NATIONAL BOARD OF ACCREDITATION

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

Program Name : Electronics Engineering	**Discipline**: Engineering & Technology
Level : Under Graduate	**Tier**: 1
Application No: 10374	**Date of Submission**: 03-03-2025

PART A- Profile of the Institute

A1.Name of the Institute: M.T.E.SOCIETY S WALCHAND COLLEGE OF ENGG VISHRAMBAG P.O.WILLINGDON COLLEGE SANGLI	
Year of Establishment : 1947/1994	Location of the Institute: Sangli
A2. Institute Address:OPP.WILLINGDON COLLEGE POST OFFICE VISHRAMBAG SANGLI	
City:SANGLI	State:Maharashtra
Pin Code:416415	Website:www.walchandsangli.ac.in
Email:WALCHAND@REDIFFMAIL.COM	Phone No(with STD Code):0233-2303433
A3. Name and Address of the Affiliating University (if any):	
Name of the University :	City: Kolhpur
State : Maharashtra	Pin Code: 416004
A4. Type of the Institution: Government Aided Institute	
A5. Ownership Status: Government Aided	

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

- No. of UG programs: **6**
- No. of PG programs: **11**

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

Sr.No.	Discipline	Level of program	Name of the program	Year of Start	Year of Closed	Name of The Department
1	Engineering & Technology	UG	Civil Engineering	1947	--	Civil Engineering
2	Engineering & Technology	UG	Computer Science and Engineering	1986	--	Computer Science and Engineering
3	Engineering & Technology	PG	Computer Science and Engineering	1997	--	Computer Science and Engineering
4	Engineering & Technology	PG	Construction Management	2024	--	Civil Engineering
5	Engineering & Technology	PG	Control Systems	1971	--	Electrical Engineering
6	Engineering & Technology	PG	Design Engineering	1971	--	Mechanical Engineering
7	Engineering & Technology	UG	Electrical Engineering	1955	--	Electrical Engineering
8	Engineering & Technology	PG	Electronics & Communication Engineering	2024	--	Electronics Engineering
9	Engineering & Technology	UG	Electronics Engineering	1986	--	Electronics Engineering
10	Engineering & Technology	PG	Electronics Engineering	1986	--	Electronics Engineering
11	Engineering & Technology	PG	Environmental Engineering	1971	--	Civil Engineering

12	Engineering & Technology	UG	Information Technology	2001	--	Information Technology
13	Engineering & Technology	PG	Manufacturing Engineering	1981	--	Mechanical Engineering
14	Engineering & Technology	UG	Mechanical Engineering	1956	--	Mechanical Engineering
15	Engineering & Technology	PG	Power Systems	1971	--	Electrical Engineering
16	Engineering & Technology	PG	Structural Engineering	1971	--	Civil Engineering
17	Engineering & Technology	PG	Thermal Engineering	1971	--	Mechanical 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
Electronics Engineering	No	Electronics Engineering	UG
Computer Science and Engineering	No	Computer Science and Engineering	UG

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

No Record

PART-B: Program information

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

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

SR.NO.	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/DECREASE INTAKE (if any)	YEAR OF INCREASE/DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/COMPETENT AUTHORITY ARROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCREDITED
1	Electronics Engineering	UG	1986 / --	60	No	NA	60	1986	P-2/Br111/RC(BB)/93 /31500 Dated March 31,1994 Current EOA: F.No. Western/1-9318958099/2021/EOA	Granted accreditation for 3 years for the period (specify period)	2016	2022	1

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. S. D.Ruikar
B. Nature of appointment:	Regular
C. Qualification:	ME/M. Tech and PhD

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	60	60	60	60	60	60
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	9	11	10	9	9	8
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	10	8	7	7	8	10	3
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	70	77	78	77	77	79	71

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	10	0	116.67
2023-24 (CAYm1)	60	8	0	113.33
2022-23 (CAYm2)	60	7	0	111.67

Average [(ER1 + ER2 + ER3) / 3] = 113.89≡ 100

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).	77.00	79.00	71.00
B=No. of students who graduated from the program in the stipulated course duration	70.00	77.00	64.00
Success Rate (SR)= (B/A) * 100	90.91	97.47	90.14

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 92.84

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)	8.04	7.63	7.84
Y=Total no. of successful students	60.00	60.00	60.00
Z=Total no. of students appeared in the examination	60.00	60.00	60.00

API [X*(Y/Z)]	8.04	7.63	7.84

Average API[(AP1+AP2+AP3)/3] : 7.84

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

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

Academic Performance	CAYm1 (2023-24)	CAYm2 (2022-23)	CAYm3 (2021-22)
X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2rd year/10)	7.80	7.93	8.02
Y=Total no. of successful students	77.00	77.00	75.00
Z=Total no. of students appeared in the examination	71.00	70.00	69.00
API [X * (Y/Z)]	8.46	8.72	8.72

Average API [(AP1 + AP2 + AP3)/3] : 8.63

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)	7.94	7.93	8.23
Y=Total no. of successful students	75.00	75.00	77.00
Z=Total no. of students appeared in the examination	77.00	75.00	78.00
API [X*(Y/Z)]:	7.73	7.93	8.12

Average API [(AP1 + AP2 + AP3)/3] : 7.93

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	75.00	77.00	68.00
X=No. of students placed	59.00	70.00	60.00
Y=No. of students admitted to higher studies	1.00	1.00	4.00
Z=Total no. of students appeared in the examination	0.00	0.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	80.00	92.21	94.12

Average Placement Index = (P_1 + P_2 + P_3)/3: 88.78 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	Mr. S. B. Dhaygude	XXXXXXX59Q	M.E/M.Tech	Shivaji University	Video Engg	01/01/1991	34.1	Assistant Professor	Associate Professor	02/01/2006	Regular	Yes		No
2	Mr. N. V. Marathe	XXXXXXX36F	M.E/M.Tech	Shivaji University	Signals and Systems	02/08/1993	31.6	Assistant Professor	Associate Professor	29/02/2008	Regular	Yes		No
3	Mr. S. K. Parchandekar	XXXXXXX68A	M.E/M.Tech	Shivaji University	Electromagnetic Engineering	02/08/2002	22.6	Assistant Professor	Associate Professor	12/12/2012	Regular	Yes		No
4	Dr. S. D.Ruikar	XXXXXXX80H	XXXXXXXXXXXXXXXPhD	Shri Guru Gobind Singh Institute of Engineering Technology, SRTMU Nanded	Image processing, Antenna Design	04/03/2014	10.11	Associate Professor	Associate Professor	04/03/2014	Regular	Yes		Yes
5	Dr. S. G. Tamhankar	XXXXXXX83R	XXXXXXXXXXXXXXXPhD	Shivaji University	Computer Communication ,IOT	19/10/2004	20.4	Assistant Professor	Associate Professor	10/04/2021	Regular	Yes		No
6	Mr.R.G.Mevekari	XXXXXXX79H	M.E/M.Tech	Shivaji University	VLSI,Digital ELectronics	25/08/2009	15.6	Assistant Professor	Assistant Professor		Regular	Yes		No
7	Ms. S. U. Patil	XXXXXXX57Q	M.E/M.Tech	Shivaji University	Communication, Image and Pattern recognition	25/06/2012	12.8	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
8	Mr. S. R. Khedkar	XXXXXXX11A	M.E/M.Tech	Shivaji University	Embedded Systems	17/06/2013	11.4	Assistant Professor	Assistant Professor		Contractual Fulltime	No	06/11/2024	No
9	Mrs. N. S. Babar	XXXXXXX52C	M.E/M.Tech	Shivaji University	Deep Learning, computer Vision	01/03/2023	1.11	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
10	Dr. R. S. Gaikwad	XXXXXXX85H	XXXXXXXXXXXXXXXPhD	Shivaji University	AI, Digital and Analog Electronics	21/08/2023	1.6	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
11	Mrs. D. R. Chavan	XXXXXXX17E	M.E/M.Tech	Shivaji University	Signal Processing	28/08/2023	1.5	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
12	Dr. S. S. Shinde	XXXXXXX86K	XXXXXXXXXXXXXXXPhD	VTU, Belagavi	Wireless Communication, VANET	26/08/2024	0.5	Associate Professor	Associate Professor		Contractual Fulltime	Yes		No
13	Dr. S. V. Vanmore	XXXXXXX34G	XXXXXXXXXXXXXXXPhD	Shivaji University	Embedded System Design,Image Processing	26/08/2024	0.5	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No

14	Mrs.T.S.Upadhye	XXXXXXX94E	M.E/M.Tech	Shivaji University	Image Processing	06/01/2025	0.1	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
15	Mr. V. T. Kamble	XXXXXXX39E	M.E/M.Tech	Shivaji University	Image Processing	06/01/2025	0	Assistant Professor	Assistant Professor		Contractual Fulltime	No	30/01/2025	No
16	Dr. B. G. Patil	XXXXXXX74G	XXXXXXXXXXXXXXXPhD	Shivaji University, Kolhapur	Image processing, Biomedical	07/12/1989	35.2	Assistant Professor	Professor	01/04/2019	Regular	Yes		No
17	Dr. Mrs. A. A. Agashe	XXXXXXX17K	XXXXXXXXXXXXXXXPhD	Shivaji University, Kolhapur	Mobile Communication	01/06/2010	14.9	Associate Professor	Professor	01/04/2017	Regular	Yes		No
18	Dr. Mrs. M. M. Patil	XXXXXXX51D	XXXXXXXXXXXXXXXPhD	Shivaji University, Kolhapur	Embedded System	01/06/2019	4	Associate Professor	Associate Professor	01/06/2019	Contractual Fulltime	No	16/06/2023	No
19	Mrs. M. R. Khare	XXXXXXX11F	M.E/M.Tech	Shivaji University, Kolhapur	Image Processing, Control System, WSN	03/08/2019	4.11	Assistant Professor	Assistant Professor		Contractual Fulltime	No	05/07/2024	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 Department2

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

Description	**CAY(2024-25)**	**CAYm1 (2023-24)**	**CAYm2 (2022-23)**
UG1.B	66	66	66
UG1.C	66	66	66
UG1.D	66	66	66
UG1: Electronics Engineering	**198**	**198**	**198**
PG1.A	12	0	0
PG1.B	0	0	0

Description	CAY(2024-25)	CAYm1 (2023-24)	CAYm2 (2022-23)
PG1: Electronics & Communication Engineering	**12**	**0**	**0**
PG2.A	0	12	30
PG2.B	12	30	30
PG2: Electronics Engineering	**12**	**42**	**60**
DS=Total no. of students in all UG and PG programs in the Department	222	240	258
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=** 222	**S2=** 240	**S3=** 258
DF=Total no. of faculty members in the Department	14	14	12
AF= Total no. of faculty members in the allied Departments	0	0	0
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	**F1=** 14	**F2=** 14	**F3=** 12
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= 20.18**	**SFR2= 20.00**	**SFR3= 25.80**
Average SFR for 3 years	**SFR= 21.99**		

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)	7	7	11.00	22.27
2023-24(CAYm1)	4	10	11.00	18.18
2022-23(CAYm2)	5	7	12.00	16.25

C4. Faculty Cadre Proportion

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

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

Year	Professors		Associate Professors		Assistant Professors	
	Required RF1	Available AF1	Required RF2	Available AF1	Required RF3	Available AF3
2024-25	1.00	2.00	2.00	2.00	7.00	4.00
2023-24	1.00	2.00	2.00	2.00	8.00	4.00

2022-23	1.00	2.00	2.00	2.00	8.00	4.00
Average	RF1=1.00	AF1=2.00	RF2=2.00	AF2=2.00	RF2=7.67	AF2=4.00

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)

(CAYm2)

(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	7	5	6
2	No. of peer reviewed conference papers published	2	1	2
3	No. of books/book chapters published	1	0	3

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
Dr.S.D.Ruikar	Ms.S.U.Patil	Electronics Engineering	5G & IOT for Intelligent Health Care	ATA Freight India, Pvt. Ltd.,Pune	1year	20.00
						Amount received (Rs.):20.00

(CAYm2)

(CAYm3)

Total Amount (Lacs) Received for the Past 3 Years: 20.00

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
Dr.S.D.Ruikar	Mr.S. R. Khedkar	Electronics Engineering	Consultancy of 3D Equipment	Deputy Director, ZP, Sangli.	1 day	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
Dr.A.A.Agashe	Mr. R.G. Mevekari	Electronics Engineering	Consultancy of Virtual Interaction Class Material	A.N.Technology, Nadi Ves, A/P Kapasi, Kagal, Kolhapur	1day	0.01
						Amount received (Rs.):0.01

(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
Dr.A.A.Agashe	Mr. R.G. Mevekari	Electronics Engineering	Consultancy of Smart LED TV	Educational Officer, ZP, Satara	1 day	0.01
Dr.A.A.Agashe	Mr. R.G. Mevekari	Electronics Engineering	Consultancy of Smart LED TV	Educational Officer, Wala Panchayat Samitee, Islampur, Sangli	1 day	0.00
						Amount received (Rs.):0.01

Total amount (Lacs) received for the past 3 years: 0.02

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
Dr. S.D.Ruikar, Ms. S.U.Patil	Implementation of Autonomous Driving System Framework for safe driving	2Yrs	1.50	0.00	Implement algorithm in autonomous driving model that closely approximates real-world driving conditions
Dr.S.G.Tamhankar, Dr. R.S.Gaikwad	Kitchen Waste Based Biogas Plant in Hostel Mess	2 yrs.	3.00	285000.00	Kitchen Waste Management and Energy conservation
			Amount received (Rs.): 4.50		

(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
Nil					
			Amount received (Rs.): 0		

(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
Nil					
			Amount received (Rs.): 0		

Total amount (Lacs) received for the past 3 years : 4.50

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	Electronics Design and Automation Lab-Wing A and Wing B	20	DSP Development Kit(Shark Processor), Development FPGA-CPLD Trainer, DSP Design	20 hours	Mr. A. V. Shetti	Lab Assistant	Diploma in Electrical
2	Embedded Systems and Microcontroller Lab	25	8085,8051 Kits, ARM7 kits & their peripherals, Embedded System Lab Trainer kits, Desktop	30 hours	Mr. A. V. Shetti	Lab Assistant	Diploma in Electrical
3	Industrial Electronics Lab	25	Power Electronics Experiment kits, Industrial Drive Trainer kit, PLC trainer kits, Power Scopes, Digital	30 hours	Mr. S. B. Bhandage	Lab Assistant	SSC
4	Instrumentation And Control Lab	25	Instrumentation and Control lab trainer kits, , Robotics and AI Lab instruments, • Quanser or	30 hours	Mr. S.B. Kolap	Lab Assistant	SSC
5	Applied Electronics Lab	25	Analog and Digital Trainer Kits, Digital storage oscilloscopes, Function Generator, DC power	30 hours	Ms. J.J. Khandare	Lab Assistant	Diploma in Electronics
6	Basic Electronics Lab	25	Analog and Digital Trainer Kits, Digital storage oscilloscopes, Function Generator, DC power	30 hours	Ms. A. Y. Chavan	Lab Assistant	B.E. in Electronics
7	Communication Lab -Tutorial Room - Labview lab	25	Communication related development and trainer kits- Audio video trainer kits, Microwave trainer kits,	30 hours	Mr. S.N. Nitwe	Lab Assistant	DIE

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Electronics Design and Automation Lab	First Aid box and Fire extinguisher, CCTV Surveillance, Lab Entry Logs, Safety warning boards
2	Embedded Systems and Microcontroller Lab	First Aid box and Fire extinguisher, CCTV Surveillance, Lab Entry Logs, Safety warning boards
3	Industrial Electronics Lab	First Aid box and Fire extinguisher, CCTV Surveillance, Lab Entry Logs, Safety warning boards
4	Instrumentation And Control Lab	First Aid box and Fire extinguisher, CCTV Surveillance, Lab Entry Logs, Safety warning boards
5	Applied Electronics Lab	First Aid box and Fire extinguisher, CCTV Surveillance, Lab Entry Logs, Safety warning boards
6	Basic Electronics Lab	First Aid box and Fire extinguisher, CCTV Surveillance, Lab Entry Logs, Safety warning boards
7	Communication Lab	First Aid box and Fire extinguisher, CCTV Surveillance, Lab Entry Logs, Safety warning boards
8	PG-I Lab	First Aid box and Fire extinguisher, CCTV Surveillance, Lab Entry Logs, Safety warning boards
9	PG-II Lab	First Aid box and Fire extinguisher, CCTV Surveillance, Lab Entry Logs, Safety warning boards

D3. Project Laboratory/Research Laboratory

- The John Deere Research Laboratory is established through collaboration with John Deere India Pvt. Ltd., with the objective of promoting advanced research and product development in the areas of Embedded Systems, IoT, and Automation.

Facilities available:

- High-performance computing systems
- ARM Cortex-based embedded kits
- IoT development platforms (ESP32, Raspberry Pi, sensors, actuators)

- The lab actively supports students working on problem statements for national-level innovation competitions like: Smart India Hackathon, e-Yantra, Robo-Race, Robo-War Competitions at various institutes.

Achievements of students in those activities:


- The department encourages the optimal utilization of all academic laboratories for research and project-based learning. Students can utilize lab resources whenever required for their research and project work.

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

S.N.	Name of the Laboratory
1.	John Deere research lab

- **Snapshots of projects carried out in the form of Mini project, Mega project etc.**


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)	390	20	8	72	104
2023-24(CAYm1)	390	20	9	78	114
2024-25(CAY)	660	33	12	90	84

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	10000000	9139945	7500000	10016244	2500000	4418229	4000000	3143399
Library	3500000	1295225	3000000	2357952	2500000	3636554	4983000	2126004
Laboratory equipment	70000000	13316714	65800000	42620163	49000000	28122446	42500000	30390126
Teaching and non-teaching staff salary	355000000	280304250	360000000	353750071	370000000	371250999	330000000	324877014

Outreach Programs	2500000	1178000	2000000	1412056	300000	228636	200000	430640
R&D	2100000	1952974	2100000	760857	2400000	210817	2512000	70169
Training, Placement and Industry linkage	3500000	184000	1500000	221531	700000	146354	1200000	95380
SDGs	8629916	2349600	7046194	1715750	5573901	1418560	6096807	618825
Entrepreneurship	2000000	170806	2000000	377192	0	3633725	0	0
Others, specify	15500000	12777172	16450000	15593394	13950000	12994265	11900000	7759976
Total	**472729916**	**322668686**	**467396194**	**428825210**	**446923901**	**426060585**	**403391807**	**369511533**

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	4000000	3323317	3575200	2457444	3487560	1073578	4000000	408714
Software	0	0	424800	424800	1012440	1012440	0	0
SDGs	0	0	0	0	0	0	0	0
Support for faculty development	0	0	0	0	0	0	0	0
R & D	300000	140521	200000	200433	200000	8100	0	0
Industrial Training, Industry expert, Internship	0	0	0	0	0	0	0	0
Miscellaneous Expenses*	600000	513666	450000	433860	700000	132246	300000	40490
Total	**4900000**	**3977504**	**4650000**	**3516537**	**5400000**	**2226364**	**4300000**	**449204**