NATIONAL BOARD OF ACCREDITATION

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

Note: To save Data Capturing Points as PDF Please click on print button and select destination as 'Save as PDF'. PLEASE SELECT LANDSCAPE MODE.

Program Name : Electrical and Electronics Engineering	**Discipline**: Engineering & Technology
Level : Under Graduate	**Tier**: 1
Application No: 10565	**Date of Submission**: 28-05-2025

PART A- Profile of the Institute

A1.Name of the Institute: BMS Institute of Technology and Management	
Year of Establishment : 2002	Location of the Institute: Bangalore
A2. Institute Address:Dodaballapur Road, Avalahalli, Yelahanka,	
City:Bangalore Urban	State:Karnataka
Pin Code:560064	Website:https://bmsit.ac.in
Email:principal@bmsit.in	Phone No(with STD Code):080-68730402
A3. Name and Address of the Affiliating University (if any):	
Name of the University : Visvesvaraya Technological University	City:
State :	Pin Code: 0
A4. Type of the Institution: Deemed University	
A5. Ownership Status: Self financing	

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

- No. of UG programs: **9**
- No. of PG programs: **4**

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	Computer Application	PG	Master of Computer Application	2003	--	Computer Application
2	Engineering & Technology	UG	Artificial Intelligence and Machine Learning	2019	--	Artificial Intelligence and Machine Learning
3	Engineering & Technology	UG	Civil Engineering	2013	--	Civil Engineering

4	Engineering & Technology	UG	Computer Science and Business System	2023	--	Computer Science and Business System
5	Engineering & Technology	UG	Computer Science and Engineering	2002	--	Computer Science and Engineering
6	Engineering & Technology	PG	Computer Science and Engineering	2014	--	Computer Science and Engineering
7	Engineering & Technology	PG	Cyber Security	2022	--	Information Science and Engineering
8	Engineering & Technology	UG	Electrical & Electronics Engineering	2003	--	Electrical and Electronics Engineering
9	Engineering & Technology	UG	Electronics & Communication Engineering	2002	--	Electronics and Communication Engineering
10	Engineering & Technology	UG	Electronics and Telecommunication Engineering	2003	--	Electronics and Telecommunication Engineering
11	Engineering & Technology	UG	Information Science & Engineering	2010	--	Information Science and Engineering
12	Engineering & Technology	UG	Mechanical Engineering	2002	--	Mechanical Engineering
13	Management	PG	Master of Business Administration	2022	--	Management

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

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

Name of the Department	Having Allied Departments	Name of the Program	Program Level
Artificial Intelligence and Machine Learning	Yes	Artificial Intelligence and Machine Learning	UG
Computer Science and Engineering	Yes	Computer Science and Engineering	UG
Mechanical Engineering	No	Mechanical Engineering	UG
Electronics and Communication Engineering	No	Electronics & Communication Engineering	UG

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

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 :	Prashant A. Athavale
B. Nature of appointment:	Regular
C. Qualification:	Ph.D

B3. Program Details

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

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2024-25 (CAY)	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)	2020-21 (CAYm4)	2019-20 (CAYm5)	2018-19 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	60	60	60	60	60	60	60
N1=Total no. of students admitted in the 1st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program	60	53	47	45	42	54	57
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	6	6	16	6	6	6
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	4	5	3	3	3	5	3
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	64	64	56	64	51	65	66

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

B4. Enrolment Ratio in the First Year

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

Year of entry	N (From Table 4.1)	N1 (From Table 4.1)	N4 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2024-25 (CAY)	60	4	0	106.67

2023-24 (CAYm1)	60	5	0	96.67
2022-23 (CAYm2)	60	3	0	83.33

Average [(ER1 + ER2 + ER3) / 3] = 95.56≡ 20.00

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

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

Item	(2020-21) LYG	(2019-20) LYGm1	(2018-19) LYGm2
A*= (No. of students admitted in the 1st year of that batch and those actually admitted in the 2nd year via lateral entry, plus the number of students admitted through multiple entry (if any) and separate division if applicable, minus the number of students who exited through multiple entry (if any).	66.00	66.00	66.00
B=No. of students who graduated from the program in the stipulated course duration	45.00	61.00	59.00
Success Rate (SR)= (B/A) * 100	68.18	92.42	89.39

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 83.33

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)	6.83	7.19	6.41
Y=Total no. of successful students	56.00	44.00	48.00
Z=Total no. of students appeared in the examination	58.00	50.00	48.00
API [X*(Y/Z)]	6.59	6.33	6.41

Average API[(AP1+AP2+AP3)/3] : 6.44

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)	6.74	6.68	6.45
Y=Total no. of successful students	50.00	64.00	51.00
Z=Total no. of students appeared in the examination	50.00	64.00	51.00
API [X * (Y/Z)]	6.74	6.68	6.45

Average API [(AP1 + AP2 + AP3)/3] : 6.62

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)	7.37	6.56	7.03
Y=Total no. of successful students	64.00	56.00	65.00
Z=Total no. of students appeared in the examination	64.00	57.00	65.00
API [X*(Y/Z)]:	7.37	6.44	7.03

Average API [(AP1 + AP2 + AP3)/3] : 6.95

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	66.00	66.00	66.00
X=No. of students placed	35.00	58.00	56.00
Y=No. of students admitted to higher studies	2.00	5.00	5.00
Z= No. of students taking up entrepreneurship	0.00	0.00	1.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	56.06	95.45	93.94

Average Placement Index = (P_1 + P_2 + P_3)/3: 81.82 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	Prashant A. Athavale	XXXXXXX67P	Ph.D	VTU	Faculty of Electrical & Electronics Engineering Sciences	16/01/2009	16.2	Lecturer	Assistant Professor		Regular	Yes		Yes
2	Sanjay Lakshminarayanan	XXXXXXX09H	Ph.D	IISc	Power Electronics	06/10/2017	7.6	Professor	Professor	06/10/2017	Regular	Yes		No
3	Shilpa G	XXXXXXX11F	M.E/M.Tech	VTU	Computer Application in Industrial Drives	02/07/2014	10.9	Assistant Professor	Assistant Professor		Regular	Yes		No
4	Nagaraj D Chonali	XXXXXXX73P	M.E/M.Tech	VTU	VLSI Design & Embedded Systems	01/08/2015	9.8	Assistant Professor	Assistant Professor		Regular	Yes		No
5	Prashanth N A	XXXXXXX31B	Ph.D	JNTU	Electrical Engineering	16/07/2014	10.8	Assistant Professor	Assistant Professor		Regular	Yes		No
6	Manjunatha Babu P	XXXXXXX95M	Ph.D	VTU	Faculty of Electrical & Electronics Engineering Sciences	10/08/2012	12.8	Assistant Professor	Assistant Professor		Regular	Yes		No
7	H D Kattimani	XXXXXXX85J	MS	BITSP	Electronics & Control Branch	13/09/2006	18.8	Assistant Professor	Associate Professor		Regular	Yes		No
8	Babu Naik Gugulothu	XXXXXXX14D	Ph.D	VTU	Electrical Engineering	19/08/2011	13.7	Lecturer	Assistant Professor		Regular	Yes		No
9	Suma Umesh	XXXXXXX59H	Ph.D	VTU	Faculty of Electrical & Electronics Engineering Sciences	04/8/2008	16.8	Lecturer	Assistant Professor		Regular	Yes		No
10	Madhu Palati	XXXXXXX02A	Ph.D	JU	Electrical & Electronics Engineering Sciences	27/01/2017	8.2	Assistant Professor	Assistant Professor		Regular	No	04/04/2025	No
11	Narapareddy Ramarao	XXXXXXX57N	Ph.D	JNTU	Electrical & Electronics Engineering	30/07/2014	10.8	Assistant Professor	Associate Professor	30/01/2015	Regular	Yes		No

12	Rajinikanth V K	XXXXXXX66K	M.E/M.Tech	VTU	Computer Applications in Industrial Drives	01/08/2015	8.7	Assistant Professor	Assistant Professor		Regular	No	22/03/2024	No
13	Ozwin Dominic Dsouza	XXXXXXX32E	M.E/M.Tech	VTU	Computer Application in Industrial Drives	16/08/2012	12.7	Assistant Professor	Assistant Professor		Regular	Yes		No
14	Manjula B K	XXXXXXX77J	M.Tech	VTU	VLSI Design and Embedded Systems	26/07/2010	14.10	Lecturer	Assistant Professor		Regular	Yes		No
15	Vikram Chekuri	XXXXXXX51D	M.E.	AU	Power Systems Engineering	01/08/2011	13.9	Lecturer	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(2024-25)	CAYm1 (2023-24)	CAYm2 (2022-23)
UG1.B	66	66	66

Description	CAY(2024-25)	CAYm1 (2023-24)	CAYm2 (2022-23)
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	13	14	15
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=** 13	**F2=** 14	**F3=** 15
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= 22.00**	**SFR2= 18.00**	**SFR3= 16.50**
Average SFR for 3 years	**SFR= 18.83**		

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)	6	7	9.00	24.44
2023-24(CAYm1)	5	9	9.00	23.89
2022-23(CAYm2)	5	10	9.00	25.00

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	1.00	2.00	1.00	6.00	11.00
2023-24	1.00	1.00	2.00	1.00	6.00	12.00
2022-23	1.00	1.00	2.00	1.00	6.00	13.00
Average	RF1=1.00	AF1=1.00	RF2=2.00	AF2=1.00	RF2=6.00	AF2=12.00

C5. Visiting/Adjunct Faculty/Professor of Practice

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

(CAYm1)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Snehashri naveen Kumar	Visiting Faculty	Krishna Gana Sangeetha Shaale	NCMC in Music	26.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Snehashri Naveen Kumar	Visiting faculty	Krishna Gana Sangeetha Shaale	NCMC in Music	26.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Snehasri Naveen Kumar	Visiting Faculty	Krishna Gana Sudha Sangeetha Shaale	NCMC in Music	26.00

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	3	3
2	No. of peer reviewed conference papers published	7	6	12
3	No. of books/book chapters published	4	5	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	Electrical Hardware / Circuit Analysis	3	Three phase load, Three Phase Auto Transformers, Ammeters, Voltmeters,	12 hrs	Dattathreya S.R.	Instructor	B.E (EEE)
2	Relay And High Voltage	3	Spark over characterstics test equipment, numerical relay characteristic test kit,	6 hrs	Channamallappa H.	Foreman	Diploma (EE)
3	Electrical Machines-1	3	Transformers, DC Generators, Alternators, Lamp and Mechanical Loads, Digital Tacho	6 hrs	Siddalinga swamy H	Instructor	Diploma (ECE)
4	Electrical Machines-2	3	DC Motors and Induction Machines, Mechanical Brake Drum Arrangement,	6 hrs	Siddalinga swamy H	Instructor	Diploma (ECE)
5	Microcontrollers / CAED/ DSP/ PSS	1	Computers(35No.), Interfacing DC motor, stepper Motor speed controller, Elevator,	12 hrs	Manjunath C.	Asst. Instructor	B.E (ECE)
6	Electronics Laboratory/ Power Electronics/ Control System/	3	DSO, Signal Generator, RLC Components, Multimeter, DC Power supply, LCR Meter,	12 hrs	K.M. Ananda Kumar	Asst. Instructor	ITI ,B.A

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Electrical Hardware / Circuit Analysis	a. Students are inspected with respect to shoes. b. Safety Instruction Charts are displayed in the laboratories, and beginning of every semester, the attention of the students is drawn towards these instructions. c. Fire extinguishers are installed in laboratory and yearly maintenance is done by external agency. d. First Aid Kit is made available in all the laboratories, and students are made aware of it. e. Earthing of an electrical system or installation is provided for the reasons of safety f. Students are instructed to turn off the power and unplug equipment before leaving the laboratory. g. Cleanliness of the lab is ensured each day. h. Students are instructed not to open a power supply or a CRT monitor. i. Lab in Charges brief about the safety Instructions and Do's and Don'ts to all the students. j. CCTV surveillance installed. k. ELCB/MCB protection provided. l. During the conduction of the experiment, the lab in-charge / instructor will be supervising.

2	Electronics Laboratory/ Power Electronics/ Control System/ Arduino Projects Lab	a. Students are inspected with respect to shoes. b. Safety Instruction Charts are displayed in the laboratories, and beginning of every semester, the attention of the students is drawn towards these instructions. c. Fire extinguishers installed and maintained yearly. d. First Aid Kit available. e. Earthing is provided. f. Hardware to be switched off and software applications to be properly closed after use. g. Daily cleanliness maintained. h. Students advised not to open hardware devices without supervision. i. Lab in-charges explain safety norms and Do's & Don'ts. j. CCTV surveillance installed. k. ELCB/MCB protection provided.
3	Electrical Machines-1	a. Students are inspected with respect to shoes. b. Safety Instruction Charts are displayed in the laboratories, and beginning of every semester, the attention of the students is drawn towards these instructions. c. Insulated rubber mats are installed near live equipment and switchboards for operator safety. d. Fire extinguishers are installed in laboratory and yearly maintenance is done by external agency. e. First Aid Kit is made available in all the laboratories. f. Earthing of an electrical system or installation is provided for the reasons of safety g. Instructed to turn off the power and unplug equipment before leaving the laboratory. h. Cleanliness of the lab is ensured each day. i. Students are instructed not to open a power supply or a CRT monitor. j. Lab in Charges brief about the safety Instructions and Do's and Don'ts to all the students. k. CCTV surveillance installed. l. ELCB/MCB protection provided.
4	Electrical Machines-2	a. Students are inspected with respect to shoes. b. Safety Instruction Charts are displayed in the laboratories, and beginning of every semester, the attention of the students is drawn towards these instructions. c. Insulated rubber mats are installed near live equipment and switchboards for operator safety. d. Fire extinguishers are installed in laboratory and yearly maintenance is done by external agency. e. First Aid Kit is made available in all the laboratories. f. Earthing of an electrical system or installation is provided for the reasons of safety g. Instructed to turn off the power and unplug equipment before leaving the laboratory. h. Cleanliness of the lab is ensured each day. i. Students are instructed not to open a power supply or a CRT monitor. j. Lab in Charges brief about the safety Instructions and Do's and Don'ts to all the students. k. CCTV surveillance installed. l. ELCB/MCB protection provided.
5	Microcontrollers / CAED/ DSP/ PSS	a. Safety Instruction Charts are displayed in the laboratories, and beginning of every semester, the attention of the students is drawn towards these instructions. b. Fire extinguishers installed and maintained annually. c. First Aid Kit available. d. Earthing ensured. e. Equipment must be switched off after use. f. Obsolete accessories logged in scrap ledger. g. Daily lab cleanliness maintained. h. Lab in-charges orient students on safety practices. i. CCTV surveillance installed. j. ELCB/MCB protection provided.
6	Relay And High Voltage	a. Students are inspected with respect to shoes. b. Safety Instruction Charts are displayed in the laboratories, and beginning of every semester, the attention of the students is drawn towards these instructions. c. Fire extinguishers are installed in laboratory and yearly maintenance is done by external agency. d. First Aid Kit is made available in all the laboratories. e. Earthing of an electrical system or installation is provided for the reasons of safety f. Instructed to turn off the power and unplug equipment before leaving the laboratory. g. Cleanliness of the lab is ensured each day. h. Students are instructed not to open a power supply or a CRT monitor. i. Lab in Charges brief about the safety Instructions and Do's and Don'ts to all the students. j. ELCB/MCB protection provided.

D3. Project Laboratory/Research Laboratory

Project/Research Laboratory:

To promote a culture of innovation, project-based learning, and research orientation among students and faculty, the department has established dedicated laboratories and facilities that support project work, applied research, and innovation activities. The details of these major project and research-supportive facilities are outlined below:

1. MATLAB Campus-Wide License

- **Details:** The institution has subscribed to a campus-wide license of MATLAB and Simulink, along with specialized toolboxes for Control Systems, Signal Processing, Power Systems, Optimization, and Machine Learning.
- **Purpose:** To provide simulation and modeling support for student projects, faculty research, and advanced curriculum implementation.
- **Utilization:** Extensively used in Power Electronics, Control Systems, and Power Systems projects by students and faculty.

2. COMSOL Multiphysics

- **Details:** COMSOL software provides a robust platform for multiphysics modeling, including electrical, thermal, and structural analyses.
- **Purpose:** To facilitate interdisciplinary simulation-based research.
- **Utilization:** Used by faculty and students for simulations in electrical machines and heat dissipation in power converters.

3. PLC Trainer Kit

- **Details:** Industrial-grade PLC kits with simulation software and input/output modules for real-time programming.
- **Purpose:** To enable hands-on experience in industrial automation and SCADA-based projects.
- **Utilization:** Used in Projects and training programs.

4. IoT Development Kit

- **Details:** IoT kits include microcontrollers (NodeMCU/ESP32), sensors (temperature, IR, gas, etc.), and Wi-Fi modules for real-time data interfacing.
- **Purpose:** To support smart system development, sensor interfacing, and cloud-based project work.
- **Utilization: U**sed in mini and major projects like smart homes, health monitoring systems, and environmental monitoring.

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)	840	42	33	21	73
2023-24(CAYm1)	1080	54	34	21	58
2024-25(CAY)	1680	84	47	22	50

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	310414000	195950622	63027000	245603557	92012000	146850938	90406990	75119573
Library	4820000	3009564	4540000	1652480	4532000	3213379	3105672	2081176
Laboratory equipment	98085000	100195987	56297723	48425365	47218800	37131454	37047150	35449946
Teaching and non-teaching staff salary	540549363	504853556	468845121	420514176	406576332	387082539	316400000	327554068
Outreach Programs	650000	822236	284000	66478	261000	72933	226240	158298
R&D	6455000	5271061	3000000	1515297	4100000	681028	1450000	569069
Training, Placement and Industry linkage	9356300	5020700	4650000	3965459	6029000	4554823	1106000	1072119
SDGs	7500000	6335430	6700000	5388445	7050000	5501432	6687000	3987905
Entrepreneurship	4450000	2886460	3020000	3103215	4700000	1060792	1850000	32748

Others, specify	178103253	133795856	159505947	230249609	96201342	145176583	80165841	120491420
Total	**1160382916**	**958141472**	**769869791**	**960484081**	**668680474**	**731325901**	**538444893**	**566516322**

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	1720000	1394594	860000	485336	1700000	656420	787000	59497
Software	1000000	1019520	849600	849600	849600	849600	900000	849600
SDGs	200000	244401	100000	77439	100000	40152	0	0
Support for faculty development	100000	69461	100000	44732	100000	28452	100000	24164
R & D	100000	69000	100000	28000	100000	20000	100000	0
Industrial Training, Industry expert,	100000	99766	100000	58798	100000	74446	100000	34000
Miscellaneous Expenses*	200000	90000	100000	79472	50000	20000	340000	270600
Total	**3420000**	**2986742**	**2209600**	**1623377**	**2999600**	**1689070**	**2327000**	**1237861**