

NATIONAL BOARD OF ACCREDITATION

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

Program Name : Electrical Engineering	Discipline: Engineering & Technology
Level : Under Graduate	Tier: 2
Application No: 11847	Date of Submission: 21-05-2026

PART A- Profile of the Institute

A1.Name of the Institute: AMRUTVAHINI COLLEGE OF ENGINEERING, SANGAMNER	
Year of Establishment : 1983	Location of the Institute: At Amrutnagar Post Sangamner Sk Tal Sangamner Dist Ahilyanagar Maharashtra 422608
A2. Institute Address: AT - AMRUTNAGAR, POST- SANGAMNER (SK), TAL: SANGAMNER, DIST-AHMEDNAGAR, MAHARASHTRA, 422608	
City:SANGAMNER	State:Maharashtra
Pin Code:422605	Website:www.avcoe.org
Email:PRINCIPAL@AVCOE.ORG	Phone No(with STD Code):-
A3. Name and Address of the Affiliating University (if any):	
Name of the University : SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE	City: Pune
State : Maharashtra	Pin Code: 411007
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: 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	Engineering & Technology	UG	Artificial Intelligence and Data Science	2023	--	Artificial Intelligence and Data Science
2	Engineering & Technology	UG	Automation & Robotics	2021	--	Automation and Robotics
3	Engineering & Technology	UG	Civil Engineering	1983	--	Civil Engineering
4	Engineering & Technology	PG	Civil Engineering (Structural Engineering)	2007	--	Civil Engineering
5	Engineering & Technology	UG	Computer Engineering	1986	--	Computer Engineering
6	Engineering & Technology	PG	Computer Engineering	2010	--	Computer Engineering
7	Engineering & Technology	UG	Electrical Engineering	2012	--	Electrical Engineering
8	Engineering & Technology	UG	Electronics and Computer Engineering	2021	--	Electronics and Computer Engineering
9	Engineering & Technology	UG	Electronics and Telecommunication Engineering	2000	--	Electronics and Telecommunication Engineering
10	Engineering & Technology	UG	Information Technology	2001	--	Information Technology
11	Engineering & Technology	UG	Mechanical Engineering	1991	--	Mechanical Engineering
12	Engineering & Technology	PG	Mechanical Engineering (Design)	2007	--	Mechanical Engineering
13	Management	PG	Master of Business Administration	2010	--	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
Electrical Engineering	No	Electrical Engineering	UG
Computer Engineering	Yes	Computer Engineering	UG
Mechanical Engineering	Yes	Mechanical 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 APPROVAL DETAILS	ACCREDITATION STATUS	FROM	1
1	Electrical Engineering	UG	2012 / --	60	Yes	2024	120	2024	1-44641157702, F.No. Western/1-44641157702/2025/EOA Date of Approval: 05-Apr-2025	Granted accreditation for 3 years for the period (specify period)	2023	2

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	T
Sanctioned Intake for Last Five Years for the Electrical Engineering												
Academic Year				Sanctioned Intake								
2025-26				120								
2024-25				120								
2023-24				60								
2022-23				60								
2021-22				60								
2020-21				60								

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.Sunil Somnath Kadlag
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)	2025-26 (CAY)	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)	2021-22 (CAYm4)	2020-21 (CAYm5)	2019-20 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	120	120	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	121	120	62	61	60	58	60
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	24	8	9	9	11	13
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	8	16	8	8	8	10	4
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	129	160	78	78	77	79	77

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]
2025-26 (CAY)	120	121	8	107.50
2024-25 (CAYm1)	120	120	16	113.33
2023-24 (CAYm2)	60	54	8	103.33

Average $[(ER1 + ER2 + ER3) / 3] = 108.05 \approx 100$

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	(2021-22) LYG	(2020-21) LYGm1	(2019-20) 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	77.00
B=No. of students who graduated from the program in the stipulated course duration	54.00	61.00	73.00
Success Rate (SR)= (B/A) * 100	70.13	77.22	94.81

Average SR of three batches $((SR_1 + SR_2 + SR_3)/3)$: 80.72

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(2024-25)	CAYm2(2023-24)	CAYm3 (2022-23)
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)	6.80	6.73	6.63
Y=Total no. of successful students	132.00	63.00	61.00
Z=Total no. of students appeared in the examination	136.00	62.00	69.00
API $[X*(Y/Z)]$	6.60	6.84	5.86

Average API $[(AP1+AP2+AP3)/3]$: 6.43

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 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
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)	7.41	7.40	6.77

Y=Total no. of successful students	54.00	56.00	62.00
Z=Total no. of students appeared in the examination	71.00	70.00	83.00
API [X * (Y/Z)]	5.64	5.92	5.06

Average API [(AP1 + AP2 + AP3)/3] : 5.54

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 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
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)	7.84	7.94	7.80
Y=Total no. of successful students	48.00	57.00	68.00
Z=Total no. of students appeared in the examination	56.00	62.00	78.00
API [X*(Y/Z)]:	6.72	7.30	6.80

Average API [(AP1 + AP2 + AP3)/3] : 6.94

B9. Placement, Higher Studies, and Entrepreneurship

Table No.B9.1: Placement, higher studies, and entrepreneurship details.

Item	LYG (2021-22)	LYGm1(2020-21)	LYGm2(2019-20)
FS*=Total no. of final year students	77.00	79.00	77.00
X=No. of students placed	44.00	59.00	34.00
Y=No. of students admitted to higher studies	1.00	1.00	1.00
Z= No. of students taking up entrepreneurship	1.00	1.00	1.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	59.74	77.22	46.75

Average Placement Index = (P_1 + P_2 + P_3)/3: 61.24 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.Sunil Somnath Kadlag	XXXXXXXX43Q	Ph.D	Suresh Gyan Vihar University, Jaipur	Electric Vehicle and Control Systems	12/07/1999	26.10	Lecturer	Professor	28/03/2026	Regular	Yes		Yes
2	Dr.Kishor Vinayak Bhadane	XXXXXXXX81H	Ph.D	RTM Nagpur Univ.,Nagpur	Electrical Power System and Renewable Energy	21/08/2020	5.8	Associate Professor	Associate Professor	21/08/2020	Regular	Yes		No
3	Dr.Jyoti Ramdas Rokde	XXXXXXXX79B	Ph.D	DR. B.A.M.U. Sambhajinagar	Electrical Power System	12/08/2008	17.9	Lecturer	Assistant Professor		Regular	Yes		No
4	Mr.Tejas Ramesh Bhanegaonkar	XXXXXXXX48L	M.E.	Dr.B.A.M.U., Sambhajinagar	Electrical Machines and Drives	07/07/2010	15.10	Lecturer	Assistant Professor		Regular	Yes		No
5	Mr.Anil Kumar Pathak	XXXXXXXX35B	M.Tech	RGPV , Bhopal	Power System	21/07/2011	14.10	Lecturer	Assistant Professor		Regular	Yes		No
6	Mr.Vijay Kumar	XXXXXXXX92G	M.Tech	R.T.U. , Kota	Power System Engineering	17/06/2013	12.11	Lecturer	Assistant Professor		Regular	Yes		No
7	Dr.Arvind Subhash Pande	XXXXXXXX29E	Ph.D	University of Engineering and Management, Jaipur	Electrical Vehicle	01/07/2014	11.10	Assistant Professor	Assistant Professor		Regular	Yes		No
8	Mrs.Monal Sachin Gadakh (Pawar)	XXXXXXXX41F	M.E.	S.P.P.U., Pune	Electrical Power System	03/02/2014	12.3	Assistant Professor	Assistant Professor		Regular	Yes		No
9	Dr.Akshay Ashok Pathare	XXXXXXXX77F	Ph.D	JECRC University, Jaipur	Electrical Power System	08/12/2014	11.5	Assistant Professor	Assistant Professor		Regular	Yes		No
10	Mrs.Yogita Uday Kakad (More)	XXXXXXXX07C	M.E.	S.P.P.U.,Pune	Power System	22/08/2022	3.8	Assistant Professor	Assistant Professor		Regular	Yes		No
11	Ms. Manisha Dilip Landge	XXXXXXXX56E	M.Tech	G.H.Raisoni University, Amravati	Electrical Power System	09/08/2023	2.9	Assistant Professor	Assistant Professor		Regular	Yes		No
12	Mr. Nilesh Valmik Hadpe	XXXXXXXX80Q	M.E.	S.P.P.U. , Pune	Power System	06/09/2023	2.8	Assistant Professor	Assistant Professor		Regular	Yes		No
13	Mr.Dilip Dadasaheb Gaikwad	XXXXXXXX03P	M.E.	K.B.C.N.M.U., Jalgaon	Electrical Power System	03/06/2025	0.11	Assistant Professor	Assistant Professor		Regular	Yes		No

14	Mr.Kishor Chandrakant Muley	XXXXXXXX81F	M.E.	RGPV , Bhopal	Electrical Power System	02/06/2025	0.11	Assistant Professor	Assistant Professor		Regular	Yes		No
15	Dr. Subash Chandra Sahoo	XXXXXXXX64K	Ph.D	NIT, Silchar	Electrical Powe System	02/06/2025	0.11	Assistant Professor	Assistant Professor		Regular	Yes		No
16	Mr. Shekhar Gangadhar Pawar	XXXXXXXX60N	M.Tech	BHABHA University, Bhopal	Electrical Power System	10/07/2025	0.10	Assistant Professor	Assistant Professor		Regular	Yes		No
17	Mr. Sandeep Vasant Kolhe	XXXXXXXX57D	M.E.	S.P.P.U. , Pune	Power System	01/08/2025	0.9	Assistant Professor	Assistant Professor		Regular	Yes		No
18	Mr.Vilas Digambar Shinde	XXXXXXXX76P	M.E.	S.P.P.U., Pune	Power System	01/08/2025	0.9	Assistant Professor	Assistant Professor		Regular	Yes		No
19	Mr.Atul Arunrao Joshi	XXXXXXXX85D	M.E.	DR.B.A.M.U ,Sambhajinagar	Control System	16/12/2015	8.9	Assistant Professor	Assistant Professor		Regular	No	16/09/2024	No
20	Mr.Satish Jaywant Aher	XXXXXXXX00B	M.Tech	Shivaji Univ., Kolhapur	Energy System	24/09/2012	12.10	Assistant Professor	Assistant Professor		Regular	No	01/08/2025	No
21	Mr.Chetan Wamanrao Jadhao	XXXXXXXX16F	M.Tech	BATU, Lonere	Power System	05/07/2024	0.7	Assistant Professor	Assistant Professor		Regular	No	27/02/2025	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(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
UG1.B	132	66	66
UG1.C	66	66	66
UG1.D	66	66	66
UG1: Electrical Engineering	264	198	198
DS=Total no. of students in all UG and PG programs in the Department	264	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= 264	S2= 198	S3= 198
DF=Total no. of faculty members in the Department	18	13	13
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= 18	F2= 13	F3= 13
FF=The faculty members in F who have a 100% teaching load in the first-year courses	5	4	4
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1= 20.31	SFR2= 22.00	SFR3= 22.00
Average SFR for 3 years	SFR= 21.44		

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 = $2.5 \times [(10X + 4Y) / RF]$
2025-26(CAY)	4	14	13.00	18.46
2024-25(CAYm1)	2	11	9.00	17.78
2023-24(CAYm2)	2	11	9.00	17.78

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
2025-26	1.00	0.00	3.00	2.00	9.00	16.00
2024-25	1.00	0.00	2.00	2.00	7.00	11.00
2023-24	1.00	0.00	2.00	2.00	7.00	11.00
Average	RF1=1.00	AF1=0.00	RF2=2.33	AF2=2.00	RF2=7.67	AF2=12.67

C5. Visiting/Adjunct Faculty/Professor of Practice

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

(CAYm1)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Er. Sanjay Chaudhari	General Manager,	Electronic Study Centre, Nashik	Industrial Approach in Electrical & Electronics	50.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Er. Sanjay Chaudhari	General Manager,	Electronic Study Centre, Nashik	Industrial Approach in Electrical & Electronics	50.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Er. Sanjay Chaudhari	General Manager,	Electronic Study Centre, Nashik	Industrial Approach in Electrical & Electronics	50.00

C6. Academic Research

Table No. C6.1: Faculty publication details.

S.No.	Item	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)
1	No. of peer reviewed journal papers published	22	30	23
2	No. of peer reviewed conference papers published	4	4	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
Prof. Vijay Kumar	Prof. S. J. Aher	Electrical Engineering	Design and Performance Evaluation of Superconducting Electric Drives for Traction Type Elevators (Project No. 20TEC000402)	ASPIRE Research Mentorship Scheme, Savitribai Phule Pune University (SPPU)	1 Year	1.93
						Amount received (Rs.):1.93

(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.K.V.Bhadane		Electrical Engineering	E.S.D.P. on Electrical Technician	MSME, Mumbai	1 Year	0.32
Dr.K.V.Bhadane		Electrical Engineering	STTP conduction at IDEMI Mumbai	MSME, Mumbai	1 Year	0.10
						Amount received (Rs.):0.42

(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.S.S.Kadlag	Dr.K.V.Bhadane	Electrical Engineering	Smart AI Based Condition Monitoring	AICTE, ISTE	1 Year	0.93
						Amount received (Rs.):0.93

Total Amount (Lacs) Received for the Past 3 Years: 3.28

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. S. Kadlag		Electrical Engineering	Automation system and Electrical Work at Hindu Hrudaysamrat Balasaheb Thackeray Maharashtra Samruddhi Mahamarg	Green Valley Services	2 Years	1.00
						Amount received (Rs.):1.00

(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. S. S. Kadlag		Electrical Engineering	Automation system and Electrical Work at Hindu Hrudaysamrat Balasaheb Thackeray Maharashtra Samruddhi Mahamarg	M/s R.M. Katore & Company and Sanket Rose Nursery (JV)	2 Years	0.89
Dr. S. S. Kadlag		Electrical Engineering	Refund in Excess Bill due to wrong tariff	MSEDCL	1 Year	48.81
Dr. S. S. Kadlag		Electrical Engineering	Revision of Electricity Tariff	MSEDCL	1 Year	24.00
						Amount received (Rs.):73.70

(CAYm3)

Total amount (Lacs) received for the past 3 years: 74.70

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. S. Kadlag & Prof. A. K. Pathak	SIEP E-Bike	1 Year	2.76	2.76	Winner of SIEP E-Bike Challenge
			Amount received (Rs.): 2.76		

(CAYm2)

(CAYm3)

Total amount (Lacs) received for the past 3 years : 2.76

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	Basic Electrical engineering lab	23	NA	1	Mr.V.S. Thorat	Technical Assistant	B.E. (Pursuing)
2	Software lab	20	Dell Desktop Computer (Intel® Core™ i5 Processor), 6 kVA UPS (True Online Double-Conversion UPS with AVR feature)	0.465	Mr.R.A. Jondhale	Technical Assistant	B.E. (Electrical Engir
3	Embedded system lab	20	Computer-Dell Desktop Dell Make Intel Core i5 Processor, Invertor (Legrand Numeric) True Online Double-Conversion UPS with AVR feature	0.435	Mrs. P.S. Aher	Technical Assistant	B.C.A.
4	Electrical Machine Lab I and II	20	DC Power Supply Rectifier, 5 HP Shunt-Wound DC Motor Coupled with 3 kVA Automatic AVR Shunt-Wound DC Motor	0.46	Mr. Y. S. Inamdar	Technical Assistant	B.E. (Electrical Engir
5	Electric measurement and instrumentation lab	20	Single-Phase Phantom Load for Calibration of Ammeter, Voltmeter, and Wattmeter	0.57	Mr. Y. S. Inamdar	Technical Assistant	B.E. (Electrical Engir
6	High voltage Engg. Lab	20	High Voltage Tester (30 kV, 30 mA, High Voltage India Make), Oil Testing Kit (60 kV, High Voltage India Make) Transformer Oil Tester	0.515	Mrs. P.S. Aher	Technical Assistant	B.C.A.
7	Power Electronics lab	20	Experimental Kit of 3 Phase Full Rectifier, Harmonics Analyser of 3phase system	0.599	Mr. R.R. Shinde	Lab Assistant	ITI
8	Power System and Electrical Drives Lab	20	Measurement of ABCD Parameters of Medium Transmission Line, Study of the Effect of VAR Compensation Using Capacitor Bank	0.515	Mr. R.R. Shinde	Lab Assistant	ITI
9	PLC and SCADA lab	20	Switchgear Test Kit with ACB, Study and Testing of Contactor, MCCB Testing Equipment, Measurement Board	0.345	Mr. R. A. Jondhale	Technical Assistant	B.E. (Electrical Engir

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Basic Electrical Engineering Lab	• Fire Extinguisher (Type ABC for electrical fire, Type BC-CO2 for general fire) with regular filling. • MCB and ELCB protection. • Safety instructions and stickers displayed. • Rubber gloves for staff/students during connections. • OLTC (500 KVA) at powerhouse for constant voltage. • Lightning arresters on institute premises. • Proper earthing. • Low-voltage AC/DC power supplies with overload protection. • Insulated workbenches and rubber mats.
2	Software Lab	• Fire Extinguisher (Type ABC for electrical fire, Type BC-CO2 for general fire) with regular filling. • MCB and ELCB protection. • Safety instructions and stickers displayed. • Proper earthing. • UPS for all workstations. • CCTV surveillance for security and monitoring. • Proper cable management to prevent tripping hazards. • Regular antivirus updates and firewall protection. • Proper ventilation and cooling for servers/workstations.

3	Embedded System Lab	• Fire Extinguisher (Type ABC for electrical fire, Type BC-CO2 for general fire) with regular filling. • MCB and ELCB protection. • Safety instructions and stickers displayed. • Proper earthing. • UPS for all workstations. • Over-current protection for all trainer kits and development boards. • Proper labelling of IC pins and voltage levels on trainer kits. • Proper ventilation and cooling for workstations.
4	Electrical Machine Lab I & II	• Fire Extinguisher (Type ABC for electrical fire, Type BC-CO2 for general fire) with regular filling. • MCB and ELCB protection. • Safety instructions and stickers displayed. • Rubber gloves for staff/students during connections. • OLTC (500 KVA) at powerhouse for constant voltage. • Lightning arresters on institute premises. • Proper earthing. • Emergency stop buttons near each machine. • Insulated floor mats near motor control panels.
5	Electrical Measurement and Instrumentation Lab	• Fire Extinguisher (Type ABC for electrical fire, Type BC-CO2 for general fire) with regular filling. • MCB and ELCB protection. • Safety instructions and stickers displayed. • Rubber gloves for staff/students during connections. • OLTC (500 KVA) at powerhouse for constant voltage. • Lightning arresters on institute premises. • Proper earthing. • Fused test leads and current-limited supplies. • Proper grounding of all measuring instruments. • Safe handling guidelines for precision instruments.
6	High Voltage Engineering Lab	• Fire Extinguisher (Type ABC for electrical fire, Type BC-CO2 for general fire) with regular filling. • MCB and ELCB protection. • Safety instructions and stickers displayed. • Rubber gloves for staff/students during connections. • OLTC (500 KVA) at powerhouse for constant voltage. • Lightning arresters on institute premises. • Proper earthing. • Restricted access with authorization only. • Interlocked safety gates and high-voltage warning signs. • Discharge rods and grounding sticks. • Dead-man switch for high voltage source. • Emergency shutdown procedure displayed.
7	Power Electronics Lab	• Fire Extinguisher (Type ABC for electrical fire, Type BC-CO2 for general fire) with regular filling. • MCB and ELCB protection. • Safety instructions and stickers displayed. • Rubber gloves for staff/students during connections. • OLTC (500 KVA) at powerhouse for constant voltage. • Lightning arresters on institute premises. • Proper earthing. • Isolated oscilloscope probes for floating measurements. • Proper ventilation for heat dissipation.
8	Power system and Electrical Drives lab	• Fire Extinguisher (Type ABC for electrical fire, Type BC-CO2 for general fire) with regular filling. • MCB and ELCB protection. • Safety instructions and stickers displayed. • Rubber gloves for staff/students during connections. • OLTC (500 KVA) at powerhouse for constant voltage. • Lightning arresters on institute premises. • Proper earthing. • Emergency stop on drive control panels. • Overload and short-circuit protection for drives. • Insulated mats near drive panels. • Safety interlocks for rotating machinery.
9	PLC and SCADA Lab	• Fire Extinguisher (Type ABC for electrical fire, Type BC-CO2 for general fire) with regular filling. • MCB and ELCB protection. • Safety instructions and stickers displayed. • Proper earthing. • 24V DC logic level safety (no direct mains on trainer). • Emergency stop simulation in PLC programs. • Proper grounding for communication cables.

D3. Project Laboratory/Research Laboratory

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
2023-24(CAYm2)	840	42	15	49	52
2024-25(CAYm1)	960	48	19	56	55
2025-26(CAY)	1020	51	19	60	53

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 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Infrastructure Built-Up	38500000	58624483	35000000	44024355	29800000	23836341	18000000	23836933
Library	3700000	2712589	3630000	2975874	3300000	2295325	3000000	2410812
Laboratory equipment	34000000	36709245	29000000	23436219	27500000	35612324.8	25000000	22641782.5
Teaching and non-teaching staff salary	340000000	327818625	320000000	295326769	280000000	265459527	210000000	244724658
Outreach Programs	3300000	1588155	3025000	1272155	2700000	1125993	1500000	1590488
R&D	3751000	4521987	3410000	3518260	3100000	1685961	3000000	1396796
Training, Placement and Industry linkage	4235000	5145564	3850000	3012336	3500000	2103012	3000000	729181
SDGs	3327500	3825179	3025000	11548383	3000000	4087365	2500000	6822787
Entrepreneurship	200000	240797	150000	64377	50000	6500	50000	7000
Others, specify	21265000	17807743	21050000	16447126	19000000	21173162	15000000	15831650.69
Total	452278500	458994367	422140000	401625854	371950000	357385510.8	281050000	319992088.19

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 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Laboratory equipment	3100000	3168719	3100000	640040	3100000	3242127	140000	131667
Software	1100000	1020700	800000	768200	800000	751498	800000	751498
SDGs	600000	306014	420000	970064	410000	236948	400000	401340
Support for faculty development	40000	6000	5000	35000	5000	3000	5000	3000
R & D	20000	17713	5000	10610	5000	3000	5000	3000
Industrial Training, Industry expert, Internship	250000	208300	100000	206306	80000	77900	65000	50000
Miscellaneous Expenses*	120000	78000	69000	69906	68000	69957	35000	10333
Total	5230000	4805446	4499000	2700126	4468000	4384430	1450000	1350838

NATIONAL BOARD OF ACCREDITATION

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

Program Name : Mechanical Engineering	Discipline: Engineering & Technology
Level : Under Graduate	Tier: 2
Application No: 11847	Date of Submission: 21-05-2026

PART A- Profile of the Institute

A1.Name of the Institute: AMRUTVAHINI COLLEGE OF ENGINEERING, SANGAMNER	
Year of Establishment : 1983	Location of the Institute: At Amrutnagar Post Sangamner Sk Tal Sangamner Dist Ahilyanagar Maharashtra 422608
A2. Institute Address: AT - AMRUTNAGAR, POST- SANGAMNER (SK), TAL: SANGAMNER, DIST-AHMEDNAGAR, MAHARASHTRA, 422608	
City:SANGAMNER	State:Maharashtra
Pin Code:422605	Website:www.avcoe.org
Email:PRINCIPAL@AVCOE.ORG	Phone No(with STD Code):-
A3. Name and Address of the Affiliating University (if any):	
Name of the University : SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE	City: Pune
State : Maharashtra	Pin Code: 411007
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: 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	Engineering & Technology	UG	Artificial Intelligence and Data Science	2023	--	Artificial Intelligence and Data Science
2	Engineering & Technology	UG	Automation & Robotics	2021	--	Automation and Robotics
3	Engineering & Technology	UG	Civil Engineering	1983	--	Civil Engineering
4	Engineering & Technology	PG	Civil Engineering (Structural Engineering)	2007	--	Civil Engineering
5	Engineering & Technology	UG	Computer Engineering	1986	--	Computer Engineering
6	Engineering & Technology	PG	Computer Engineering	2010	--	Computer Engineering
7	Engineering & Technology	UG	Electrical Engineering	2012	--	Electrical Engineering
8	Engineering & Technology	UG	Electronics and Computer Engineering	2021	--	Electronics and Computer Engineering
9	Engineering & Technology	UG	Electronics and Telecommunication Engineering	2000	--	Electronics and Telecommunication Engineering
10	Engineering & Technology	UG	Information Technology	2001	--	Information Technology
11	Engineering & Technology	UG	Mechanical Engineering	1991	--	Mechanical Engineering
12	Engineering & Technology	PG	Mechanical Engineering (Design)	2007	--	Mechanical Engineering
13	Management	PG	Master of Business Administration	2010	--	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
Electrical Engineering	No	Electrical Engineering	UG
Computer Engineering	Yes	Computer Engineering	UG
Mechanical Engineering	Yes	Mechanical 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)

Allied Department/Cluster Name	Program Name	Program Level
Automation and Robotics	Automation & Robotics	UG

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
1	Mechanical Engineering	UG	1991 / --	60	Yes	2012	120	2012	F.No. Western/ 1-715941562/2012/EOA Dt. 10/05/2012	Granted accreditation for 3 years for the period (specify period)	2023	2026

List of the Allied Departments/Cluster and Programs:

SR.NO.	ALLIED DEPARTMENT NAME	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
1	Automation and Robotics	Automation & Robotics	UG	2021 / --	60	No	NA	60	2021	Higher and Technical Education Department, Government of Maharashtra, Government Resolution No. TEM-	Eligible but not applied

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

A. Name of the HoD :	Dr. Wakchaure Vishnu Damodhar
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)	2025-26 (CAY)	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)	2021-22 (CAYm4)	2020-21 (CAYm5)	2019-20 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	120	120	120	120	120	120	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	120	108	103	106	103	85	116
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	32	30	18	32	55	31
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	6	13	14	14	18	12	7
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	126	153	147	138	153	152	154

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]
2025-26 (CAY)	120	120	6	105.00
2024-25 (CAYm1)	120	108	13	100.83
2023-24 (CAYm2)	120	103	14	97.50

Average [(ER1 + ER2 + ER3) / 3] = 101.11≅ 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	(2021-22) LYG	(2020-21) LYGm1	(2019-20) 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).	83.00	105.00	134.00
B=No. of students who graduated from the program in the stipulated course duration	153.00	152.00	154.00
Success Rate (SR)= (B/A) * 100	184.34	144.76	114.93

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 148.01

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(2024-25)	CAYm2(2023-24)	CAYm3 (2022-23)
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)	6.38	5.62	5.70
Y=Total no. of successful students	123.00	111.00	129.00
Z=Total no. of students appeared in the examination	130.00	137.00	131.00
API [X*(Y/Z)]	6.04	4.55	5.61

Average API[(AP1+AP2+AP3)/3] : 5.40

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 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
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)	6.99	7.01	6.34

Y=Total no. of successful students	119.00	100.00	104.00
Z=Total no. of students appeared in the examination	138.00	111.00	151.00
API [X * (Y/Z)]	6.03	6.32	4.37

Average API [(AP1 + AP2 + AP3)/3] : 5.57

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 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
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)	7.71	7.65	7.17
Y=Total no. of successful students	89.00	89.00	118.00
Z=Total no. of students appeared in the examination	100.00	104.00	144.00
API [X*(Y/Z)]:	6.86	6.55	5.88

Average API [(AP1 + AP2 + AP3)/3] : 6.43

B9. Placement, Higher Studies, and Entrepreneurship

Table No.B9.1: Placement, higher studies, and entrepreneurship details.

Item	LYG (2021-22)	LYGm1(2020-21)	LYGm2(2019-20)
FS*=Total no. of final year students	153.00	152.00	154.00
X=No. of students placed	80.00	108.00	84.00
Y=No. of students admitted to higher studies	2.00	0.00	1.00
Z= No. of students taking up entrepreneurship	0.00	1.00	1.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	53.59	71.71	55.84

Average Placement Index = (P_1 + P_2 + P_3)/3: 60.38 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. Wakchaure Vishnu Damodhar	XXXXXXXX80L	Ph.D	SPPU, Pune	CAD/CAM	08/12/2016	9.5	Professor	Professor	08/12/2016	Regular	Yes		Yes
2	Dr. Aher Vishnu Sadashiv	XXXXXXXX84Q	Ph.D	SPPU, Pune	Design Engineering	26/08/2000	25.9	Assistant Professor	Associate Professor	15/02/2022	Regular	Yes		No
3	Dr. Bajaj Dipak Sriramji	XXXXXXXX98R	Ph.D	SPPU, Pune	Design Engineering	01/01/2009	17.4	Assistant Professor	Associate Professor	24/09/2022	Regular	Yes		No
4	Dr. Nagare Prashant Narayan	XXXXXXXX95H	Ph.D	SPPU, Pune	Design Engineering	06/04/2007	19.1	Assistant Professor	Associate Professor	02/06/2025	Regular	Yes		No
5	Dr. Harne Mahesh Shaligram	XXXXXXXX23P	Ph.D	RTMU, Nagpur	Design Engineering	14/07/2007	18.10	Assistant Professor	Assistant Professor		Regular	Yes		No
6	Mr. Mhaske Vilas Machindra	XXXXXXXX39A	M.E.	Shivaji University, Kolhapur	Design Engineering	07/08/2008	17.9	Assistant Professor	Assistant Professor		Regular	Yes		No
7	Mr. Fargade Sandeep Chandrabhan	XXXXXXXX33A	M.E.	SPPU, Pune	Design Engineering	21/09/2006	19.8	Assistant Professor	Assistant Professor		Regular	Yes		No
8	Mr. Tambe Nitin Haribhau	XXXXXXXX06B	M.E.	SPPU, Pune	Heat Power	16/08/2011	14.9	Assistant Professor	Assistant Professor		Regular	Yes		No
9	Mr. Deokar Anand Vasantrao	XXXXXXXX81J	M.E.	SPPU, Pune	Design Engineering	06/09/2007	18.8	Assistant Professor	Assistant Professor		Regular	Yes		No
10	Dr. Bayas Eknath Tryambak	XXXXXXXX20L	Ph.D	VGU, Jaipur	Design Engineering	08/11/2008	17.6	Assistant Professor	Assistant Professor		Regular	Yes		No
11	Mr. Varpe Babasaheb Kisan	XXXXXXXX90C	M.E.	SPPU, Pune	Design Engineering	09/04/2008	18.1	Assistant Professor	Assistant Professor		Regular	Yes		No
12	Mr. Wakchaure Pravin Babanrao	XXXXXXXX96E	M.E.	SPPU, Pune	Design Engineering	23/08/2010	15.9	Assistant Professor	Assistant Professor		Regular	Yes		No
13	Dr. Deshmukh Kishor Bhausahab	XXXXXXXX31Q	Ph.D	SPPU, Pune	Design Engineering	21/07/2011	14.10	Assistant Professor	Assistant Professor		Regular	Yes		No
14	Dr. Dagale Kishor Dhondiba	XXXXXXXX82Q	Ph.D	VGU, Jaipur	Design Engineering	02/07/2012	13.10	Assistant Professor	Assistant Professor		Regular	Yes		No
15	Dr. Gadakh Sachin Tukaram	XXXXXXXX27C	Ph.D	RGPV, Bhopal	Tribology and Maintenance Engineering	06/07/2012	13.10	Assistant Professor	Assistant Professor		Regular	Yes		No
16	Mr. Jambukar Ganpat Baban	XXXXXXXX68P	M.E.	SPPU, Pune	Design Engineering	06/07/2012	13.10	Assistant Professor	Assistant Professor		Regular	Yes		No

17	Mr. Amrutkar Sunil Kashinath	XXXXXXXX50N	M.E.	RGPV, Bhopal	Heat Power	25/09/2012	13.7	Assistant Professor	Assistant Professor		Regular	Yes		No
18	Dr. Aher Avinash Bhagwat	XXXXXXXX89D	Ph.D	VGU, Jaipur	Design Engineering	21/09/2010	15.8	Assistant Professor	Assistant Professor		Regular	Yes		No
19	Dr. Raktate Omesh Uttamrao	XXXXXXXX88P	Ph.D	Kalinga University, Raipur	Manufacturing	28/06/2012	13.10	Assistant Professor	Assistant Professor		Regular	Yes		No
20	Mr. Pendbhaje Gaurav Sanjay	XXXXXXXX79A	M.E.	SPPU, Pune	Design Engineering	15/07/2013	12.10	Assistant Professor	Assistant Professor		Regular	Yes		No
21	Mr. Dighe Kapil Keshavrao	XXXXXXXX01Q	M.E.	SPPU, Pune	Design Engineering	15/07/2013	12.10	Assistant Professor	Assistant Professor		Regular	Yes		No
22	Dr. Shinde Balasaheb Ganpat	XXXXXXXX71B	Ph.D	MIT-ADT University, Pune	Product Development	16/08/2014	11.9	Assistant Professor	Assistant Professor		Regular	Yes		No
23	Dr. Gite Ravindra Eknath	XXXXXXXX10M	Ph.D	SPPU, Pune	Additive Manufacturing	01/02/2016	10.3	Assistant Professor	Assistant Professor		Regular	Yes		No
24	Dr. Galande Swapnil Dnyadeo	XXXXXXXX41B	Ph.D	SPPU, Pune	Design Engineering	10/02/2016	10.3	Assistant Professor	Assistant Professor		Regular	Yes		No
25	Mr. Gunjal Popat Nana	XXXXXXXX85P	M.E.	SPPU, Pune	Design Engineering	23/12/2014	11.4	Assistant Professor	Assistant Professor		Regular	Yes		No
26	Mr. Wagh Yogesh Jaywant	XXXXXXXX79K	M.E.	NMU, Jalgaon	Thermal Engineering	17/02/2016	10.3	Assistant Professor	Assistant Professor		Regular	Yes		No
27	Mr. Thorat Satyajit Prakash	XXXXXXXX45N	M.E.	SPPU, Pune	Design Engineering	06/07/2017	8.10	Assistant Professor	Assistant Professor		Regular	Yes		No
28	Dr. Hase Vaibhav Jalindar	XXXXXXXX54P	Ph.D	SPPU, Pune	CAD/CAM	29/07/2002	23.9	Assistant Professor	Associate Professor	10/12/2019	Regular	Yes		No
29	Dr. Gavhane Rakhmaji Sopan	XXXXXXXX82G	Ph.D	SPPU, Pune	Heat Power	08/10/2005	20.7	Assistant Professor	Assistant Professor		Regular	Yes		No
30	Mr. Patil Virupakshagouda Yallanagouda	XXXXXXXX84J	M.E.	Mysore University, Mysore	Maint. Engg	29/06/2006	19.10	Assistant Professor	Assistant Professor		Regular	Yes		No
31	Mr. Nibe Deepak Madhavrao	XXXXXXXX83R	M.E.	SPPU, Pune	Heat Power	09/08/2008	17.9	Assistant Professor	Assistant Professor		Regular	Yes		No
32	Dr. Varpe Bhausaheb Rambhau	XXXXXXXX17E	Ph.D	SPPU, Pune	Design Engineering	03/09/2011	14.8	Assistant Professor	Assistant Professor		Regular	Yes		No
33	Dr. Gunjal Yogesh Ramrao	XXXXXXXX63D	Ph.D	SPPU, Pune	Design Engineering	11/08/2005	20.9	Assistant Professor	Assistant Professor		Regular	Yes		No
34	Dr. Shirke Makarand Bhikaji	XXXXXXXX59D	Ph.D	SPPU, Pune	Design Engineering	16/07/2007	18.10	Assistant Professor	Assistant Professor		Regular	Yes		No
35	Mr. Vilhekar Raman Ramdasrao	XXXXXXXX10P	M.E.	DBATU, Raigad	Thermal and Fluid Engineering	04/03/2014	12.2	Assistant Professor	Assistant Professor		Regular	Yes		No
36	Mr. Shivsharan Pratap Sopan	XXXXXXXX12L	M.E.	SPPU, Pune	Design Engineering	03/07/2012	13.10	Assistant Professor	Assistant Professor		Regular	Yes		No
37	Mr. Bhagwat Kiran Somnath	XXXXXXXX81B	M.E.	SPPU, Pune	Design Engineering	23/12/2014	11.4	Assistant Professor	Assistant Professor		Regular	Yes		No
38	Mr. Shinde Amit Shivaji	XXXXXXXX29A	M.E.	SPPU, Pune	Design Engineering	29/12/2014	11.4	Assistant Professor	Assistant Professor		Regular	Yes		No
39	Mr. Morankar Kamalakar Prabhakar	XXXXXXXX82G	M.E.	Shivaji University, Kolhapur	Power Engineering	15/07/1991	32.10	Assistant Professor	Associate Professor	12/07/1999	Regular	No	31/05/2024	No
40	Mr. Chaudhari Sujit Badashaha	XXXXXXXX83F	M.E.	SPPU, Pune	Design Engineering	23/12/2014	9.9	Assistant Professor	Assistant Professor		Regular	No	05/10/2024	No

Table No.C2: Faculty details of Allied Departments for the past 3 years including CAY.

Sr.No	Name of the Faculty	PAN No.	APAAAR faculty ID*(if any)	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. Vilas Baburao Shinde	XXXXXXXX11P	XXXXXXXXXX987	Ph.D	SPPU, Pune	Robotics	09/08/2004	21.9	Assistant Professor	Assistant Professor		Regular	Yes		Yes
2	Dr. Ravindra Somnath Tajane	XXXXXXXX58D	XXXXXXXXXX616	Ph.D	SPPU, Pune	Production Engineering	15/12/1990	35.5	Assistant Professor	Associate Professor	29/01/2018	Regular	Yes		No
3	Dr. Bhaskar Ramkrishna Borkar	XXXXXXXX81M	XXXXXXXXXX853	Ph.D	VNIT, Nagpur	Production Engineering	29/07/2002	23.9	Assistant Professor	Professor	29/01/2018	Regular	Yes		No
4	Dr. Vijay Shivaji Gadakh	XXXXXXXX24E	XXXXXXXXXX167	Ph.D	NIT, Warangal	Production Engineering	16/08/2010	15.9	Assistant Professor	Associate Professor	01/04/2016	Regular	Yes		No

5	Dr. Narayan Sahadu Khemnar	XXXXXXXX22F	XXXXXXXXXX993	Ph.D	SPPU, Pune	Production Engineering	11/08/2005	20.9	Assistant Professor	Assistant Professor		Regular	Yes		No
6	Mr. Hemant Parashram Pathade	XXXXXXXX77J	XXXXXXXXXX999	M.E.	SPPU, Pune	Mechanical Engineering	03/12/2007	18.5	Assistant Professor	Assistant Professor		Regular	Yes		No
7	Mr. Satish Namdeorao Gadhave	XXXXXXXX93D	XXXXXXXXXX048	M.E.	SPPU, Pune	Production Engineering	03/12/2007	18.5	Assistant Professor	Assistant Professor		Regular	Yes		No
8	Mr. Manoj Jagannath Thokale	XXXXXXXX81E	XXXXXXXXXX267	M.Tech	SPPU, Pune	Manufacturing Engg and Automation	15/06/2009	16.11	Assistant Professor	Assistant Professor		Regular	Yes		No
9	Mr. Prashant Bhausaheb Wakchaure	XXXXXXXX77A	XXXXXXXXXX822	M.E.	SPPU, Pune	Production Engineering	25/02/2013	13.2	Assistant Professor	Assistant Professor		Regular	Yes		No
10	Dr. Nitin Jalindar Varpe	XXXXXXXX02J	XXXXXXXXXX022	Ph.D	UEM, Jaipur	Mechanical Engineering	18/06/2014	11.11	Assistant Professor	Assistant Professor		Regular	Yes		No
11	Mr. Sunil Kisan Bangar	XXXXXXXX11H	XXXXXXXXXX053	M.E.	JNTU, Hyderabad	Advanced Manufacturing System	01/02/2016	10.3	Assistant Professor	Assistant Professor		Regular	Yes		No
12	Ms. Vidya Ramesh Wakchaure	XXXXXXXX90A	XXXXXXXXXX869	M.E.	SPPU, Pune	Microwave	01/07/2024	1.10	Assistant Professor	Assistant Professor		Regular	Yes		No

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(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
UG1.B	132	132	132
UG1.C	132	132	132
UG1.D	132	132	132
UG1: Mechanical Engineering	396	396	396
UG2.B	66	66	66
UG2.C	66	66	66
UG2.D	66	66	0
UG2: Automation & Robotics	198	198	132
PG1.A	6	6	6
PG1.B	6	6	6
PG1: Mechanical Engineering (Design)	12	12	12
DS=Total no. of students in all UG and PG programs in the Department	408	408	408
AS=Total no. of students of all UG and PG programs in allied departments	198	198	132
S=Total no. of students in the Department (DS) and allied departments (AS)	S1= 606	S2= 606	S3= 540
DF=Total no. of faculty members in the Department	38	38	40
AF= Total no. of faculty members in the allied Departments	12	12	11
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	F1= 50	F2= 50	F3= 51
FF=The faculty members in F who have a 100% teaching load in the first-year courses	12	11	13
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1= 15.95	SFR2= 15.54	SFR3= 14.21
Average SFR for 3 years	SFR= 15.23		

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 = $2.5 \times [(10X + 4Y) / RF]$
2025-26(CAY)	16	34	30.00	24.67

2024-25(CAYm1)	15	35	30.00	24.17
2023-24(CAYm2)	13	38	27.00	26.11

C4. Faculty Cadre Proportion

- Faculty Cadre Proportion is 1(RF1): 2(RF2): 6(RF3)
- RF1= No. of Professors required = $1/9 \times \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per C2 of this documents.}$
- RF2= No. of Associate Professors required = $2/9 \times \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per section C2 of this documents.}$
- RF3= No. of Assistant Professors required = $6/9 \times \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per section C2 of this documents.}$
- 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
2025-26	3.00	2.00	7.00	6.00	20.00	42.00
2024-25	3.00	2.00	7.00	5.00	20.00	43.00
2023-24	3.00	2.00	6.00	5.00	18.00	44.00
Average	RF1=3.00	AF1=2.00	RF2=6.67	AF2=5.33	RF2=19.33	AF2=43.00

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	0	0	0	0	0.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Pankaj Patil	Sr. Production Faculty	Maya Academy of Advanced Cinematics , Nashik	ARVR	52.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Pankaj Patil	Sr. Production Faculty	Maya Academy of Advanced Cinematics , Nashik	ARVR	54.00

C6. Academic Research

Table No. C6.1: Faculty publication details.

S.No.	Item	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)
1	No. of peer reviewed journal papers published	29	22	14
2	No. of peer reviewed conference papers published	11	17	10
3	No. of books/book chapters published	3	1	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
Dr.K.B. Deshmukh	----	Mechanical	Investigation of Thermal Performance Enhancement	Internal Quality Assurance Cell	02 years	0.80
						Amount received (Rs.):0.80

(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
----	----	----	----	----	----	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
Dr.V.S. Gadakh	----	Mechanical	Study of Inter layer in FSW of Aluminum & Steel	AICTE, New Delhi	3 years	21.56
						Amount received (Rs.):21.56

Total Amount (Lacs) Received for the Past 3 Years: 22.36

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
----	----	----	----	----	----	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
----	----	----	----	----	----	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
----	----	----	----	----	----	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
Prof. B. K. Varpe	SAE BAJA	2024–25	3.50	3.50	Successfully Completed
Prof. B. K. Varpe	TIFEN	2024–25	0.55	0.55	Winner
Prof. B. K. Varpe	E-BAJA	2024–25	3.00	3.00	Successfully Completed
			Amount received (Rs.): 7.05		

(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
Prof. B. K. Varpe	E-REEV	2023–24	3.50	3.50	Winner
			Amount received (Rs.): 3.50		

(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
Prof. B. K. Varpe	TIFEN	2022–23	2.00	2.00	Winner
			Amount received (Rs.): 2.00		

Total amount (Lacs) received for the past 3 years : 12.55

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	Heat Engine Laboratory	5	Four Stroke Four Cylinder Diesel Engine Coupled with Hydraulic Dynamometer Test Rig. Diesel Engine 4 Stroke 4 Cylinder Test	Semester -I: 16	Mr. V. V. Davkhare	Lab. Asst	ITI-Diesel Mechanic
2	Steam Power Laboratory	5	Steam Power Plant having Boiler (Non- IBR, Diesel fired, Water tube with steam output of 400 Kcal/hr, Pressure 40 PSI, Water 3000 ltr)	Semester -I: 16	Mr. V. V. Davkhare	Lab. Asst	ITI-Diesel Mechanic
3	Heat Transfer Laboratory	5	Thermal Conductivity of Metal Rod Apparatus and Spherical Film Heat transfer coefficient apparatus. Dia. Pipe surface Apparatus	Semester-I: 16	Mr. S. B. Jondhale	Lab. Asst.	ITI-Electrician
4	Refrigeration & Air Conditioning Laboratory	5	Vapor Absorption Refrigeration Cycle Test RIG, VCR Mini Ice Plant, Air-conditioning Cycle Test Rig. Medium Air Conditioning Model, Humidifier	Semester-I: 16	Mr. S.B.Thorat	Tech. Asst.	Diploma in Mechanic
5	Dynamics of Machinery Laboratory	5	Wheel Balancing Machine, Centrifugal Governor, Vibration Lab Set-Up, Dynamic Balancing Machine, Fundamental Set Up	Semester-I: 16	Mr. S.B.Thorat	Tech. Asst.	Diploma in Mechanic
6	Theory of Machine Laboratory	5	Clutch & Brake Lining Friction Testing Apparatus, Epicyclic Gear train Test Rig, Hydraulic Governor Model, Flywheel Governor	Semester-I: 16	Mr. S.T. Waman	Tech. Asst.	Diploma in Mechanic
7	CAD CAM Laboratory	5	P-IV:03 C2D: 77 AMD:10 Core i7: 40 Intel i7 13th Generation-20 Interactive Flat Panel 86" IBM Model Series M4 Computer, CAM, Milling 7	Semester -I: 20	Mrs.M.P. Pansare/ M	Tech. Asst.	ME Comp /BCS
8	Industrial Fluid Power Laboratory	5	Hydraulic Accumulator & Intensifier, Pneumatic Trainer to perform different pneumatic circuits, Hydraulic Trainer with Accumulator, Oil Cores	Semester -I: 16	Mr. M. S. Khurpe	Tech. Asst.	Diploma in Mechanic

9	Mechatronics Laboratory	5	PLC Trainer, Ladder Programming software, PID Trainer, Temperature Sensor Calibration	Semester -I: 16	Mr. M. S. Khurpe	Tech. Asst.	Diploma in Mechanic
10	PG and Research Laboratory	5	Four Ball Tester, Pin on Disc Test Rig, Journal bearing test Rig and 3D Printer	Semester -I: 04	Mr. S. T. Waman	Tech. Asst.	Diploma in Mechanic
11	Project /PBL Laboratory	5	Drilling machine, Power Hacksaw machine, TIG welding, arc welding machine, Surface	Semester -I: 16	Mr. S. T. Waman	Tech. Asst.	Diploma in Mechanic
12	Central Workshop	5	Lathe machine, CNC Lathe Machine Milling M/c, Cylindrical grinding machine, Surface	Lathe machine	Mr.Hodgar R.B. Mr.B	Instructor	ITI Machinist ITI Turr
13	Testing of Materials Laboratory (Shared with Civil Engineering)	5	Digital Universal Testing Machine (UTM), Compression Testing Machine (CTM), Torsion	Semester –I 16	Mr. S. T. Shinde	Laboratory Assistant	ITI – Surveyor
14	Fluid Mechanics Laboratory (Shared with Civil Engineering)	5	Fluid Mechanics: Venturi meter / Orifice meter Apparatus, Notches Apparatus, Minor and	Semester –I 06	Mr. S. S. Godase	Technical Assistant	Diploma in Mechanic
15	Fluid Machinery Laboratory	5	Fluid Machinery: Francis Turbine test rig, Pelton Turbine test & Centrifugal pump test rig.	Semester –I 06	Mr. V. V. Davkhare	Lab. Asst.	ITI-Diesel Mechanic.
16	Engineering Metallurgy Laboratory (Shared with Automation and	5	Rockwell and Brinell Hardness Tester, Vickers Hardness Tester, Poldi Hardness Tester,	Semester –I 16	Mr. Roham V.V.	Technical Assistant	Diploma in Mechanic
17	Metrology and Quality Control (MQC) Laboratory (Shared with	5	Optical Microscope, Optical Profile Projector, Monochromatic Light Source, Tool Makers	Semester –II 1	Mr. Kakad J.T.	Technical Assistant	Diploma in Mechanic
18	Electrical Machine Laboratory (Shared with Electrical Engineering)	5	Electrical breaking of DC shunt Motor Test Rig., Demonstration of use of starter DC motor	Semester –I 06	Mr. Yash Inamdar	Technical Assistant	BE-Electrical

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	General (All Labs)	1. Fire extinguishers are available in each Laboratory (Company- Safe Zone Plus, Type- Dry powder, Weight- 2kg, Pressure- 30 kgf/cm2. Used for- Solid fire, liquid fire, gas fire, electric fire.) the dispensary by the medical officer. Also, an ambulance is available in campus for handling a medical emergency. 11. Major portion of the department is under CCTV surveillance. 2. For electrical safety, Miniature Circuit Breakers (MCB) and Earth Leakage Circuit Breaker (ELCB) are used. Also, instructions are displayed at prominent places. 3. 500 KVA Online Tap Changing Transformer (OLCT) is installed at a powerhouse with constant voltage output. 4. Safety instructions, as well as emergency contact numbers, are displayed. 5. First Aid Kit is available in the Department office. 6. Flammable chemicals are kept separately. 7. Cage for LPG cylinder outside Laboratory. 8. Fire Safety and Energy Audit is done frequently at the institute level. 9. The Microprocessor-based Automatic Power Factor Control (APFC) bank is installed at a powerhouse that maintains power factor 1 so that the wire is not heated beyond the limit. 10. Lightning arresters are installed in the institute premises to protect against lightning stroke. Medical facility is available for minor casualties in
2	Steam Power Lab	1. Pressure triggering device is mounted on the boiler if pressure exceeds the design pressure limit of the boiler. 2. Pressure safety valves are available to relieve the excessive pressure. 3. Water sprinkler system is available for the safety in case of fire hazard. 4. Ensure the water supply in the boiler before starting the ignition.
3	Heat Engine Laboratory	1. Pressure safety valves are available on the receiver tank of the compressor to relieve the excessive pressure. 2. Safety grill covers for engine moving components like fan, dynamometer coupling, and flywheels. 3. Safety Guards are mounted on belt drive of air compressor. 4. Oil level is regularly checked and maintained in the engine sump. 5. Engine cooling water supply is checked regularly to avoid overheating of engine.
4	Refrigeration and Air Conditioning Laboratory	Safety Instructions: 1. Ensure the working of pressure gauges and condenser fan before starting of compressor in VCR system. 2. Increase the load gradually and do not overload the refrigeration system. 3. Switch off the system if any refrigerant gas leakage is identified.
5	Theory of Machines Laboratory Dynamics of Machinery Laboratory	Safety Instructions: 1. The main frame of the static balancing of four masses is rigidly attached to the foundation. 2. Do not start electric supply without ensuring Dimmer is at zero volt position. 3. Do not touch the moving components. 4. Do not allow the Gyroscope to rotate more than 360 Degree. 5. Do not put or add the weights in running condition of shock absorber testing. 6. Ensure that the speed regulator is at Minimum position before starting of clutch plate and Brake liners testing.
6	Heat Transfer Laboratory	Safety Instructions: 1. Check the sufficient amount of distilled water in the container of Critical Heat Flux apparatus. 2. Do not touch the water or terminal point after putting the switch on position. 3. Do not touch the copper tube while conducting the trial on Natural Convection apparatus. 4. Increase the voltage supply slowly.
7	Industrial Fluid Power & Mechatronics Laboratory	Pressure relief valve is mounted on Hydraulic and Pneumatic Trainer kits to avoid the excess pressure. Safety Instructions: 1. Operate hydraulic pressure in specified limits only. 2. Do not over stress the switches and valves. 3. Do not increase the delivery pressure of Gear Pump device beyond 70 bar.
8	Project Laboratory Central Workshop	Safety Instructions: 1. Students must wear apron and leather shoes. 2. While working on machine no one should engage in chatting and avoid crowding. 3. Do not spill oil and grease on floor. 4. Wear safety glasses, safety net guards, and Hand gloves and helmets whenever necessary. 5. Use Tongs to handle hot jobs. 6. Remove the rings wrist watches, scrap neck tie etc prior to working on the machines.
9	Research Laboratory	1. Always close the safety cover of the four ball tester while taking the observation of the experimentation. 2. Do not touch the rotating part of the Pin on disc Apparatus. 3. Always close the safety cover of the instrument cabinet while in operation.
10	Industrial PBL Laboratory CAD Laboratory	Sophos Firewall Network safety is installed at central level. Safety Instructions: 1. Do not use Flash drive, CD, hard disc without prior permission. If permitted, scan them for computer viruses. 2. Keep safe distance from the power backup and storage batteries. 3. Students should not attempt to repair, open, tamper or interfere with any of the computer, printing, network. 4. Try not to touch any of the circuit boards and power sockets when a device is connected to them and switched on. 5. Do not open the system unit casing or monitor casing particularly when the power is turned on.

11	Fluid Machinery	1. Do not operate any equipment without proper training and permission. 2. Check all electrical connections before switching on pumps and motors. 3. Do not touch electrical equipment with wet hands. 4. Ensure proper earthing of all electrical machines and control panels. 5. Switch off the power supply immediately in case of any fault or emergency. 6. Inspect pumps, turbines, pipes, valves, and measuring instruments before use. 7. Ensure that all rotating parts are properly covered with safety guards. 8. Open and close valves slowly to avoid water hammer effects. 9. Maintain the recommended water level in tanks and reservoirs. 10. Avoid sudden starting and stopping of pumps and turbines. 11. Clean any water spill immediately to prevent slipping accidents.
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D3. Project Laboratory/Research Laboratory

- There are a number of computational and experimental facilities in the Department of Mechanical Engineering to facilitate the students to carry out their final year projects. In addition, these facilities play a supporting/central role for some research projects as well.
- These facilities are important since a final year project is mandatory as a part of the coursework. Additionally, department has SAE Collegiate Club. The students use specially created project laboratory facility to design and fabricate various projects for competitions of SAE and other bodies such as SAE-BAJA (SUPRA, M-BAJA, E-BAJA), SAE-TIFAN, Solar Design Challenge, Aero Design etc.
- The additional equipment required for conducting the research projects in the area of tribology, alternative fuels, vibration and CAE, Friction Stir Welding (FSW) is available in the department.
- The institute also provides financial support, raw material and consumables required in the project lab to the students.
- Laboratories are made available for the students to carry out project work within and beyond working hours as per requirements.
- Central workshop facility is also made available to the students for fabrication work of projects during and after working hours.
- The hard copies of earlier projects completed by the students are made available to the students for study and reference.
- The industrial PBL Lab is also set-up in association with Mechatol Engineering Solutions, Pune to execute the industry projects for the exposure

Table 7.5.1: Number of projects conducted in laboratories

S.N.	Laboratory / Year	2024 -2025	2023-2024	2022 -2023
1.	Heat Engine Laboratory	1	2	1
2.	Heat Transfer Laboratory	-	-	2
3.	Dynamics of Machinery Laboratory	-	-	1
4.	-CAD CAM Laboratory	9	3	2
5.	PG and Research Laboratory	2	2	4
6.	Project Laboratory	10	7	7
7.	Central Workshop	2	5	9
8.	Industrial PBL Laboratory	-	-	1

Table 7.5.2.Utilization details of laboratories for project work.

Sr. No	Name of Laboratories	Facility	Project Work (Per Semester)
1	Heat Engine Laboratory	Testing of alternative fuels on variable compression ratio engine.	20+ Hrs
2	Heat Transfer Laboratory	Testing on thermal conductivity Apparatus	20+ Hrs
3	Dynamics of Machinery Laboratory	Use of Automatic Balancing Machine, FFT analyzer, and Fatigue life Apparatus for vibration analysis	20+ Hrs
4	CAD CAM Laboratory	Use of application software's such as Creo, CATIA/ANSYS, MATLAB etc.	300+ Hrs
5	PG and Research Laboratory	Testing on four Ball Tester, Pin on Disk Apparatus, general bearing apparatus and 3D Printer	40+ Hrs
6	Project Laboratory	Use of TIG/ARC Welding, drilling, Power saw, Cutting machine, air compressor etc for fabrication work.	300+ Hrs.
7	Central Workshop	USE OF Lathe machine, CNC Lathe Machine Milling M/c, Cylindrical grinding machine, Surface Grinder, TIG Welding machine Planer machine Radial, Drill Machine, Precision Center less grinder, Tool &Cutter grinder, MIG Welding Machine, Hydraulic Hacksaw, Shearing machine Power etc.	100+ Hrs
8	Industrial PBL	Platform for the students to execute Industrial Projects in association with Mechatol Engineering Product Solutions, Pune. Dedicated space with 05 desktop and required	30+ Hrs

1. Participated in SAE TIFAN 2025 completion, at MPKV Rahuri, Maharashtra 23rd to 27th April 2025

1st runner-up of prize Rs.100000/-(one Lakh only)

First prize of BEST Prize Productivity Rs.25000/-(Twenty five thousand only)



2. SAE REEV Virtual 2023-24 on 4th November –

1st Runner up with Prize Rs.25000/-(Twenty five thousand only)



3.Event: ISIE E-BIKE Challenge2026-

Outstanding innovation, forward-thinking design, and potential for future electric mobility solutions

Fastest acceleration performance among all competing e-bike



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 $\frac{((NS1 \times 0.8) + (NS2 \times 0.2))}{(\text{No. of required faculty (RF4)})}$; Percentage= $\frac{((NS1 \times 0.8) + (NS2 \times 0.2))}{RF}$
2023-24(CAYm2)	840	42	15	49	52
2024-25(CAYm1)	960	48	19	56	55
2025-26(CAY)	1020	51	19	60	53

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 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Infrastructure Built-Up	38500000	58624483	35000000	44024355	29800000	23836341	18000000	23836933
Library	3700000	2712589	3630000	2975874	3300000	2295325	3000000	2410812
Laboratory equipment	34000000	36709245	29000000	23436219	27500000	35612324.8	25000000	22641782.5
Teaching and non-teaching staff salary	340000000	327818625	320000000	295326769	280000000	265459527	210000000	244724658
Outreach Programs	3300000	1588155	3025000	1272155	2700000	1125993	1500000	1590488
R&D	3751000	4521987	3410000	3518260	3100000	1685961	3000000	1396796
Training, Placement and Industry linkage	4235000	5145564	3850000	3012336	3500000	2103012	3000000	729181
SDGs	3327500	3825179	3025000	11548383	3000000	4087365	2500000	6822787
Entrepreneurship	200000	240797	150000	64377	50000	6500	50000	7000
Others, specify	21265000	17807743	21050000	16447126	19000000	21173162	15000000	15831650.69
Total	452278500	458994367	422140000	401625854	371950000	357385510.8	281050000	319992088.19

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 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Laboratory equipment	3500000	3414795	3500000	3185675	4000000	1774121	4000000	3583766
Software	00	00	1200000	1598900	800000	00	00	00
SDGs	670000	758590	663000	2291162	650000	807380	600000	1347710
Support for faculty development	150000	133457	150000	39169	150000	69741	150000	138072
R & D	800000	766941	750000	794982	700000	633899	500000	400241
Industrial Training, Industry expert, Internship	100000	44500	100000	68420	100000	62778	100000	28700
Miscellaneous Expenses*	300000	216506	300000	251142	300000	137433	300000	203902
Total	5520000	5334789	6663000	8229450	6700000	3485352	5650000	5702391