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: 10758	**Date of Submission**: 09-06-2025

PART A- Profile of the Institute

A1.Name of the Institute: St Joseph Engineering College	
Year of Establishment : 2002	Location of the Institute: Mangalore
A2. Institute Address:St Joseph Engineering College,Vamanjoor Post,Mangalore 575028,Karnataka State,India.	
City:Dakshina Kannada	State:Karnataka
Pin Code:575028	Website:www.sjec.ac.in
Email:dean.qa@sjec.ac.in	Phone No(with STD Code):824-2263732
A3. Name and Address of the Affiliating University (if any):	
Name of the University :	City: Belgaum
State : Karnataka	Pin Code: 590018
A4. Type of the Institution: Autonomous CAY(2021-22)	
A5. Ownership Status: Self financing	

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

- No. of UG programs: **8**
- No. of PG programs: **2**

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 of Computer Application	2008	--	Computer Application
2	Engineering & Technology	UG	Artificial Intelligence and Machine Learning	2020	--	Artificial Intelligence and Machine Learning
3	Engineering & Technology	UG	Civil Engineering	2012	--	Civil Engineering
4	Engineering & Technology	UG	Computer Science and Business System	2021	--	Computer Science and Business System
5	Engineering & Technology	UG	Computer Science and Engineering	2002	--	Computer Science and Engineering
6	Engineering & Technology	UG	Computer Science and Engineering (Data Science)	2022	--	Computer Science and Engineering (Data Science)
7	Engineering & Technology	UG	Electrical and Electronics Engineering	2002	--	Electrical and Electronics Engineering
8	Engineering & Technology	UG	Electronics & Communication Engineering	2002	--	Electronics and Communication Engineering
9	Engineering & Technology	UG	Mechanical Engineering	2002	--	Mechanical Engineering

10	Management	PG	Master of Business Administration	2007	--	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
Computer Science and Engineering	Yes	Computer Science and Engineering	UG
Mechanical Engineering	No	Mechanical Engineering	UG
Civil Engineering	No	Civil Engineering	UG
Electronics and Communication Engineering	No	Electronics & Communication Engineering	UG
Electrical and Electronics Engineering	No	Electrical and Electronics Engineering	UG

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

Cluster ID. Name of the Department (in table no. A7.1) Name of allied Departments/Cluster (for table no. A7.1)

No Record

PART-B: Program information

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

Table No. B1: Program details.

A. List of the Programs Offered by the Department:

SR.NO.	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/DECREASE INTAKE (if any)	YEAR OF INCREASE/DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/COMPETENT AUTHORITY ARROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCREDITED
1	Mechanical Engineering	UG	2002 / --	60	Yes	2021	120	2021	F.No. South- West/1-44643507841/ 2025/EOA Dated 05 Apr 2025	Granted accreditation for 3 years for the period (specify period)	2022	2025	4

Sanctioned Intake for Last Five Years for the Mechanical Engineering	
Academic Year	**Sanctioned Intake**
2024-25	120
2023-24	120
2022-23	120
2021-22	120
2020-21	180
2019-20	180

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 :	Shreeranga Bhat
B. Nature of appointment:	Regular

C. Qualification:	Ph.D

B3. Program Details

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

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2024-25 (CAY)	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)	2020-21 (CAYm4)	2019-20 (CAYm5)	2018-19 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	120	120	120	120	180	180	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	107	62	33	62	53	109	92
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	38	28	32	26	7	18
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	6	6	6	8	8	6
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	113	106	67	100	87	124	116

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)	120	107	6	94.17
2023-24 (CAYm1)	120	62	6	56.67
2022-23 (CAYm2)	120	33	6	32.50

Average [(ER1 + ER2 + ER3) / 3] = 61.11≡ 11.00

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	187.00	138.00
B=No. of students who graduated from the program in the stipulated course duration	85.00	115.00	102.00
Success Rate (SR)= (B/A) * 100	41.26	61.50	73.91

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 58.89

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)	6.78	7.33	6.96
Y=Total no. of successful students	62.00	39.00	68.00
Z=Total no. of students appeared in the examination	62.00	39.00	68.00
API [X*(Y/Z)]	6.78	8.66	7.63

Average API[(AP1+AP2+AP3)/3] : 7.69

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

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

Academic Performance	CAYm1 (2023-24)	CAYm2 (2022-23)	CAYm3 (2021-22)
X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2rd year/10)	6.71	7.27	7.09
Y=Total no. of successful students	67.00	99.00	85.00
Z=Total no. of students appeared in the examination	67.00	100.00	87.00
API [X * (Y/Z)]	6.71	7.20	6.93

Average API [(AP1 + AP2 + AP3)/3] : 6.95

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

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

Academic Performance	CAYm1 (2023-24)	CAYm2 (2022-23)	CAYm3 (2021-22)
X=(Mean of 3rd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 3rd year/10)	7.02	6.93	6.01
Y=Total no. of successful students	98.00	85.00	115.00
Z=Total no. of students appeared in the examination	99.00	85.00	115.00
API [X*(Y/Z)]:	6.95	6.93	6.01

Average API [(AP1 + AP2 + AP3)/3] : 6.63

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	187.00	138.00
X=No. of students placed	50.00	75.00	30.00
Y=No. of students admitted to higher studies	5.00	4.00	6.00
Z= No. of students taking up entrepreneurship	0.00	0.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	26.70	42.25	26.09

Average Placement Index = (P_1 + P_2 + P_3)/3: 31.68 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	Raju K	XXXXXXX09G	Ph.D	IIT, BHU	Manufacturing Engineering	25/08/2004	20.9	Lecturer	Professor	01/09/2010	Regular	Yes		No
2	Sudheer	XXXXXXX56R	Ph.D	VTU	Materials Engineering	18/08/2005	19.9	Assistant Professor	Professor	20/07/2015	Regular	Yes		No
3	Purushothama Chippar	XXXXXXX22Q	Ph.D	Inha University	Thermal Engineering	03/08/2015	9.10	Associate Professor	Professor	01/01/2019	Regular	Yes		No
4	Shreeranga Bhat	XXXXXXX75N	Ph.D	VTU	Mechanical Engineering	11/09/2006	18.8	Assistant Professor	Professor	01/01/2019	Regular	Yes		Yes
5	James Valder	XXXXXXX20A	Ph.D	NITK	Materials Engineering	20/08/2014	9.8	Associate Professor	Associate Professor	20/08/2014	Regular	No	14/05/2024	No
6	Binu K G	XXXXXXX76C	Ph.D	Manipal University	Design Engineering	29/08/2005	19.9	Assistant Professor	Professor	01/04/2014	Regular	Yes		No
7	Sharun Mendonca	XXXXXXX77Q	Ph.D	VTU	Thermal Engineering	15/07/2013	11.10	Assistant Professor	Associate Professor	01/10/2022	Regular	Yes		No
8	Sushanth H G	XXXXXXX05P	Ph.D	VTU	Thermal Engineering	18/01/2013	12.4	Assistant Professor	Associate Professor	01/10/2022	Regular	Yes		No
9	Ravikantha Prabhu	XXXXXXX22E	Ph.D	VTU	Materials Engineering	19/08/2008	16.9	Lecturer	Associate Professor	01/10/2022	Regular	Yes		No
10	Rolvin Sunil DSilva	XXXXXXX62K	Ph.D	VTU	Thermal Engineering	16/08/2005	19.9	Lecturer	Associate Professor	01/10/2022	Regular	Yes		No
11	Pavana Kumar B	XXXXXXX15B	Ph.D	VTU	Manufacturing Engineering	01/08/2013	11.10	Assistant Professor	Associate Professor	01/10/2022	Regular	Yes		No
12	Sampath Kumar	XXXXXXX21N	M.Tech	VTU	Energy engineering	14/08/2006	17.9	Assistant Professor	Assistant Professor		Regular	No	14/05/2024	No
13	Prashanth Kumar	XXXXXXX43M	M.Tech	VTU	Thermal Engineering	01/09/2006	18.9	Assistant Professor	Assistant Professor		Regular	Yes		No
14	Prathviraj H	XXXXXXX14B	M.Tech	VTU	Energy engineering	21/08/2006	18.9	Assistant Professor	Assistant Professor		Regular	Yes		No
15	Rudolf Charles Dsouza	XXXXXXX01M	XXXXXXXXXXXXXXXXng)	VTU	Manufacturing Engineering	01/02/2007	18.4	Assistant Professor	Assistant Professor		Regular	Yes		No
16	Vijay V S	XXXXXXX01F	Ph.D	VTU	Thermal Engineering	15/07/2015	9.10	Assistant Professor	Assistant Professor		Regular	Yes		No
17	Noel Deepak Shiri	XXXXXXX26L	M.Tech	VTU	Computational Analysis in Mechnical Sciences	16/07/2009	15.10	Lecturer	Assistant Professor		Regular	Yes		No

18	Swaraj D Lewis	XXXXXXX36B	Ph.D	VTU	Thermal Engineering	16/01/2014	11.4	Assistant Professor	Assistant Professor		Regular	Yes		No
19	Vinoothan Kaliveer	XXXXXXX29R	M.Tech	VTU	Computational Analysis in Mechnical Sciences	10/08/2011	13.9	Lecturer	Assistant Professor		Regular	Yes		No
20	Yathish Kumar	XXXXXXX15N	M.Tech	VTU	Computational Analysis in Mechnical Sciences	18/09/2014	10.8	Lecturer	Assistant Professor		Regular	Yes		No
21	Ashwin Shetty	XXXXXXX77G	Ph.D	VTU	Materials Engineering	10/08/2011	13.9	Lecturer	Assistant Professor		Regular	Yes		No
22	Joel Antony Dmello	XXXXXXX17P	M.Tech	VTU	Design Engineering	11/07/2016	8.10	Assistant Professor	Assistant Professor		Regular	Yes		No
23	Poornesh M	XXXXXXX40K	M.Tech	VTU	Design Engineering	15/06/2015	9.11	Assistant Professor	Assistant Professor		Regular	Yes		No
24	Ramya M	XXXXXXX24A	M.Tech	VTU	Thermal Engineering	07/07/2014	10.10	Assistant Professor	Assistant Professor		Regular	Yes		No
25	Rajesh Belchada	XXXXXXX67G	M.Tech	NITK	Thermal Engineering	13/12/2021	3.5	Assistant Professor	Assistant Professor		Regular	Yes		No
26	Abhijit S	XXXXXXX65C	M.Tech	VTU	Design Engineering	01/07/2022	2.11	Assistant Professor	Assistant Professor		Regular	Yes		No
27	Canute Sherwin	XXXXXXX94C	Ph.D	VTU	Materials Engineering	16/07/2018	4.9	Assistant Professor	Assistant Professor		Regular	No	28/04/2023	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(2024-25)	CAYm1 (2023-24)	CAYm2 (2022-23)
UG1.B	132	132	132
UG1.C	132	132	198
UG1.D	132	198	198
UG1: Mechanical Engineering	**396**	**462**	**528**
DS=Total no. of students in all UG and PG programs in the Department	396	462	528
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=** 396	**S2=** 462	**S3=** 528
DF=Total no. of faculty members in the Department	24	26	26
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=** 24	**F2=** 26	**F3=** 26
FF=The faculty members in F who have a 100% teaching load in the first-year courses	5	5	4
Student Faculty Ratio (SFR)=S/(F-FF)	**SFR1= 20.84**	**SFR2= 22.00**	**SFR3= 24.00**
Average SFR for 3 years	**SFR= 22.28**		

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)	12	12	19.00	22.11
2023-24(CAYm1)	13	13	23.00	19.78
2022-23(CAYm2)	11	15	26.00	16.35

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	2.00	5.00	4.00	5.00	13.00	14.00
2023-24	2.00	5.00	5.00	6.00	15.00	15.00

2022-23	2.00	5.00	5.00	1.00	17.00	20.00
Average	RF1=2.00	AF1=5.00	RF2=4.67	AF2=4.00	RF2=15.00	AF2=16.33

C5. Visiting/Adjunct Faculty/Professor of Practice

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

(CAYm1)

(CAYm2)

(CAYm3)

C6. Academic Research

Table No. C6.1: Faculty publication details.

S.No.	Item	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)
1	No. of peer reviewed journal papers published	31	11	11
2	No. of peer reviewed conference papers published	2	9	1
3	No. of books/book chapters published	0	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
Dr. Anjali Ganesh	Dr. Shreeranga Bhat Dr. Binu K G	Department of Mechanical Engineering	Upskilling and Reskilling of Artisans in Dakshina Kannada, Udupi and Uttara Kannada Districts with respect to Skill India Mission of Pradhan Mantri Kaushal Vikas Yojana 4.0	Indian Council of Social Science Research	one year	12.00
Dr. Purushothama Chippar		Department of Mechanical Engineering	Drive Modes Based Tire Inflation Control System	KSCST	one year	0.10
						Amount received (Rs.):12.10

(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
Mr. Vijay V S		Mechanical Engineering	STUDY ON CONVERTING ARECA HUSK INTO BIOMASS FUEL	KSCST	one year	0.07
Mr. Ashwin Shetty	Mr. Joel A Dmello	Mechanical Engineering	Design and Fabrication of Paddy-Dust Cleaning Machine	KSCST	one year	0.09
						Amount received (Rs.):0.16

(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. SUSHANTH H GOWDA		Mechanical Engineering	EXTRACTION OF OIL& PRODUCTION OF BIODIESEL FROM HEMP SEED AS A FEEDSTOCK AND ANALYSE THE PERFORMANCE, EMISSION& COMBUSTION CHARACTERISTICS RUNNING ON CI ENGINE AT DIFFERENT INJECTION TIMINGS	KSCST	one year	0.12
						Amount received (Rs.):0.12

Total Amount (Lacs) Received for the Past 3 Years: 12.38

Note*:

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

C8. Consultancy Work

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

(CAYm1)

(CAYm2)

(CAYm3)

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

Note*:

- Only consultancy projects will be considered. Infrastructure-based projects will not be considered here.

C9. Institution Seed Money or Internal Research Grant to its Faculty for Research Work

Table No. C9.1: List of faculty members received seed money or internal research grant from the Institution.

(CAYm1)

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
Raju K	Investigation on evolution of Hydrogen in alkaline solution from electro deposited nickel Molybdenum	One year	1.09	1.09	Research Paper
Shreeranga Bhat	Minitab predictive analytics software licenses	One Year	1.20	1.20	Research Paper
			Amount received (Rs.): 2.29		

(CAYm2)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
-	-	-			-
			Amount received (Rs.): 0		

(CAYm3)

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 Sudheer M & Mr Ravikantha Prabhu	Study of flammability properties of polymers (plastics) and its composites	one year	2.80	2.80	Published Paper
			Amount received (Rs.): 2.80		

Total amount (Lacs) received for the past 3 years : 5.09

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	Machine Shop	25	1. Drilling Machine 2. Hydraulic power hacksaw machine 3. Electric drilling machine 4. Bench	8x3hrs 24 Hrs	Mr. James Manoj Masca	Foreman Lab Instructo	Diploma-AE B.E- ME, C
2	Foundry & Forging Lab	25	1. Smithy hearth 2. Blower (3 HP. motor) 3. Sand testing equipment's ● Sieve shaker ●	8x3hrs 24 Hrs /	Mr Immanuel Jayakarar	Lab Assistant Lab Ass	Diploma -ME Craftmans
3	Metallography & Material Testing Lab	25	1. Universal Testing machine 2. Impact Testing machine 3. Rockwell Hardness tester 4.	8x3hrs 24 Hrs /	Mr Gunakara	Lab Instructor	Diploma-ME
4	CAD / CAM Lab	50	1. Computers -81 16 GB RAM NVME-M.2 1 TB HDD 19.5" Monitor 2. APLAB Make 20 KVA,	CAMD: Odd: 8:	Mr Harshith Mr Immanu	Lab Instructor, Lab Ass	Diploma-ME (A.M.I.E) [
5	Mechanical Measurements & Metrology Lab	25	1. Toolmakers Microscopes & Accessories 2. Lathe Tool Dynamometer 3. Drill Tool	8x3hrs 24 Hrs /	Ms. Jayashree	Lab Instructor	Diploma-ME
6	Energy Conversion Engineering Lab	25	1. Cleveland Open cup Apparatus 2. Pensky Martin closed cup Apparatus 3. Redwood	8x3hrs 24 Hrs /	Mr. Rajesh	Lab Instructor	Diploma-ME
7	Heat and Mass Transfer Lab	25	1. Free convection apparatus 2. Forced Convection apparatus 3. Pin Fin Apparatus 4.	8x3hrs 24 Hrs /	Mr. Rajesh	Lab Instructor	Diploma-ME
8	Design Lab	25	1. Journal Bearing Test-rig 2. Vibration Equipment 3. Whirling of Shaft 4. Balancing of	8x3hrs 24 Hrs /	Mr Gunakara	Lab Instructor	ITI, Diploma-ME

9	Fluid Mechanics & Machines Lab	25	1. Pipe Friction Apparatus 2. Loss of Head on Pipe Fitting Apparatus 3. Impact of Jet on vanes 4. Orifices and Venturimeter and Rotameter 5	8x3hrs 24 Hrs /	Ms Jayashree	Lab Instructor	Diploma -ME
10	Computer Aided Engg. Drawing Lab	60	1. i-5 Desktop Systems Computers -40 16 GB RAM NVME-M.2 1 TB HDD 19.5" Monitor 2. Laser Printer V.3 7.5 KVA Power One make UPS	Odd: 8x3hrs 24	Mr. Christopher Cutinha	Lab Instructor Lab Instr	Diploma-ME Diploma-M
11	CIM and Automation Lab	25	1. i-5 Desktop Systems,Computers -4616 GB RAM NVME-M.21 TB HDD19.5" Monitor 2. 2. Details of UPS: 20KVA, 3 online ups with 30	8x3 hrs 24 Hrs	Mr. Rajesha	Lab Instructor	Diploma-ME

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Machine Shop	1. All procedures which need to be conducted alone or after-hours need to be reviewed for hazards and must be approved by the Head of the Department. 2. The students are made aware of the location of all exits, evacuation route, first aid kit, eye wash, and fire extinguisher. 3. Students are made to wear approved eye protection (safety glasses, or goggles) at all times in some of the laboratories. 4. Protective Clothing (Uniform). 5. Shoes must completely cover the foot. No sandals or crocs are allowed. 6. Long hair must be tied back, and all loose clothing or dangling jewelry must be secured or removed while in the laboratory. 7. No food or drink of any kind in the laboratory. 8. No equipment is allowed to be operated without proper training or demonstrated competency. 9. All aisles and work space is kept clear of clutter. All exits, fire extinguishers, electrical disconnect and eye washes remain accessible at all times. 10. All equipment guards remain in place. Equipment's are not allowed to be modified without approval of the Head of the Department who will do a hazard assessment associated with proposed changes. 11. Any unsafe or dangerous behavior must be reported to the Course instructor/Lab in charge/ head of the Department. 12. All electrical work is reviewed by an electrician prior to use.
2	Foundry & Forging Lab	1. All procedures which need to be conducted alone or after-hours need to be reviewed for hazards and must be approved by the Head of the Department. 2. The students are made aware of the location of all exits, evacuation route, first aid kit, eye wash, and fire extinguisher. 3. Students are made to wear approved eye protection (safety glasses, or goggles) at all times in some of the laboratories. 4. Protective Clothing (Uniform) 5. Shoes must completely cover the foot. No sandals or crocs are allowed. 6. Long hair must be tied back, and all loose clothing or dangling jewelry must be secured or removed while in the laboratory. 7. No equipment is allowed to be operated without proper training or demonstrated competency. 8. All aisles and work space is kept clear of clutter. All exits, fire extinguishers, electrical disconnect and eye washes remain accessible at all times. 9. All equipment guards remain in place. Equipment's are not allowed to be modified without approval of the Head of the Department who will do a hazard assessment associated with proposed changes. 10. Any unsafe or dangerous behavior must be reported to the Course instructor/Lab in charge/ head of the Department. 11. All electrical work is reviewed by an electrician prior to use.
3	Metallography & Material Testing Lab	1. All procedures which need to be conducted alone or after-hours need to be reviewed for hazards and must be approved by the Head of the Department. 2. The students are made aware of the location of all exits, evacuation route, first aid kit, eye wash, and fire extinguisher. 3. Students are made to wear approved eye protection (safety glasses, or goggles) at all times in some of the laboratories. 4. Protective Clothing (Uniform) 5. Shoes must completely cover the foot. No sandals or crocs are allowed. 6. Long hair must be tied back, and all loose clothing or dangling jewelry must be secured or removed while in the laboratory. 7. No equipment is allowed to be operated without proper training or demonstrated competency. 8. All aisles and work space is kept clear of clutter. All exits, fire extinguishers, electrical disconnect and eye washes remain accessible at all times. 9. All equipment guards remain in place. Equipment's are not allowed to be modified without approval of the Head of the Department who will do a hazard assessment associated with proposed changes. 10. Any unsafe or dangerous behavior must be reported to the Course instructor/Lab in charge/ head of the Department. 11. All electrical work is reviewed by an electrician prior to use.
4	CAD / CAM Lab	1. Do not plug in external devices without scanning them for computer viruses. 2. Try not to touch any of the circuit boards and power sockets when a device is connected to them and switched on. 3. Students should not attempt to repair, open, tamper or interfere with any of the computer device. 4. Turn off the machine once you are done using it. 5. Do not eat or drink in the laboratory. 6. The students are made aware of the location of all exits, evacuation route, first aid kit, eye wash, and fire extinguisher. 7. All electrical work is reviewed by an electrician prior to use.

5	Mechanical Measurements & Metrology Lab	1. All procedures which need to be conducted alone or after-hours need to be reviewed for hazards and must be approved by the Head of the Department. 2. The students are made aware of the location of all exits, evacuation route, first aid kit, eye wash, and fire extinguisher. 3. All electrical work is reviewed by an electrician prior to use.
6	Energy Conversion Engineering Lab	1. All procedures which need to be conducted alone or after-hours need to be reviewed for hazards and must be approved by the Head of the Department. 2. The students are made aware of the location of all exits, evacuation route, first aid kit, eye wash, and fire extinguisher. 3. Students are made to wear approved eye protection (safety glasses, or goggles) at all times in some of the laboratories. 4. Shoes must completely cover the foot. No sandals or crocs are allowed. 5. Long hair must be tied back, and all loose clothing or dangling jewelry must be secured or removed while in the laboratory. 6. No equipment is allowed to be operated without proper training or demonstrated competency. 7. All aisles and work space is kept clear of clutter. All exits, fire extinguishers, electrical disconnect and eye washes remain accessible at all times. 8. All equipment guards remain in place. Equipment's are not allowed to be modified without approval of the Head of the Department who will do a hazard assessment associated with proposed changes. 9. All waste chemicals are put in approved and labeled containers. No hazardous waste is allowed to be dumped into sinks or garbage cans. 10. Any unsafe or dangerous behavior must be reported to the Course instructor/Lab in charge/ head of the Department. 11. All electrical work is reviewed by an electrician prior to use.
7	Heat and Mass Transfer Lab	1. All procedures which need to be conducted alone or after-hours need to be reviewed for hazards and must be approved by the Head of the Department. 2. The students are made aware of the location of all exits, evacuation route, first aid kit, eye wash, and fire extinguisher. 3. Shoes must completely cover the foot. No sandals or crocs are allowed. 4. Long hair must be tied back, and all loose clothing or dangling jewelry must be secured or removed while in the laboratory. 5. No equipment is allowed to be operated without proper training or demonstrated competency. 6. All equipment guards remain in place. Equipment's are not allowed to be modified without approval of the Head of the Department who will do a hazard assessment associated with proposed changes. 7. All electrical work is reviewed by an electrician prior to use.
8	Design Lab	1. All procedures which need to be conducted alone or after-hours need to be reviewed for hazards and must be approved by the Head of the Department. 2. The students are made aware of the location of all exits, evacuation route, first aid kit, eye wash, and fire extinguisher. 3. Shoes must completely cover the foot. No sandals or crocs are allowed. 4. Long hair must be tied back, and all loose clothing or dangling jewelry must be secured or removed while in the laboratory. 5. No equipment is allowed to be operated without proper training or demonstrated competency. 6. All equipment guards remain in place. Equipment's are not allowed to be modified without approval of the Head of the Department who will do a hazard assessment associated with proposed changes. 7. All electrical work is reviewed by an electrician prior to use.
9	Fluid Mechanics & Machines Lab	1. All procedures which need to be conducted alone or after-hours need to be reviewed for hazards and must be approved by the Head of the Department. 2. The students are made aware of the location of all exits, evacuation route, first aid kit, eye wash, and fire extinguisher. 3. Students are made to wear approved eye protection (safety glasses, or goggles) at all times in some of the laboratories. 4. Shoes must completely cover the foot. No sandals or crocs are allowed. 5. Long hair must be tied back, and all loose clothing or dangling jewelry must be secured or removed while in the laboratory. 6. No equipment is allowed to be operated without proper training or demonstrated competency. 7. All aisles and work space is kept clear of clutter. All exits, fire extinguishers, electrical disconnect and eye washes remain accessible at all times. 8. All equipment guards remain in place. Equipment's are not allowed to be modified without approval of the Head of the Department who will do a hazard assessment associated with proposed changes. 9. Any unsafe or dangerous behavior must be reported to the Course instructor/Lab in charge/ head of the Department. 10. All electrical work is reviewed by an electrician prior to use.
10	Computer Aided Engg. Drawing Lab	1. Do not plug in external devices without scanning them for computer viruses. 2. Try not to touch any of the circuit boards and power sockets when a device is connected to them and switched on. 3. Students should not attempt to repair, open, tamper or interfere with any of the computer devices. 4. Turn off the machine once you are done using it. 5. Do not eat or drink in the laboratory. 6. The students are made aware of the location of all exits, evacuation route, first aid kit, eye wash, and fire extinguisher. 7. All electrical work is reviewed by an electrician prior to use.
11	CIM and Automation Lab	1. Do not plug in external devices without scanning them for computer viruses. 2. Try not to touch any of the circuit boards and power sockets when a device is connected to them and switched on. 3. Students should not attempt to repair, open, tamper or interfere with any of the computer devices. 4. The workspace should be situated away from carpeted areas since carpets build up electrostatic charges. 5. Turn off the machine once you are done using it. 6. Do not eat or drink in the laboratory. 7. The students are made aware of the location of all exits, evacuation route, first aid kit, eye wash, and fire extinguisher. 8. All electrical work is reviewed by an electrician prior to use.

D3. Project Laboratory/Research Laboratory

Dedicated project lab: The Project Lab is a lab where all students have ready access to six dedicated computers with high speed internet connection (1GBPS). The primary purpose of the lab is to provide the space and resources needed by students to complete their Design and general student Projects. The lab is also available for students who need to complete projects and assignments from other courses and laboratories. The lab also serves as a meeting location for groups of students working on team projects. Students also use this lab to work on supplemental learning projects to enhance their understanding of class and lab assignments. There is a separate dedicated place where the student projects will be stored.

Students can use the design, analysis, fabrication and testing facility available in the department for the project by giving a request letter to the head of the department through the project guide. Also students can use the facility available in the other department in case of interdisciplinary project by giving the request letter to the HOD of the department where facility available through the guide and HOD, Mechanical engineering.

The following are the facilities are used by the students to complete their min and major projects provided.

Table 7.5.1: List of facilities available in the department used by students for project work

SL. No	Name of the Facilities	Location
1	Solid Edge Version 20	CAMD Lab
2	ANSYS Version 13	FEA LAB
3	CNC turning and CNC Milling, CNC simulation software.	CIM LAB
4	Thermal Research Laboratory	Heat Transfer Lab
5	Intellisuite Software	FEA LAB
6	Computerized VCR Diesel Engine Test Rig with Exhaust Gas Analyser/ Smoke meter	Energy Conversion lab
7	High Performance Computing Facilities (with ANSYS 17.1 and STAR CCM+)	Research Lab
8	Melting Furnace	Spray forming Lab
9	Computerized High-end Pin-on-Disc Wear Testing Machine with electronic weighing balance.	Material testing lab
10	Sonicator	Research lab
11	Vickers Hardness Tester	Material testing lab
12	Computerized Impact Testing Machine (International Equipments, Mumbai)	Material testing lab
13	Computerized UTM (International Equipments, Mumbai)	Material testing lab
14	Notch cutter for impact testing (International Equipments, Mumbai)	Material testing lab
15	Festo Pneumatic systems	Industrial Automation and PLC Programming Lab
16	TIG welding machine	SAE Lab
17	3D Printer	IDEA Lab
18	Laser Cutter	IDEA Lab
19	Shell and Tube Heat Exchanger	Heat and mass transfer lab

SL. No	Name of the Facilities	Location
20	Concentric Tube Heat Exchanger	Heat and mass transfer lab
21	Metal Hydride Based Hydrogen Storage Experimental Setup	Research lab
22	Shore-D Hardness Tester	Material testing lab
23	Lathe machine, drilling machine, grinding machine, shaper, milling machine	Machine shop
24	Welding machine, bench wise	Work shop
25	Rockwell and Brinnel hardness tester	Material testing lab
26	Saybolt and Redwood viscometer	Energy conversion lab
27	Bomb and Boys gas calorimeter	Energy conversion lab
28	Casting facility	Foundry forging lab

Table 7.5.2: Project laboratory

Project lab (Room No 3312)

Computer facility with high speed internet at project lab

Applied engineering and computational analysis laboratory	Computational facility at applied engineering laboratory
	
Place to store the academic project	IDEA lab facility

Table 7.5.3: List of Projects: Batch 2024-25 (With details of lab facility used for project work)

SL No	USN	Student Name	Project Guide	Project title	Lab facility used
1	**4SO22ME423**	**Sourav M Joshi**	Dr Swaraj D Lewis	Experimental and numerical analysis of phase change material thermal storage using fins	Heat Transfer Lab, Computer aided modelling lab
	4SO22ME407	Karthik M V			
	4SO22ME414	NaikSanketDhanyavan			
	4SO21ME058	Sayed Bilal			
2	**4SO22ME418**	**Pratham K Bellarkar**	Mr Prashanth Kumar	Design and fabrication of a springless suspension system using bevel gears	Machine shop, Workshop, Computer aided modelling lab
	4SO22ME404	Ashwith U Shetty			
	4SO22ME405	Deekshith K S			
	4SO22ME416	Nithin Kumar			
3	**4SO22ME430**	**Vishwas Ragavendra**	Dr Shreeranga Bhat	Rail Guard: An intelligent inspection Bot for enhanced railway safety	Computer aided modelling lab
	4SO22ME413	Mohammed Shifan			
	4SO21ME056	Rynor Gawain Pinto			
	4SO21ME070	Vion Lloyd Lobo			

4	**4SO22ME429**	**Vinay Kumar D**	Dr Vijay V S	Design of a water dispenser unit by utilizing waste heat recovery in a VCR system	Energy Conversion Lab Computerized VCR Diesel Engine Test Rig	
	4SO22ME408	Krishna Prasad S Herala				
	4SO22ME417	Prasanna A Suvarna				
	4SO22ME427	Varsha M A				
5	**4SO22ME421**	**Ranjith J Shetty**	Dr Sushanth H G	Thermal behavior of silver oxide nanofluid in a concentric tube heat exchanger and effect of inserts on heat transfer enhancement	Heat Transfer Lab	
	4SO22ME406	Gaurav				
	4SO22ME415	Newton Lawrence Lobo				
	4SO21ME073	Sinchana K C				
6	**4SO21ME060**	**Shashanka Bhat M**	Dr Pavana Kumara B	Inspection and cleaning of four inch pipe using robot	Computer aided modelling lab	
	4SO22ME403	AshitoshPatrekar				
	4SO22ME422	ShreyankDinakarGunagi				
	4SO22ME426	TanojkumarHarijan				
7	**4SO21ME069**	**Vinith**	Mr Rajesh Belchada	Fluidic propulsion system	Machine shop, Workshop, Computer aided modelling lab.	
	4SO22ME067	Thushar Kamath				
	4SO22ME410	Melber Stephen Sequeira				
	4SO22ME424	Srihari RakshanKottary				
8	**4SO22ME402**	**Amosh**	Mr Yathish Kumar	Design and development of smart mini gold fume extractor	Machine shop, Workshop, Computer aided modelling lab.	
	4SO22ME400	Abhishek UllasNaik				
	4SO22ME409	Manvith K J				
	4SO22ME412	Mevan Stephen Dsouza				
9	**4SO21ME059**	**Sayed Sahil Ahamed**	Dr Rolvin S D'Silva	Hybrid portable refrigeration	Workshop, Heat Transfer Lab	
	4SO21ME063	Sheik Mohammed Safhan				
	4SO22ME411	MelronArulu				
	4SO22ME431	ZeeshanUl-Haque				
10	4SO21ME043	Muhammed Rihan	Ms Ramya M	Automated solar based road signal board cleaner using motors		
	4SO22ME419	Rahul RajendraPednekar				
	4SO22ME425	SumanthNamdevNaik				

11	**4SO21ME065**	**Sidharth E**	Mr Prathviraj H	Pneumatic paper cutting machine with a proximity sensor based safety mechanism	Machine shop, Workshop, Computer aided modelling lab.	
	4SO21ME004	Abhay L				
	4SO21ME047	NirmalVenu				
	4SO22ME428	Varun Bhandary				
12	**4SO21ME048**	**Nolan Aaron Pinto**	Mr Abhijith S	Design and development of an automated 3 D Printed robotic arm with RFID based object sorting	Machine shop, Workshop, Computer aided modelling lab.	
	4SO21ME025	HimanshuSaluja				
	4SO21ME050	Jeevaths P H				
	4SO22ME420	Ramesh Kashiram				
13	**4SO21ME045**	**Nelson Sequeira**	Dr Binu K G	Design, and analysis of polymer journal bearing	Computer aided modelling lab.	
	4SO21ME027	Juvence Leon Lobo				
	4SO21ME055	Roydon Pinto				
	4SO21ME064	Sheikh Mohammed Humail				
14	**4SO21ME033**	**Mohammad Riyaz**	Mr Poornesh M	Fabrication and Analysis ofrecyclable thermoplastic polymer Composite	Material Testing Lab (Pin-on-Disc Wear Testing Machine with electronic weighing balance, Rockwell hardness tester, Furnace, Universal testing machine)	
	4SO21ME031	Mahmood Rifath				
	4SO21ME062	Sheik Mohammed Hilal				
	4SO21ME071	Zakir Hussain				
15	**4SO21ME057**	**Sandesh Bekal**	Dr Purushothama Chippar	Automated tire inflation and deflation system	Machine shop, Workshop, Computer aided modelling lab.	
	4SO21ME007	Akash				
	4SO21ME053	Renish Joel Rebello				
	4SO21ME061	Shaun ClitusD'Sa				
16	**4SO21ME008**	**Akhil P B**	Mr.Vinoothan Kaliveer	Characterization studies on Nickel coating on stainless steel for hydrogen evolution reaction	Computer aided modelling lab.	
	4SO21ME016	Brayan John D'Souza				
	4SO21ME054	Renol D'Souza				
	4SO22ME401	Alwyn Lobo				

17	**4SO21ME021**	**Denwil Brynoth Fernandes**	Dr Sudheer M	Fabrication and Analysis of mechanical properties of epoxy Composite with hollow glass-microspheres	Material Testing Lab -electronic weighing balance, Rockwell hardness tester, Furnace, Universal testing machine	
	4SO21ME022	Hadef Ibrahim				
	4SO21ME038	Mohammed Asmaan				
	4SO21ME049	P D ShreyasKsheersagar				
18	**4SO21ME009**	**Akshay P Nair**	Dr Ravikanth Prabhu	Fabrication and analysis of forged flax fibre composites	Material Testing Lab (Pin-on-Disc Wear Testing Machine with electronic weighing balance, Rockwell hardness tester, Furnace, Universal testing machine	
	4SO21ME013	Anujna M				
	4SO21ME028	Kaushal Manoj				
	4SO21ME035	Mohd. AfradAboobaker				
19	**4SO21ME030**	**M Santhosh Prabhu**	Dr Raju K	Design and fabrication of power operated decorticator for black pepper	Machine sop, Workshop, Computer aided modelling lab.	
	4SO21ME006	Adithya S Shetty				
	4SO21ME017	Chethan S Shetty				
	4SO21ME018	Daniel Anthony Fernandes				
20	**4SO21ME052**	**Prathik S Rao**	Mr Joel A D'Mello	Design and fabrication of Casket lowering mechanism	Machine shop, Workshop, Computer aided modelling lab.	
	4SO21ME029	Kiran Godfrey Pinto				
	4SO21ME051	Prathamesh P Acharya				
	4SO21ME068	Vaibhava K				
21	**4SO21ME032**	**Mayur**	Mr Ashwin Shetty	Advanced fabrication for high performance power lift system	Machine shop, Workshop, Computer aided modelling lab.	
	4SO21ME010	Alden Mark Alvares				
	4SO21ME012	Anson Fernandes				
	4SO21ME046	Nihal R K				
22	**4SO21ME036**	**Mohammed Amaan**	Dr Raju K	Design and fabrication cost effective battery powered wheel chair	Machine shop, Workshop, Computer aided modelling lab.	
	4SO21ME001	Abdul Hasan Rilwan				
	4SO21ME002	Abdul KhadarSanoohHamee				
	4SO21ME019	Davood Hakeem				

23	**4SO21ME026**	**Ismail Raheez**	Dr Sharun Mendonca	Mechanical behavior of e-glass/coir epoxy reinforced hybrid composite	Material Testing Lab (Pin-on-Disc weighing balance, Rockwell hardness tester, Furnace, Universal testing machine)	
	4SO21ME003	Abdul Mehazir				
	4SO21ME005	AboobakkerSiddiqSahood				
	4SO21ME015	Ayaan Mohammed Shameer				
24	**4SO21ME039**	**Mohammed Eyad**	Mr Noel Deepak Shiri	Design and fabrication of chamber for carbon mineralization of industrial residue for enhanced concrete	Machine shop, Workshop, Computer aided modelling lab.	
	4SO21ME040	Mohammed MuthasibBaji				
	4SO21ME041	Mohammed Rehan				
	4SO21ME042	Mohammed Zaid				
25	**4SO21ME037**	**Mohammed Anas**	Mr Rudolf C D'Souza	Reciprocating auto pneumatic hacksaw	Machine shop, Workshop, Computer aided modelling lab.	
	4SO21ME011	Ameen Ahsan				
	4SO21ME014	Aqeel Ahmed Sajid				
	4SO21ME023	Hasan Ahmed Razi				

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)	720	36	31	32	87
2023-24(CAYm1)	780	39	41	36	103
2024-25(CAY)	780	39	44	38	110

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	40200000	40202708	47750000	2587465	110500000	0	19000000	1747534
Library	5180000	5130342	5720000	4491845	4005000	3656963	3354000	3353989
Laboratory equipment	36825000	24254802	28000000	28277859	26084000	18272736	25767000	18665159
Teaching and non-teaching staff salary	214694000	216932815	193018000	188487743	155600000	169416458	146000000	139620528
Outreach Programs	133000	25479	500000	75089	500000	10634	20000	263451
R&D	10791000	5913387	9816000	2686421	6278500	3502518	6004000	2729475
Training, Placement and Industry linkage	1881000	2517801	1848000	1790301	1100000	2689745	514000	919924
SDGs	1200000	456070	5200000	1732223	0	0	0	0
Skill training expenses	18895000	16657044	13750000	12664348	13000000	11738042	6205000	9290095
Laboratory Consumables, Maintenance and Spares,	33803000	133007906	88209000	114564567	87250000	88454932	87786700	74276866
Total	**363602000**	**445098354**	**393811000**	**357357861**	**404317500**	**297742028**	**294650700**	**250867021**

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	2422500	1681500	287000	24072	2208500	1057044	1357500	7655091
Software	0	0	0	0	0	0	0	0
SDGs	0	0	0	0	0	0	0	0
Support for faculty development	200000	71522	250000	3000	250000	338414	250000	100701
R & D	800000	1230454	700000	693194	1000000	553510	200000	798501
Industrial Training, Industry expert, Internship	2590000	23369	0	32792	0	57927	0	0
Miscellaneous Expenses*	0	0	0	0	0	0	0	0
Total	**6012500**	**3006845**	**1237000**	**753058**	**3458500**	**2006895**	**1807500**	**8554293**