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: 11537	**Date of Submission**: 13-02-2026

PART A- Profile of the Institute

A1.Name of the Institute: BONAM VENKATA CHALAMAYYA ENGINEERING COLLEGE	
Year of Establishment : 1997	Location of the Institute: Odalarevu
A2. Institute Address:ODALAREVU,ALLAVARAM MANDAL,EAST GODAVARI DIST,ANDHRA PRADESH	
City:--Select--	State:Andhra Pradesh
Pin Code:533210	Website:www.bvcec.edu.in
Email:bvce@bvcgroup.in	Phone No(with STD Code):08856-250045
A3. Name and Address of the Affiliating University (if any):	
Name of the University : JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINAD	City: east Godavari
State : Andhra Pradesh	Pin Code: 533003
A4. Type of the Institution: Autonomous CAY(2018-19)	
A5. Ownership Status: Self financing	

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

- No. of UG programs: **10**
- No. of PG programs: **8**

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	PG	Advanced Manufacturing Systems	2012	--	Mechanical Engineering
2	Engineering & Technology	UG	Artificial Intelligence and Machine Learning	2021	--	Computer Science and Engineering
3	Engineering & Technology	UG	Civil Engineering	2009	--	Civil Engineering
4	Engineering & Technology	UG	Computer Science and Engineering	1998	--	Computer Science and Engineering
5	Engineering & Technology	PG	Computer Science and Engineering	2009	--	Computer Science and Engineering
6	Engineering & Technology	UG	Computer Science and Engineering (Artificial Intelligence & Machine Learning)	2022	--	Computer Science and Engineering
7	Engineering & Technology	UG	Computer Science and Engineering (Artificial Intelligence and Data Science)	2020	--	Computer Science and Engineering
8	Engineering & Technology	UG	Electrical and Electronics Engineering	1997	--	Electrical and Electronics Engineering
9	Engineering & Technology	UG	Electronics & Communication Engineering	1997	--	Electronics and Communication Engineering
10	Engineering & Technology	PG	Embedded Systems	2009	--	Electronics and Communication Engineering
11	Engineering & Technology	UG	Information Technology	2024	--	Computer Science and Engineering
12	Engineering & Technology	UG	Mechanical Engineering	1997	--	Mechanical Engineering
13	Engineering & Technology	UG	Mining Engineering	2015	2016	Civil Engineering
14	Engineering & Technology	PG	Power Electronics	2010	--	Electrical and Electronics Engineering
15	Engineering & Technology	PG	Software Engineering	2011	2016	Computer Science and Engineering
16	Engineering & Technology	PG	Soil Mechanics & Foundation Engineering	2012	2021	Civil Engineering
17	Engineering & Technology	PG	Structural Engineering	2015	--	Civil Engineering
18	Engineering & Technology	PG	Thermal Engineering	2010	2021	Mechanical Engineering

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

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

Name of the Department	Having Allied Departments	Name of the Program	Program Level
Mechanical Engineering	No	Mechanical Engineering	UG

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

No Record

PART-B: Program information

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

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

SR.NO.	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/ DECREASE INTAKE (if any)	YEAR OF INCREASE/ DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/COMPETENT AUTHORITY ARROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCREDITED	PROGRAM DURATION
1	Mechanical Engineering	UG	1997 / --	60	Yes	2022	60	2022	SOUTH-CENTRAL/1-10973345313/2022/ EOA 03-07-2022	Granted provisional accreditation for two years for the period(specify period)	2013	2015	2	4

Sanctioned Intake for Last Five Years for the Advanced Manufacturing Systems	
Academic Year	**Sanctioned Intake**
2025-26	60
2024-25	60
2023-24	60
2022-23	60
2021-22	120
2020-21	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 :	Madugula Naveen Srinivas
B. Nature of appointment:	Regular
C. Qualification:	M.Tech and Ph.D.

B3. Program Details

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

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2025-26 (CAY)	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)	2021-22 (CAYm4)	2020-21 (CAYm5)	2019-20 (CAYm6)
N=Sanctioned intake of the program (as per AICTE / Competent authority)	60	60	60	60	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	39	53	56	48	42	45	55
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	8	15	16	71	70	50
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	3	6	6	5	9	6	0
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	42	67	77	69	122	121	105

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

B4. Enrolment Ratio in the First Year

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

Year of entry	N (From Table 4.1)	N1 (From Table 4.1)	N4 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2025-26 (CAY)	60	39	3	70.00
2024-25 (CAYm1)	60	53	6	98.33
2023-24 (CAYm2)	60	56	6	103.33

Average [(ER1 + ER2 + ER3) / 3] = 90.55≡ 20.00

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

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

Item	(2021-22) LYG	(2020-21) LYGm1	(2019-20) LYGm2
A*= (No. of students admitted in the 1st year of that batch and those actually admitted in the 2nd year via lateral entry, plus the number of students admitted through multiple entry (if any) and separate division if applicable, minus the number of students who exited through multiple entry (if any).	191.00	190.00	170.00
B=No. of students who graduated from the program in the stipulated course duration	92.00	95.00	74.00
Success Rate (SR)= (B/A) * 100	48.17	50.00	43.53

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 47.23

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

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

Academic Performance	CAYm1(2024-25)	CAYm2(2023-24)	CAYm3 (2022-23)
Mean of CGPA or mean percentage of all successful students(X)	7.53	7.45	6.53
Y=Total no. of successful students	32.00	27.00	30.00
Z=Total no. of students appeared in the examination	51.00	45.00	44.00
API [X*(Y/Z)]	4.72	4.47	4.45

Average API[(AP1+AP2+AP3)/3] : 4.55

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

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

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2rd year/10)	7.25	6.89	6.76

Y=Total no. of successful students	34.00	51.00	94.00
Z=Total no. of students appeared in the examination	34.00	54.00	102.00
API [X * (Y/Z)]	7.25	6.51	5.83

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

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

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

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 3rd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 3rd year/10)	7.94	6.92	6.67
Y=Total no. of successful students	46.00	94.00	98.00
Z=Total no. of students appeared in the examination	51.00	94.00	99.00
API [X*(Y/Z)]:	7.16	6.92	6.60

Average API [(AP1 + AP2 + AP3)/3] : 6.89

B9. Placement, Higher Studies, and Entrepreneurship

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

Item	LYG (2021-22)	LYGm1(2020-21)	LYGm2(2019-20)
FS*=Total no. of final year students	191.00	190.00	170.00
X=No. of students placed	83.00	80.00	65.00
Y=No. of students admitted to higher studies	8.00	10.00	8.00
Z= No. of students taking up entrepreneurship	0.00	0.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	47.64	47.37	42.94

Average Placement Index = (P_1 + P_2 + P_3)/3: 45.98 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	Madugula Naveen Srinivas	XXXXXXX97A	M.Tech and Ph.D.	NIT Patna	Additive Manufacturing	01/07/2024	1.7	Assistant Professor	Assistant Professor		Regular	Yes		Yes
2	Bathula Srinivas	XXXXXXX45M	M.Tech	NIT Calicut	Manufacturing	07/01/2008	18.1	Assistant Professor	Assistant Professor		Regular	Yes		No
3	Yadala Sujatha	XXXXXXX83F	M.Tech and Ph.D.	JNTU Ananthapur	Industrial Engineering	01/11/2016	8	Associate Professor	Professor	16/11/2019	Regular	No	30/10/2024	No
4	Alapati Rama Krishna	XXXXXXX88F	M.Tech and Ph.D.	JNTU Kakinada	Thermal Engineering	20/09/1999	26.4	Lecturer	Associate Professor	01/04/2024	Regular	Yes		No
5	Gosangi Narasa Raju	XXXXXXX37H	M.Tech and Ph.D.	JNTU Kakinada	Manufacturing	07/07/2006	19.7	Assistant Professor	Professor	13/08/2024	Regular	Yes		No
6	Sivasundar Vijay Kumar	XXXXXXX62P	M.Tech and Ph.D.	Maharishi University	Manufacturing	01/11/2016	8.6	Assistant Professor	Professor	09/09/2020	Regular	No	01/05/2025	No
7	Yerubandi Venkata Ramana Murty	XXXXXXX05B	M.Tech	JNTU Kakinada	CAD-CAM	01/12/2006	19.2	Assistant Professor	Assistant Professor		Regular	Yes		No
8	Giddi Venkateswara Rao	XXXXXXX99M	M.Tech	JNTU Hyderabad	Thermal Engineering	03/11/2010	15.3	Assistant Professor	Assistant Professor		Regular	Yes		No
9	Nitchenakolla Vasudeva Rao	XXXXXXX03L	M.E.	Andhra University	Machine Design	13/10/2008	17.4	Assistant Professor	Assistant Professor		Regular	Yes		No
10	Sujeet Kumar	XXXXXXX64M	M.Tech and Ph.D.	NIT Patna	Material Science & Manufacturing	15/07/2023	2.6	Assistant Professor	Assistant Professor		Regular	Yes		No
11	Barre Srikanth	XXXXXXX86M	M.Tech	JNTU Kakinada	Thermal Engineering	09/11/2016	7.8	Assistant Professor	Assistant Professor		Regular	No	27/07/2024	No
12	Saladi Satya Srinivasa Krishna Kumar	XXXXXXX43R	M.Tech	JNTU Kakinada	Advance Manufacturing System	01/09/2017	8.5	Assistant Professor	Assistant Professor		Regular	Yes		No
13	Gubbala Ganesh	XXXXXXX83D	M.Tech	JNTU Kakinada	Manufacturing	21/08/2018	7.5	Assistant Professor	Assistant Professor		Regular	Yes		No
14	Ganta Raju	XXXXXXX53R	M.Tech	JNTU Kakinada	Machine Desine	01/06/2019	5.11	Assistant Professor	Assistant Professor		Regular	No	01/05/2025	No
15	Neethipudi Ajay	XXXXXXX33J	M.Tech	JNTU Kakinada	Manufacturing	23/09/2019	5.7	Assistant Professor	Assistant Professor		Regular	No	01/05/2025	No
16	Kanupuri Rajendra Prasad	XXXXXXX35G	M.Tech	JNTU Kakinada	Manufacturing	01/06/2019	6.8	Assistant Professor	Assistant Professor		Regular	Yes		No

17	Choppala Vinodh	XXXXXXX78L	M.Tech	JNTU Kakinada	Thermal Engineering	01/01/2020	5.7	Assistant Professor	Assistant Professor		Regular	No	25/08/2025	No
18	Yellamelli Srinivas	XXXXXXX95N	M.Tech	JNTU Kakinada	Manufacturing	20/01/2020	5.3	Assistant Professor	Assistant Professor		Regular	No	01/05/2025	No
19	Nathi Guru Murthy	XXXXXXX70B	M.Tech	JNTU Kakinada	CAD-CAM	01/06/2020	5.8	Assistant Professor	Assistant Professor		Regular	Yes		No
20	Chinnam Durga Jaya Teja	XXXXXXX05L	M.Tech	JNTU Kakinada	Machine Design	01/05/2023	2.1	Assistant Professor	Assistant Professor		Regular	No	25/06/2025	No
21	Vaddy Sai	XXXXXXX99N	M.Tech	JNTU Kakinada	Thermal Engineering	01/05/2023	2	Assistant Professor	Assistant Professor		Regular	No	30/05/2025	No
22	Gorripudi Sirisha	XXXXXXX97H	M.Tech	JNTU Kakinada	Manufacturing	01/06/2023	1.11	Assistant Professor	Assistant Professor		Regular	No	01/05/2025	No
23	Mutyala Kondayya Naidu	XXXXXXX05J	M.Tech	JNTU Kakinada	Thermal Engineering	30/06/2016	9.7	Assistant Professor	Assistant Professor		Regular	Yes		No
24	Ragutu Pradeep	XXXXXXX41K	M.Tech	JNTU Kakinada	Manufacturing	01/01/2019	6.4	Assistant Professor	Assistant Professor		Regular	No	01/05/2025	No
25	Sarilla Manojkumar	XXXXXXX90E	M.Tech	JNTU Kakinada	Manufacturing	20/01/2020	6	Assistant Professor	Assistant Professor		Regular	Yes		No
26	K. Krishna chaitanya	XXXXXXX97F	M.Tech	JNTU Kakinada	Manufacturing	02/12/2024	1.1	Assistant Professor	Assistant Professor		Regular	Yes		No
27	Dutta Maheswar	XXXXXXX33R	M.Tech and Ph.D.	JNTU Hyderabad	Thermal Engineering	08/07/2024	1.6	Professor	Professor		Regular	Yes		No

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

C2. Student-Faculty Ratio (SFR)

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

No. of UG Programs in the Department1 No. of PG Programs in the Department1
Table No.C2.1: Student-faculty ratio.

Description	CAY(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
UG1.B	66	66	66
UG1.C	66	66	132
UG1.D	66	132	132
UG1: Mechanical Engineering	**198**	**264**	**330**
PG1.A	18	18	18
PG1.B	18	18	18
PG1: Advanced Manufacturing Systems	**36**	**36**	**36**
DS=Total no. of students in all UG and PG programs in the Department	234	300	366
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=** 234	**S2=** 300	**S3=** 366
DF=Total no. of faculty members in the Department	16	24	24
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=** 16	**F2=** 24	**F3=** 24
FF=The faculty members in F who have a 100% teaching load in the first-year courses	3	3	3
Student Faculty Ratio (SFR)=S/(F-FF)	**SFR1= 18.00**	**SFR2= 14.29**	**SFR3= 17.43**
Average SFR for 3 years	**SFR= 16.57**		

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)]
2025-26(CAY)	5	11	11.00	21.36
2024-25(CAYm1)	6	18	14.00	23.57
2023-24(CAYm2)	3	21	18.00	15.83

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
2025-26	1.00	2.00	2.00	1.00	7.00	13.00
2024-25	1.00	3.00	3.00	1.00	10.00	20.00
2023-24	2.00	2.00	4.00	1.00	12.00	21.00
Average	RF1=1.33	AF1=2.33	RF2=3.00	AF2=1.00	RF2=9.67	AF2=18.00

C5. Visiting/Adjunct Faculty/Professor of Practice

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

(CAYm1)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Peethala Bhaskararao	Team Lead Service	Vision Systems & Solutions	Piping design, and Building information modeling	52.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Sandeep Vankayala	Project Manager	Xylem Water Solutions India Private Limited	Piping design, and Building information modeling	51.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Sandeep Vankayala	Project Manager	Xylem Water Solutions India Private Limited	Robotics and CAD/CAM Tools	50.00

C6. Academic Research

Table No. C6.1: Faculty publication details.

S.No.	Item	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)
1	No. of peer reviewed journal papers published	14	12	11
2	No. of peer reviewed conference papers published	3	2	2
3	No. of books/book chapters published	3	2	2

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
	Mr. Nitchenakoll A Vasudeva Rao	Mechanical Engineering	Empowering Tribal Fishing Community Through Development Of Innovative And Standardized Smoking Kilns And Improvised Traditional Fishing Gears	Department Of Science & Technology	3 Years	141.19
						Amount received (Rs.):141.19

(CAYm2)

(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. M Srinivasarao	Mr. Giddi Venkateswara Rao	Mechanical Engineering	Science And Technology Intervention To Make Low-Cost Fish Dryer To Enhance Socio-Economic Status Of St Fishing Community Of Konaseema Region	Department Of Science & Technology	3 Years	38.63
						Amount received (Rs.):38.63

Total Amount (Lacs) Received for the Past 3 Years: 179.82

Note*:

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

C8. Consultancy Work

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

(CAYm1)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. Dutta Maheswar	Mr. Gubbala Ganesh	Mechanical Engineering	AI Based Waste Segregation Machine	MaraManishi Innovations Pvt Ltd	Two Years	3.20
Dr. Madugula Naveen Srinivas	Mr. Nitchenakoll A Vasudeva Rao	Mechanical Engineering	Robotic Inspection Rover for Industrial Plants	MaraManishi Innovations Pvt Ltd	Two Years	4.10
						Amount received (Rs.):7.30

(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. Alapati Ramakrishna	Mr. Bathula Srinivas	Mechanical Engineering	Automated Material Handling Robot	MaraManishi Innovations Pvt Ltd	Two Years	3.60
Dr. Gosangi Narasa Raju	Mr. Giddi Venkateswara rao	Mechanical Engineering	Smart Conveyor Sorting System	MaraManishi Innovations Pvt Ltd	Two Years	2.80
						Amount received (Rs.):6.40

(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. Sivasundar Vijayakumar	Mr. Ganta Raju	Mechanical Engineering	Solar Panel Cleaning Robot	MaraManishi Innovations Pvt Ltd	Two Years	3.50
Dr. Yadala Sujatha	Ch. Vinod	Mechanical Engineering	Robotic Wall Painting Machine	MaraManishi Innovations Pvt Ltd	Two Years	3.10
						Amount received (Rs.):6.60

Total amount (Lacs) received for the past 3 years: 20.30

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. Sujeet Kumar	Design and Assembly of Solar Powered Refrigeration System	6 Months	1.00	0.50	Working Model
Dr. M Naveen Srinivas	Design and Fabrication of GO-CART	6 Months	1.50	1.00	Working Model
Mr. Choppala Vinodh	Fabrication of Solar Powered Sea Water Distillation Equipment for Potable Water Generation	6 Months	0.50	0.30	Working Model
			Amount received (Rs.): 3.00		

(CAYm2)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Dr. Alapati Ramakrishna	Detachable E-Bike For Physically Challenged Persons	6 Months	1.00	0.60	Working Model
Mr. B. Srinivas	Detachable E-Bike For Physically Challenged Persons	6 Months	1.00	0.50	Working Model
			Amount received (Rs.): 2.00		

(CAYm3)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Mr. A. Ramakrishna	Fluid Flow and Heat Transfer Analysis of MCHS for Electronics Cooling	1 Year	1.50	1.00	Working Model
			Amount received (Rs.): 1.50		

Total amount (Lacs) received for the past 3 years : 6.50

PART D: Laboratory Infrastructure in the Department

(Data to be filled in for the Department)

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

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

Sr. No	Name of the Laboratory	Number of students per set up(Batch Size)	Name of the Important Equipment	Weekly utilization status(all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical staff	Designation	Qualification
1	Basic Workshop	4	I. Fitting Shop Equipment, II. Carpentry Shop Equipment, III. House-Wiring Section, Equipment, IV.	Engineering W	1. Mr. P. Jeevan Kumar	Lab Technician Asst. Fi	DME ITI IT
2	Engineering Mechanics Lab	4	i) Gravesand's Apparatus for Verification of Parallelogram law of forces, Triangular law of forces,	Even Semeste	Mr.Ch. Paramjyothi	Jr. Lab Asst.	ITI
3	Metallurgy Lab & Mechatronics Lab	4	I) Metallurgy Lab II) Mechatronics Lab i) Transducer trainer kit ii) PLC	Odd Semester:	Mr. Y. Nageswara Rao	Jr. Lab Asst.	ITI
4	Mechanics of Solids & Fluid Mechanics and Hydraulic Machines Lab	4	I) Mechanics of Solids Lab: i) Universal Testing Machine ii) Hardness Testing	Odd Semester:	Mr. M. Madhava Rao M	Jr. Lab Asst. Lab Techni	ITI, DME, ITI
5	Thermal Engineering Lab	4	) Twin cylinder 4-stroke diesel engine test rig ii) Refrigeration tutor test rig iii) Two-	Odd Semester:	Mr.Y. Durga Prasad	Jr. Lab Asst.	DME
6	Production Technology Lab	4	I) Foundry Equipment III) Equipment for Metal Forming i) Hydraulic Press	Even Semeste	Mr. P. Jeevan Kumar	Lab Technician	DME
7	Machine Tools & Metrology Lab	4	I) Machine Tools Lab: i) Lathe Machines - 4 ¹/2 x 11'' Bed (4), 4 ¹/2 x 12''Bed (1), All-	Odd Semester:	Mr. K. Appa Rao	Asst. fitter	ITI
8	Theory of Machines Lab	4	i) Whirling Shaft Apparatus ii) Governor Apparatus iii) Motorized	Odd Semester:	Mr. P. Narayana Murthy	Jr. Lab asst.	ITI
9	Heat transfer Lab	4	i) Composite wall Apparatus ii) Heat Pipe Apparatus iii) Natural, Forced	Even Semeste	Mr. M. Madhava Rao	Jr. Lab asst.	ITI

10	CAD/CAM Lab	1	i) HMT CNC Trainmaster Vertical Machining Center (VMC 200 T) ii) CADIAN (unlimited)	Odd Semester:	Mr. Y. Durga Prasad	Jr. Lab asst.	DME
11	Robotics Lab	4	i) igus Robolink RL-D-RBT-3322-BC-R00177, RW ii) igus Robolink RL-D-RBT-5532-BC-R00178, RW	Even Semeste	Mr. Y. Durga Prasad	Jr. Lab asst.	DME

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Engineering Workshop	• Mandatory use of Personal Protective Equipment such as Apron, Safety Shoe, goggles, gloves • Tool handling instructions • Fire extinguishers & First-aid kit available • CCTV
2	Engineering Mechanics Lab	• Proper clamping and alignment • Non-slip flooring • Clear instructions and faculty supervision during experimentation • CCTV
3	Mechanics of Solids Lab -- Fluid Mechanics & Hydraulic Machines Lab	• Shields on testing machines and emergency stop provisions • Avoidance of sudden loading • Ensure proper alignment and clamping of specimens • CCTV .... • Proper earthing of electrical equipment • Leak-proof piping and dry floors to avoid slipping • Clear indication of pressure limits on meters • CCTV
4	Manufacturing Processes (Production Technology lab) Lab	• Heat resistant gloves and face shields during welding • Safe handling of molten metal • Restricted access during pouring operations • Fire extinguishers & First-aid kit available • CCTV
5	Thermal Engineering Lab	• Insulated hot surfaces • Display of temperature and pressure limits • Fire extinguishers • Strict adherence to start-up & shut down procedures of engines • CCTV
6	Theory of Machines Lab	• Guards on rotating parts • Safe distance maintained during operation • Use of balanced components • CCTV
7	Machine Tools & Metrology Lab	• Machine guards and chip shields are arranged • Proper clamping of work pieces • Prohibition of loose cloths • Safe handling of precision instruments • Fire extinguishers & First-aid kit available & CCTV
8	Heat Transfer Lab	• Insulation on heated sections; warning labels for hot surfaces • Controlled power supply; adequate ventilation; safe handling of electrical heaters and sensors • CCTV
9	Robotics Lab	• Safe battery charging and storage • Emergency shutdown switches • Software & hardware access control • CCTV
10	CAD/CAM Lab	• Electrical safety and proper earthing • Software usage guidelines • Controlled access to Machining Center • Anti-Virus Firewall • CCTV
11	Material Science Lab ----------------------- Mechatronics Lab	• Avoid direct contact with lenses during Optical microscopy • Handle acids/etchants carefully • Use Tongs, Safety goggles and gloves during heat treatment • CCTV .... • Safe handling of sensors and actuators • Proper insulation of wiring • CCTV

D3. Project Laboratory/Research Laboratory

S.No.	Name of the Laboratory	Equipment
1	Project Lab	• Computer Systems with internet -10 • Legacy Project Prototypes • Printer • Scanner • LCD Projector • CC Camera
2	Research & Development Lab	• Computer Systems with internet-10 • Drafting, Modeling & Analysis Software: ACT CAD, SOLIDWORKS, ANSYS, ABAQUS • Access to e-journals • Printer • Scanner • LCD Projector • CC Camera
3	Centre of Excellence – Robotics and Artificial Intelligence	• Micro Controller & Control Boards – Arduino UNO R3 • Robotics Base Kits • Sensors – IR, LDR • Value Add Visual Components • Displays & Output • Printer • Scanner • LCD Projector • CC Camera

1. Project Laboratory

The Project Laboratory serves as a dedicated facility to support final-year undergraduate students in carrying out design projects. The laboratory is structured to promote design thinking, innovation, experimentation, and problem-solving in core mechanical engineering domains such as Design Engineering, Thermal & Fluid Engineering, and Manufacturing Engineering.

The facility enables students to conceptualize, design, fabricate, test, and validate engineering systems and components. It encourages interdisciplinary teamwork, application of modern engineering tools, project planning, documentation, and outcome-based execution. The laboratory environment promotes collaborative learning and provides access to necessary equipment, software, and internet resources to facilitate project development.

Through structured project reviews and mentor guidance, students develop competencies in:

- Design and development of solutions
- Engineering tool usage
- Project management and documentation
- Teamwork and communication
- Sustainable and socially responsible engineering practices

2. Research & Development Laboratory

The **Research & Development (R&D) Laboratory** is established to cultivate a research-oriented mindset among students and faculty members. The laboratory supports investigative learning, experimentation, data analysis, and innovation-driven projects aligned with contemporary technological advancements and sustainability goals.

The facility enables:

- Experimental investigations
- Prototype development
- Performance testing and validation
- Emission and environmental impact studies
- Applied research activities

Students are encouraged to undertake mini-projects, funded projects, and research-based final-year projects under faculty supervision. The laboratory fosters analytical thinking, interpretation of experimental data, and development of sustainable engineering solutions.

The R&D Laboratory enhances:

- Research-based knowledge application
- Design of experiments and data interpretation
- Environmental awareness and sustainability focus
- Ethical engineering practices
- Innovation and entrepreneurship culture

3. Centre of Excellence – Robotics and Artificial Intelligence

The **Centre of Excellence (CoE) – Robotics and Artificial Intelligence** is established to provide advanced training, industry-aligned skill development, and research exposure in emerging technologies such as robotics, automation, artificial intelligence, and control systems.

The CoE bridges the gap between academia and industry by offering:

- Hands-on training in robotic systems
- Automation and control experimentation
- AI-based applications in mechanical systems
- Industry-oriented workshops and certification programs
- Support for innovation and interdisciplinary projects

Key outcomes of the Centre include:

- Advanced design and automation competencies
- Practical exposure to intelligent systems
- Collaborative and multidisciplinary teamwork
- Adaptability to emerging technologies
- Innovation-driven project development

PART E: First Year faculty and financial Resources

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

E1. First Year Student-Faculty Ratio (FYSFR)

Table No. E1.1: FYSFR details.

Year	Sanctioned intake of all UG programs (S4)	No. of required faculty (RF4= S4/20)	No. of faculty members in Basic Science Courses & Humanities and Social Sciences including Management courses (NS1)	No. of faculty members in Engineering Science Courses (NS2)	Percentage= No. of faculty members ((NS1*0.8) +(NS2*0.2))/(No. of required faculty (RF4)); Percentage=((NS1*0.8) +(NS2*0.2))/RF
2023-24(CAYm2)	660	33	37	11	96
2024-25(CAYm1)	780	39	42	11	92
2025-26(CAY)	780	39	42	11	92

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

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

Items	Budgeted in 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Infrastructure Built-Up	400	397.63	110	109.54	77	76.72	93	92.71
Library	7	6.98	10	9.84	16	15.53	8	7.95
Laboratory equipment	24	23.12	61	60.30	34	33.52	66	65.67
Teaching and non-teaching staff salary	1257	1255.27	1273	1271.72	1119	1117.28	1024	1023.98
Outreach Programs	0	0	0.45	0.41	0.95	0.92	0	0
R&D	10	6.74	16	11.43	15	10.68	18	16.43
Training, Placement and Industry linkage	32	30.87	12	11.86	25	23.35	18	17.51
SDGs	14	13.77	32	30.75	21	20.31	27	25.21
Entrepreneurship	6	5.23	6	5.03	5	4.31	4	3.80
Others, specify	250	249.83	700	698.12	510	504.50	450	447.24
Total	**2000**	**1989.44**	**2220.45**	**2209.00**	**1822.95**	**1807.12**	**1708**	**1700.50**

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

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

Items	Budgeted in 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Laboratory equipment	2.00	1.93	7.00	6.56	5.00	4.47	11.50	11.42
Software	4.50	3.95	2.00	0.00	1.50	1.00	2.00	0.00
SDGs	1.50	1.15	4.00	3.34	3.00	2.70	4.75	4.38
Support for faculty development	3.00	2.50	1.75	1.38	3.00	2.40	3.00	2.40
R & D	1.00	0.57	3.00	1.80	2.00	1.42	3.00	2.86
Industrial Training, Industry expert, Internship	4.50	4.12	3.00	2.56	5.00	4.96	5.50	5.04
Student Activities	1.50	1.00	1.50	1.10	1.25	1.05	1.00	0.95
Total	**18.00**	**15.22**	**22.25**	**16.74**	**20.75**	**18.00**	**30.75**	**27.05**