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: 10572	**Date of Submission**: 23-04-2025

PART A- Profile of the Institute

A1.Name of the Institute: PRASAD V. POTLURI SIDDHARTHA INSTITUTE OF TECHNOLOGY	
Year of Establishment : 1998	Location of the Institute: Lat 16.4877°, Long 80.6941°
A2. Institute Address:VASANTHA NAGAR -POST KANURU	
City:VIJAYAWADA	State:Andhra Pradesh
Pin Code:520007	Website:www.pvpsiddhartha.ac.in
Email:PRINCIPAL@PVPSIDDHARTHA.AC.IN	Phone No(with STD Code):0866-2581699
A3. Name and Address of the Affiliating University (if any):	
Name of the University : JNTU KAKINADA	City: east Godavari
State : Andhra Pradesh	Pin Code: 533003
A4. Type of the Institution: Self-Supported Institute	
A5. Ownership Status: Self financing	

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

- No. of UG programs: **8**
- No. of PG programs: **3**

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

Sr.No.	Discipline	Level of program	Name of the program	Year of Start	Year of Closed	Name of The Department
1	Engineering & Technology	UG	Civil Engineering	2008	--	Civil Engineering
2	Engineering & Technology	UG	Computer Science and Engineering	1999	--	Computer Science and Engineering
3	Engineering & Technology	UG	Computer Science and Engineering (Artificial Intelligence & Machine Learning)	2022	--	Computer Science and Engineering (Artificial Intelligence and Machine Learning)
4	Engineering & Technology	UG	Computer Science and Engineering (Data Science)	2022	--	Computer Science and Engineering (Artificial Intelligence and Machine Learning)
5	Engineering & Technology	UG	Electrical and Electronics Engineering	2001	--	Electrical and Electronics Engineering
6	Engineering & Technology	UG	Electronics & Communication Engineering	2000	--	Electronics and Communication Engineering
7	Engineering & Technology	UG	Information Technology	1998	--	Information Technology

8	Engineering & Technology	PG	Machine Design	2008	--	Mechanical Engineering
9	Engineering & Technology	UG	Mechanical Engineering	1998	--	Mechanical Engineering
10	Engineering & Technology	PG	Microwave & Communication Engineering	2010	--	Electronics and Communication Engineering
11	Management	PG	Master of Business Administration	2008	--	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
Information Technology	Yes	Information Technology	UG
Electronics and Communication Engineering	No	Electronics & Communication Engineering	UG
Electrical and Electronics Engineering	No	Electrical and Electronics Engineering	UG
Mechanical Engineering	No	Mechanical Engineering	UG

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

No Record

PART-B: Program information

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

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

SR.NO.	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/DECREASE INTAKE (if any)	YEAR OF INCREASE/DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/COMPETENT AUTHORITY ARROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCREDITE
1	Mechanical Engineering	UG	1998 / --	60	Yes	2022	60	2022	F.No. South-Central/1-10973783567/2022/EOA; dated 7.7.2022	Granted accreditation for 3 years for the period (specify period)	2022	2025	5

Sanctioned Intake for Last Five Years for the Machine Design	
Academic Year	**Sanctioned Intake**
2024-25	60
2023-24	60
2022-23	60
2021-22	120
2020-21	120
2019-20	120

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.B.Raghu Kumar
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)	60	60	60	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	56	53	37	68	108	94	109
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	13	20	37	24	28	23
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	3	9	7	3	0
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	62	72	60	114	139	125	132

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

B4. Enrolment Ratio in the First Year

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

Year of entry	**N (From Table 4.1)**	**N1 (From Table 4.1)**	**N4 (From Table 4.1)**	**Enrollment Ratio [(N1/N)*100]**
2024-25 (CAY)	60	6	0	103.33
2023-24 (CAYm1)	60	6	0	98.33
2022-23 (CAYm2)	60	3	0	66.67

Average [(ER1 + ER2 + ER3) / 3] = 89.44≡ 17.00

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).	144.00	148.00	143.00
B=No. of students who graduated from the program in the stipulated course duration	101.00	80.00	97.00

Success Rate (SR)= (B/A) * 100	70.14	54.05	67.83

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 64.01

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

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

Academic Performance	CAYm1(2023-24)	CAYm2(2022-23)	CAYm3 (2021-22)
Mean of CGPA or mean percentage of all successful students(X)	4.47	6.89	6.49
Y=Total no. of successful students	54.00	37.00	70.00
Z=Total no. of students appeared in the examination	54.00	37.00	70.00
API [X*(Y/Z)]	4.47	6.89	6.49

Average API[(AP1+AP2+AP3)/3] : 5.95

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)	6.82	6.91	6.64
Y=Total no. of successful students	56.00	101.00	135.00
Z=Total no. of students appeared in the examination	57.00	107.00	137.00
API [X * (Y/Z)]	6.70	6.52	6.54

Average API [(AP1 + AP2 + AP3)/3] : 6.59

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)	6.77	6.82	6.46
Y=Total no. of successful students	98.00	130.00	120.00
Z=Total no. of students appeared in the examination	101.00	135.00	120.00
API [X*(Y/Z)]:	6.57	6.57	6.46

Average API [(AP1 + AP2 + AP3)/3] : 6.53

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	144.00	148.00	143.00
X=No. of students placed	87.00	68.00	73.00
Y=No. of students admitted to higher studies	8.00	11.00	21.00
Z=Total no. of students appeared in the examination	0.00	0.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	65.97	53.38	65.73

Average Placement Index = (P_1 + P_2 + P_3)/3: 61.69 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.B.Raghu Kumar	XXXXXXX21Q	Ph.D	JNTU Kakinada	Machine Design	30/06/2016	8.9	Professor	Professor	30/06/2016	Regular	Yes		Yes
2	Dr.M.S.R. Niranjan Kumar	XXXXXXX21C	Ph.D	Andhra University	Production Engineering	14/06/2012	12.9	Professor	Professor	14/06/2012	Regular	Yes		No
3	Dr. G. Phani Prasanthi	XXXXXXX92D	Ph.D	JNTU Anantapur	Machine Design	15/06/2009	15.9	Assistant Professor	Professor	01/05/2023	Regular	Yes		No
4	Dr.K.Sri Vidya	XXXXXXX83C	Ph.D	GITAM University	Production Engineering	12/11/2007	17.5	Assistant Professor	Associate Professor	01/10/2016	Regular	Yes		No
5	Dr K. Ravi Praksh Babu	XXXXXXX16N	Ph.D	JNTU Kakinada	Design and Production Engineering	12/06/2018	6.10	Associate Professor	Associate Professor	12/06/2018	Regular	Yes		No
6	Mr.U.Koteswara Rao	XXXXXXX63B	M.E/M.Tech	IIT Madras	Machine Design	03/08/2009	15.8	Assistant Professor	Associate Professor	01/03/2010	Regular	Yes		No
7	Mr. M.V.H.S.Kumar	XXXXXXX11D	M.E/M.Tech	JNTU Hyderabad	Thermal Engineering	15/10/1999	24.7	Assistant Professor	Associate Professor	01/02/2006	Regular	No	25/05/2024	No
8	Dr.G. Vijaya kumar	XXXXXXX25J	Ph.D	JNTU Hyderabad	Manufacturing Technology	11/07/2002	20.1	Assistant Professor	Professor	01/06/2013	Regular	No	30/08/2022	No
9	Dr.Sd.Abdul Kalam	XXXXXXX15Q	Ph.D	JNTU Kakinada	Machine Design	01/11/2008	16.5	Assistant Professor	Assistant Professor		Regular	Yes		No
10	Dr.M.Naga Swapna Sri	XXXXXXX83B	Ph.D	Acharya Nagarjuna University	CAD/CAM	01/06/2013	11.10	Assistant Professor	Assistant Professor		Regular	Yes		No
11	Dr.P.Anusha	XXXXXXX61H	Ph.D	Acharya Nagarjuna University	Heat Transfer	23/11/2010	14.4	Assistant Professor	Assistant Professor		Regular	Yes		No
12	Dr.Ch. Kishore Reddy	XXXXXXX89C	Ph.D	Acharya Nagarjuna University	CAD/CAM	29/07/2013	11.4	Assistant Professor	Assistant Professor		Regular	No	27/11/2024	No
13	Dr T. Rama krishna	XXXXXXX81M	Ph.D	IIT Kharagpur	Thermal Engineering	16/07/2021	1.9	Assistant Professor	Assistant Professor		Regular	No	01/05/2023	No
14	Dr. K.I.Vishnu Vandana	XXXXXXX44F	Ph.D	Andhra University	CAD/CAM	10/06/2011	13.10	Assistant Professor	Assistant Professor		Regular	Yes		No

15	Dr .M.Rajya Lakshmi	XXXXXXX44B	Ph.D	Acharya Nagarjuna University	Computer Integrated Manufacturing (CIM)	31/05/2012	12.10	Assistant Professor	Assistant Professor		Regular	Yes		No
16	Dr. M.Somaiah Chowdary	XXXXXXX98H	Ph.D	NIT Warangal	Machine Design	27/06/2015	9.9	Assistant Professor	Assistant Professor		Regular	Yes		No
17	Ms.E.Kavitha	XXXXXXX00N	M.E/M.Tech	Acharya Nagarjuna University	CAD/CAM	10/12/2007	17.4	Assistant Professor	Assistant Professor		Regular	Yes		No
18	Mr.G.Bala Krishna	XXXXXXX50B	M.E/M.Tech	Andhra University	CAD/CAM	16/10/2009	15.5	Assistant Professor	Assistant Professor		Regular	Yes		No
19	Mr.K.Venkata Rao	XXXXXXX66D	M.E/M.Tech	Andhra University	Heat Transfer	01/06/2013	11.10	Assistant Professor	Assistant Professor		Regular	Yes		No
20	Mr.N.Raghuram	XXXXXXX40A	M.E/M.Tech	Lovely Professional University	Mechanical Engineering	01/06/2013	11.10	Assistant Professor	Assistant Professor		Regular	Yes		No
21	Mr.Ch.Lakshmi kanth	XXXXXXX97N	M.E/M.Tech	Andhra University	Machine Design	04/06/2013	11.10	Assistant Professor	Assistant Professor		Regular	Yes		No
22	Mr.P.Mastan Rao	XXXXXXX90A	M.E/M.Tech	IIT Madras	Mechanical Engineering	09/05/2014	10.11	Assistant Professor	Assistant Professor		Regular	Yes		No
23	Mr.Ch.MohanSumanth	XXXXXXX50P	M.E/M.Tech	Osmania University	CAD/CAM	18/06/2014	10.9	Assistant Professor	Assistant Professor		Regular	Yes		No
24	Mr.T.Srinag	XXXXXXX61K	M.E/M.Tech	REC Warangal	Computer Integrated Manufacturing (CIM)	07/07/2014	10.9	Assistant Professor	Assistant Professor		Regular	Yes		No
25	Mr.P.Gopala Krishnaiah	XXXXXXX09K	M.E/M.Tech	Acharya Nagarjuna University	Production Engineering	26/06/2015	9.9	Assistant Professor	Assistant Professor		Regular	Yes		No
26	Ms.Vidya Chaparala	XXXXXXX00F	M.E/M.Tech	JNTU Hyderabad	Thermal Engineering	29/06/2015	9.9	Assistant Professor	Assistant Professor		Regular	Yes		No
27	Ms.M.Radha Devi	XXXXXXX75M	M.E/M.Tech	JNTU Kakinada	CAD/CAM	09/05/2016	8.11	Assistant Professor	Assistant Professor		Regular	Yes		No
28	Mr T. J. Prasanna Kumar	XXXXXXX48F	M.E/M.Tech	JNTU Kakinada	Thermal Engineering	17/11/2011	13.5	Assistant Professor	Assistant Professor		Regular	Yes		No
29	Mr J. Surendra	XXXXXXX04L	M.E/M.Tech	JNTU Hyderabad	CAD/CAM	31/12/2019	5.3	Assistant Professor	Assistant Professor		Regular	Yes		No
30	Ms.V. Sravani	XXXXXXX40L	M.E/M.Tech	JNTU Kakinada	Thermal Engineering	06/11/2021	3.5	Assistant Professor	Assistant Professor		Regular	Yes		No
31	Mr. I. Manoj Kumar	XXXXXXX95L	M.E/M.Tech	JNTU Kakinada	CAD/CAM	09/11/2021	2.5	Assistant Professor	Assistant Professor		Regular	No	30/04/2024	No
32	Dr.K.Ravi	XXXXXXX51E	Ph.D	Banaras Hindu University	Process Metallurgy	07/11/2013	8.8	Professor	Professor	07/11/2013	Regular	No	08/07/2022	No

33	Mr.K.Sriram Vikas	XXXXXXX91M	M.E/M.Tech	Lovely Professional University	Mechanical Engineering	30/06/2014	8.1	Assistant Professor	Assistant Professor		Regular	No	01/08/2022	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 Department1

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

Description	**CAY(2024-25)**	**CAYm1 (2023-24)**	**CAYm2 (2022-23)**
UG1.B	66	66	132
UG1.C	66	132	132
UG1.D	132	132	132
UG1: Mechanical Engineering	**264**	**330**	**396**
PG1.A	6	6	6
PG1.B	6	6	6
PG1: Machine Design	**12**	**12**	**12**
DS=Total no. of students in all UG and PG programs in the Department	276	342	408
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=** 276	**S2=** 342	**S3=** 408
DF=Total no. of faculty members in the Department	26	29	30
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=** 26	**F2=** 29	**F3=** 30
FF=The faculty members in F who have a 100% teaching load in the first-year courses	4	4	3
Student Faculty Ratio (SFR)=S/(F-FF)	**SFR1= 12.55**	**SFR2= 13.68**	**SFR3= 15.11**
Average SFR for 3 years	**SFR= 13.78**		

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)	11	15	13.00	32.69
2023-24(CAYm1)	12	17	17.00	27.65
2022-23(CAYm2)	11	19	20.00	23.25

C4. Faculty Cadre Proportion

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

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

Year	Professors		Associate Professors		Assistant Professors	
	Required RF1	Available AF1	Required RF2	Available AF1	Required RF3	Available AF3
2024-25	1.00	3.00	3.00	2.00	9.00	21.00
2023-24	1.00	3.00	3.00	2.00	11.00	24.00
2022-23	2.00	2.00	4.00	3.00	13.00	25.00
Average	RF1=1.33	AF1=2.67	RF2=3.33	AF2=2.33	RF2=11.00	AF2=23.33

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)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr. B Raviteja	Technical Trainer	Synergem	Non Destructive Testing	25.00
2	Mr.U.Siva Satyanarayana	Managing Director	Sheetal Enterprises	Refrigeration & Air Conditioning	25.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.U.Siva Satyanarayana	Managing Director	Sheetal Enterprises	Refrigeration & Air Conditioning	25.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.Bashyam Kalyanaram	CEO	Sri Comforts	Refrigeration & Air Conditioning	25.00
2	Mr. B Raviteja	Technical Trainer	Prakasa spectro cast (P) Ltd & SynergemTechnical Trainer, Synergem	Non Destructive Testing	25.00

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	28	33	17
2	No. of peer reviewed conference papers published	11	3	5
3	No. of books/book chapters published	1	5	3

C7. Sponsored Research Project

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

(CAYm1)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. M. Naga Swapana Sri		Mechanical Engineering	Umbrella shaped Cooler	MSME	2 Years	12.07
Dr. P. Anusha		Mechanical Engineering	Prototyping Potentiality of Ionocaloric Refrigerator	ISHRAE	1 Year	0.50
						Amount received (Rs.):12.57

(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. P. Anusha		Mechanical Engineering	AI Enabled Bio Sensor to Control AC	SERB	2 Years	11.97
Dr. P. Anusha	Dr. M. Naga Swapna Sri	Mechanical Engineering	SPRG UG	ISHRAE	1 Year	0.50
						Amount received (Rs.):12.47

(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. Phani Prasanthi		Mechanical Engineering	Fabrication and characterization of bio Hybrid natural fiber reinforced composites using experimental and numerical methods	AICTE	3 Years	11.40
						Amount received (Rs.):11.40

Total Amount (Lacs) Received for the Past 3 Years: 36.44

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
G. Bala Krishna		Mechanical Engineering	Chemical Composition Analysis, Testing, tensile and flexural strength	Maheswari Projects, Patamata, Vijayawada	10 Days	0.20
Dr. Phani Prasanthi		Mechanical Engineering	Tensile and impact testing	Civil Engineering Department, VRSEC	1 day	0.01
Dr. Phani Prasanthi		Mechanical Engineering	Impact Testing	RVR&JC, Chodavaram	1 day	0.00
Dr. Phani Prasanthi		Mechanical Engineering	Tensile and impact testing	Gudlavalleru Engineering College, Gudlavalleru	1 day	0.06
Dr. Phani Prasanthi		Mechanical Engineering	Tensile and impact testing	Gudlavalleru Engineering College, Gudlavalleru	1 day	0.06
Dr.Phani Prasanthi		Mechanical Engineering	Tensile and impact testing	Bapatla Engineering College	1 day	0.01
Dr. Phani Prasanthi		Mechanical Engineering	Tensile and impact testing	Gudlavalleru Engineering College, Gudlavalleru	1 day	0.06
Dr. Phani Prasanthi		Mechanical Engineering	Tensile and flexural testing	ME Department, VRSEC	1 day	0.03
Dr. Kishore Reddy		Mechanical Engineering	Bureau of Indian Standards	Bureau of Indian Standards (BIS), Vijayawada,Standards campaign by the Standards CLUB, Dept. Of ME	1 day	0.21
						Amount received (Rs.):0.64

(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.Phani Prasanthi		Mechanical Engineering	Tensile, Bending and Impact testing of Natural Composite Materials	Gudlavalleru Engineering college, Gudlavalleru, Krishna Dt, Andhra Pradesh, India	3 days	0.20
Dr.Phani Prasanthi and Dr.B.Raghu Kumar		Mechanical Engineering	Development of the below knee and above knee Prosthetic Components	Navayuga Medical and Health Services Trust Ist floor, D.No: 54-202-11/4A, Surendra Heights, Subba Rao Colony, Vijayawada, Ap and Warangal Urban Telangana	3 Months	0.00
Dr.Phani Prasanthi		Mechanical Engineering	Tensile, Bending and Impact testing of Natural Composite Materials	Gudlavalleru Engineering college, Gudlavalleru, Krishna Dt, Andhra Pradesh, India	2 days	0.12
N.Raghu Ram		Mechanical Engineering	Utilization of Ball Milling Composites	Gudlavalleru Engineering college, Gudlavalleru, Krishna Dt, Andhra Pradesh, India	1 Day	0.03
Dr.Phani Prasanthi		Mechanical Engineering	Tensile, Bending and Impact testing of Natural Composite Materials	Gudlavalleru Engineering college, Gudlavalleru, Krishna Dt, Andhra Pradesh, India	1 Day	0.09
Dr.Phani Prasanthi		Mechanical Engineering	Tensile, Bending and Impact testing of Natural Composite Materials	VRSEC, Department of Civil Engineering, Kanuru, Vijayawada	1 Day	0.02
Dr.Phani Prasanthi		Mechanical Engineering	Tensile, Bending and Impact testing of Natural Composite Materials	VRSEC, Department of Civil Engineering, Kanuru, Vijayawada	1 Day	0.03
N.Raghu Ram	Dr.B.Raghu Kumar & U.Koteswara Rao	Mechanical Engineering	Ball milling	Gudlavalleru Engineering college, Gudlavalleru, Krishna Dt, Andhra Pradesh, India	1 Day	0.01
N.Raghu Ram		Mechanical Engineering	Ball milling	Gudlavalleru Engineering college, Gudlavalleru, Krishna Dt, Andhra Pradesh, India	1 Day	0.04
G.Bala Krishna		Mechanical Engineering	Chemical Composition Analysis, Ultrasonic testing, tensile and flexural strength	AS INfrac, Tadigadapa, Kannuru	1 Day	0.25
Dr.K.Srividya		Mechanical Engineering	Dumping system analysis	Sheetal Enterprises, Sitaram Puram, Vijayawada	1 Day	0.10
						Amount received (Rs.):0.89

(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.Phani Prasanthi		Mechanical Engineering	Tensile, Bending and Impact testing of Natural Composite Materials	Gudlavalleru Engineering college, Gudlavalleru, Krishna Dt, Andhra Pradesh, India	1 Day	0.23
Dr.Phani Prasanthi		Mechanical Engineering	Thermal Conductivity of Natural Composites	RVR& JC college of Engineering, Chandramoulipuram, Chowdavaram, Guntur-522019, India	1 Day	0.02
Dr.P.Anusha	Dr.M.Naga swapna sree	Mechanical Engineering	Assessment of LPG Gas As Alternative in Domestic Refrigerator	RVR& JC college of Engineering, Chandramoulipuram, Chowdavaram, Guntur-522019, India	1 Day	0.04
Dr.M.Naga swapna sree	Dr.P.Anusha	Mechanical Engineering	Assessment of LPG Gas As Alternative in Domestic Refrigerator	RVR& JC college of Engineering, Chandramoulipuram, Chowdavaram, Guntur-522019, India	1 Day	0.04
						Amount received (Rs.):0.33

Total amount (Lacs) received for the past 3 years: 1.86

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.M.NagaSwapna Sri	Metal Matrix Composite and Nano Material Characterization	1 Year	0.25	0.25	Scopus Paper
Dr. K.I.VishnuVandana	Machining Performance of Textured ceramic composite tool inserts.	1 Year	0.25	0.25	Scopus Paper
Dr. M.Rajya Lakshmi	Experimental Analysis of Machining parameters in Milling using machine learning algorithms	1 Year	0.25	0.25	scopus conference paper
Ch.Vidya	Stability analysis of nano coolants	1 Year	0.21	0.04	Scopus Paper
			Amount received (Rs.): 0.96		

(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.G.Bala Krishna	Estimation of Process parameters on EDM	1 Year	0.30	0.30	SCI Journal Paper
Dr.M.Rajya Lakshmi	Optimization of process parameters of pocket milling	1 Year	0.20	0.20	Scopus Journal Paper
Dr.K.I.V. Vandana	Ceramic Composites	1 Year	0.20	0.20	Scopus Conference Paper
Mr.N.Raghu Ram	Aluminium and titanium welding	1 Year	0.15	0.15	Scopus Conference Paper
Ms.Ch.Vidya	Heat exchangers	1 Year	0.21	0.20	Scopus Conference Paper
Mr.P.GopalaKrishnaiah	Nanofluid characterization	1 Year	0.24	0.18	Two conference papers, One Scopus paper
Mr.T.J. Prasanna Kumar	Characterization of ceramic Composites	1 Year	0.19	0.19	Conference paper
Dr.T.Rama Krishna	Gadolinium metal for electromagnetic refrigeration effect	1 Year	0.19	0.19	1 Journal, 1 International Conference
Dr.Ch.Kishore Reddy	Experiments on fluid flow and heat transfer in plate/porous medium	1 Year	0.25	0.25	Paper accepted in International conference
Ms.E.Kavitha	Metal Forming of Aluminium materials	1 Year	0.20	0.20	Experimentation done
Ms.M.Radha Devi	3D Printing of Aluminium Alloys	1 Year	0.22	0.00	Work in progress
			Amount received (Rs.): 2.35		

(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.P.Anusha	Gadolinium metal for electromagnetic refrigeration effect	1 Year	0.18	0.18	Scopus paper
Dr. T.Rama Krishna	Experiments on fluid flow and heat transfer in plate/porous 3medium	1 Year	0.18	0.18	Scopus paper
Mr. T. Srinag	Green Composites	1 Year	0.18	0.11	Scopus paper
Mr.T.J.Prasanna Kumar	Aerodynamic Characterization on various models	1 Year	0.18	0.18	Scopus paper
Mr. P.GopalaKrishaiah	Metal Forming of Aluminium materials	1 Year	0.18	0.18	Scopus paper
Sri Ram Vikas	Aluminium and titanium welding	1 Year	0.18	0.18	Scopus paper
N.Raghu Ram	Estimation of Process parameters on EDM	1 Year	0.18	0.18	Scopus paper
Ms. K I V Vandana	Ceramic Composites	1 Year	0.18	0.18	Scopus paper
Ms. M. Rajya Lakshmi	Machining and testing on Abrasive water jet machine	1 Year	0.18	0.18	Scopus paper
Ms.Ch.Vidya	Nanofluid characterization	1 Year	0.18	0.18	Scopus paper
G.Bala Krishna	Characterization of ceramic Composites	1 Year	0.18	0.18	Scopus paper
Dr.Phani Prasanthi	Air Quality PM Measuring Instrument for Indoor	1 Year	0.48	0.48	Equipment purchased
Dr.G.Vijay Kumar	Digital Drill Tool Dynamo Meter	1 Year	0.49	0.49	Equipment purchased
			Amount received (Rs.): 2.95		

Total amount (Lacs) received for the past 3 years : 6.26

PART D: Laboratory Infrastructure in the Department

(Data to be filled in for the Department)

D1. Adequate and Well-Equipped Laboratories, and Technical Manpower

Table No.D1.1: List of laboratories and technical manpower.

Sr. No	Name of the Laboratory	Number of students per set up(Batch Size)	Name of the Important Equipment	Weekly utilization status(all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical staff	Designation	Qualification
1	Heat transfer Lab	3	Double pipe Heat Exchanger, Re-circulating air conditioning tutor, Stefan Boltzmann's apparatus, Critical heat flux apparatus, Thermal Conductivity of	12	S.V. R. Chaitanya	Jr. Mechanic	ITI
2	Fuels Lab	3	Bomb Calorimeter, Gemini Junkers gas calorimeter, Carbon residue apparatus, Pensky Marten flash &fire point apparatus, Cleavelands (open cup) flash	12	S.V. R. Chaitanya	Jr. Mechanic	ITI
3	Material Testing Lab	3	Servo Controlled FIE Universal Testing Machine with Electronic Extensometer and Shear Test attachment, 600KN Capacity, FIE Compression	12	K. Nagendra Prasad	Jr. Mechanic	DME
4	IC Engines Lab	3	Double stage air compressor test rig, Horizontal diesel engine(single cylinder), 4-stroke single cylinder petrol engine, 4-stroke multi cylinder petrol	12	S.V. R. Chaitanya	Jr. Mechanic	ITI

5	Machine Tools Lab-II	3	Electrical Control Panel ,Indian make PL-4, S.S & S.G. Lathe with accessories – 2 No ,Indian make	12	N. Raghava Rao	Jr. Mechanic	ITI
6	Work Shop	1	Wood Turning Lathe, Arc Welding Machine, TIG Welding Machine, Band Saw Machine, 3D Printers-	18	P. Rama Krishna Rao, M	Jr. Mechanic, Jr. Mech	DCE, ITI ,ITI ,ITI, ITI, IT
7	Machine Tools Lab-1	3	Universal Radial Drilling Machine ,Universal Milling Machine, Master 18" Geared Universal Shaping	12	D. Uma Maheswara Rao	Jr. Mechanic	LME
8	Metallurgy Lab	3	Specimen Cut off M/C ,Linisher wet and dry model ,Cold Mounting Kit ,Heat Treatment furnace 5*5*12	12	T. Naresh	Jr. Mechanic	ITI
9	Machine Dynamics Lab	3	FFT Analyzer (Vibrometer Mac 810) Data Collector, Universal VIB – LAB Apparatus, Static and Dynamic	6hrs B.tech, 3h	T. Naresh	Jr. Mechanic	ITI
10	Dassaults Lab	1	CATIA ,DELMIA ,SIMILIA	6	K. Suresh	Jr. Mechanic	DME
11	CAM Lab	1	XL-TURN CNC Slant Bed Lathe ,XL-MILL ATC CNC Milling Machine, Pneumatic Chuck for Lathe ,	3	D. Uma Maheswara Rao	Jr. Mechanic	LME
12	Metrology & Instrumentation Lab	3	Surface Roughness tester , Profile Projector, Tool makers microscope , Slip Gauges, sine bar,	6	T. Naresh	Jr. Mechanic	ITI
13	Design Thinking lab	1	White Boards, HP PRO 330 Desktop Computer , Tables and Chairs	6	T. Naresh	Jr. Mechanic	ITI
14	Mechatronic s Lab	3	Basic Pneumatic Training Equipment Set ,Basic Electro Pneumatic Training Equipment Set	6	K. Suresh	Jr. Mechanic	DME
15	CAD Lab	1	DELL power edge Server T440, HP PRO 3330 I5 PCs (31 No.s), DELL I5 Systems (45 No.s) ,Dell	18hrs for B.Tec	G. Rajendra Prasad	Lab Technician	B. Tech
16	Mechanics Lab	3	Compound pendulum , Fly wheel ,Bell crank lever , Parallelogram forces apparatus ,Triangle forces	6	K.Gowri Sankar	Jr. Mechanic	B.Tech

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Heat transfer Lab	General: Fire extinguishers, Medical Kit, MCBs, Shoes Specific: Exhaust fans ,powder to stop fires , heat insulation cover for hot air blower
2	Fuels Lab	General: Fire extinguishers, Medical Kit, MCBs, Shoes Specific: Exhaust fans ,powder to stop fires

3	Material Testing Lab	General: Fire extinguishers, Medical Kit, MCBs, Shoes Specific: safety marking for individual machines , aprons, safety guard for imp[act testing machine
4	IC Engines Lab	General: Fire extinguishers, Medical Kit, MCBs, Shoes Specific: guards, shields to all engines , emergency stops , aprons , long hair must be restrained
5	Machine Tools Lab-2	General: Fire extinguishers, Medical Kit, MCBs, Shoes Specific: safety goggles , Anti skin mats, safety marking for individual machines , aprons , safety guards for rotating machines like lathes, grinding machines , etc. Gloves handle hot work pieces , long hair must be restrained.
6	Workshop	General: Fire extinguishers, Medical Kit, MCBs, Shoes Specific: safety goggles, aprons, protective clothing ,safety shoes , welding helmet , face shields fore welding , gloves , long hair must be restrained
7	Machine Tools Lab-1	General: Fire extinguishers, Medical Kit, MCBs, Shoes Specific: safety guards to the rotating equipment, safety marking for individual machines , long hair must be restrained
8	Metallurgy Lab	General: Fire Extinguisher, Medical kit, MCBs, shoes Lab Specific: Aprons, Temperature resistant gloves, cold setting molds for handling work piece before grinding, masks while using chemicals.
9	Design Thinking	General: Fire Extinguisher, Medical kit, MCBs
10	Machine Dynamics Lab	General: Fire Extinguisher, Medical kit, MCBs, shoes
11	Dassaults Lab	General: Fire Extinguisher, Medical kit, MCBs
12	CAM Lab	General: Fire Extinguisher, Medical kit, MCBs specific: Emergency stop for CNC machines,
13	Metrology & Instrumentation Lab	General: Fire Extinguisher, Medical kit, MCBs, shoes

14	Mechatronics Lab	General: Fire Extinguisher, Medical kit, MCBs, shoes specific: Pressure regulators and pressure gauges for precise pressure control and monitoring.
15	CAD Lab	General: Fire Extinguisher, Medical kit, MCBs Lab Specific: UPS
16	Mechanics Lab	General: Fire Extinguisher, Medical kit, MCBs, shoes

17	General safety precautions in all labs (Wherever it is required)	Wear Proper PPE – Always wear a lab coat, safety goggles, gloves, and closed-toe shoes to protect yourself from potential spills and splashes. Ensure Proper Ventilation – Conduct experiments in a well-ventilated area or under a fume hood to avoid inhaling harmful vapors. Handle Flammable Substances with Care – Keep liquid fuels and lubricants away from open flames, sparks, or any heat sources to prevent fire hazards. Know Fire Safety Procedures – Be aware of fire extinguisher locations (Class B for flammable liquids) and how to use them in case of emergencies. Inspect Equipment Before Use – Always check viscometers, calorimeters, and other apparatus for any leaks, cracks, or malfunctions before starting an experiment. Avoid Inhaling Fumes – Do not directly smell or inhale fumes from fuels and lubricants, always use appropriate ventilation. Handle Hot Apparatus with Caution – Many experiments involve heating,use tongs, insulated gloves, or protective tools when handling hot equipment. Dispose of Waste Properly – Never pour fuel or lubricant residues down the drain, use designated disposal containers. Label Chemicals Clearly – Ensure that all fuels and lubricants are correctly labeled and stored to avoid accidental misuse. Follow Equipment Operating Guidelines – Use Pensky Martin's, Cleveland's, and other apparatus strictly as per the provided instructions. Clean Spills Immediately – If a spill occurs, inform the instructor and clean it up using absorbent materials while following safety protocols. Keep Electrical Equipment Dry – Avoid any contact of calorimeters and other electrical instruments with water or flammable liquids. Maintain Safe Distances – Keep combustible materials away from ignition sources during flash and fire point experiments. Use Gas Cylinders Safely – If working with gaseous fuels in Junker's Calorimeter, ensure gas cylinders are properly secured and free from leaks. Never Leave Experiments Unattended – Always monitor tests, especially those involving high temperatures or flammable substances. Store Fuels Properly – Keep solid, liquid, and gaseous fuels in designated containers, away from direct heat and sunlight. Know Emergency Procedures – Familiarize yourself with emergency exits, first aid stations, and safety protocols in case of an accident. Avoid Direct Skin Contact – Do not handle lubricants or fuels with bare hands, as prolonged exposure may cause skin irritation. Receive Proper Training – Before conducting any experiment, ensure you understand the procedures and safety measures involved. Inspect Tools Before Use: Ensure hand tools and machines are in good condition and free from defects. Use the Right Tool for the Job: Avoid using inappropriate tools, as they can cause accidents. Proper Handling of Hand Tools: Store sharp tools safely and never carry them in pockets. Secure Work-pieces: Use clamps or vises to hold materials firmly when working. Follow Manufacturer's Instructions: Operate machines according to safety guidelines. Keep Hands Away from Moving Parts: Never place hands near rotating or moving machine parts. Do Not Remove Safety Guards: Keep protective guards in place on machines like lathes, grinders, and saws. Turn Off and Unplug Machines: Always disconnect machines before adjusting or repairing them. Keep a Safe Distance: Maintain a safe working distance when observing someone using a machine. Use Proper Wiring and Grounding: Ensure all electrical connections are secure and properly grounded. Turn Off Power Before Repairs: Always switch off and unplug electrical equipment before maintenance. Use Fire Extinguishers When Needed: Be familiar with the locations and operation of fire extinguishers Keep Floors Dry and Clean: Prevent slips and falls by removing oil spills, sawdust, or metal shavings. Organize Tools and Equipment: Store tools properly after use to avoid trip hazards. Dispose of Waste Properly: Use designated bins for metal scraps, wood shavings, and chemical waste. Secure Cylinders: Always store gas cylinders upright and chain them securely. Check for Leaks: Regularly inspect hoses, valves, and regulators for leaks before use. Close Valves When Not in Use: Always close gas cylinder valves when finished welding or when cylinders are not in use. Use Proper Tools: Ensure tools like snips, shears, hammers, and files are in good condition and suited for the task. Inspect Tools Before Use: Check for damaged or dull cutting tools and replace them if necessary. Secure Workpieces: Use clamps or Vises to hold metal sheets firmly while working to prevent movement. Proper Handling of Sharp Edges: Always file or deburr sharp edges after cutting to avoid injuries. Turn Off Power Before Working: Always disconnect the power supply before handling any wiring or electrical connections. Use Proper Insulated Tools: Ensure screwdrivers, pliers, and cutters have insulated handles. Follow Circuit Diagrams: Work according to approved wiring diagrams to avoid incorrect connections. Check for Live Wires: Use a tester or multimeter to verify that wires are not live before touching them. Proper Grounding: Always ground electrical installations to prevent shocks. Avoid Overloading Circuits: Do not connect too many devices to a single outlet or circuit. Handle Soldering Irons Safely: When soldering, keep the iron away from flammable materials and turn it off after use. Use Proper Wire Stripping Techniques: Avoid cutting too deep when stripping insulation to prevent conductor damage. Correct Handling of Files: Attach a proper handle to the file and never use it without one. Sawing Safety: Ensure the hacksaw blade is properly tensioned and use controlled strokes to prevent slipping.

D3. Project Laboratory/Research Laboratory

The department is having TWO (2) research laboratories and One(1) center of Excellence

- Composite Materials lab
- Refrigeration and Air conditioning lab
- Dassults 3D Lab

1.Composite Materials Lab

- The AICTE – RPS sponsored Research Laboratory for Natural Composites was established in Room 118 B, (Ground Floor) specializing in the characterization of natural composite materials.
- It focuses on evaluating fundamental Mechanical properties such as tensile strength, bending strength, impact strength, thermal conductivity and Moisture absorption all integrated with computerized analysis.
- From a utilization perspective, the lab has contributed to the publication of 20 research papers and generated consultancy projects worth approximately 1.5 lakhs.
- Equipped for both basic and advanced research, the lab also serves as a platform for patent development.
- The lab is aligned with Program Outcomes (PO1, PO2, PO3, PO4, PO5, and PO7) and is also connected to both Program-Specific Outcomes (PSO1 and PSO2)

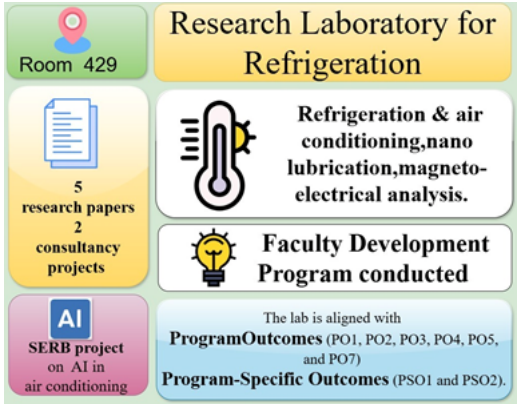
Fig. 7.5.1. Composite Materials Lab

Tensometer Impact tester Thermal conductivity Measuring app

- **Fig. 7.5.2. Research Equipment in Composite Materials Lab**

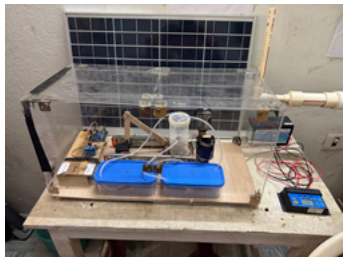
2.Refrigeration and Air conditioning lab

- The Research Laboratory for Refrigeration was established in Room 429, focusing on the study of refrigeration and air conditioning, nano lubrication, and magneto- electrical analysis. Additionally, the lab is involved in a Science and Engineering Research Board (SERB) project that integrates AI into air conditioning systems.
- From a utilization perspective, the lab has contributed to the publication of FIVE research papers and successfully completed TWO consultancy projects. Furthermore, a Faculty Development Program (FDP) was conducted under this lab to raise awareness in the field.
- The lab is aligned with Program Outcomes (PO1, PO2, PO3, PO4, PO5, and PO7) and is also connected to both Program-Specific Outcomes (PSO1 and PSO2).



- **Fig. 7.5.3. Refrigiration and Air conditionning Lab**





AI Sensor for AC Control: Experimental Setup Mobile Peltier Cooler working Model, Magnetic Refrigerator Working Model

- **Fig. 7.5.4. Research Equipment in Refrigiration and Air conditionning Lab**

3. The Dassaults 3D Lab

- It was established in Room 318 as a Center of Excellence through industry collaboration. This lab facilitates faculty training, student training, (AP Skill Development) and certification programs for students(60), in addition to supporting regular academic laboratory activities with internal assessment .
- The lab is aligned with Program Outcomes (PO1, PO2, PO3, PO4, PO5, and PO7) and is also connected to both Program-Specific Outcomes (PSO1 and PSO2).

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	28	11	68
2023-24(CAYm1)	720	36	27	14	68
2024-25(CAY)	780	39	25	14	58

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	3700000	17455000	3200000	4376000	3150000	1653000	5450000	1019000
Library	3095000	2979000	2550000	3295000	2478000	2996000	2365000	2554000
Laboratory equipment	54656000	33844000	39012000	28548000	32204000	26598000	14464000	19884000
Teaching and non-teaching staff salary	241021000	245419000	230845000	242250000	219853000	227822000	213439000	219550000
Outreach Programs	2117000	2475000	1118000	2158000	1512000	856000	1109000	92000
R&D	2525000	973000	1817000	1183000	1725000	818000	1450000	488000
Training, Placement and Industry linkage	5055000	5013000	4770000	4216000	3038000	3395000	3980000	1024000
SDGs	165000	1970000	376000	1783000	195000	369000	1220000	344000
Entrepreneurship	485000	29000	392000	98000	301000	145000	194000	12000
Other Maintenance Expenses	20871000	31828000	21967000	20927000	20911000	25766000	19499000	21467000
Total	**333690000**	**341985000**	**306047000**	**308834000**	**285367000**	**290418000**	**263170000**	**266434000**

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	580000	515101	425000	347616	178000	714362	690000	686603
Software	420000	430592	410000	393397	340000	369765	300000	310880
SDGs	325000	170037	175000	86281	125000	125349	125000	38390
Support for faculty development	75000	44675	50000	59860	50000	20500	50000	16096
R & D	300000	300000	300000	300000	300000	300000	300000	300000
Industrial Training, Industry expert, Internship	40000	38000	40000	40000	40000	40000	40000	40000
Miscellaneous Expenses*	602130	511036	751670	613305	521090	349884	837530	753933
Total	**2342130**	**2009441**	**2151670**	**1840459**	**1554090**	**1919860**	**2342530**	**2145902**