NATIONAL BOARD OF ACCREDITATION

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

Program Name : Electrical & Electronics Engineering	**Discipline**: Engineering & Technology
Level : Under Graduate	**Tier**: 1
Application No: 10975	**Date of Submission**: 03-09-2025

PART A- Profile of the Institute

A1.Name of the Institute: IPS Academy, Institute of Engineering and Science, Indore, M.P.	
Year of Establishment : 1999	Location of the Institute: KNOWLEDGE VILLAGE RAJENDRA NAGAR A B ROAD INDORE
A2. Institute Address:INSTITUTE OF ENGINEERING AND SCIENCE, IPS ACADEMY, KNOWLEDGE VILLAGE, RAJENDRA NAGAR, A. B. ROAD, INDORE. (MP) PIN CODE- 452012	
City:Indore	State:Madhya Pradesh
Pin Code:452012	Website:www.ies.ipsacademy.org
Email:director.ies@ipsacademy.org	Phone No(with STD Code):0731-4014601
A3. Name and Address of the Affiliating University (if any):	
Name of the University :	City: Bhopal
State : Madhya Pradesh	Pin Code: 462033
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: **14**
- No. of PG programs: **7**

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

Sr.No.	Discipline	Level of program	Name of the program	Year of Start	Year of Closed	Name of The Department
1	Engineering & Technology	UG	Agricultural Engineering	2022	2025	Agricultural Engineering
2	Engineering & Technology	UG	Artificial Intelligence and Machine Learning	2021	2022	Artificial Intelligence and Machine Learning
3	Engineering & Technology	UG	Chemical Engineering	2004	--	Chemical Engineering
4	Engineering & Technology	PG	Chemical Engineering	2011	--	Chemical Engineering
5	Engineering & Technology	UG	Civil Engineering	2004	--	Civil Engineering
6	Engineering & Technology	UG	Computer Science & Information Technology	2018	--	Computer Science and Information Technology
7	Engineering & Technology	UG	Computer Science and Engineering	1999	--	Computer Science and Engineering
8	Engineering & Technology	UG	Computer Science and Engineering (Artificial Intelligence & Machine Learning)	2021	--	Computer Science and Engineering (Artificial Intelligence and Machine Learning)
9	Engineering & Technology	UG	Computer Science and Engineering (Data Science)	2020	--	Computer Science and Engineering (Data Science)

10	Engineering & Technology	UG	Computer Science and Engineering (Internet of Things and Cyber Security including Blockchain Technology)	2022	--	Computer Science and Engineering (Internet of Things and Cyber Security including Blockchain Technology)
11	Engineering & Technology	UG	Computer Science and Engineering (Internet of Things)	2020	--	Computer Science and Engineering (Internet of Things)
12	Engineering & Technology	PG	Construction & Project Management	2013	--	Civil Engineering
13	Engineering & Technology	PG	Data Science	2007	--	Computer Science and Engineering (Data Science)
14	Engineering & Technology	PG	Digital Communications Engineering	2007	--	Electronics and Communication Engineering
15	Engineering & Technology	UG	Electrical & Electronics Engineering	2003	--	Electrical and Electronics Engineering
16	Engineering & Technology	UG	Electronics & Communication Engineering	1999	--	Electronics and Communication Engineering
17	Engineering & Technology	UG	Fire Technology and Safety	1999	--	Fire Technology and Safety
18	Engineering & Technology	PG	Industrial Safety Engineering	2010	--	Fire Technology and Safety
19	Engineering & Technology	UG	Mechanical Engineering	2013	--	Mechanical Engineering
20	Engineering & Technology	PG	Power Electronics	2013	--	Electrical and Electronics Engineering
21	Engineering & Technology	PG	Structural Engineering	2009	--	Civil Engineering

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

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

Name of the Department	Having Allied Departments	Name of the Program	Program Level
Fire Technology and Safety	No	Fire Technology and Safety	UG
Electrical and Electronics Engineering	No	Electrical & Electronics Engineering	UG
Mechanical Engineering	No	Mechanical Engineering	UG
Electronics and Communication Engineering	No	Electronics & Communication Engineering	UG
Chemical Engineering	No	Chemical Engineering	UG

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

No Record

PART-B: Program information

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

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

SR.NO.	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/DECREASE INTAKE (if any)	YEAR OF INCREASE/DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/COMPETENT AUTHORITY ARROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCREDITED	PROGRAM DURATION
1	Electrical & Electronics Engineering	UG	2003 / --	60	Yes	2021	30	2021	AICTE	Granted accreditation for 3 years for the period (specify period)	2017	2020	1	4

Sanctioned Intake for Last Five Years for the Power Electronics	
Academic Year	**Sanctioned Intake**
2024-25	30
2023-24	30
2022-23	30
2021-22	30
2020-21	120
2019-20	90

List of the Allied Departments/Cluster and Programs:

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

A. Name of the HoD :	DR. MANISH SAHAJWANI
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)	30	30	30	30	120	90	120
N1=Total no. of students admitted in the 1st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program	16	14	11	16	17	25	33
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	5	7	3	4	3	4
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.	16	19	18	19	21	28	37

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)	30	16	0	53.33
2023-24 (CAYm1)	30	14	0	46.67
2022-23 (CAYm2)	30	11	0	36.67

Average [(ER1 + ER2 + ER3) / 3] = 45.56≡ 5.00

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).	124.00	93.00	124.00
B=No. of students who graduated from the program in the stipulated course duration	14.00	25.00	33.00

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 21.59

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)	7.75	7.12	6.76
Y=Total no. of successful students	13.00	9.00	14.00
Z=Total no. of students appeared in the examination	14.00	11.00	16.00
API [X*(Y/Z)]	7.20	5.83	5.92

Average API[(AP1+AP2+AP3)/3] : 6.32

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)	7.56	7.50	6.99
Y=Total no. of successful students	12.00	16.00	14.00
Z=Total no. of students appeared in the examination	16.00	17.00	21.00
API [X * (Y/Z)]	5.67	7.06	4.66

Average API [(AP1 + AP2 + AP3)/3] : 5.80

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)	7.49	6.79	8.02
Y=Total no. of successful students	16.00	14.00	26.00
Z=Total no. of students appeared in the examination	16.00	14.00	26.00
API [X*(Y/Z)]:	7.49	6.79	8.02

Average API [(AP1 + AP2 + AP3)/3] : 7.43

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	124.00	93.00	124.00
X=No. of students placed	10.00	10.00	25.00
Y=No. of students admitted to higher studies	2.00	4.00	1.00
Z= No. of students taking up entrepreneurship	0.00	0.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	9.68	15.05	20.97

Average Placement Index = (P_1 + P_2 + P_3)/3: 15.23 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	DR. A. G. KOTHARI	XXXXXXX56L	Ph.D	IIT Kanpur	Power System	20/08/2013	12	Professor	Professor		Regular	Yes		No
2	DR. MANISH SAHAJWANI	XXXXXXX76N	Ph.D	RGPV	Digital Communication	08/03/2006	19.6	Assistant Professor	Professor	12/09/2023	Regular	Yes		Yes
3	MANOJ GUPTA	XXXXXXX47N	M.E.	RGPV	Power Electronics	07/08/2008	17	Assistant Professor	Assistant Professor		Regular	Yes		No
4	MR. KAMLESH GUPTA	XXXXXXX90L	M.E.	RGPV	Power Electronics	12/02/2013	12.6	Assistant Professor	Assistant Professor		Regular	Yes		No
5	DR. YOGENDRA SINGH DOHARE	XXXXXXX52E	Ph.D	IIT Dhanbad	Electrical Machine & Drives	9/03/2016	9.5	Assistant Professor	Associate Professor	03/08/2024	Regular	Yes		No
6	MR. DEEPESH BHATI	XXXXXXX71F	M.E.	RGPV	Power Electronics	23/03/2010	15.5	Assistant Professor	Assistant Professor		Regular	Yes		No
7	MS. ANKITA SINGH	XXXXXXX80E	M.E.	RGPV	Power Electronics	27/07/2012	13.1	Assistant Professor	Assistant Professor		Regular	Yes		No
8	MR. HEMANT MEHAR	XXXXXXX06H	M.E.	RGPV	Power Electronics	21/01/2013	12.7	Assistant Professor	Assistant Professor		Regular	Yes		No
9	MS. NAMRATA NEBHNANI	XXXXXXX23A	M.E.	RGPV	Digital Instrumentation	10/08/2012	13	Assistant Professor	Assistant Professor		Regular	Yes		No
10	MOHD FIROZ KHAN	XXXXXXX66G	M.Tech	RGPV	Power Electronics	21/08/2009	16	Assistant Professor	Assistant Professor		Regular	Yes		No

11	MS. PRIYA PAL	XXXXXXX48Q	M.E.	RGPV	Power Electronics	19/01/2015	10.7	Assistant Professor	Assistant Professor		Regular	Yes		No
12	DR. SHARAD JAIN	XXXXXXX18E	Ph.D	AMITY Uni,Jaipur	Digital Communication	01/09/2015	10	Assistant Professor	Associate Professor	23/01/2025	Regular	Yes		No
13	MR. SUBHASH KUMAR MANDAL	XXXXXXX96N	M.Tech	NIT Silchar	Power System	9/09/2015	9.11	Assistant Professor	Assistant Professor		Regular	Yes		No
14	DR. POOJA BHATT	XXXXXXX57L	Ph.D	IIIT Nagpur	Power Electronics	2/08/2017	8.1	Assistant Professor	Assistant Professor		Regular	Yes		No
15	MR. JAGDISH CHHABRIA	XXXXXXX84B	B.E.	Indore University	Electrica	15/01/2022	3.7	Professor	Professor		Regular	Yes		No
16	MR SUNDEEP GUPTA	XXXXXXX35C	B.E.	IIT Kharagpur	Instrumentation Eng.	01/07/2019	6.2	Professor	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 Department1
Table No.C2.1: Student-faculty ratio.

Description	**CAY(2024-25)**	**CAYm1 (2023-24)**	**CAYm2 (2022-23)**
UG1.B	33	33	33
UG1.C	33	33	124
UG1.D	33	124	93
UG1: Electrical & Electronics Engineering	**99**	**190**	**250**
PG1.A	9	9	9
PG1.B	9	9	18
PG1: Power Electronics	**18**	**18**	**27**
DS=Total no. of students in all UG and PG programs in the Department	117	208	277
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=** 117	**S2=** 208	**S3=** 277

Description	CAY(2024-25)	CAYm1 (2023-24)	CAYm2 (2022-23)
DF=Total no. of faculty members in the Department	14	14	14
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=** 14	**F2=** 14	**F3=** 14
FF=The faculty members in F who have a 100% teaching load in the first-year courses	4	3	3
Student Faculty Ratio (SFR)=S/(F-FF)	**SFR1= 11.70**	**SFR2= 18.91**	**SFR3= 25.18**
Average SFR for 3 years	**SFR= 18.60**		

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)	3	11	5.00	37.00
2023-24(CAYm1)	3	11	10.00	18.50
2022-23(CAYm2)	3	11	13.00	14.23

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	1.00	2.00	1.00	1.00	3.00	11.00
2023-24	1.00	1.00	2.00	1.00	6.00	12.00
2022-23	1.00	1.00	3.00	1.00	9.00	12.00
Average	RF1=1.00	AF1=1.33	RF2=2.00	AF2=1.00	RF2=6.00	AF2=11.67

C5. Visiting/Adjunct Faculty/Professor of Practice

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

(CAYm1)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr Jagdish Chhabria	Professor	IPS ACADEMY	Electrical Engineering	50.00
2	Mr Sundip Gupta	Professor	IPS ACADEMY	Instrumentation Engineering	50.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr Jagdish Chhabria	Professor	IPS ACADEMY	Electrical Engineering	50.00
2	Mr Sundip Gupta	Professor	IPS ACADEMY	Instrumentation Engineering	50.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr Jagdish Chhabria	Professor	IPS ACADEMY	Electrical Engineering	50.00
2	Mr Sundip Gupta	Professor	IPS ACADEMY	Instrumentation Engineering	50.00

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	3	5	8
2	No. of peer reviewed conference papers published	0	2	0
3	No. of books/book chapters published	0	0	0

C7. Sponsored Research Project

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

(CAYm1)

(CAYm2)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Deepesh Bhati		ME & EEE	M-BAHA	IPSA,IES,Indore	06-03-2024 to 10-03-2024	0.00
						Amount received (Rs.):0.00

(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
Mr. Manoj Gupta	Robotic Hand	1 Year	100000.00	82500.00	working models/prototypes
			Amount received (Rs.): 100000.00		

(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
Mr. Manish Sahajwani	Peltier Based Heating and Cooling System	1 Year	100000.00	85000.00	working models/prototypes
			Amount received (Rs.): 100000.00		

(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
Mr. Kamlesh Gupta	Anti Collision Device for Car	1 Year	100000.00	56200.00	working models/prototypes
			Amount received (Rs.): 100000.00		

Total amount (Lacs) received for the past 3 years : 300000.00

PART D: Laboratory Infrastructure in the Department

(Data to be filled in for the Department)

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

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

Sr. No	Name of the Laboratory	Number of students per set up(Batch Size)	Name of the Important Equipment	Weekly utilization status(all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical staff	Designation	Qualification
1	MODELLING & SIMULATION LAB	30	MATLAB Software	Twice in a wee	Mr. Anil Songare	Lab Assistant	Diploma
2	MODELLING & SIMULATION LAB	30	PSIM Software	Twice in a wee	Mr. Anil Songare	Lab Assistant	Diploma
3	BASIC ELECTRICAL ENGINEERING LAB	30	Oscilloscope (20mhz)	Twice in a wee	Mr. Anil Songare	Lab Assistant	Diploma

4	BASIC ELECTRICAL ENGINEERING LAB	30	3 Phase auto transformer (3Ph, 8A)	Twice in a wee	Mr. Sonu Verma	Lab Assistant	B.Sc. (Electronics)
5	BASIC ELECTRICAL ENGINEERING LAB	30	Techo Meter Digital	Twice in a wee	Mr. Bidhut Chatterjee	Lab Assistant	Lab Assistant
6	BASIC ELECTRICAL ENGINEERING LAB	30	D.C.Motor (1hp-1500rpm)	Twice in a wee	Mr. Bidhut Chatterjee	Lab Assistant	Lab Assistant
7	CONTROL SYSTEM LAB	30	CRO 30 MHz Dual Channel with Power Supply 4 Poles	Twice in a wee	Mr. Anil Songare	Lab Assistant	Diploma
8	CONTROL SYSTEM LAB	30	Function Generator Model No 5074	Twice in a wee	Mr. Anil Songare	Lab Assistant	Diploma
9	CONTROL SYSTEM LAB	30	Digital Storage Oscilloscope	Twice in a wee	Mr. Anil Songare	Lab Assistant	Diploma
10	DIGITAL ELECTRONICS AND LOGIC DESIGN LAB	30	Digital Lab Logic Gate Tutor	Twice in a wee	Mr. Sonu Verma Gate Tut	Lab Assistant	B.Sc. (Electronics)
11	DIGITAL ELECTRONICS AND LOGIC DESIGN LAB	30	Study of various types of Flip Flop	Twice in a wee	Mr. Bidhut Chatterjee	Lab Assistant	Diploma
12	ELECTRICAL DRIVES LAB	30	AC Drive	Twice in a wee	Mr. Bidhut Chatterjee	Lab Assistant	Diploma
13	ELECTRICAL DRIVES LAB	30	DC Drive	Twice in a wee	Mr. Bidhut Chatterjee	Lab Assistant	Diploma
14	ELECTRICAL DRIVES LAB	30	AC-DC Motor and Generator Set with Techo Generator	Twice in a wee	Mr. Bidhut Chatterjee	Lab Assistant	Diploma
15	ELECTRICAL DRIVES LAB	30	AC Drive Kit	Twice in a wee	Mr. Bidhut Chatterjee	Lab Assistant	Diploma
16	ELECTRICAL DRIVES LAB	30	DC Drive Kit	Twice in a wee	Mr. Bidhut Chatterjee	Lab Assistant	Diploma
17	ELECTRONICS INSTRUMENTATION LAB	30	LCR Q meter	Twice in a wee	Mr. Sonu Verm	Lab Assistant	B.Sc. (Electronics)
18	ELECTRONICS INSTRUMENTATION LAB	30	Strain Gauge with Cantilever Beam Trainer Kit (Model No.-ME1051)	Twice in a wee	Mr. Sonu VermTutor	Lab Assistant	B.Sc. (Electronics)
19	ELECTRONICS INSTRUMENTATION LAB	30	Pressure Measurement using Strain Gauge (Model No.-ME1061)	Twice in a wee	Mr. Sonu VermTutor	Lab Assistant	B.Sc. (Electronics)
20	ELECTRONICS INSTRUMENTATION LAB	30	LVDT Trainer Kit (Model No.-ME1052)	Twice in a wee	Mr. Sonu VermTutor	Lab Assistant	B.Sc. (Electronics)

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures

1	Power System Lab	Fire Extinguisher, MCB, Electrical Safety Charts, Earthing, Rubber Hand Glubs
2	Electrical Machine Lab	Fire Extinguisher, MCB, Electrical Safety Charts, Strip Earthing, ELCB, Rubber Pad
3	Physics Lab	Fire Extinguisher, MCB, Electrical Safety Charts, Earthing
4	Basic Electrical Lab	Fire Extinguisher, MCB, Electrical Safety Charts, Earthing
5	Project Lab	Fire Extinguisher, MCB, Electrical Safety Charts, Earthing
6	Power Electronics Lab	Fire Extinguisher, MCB, Electrical Safety Charts, Earthing
7	Electric Drive Lab	Fire Extinguisher, MCB, Electrical Safety Charts, Earthing
8	Control System Lab	Fire Extinguisher, MCB, Electrical Safety Charts, Earthing
9	Network Analysis	Fire Extinguisher, MCB, Electrical Safety Charts, Earthing
10	Electrical Instrumentation Lab	Fire Extinguisher, MCB, Electrical Safety Charts, Earthing
11	MPMC Lab	Fire Extinguisher, MCB, Electrical Safety Charts, Earthing
12	DELD Lab	Fire Extinguisher, MCB, Electrical Safety Charts, Earthing

13	Analog Electronics Lab	Fire Extinguisher, MCB, Electrical Safety Charts, Earthing

D3. Project Laboratory/Research Laboratory

Table No. 7.5.1: List of project laboratory/research laboratory /Centre of Excellence

S. No.	Name of the Laboratory	Utilization
1	Project Laboratory	Used by UG and PG students for mini-projects, final-year projects, and interdisciplinary activities; equipped with computers, licensed simulation software, and prototyping kits; supports design, testing, and implementation of innovative solutions.
2	Research Laboratory (NI-LabVIEW)	Utilized by faculty and research scholars for advanced modeling, simulation, and experimental studies; supports externally funded projects, research publications, and consultancy work.
3	Modeling and Simulation (MATLAB)	Third year and final year students can use this facility for the development of mathematical modeling and simulation.
4	Automation Laboratory (PLC-SCADA)	PLC (Programmable Logic Controller) and SCADA (Supervisory Control and Data Acquisition) systems are used demonstrate industrial automation & control and monitor processes for UG students.

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)	1200	60	32	27	52
2023-24(CAYm1)	1080	54	34	27	60
2024-25(CAY)	1350	68	39	28	54

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	13500000	12165791	30000000	29247341	3000000	2849542	4000000	3722103
Library	4000000	3827562	3600000	2942647	3000000	2671152	2500000	2428320
Laboratory equipment	15000000	11293138	17500000	14597042	17000000	16582225	3000000	2888247
Teaching and non-teaching staff salary	310000000	306841161.9	210000000	198729602.6	217000000	216013546	197000000	196375951
Outreach Programs	850000	445936	800000	276974	700000	643959	100000	9483
R&D	15000000	11943535	14500000	11377521	13000000	12293948	9500000	8868850
Training, Placement and Industry linkage	13000000	12546196	11000000	9983475	10000000	8962633	9000000	7672202
SDGs	5500000	4882136	5000000	4750248	4500000	3948526	4000000	3459489
Entrepreneurship	1500000	1212111	1400000	1278748	1300000	1174590	500000	153000
Others, specify	148000000	146195460.96	123000000	119016351.81	162000000	149976963.6	65000000	54990405
Total	**526350000**	**511353027.86**	**416800000**	**392199950.41**	**431500000**	**415117084.6**	**294600000**	**280568050**

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	0	0	0	0	0	0	0	0
Software	0	0	0	0	0	0	0	0
SDGs	220000	214333	250000	231000	100000	71000	140000	131000
Support for faculty development	210000	204150	250000	252161	210000	203250	210000	202500
R & D	100000	94200	100000	82500	100000	85000	100000	56200
Industrial Training, Industry expert, Internship	80000	70287	100000	96334	40000	36000	20000	10000
Miscellaneous Expenses*	40000	5000	60000	55000	65000	63210	55000	53744
Total	**650000**	**587970**	**760000**	**716995**	**515000**	**458460**	**525000**	**453444**