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**: 1
Application No: 10107	**Date of Submission**: 05-04-2025

PART A- Profile of the Institute

A1.Name of the Institute: Sri Satya Sai University of Technology and Medical Sciences	
Year of Establishment : 1999	Location of the Institute:
A2. Institute Address:SH-18,BHOPAL INDORE ROAD,OPP. OILFED PLANT,PACHAMA SEHORE(MP)	
City:Sehore	State:Madhya Pradesh
Pin Code:462043	Website:www.sssutms.co.in
Email:info@sssutms.co.in	Phone No(with STD Code):-
A3. Name and Address of the Affiliating University (if any):	
Name of the University : SRI SATYA SAI UNIVERSITY OF TECHNOLOGY AND MEDICAL	City:
State :	Pin Code:
A4. Type of the Institution: University	
A5. Ownership Status:	

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

- No. of UG programs: **11**
- No. of PG programs: **14**

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

Sr.No.	Discipline	Level of program	Name of the program	Year of Start	Year of Closed	Name of The Department
1	Computer Application	PG	Master in Computer Applications	2014	--	Computer Application
2	Engineering & Technology	UG	Aeronautical Engineering	2014	--	Aeronautical Engineering
3	Engineering & Technology	UG	Chemical Engineering	2014	--	Chemical Engineering
4	Engineering & Technology	UG	Civil Engineering	2014	--	Civil Engineering
5	Engineering & Technology	PG	Civil Engineering	2014	--	Civil Engineering
6	Engineering & Technology	UG	Computer Science and Engineering	2014	--	Computer Science and Engineering
7	Engineering & Technology	PG	Computer Science and Engineering	2014	--	Computer Science and Engineering
8	Engineering & Technology	PG	Computer Technology & Application	2014	--	Computer Science and Engineering
9	Engineering & Technology	PG	Digital Communications	2014	--	Electronics and Communication Engineering
10	Engineering & Technology	UG	Electrical & Electronics Engineering	2014	--	Electrical and Electronics Engineering
11	Engineering & Technology	UG	Electrical Engineering	2014	--	Electrical Engineering
12	Engineering & Technology	PG	Electrical Power Systems	2014	--	Electrical Engineering
13	Engineering & Technology	UG	Electronics & Communication Engineering	2014	--	Electronics and Communication Engineering
14	Engineering & Technology	UG	Electronics & Instrumentation Engineering	2014	--	Electronics and Instrumentation Engineering
15	Engineering & Technology	PG	Industrial Design	2014	--	Mechanical Engineering
16	Engineering & Technology	PG	Information Technology	2014	--	Information Technology
17	Engineering & Technology	UG	Information Technology	2014	--	Information Technology
18	Engineering & Technology	UG	Mechanical Engineering	2014	--	Mechanical Engineering
19	Engineering & Technology	UG	Mining Engineering	2014	--	Mining Engineering
20	Engineering & Technology	PG	Power Electronics	2014	--	Electrical Engineering
21	Engineering & Technology	PG	Software Engineering	2014	--	Computer Science and Engineering
22	Engineering & Technology	PG	Structural Design	2014	--	Civil Engineering
23	Engineering & Technology	PG	Thermal Engineering	2014	--	Mechanical Engineering
24	Engineering & Technology	PG	VLSI	2014	--	Electronics and Communication Engineering
25	Management	PG	Master of Business Administration	2014	--	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
Mechanical Engineering	No	Mechanical Engineering	UG
Electronics and Communication Engineering	Yes	Electronics & Communication Engineering	UG
Computer Science and Engineering	Yes	Computer Science and Engineering	UG

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

No Record

PART-B: Program information

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

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

SR.NO.	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/DECREASE INTAKE (if any)	YEAR OF INCREASE/DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/COMPETENT AUTHORITY ARROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCREDITED	PROGRAM DURATION
1	Mechanical Engineering	UG	2014 / --	180	No	NA	180	2014	yes	Applying first time	--	--	0	4

SR.NO.	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/DECREASE INTAKE (if any)	YEAR OF INCREASE/DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/COMPETENT AUTHORITY ARROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCREDITED	PROGRAM DURATION

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. RASHMI DWIVEDI
B. Nature of appointment:	Regular
C. Qualification:	ME/M. Tech and PhD

B3. Program Details

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

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2024-25 (CAY)	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)	2020-21 (CAYm4)	2019-20 (CAYm5)	2018-19 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	180	180	180	180	180	180	180
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	171	165	164	165	164	163	162
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	25	24	23	26	28	27
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.	171	190	188	188	190	191	189

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

B4. Enrolment Ratio in the First Year

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

Year of entry	N (From Table 4.1)	N1 (From Table 4.1)	N4 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2024-25 (CAY)	180	0	0	95.00
2023-24 (CAYm1)	180	0	0	91.67
2022-23 (CAYm2)	180	0	0	91.11

Average [(ER1 + ER2 + ER3) / 3] = 92.59≡ 20.00

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

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

Item	(2020-21) LYG	(2019-20) LYGm1	(2018-19) LYGm2
A*= (No. of students admitted in the 1st year of that batch and those actually admitted in the 2nd year via lateral entry, plus the number of students admitted through multiple entry (if any) and separate division if applicable, minus the number of students who exited through multiple entry (if any).	206.00	208.00	207.00
B=No. of students who graduated from the program in the stipulated course duration	180.00	176.00	179.00
Success Rate (SR)= (B/A) * 100	87.38	84.62	86.47

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 86.16

B6. Academic Performance of the First-Year Students of the Program

Table No.B6.1: Academic Performance of the First-Year Students of the Program.

Academic Performance	CAYm1(2023-24)	CAYm2(2022-23)	CAYm3 (2021-22)
X=(Mean of 1st year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 1st year/10)	8.20	7.80	7.50
Y=Total no. of successful students	186.00	185.00	186.00
Z=Total no. of students appeared in the examination	165.00	164.00	165.00
API [X*(Y/Z)]	9.24	8.80	8.45

Average API[(AP1+AP2+AP3)/3] : 8.83

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

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

Academic Performance	CAYm1 (2023-24)	CAYm2 (2022-23)	CAYm3 (2021-22)
X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2rd year/10)	7.80	8.20	8.30
Y=Total no. of successful students	181.00	180.00	183.00
Z=Total no. of students appeared in the examination	209.00	209.00	213.00
API [X * (Y/Z)]	6.76	7.06	7.13

Average API [(AP1 + AP2 + AP3)/3] : 6.98

B8. Academic Performance of the Third Year Students of the Program

Table No.B8.1: Academic Performance of the Third Year Students of the Program

Academic Performance	CAYm1 (2023-24)	CAYm2 (2022-23)	CAYm3 (2021-22)
X=(Mean of 3rd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 3rd year/10)	8.78	8.94	8.75
Y=Total no. of successful students	174.00	181.00	182.00
Z=Total no. of students appeared in the examination	180.00	183.00	188.00
API [X*(Y/Z)]:	8.49	8.84	8.47

Average API [(AP1 + AP2 + AP3)/3] : 8.60

B9. Placement, Higher Studies, and Entrepreneurship

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

Item	LYG (2020-21)	LYGm1(2019-20)	LYGm2(2018-19)
FS*=Total no. of final year students	206.00	208.00	207.00
X=No. of students placed	84.00	68.00	79.00
Y=No. of students admitted to higher studies	18.00	35.00	28.00
Z= No. of students taking up entrepreneurship	2.00	8.00	10.00

Placement Index(P) = (((X + Y + Z)/FS) * 100):	50.49	53.37	56.52

Average Placement Index = (P_1 + P_2 + P_3)/3: 53.46 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. RASHMI DWIVEDI	XXXXXXX50P	ME/M. Tech and PhD	MANIT BHOPAL	INDUSTRIAL DESIGN	19/09/2023	1.4	Professor	Professor	19/09/2023	Regular	Yes		Yes
2	Dr. G .R Selokar	XXXXXXX82N	ME/M. Tech and PhD	MAHTMA GANDHI KASHI VIDHYPITH U.P	THERMAL ENGINERRING	24/08/2009	15.6	Professor	Professor	28/05/2014	Regular	Yes		No
3	Dr. SANJAY KALRAIYA	XXXXXXX94N	M.E/M.Tech	RGPV BHOPAL	THERMAL ENGINERRING	02/05/2018	6.8	Assistant Professor	Assistant Professor		Regular	Yes		No
4	DR. MAHENDRA DANGE	XXXXXXX59F	ME/M. Tech and PhD	RASHTRASANT TUKADUJI MAHARAJ NAGPUR UNIVERSITY	THERMAL ENGINERRING	19/05/2021	3.9	Professor	Professor	19/05/2021	Regular	Yes		No
5	Mr. Mohnish Dongre	XXXXXXX23C	M.E/M.Tech	SRI SATYA SAI UNIVERSITY OF TECHNOLOGY AND MEDICAL SCIENCES	THERMAL ENGINEERING	17/05/2022	2.9	Assistant Professor	Assistant Professor		Regular	Yes		No
6	DR. SANTOSH KUMAR RAI	XXXXXXX98G	ME/M. Tech and PhD	SRM IST CHENNAI INDIA	THERMAL ENGINERRING	08/01/2024	1	Associate Professor	Associate Professor	08/01/2024	Regular	Yes		No
7	DR. RAM CHHABI MATAWALE	XXXXXXX68Q	ME/M. Tech and PhD	NIT ROURKELA	INDUSTRIAL AND PRODUCTION ENGINEERING	19/12/2018	6.1	Professor	Professor	19/12/2018	Regular	Yes		No
8	Mr. Manish Balwanshi	XXXXXXX22R	M.E/M.Tech	R.G.P.V Bhopal	Thermal Engineering	18/12/2018	6.1	Assistant Professor	Assistant Professor		Regular	Yes		No
9	DR. DHARMENDRA SINGH RAJPUT	XXXXXXX66R	ME/M. Tech and PhD	RNTU BHOPAL	INDUSTRIAL AND PRODUCTION ENGINEERING	12/01/2023	2	Associate Professor	Associate Professor	12/01/2023	Regular	Yes		No
10	DR. SACHIN BARASKAR	XXXXXXX16L	ME/M. Tech and PhD	SSSUTMS SEHORE	THERMAL ENGINERRING	28/05/2014	10.9	Assistant Professor	Associate Professor	14/12/2024	Regular	Yes		No
11	GAURAV kumar	XXXXXXX77D	M.E/M.Tech	SSSUTMS SEHORE	THERMAL ENGINERRING	01/01/2020	5.1	Assistant Professor	Assistant Professor		Regular	Yes		No
12	Akshay kumar	XXXXXXX99A	M.E/M.Tech	ssipmt raipur	THERMAL ENGINERRING	17/01/2022	3	Assistant Professor	Assistant Professor		Regular	Yes		No
13	PIYUSH kumar KASHYAP	XXXXXXX35L	M.E/M.Tech	rgpv bhopal	THERMAL ENGINERRING	16/01/2019	6	Assistant Professor	Assistant Professor		Regular	Yes		No
14	VISHAL ANAND	XXXXXXX23H	M.E/M.Tech	shri balji college of tech. jaipur	THERMAL ENGINERRING	03/05/2021	3.9	Assistant Professor	Assistant Professor		Regular	Yes		No
15	YOGESH VIJAY PATIL	XXXXXXX02H	M.E/M.Tech	SSSUTMS SEHORE	THERMAL ENGINERRING	17/01/2017	8	Assistant Professor	Assistant Professor		Regular	Yes		No
16	AJAY KUMAR CHOUBEY	XXXXXXX09E	ME/M. Tech and PhD	MANIT BHOPAL	MATERIAL	30/05/2023	1.8	Associate Professor	Associate Professor	30/05/2023	Regular	Yes		No
17	DEEPIKA JIJOTIA	XXXXXXX09M	M.E/M.Tech	SATI VIDEISHA	THERMAL ENGINERRING	18/01/2019	6	Assistant Professor	Assistant Professor		Regular	Yes		No
18	PRAKHAR DUBEY	XXXXXXX19K	M.E/M.Tech	RGPV BHOPAL	THERMAL ENGINERRING	18/07/2022	2.6	Assistant Professor	Assistant Professor		Regular	Yes		No
19	ABHILASH DAHAYAT	XXXXXXX97R	M.E/M.Tech	RGPV BHOPAL	THERMAL	19/12/2018	6.1	Assistant Professor	Assistant Professor		Regular	Yes		No
20	NIRMAL GUPTA	XXXXXXX35D	M.E/M.Tech	DAV INDORE	THERMAL	05/07/2018	6.7	Assistant Professor	Assistant Professor		Regular	Yes		No
21	Mr. PRADEEP KUMAR	XXXXXXX77N	M.E/M.Tech	RGPV BHOPAL	THERMAL	03/08/2015	9.6	Assistant Professor	Assistant Professor		Regular	Yes		No
22	Mr. JAINPAL KESHRIMAL JAIN	XXXXXXX85B	M.E/M.Tech	RGPV BHOPAL	THERMAL	06/07/2018	6.7	Assistant Professor	Assistant Professor		Regular	Yes		No
23	Mr. NADIMUAL HAQUE	XXXXXXX47F	M.E/M.Tech	RGPV BHOPAL	THERMAL	17/01/2022	3	Assistant Professor	Assistant Professor		Regular	Yes		No
24	Mr. GOPAL SAHU	XXXXXXX21C	M.E/M.Tech	MATS UNIVERSITY	THERMAL	08/06/2021	3.7	Assistant Professor	Assistant Professor		Regular	Yes		No
25	Mr. RAJU KUMAR	XXXXXXX05P	M.E/M.Tech	SSSUTMS SEHORE	THERMAL	21/12/2017	7.1	Assistant Professor	Assistant Professor		Regular	Yes		No
26	Mr. WASIM AHMAD	XXXXXXX94E	M.E/M.Tech	SSSUTMS SEHORE	THERMAL	08/01/2020	5	Assistant Professor	Assistant Professor		Regular	Yes		No
27	Mr. DEEPAK RAGHUVANSHI	XXXXXXX02P	M.E/M.Tech	SGSIT INDORE	THERMAL	02/02/2015	10	Assistant Professor	Assistant Professor		Regular	Yes		No
28	Mr. YOGESH VISHWAKARMA	XXXXXXX93M	M.E/M.Tech	RGPV BHOPAL	THERMAL	05/08/2014	10.6	Assistant Professor	Assistant Professor		Regular	Yes		No
29	Mr. SURENDRA KUMAR	XXXXXXX59R	M.E/M.Tech	SSSUTMS SEHORE	THERMAL	15/09/2020	4.4	Assistant Professor	Assistant Professor		Regular	Yes		No
30	Dr MANISH GANGIL	XXXXXXX55G	ME/M. Tech and PhD	MANIT BHOPAL	PRODUCTION ENGINEERING	20/04/2022	2.10	Associate Professor	Associate Professor	20/04/2022	Regular	Yes		No
31	Mr RANJIT NIKOSE	XXXXXXX96R	M.E/M.Tech	MANIT BHOPAL	HYDRO POWER	14/07/2022	2.6	Assistant Professor	Assistant Professor		Regular	Yes		No
32	Dr.AMIT SHARMA	XXXXXXX03M	ME/M. Tech and PhD	MADHYANCHAL UNIVERSITY	Machine Design	18/07/2022	2.6	Assistant Professor	Associate Professor	11/11/2024	Regular	Yes		No

33	Mr PRABHAT KAUSHAL	XXXXXXX49G	M.E/M.Tech	RKDF UNIVERSITY	Thermal Engineering	14/02/2022	2.11	Assistant Professor	Assistant Professor		Regular	Yes		No
34	Mr DHEERAL SINGH	XXXXXXX59C	M.E/M.Tech	RGPV BHOPAL	INDUSTRIAL DESIGN	11/07/2022	2.7	Assistant Professor	Assistant Professor		Regular	Yes		No
35	Mr AVINASH SINGH	XXXXXXX73J	M.E/M.Tech	RGPV BHOPAL	THERMAL ENGINERRING	11/04/2022	2.9	Assistant Professor	Assistant Professor		Regular	Yes		No
36	Mr. Yogehs Tembhurne	XXXXXXX47E	M.E/M.Tech	MNNIT Allahabad UP	DESIGN	13/02/2023	1.11	Assistant Professor	Assistant Professor		Regular	Yes		No
37	DR. Priyanka Jhavar	XXXXXXX20F	M.E/M.Tech	RGPV BHOPAL	Industrial Engineering and Management	09/02/2009	16.1	Assistant Professor	Associate Professor	17/02/2025	Regular	Yes		No
38	Dr AMITESH PAUL	XXXXXXX21H	ME/M. Tech and PhD	RGPV BHOPAL	THERMAL ENGINERRING	10/07/2008	16.7	Assistant Professor	Associate Professor	12/09/2022	Regular	Yes		No
39	MR. OMPRAKASH PATEL	XXXXXXX52F	M.E/M.Tech	RKDF UNIVERSITY	PRODUCTION ENGINEERING	16/08/2022	2.6	Assistant Professor	Assistant Professor		Regular	Yes		No

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

C2. Student-Faculty Ratio (SFR)

No. of UG(Engineering) programs in Department including allied departments/ clusters (UGn):
UG1=1st UG program
UGn=nth UG program
B= No. of Students in UG 2nd year (ST)
C= No. of Students in UG 3rd year (ST)
D= No. of Students in UG 4th year (ST)
No. of PG (Engineering) programs in Department including allied departments/ clusters (PGm):
PG1=1st PG program.
PGm=mth PG program
A= No. of Students in PG 1st year
B= No. of Students in PG 2nd year
Student Faculty Ratio **(SFR)** = S/F
S= No. of students of all programs in the Department including all students of allied departments/clusters.
No. of students (ST)=Sanctioned Intake (SA)+ Actual admitted students via lateral entry including leftover seats (L) if any (limited to 10 % of SA)
Students who admitted under supernumerary quotas (SNQ, EWS, etc) will not be considered in calculating SFR value. Those students are exempted.
F=Total no. of regular or contractual faculty members (Full Time) in the Department, including allied departments/clusters (excluding first year faculty (The faculty members who have a 100% teaching load in the first-year courses)).

No. of UG Programs in the Department1 No. of PG Programs in the Department2

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

Description	**CAY(2024-25)**	**CAYm1 (2023-24)**	**CAYm2 (2022-23)**
UG1.B	198	198	198
UG1.C	198	198	198
UG1.D	198	198	198
UG1: Mechanical Engineering	**594**	**594**	**594**
PG1.A	18	18	18
PG1.B	18	18	18
PG1: Industrial Design	**36**	**36**	**36**
PG2.A	36	36	36
PG2.B	36	36	36
PG2: Thermal Engineering	**72**	**72**	**72**
DS=Total no. of students in all UG and PG programs in the Department	702	702	702
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=** 702	**S2=** 702	**S3=** 702
DF=Total no. of faculty members in the Department	38	36	33
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=** 38	**F2=** 36	**F3=** 33
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)	**SFR1= 18.47**	**SFR2= 19.50**	**SFR3= 21.27**
Average SFR for 3 years	**SFR= 19.75**		

C3. Faculty Qualification

- Faculty qualification index (FQI) = 2.5 * [(10X +4Y)/RF] where
- X=No. of faculty members with Ph.D. degree or equivalent as per AICTE/UGC norms.
- Y=No. of faculty members with M. Tech. or ME degree or equivalent as per AICTE/ UGC norms.
- RF=No. of required faculty in the Department including allied Departments to adhere to the 20:1 Student-Faculty ratio, with calculations based on both student numbers and faculty requirements as per section C2 of this documents: (RF=S/20).

Table No.C3.1: Faculty qualification.

Year	**X**	**Y**	**RF**	**FQ = 2.5 x [(10X + 4Y) / RF)]**
2024-25(CAY)	9	29	35.00	14.71
2023-24(CAYm1)	7	29	35.00	13.29
2022-23(CAYm2)	4	29	35.00	11.14

C4. Faculty Cadre Proportion

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

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

Year	**Professors**		**Associate Professors**		**Assistant Professors**	
	Required RF1	**Available AF1**	**Required RF2**	**Available AF1**	**Required RF3**	**Available AF3**
2024-25	3.00	4.00	7.00	5.00	23.00	29.00
2023-24	3.00	3.00	7.00	4.00	23.00	29.00
2022-23	3.00	3.00	7.00	1.00	23.00	29.00
Average	RF1=3.00	AF1=3.33	RF2=7.00	AF2=3.33	RF2=23.00	AF2=29.00

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	Dr. NEELU JAIN	ASSOSCIATE PROFESSOR	SSSUTMS	CHEMISTRY	50.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	MS AMREEN KHAN	ASSISTANT PROFESSOR	SSSUTMS	PHYSICS	50.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr. KIRAN KUMARI	ASSOCIATE PROFESSOR	SSSUTMS	MATHEMATICS	50.00

C6. Academic Research

Table No. C6.1: Faculty publication details.

S.No.	Item	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)
1	No. of peer reviewed journal papers published	9	23	11
2	No. of peer reviewed conference papers published	5	3	1
3	No. of books/book chapters published	0	2	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. Rashmi Dwivedi	Dr Santosh Kumar Rai	Mechanical Engineering	Development of enhancement of heat transfer trough solar air heater	Sidharth Kaproor Infrastructure PVT.LTD	1 year	600000.00
						Amount received (Rs.):600000.00

(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
Mrs Priyanka	Mr. Sachin Baraskar	Mechanical Engineering	Development 3D Printing Machine	Sidharth Kaproor Infrastructure PVT.LTD	1 Year	200000.00
						Amount received (Rs.):200000.00

(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
NA	NA	NA	NA	NA	NA	0.00
						Amount received (Rs.):0.00

Total Amount (Lacs) Received for the Past 3 Years: 800000.00

Note*:

- Only sponsored research projects will be considered. Infrastructure-based projects will not be considered here.

C8. Consultancy Work

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

(CAYm1)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr Santosh Kumar Rai	NA	Mechanical Engineering	Design and Development of Natural Circulation Loop Assignment	Sidharth Kaproor Infrastructure PVT.LTD	01 year	780000.00
Dr Santosh Kumar Rai	NA	Mechanical Engineering	Design and development of a smart house with automated environment control	Sidharth Kaproor Infrastructure PVT.LTD	03 year	2870000.00
						Amount received (Rs.):3650000.00

(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 CHHABI MATAWALE	na	Mechanical Engineering	Drawings of TTP of Masord Checking	SPS Camshafts Pvt Ltd	03 year	1781400.00
						Amount received (Rs.):1781400.00

(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. DHANANJAY YADAV	NA	Mechanical Engineering	Remote Sensing and Geographic Systems Inputs for Hydroelectric Projects	Andritz Hydro Private Limited	02 year	2580000.00
Dr Nilesh Diwakar	NA	Mechanical Engineering	Analysis of Waste Water Sample	S. R. Ferro Alloys	03 year	2974500.00
						Amount received (Rs.):5554500.00

Total amount (Lacs) received for the past 3 years: 10985900.00

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
Dr. Santosh Kumar Rai	Development of the high temperature 3D printer	1 YEAR	186000.00	186000.00	Successful Design and Fabrication, Material Compatibility
Ms Yamini Rai	Development of AI based drone system for detecting multiple disease in the plant	1 YEAR	186000.00	186000.00	Automated Disease Detection System, Improved Accuracy and Speed in Disease Identification
Dr. Rashmi Dwivedi	Design and Development of Aircraft	1 YEAR	300000.00	300000.00	Prototype Development, Aerodynamic Design Optimization, Material Selection and Testing
Mr. Manoj kumar Gandwane	Removal of arsenic From Waste Water by USING OF Absorbent	1 YEAR	123000.00	123000.00	Effective Arsenic Removal, Identification of Suitable Absorbent
			Amount received (Rs.): 795000.00		

(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
Mr. Devendra Patle	Design and development of enhancement of heat transfer trough solar air heater	1 YEAR	176000.00	176000.00	Improved Thermal Efficiency, Optimized Design Parameters
Mr. Sachin Baraskar	Design and Development of the Hybrid solar car	1 YEAR	300000.00	300000.00	Development of a functional hybrid solar vehicle, Integration of photovoltaic (PV) panels
Dr. Rajendra Sigh Kushwah	IOT based crop health detection & Prevention system	1 YEAR	280000.00	280000.00	Real-time Monitoring of Crop Health, Early Detection of Crop Diseases
			Amount received (Rs.): 756000.00		

(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
Praboodh Khampariya	Design & Simulation of Single phase Sinusoidal Pulse Width Modulation (Unipolar) Inverter Prototype	1 YEAR	225000.00	225000.00	Understanding of Power Electronics Principles, Implementation of SPWM (Unipolar) Technique
SS Ali	Fixed Point Theorem for Fuzzy Metric Space	1 YEAR	230000.00	230000.00	Understanding of Fuzzy Metric Spaces, New Fixed Point Theorems, Generalization of Existing Results
Ajay Sawrup	A Laboratory Assessment on Concrete Mix Design by Using Fly Ash as Bonding	1 YEAR	225000.00	225000.00	Impact on Concrete Properties, Cost-Effectiveness, Environmental Benefits
Prakhar Dubey	Development of Optimized Muffler to Improve the Efficiency of Diesel Engine for Eicher Bus	1 YEAR	300000.00	300000.00	Improved Engine Efficiency, Noise Reduction, Compliance with Environmental Regulations
			Amount received (Rs.): 980000.00		

Total amount (Lacs) received for the past 3 years : 2531000.00

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	Strength of Materials Lab	30	Universal Testing Machine, Impact Testing Machine	5 sessions/wee	Suresh vishwakarma	Technician	ITI (Fitter)
2	Fluid Mechanics & Machinery Lab	25	Pelton Wheel, Centrifugal Pump, Bernoulli Setup	4 sessions/wee	Ram Babu	Lab Technician	B.E. (Mechanical)
3	Thermal Engineering Lab	20	4-stroke Diesel Engine Test Rig, Air Compressor	6 sessions/wee	Mahesh yadav	Lab Assistant	Diploma (Mech. Engg.)
4	Heat and Mass Transfer Lab	20	Heat Exchangers, Thermal Conductivity Apparatus	3 sessions/wee	sumit	Technician	ITI (Refrigeration)
5	Theory of Machines Lab	25	Gyroscope, Governors, Cam-Follower Mechanism	4 sessions/wee	Anil	Lab Assistant	B.Tech (Mechanical)
6	Dynamics of Machines Lab	25	Whirling of Shaft, Vibration Apparatus	3 sessions/wee	manoj	Technician	Diploma (Mech. Engg.)
7	Manufacturing Processes Lab	25	Lathe Machines, Drilling Machines, Milling Machine	6 sessions/wee	A khan	Foreman	TI (Machinist)
8	CNC and Automation Lab	20	CNC Lathe, CNC Milling Trainer, Robotic Arm	3 sessions/wee	Manohar	Lab Assistan	Diploma (Mech. Engg.)
9	CAD/CAM Lab	30	Workstations, ANSYS, AutoCAD, SolidWorks	5 sessions/wee	Anand Sharma	System Operator	B.Sc. (Computer)

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Thermal Engineering Lab	Fire extinguisher, First aid kit, Emergency power cut-off switch
2	Workshop Lab	PPEs (aprons, gloves, safety shoes), Emergency shower, Fire buckets

3	CNC and Automation Lab	Safety enclosures, Emergency STOP, Operator manual display
4	Fluid Machinery Lab	Anti-skid flooring, Emergency drain, Proper earthing of electrical components
5	Strength of Materials Lab	Safety glasses, Insulated gloves, Machine guards, Warning signboards

D3. Project Laboratory/Research Laboratory

Dedicated spaces for research, innovation, and project development have been established with modern resources to promote hands-on learning and creativity.

Table 7.5.1: List of Project Laboratory / Research Laboratory / Centre

S.N.	Name of the Lab/CoE	Facilities Available	Utilization	Focus Area	Relevance to POs/PSOs
1	Final Year Project Lab	Workbenches, measuring instruments, fabrication tools	Final year and mini projects	Thermal, Design, Manufacturing	PO3, PO4, PSO1
2	Centre for Robotics and Mechatronics	Arduino kits, Raspberry Pi, Sensors, Robotic arms	Interdisciplinary projects, workshops	Automation, IoT, Smart Systems	PO5, PO11, PSO2
3	Research Lab on Renewable Energy	Solar panel test rigs, wind turbine model, data loggers	Faculty and PG student research	Sustainable energy systems	PO6, PSO2
4	CAD/CAM Innovation Hub	Licensed design and analysis software, CNC trainers	Design optimization and prototyping	Product design and rapid prototyping	PO5, PO9, PSO1

PART E: First Year faculty and financial Resources

(Data to be filled in for the first year course faculty and budget allocation and utilization)

E1. First Year Student-Faculty Ratio (FYSFR)

Table No. E1.1: FYSFR details.

Year	Sanctioned intake of all UG programs (S4)	No. of required faculty (RF4= S4/20)	No. of faculty members in Basic Science Courses & Humanities and Social Sciences including Management courses (NS1)	No. of faculty members in Engineering Science Courses (NS2)	Percentage= No. of faculty members ((NS1*0.8) + (NS2*0.2))/(No. of required faculty (RF4)); Percentage= ((NS1*0.8) +(NS2*0.2))/RF
2022-23(CAYm2)	180	9	0	18	40
2023-24(CAYm1)	180	9	0	18	40
2024-25(CAY)	180	9	0	18	40

E2. Budget Allocation, Utilization, and Public Accounting at Institute Level

Table No. E2.1: Budget and actual expenditure incurred at Institute level.

Items	Budgeted in 2024-2025	Actual Expenses in 2024-2025 till	Budgeted in 2023-2024	Actual Expenses in 2023-2024 till	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till
Infrastructure Built-Up	200000	1500000	200000	1500000	50000000	45000000	36550000	35000000
Library	500000	450000	500000	450000	500000	500000	500000	500000
Laboratory equipment	900000	800000	900000	800000	12000000	1100000	3600000	1100000
Teaching and non-teaching staff salary	180000000	158000000	210000000	190000000	200000000	195000000	195000000	165000000
Outreach Programs	200000	180000	200000	180000	5000000	4500000	5000000	4500000
R&D	1500000	1400000	1500000	1400000	1500000	1400000	7000000	1400000
Training, Placement and Industry linkage	5000000	450000	5000000	450000	5000000	450000	5000000	450000
SDGs	700000	650000	700000	650000	8000000	650000	8000000	650000
Entrepreneurship	500000	450000	500000	450000	5000000	450000	10000000	450000
Others, specify	3000000	250000	3000000	250000	3000000	250000	3000000	250000
Total	**192500000**	**164130000**	**222500000**	**196130000**	**290000000**	**249300000**	**273650000**	**209300000**

E3. Budget Allocation, Utilization, and Public Accounting at Program Specific Level

Table No. E3.1: Budget and actual expenditure incurred at program level.

Items	Budgeted in 2024-2025	Actual Expenses in 2024-2025 till	Budgeted in 2023-2024	Actual Expenses in 2023-2024 till	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till
Laboratory equipment	500000	230000	800000	700000	500000	400000	100000	50000
Software	300000	200000	500000	460000	300000	200000	100000	50000
SDGs	100000	90000	100000	90000	100000	90000	50000	40000
Support for faculty development	200000	150000	200000	190000	200000	183000	100000	60000
R & D	300000	250000	300000	280000	300000	247000	100000	60000
Industrial Training, Industry expert, Internship	100000	80000	100000	80000	100000	80000	50000	40000
Miscellaneous Expenses*	50000	40000	50000	30000	50000	30000	50000	25000
Total	**1550000**	**1040000**	**2050000**	**1830000**	**1550000**	**1230000**	**550000**	**325000**