NATIONAL BOARD OF ACCREDITATION
Data Capturing Points of the Program Applied for NBA Accreditation– Tier I/II UG (Engineering) Institute Programs
PART A – Profile of the Institute

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PART A – Profile of the Institute

Name of the Program applied for: Bachelor of Technology (B Tech) in Mechanical Engineering

<table>
<tr><td>A1.</td><td colspan="4">Name of the Institute: Shri Vile Parle Kelavani Mandals Narsee Monjee Institute Of Management Studies Deemed To Be University SVKM’s NMIMS V.L.Mehta Road,Vile Parle (W)</td></tr>
<tr><td></td><td colspan="2">Year of Establishment: 2003</td><td colspan="2">Location of the College: Vile Parle (W), Mumbai</td></tr>
<tr><td>A2.</td><td colspan="4">Institute Address:
SVKM’s NMIMS, Mukesh Patel School of Technology Management & Engineering Behind Homeopathy College, Bhakti Vedant Swami Marg, Near Cooper Hospital, JVPD Scheme, Vile Parle (West)</td></tr>
<tr><td></td><td colspan="2">City: Mumbai</td><td colspan="2">State: Maharashtra</td></tr>
<tr><td></td><td colspan="2"></td><td colspan="2">Website:
https://engineering.nmims.edu</td></tr>
<tr><td></td><td colspan="2">E-mail: Dean.MPSTME@nmims.edu</td><td colspan="2">Phone No (with STD code: +91 22 42334000</td></tr>
<tr><td>A3.</td><td colspan="4">Name and Address of the Affiliating University (If any): -</td></tr>
<tr><td></td><td colspan="2">Name of University: Shri Vile Parle Kelavani Mandals Narsee Monjee Institute Of Management Studies (Deemed To Be University)</td><td colspan="2">City: Mumbai</td></tr>
<tr><td></td><td colspan="2">State: Maharashtra</td><td colspan="2">Pin Code: 400056</td></tr>
<tr><td>A4.</td><td colspan="4">Type of the Institution:</td></tr>
<tr><td></td><td colspan="4">
<table>
<tr><td>Institute of National Importance</td><td></td><td>Deemed University</td><td>✔</td></tr>
<tr><td>University</td><td></td><td>Autonomous</td><td></td></tr>
<tr><td>Non-Autonomous (Affiliated)</td><td></td><td>Any other (Please specify)</td><td></td></tr>
</table>
Provide Details: Deemed-to-be-University status in 2003 under Section 3 of University Grants Commission (UGC) Act.</td></tr>
<tr><td>A5.</td><td colspan="4">Ownership Status: -(Tick the applicable choice)</td></tr>
<tr><td></td><td colspan="4">
<table>
<tr><td>Central Government</td><td></td><td>State Government</td><td></td></tr>
<tr><td>Government Aided</td><td></td><td>Self financing</td><td>✔</td></tr>
<tr><td>Any Other (Please Specify)</td><td></td><td colspan="2"></td></tr>
</table>
Provide Details: Shri Vile Parle Kelavani Mandal (SVKM) is a Public Charitable Trust established in 1934 and registered under the Society’s Registration Act and Bombay Public Trust Act, India.</td></tr>
<tr><td>A6.</td><td colspan="4">Details of all Programs being Offered by the Institution: -</td></tr>
<tr><td></td><td colspan="4">No. of UG programs: 11</td></tr>
<tr><td></td><td colspan="4">No. of PG programs: 03</td></tr>
</table>

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

S.N.	Level of program (UG/PG)	Name of the program	Year of Start	Year of close*	Name of the Department
1.	UG	B Tech in Information Technology	2006-07	NA	Information Technology
2.	UG	B Tech in Computer Engineering	2006-07	NA	Computer Engineering
3.	UG	B Tech in Electronics and Telecommunication Engineering	2006-07	NA	Electronics and Telecommunication Engineering
4.	UG	B Tech in Civil Engineering	2010-11	NA	Civil Engineering
5.	UG	B Tech in Mechanical Engineering	2010-11	NA	Mechanical Engineering
6.	UG	B Tech in Mechatronics Engineering	2014-15	NA	Mechatronics Engineering
7.	UG	B Tech in Data Science	2017-18	NA	Data Science
8.	UG	B Tech Computer Science and Business Systems	2019-20	NA	Computer Engineering
9.	UG	B Tech Computer Science and Engineering (Cyber Security)	2020-21	NA	Computer Engineering
10.	UG	B Tech in Artificial Intelligence	2020-21	NA	Artificial Intelligence
11.	UG	B Tech Computer Science and Engineering (Data Science)	2020-21	NA	Computer Engineering
12.	PG	M Tech in Data Science	2015-16	NA	Data Science
13.	PG	M Tech in Artificial Intelligence	2018-19	NA	Artificial Intelligence
14.	PG	MCA	2007-08	NA	Computer Engineering
15.	Integrated	MBA Tech	2004-05	NA	Technology Management

Note: - Please mention department wise.

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

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

Cluster ID	Department Name	Program Name
1.	Civil Engineering	B Tech in Civil Engineering
2.	Mechanical Engineering	B Tech in Mechanical Engineering
3.	Mechatronics Engineering	B Tech in Mechatronics Engineering
4.	Electronics and Telecommunication Engineering	B Tech in Electronics and Telecommunication Engineering
5.	Information Technology	B Tech in Information Technology

Table No. A7.2: Allied Department(s) to the Department of the program considered for accreditation as

Cluster ID	Name of the Department (in table no. A7.1)	Name of allied Departments/Cluster (for table no. A7.1)
1.	Civil Engineering	NA
2.	Mechanical Engineering	Mechatronics Engineering
3.	Mechatronics Engineering	Mechanical Engineering
4.	Electronics and Telecommunication Engineering	NA
5.	Information Technology	Computer Engineering Data Science Artificial Intelligence

PART-B: Program information

(Data to be filled in for the program applied for Accreditation)

B1: Provide the Required Information for the Program Applied For: - Mechanical Engineering

Table No. B1: Program details.

S. N.	Program Name	Year of start	Sanctioned Intake	Increase/ decrease in intake, if any	Year of increase/ decrease	AICTE Approval Details	Accreditation Status*	No. of times program accredited
1.	B Tech Mechanical Engineering	2010-11	60	120	2018-19	Approved University (vide letter No. F.9-37/2001-U.3 dated 15th October, 2007) Institute (vide letter No. F. NO. 30-15/2007 (CPP-I) dated 13th August, 2008)	Applying first time	-

* Write applicable one:

- **Applying first time**

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

A. Name of the HoD : Dr. Ashish J. Deshmukh

B. Nature of appointment: (Tick the applicable choice)

- **Regular** [√]
- **Contract** [ ]
- **Ad hoc** [ ]

C. Qualification: (Tick the applicable choice)

- **Ph.D.** [√]
- **ME/M.Tech** [ ]
- **Any other*** [ ]

***Please provide details:** _____

B3: Program Details

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

Item (Information is to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	CAY	CAYm1	CAYm2	CAYm3	CAYm4 (LYG)	CAYm5 (LYGm1)	CAYm6 (LYGm2)
N= Sanctioned intake of the program (as per AICTE /Competent authority)	120	96	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	97	68	90	94	73	77	96
N2= Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	2	3	2	8	10	9
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	0	0	0	0	0	0	0
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	**97**	**70**	**93**	**96**	**81**	**87**	**105**

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.

Item (Students enrolled in the First Year on average over 3 academic years (CAY, CAYm1, and CAYm2))	CAY	CAYm1	CAYm2
N= Sanctioned intake of the program in the 1st year (as per AICTE/Competent authority)	120	96	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	97	68	90
N4= Total no. of students admitted in the 1st year via all supernumerary quotas	0	0	0
Enrolment Ratio (ER)= (N1+N4)/N	**97**	**68**	**90**
Average ER= (ER_1+ ER_2+ ER_3)/3	**85**		

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	LYG	LYGm1	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).	81	87	105
B=No. of students who graduated from the program in the stipulated course duration	60	70	84
Success Rate (SR)= (B/A)*100	**74.07**	**80.46**	**80.00**
Average SR of three batches ((SR_1+SR_2+ SR_3)/3)	**78.18**		

Note ***:** If the value of A in Table No. B5.1 is less than the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2), then the value of A in Table No.B5.1 should be the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2) of Table No.B3.1.

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	CAYm2	CAYm3
X= (Mean of 1st year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 1st year/10)	7.45	7.27	7.28
Y= Total no. of successful students	63	82	87
Z = Total no. of students appeared in the examination	69	89	93
API = X* (Y/Z)	**6.80**	**6.70**	**6.81**
Average API = (API_1 + API_2 + API_3)/3	**6.77**		

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	CAYm2	CAYm3
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)	7.03	7.75	8.115
Y= Total no. of successful students	80	79	69
Z =Total no. of students appeared in the examination	85	89	73
API = X* (Y/Z)	**6.62**	**6.88**	**7.67**
Average API = (API_1 + API_2 + API_3)/3	**7.06**		

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	CAYm2	CAYm3
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)	7.745	7.705	7.56
Y= Total no. of successful students	77	69	88
Z= Total no. of students appeared in the examination	82	70	88
API = X* (Y/Z)	**7.27**	**7.59**	**7.56**
Average API = (API_1 + API_2 + API_3)/3	**7.47**		

B9: Placement, Higher Studies, and Entrepreneurship

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

Item	LYG	LYGm1	LYGm2
FS*=Total no. of final year students	69 (<96+2)	88 (<120+3)	101 (<120+2)
X= No. of students placed	15	16	25
Y= No. of students admitted to higher studies	22	17	21
Z= No. of students taking up entrepreneurship	2	2	5
X + Y + Z =	39	35	51
Placement Index (P) = (((X + Y + Z)/FS) * 100)	**39.80**	**28.45**	**41.80**
Average placement index = (P_1 + P_2 + P_3)/3	**36.68**		

Note ***:** If the value of FS in Table No. B9.1 is less than the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2), then the value of FS in Table No. B9.1 should be the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2) of Table No.B3.1.

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

Information of Faculty (2024-25)

Sr. No.	Name of the Faculty	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/Adhoc)	If contractual mention Full time or (Part time or hourly based)	Currently Associated (Y/N)	Date of Leaving if any (in case currently Associated is "No")
1	Dr. Ravi Prakashrao Terkar	Ph.D	NMIMS University	Production Engineering	15-04-2011	13.11	Associate Professor	Professor	03.11.2018	Regular	-	Yes	
2	Dr. Rajesh Yashvant Patil	Ph.D	NMIMS University	Thermal Engineering	05-06-2007	17.9	Assistant Professor	Associate Professor	01.07.2010	Regular	-	Yes	
3	Dr. Ashish Jaykumar Deshmukh	Ph.D	NMIMS University	Logistics and Supply Chain Management	04-07-2007	17.8	Assistant Professor	Professor	02.12.2023	Regular	-	Yes	
4	Dr. Sawankumar Ramdas Naik	Ph.D	NMIMS University	Production / Operations Management	28-05-2007	17.9	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
5	Dr. Sudipto Sarkar	Ph.D	IIT, Kanpur	Mechanical / Heat Power Specialization	01-08-2024	0.7	Professor	Professor	-	Contract	Full Time	Yes	
6	Dr. Swati Ranjeet Donde	Ph.D	Sardar Patel College of Engineering (SPCE), Mumbai	Thermal Engineering	21-02-2013	12	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
7	Mr. Sunil Laxmanrao Bhil	M.E.	Mumbai University	Design & Automobile	24-07-2013	11.7	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
8	Dr. Samadhan Prakash Deshmukh	Ph.D	NMIMS University	Manufacturing Systems	11-11-2014	10.4	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
9	Ms. Neepa Manharlal Patel	M.Tech	Nirma University	CAD/CAM	06-07-2015	9.8	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
10	Mr. Giridhar Sadanand Chavan	M.E.	Mumbai, University	Manufacturing & Automation	06-07-2015	9.8	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
11	Ms. Zoya Akhtar Rizvi	M.E.	Mumbai, University	CAD/CAM, Robotics	09-11-2015	9.4	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
12	Mr. Nilesh Bhojraj Balki	M.E.	Pune University	Heat Power Engg.	20-01-2017	8.1	Assistant Professor	Assistant Professor	-	Regular	-	Yes	

13	Ms. Abira Mukherjee	M.Tech	West Bengal University of Technology (WBUT)	Production Engineering	15-06-2017	7.9	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
14	Dr. Abhishek Priyam	Ph.D	National Institute of Technology Jamshedpur (NIT), Jamshedpur	Solar Energy Technology	11-06-2018	6.9	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
15	Mr. Gnanagonda K Marthande	M.Tech	Defence Institute of Advanced Technology (DIAT), Pune	Armament/ Combat Vehiles	01-06-2018	6.9	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
16	Mr. Mayur Marathe	M.E.	Mumbai University	CAD/CAM & Robotics	02-07-2018	6.8	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
17	Chandrakant Wani	M.Tech	Rajiv Gandhi Proudyogiki University	Mechanical	15-07-2022	14.5	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
18	Dr. Rakesh Chaudhari	Ph.D	NMIMS, Mumbai	Mechanical Engineering	11-11-2011	13	Assistant Professor	Associate Professor	11.11.2011	Regular	-	Yes	
19	Rajesh Verma	M.Tech	M Tech DS - NMIMS & M Tech Thermal Rajiv Gandhi Proudyogiki Vishwavidyalaya (R.G.P.V) Bhopal	DS & Thermal Engineering	28-07-2015	9	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
20	Dr. Rajnish Katarne	Ph.D	Bhagwant University, Ajmer	Engineering Mechanical	10-07-2017	7	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
21	Dr. Vishal Fegade	Ph.D	Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU)	Engineering Mechanical	01-08-2007	17	Assistant Professor	Associate Professor	Sep-11	Regular	-	Yes	
22	Aditya Kasar	ME	Mumbai University	CAD CAM & Robotics)	01-07-2017	7.8	Assistant Professor	Assistant Professor	-	Regular	-	Yes	

Information of Faculty (2023-24)

Sr. No.	Name of the Faculty	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/Adhoc)	If contractual mention Full time or (Part time or hourly based)	Currently Associated (Y/N)	Date of Leaving if any (in case currently Associated is "No")
1	Dr Asha Ingle	PhD	IIT, Bombay	Metallurgy & Materials Sci.	02/07/2012	11.6	Professor	Professor	--	Regular		Yes	01.12.2023
2	Dr. Ravi Prakashrao Terkar	Ph.D	NMIMS University	Production Engineering	15-04-2011	12.11	Associate Professor	Professor	03.11.2018	Regular	-	Yes	
3	Dr. Rajesh	Ph.D	NMIMS University	Thermal Engineering	05-06-2007	16.9	Assistant Professor	Associate Professor	01.07.2010	Regular	-	Yes	

	Yashvant Patil												
4	Dr. Ashish Jaykumar Deshmukh	Ph.D	NMIMS University	Logistics and Supply Chain Management	04-07-2007	16.8	Assistant Professor	Professor	02.12.2023	Regular	-	Yes	
5	Dr. Sawan kumar Ramdas Naik	Ph.D	NMIMS University	Production / Operations Management	28-05-2007	16.9	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
6	Ms. Swati Ranjeet Donde	M.E.	Sardar Patel College of Engineering (SPCE), Mumbai	Thermal Engineering	21-02-2013	11	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
7	Dr. Prashob P S	Ph.D.	NIT Calicut	Computer aided Structural Analysis & Design	05-06-2018	5.6	Assistant Professor	Assistant Professor	-	Regular	-	Yes	02.12.2023
8	Mr. Sunil Laxmanrao Bhil	M.E.	Mumbai University	Design & Automobile	24-07-2013	10.7	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
9	Mr. Samadhan Prakash Deshmukh	M.E.	Mumbai University	Manufacturing Systems	11-11-2014	9.4	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
10	Ms. Neepa Manharlal Patel	M.Tech	Nirma University	CAD/CAM	06-07-2015	8.8	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
11	Mr. Giridhar Sadanand Chavan	M.E.	Mumbai, University	Manufacturing & Automation	06-07-2015	8.8	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
12	Ms. Zoya Akhtar Rizvi	M.E.	Mumbai, University	CAD/CAM,Robotics	09-11-2015	8.4	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
13	Mr. Nilesh Bhojraj Balki	M.E.	Pune University	Heat Power Engg.	20-01-2017	7.1	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
14	Ms. Abira Mukherjee	M.Tech	West Bengal University of Technology (WBUT)	Production Engineering	15-06-2017	5.9	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
15	Dr. Abhishek Priyam	Ph.D	National Institute of Technology Jamshedpur (NIT), Jamshedpur	Solar Energy Technology	11-06-2018	5.9	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
16	Mr. Gnanagonda K Marthande	M.Tech	Defence Institute of Advanced Technology (DIAT), Pune	Armament/Combat Vehiles	01-06-2018	5.9	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
17	Mr. Mayur Marathe	M.E.	Mumbai University	CAD/CAM & Robotics	02-07-2018	5.8	Assistant Professor	Assistant Professor	-	Regular	-	Yes	

18	Chandrakant Wani	M.Tech	Rajiv Gandhi Proudyogiki University	Mechanical	15-07-2022	13.5	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
19	Dr. Rakesh Chaudhari	Ph.D	NMIMS, Mumbai	Mechanical Engineering	11-11-2011	12	Assistant Professor	Associate Professor	11.11.2011	Regular	-	Yes	
20	Rajesh Verma	M.Tech	M Tech DS -NMIMS & M Tech Thermal Rajiv Gandhi Proudyogiki Vishwavidyalaya (R.G.P.V) Bhopal	DS & Thermal Engineering	28-07-2015	8	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
21	Dr. Rajnish Katarne	Ph.D	Bhagwant University, Ajmer	Engineering Mechanical	10-07-2017	6	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
22	Dr. Vishal Fegade	Ph.D	Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU)	Engineering Mechanical	01-08-2007	16	Assistant Professor	Associate Professor	Sep-11	Regular	-	Yes	
23	Aditya Kasar	ME	Mumbai University	CAD CAM & Robotics)	01-07-2017	6.8	Assistant Professor	Assistant Professor	-	Regular	-	Yes	

Information of Faculty (2022-23)

Sr. No.	Name of the Faculty	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/Adhoc)	If contractual mention Full time or (Part time or hourly based)	Currently Associated (Y/N)	Date of Leaving if any (in case currently Associated is "No")
1	Dr Asha Ingle	PhD	IIT, Bombay	Metallurgy & Materials Sci.	02/07/2012	10.6	Professor	Professor	--	Regular		Yes	
2	Dr. Ravi Prakashrao Terkar	Ph.D	NMIMS University	Production Engineering	15-04-2011	11.11	Associate Professor	Professor	03.11.2018	Regular	-	Yes	
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5	Sawankumar Ramdas Naik	M Tech	VJTI University	Production Engineering	28-05-2007	15.9	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
6	Ms. Swati Ranjeet Donde	M.E.	NMIMS University	Thermal Engineering	21-02-2013	10	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
7	Dr. Prashob P S	Ph.D.	NIT Calicut	Computer aided Structural Analysis & Design	05-06-2018	4.6	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
8	Mr. Mahavir Bhattacharya	M.E	Mumbai University	Energy Engineering.	15.06.2017	6.6	Assistant Professor	Assistant Professor	-	Regular	-	Yes	13-05-2023
9	Mr. Sunil Laxmanrao Bhil	M.E	Mumbai University	Design & Automobile	24-07-2013	9.7	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
10	Mr. Samadhan Prakash	M.E	Mumbai University	Manufacturing Systems	11-11-2014	8.4	Assistant Professor	Assistant Professor	-	Regular	-	Yes	

	Deshmukh												
11	Ms. Neepa Manharlal Patel	M.Tech	Nirma University	CAD/CAM	06-07-2015	7.8	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
12	Mr. Giridhar Sadanand Chavan	M.E.	Mumbai, University	Manufacturing & Automation	06-07-2015	7.8	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
13	Ms. Zoya Akhtar Rizvi	M.E.	Mumbai, University	CAD/CAM,Robotics	09-11-2015	7.4	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
14	Mr. Nilesh Bhojraj Balki	M.E.	Pune University	Heat Power Engg.	20-01-2017	6.1	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
15	Ms. Abira Mukherjee	M.Tech	West Bengal University of Technology (WBUT)	Production Engineering	15-06-2017	5.9	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
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18	Mr. Mayur Marathe	M.E.	Mumbai University	CAD/CAM & Robotics	02-07-2018	4.8	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
19	Chandrakant Wani	M.Tech	Rajiv Gandhi Proudyogiki University	Mechanical	15-07-2022	12.5	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
20	Dr. Rakesh Chaudhari	Ph.D	NMIMS, Mumbai	Mechanical Engineering	11-11-2011	11	Assistant Professor	Associate Professor	11.11.2011	Regular	-	Yes	
21	Rajesh Verma	M.Tech	M Tech DS -NMIMS & M Tech Thermal Rajiv Gandhi Proudyogiki Vishwavidyalaya (R.G.P.V) Bhopal	DS & Thermal Engineering	28-07-2015	7	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
22	Dr. Rajnish Katarne	Ph.D	Bhagwant University, Ajmer	Engineering Mechanical	10-07-2017	5	Assistant Professor	Assistant Professor	-	Regular	-	Yes	
23	Dr. Vishal Fegade	Ph.D	Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU)	Engineering Mechanical	01-08-2007	15	Assistant Professor	Associate Professor	Sep-11	Regular	-	Yes	
24	Aditya Kasar	ME	Mumbai University	CAD CAM & Robotics)	01-07-2017	5.8	Assistant Professor	Assistant Professor	-	Regular	-	Yes	

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

Information of Faculty (2024-25)

Sr. No.	Name of the Faculty	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/Adhoc)	If contractual mention Full time or (Part time or hourly based)	Currently Associated (Y/N)	Date of Leaving if any (in case currently Associated is "No")
1	Asif Momin	M.E.	Pune University	Mechanical Design	09-07-2015	9.8	Assistant Professor	Assistant Professor		Regular		Y	
2	Abdul Ainal	M.Tech	NIT, Nagpur	Power Systems	31-07-2013	11.7	Assistant Professor	Assistant Professor		Regular		Y	
3	Mohan Bodkhe	M.Tech	VJTI, Mumbai	CAD/CAM	01-12-2017	7.3	Assistant Professor	Assistant Professor		Regular		Y	
4	Dr. Avinash Tandale	Ph.D	NMIMS	Biomedical & Electronics	23-06-2008	16.8	Assistant Professor	Assistant Professor		Regular		Y	
5	Nirmal Thakur	M.Tech	NMIMS	Biomedical & Electronics	01-09-2012	12.6	Assistant Professor	Assistant Professor		Regular		Y	
6	Ashwini Gade	M.Tech	NMIMS	Electronics & telecommunication	05-08-2011	13.7	Assistant Professor	Assistant Professor		Regular		Y	
7	Amey Raut	M.Tech	NMIMS	Electronics & telecommunication	06-09-2012	12.6	Assistant Professor	Assistant Professor		Regular		Y	
8	Dattatray Sawant	M.E.	Mumbai, University	Controll Systems, Signal Porcessing	01-12-2014	10.3	Assistant Professor	Assistant Professor		Regular		Y	
9	Dr Venkatesh Deshmukh	Ph.D	Auburn University (U.S.a)	Dynamics & Control	02-01-2019	6.2	Professor	Professor		Regular		Y	
10	Dr. Sunny Nanade	Ph.D	Sir Padampat Singhania University, Udaipur / Thappar University	CAD/CAM & Robotics	10-06-2019	5.9	Assistant Professor	Assistant Professor		Regular		Y	
11	Dr. Chetna Sharma	Ph.D	SPCE / Jagganath University	Machine Design & Manufacturing System Engg.	10-06-2019	5.9	Assistant Professor	Assistant Professor		Regular		Y	
12	Dr. Praveen Loharkar	Ph.D	NMIMS, University	Mechanical Engineering	01-07-2015	8.9	Assistant Professor	Associate Professor	30-06-2022	Regular		Y	

Information of Faculty (2023-24)

Sr. No.	Name of the Faculty	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/Adhoc)	If contractual mention Full time or (Part time or hourly based)	Currently Associated (Y/N)	Date of Leaving if any (in case currently Associated is "No")
1	Asif Momin	M.E.	Pune University	Mechanical Design	09-07-2015	7.8	Assistant Professor	Assistant Professor		Regular		Y	
2	Abdul Ainal	M.Tech	NIT, Nagpur	Power Systems	31-07-2013	10.7	Assistant Professor	Assistant Professor		Regular		Y	
3	Mohan Bodkhe	M.Tech	VJTI, Mumbai	CAD/CAM	01-12-2017	6.3	Assistant Professor	Assistant Professor		Regular		Y	
4	Dr. Avinash Tandale	Ph.D	NMIMS	Biomedical & Electronics	23-06-2008	15.8	Assistant Professor	Assistant Professor		Regular		Y	
5	Nirmal Thakur	M.Tech	NMIMS	Biomedical & Electronics	01-09-2012	11.6	Assistant Professor	Assistant Professor		Regular		Y	
6	Ashwini Gade	M.Tech	NMIMS	Electronics & telecommunication	05-08-2011	12.7	Assistant Professor	Assistant Professor		Regular		Y	
7	Amey Raut	M.Tech	NMIMS	Electronics & telecommunication	06-09-2012	11.6	Assistant Professor	Assistant Professor		Regular		Y	
8	Dattatray Sawant	M.E.	Mumbai, University	Controll Systems, Signal Porcessing	01-12-2014	9.3	Assistant Professor	Assistant Professor		Regular		Y	
9	Dr Venkatesh Deshmukh	Ph.D	Auburn University (U.S.a)	Dynamics & Control	02-01-2019	5.2	Professor	Professor		Regular		Y	
10	Dr. Sunny Nanade	Ph.D	Sir Padampat Singhania University, Udaipur / Thappar University	CAD/CAM & Robotics	10-06-2019	4.9	Assistant Professor	Assistant Professor		Regular		Y	
11	Dr. Chetna Sharma	Ph.D	SPCE	Machine Design & Manufacturing System Engg.	10-06-2019	4.9	Assistant Professor	Assistant Professor		Regular		Y	
12	Dr. Praveen Lohakar	Ph.D	NMIMS, University	Mechanical Engineering	01-07-2015	7.9	Assistant Professor	Associate Professor	30-06-2022	Regular		Y	

Information of Faculty (2022-23)

Sr. No.	Name of the Faculty	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/Adhoc)	If contractual mention Full time or (Part time or hourly based)	Currently Associated (Y/N)	Date of Leaving if any (in case currently Associated is "No")
1	Asif Momin	M.E.	Pune University	Mechanical Design	09-07-2015	7.8	Assistant Professor	Assistant Professor		Regular		Y	
2	Abdul Ainal	M.Tech	NIT, Nagpur	Power Systems	31-07-2013	9.7	Assistant Professor	Assistant Professor		Regular		Y	
3	Mohan Bodkhe	M.Tech	VJTI, Mumbai	CAD/CAM	01-12-2017	5.3	Assistant Professor	Assistant Professor		Regular		Y	
4	Dr. Avinash Tandale	Ph.D	NMIMS	Biomedical & Electronics	23-06-2008	14.8	Assistant Professor	Assistant Professor		Regular		Y	
5	Nirmal Thakur	M.Tech	NMIMS	Biomedical & Electronics	01-09-2012	10.6	Assistant Professor	Assistant Professor		Regular		Y	
6	Ashwini Gade	M.Tech	NMIMS	Electronics & telecommunication	05-08-2011	11.7	Assistant Professor	Assistant Professor		Regular		Y	
7	Amey Raut	M.Tech	NMIMS	Electronics & telecommunication	06-09-2012	10.6	Assistant Professor	Assistant Professor		Regular		Y	
8	Dattatray Sawant	M.E.	Mumbai, University	Controll Systems, Signal Porcessing	01-12-2014	8.3	Assistant Professor	Assistant Professor		Regular		Y	
9	Dr Venkatesh Deshmukh	Ph.D	Auburn University (U.S.a)	Dynamics & Control	02-01-2019	4.2	Professor	Professor		Regular		Y	
10	Vinod Jain	M. S.	Oklahoma State University	Computer Architecture and VLSI System Design	02-11-2009	13.75	Associate Professor	Associate Professor		Regular		N	05-08-2023
11	Dr. Sunny Nanade	Ph.D	Sir Padampat Singhania University, Udaipur / Thappar University	CAD/CAM & Robotics	10-06-2019	3.9	Assistant Professor	Assistant Professor		Regular		Y	
12	Chetna Sharma	M.Tech.	Jagannath University	Manufacturing System Engineering	10-06-2019	3.9	Assistant Professor	Assistant Professor		Regular		Y	
13	Praveen Loharkar	M.Tech.	Maulana Azad National Institute of Technology, Bhopal	Industrial Design	01-07-2015	6.9	Assistant Professor	Associate Professor	30-06-2022	Regular		Y	

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

Year	CAY (2024-25)	CAY1(2023-24)	CAY2(2022-23)
2nd Year Students of UGn Program	144	180	180
3rd Year Students of UGn Program	180	180	180
3rd Year Students of UGn Program	180	180	180
DS=Total no. of students in all UG program in the Department	336	360	360
AS=Total no. of students of all UG program in allied departments	168	180	180
S= Total no. of students in the Department (DS) and allied department (UG1)	504	540	540
DF=Total no. of faculty members in the Department	22	23	24
AF= Total no. of faculty members in the allied Departments	12	12	13
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	34	35	37
FF=The faculty members in F who have a 100% teaching load in the first-year courses	0	0	0
Student Faculty Ratio (SFR)=S/(F-FF)	14.82	15.42	14.59
Average SFR for 3 Years	14.94		

C3: Faculty Qualification

Table No.C3.1: Faculty qualification.

Year	X	Y	RF	FQI= 2.5 * [(10X +4Y)/RF]
CAY 2024-25	16	18	25.2	23.0158
CAYm1 2023-24	15	20	27	21.2962
CAYm2 2022-23	12	25	27	20.3703

C4: Faculty Cadre Proportion

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

Year	Professors		Associate Professors		Assistant Professors	
	Required Faculty(RF1)	Available Faculty(AF1)	Required Faculty(RF2)	Available Faculty(AF2)	Required Faculty(RF3)	Available Faculty(AF3)
CAY 2024-25	3	4	6	4	17	26
CAYm1 2023-24	3	4	6	4	18	27
CAYm2 2022-23	3	3	6	5	18	28
Average Numbers	RF1=3	AF1=3.66	RF2=6	AF2=4.66	RF3=17.66	AF3=27

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.

S.N.	Name of the Person	Designation & Organization	Name of the Course	No. of hours handled
CAYm1- 2023-24				
1	Navin Rohatgi	Chartered Accountant, Rohatgi & Company	Management for Accountancy for Engineering	30
2	Vivek Ahuja	Working as CEO & Director in Green Enable Technologies Pvt. Ltd., Mumbai from 2022 to till date.	Intro to Virtual Reality & Augmented Rea	60
3	Deepak Kumar Sinha	Worked as Senior Product and Training Manager in Jetking Infotrain Limited, Mumbai	Robotic Process Automation	45
4	Vivek Ahuja	Working as CEO & Director in Green Enable Technologies Pvt. Ltd., Mumbai from 2022 to till date.	Simulated Mixed Reality	30
			Total no. of hours:	165
CAYm2 2022-23				

1	Saroj Goswami	Assistant Professor, Sasmira's Institute of Management Studies and Research, Mumbai	Principle of Economics and Management	45
2	Smitesh Bhosle	Financial Advisor, ONGC	Management for Accountancy for Engineering	30
			Total no. of hours:	75
CAYm3 2021-22				
1	Gaurav Mittal	Manager Deloitte	Optimization for Decision Making	45
2	Neha Mirajkar	Lawyer at Mumbai High Court	Constitution of India	15
			Total no. of hours:	60

C6: Academic Research

Table No. C6.1: Faculty publication details.

S.N.	Item	CAYm1	CAYm2	CAYm3
1	No. of peer reviewed journal papers published	5	6	3
2	No. of peer reviewed conference papers published	13	10	14
3	No. of books/book chapters published	13	1	-

C7: Sponsored Research Project

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

S.N.	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)
CAYm1							
1	Nil	Nil	Nil	Nil	Nil	Nil	Nil
						Amount received (Rs.)	Nil
CAYm2							
1	Nil	Nil	Nil	Nil	Nil	Nil	Nil
						Amount received (Rs.)	Nil
CAYm3							
1	Nil	Nil	Nil	Nil	Nil	Nil	Nil
						Amount received (Rs.)	Nil
						Total Amount (Lacs) Received for the Past 3 Years	Nil

C8: Consultancy Work

Table No. C8.1: List of consultancy projects received from external agencies.

S.N.	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)
CAYm1							
1	Nil	Nil	Nil	Nil	Nil	Nil	Nil
						Amount received (Rs.)	Nil
CAYm2							
1	Nil	Nil	Nil	Nil	Nil	Nil	Nil
						Amount received (Rs.)	Nil
CAYm3							
1	Nil	Nil	Nil	Nil	Nil	Nil	Nil
						Amount received (Rs.)	Nil
						Total amount (Lacs) received for the past 3 years	Nil

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.

S.N.	Faculty name	Project title/ Support for Activity	Duration	Amount (Lacs)	Amount Utilized (Lacs)	Outcomes of the project
CAYm1 (2023-24)						
1	Prof. Abhishek Priyam	A study on composites produced by FDM 3D printer	1	200000	200000	FDM printing can improve the mechanical properties of composites compared to printing with pure polymers.
2	Dr. Ravi Terkar	Experimental study on the effect of infill density of tensile strength of ABS 3D printed parts.	1	1,50,000	1,50,000	As infill density increases from 20% to 80%, the tensile strength of ABS parts also increases progressively.
3	Dr. Rajesh Patil	Experimental study on the effect of infill density of tensile strength of PLA 3D printed parts	1	1,50,000	1,50,000	Higher infill density translates to more material within the printed part, resulting in a stronger, more robust structure capable of withstanding greater tensile forces.
Amount received (Rs.) = 500000						
CAYm2 (2022-23)						
1.	Prof. G. K. Marthande	Experimental investigation on the effect of infill density on tensile strength of composite material.	1	2,00,000	2,00,000	Progressive improvement in tensile strength is observed as infill

						density increases from lower percentages
2	Prof. Sawankumar Naik	Smart Manufacturing with Digital Twins: Enhancing Hydraulics and Pneumatics Control through Robotics	2	1,10,000	1,10,000	Digital twins allow for real-time monitoring of robotic systems, hydraulics, and pneumatics, enabling engineers to simulate various scenarios and optimize performance parameters.
3	Prof. Swati Donde	Exploring the Future: Virtual Reality-enabled Cultural Heritage Preservation with Robotics Assistance	2	1,10,000	1,10,000	This study provides an overview of the last decade of the use of augmented reality in cultural heritage through a detailed review of the scientific papers in the field.
4	Prof. Sunil Bhil	Digital Twin Integration in Agricultural Robotics for Precision Farming and Crop Monitoring	2	1,10,000	1,10,000	Optimized Resource Management: Digital twins enable precise application of water, fertilizers, and pesticides, minimizing waste and environmental impact.
5	Prof. Samadhan Deshmukh	Immersive Human-Robot Interaction: Virtual Reality Interfaces for Controlling Robotic Systems	2	1,10,000	1,10,000	VR provides a more natural and intuitive interface for controlling robots, allowing operators to better understand and interact with the robot's environment and actions.
Amount received (Rs.) =640000						
CAYm3 (2021-22)						
1	Dr.Ashish Deshmukh	Investigation on effect of layer thickness on the 3D printed parts using ABS material	1	200000	200000	Investigation helped in understanding the layer thickness effect
2	Dr. Sawankumar Naik	Investigation on effect of layer thickness on the 3D printed parts	1	100000	100000	Outcome for "Investigation on effect of layer thickness on the

		using PLA material				3D printed parts using ABS material" Research Collaboration, Mentoring Students
3	Dr. Swati Donde	Investigation on effect of layer thickness on the 3D printed parts using PETG material	1	122000	122000	Thickness layers: Reduce the number of layers required for a 3D print, thus decreasing print time.
4	Dr. Rajesh Patil.	Experimental study on the effect of infill density of tensile strength of ABS 3D printed parts.	1	100000	100000	Studies consistently show that as infill density increases from lower percentages (e.g., 20%) to higher ones (e.g., 80% or 100%), the tensile strength of ABS 3D-printed parts also increases.
Amount received (Rs.) = 522000						
Total amount (Lacs) received for the past 3 years = 1662000						

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

S. N.	Name of the Laboratory	No. of students per setup (Batch Size)	Name of the major equipment	Weekly utilization status (all the courses for which the lab is utilized)	Technical Manpower support		
					Name of the technical staff	Designation	Qualification
1.	Auto CAD	30	Auto CAD software	36	Yashraj Ghalame	Lab Assistant	Diploma Mechanical Engineering
2.	Materials Engineering	20	Rockwell Cum Brinell Hardness Tester, Digital Colour TFT Ultrasonic Flaw Detector with Std. Accessories, Magnetic Crack Detection Equipment,	08	Santosh Khanwilkar	Lab Assistant	ITI, NCTVT, CTI

			Comparator Block : Aluminium, Inverted Metallurgical Microscope, Belt Polisher Machine, Jominy Quench Test with Furnace, Double Disc Polishing Machine				
3.	Applied Thermodynamics	20	Lancashire Boiler Model Babcock & Wilcox Boiler Model Locomotive Boiler Model Cochran Boiler Model Vertical Water Tube Boiler Model Lamount Boiler Mode Lever Safety Valve Model Spring Loaded Safety Valve Model Dead Weight Safety Valve Model High Steam-Low Water Safety Valve Model Water Guage Model Feed Check Valve Model Blow off Cock Model Reducing Valve Model Fusible Plugs Model Green Economizer Model Sudgen Super Heater Model Steam Injector Model Gas Turbine Model Wankel Engine Model Air/Steam Pressure Compound Model Jet Condensor (Parallel Flow)Model Jet Condensor(Counter Flow)Model Surface Condensor Model Evaporative Condensor Model Pressure Velocity Compo. Steam Turbine Steam Engine with Boiler Model De-Level Turbine Transparent Model Ram Jet Engine Model Model 4 stroke Petrol Engine Model 4 stroke Diesel	24	Hemant Kolambe	Lab Assistant	ITI (Fitter)

			Engine Model 2 stroke Petrol Engine Model 2 stroke Diesel Engine Compressor Test Rig Four stroke Diesel Engine Test Rig Four stroke Petrol Engine Test Rig				
4.	Theory of Machines	20	Cam analysis Gear tooth profile-rack and pinion cutter Epicyclic gear train model Motorised gyroscope Slip and creep measurement apparatus Energy of flywheel Peaucellier mechanism model Steering gear mechanism Universal hook joint model Elliptical trammels model Oldham coupling model Pentograph model Slider crank mechanism model Crank sloteed quick return mechanism model Withworth quick return mechanism model Beam engine model Rotary engine model Kinamatic pairs model	10	Yashraj Ghalame	Lab Assistant	Diploma Mechanical Engineering
5.	Strength of Materials	20	Universal testing machine Torsion testing machine Izod and Charpy testing machine	8	Yashraj Ghalame	Lab Assistant	Diploma Mechanical Engineering
6.	Vibration	10	Universal vibration apparatus Whirling of shaft demonstrator apparatus Static & dynamic balancing apparatus	2	Yashraj Ghalame	Lab Assistant	Diploma Mechanical Engineering
7.	Mechanical workshop	20	Universal milling machine, KMP drilling machine, box spanner, Surface plate, anvil, threading dia 1/2", pipe vice, portable hand grinder,	22	Anil Sing Patil	Lab Assistant	ITI, NCTVT, CTI

			shaping machine, band saw machine, hand shearing machine, radial drill machine, universal milling machine, bench grinder, threading dia 1/2", pipe vice 2 ", band saw machine, bench vice, circular saw 12"				
8.	Fluid Mechanics	20	Metacentric Height Apparatus Bernoulli's Apparatus Reynolds Apparatus Venturi meter Apparatus Orifice meter Apparatus Minor Losses Apparatus Major losses Apparatus	02	Hemant Kolambe	Lab Assistant	ITI (Fitter)
9.	Additive Manufacturing	30	3D printer, AION 500 MK2 3D printer, HP 6CJ04AV Laptop, Einscan Pro 2X plus 3D Scanner, SLS Sinterit Lisa Pro 3D printer, Oven (meta lab), Vacuum cleaner (forbes super Lite), Ender 3 Max 3D printer, Accucrafti250+ 3D printer, Pratham 3.0 dual 3D printer, Laser Cutting Machine	30	Prachin Patil	Lab Assistant	B E (Electronics)
10.	Refrigeration & Air-Conditioning	20	Vapour Compression test Rig Cascade Refrigeration System, Window Air Conditioning Test Rig, Automotive Air Conditioner Trainer, Vapour Absorption Trainer, Model-Cut Section-Compressor, Model- Refrigerator, Model-Cut Section-Thermostat Expansion, Model-Cut Section-Solenoid Valve, Multi Expansion Devices & Evaporators	18	Santosh Khanwilkar	Lab Assistant	ITI,NCTVT,CTI
11.	CAD/CAM	30	Solid Works, MAT LAB	02	Yashraj Ghalame	Lab Assistant	Diploma Mechanical

							Engineering
12.	Heat Transfer	20	Heat Transfer through lagged pipe Thermal conductivity apparatus (GHP) Forced convection apparatus Free convection apparatus Parallel flow double pipe heat exchanger Counter flow double pipe heat exchanger Parallel flow finned tube heat exchanger Counter flow finned tube heat exchanger	06	Santosh Khanwilkar	Lab Assistant	ITI, NCTVT, CTI
13.	Mechanical Measurement and Metrology	20	Floating Carriage Micrometer (400983) Autocollimator (ACT - 01S / S L NO 228) Vernier Caliper 530 - 119) Digital Vernier Caliper (500 – 171 - 20) Dial Vernier Caliper (505 - 673) Vernier Depth Guage (527 - 203) Micrometer (0 to 25 mm) (103 – 137) Micrometer (25 to 50 mm) (103 – 138) Digital Micrometer (0 to 25 mm) (293 - 230) Micrometer Depth Gauge (0 to 25 mm) (128 - 101) Spirit Level 200 mm (960 - 603) Digital Height Gauge 300 mm (570 - 312) Lever Dial Gauge (0.001mm) (513 - 471E) Dial Gauge (0.01mm) (2046S) Dial Gauge (0.001mm) (2109S - 10) Lever Dial Gauge (513 - 404T) Bevel Protractor L.C. 5mm (187 - 201) Screw Thread Micrometer (0 To 25 mm) (125 -	04	Santosh Khanwilkar	Lab Assistant	ITI, NCTVT, CTI

			103) Dial stand (Magnetic Base) (7010S-10) Comparator Stand (215 - 405 - 10) Surface Plate, Granite (600*600mm) (517 - 103) Comparator (Dial) 100mm (3062S - 19) Digital Vernier Caliper (500 - 171 - 20) Digital Bevel Protractor L.C. 1 sec. (187 - 501) Optical Flat Dia 45mm (158 - 117) Profile Projector PJ-A3010F-1 (302 - 713D&172 - 203) Surface Finish Tester (Model SJ-210) (178-561-02E) Vernier Height Gauge 300mm (514 - 103) Thickness Gauges 0.5 to 1mm (10 L) (184 - 313S) Pitch Gauges (188 - 122) LVDT TRAINER (Model ITK - 01) THERMOCOUPLE TRAINER (Model ITK - 04) RTD TRAINER (Model ITK - 05) Slip Gauge Set (400976) Gear Tooth Vernier Caliper (400995) Angle Gauge Set (400978) Sin Bar (400977) Angle Plate (401462) "V" Block (Magnetic 90mm*100mm) (400980) "V" Block (Magnetic 100mm*120mm) (400980) Wire Gauge (401502) Load Strain Gauge (400956) Pressure transducer Kit (401326) Monocromatic Light Source with Optical Flat Set (402499)				

14.	FEA	20	Ansys Software	02	Yashraj Ghalame	Lab Assistant	Diploma Mechanical Engineering
15.	Fluid Machinery	20	Impact of Jet Apparatus, Pelton Wheel Test Rig- 1kW , Francis Turbine Test Rig, Kaplan Turbine Test Rig-1 KW Apparatus, Centrifugal Pump Test Rig–1HP Apparatus, Reciprocating Pump Test Rig – Apparatus, Gear Pump Test Rig – Apparatus, Determining cd for V – Notches	14	Hemant Kolambe	Lab Assistant	ITI (Fitter)
16.	Hydraulics Lab	20	Bosch – Rexroth Hydraulics Trainer Kit with accessories (4 Workstations) - Hydraulic Power pack (50 Bar), Onboard Relay modules, Amplifier Cards, Timer Cards, Control Cards, 24 Volts power supply module, Level measurement, Load Simulator. Pressure Relief Valves, Directional Controlled Valves (Manually operated & Solenoid actuated), Throttle valves, Non-return valves, Electrical Pressure switch, Hydraulic Accumulator, Hydraulic Geared Motors, Double acting hydraulic cylinders, Pressure Reducing valve, Shut off valves, Inductive Proximity Sensors, Solenoid Connectors, Throttle valves with check valves, Hydraulic Hoses. HP AIO ProOne 600 GB Desktops (Quantity-03) with Inrdaworks Engineering (Version 14), Automation Studio 7.0 Educational Version and MATLAB R2022b, Softwares.	02	Prachin Patil	Lab Assistant	B E (Electronics)
17.	Pneumatic Lab	20	Bosch- Rexroth Pneumatics Trainer Kit	02	Prachin Patil	Lab Assistant	B E (Electronics)

			with Accessories (4 Workstations)- Onboard Relay modules, Switch Cards, Amplifier cards, Timer Relays, Variable DC Power Supply (0 to 10 Volts), Control Cards, 24 Volts power supply. Pneumatic Air compressors, B0514123 (Quantity 3)- 230 Volts/50HZ, 15 Liters Capacity, Volume flow control. Pneumatic FRL Units, Directional Control Valves (Manual, Pilot & Solenoid actuated), Non return valves, Flow control valve, Pressure Switch (Analog & Digital), Shut off valves, Check valves, Pneumatic Roller Switches, Electrical Limit Switches, Single acting cylinders, Double acting cylinders.				
18.	PLC and Sensorics Lab	20	Bosch – Rexroth Sensorics Trainers- Inductive, Capacitive, Magnetic, Ultrasonic and Optical Proximity Sensors, Test Sample Materials, 24 Volts DC Motors, Counter, 0-30 Volts Power Supply. Horner PLCs with HMI and I/O cards, Pneumatic Press, Proximity Sensors. DC Servo motors, IOT Gateway with TP Link Router, Rexroth Field Bus Module (S-20-ETH-BK), S20-D1-16/1 & S20-A1-4-1, I/P &O/P Modules Modules),SSL41047R CMCB(Siemens), Windows based IOT Gateway App.	02	Prachin Patil	Lab Assistant	B E (Electronics)
19.	Mechatronics and Robotics Lab:	20	Bosch- Rexroth Modular Mechtronics Assembly System (MMS) - 3 Separate Section for Testing / Inspection, Assembly and Storage, SCARA Robot – 4	02	Prachin Patil	Lab Assistant	B E (Electronics)

			Axis, Teach Pedant, 3 phase PM Synchronous motors with MLC drives, Safety Doors with magnetic sensors, Rechargeable batteries. Yaskawa Motoman Robot - Motoman robot MH-5 with Dx100 robot controller, Programming pendant with 8-meter cable. Bosch – Rexroth MTX 4 Axis CNC Simulator-Teach pendent, Control Display Unit, Input and Output cards, Four Axis 3 Phase PM Synchronous Motors, MLC controllers.				

D2: `Safety Measures in Laboratories

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

S.N.	Name of the Laboratory	Safety Measures
1.	Materials Engineering	• Fire Extinguisher • Smoke and Heat Detector • Circuit Breakers & Fuses (overload protection) • Warning Signage & Safety Posters • (electrical hazard, fire safety, emergency exits) • CCTV Monitoring
2.	Applied Thermodynamics	• Adequate ventilation for exhaust gases • Fire Extinguisher • Smoke and Heat Detector • Circuit Breakers & Fuses (overload protection) • Warning Signage & Safety Posters • (electrical hazard, fire safety, emergency exits) • CCTV Monitoring
3.	Theory of machines	• Fire Extinguisher • Smoke and Heat Detector • Circuit Breakers & Fuses (overload protection) • Warning Signage & Safety Posters • (electrical hazard, fire safety, emergency exits) • CCTV Monitoring
4.	Strength of Materials	• Fire Extinguisher • Smoke and Heat Detector • Circuit Breakers & Fuses (overload protection) • Warning Signage & Safety Posters • (electrical hazard, fire safety, emergency exits) • CCTV Monitoring
5.	Vibrations	• Guard protection for equipment • Fire Extinguisher • Smoke and Heat Detector • Circuit Breakers & Fuses (overload protection) • Warning Signage & Safety Posters (electrical hazard, fire safety, emergency exits) • CCTV Monitoring
6.	Workshop	• Use of PPE is mandatory

		• Proper ventilation • First-aid kits • Fire Extinguisher • Smoke and Heat Detector • Circuit Breakers & Fuses (overload protection) • Warning Signage & Safety Posters (electrical hazard, fire safety, emergency exits) • CCTV Monitoring
7.	Fluid Mechanics and Fluid Machinery Lab	• Fire Extinguisher • Smoke and Heat Detector • Circuit Breakers & Fuses (overload protection) • Warning Signage & Safety Posters (electrical hazard, fire safety, emergency exits) • CCTV Monitoring
8.	Additive manufacturing	• Fire Extinguisher • Smoke and Heat Detector • Circuit Breakers & Fuses (overload protection) • Warning Signage & Safety Posters (electrical hazard, fire safety, emergency exits) • CCTV Monitoring
9.	Refrigeration and Air- Conditioning Lab	• Fire Extinguisher • Smoke and Heat Detector • Circuit Breakers & Fuses (overload protection) • Warning Signage & Safety Posters (electrical hazard, fire safety, emergency exits) • CCTV Monitoring
10.	Heat Transfer	• Fire Extinguisher • Smoke and Heat Detector • Circuit Breakers & Fuses (overload protection) • Warning Signage & Safety Posters (electrical hazard, fire safety, emergency exits) • CCTV Monitoring
11.	Mechanical Measurement and Metrology	• Fire Extinguisher • Smoke and Heat Detector • Circuit Breakers & Fuses (overload protection) • Warning Signage & Safety Posters (electrical hazard, fire safety, emergency exits) • CCTV Monitoring
12.	Auto CAD Lab, FEA Lab, CAD/CAM Lab	• Fire Extinguisher • Smoke and Heat Detector • Circuit Breakers & Fuses (overload protection) • Warning Signage & Safety Posters (electrical hazard, fire safety, emergency exits) • CCTV Monitoring
13.	Hydraulics Lab	• Fire Extinguisher • Smoke and Heat Detector • Circuit Breakers & Fuses (overload protection) • Warning Signage & Safety Posters (electrical hazard, fire safety, emergency exits) • CCTV Monitoring
14.	Pneumatic Lab	• Fire Extinguisher • Smoke and Heat Detector • Circuit Breakers & Fuses (overload protection) • Warning Signage & Safety Posters (electrical hazard, fire safety, emergency exits) • CCTV Monitoring
15.	PLC and Sensorics Lab	• Fire Extinguisher • Smoke and Heat Detector • Circuit Breakers & Fuses (overload protection) • Warning Signage & Safety Posters (electrical hazard, fire safety, emergency exits) • CCTV Monitoring
16.	Mechatronics and Robotics Lab	• Fire Extinguisher • Smoke and Heat Detector • Circuit Breakers & Fuses (overload protection)

		• Warning Signage & Safety Posters (electrical hazard, fire safety, emergency exits) • CCTV Monitoring

D3: Project Laboratory/Research Laboratory

Table No. D3.1: List of project laboratory/research laboratory /Centre of Excellence.

S.N.	Name of the Laboratory
1.	VIP Lab
2	EPICS Studio
3	Research Labs –Additive Manufacturing Lab
4	Common Component Studio (CCS)

PART E: Fist 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))/RF4
2024-25	1080	54	52	25	0.86
2023-24	1080	54	52	25	0.86
2022-23	1080	54	49	25	0.82

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 CFY 24-25	Actual expenses in CFY-24-25	Budgeted in CFYm1 23-24	Actual Expenses in CFYm1 23-24	Budgeted in CFYm2 22-23	Actual Expenses in CFYm2 22-23	Budgeted in CFYm3 21-22	Actual Expenses in CFYm3 21-22
Infrastructure Built-Up	13,770	0	14,075	0	10,651.44	13,583.53	6,900	13,505.59
Library	80	60.02	75	83.86	70	71.98	65	44.19
Laboratory equipment	65	22.82	600	123.43	280	15.01	380	90.79
Teaching and non-teaching staff salary	5,909.55	4,546.21	5,824.88	4,799.17	5,371.52	4,705.70	4,519.73	4,233.24
Outreach Programs	35	33.45	67.50	57.99	55	51.24	50	17.38
R&D	30	14.58	50	7.17	30	9.05	20	7.75

Training, Placement and Industry linkage	65	19.36	60	32.15	48	67.96	29	37.3
SDGs	35	33.45	67.50	57.99	55	51.24	50	17.8
Entreprene urship								
Others*,pl. specify (DEP ON ASSET, RES & MAINT, ADM EXPNS, MUNICIPAL TAXES, OTHE R INCIDETAL A EXP)	6447.99	18021.85	4413.99	26,165.90	4570.10	4,858.76	3367.67	3,468.15
Total amount	26437.54	22,742.72	25233.87	31327.66	21131.06	23414.47	15381.40	21421.77

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 CFY 24-25**	**Actual expenses in CFY 24-25**	**Budgeted in CFY*m*1 23-24**	**Actual Expenses in CFY*m*1 23-24**	**Budgeted in CFY*m*2 22-23**	**Actual Expenses in CFY*m*2 22-23**	**Budgeted in CFY*m*3 21-22**	**Actual Expenses in CFY*m*3 21-22**
Laboratory equipment	1.52	0.53	11.52	2.37	8.25	0.44	13.53	3.23
Software	0.35	0.02	0.48	0.14	0.74	0.01	0.71	0.04
SDGs	1.64	1.57	2.59	2.23	3.24	3.02	3.56	1.24
Support for faculty development	1.4	0.55	1.15	0.14	1.77	0.07	1.78	0.27
R & D	0.7	0.34	0.96	0.14	0.88	0.27	0.71	0.28
Industrial Training, Industry expert, Internship	1.52	0.45	1.15	0.62	1.41	2	1.03	1.33
Miscellaneous expenses *	150.98	411.09	84.77	135	134.59	142.99	119.86	123.31
Total amount	158.12	414.56	102.63	140.63	150.87	148.8	141.19	129.69