

**NATIONAL BOARD OF ACCREDITATION**

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

<b>Program Name :</b> Electronics & Communication Engineering	<b>Discipline:</b> Engineering & Technology
<b>Level :</b> Under Graduate	<b>Tier:</b> 1
<b>Application No:</b> 10975	<b>Date of Submission:</b> 03-09-2025

**PART A- Profile of the Institute**

<b>A1. Name of the Institute:</b> 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
<b>A2. Institute Address:</b> 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.ipacademy.org
Email:director.ies@ipacademy.org	Phone No(with STD Code):0731-4014601
<b>A3. Name and Address of the Affiliating University (if any):</b>	
Name of the University :	City: Bhopal
State : Madhya Pradesh	Pin Code: 462033
<b>A4. Type of the Institution:</b> Self-Supported Institute	
<b>A5. Ownership Status:</b> 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
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## 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	Electronics & Communication Engineering	UG	1999 / --	60	Yes	2023	30	2023	AICTE	Granted accreditation for 3 years for the period (specify period)	2017	2020	1	4

SR.NO.	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/DECREASE INTAKE (if any)	YEAR OF INCREASE/DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/COMPETENT AUTHORITY APPROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCREDITED	PROGRAM DURATION
<b>Sanctioned Intake for Last Five Years for the Digital Communications Engineering</b>														
<b>Academic Year</b>														Sanctioned Intake
2024-25														30
2023-24														30
2022-23														60
2021-22														60
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. Rupesh Dubey
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	60	60	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	30	26	18	16	29	43	38
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	3	1	1	0	1	0
N3=Separate division if any	1	1	0	0	0	0	1
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.	31	30	19	17	29	44	39

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	30	0	100.00
2023-24 (CAYm1)	30	26	0	86.67
2022-23 (CAYm2)	60	18	0	30.00

Average [ (ER1 + ER2 + ER3) / 3 ] = 72.22 ≈ 14.00

**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).)	120.00	91.00	120.00
B=No. of students who graduated from the program in the stipulated course duration	25.00	40.00	34.00
Success Rate (SR)= (B/A) * 100	20.83	43.96	28.33

Average SR of three batches ((SR\_1+ SR\_2+ SR\_3)/3): 31.04

**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 )
X=(Mean of 1st year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 1st year/10)	7.30	6.80	4.60
Y=Total no. of successful students	17.00	16.00	9.00
Z=Total no. of students appeared in the examination	26.00	18.00	16.00
API [X*(Y/Z)]	4.77	6.04	2.59

Average API[ (AP1+AP2+AP3)/3 ] : 4.47

**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 2nd year/10)	8.24	6.80	8.30
Y=Total no. of successful students	12.00	9.00	26.00
Z=Total no. of students appeared in the examination	17.00	10.00	26.00
API [ X * (Y/Z) ]	5.82	6.12	8.30

Average API [ (AP1 + AP2 + AP3)/3 ] : 6.75

**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)	7.30	8.24	8.07
Y=Total no. of successful students	9.00	26.00	40.00
Z=Total no. of students appeared in the examination	9.00	26.00	40.00
API [ X*(Y/Z) ]:	7.30	8.24	8.07

Average API [ (AP1 + AP2 + AP3)/3 ] : 7.87

**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	120.00	91.00	120.00
X=No. of students placed	12.00	20.00	24.00
Y=No. of students admitted to higher studies	0.00	2.00	0.00

Z= No. of students taking up entrepreneurship	0.00	0.00	1.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	10.00	24.18	20.83

Average Placement Index = (P\_1 + P\_2 + P\_3)/3: 18.34 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. Rupesh Dubey	XXXXXXX94N	Ph.D	Devi Ahilya University, Indore	Signal Processing and machine Learning	02/08/2004	21.1	Assistant Professor	Professor	23/01/2025	Regular	Yes		Yes
2	Dr. Nitin Kumar Jain	XXXXXXX04E	Ph.D	Devi Ahilya University, Indore	Wireless Sensor Networks	14/09/2009	15.11	Associate Professor	Professor	24/07/2023	Regular	Yes		No
3	Dr. Dharmendra Singh Yadav	XXXXXXX04N	Ph.D	Devi Ahilya University, Indore	Optical Network	23/03/2015	10.5	Associate Professor	Professor	24/07/2023	Regular	Yes		No
4	Dr Kavita Upadhyay	XXXXXXX11N	Ph.D	Devi Ahilya University, Indore	Semiconductor Devices	25/07/2005	20.1	Assistant Professor	Associate Professor	24/07/2023	Regular	Yes		No
5	Dr. Indra Kumar Shah	XXXXXXX86L	Ph.D	IIIT Dhanbad	Wireless Sensor Networks	12/03/2014	11.5	Assistant Professor	Associate Professor	24/07/2023	Regular	Yes		No
6	Dr. Amiteshwar Bhalavi	XXXXXXX14A	Ph.D	Devi Ahilya University, Indore	Wireless Local Area Network	22/07/2008	17.1	Assistant Professor	Associate Professor	30/09/2023	Regular	Yes		No
7	Ms. Smita Patil	XXXXXXX85Q	M.E.	Devi Ahilya University, Indore	Wireless Networks	26/02/2003	22.6	Assistant Professor	Assistant Professor		Regular	Yes		No
8	Ms. Angeeta Hirwe	XXXXXXX59N	M.E.	Devi Ahilya University, Indore	Digital Instrumentation	12/08/2009	16	Assistant Professor	Assistant Professor		Regular	Yes		No
9	Ms. Poonam Lilhare	XXXXXXX75N	M.E.	Devi Ahilya University, Indore	Nanotechnology	15/04/2010	15.4	Assistant Professor	Assistant Professor		Regular	Yes		No
10	Mr. Roopesh Makwana	XXXXXXX22R	M.E.	Devi Ahilya University, Indore	Artificial Intelligent and Machine Learning	16/08/2010	15	Assistant Professor	Assistant Professor		Regular	Yes		No
11	Ms. Vaishali Ghune	XXXXXXX19E	M.Tech	RGPV, Bhopal	VLSI & Embedded System	22/07/2024	1.1	Assistant Professor	Assistant Professor		Regular	Yes		No

12	Dr. Vandana Dubey	XXXXXXX86J	Ph.D	Manipal University Jaipur	Control System & AI	19/01/2015	10.7	Assistant Professor	Associate Professor	24/07/2025	Regular	Yes		No
13	Mr. Rajesh Babu Ahirwar	XXXXXXX13F	M.E.	RGPV BHOPAL	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING	24/02/2010	15.6	Assistant Professor	Assistant Professor		Regular	Yes		No
14	Mr. Ritesh Gupta	XXXXXXX68L	M.Tech	RGPV BHOPAL	Mixed Signal VLSI Design	27/02/2012	13.6	Assistant Professor	Assistant Professor		Regular	Yes		No
15	Ms. Namrata Atre	XXXXXXX99H	M.E.	DAVV Indore	Wireless Communication and Networking	10/02/2014	11.6	Assistant Professor	Assistant Professor		Regular	Yes		No
16	Mr. Dharmendra K. Yadaw	XXXXXXX10F	M.E.	DAVV Indore	Digital Communication	17/09/2012	12.11	Assistant Professor	Assistant Professor		Regular	Yes		No
17	Mr. Sunil Chavda	XXXXXXX33M	M.E.	DAVV Indore	VLSI	01/09/2015	9.10	Assistant Professor	Assistant Professor		Regular	No	10/07/2025	No
18	Ms. Gulafsha Baig	XXXXXXX84P	M.E.	RGPV BHOPAL	Electronics & Communication	15/02/2021	4.6	Assistant Professor	Assistant Professor		Regular	Yes		No
19	Col. Dr. Dinesh Kumar	XXXXXXX68K	Ph.D	NIU G Noida	IT- Cyber Security	01/02/2023	2.7	Professor	Professor		Regular	Yes		No
20	Ms. Garima Maheshwari	XXXXXXX25B	M.E.	RGPV, Bhopal	Control System	22/07/2024	1.1	Assistant Professor	Assistant Professor		Regular	Yes		No
21	Mr. Sandeep Rangi	XXXXXXX59R	M.Tech	YMCA Faridabad	Control System	22/07/2024	1.1	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 Department1

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

Description	CAY(2024-25)	CAYm1 (2023-24)	CAYm2 (2022-23)
UG1.B	33	61	61
UG1.C	61	61	120

Description	CAY(2024-25)	CAYm1 (2023-24)	CAYm2 (2022-23)
UG1.D	61	120	91
<b>UG1: Electronics &amp; Communication Engineering</b>	<b>155</b>	<b>242</b>	<b>272</b>
PG1.A	9	9	9
PG1.B	9	9	9
<b>PG1: Digital Communications Engineering</b>	<b>18</b>	<b>18</b>	<b>18</b>
DS=Total no. of students in all UG and PG programs in the Department	173	260	290
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)	<b>S1= 173</b>	<b>S2= 260</b>	<b>S3= 290</b>
DF=Total no. of faculty members in the Department	21	18	17
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)	<b>F1= 21</b>	<b>F2= 18</b>	<b>F3= 17</b>
FF=The faculty members in F who have a 100% teaching load in the first-year courses	4	3	2
Student Faculty Ratio (SFR)=S/(F-FF)	<b>SFR1= 10.18</b>	<b>SFR2= 17.33</b>	<b>SFR3= 19.33</b>
Average SFR for 3 years	<b>SFR= 15.61</b>		

### 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	$FQ = 2.5 * [(10X + 4Y) / RF]$
2024-25(CAY)	6	15	8.00	37.50
2023-24(CAYm1)	5	13	12.00	21.25
2022-23(CAYm2)	2	15	14.00	14.29

### 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
2024-25	1.00	3.00	1.00	3.00	5.00	15.00
2023-24	1.00	3.00	2.00	2.00	8.00	13.00
2022-23	1.00	0.00	3.00	2.00	9.00	15.00
Average	RF1=1.00	AF1=2.00	RF2=2.00	AF2=2.33	RF2=7.33	AF2=14.33

**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	Col. Dr. Dinesh Kumar	Professor of Practice	IPS Academy, Institute of Engineering & Science, Indore	Artificial Intelligence and Machine Learning	30.00	
2	Col. Dr. Dinesh Kumar	Professor of Practice	IPS Academy, Institute of Engineering & Science, Indore	Mobile & Satellite Communications	30.00	

(CAYm2)						
S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled	
1	Col. Dr. Dinesh Kumar	Professor of Practice	IPS Academy, Institute of Engineering & Science, Indore	Artificial Intelligence and Machine Learning	24.00	
2	Col. Dr. Dinesh Kumar	Professor of Practice	IPS Academy, Institute of Engineering & Science, Indore	Android App Development	30.00	

(CAYm3)						
S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled	
1	Col. Dr. Dinesh Kumar	Visiting Faculty	IPS Academy, Institute of Engineering & Science, Indore	Principle of Management	26.00	
2	Col. Dr. Dinesh Kumar	Visiting Faculty	IPS Academy, Institute of Engineering & Science, Indore	Innovation and Creativity	20.00	

**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	11	5	3
2	No. of peer reviewed conference papers published	1	2	1
3	No. of books/book chapters published	1	0	1

**C7. Sponsored Research Project**

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

(CAYm1)						
PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
NA	NA	NA	NA	NA	NA	0.00
						Amount received (Rs.):0.00

(CAYm2)						
PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
NA	NA	NA	NA	NA	NA	0.00
						Amount received (Rs.):0.00

(CAYm3)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
NA	NA	NA	NA	NA	NA	0.00
						Amount received (Rs.):0.00

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

(CAYm2)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
NA	NA	NA	NA	NA	NA	0.00
						Amount received (Rs.):0.00

(CAYm3)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
NA	NA	NA	NA	NA	NA	0.00
						Amount received (Rs.):0.00

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

Note\*:

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

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

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

(CAYm1)

Faculty name	Project title/ Support for 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
Ms. Angeeta Hirwe	Automation projects based on IoT technology for human ease	1 year	3.00	3.02	Hardware student working model, Paper presented in conference
			Amount received (Rs.): 3.00		

(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. Dharmendra Yadaw & Dr. Indra Kumar Shah	Interactive humanoid robot for student learning	1 year	2.00	1.85	Hardware student working model
			Amount received (Rs.): 2.00		

(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
Ms. Smita Patil & Mr. Indra Kumar Shah	IoT , ML & Deep learning based project for different application	1 year	2.00	1.22	Hardware student working model
			Amount received (Rs.): 2.00		

Total amount (Lacs) received for the past 3 years : 7.00

## 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	RF Engineering Lab	30	Antenna Trainers	Antenna Lab I	Mr. Manoj Solanki	Lab Technician	Diploma
2	Embedded Lab	30	Micro controller kits	Microprocesso	Mr. Manoj Solanki	Lab Technician	Diploma
3	Electronics Lab	30	Soldering & Desoldering Station	Electronics De	Mr. Manoj Solanki	Lab Technician	Diploma
4	VLSI Lab	30	FPGA & CPLD Trainer	VLSI Lab Simu	Mr. Siddarth Pal	Lab Technician	Diploma
5	Instrumentation LAB	30	Universal Function Generators	EMI Lab DSD I	Mr. Siddarth Pal	Lab Technician	Diploma
6	Advance Communication Lab	30	GSM Trainer	Analog Commu	Ms. Priya Sisodiya	Lab Technician	Diploma
7	Basic Electronics lab	30	Digital Storage Oscilloscopes(60MHz)	BEE LAB ECV	Ms. Priya Sisodiya	Lab Technician	Diploma
8	Communication Lab	30	Data Communication Trainer	CNTL lab OFC	Mr. Siddarth Pal	Lab Technician	Diploma
9	Software Lab	30	WSN Trainer kit DSP Processors	Computer Net	Mr. Siddarth Pa	Lab Technician	Diploma

10	Hardware Project Lab(Minor, Major)	30	SMT Pick and Place Machine	Major project I:	Ms. Priya Sisodiya	Lab Technician	Diploma
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**D2. Safety Measures in Laboratories**

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

Sr. No	Laboratory Name	Safety Measures
1	RF Engineering Lab	1. Laboratory Manual in each lab 2. Users of laboratory are sensified for Precautionary instructions 3. Fire Extinguisher in lab 4. Electrical audits 5. Disaster management evacuation Instructions. 5. Well ventilated lab 6. Safety audits 7. Insulated apparatus, Earthing of Switch Boards 8. Safety accessories like insulating gloves, apron, and first aid kit. 9. CCTV camera surveillance
2	Embedded Lab	1. Laboratory Manual in each lab 2. Users of laboratory are sensified for Precautionary instructions 3. Fire Extinguisher in lab 4. Electrical audits 5. Disaster management evacuation Instructions. 5. Well ventilated lab 6. Safety audits 7. Insulated apparatus, Earthing of Switch Boards 8. Safety accessories like insulating gloves, apron, and first aid kit. 9. CCTV camera surveillance
3	Electronics Lab	1. Laboratory Manual in each lab 2. Users of laboratory are sensified for Precautionary instructions 3. Fire Extinguisher in lab 4. Electrical audits 5. Disaster management evacuation Instructions. 5. Well ventilated lab 6. Safety audits 7. Insulated apparatus, Earthing of Switch Boards 8. Safety accessories like insulating gloves, apron, and first aid kit. 9. CCTV camera surveillance
4	VLSI Lab	1. Laboratory Manual in each lab 2. Users of laboratory are sensified for Precautionary instructions 3. Fire Extinguisher in lab 4. Electrical audits 5. Disaster management evacuation Instructions. 5. Well ventilated lab 6. Safety audits 7. Insulated apparatus, Earthing of Switch Boards 8. Safety accessories like insulating gloves, apron, and first aid kit. 9. CCTV camera surveillance
5	Instrumentation LAB	1. Laboratory Manual in each lab 2. Users of laboratory are sensified for Precautionary instructions 3. Fire Extinguisher in lab 4. Electrical audits 5. Disaster management evacuation Instructions. 5. Well ventilated lab 6. Safety audits 7. Insulated apparatus, Earthing of Switch Boards 8. Safety accessories like insulating gloves, apron, and first aid kit. 9. CCTV camera surveillance
6	Advance Communication Lab	1. Laboratory Manual in each lab 2. Users of laboratory are sensified for Precautionary instructions 3. Fire Extinguisher in lab 4. Electrical audits 5. Disaster management evacuation Instructions. 5. Well ventilated lab 6. Safety audits 7. Insulated apparatus, Earthing of Switch Boards 8. Safety accessories like insulating gloves, apron, and first aid kit. 9. CCTV camera surveillance
7	Basic Electronics lab	1. Laboratory Manual in each lab 2. Users of laboratory are sensified for Precautionary instructions 3. Fire Extinguisher in lab 4. Electrical audits 5. Disaster management evacuation Instructions. 5. Well ventilated lab 6. Safety audits 7. Insulated apparatus, Earthing of Switch Boards 8. Safety accessories like insulating gloves, apron, and first aid kit. 9. CCTV camera surveillance
8	Communication Lab	1. Laboratory Manual in each lab 2. Users of laboratory are sensified for Precautionary instructions 3. Fire Extinguisher in lab 4. Electrical audits 5. Disaster management evacuation Instructions. 5. Well ventilated lab 6. Safety audits 7. Insulated apparatus, Earthing of Switch Boards 8. Safety accessories like insulating gloves, apron, and first aid kit. 9. CCTV camera surveillance
9	Software Lab	1. Laboratory Manual in each lab 2. Users of laboratory are sensified for Precautionary instructions 3. Fire Extinguisher in lab 4. Electrical audits 5. Disaster management evacuation Instructions. 5. Well ventilated lab 6. Safety audits 7. Insulated apparatus, Earthing of Switch Boards 8. Safety accessories like insulating gloves, apron, and first aid kit. 9. CCTV camera surveillance
10	Hardware Project Lab (Minor, Major)	1. Laboratory Manual in each lab 2. Users of laboratory are sensified for Precautionary instructions 3. Fire Extinguisher in lab 4. Electrical audits 5. Disaster management evacuation Instructions. 5. Well ventilated lab 6. Safety audits 7. Insulated apparatus, Earthing of Switch Boards 8. Safety accessories like insulating gloves, apron, and first aid kit. 9. CCTV camera surveillance



**TableNo.7.5.1:** List of laboratories

S.No	Name of Laboratory
1	Project Lab
2	Robotics Lab
3	IOT Lab
4	Garuda Aerospace Centre of Excellence (COE)

**An overview of Laboratory:****Project Lab:**

Project lab provides facilities for project development. It provides facilities for electronics circuit design, embedded system design, automation, robotics, internet of things and many more. Through hands-on practice, students gain knowledge of different techniques used in electronic system design and also get access to tools for testing and evaluating electronic circuits. The lab is equipped with SMT Pick and Place Machine, CNC Drilling Trainer model, etc. In addition, the lab helps the students to explore and apply various communication protocols commonly used in embedded systems and robotics.

**Robotics Lab:**

The Robotics Lab is designed to familiarize students with the fundamental operations of robots. They will gain hands-on experience with standard robotic systems and will also have the opportunity to apply the knowledge acquired from other courses, such as Artificial Intelligence and Control Systems, to develop robots for specific applications.

**IOT Lab:**

The Internet of Things (IoT) is a system of interconnected physical devices, equipped with sensors, software, and communication technologies that can collect and exchange data. This technology bridges the gap between the physical environment and digital systems, enabling seamless interaction among people, processes, and machines. An IoT laboratory is primarily designed to study and experiment with various applications of smart devices and sensor-based technologies.

**Garuda Aerospace (Centre of Excellence):**

Garuda Aerospace is India's leading & biggest Drone Tech Startup in India recognized for its human-focused innovations and distinguished by dual DGCA certifications. Garuda Aerospace has expressed interest in collaborating with IPS Academy, Institute of Engineering & Science, Indore to offer industry exposure to students of institution as preferred partner for establishment of Centre of Excellence for drone technology. An MOU for establishment of Centre of Excellence for drone technology was signed between the IPS Academy, Institute of Engineering & Science, Indore and Garuda Aerospace, Chennai on 07/10/2024.

## 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	26	51
2023-24(CAYm1)	1080	54	34	26	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
<b>Total</b>	<b>526350000</b>	<b>511353027.86</b>	<b>416800000</b>	<b>392199950.41</b>	<b>431500000</b>	<b>415117084.6</b>	<b>294600000</b>	<b>280568050</b>

## 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	50000	0	1900000	1775954	0	0	0	0
Software	0	0	0	0	0	0	0	0
SDGs	150000	120000	700000	690360	120000	109040	120000	116000
Support for faculty development	350000	348358	350000	337170	320000	303000	310000	302400
R & D	310000	305975	500000	500906	350000	348164	200000	121500
Industrial Training, Industry expert, Internship	50000	47287	75000	69166	50000	24000	10000	6000
Miscellaneous Expenses*	60000	56318	220000	215172	70000	59595	50000	43691
<b>Total</b>	<b>970000</b>	<b>877938</b>	<b>3745000</b>	<b>3588728</b>	<b>910000</b>	<b>843799</b>	<b>690000</b>	<b>589591</b>