

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 : 10850	Date of Submission : 26-07-2025

PART A- Profile of the Institute

A1. Name of the Institute : MVJ COLLEGE OF ENGINEERING	
Year of Establishment : 1982	Location of the Institute: Bangalore
A2. Institute Address : CHANNASANDRA NEAR ITPB BANGALORE	
City:--Select--	State:Karnataka
Pin Code:560067	Website:www.mvjce.edu.in
Email:PRINCIPALENGG@MVJCE.EDU.IN	Phone No(with STD Code):080-42991000
A3. Name and Address of the Affiliating University (if any):	
Name of the University : VISVESVARAYA TECHNOLOGY UNIVERSITY BELGAUM	City: Belgaum
State : Karnataka	Pin Code: 590018
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: **15**
- No. of PG programs: **8**

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	Aeronautical Engineering	2007	--	Aeronautical Engineering
2	Engineering & Technology	PG	Aeronautical Engineering	2003	--	Aeronautical Engineering
3	Engineering & Technology	UG	Aerospace Engineering	2018	--	Aerospace Engineering
4	Engineering & Technology	PG	Artificial Intelligence and Data Science	2023	--	Artificial Intelligence and Data Science
5	Engineering & Technology	UG	Artificial Intelligence and Machine Learning	2020	--	Artificial Intelligence and Machine Learning
6	Engineering & Technology	UG	Chemical Engineering	1984	--	Chemical Engineering
7	Engineering & Technology	UG	Civil Engineering	1982	--	Civil Engineering
8	Engineering & Technology	UG	Computer Science and Design	2021	--	Computer Science and Design
9	Engineering & Technology	PG	Computer Science and Engineering	2003	--	Computer Science and Engineering
10	Engineering & Technology	UG	Computer Science and Engineering	1985	--	Computer Science and Engineering
11	Engineering & Technology	UG	Computer Science and Engineering (Data Science)	2020	--	Computer Science and Engineering (Data Science)
12	Engineering & Technology	UG	Electrical and Electronics Engineering	1982	--	Electrical and Electronics Engineering
13	Engineering & Technology	UG	Electronics & Communication Engineering	1982	--	Electronics and Communication Engineering
14	Engineering & Technology	UG	Electronics and Communication (Advanced Communication Technology)	2023	--	Electronics and Communication (Advanced Communication Technology)

15	Engineering & Technology	PG	Electronics and Communication (Advanced Communication Technology)	2023	--	Electronics and Communication (Advanced Communication Technology)
16	Engineering & Technology	PG	Electronics and Communication (VLSI Design)	2023	--	Electronics and Communication (VLSI Design)
17	Engineering & Technology	UG	Electronics Engineering (VLSI Design and Technology)	2023	--	Electronics Engineering (VLSI Design and Technology)
18	Engineering & Technology	UG	Industrial IoT	2021	--	Industrial IOT
19	Engineering & Technology	UG	Information Science & Engineering	1999	--	Information Science and Engineering
20	Engineering & Technology	UG	Mechanical Engineering	1982	--	Mechanical Engineering
21	Engineering & Technology	PG	Structural Engineering	2012	--	Civil Engineering
22	Engineering & Technology	PG	Transportation Engineering	2014	--	Civil Engineering
23	Management	PG	Masters in Business Administration	2000	--	Management

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

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

No Record

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

No Record

PART-B: Program information

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

Table No. B1: Program details.

- A. List of the Programs Offered by the Department:
List of the Allied Departments/Cluster and Programs:

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

A. Name of the HoD :	Dr. G SRINIVASAN
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	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	24	24	46	28	22	41	45
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	9	9	5	6	6	2
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	1	3	3	3	4	4	3
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	25	36	58	36	32	51	50

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	24	1	83.33
2023-24 (CAYm1)	30	24	3	90.00
2022-23 (CAYm2)	60	46	3	81.67

Average $[(ER1 + ER2 + ER3) / 3] = 85.00 \approx 17.00$

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	62.00
B=No. of students who graduated from the program in the stipulated course duration	27.00	37.00	41.00
Success Rate (SR)= (B/A) * 100	40.91	56.06	66.13

Average SR of three batches $((SR_1 + SR_2 + SR_3)/3)$: 54.37

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)	6.70	6.50	6.26
Y=Total no. of successful students	25.00	44.00	30.00
Z=Total no. of students appeared in the examination	26.00	48.00	30.00
API $[X*(Y/Z)]$	6.44	5.96	6.26

Average API $[(AP1+AP2+AP3)/3]$: 6.22

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)	6.00	6.05	6.19
Y=Total no. of successful students	49.00	33.00	32.00
Z=Total no. of students appeared in the examination	53.00	36.00	31.00
API $[X * (Y/Z)]$	5.55	5.55	6.39

Average API $[(AP1 + AP2 + AP3)/3]$: 5.83

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)	6.60	7.20	7.00
Y=Total no. of successful students	32.00	32.00	49.00
Z=Total no. of students appeared in the examination	33.00	32.00	49.00
API $[X*(Y/Z)]$:	6.40	7.20	7.00

Average API $[(AP1 + AP2 + AP3)/3]$: 6.87

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	66.00	66.00	62.00
X=No. of students placed	26.00	40.00	42.00
Y=No. of students admitted to higher studies	0.00	2.00	1.00
Z= No. of students taking up entrepreneurship	0.00	0.00	1.00
Placement Index(P) = $((X + Y + Z)/FS) * 100$:	39.39	63.64	70.97

Average Placement Index = $(P_1 + P_2 + P_3)/3$: 58.00 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 Assoc (Regul Contra Ad hoc
1	RENJINI E NAMBIAR	XXXXXXXX41M	M.Tech	Amrita Vishwa Vidyapeetham	Power Electronics	06/08/2018	6.11	Assistant Professor	Assistant Professor		Regula
2	DR. RENE DEV D	XXXXXXXX21N	Ph.D	Anna University	Wireless Sensor Network and Signal Processing	05/07/2023	2	Associate Professor	Associate Professor		Regula
3	RENUKAMBA J N	XXXXXXXX75L	M.Tech	VTU	Signal Processing	05/07/2021	4	Assistant Professor	Assistant Professor		Regula
4	DR. P HARISH KUMAR	XXXXXXXX89B	Ph.D	VIT University, Vellore	Electric Power System	04/07/2022	1.9	Assistant Professor	Assistant Professor		Regula
5	DR.ELENCEZHIAN M	XXXXXXXX98D	Ph.D	Anna University	Control and Instrumentation	14/06/2023	2.1	Associate Professor	Associate Professor	14/06/2023	Regula
6	Dr. G SRINIVASAN	XXXXXXXX77R	Ph.D	Anna University	Power System Engineering	03/07/2024	0.10	Professor	Professor		Regula
7	DR. SOUMYA MISHRA	XXXXXXXX30A	Ph.D	NIT Rourkela	Power Quality	01/12/2017	6.5	Associate Professor	Professor	12/07/2021	Regula
8	VEENA VANAMANE	XXXXXXXX22M	M.Tech	Shivaji University	Control Systems	01/07/2024	1	Assistant Professor	Assistant Professor		Regula
9	VAISHALI N B	XXXXXXXX15N	M.Tech	VTU	Power System	16/07/2021	4	Assistant Professor	Assistant Professor		Regula
10	DR. RAJARAJAN R	XXXXXXXX78L	Ph.D	Anna University	Power Quality	15/07/2021	2.9	Assistant Professor	Associate Professor	08/08/2022	Regula
11	KRUPA M	XXXXXXXX83N	M.Tech	VTU	Power Electronics	15/07/2016	6.9	Assistant Professor	Assistant Professor		Regula
12	PRANISHA K P	XXXXXXXX21N	M.Tech	University of Calicut	Power Electronics	26/07/2019	3.11	Assistant Professor	Assistant Professor		Regula
13	GAYATHRI R	XXXXXXXX58C	M.Tech	VTU	VLSI Design and Embedded Systems	26/07/2018	7	Assistant Professor	Assistant Professor		Regula
14	BINI BABU	XXXXXXXX31B	M.Tech	University of Calicut	Manufacturing Systems Management	20/08/2020	4.11	Assistant Professor	Assistant Professor		Regula
15	DR V R RAJAN	XXXXXXXX51M	Ph.D	Anna University	Power Electronics and Drives	14/06/2023	1.10	Assistant Professor	Assistant Professor		Regula

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	33	66	65
UG1.C	66	65	66
UG1.D	65	66	66
UG1: Electrical and Electronics Engineering	164	197	197
DS=Total no. of students in all UG and PG programs in the Department	164	197	197
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= 164	S2= 197	S3= 197
DF=Total no. of faculty members in the Department	10	11	10
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= 10	F2= 11	F3= 10
FF=The faculty members in F who have a 100% teaching load in the first-year courses	3	2	2
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1= 23.43	SFR2= 21.89	SFR3= 24.63
Average SFR for 3 years	SFR= 23.32		

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)	4	6	8.00	20.00
2023-24(CAYm1)	6	5	9.00	22.22
2022-23(CAYm2)	2	8	9.00	14.44

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	1.00	1.00	2.00	5.00	7.00
2023-24	1.00	1.00	2.00	3.00	6.00	7.00

2022-23	1.00	1.00	2.00	1.00	6.00	8.00
Average	RF1=1.00	AF1=1.00	RF2=1.67	AF2=2.00	RF2=5.67	AF2=7.33

C5. Visiting/Adjunct Faculty/Professor of Practice

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

(CAYm1)

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr.Suresh Rao	Professor of Practice	MVJCE	Embedded Systems	50.00

(CAYm3)

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	1	3
2	No. of peer reviewed conference papers published	12	3	3
3	No. of books/book chapters published	2	1	0

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)

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
			Amount received (Rs.): 0		

(CAYm3)

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

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	Micro controller Laboratory	20	•System with Keil C Version 3, and FLASHMAGIC 6.01 •8051	Fully Utilized	Ms. Ramitha	Foreman	M Tech
2	Transformers and Generators Laboratory	20	• Single auto Transformers •Three phase auto transformers -5 • DC	Fully Utilized	Mr. Malatesh	Lab Instructor	D. EE
3	Electric Circuits Laboratory	20	• LCR Meters – Measures inductance (L), capacitance (C),	Fully Utilized	Ms. Selvendr	Lab Instructor	B.E.
4	Analog Electronics Circuits Laboratory	20	•CRO •Function Generator •DSO	Fully Utilized	Mr.Chethan K	Foreman	D. ECE
5	Switchgear and Protection Laboratory	20	• Motor Protection relay • Generator Protection relay •	Fully Utilized	Ms. Ramitha	Foreman	M Tech
6	Control System Laboratory	20	• Lag, Lead-lag Compensator • Synchro transmitter and receiver	Fully Utilized	Ms. Selvendr	Lab Instructor	B.E.
7	Power Electronics Laboratory	20	• Static Characteristic SCR • Static Characteristic of MOSFET And	Fully Utilized	Ms. Ramitha	Foreman	M Tech
8	Signals and Digital Signal Processing Laboratory	20	•MATLAB Version R2024A	Fully Utilized	Mr.Chethan K	Foreman	D. ECE
9	Power System Simulation Laboratory	20	• MIPOWER 9.1 VERSION •MATLAB Version R2024A	Fully Utilized	Mr.Chethan K	Foreman	D. ECE

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Transformers and Generators Laboratory	General Safety Rules-General Rules of Conduct in Laboratories are displayed. Specific Safety Rules- Displayed for students in laboratories. First Aid Box - Contains bandages, antiseptics, burn creams, etc. for giving first aid Insulated Workbenches & Rubber Mats - Provides electrical insulation to avoid electrical shock Proper Grounding of Equipment - provides a path for electrical current to flow safely to the ground to protect students from electrical shock hazards. Warning & Danger Signs - Indicates high-voltage areas and alerts areas of electrocution risk. Smoke Detectors & Alarms - Alerts in case of fire hazards Fire Extinguisher – Quenching electrical and general fires Rubber-soled Shoes – Reduces risk of electric shock. Lab Coats or Tight Clothing – Provides insulation and protects against rotating parts Rotation parts Guard – Guards and lower the risk of contact between the students and the machine.
2	Electric Circuits Laboratory	General Safety Rules-General Rules of Conduct in Laboratories are displayed. Specific Safety Rules- Displayed for students in laboratories. First Aid Box - Contains bandages, antiseptics, burn creams, etc. for giving first aid Insulated Workbenches & Rubber Mats - Provides electrical insulation to avoid electrical shock Proper Grounding of Equipment - provides a path for electrical current to flow safely to the ground to protect students from electrical shock hazards. Warning & Danger Signs - Indicates high-voltage areas and alerts areas of electrocution risk. Smoke Detectors & Alarms - Alerts in case of fire hazards Fire Extinguisher – Quenching electrical and general fires Rubber-soled Shoes – Reduces risk of electric shock. Lab Coats or Tight Clothing – Provides insulation and protects against rotating parts Rotation parts Guard – Guards and lower the risk of contact between the students and the machine.

3	<div data-bbox="225 203 751 315" style="border: 1px solid black; padding: 5px;"> Analog Electronics Circuits Laboratory </div>	<p>General Safety Rules-General Rules of Conduct in Laboratories are displayed. Specific Safety Rules- Displayed for students in laboratories. First Aid Box - Contains bandages, antiseptics, burn creams, etc. for giving first aid Insulated Workbenches & Rubber Mats - Provides electrical insulation to avoid electrical shock Proper Grounding of Equipment - provides a path for electrical current to flow safely to the ground to protect students from electrical shock hazards. Warning & Danger Signs - Indicates high-voltage areas and alerts areas of electrocution risk. Smoke Detectors & Alarms - Alerts in case of fire hazards Fire Extinguisher – Quenching electrical and general fires Rubber-soled Shoes – Reduces risk of electric shock. Lab Coats or Tight Clothing – Provides insulation and protects against rotating parts Rotation parts Guard – Guards and lower the risk of contact between the students and the machine.</p>
4	<div data-bbox="225 562 751 674" style="border: 1px solid black; padding: 5px;"> Switchgear and Protection Laboratory </div>	<p>General Safety Rules-General Rules of Conduct in Laboratories are displayed. Specific Safety Rules- Displayed for students in laboratories. First Aid Box - Contains bandages, antiseptics, burn creams, etc. for giving first aid Insulated Workbenches & Rubber Mats - Provides electrical insulation to avoid electrical shock Proper Grounding of Equipment - provides a path for electrical current to flow safely to the ground to protect students from electrical shock hazards. Warning & Danger Signs - Indicates high-voltage areas and alerts areas of electrocution risk. Smoke Detectors & Alarms - Alerts in case of fire hazards Fire Extinguisher – Quenching electrical and general fires Rubber-soled Shoes – Reduces risk of electric shock. Lab Coats or Tight Clothing – Provides insulation and protects against rotating parts Rotation parts Guard – Guards and lower the risk of contact between the students and the machine.</p>
5	<div data-bbox="225 920 751 1032" style="border: 1px solid black; padding: 5px;"> Control System Laboratory </div>	<p>General Safety Rules-General Rules of Conduct in Laboratories are displayed. Specific Safety Rules- Displayed for students in laboratories. First Aid Box - Contains bandages, antiseptics, burn creams, etc. for giving first aid Insulated Workbenches & Rubber Mats - Provides electrical insulation to avoid electrical shock Proper Grounding of Equipment - provides a path for electrical current to flow safely to the ground to protect students from electrical shock hazards. Warning & Danger Signs - Indicates high-voltage areas and alerts areas of electrocution risk. Smoke Detectors & Alarms - Alerts in case of fire hazards Fire Extinguisher – Quenching electrical and general fires Rubber-soled Shoes – Reduces risk of electric shock. Lab Coats or Tight Clothing – Provides insulation and protects against rotating parts Rotation parts Guard – Guards and lower the risk of contact between the students and the machine.</p>
6	<div data-bbox="225 1279 751 1391" style="border: 1px solid black; padding: 5px;"> Power Electronics Laboratory </div>	<p>General Safety Rules-General Rules of Conduct in Laboratories are displayed. Specific Safety Rules- Displayed for students in laboratories. First Aid Box - Contains bandages, antiseptics, burn creams, etc. for giving first aid Insulated Workbenches & Rubber Mats - Provides electrical insulation to avoid electrical shock Proper Grounding of Equipment - provides a path for electrical current to flow safely to the ground to protect students from electrical shock hazards. Warning & Danger Signs - Indicates high-voltage areas and alerts areas of electrocution risk. Smoke Detectors & Alarms - Alerts in case of fire hazards Fire Extinguisher – Quenching electrical and general fires Rubber-soled Shoes – Reduces risk of electric shock. Lab Coats or Tight Clothing – Provides insulation and protects against rotating parts Rotation parts Guard – Guards and lower the risk of contact between the students and the machine.</p>
7	<div data-bbox="225 1570 751 1682" style="border: 1px solid black; padding: 5px;"> Micro controller Laboratory </div>	<ul style="list-style-type: none"> • Pen drive access is denied to prevent unauthorized data transfers and security breaches. • Computers must be properly shut down before leaving the lab to ensure system integrity and energy conservation. • Sophos Intercept X (Antivirus software and firewalls) are installed to safeguard against malware and cybersecurity threats. • Surge protectors are installed to reduce power fluctuations • UPS back up is provided to ensure continuous and reliable power for sensitive equipment and protecting data and programs.
8	<div data-bbox="225 1794 751 1906" style="border: 1px solid black; padding: 5px;"> Signals and Digital Signal Processing Laboratory </div>	<ul style="list-style-type: none"> • Pen drive access is denied to prevent unauthorized data transfers and security breaches. • Computers must be properly shut down before leaving the lab to ensure system integrity and energy conservation. • Sophos Intercept X (Antivirus software and firewalls) are installed to safeguard against malware and cybersecurity threats. • Surge protectors are installed to reduce power fluctuations • UPS back up is provided to ensure continuous and reliable power for sensitive equipment and protecting data and programs.

9	Power System Simulation Laboratory	<ul style="list-style-type: none"> • Pen drive access is denied to prevent unauthorized data transfers and security breaches. • Computers must be properly shut down before leaving the lab to ensure system integrity and energy conservation. • Sophos Intercept X (Antivirus software and firewalls) are installed to safeguard against malware and cybersecurity threats. • Surge protectors are installed to reduce power fluctuations • UPS back up is provided to ensure continuous and reliable power for sensitive equipment and protecting data and programs.
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D3. Project Laboratory/Research Laboratory

Research plays an important role in the educational period and provides practical skills for future employment of engineering students. The Project laboratory is set up with the objective to motivate and encourage students and faculties to take up research projects based on their innovative ideas. It is an open lab where all students and faculties in the department have ready access to basic electrical and electronic measuring and testing equipments, PCs with latest and licensed softwares, high speed Wifi connectivity and latest Micro controllers and ICs. The students and faculties are encouraged to participate in project exhibitions, technical symposiums and publish their research contributions in national and international conferences. Some of the student projects are financially supported by agencies like KSCST, EDC.

Sl. No	Name of the Laboratory	Relevance to POs and PSOs
1.	Design Project Lab	PO1, PO2, PO3, PO5, PO8, PO10 & PSO1
2.	Virtual Instrumentation Lab	PO1, PO2, PO5 & PSO1, PSO2
3.	Robotics and Automation Lab	PO1, PO2, PO3, PO8 & PSO1

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	25	40	47
2023-24(CAYm1)	1170	58	28	43	53
2024-25(CAY)	1170	58	32	41	58

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	32050000	14015116	73455000	37661544	39793000	34226584	7800000	7878393
Library	2400761	2750642	502000	499749	1162000	1064929	1326000	25457
Laboratory equipment	3342000	901650	5166000	2195886	3566000	1762769	5411000	5382208
Teaching and non-teaching staff	185200000	192785215	161100000	161023875	136320000	132377887	130100000	128144540
Outreach Programs	0	0	0	0	0	0	0	0
R&D	10347000	4388991	670000	1000000	4245900	4070605	2343000	2266996
Training, Placement and	8127236	19662453	7727000	4288806	7178000	4571136	6540000	2125457

SDGs	0	0	0	0	0	0	0	0
Entrepreneurship	0	0	0	0	0	0	0	0
Others, specify	25673000	35013718	36972000	34190932	21119000	27825497	15727000	17369252
Total	267139997	269517785	285592000	240860792	213383900	205899407	169247000	163192303

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	245000	108509	404318	381048	517424	74802	271013	88336
Software	0	0	0	0	0	0	0	0
SDGs	0	0	0	0	0	0	0	0
Support for faculty development	40000	60090	135500	78834	150500	31090	70000	19000
R & D	1700000	1639060	400000	0	120000	22426	130000	0
Industrial Training, Industry expert,	551850	312878	883716	1051701	731950	276159	944000	727900
Miscellaneous Expenses*	250000	167884	120000	24621	164750	70908	399701	105000
Total	2786850	2288421	1943534	1536204	1684624	475385	1814714	940236