, and MCB protection provided for all computer systems. • UPS and stabilized power supply ensured to protect systems from power fluctuations. • Certified power cords, insulated sockets, and surge protection used for electrical safety. • Proper cooling, and cable management maintained to ensure safe working conditions. • Fire extinguishers (CO₂/DCP type) suitable for electrical fires are installed and maintained in the laboratory. • Safety instructions, standard operating procedures (SOPs), and warning signboards displayed inside the laboratory.
11	Digital Signal Processing Lab	<ul style="list-style-type: none"> • Proper electrical wiring, earthing, and MCB protection provided for all DSP trainer kits, computers, and peripherals. • Stabilized power supply and UPS backup ensured to protect systems and data from voltage fluctuations and power failures. • Insulated power cords, connectors, and sockets used for safe operation of electronic equipment. • Proper ventilation, cooling, and cable management maintained to ensure safe working conditions. • Fire extinguishers (CO₂/DCP type) suitable for electrical fires are installed and maintained in the laboratory. • Safety instructions, standard operating procedures (SOPs), and warning signboards displayed inside the laboratory.
12	Electronics Design Laboratory	<ul style="list-style-type: none"> • Proper electrical wiring, earthing, and MCB/ELCB protection are provided for all electronic trainer kits, test instruments, computers, and peripherals. • Stabilized power supply units and UPS backup are ensured to protect laboratory equipment and experimental data from voltage fluctuations and power failures. • Insulated power cords, connectors, probes, and sockets are used for the safe operation of electronic equipment and instruments. • Proper ventilation, cooling arrangements, and systematic cable management are maintained to ensure safe and comfortable working conditions. • Low-voltage soldering stations with insulated handles and adequate fume ventilation are provided for PCB and circuit assembly work. • Fire extinguishers (CO₂/DCP type) suitable for electrical fires are installed and maintained in the laboratory. • Safety instructions, standard operating procedures (SOPs), and warning signboards displayed inside the laboratory. • Regular inspection and maintenance of relays, protection panels, and wiring are carried out to ensure safe operation. • Students are provided with pre-lab safety briefing and are instructed to follow laboratory manuals and safety protocols.
13	Introduction to VLSI Design Lab	<ul style="list-style-type: none"> • Proper electrical wiring, earthing, and MCB protection provided for all computer, servers, and laboratory power outlets. • Stabilized power supply and UPS backup are ensured for computer systems to prevent data loss and protect equipment from voltage fluctuations and power failures. • Licensed and authenticated VLSI design software tools are installed, and systems are protected using antivirus and access control mechanisms. • Adequate ventilation, cooling, and illumination are maintained to ensure safe and comfortable working conditions during extended design sessions. • All power cords, network cables, and connectors are properly insulated and managed to avoid electrical hazards and tripping risks. • Fire extinguishers (CO₂/DCP type) suitable for electrical fires are installed and maintained in the laboratory. • Safety instructions, standard operating procedures (SOPs), and warning signboards displayed inside the laboratory. • Experiments conducted under faculty supervision • Students are provided with pre-lab safety briefing and are instructed to follow laboratory manuals and safety protocols.

14	Measurement and Instrumentation	<ul style="list-style-type: none"> • Proper earthing of all measuring instruments and workbenches • Periodic calibration and maintenance of instruments • Fire extinguishers and first-aid kit available • Experiments conducted under faculty supervision • Safety instructions, SOPs, and warning signs displayed
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D3. Project Laboratory/Research Laboratory

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)	330	16	3	15	34
2024-25(CAYm1)	360	18	6	19	48
2025-26(CAY)	360	18	7	19	52

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

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

Items	Budgeted in 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Infrastructure Built-Up	0	0	0	0	16705999	16705999	0	0
Library	400000	0	402985	402985	10000	9264	1000000	999413

Laboratory equipment	25700000	9720908	22092810	21193938	44857730	44689918	33000000	32339781
Teaching and non-teaching staff salary	69217000	63457960	70877502	68810036	52963939	51156819	44799000	41280735
Outreach Programs	0	0	0	0	0	0	0	0
R&D	0	0	0	0	0	0	0	0
Training, Placement and Industry linkage	60000	60000	100000	100000	0	0	0	0
SDGs	100000	0	300000	300000	45000	45000	30000	30000
Entrepreneurship	0	0	0	0	0	0	0	0
Maintenance, Small works, Electricity bill,	13084000	7161825	12969976	10279008	9843932	8244681	6528870	3538177
Total	108561000	80400693	106743273	101085967	124426600	120851681	85357870	78188106

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

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

Items	Budgeted in 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Laboratory equipment	3500000	3395707	3500000	3435144	10500000	10317280	1300000	1214900
Software	0	0	0	0	991000	991000	0	0
SDGs	0	0	75000	75000	0	0	0	0
Support for faculty development	0	0	170000	170000	70000	70000	100000	100000
R & D	0	0	0	0	0	0	0	0

Industrial Training, Industry expert,	0	0	5000	5000	5000	5000	0	0
Consumables	10000	10000	25000	25000	25000	25000	0	0
Total	3510000	3405707	3775000	3710144	11591000	11408280	1400000	1314900