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**: 2
Application No: 11913	**Date of Submission**: 01-07-2026

PART A- Profile of the Institute

A1.Name of the Institute: AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY	
Year of Establishment : 2005	Location of the Institute: Near Tagarapuvalasa Bridge NH16
A2. Institute Address:CHERUKUPALLI VIILAGE, NEAR TAGARAPUVALASA BRIDGE,CHITTIVALASA SO, BHOGAPURAM MANDAL, VIZIANAGRAM DIST,Andhra Pradesh,531162	
City:Vizianagaram	State:Andhra Pradesh
Pin Code:531162	Website:www.aietta.ac.in
Email:dean.academics@aietta.ac.in	Phone No(with STD Code):08933-226739
A3. Name and Address of the Affiliating University (if any):	
Name of the University : Jawaharlal Nehru Technological University-Gurajada	City: Vizianagaram
State : Andhra Pradesh	Pin Code: 535003
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: **6**
- 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	Computer Application	PG	Master of Computer Application	2023	--	Computer Application
2	Engineering & Technology	PG	CAD/CAM	2012	--	Mechanical Engineering
3	Engineering & Technology	UG	Computer Science and Engineering	2005	--	Computer Science and Engineering
4	Engineering & Technology	PG	Computer Science and Engineering	2010	--	Computer Science and Engineering
5	Engineering & Technology	UG	Computer Science and Engineering (Artificial Intelligence & Machine Learning)	2020	--	Computer Science and Engineering
6	Engineering & Technology	PG	Computer Science and Engineering (Artificial Intelligence and Machine Learning)	2025	--	Computer Science and Engineering
7	Engineering & Technology	UG	Computer Science and Engineering (Data Science)	2020	--	Computer Science and Engineering
8	Engineering & Technology	UG	Electrical & Electronics Engineering	2005	--	Electrical and Electronics Engineering
9	Engineering & Technology	UG	Electronics & Communication Engineering	2005	--	Electronics and Communication Engineering
10	Engineering & Technology	UG	Mechanical Engineering	2005	--	Mechanical Engineering
11	Engineering & Technology	PG	Power Electronics	2012	2025	Electrical and Electronics Engineering
12	Engineering & Technology	PG	Power Systems	2015	--	Electrical and Electronics Engineering

13	Engineering & Technology	PG	VLSI Design	2011	--	Electronics and Communication Engineering
14	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
Mechanical Engineering	No	Mechanical Engineering	UG
Electrical and Electronics Engineering	No	Electrical & Electronics Engineering	UG
Electronics and Communication Engineering	No	Electronics & Communication Engineering	UG
Computer Science and Engineering	Yes	Computer Science and Engineering	UG
Computer Science and Engineering	Yes	Computer Science and Engineering (Artificial Intelligence & Machine Learning)	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/COMPE AUTHORITY ARROVAL DE
1	Mechanical Engineering	UG	2005 / --	60	Yes	2025	120	2025	F.No. South-Ce 44642177728/2

Sanctioned Intake for Last Five Years for the Mechanical Engineering	
Academic Year	**Sanctioned Intake**
2025-26	120
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 :	Sheik Hidayatullashariff
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)	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)	120	60	60	60	120	120	180

N1=Total no. of students admitted in the 1st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program	93	53	43	28	20	82	56
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	14	25	37	98	42	105
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	1	1	0	0	0	0	0
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	94	68	68	65	118	124	161

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)	120	93	1	78.33
2024-25 (CAYm1)	60	53	1	90.00
2023-24 (CAYm2)	60	43	0	71.67

Average [(ER1 + ER2 + ER3) / 3] = 80.00≅ 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	(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).	132.00	132.00	198.00
B=No. of students who graduated from the program in the stipulated course duration	59.00	57.00	97.00
Success Rate (SR)= (B/A) * 100	44.70	43.18	48.99

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 45.62

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)	7.11	6.85	6.53
Y=Total no. of successful students	22.00	4.00	12.00
Z=Total no. of students appeared in the examination	54.00	43.00	28.00
API [X*(Y/Z)]	2.90	0.64	2.80

Average API[(AP1+AP2+AP3)/3] : 2.11

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)	7.70	6.83	7.50
Y=Total no. of successful students	19.00	35.00	65.00
Z=Total no. of students appeared in the examination	29.00	49.00	106.00
API [X * (Y/Z)]	5.04	4.88	4.60

Average API [(AP1 + AP2 + AP3)/3] : 4.84

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)	7.21	7.42	7.05
Y=Total no. of successful students	28.00	62.00	59.00
Z=Total no. of students appeared in the examination	35.00	65.00	60.00
API [X*(Y/Z)]:	5.77	7.08	6.93

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

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	132.00	132.00	198.00
X=No. of students placed	55.00	52.00	93.00
Y=No. of students admitted to higher studies	18.00	17.00	14.00
Z= No. of students taking up entrepreneurship	10.00	11.00	15.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	62.88	60.61	61.62

Average Placement Index = (P_1 + P_2 + P_3)/3: 61.70 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
1	Sheik Hidayatullashariff	XXXXXXX12D	Ph.D	GITAM UNIVERSITY	Mechanical Engineering	02/07/2012	13.11	Assistant Professor	Associate Professor	01/07/2025
2	B MURALI KRISHNA	XXXXXXX93H	Ph.D	Indian Institute of Technology Madras	Thermal Engineering	04/01/2021	5.4	Professor	Professor	
3	RAMU GARUGUBILLI	XXXXXXX03D	Ph.D	ANDHRA UNIVERSITY	MARINE ENGINEERING	11/03/2014	12.2	Assistant Professor	Assistant Professor	
4	Beera Avinash Ben	XXXXXXX76G	Ph.D	ANDHRA UNIVERSITY	Mechanical Engineering	07/04/2018	8.2	Professor	Professor	
5	CHALLA SURESH	XXXXXXX94P	Ph.D	ANDHRA UNIVERSITY	Mechanical Engineering	14/06/2024	1.3	Professor	Professor	
6	M Venkata Praveen A	XXXXXXX75E	Ph.D	GITAM UNIVERSITY	Mechanical Engineering	01/06/2019	7	Assistant Professor	Associate Professor	01/05/2023
7	MADDA RAGHAVA RAO	XXXXXXX56B	Ph.D	ANDHRA UNIVERSITY	Metallurgical Engineering	22/10/2015	10.8	Assistant Professor	Assistant Professor	
8	PURUSHOTAMAANILKUMAR P	XXXXXXX46B	M.Tech	JNTU KAKINADA	Thermal Engineering	01/12/2014	11.6	Assistant Professor	Assistant Professor	
9	VOMMI PRADEEP KUMAR	XXXXXXX14C	M.Tech	National Institute of Technology Calicut	Manufacturing Technology	01/11/2016	9.7	Assistant Professor	Assistant Professor	
10	K K R PARIMALA	XXXXXXX28H	M.Tech	JNTU KAKINADA	CAD/CAM	01/12/2016	9.6	Assistant Professor	Assistant Professor	
11	KOSURU KUMAR	XXXXXXX91P	M.Tech	JNTU KAKINADA	Thermal Engineering	05/05/2018	8.1	Assistant Professor	Assistant Professor	
12	PAPPU RAMA KRISHNA	XXXXXXX40B	M.Tech	ANDHRA UNIVERSITY	CAD/CAM	09/09/2019	6.9	Assistant Professor	Assistant Professor	
13	KOTHA SRINU	XXXXXXX40P	M.Tech	JNTU KAKINADA	CAD/CAM	01/06/2020	6	Assistant Professor	Assistant Professor	

14	DEEPTHI KAZA	XXXXXXX65R	M.Tech	JNTU KAKINADA	Machine Design	01/11/2016	9.7	Assistant Professor	Assistant Professor	
15	SARAN TEJ VULLI	XXXXXXX34R	M.Tech	ANNA University	CAD/CAM	05/12/2016	9.6	Assistant Professor	Assistant Professor	
16	KAMPARA SARIKA	XXXXXXX94H	M.Tech	JNTU KAKINADA	CAD/CAM	08/02/2021	5.3	Assistant Professor	Assistant Professor	
17	GANESH SURAVARAPU	XXXXXXX10L	M.Tech	JNTU KAKINADA	CAD/CAM	05/06/2024	2	Assistant Professor	Assistant Professor	
18	SURUMULLA RAJESH KUMAR	XXXXXXX06Q	M.Tech	JNTU KAKINADA	Thermal Engineering	06/05/2024	2	Assistant Professor	Assistant Professor	
19	RAMIREDDY MANASA	XXXXXXX88R	M.Tech	JNTU KAKINADA	CAD/CAM	09/03/2024	2.2	Assistant Professor	Assistant Professor	
20	BORA SIDDARATHA	XXXXXXX85P	M.Tech	JNTU HYDERABAD	Thermal Engineering	22/03/2023	3.2	Assistant Professor	Assistant Professor	
21	SUNIL KUMAR JENA	XXXXXXX09R	M.Tech	JNTU KAKINADA	Thermal Engineering	20/11/2019	6.6	Assistant Professor	Assistant Professor	
22	KONERU. YESHWANTH SAI	XXXXXXX68E	M.Tech	ANDHRA UNIVERSITY	Industrial Engineering	02/07/2024	1.11	Assistant Professor	Assistant Professor	
23	VENKATA NARAYANA B	XXXXXXX66M	Ph.D	ANDHRA UNIVERSITY	Mechanical Engineering	01/06/2022	3.6	Associate Professor	Professor	01/05/2025
24	Lakshmi sramika Muttamsetty	XXXXXXX91N	M.Tech	JNTU KAKINADA	CAD/CAM	06/01/2012	12.6	Assistant Professor	Assistant Professor	
25	Juthiga Jagadesh	XXXXXXX19M	M.Tech	Nagarjuna University	Production Engineering	28/12/2021	2.11	Assistant Professor	Assistant Professor	
26	MATHAM RAMESH NAIDU	XXXXXXX25E	M.E.	ANDHRA UNIVERSITY	Industrial Engineering	05/08/2024	1.3	Assistant Professor	Assistant Professor	
27	Bhavani Shankar	XXXXXXX46C	M.Tech	ANDHRA UNIVERSITY	Machine Design	22/03/2021	4.8	Assistant Professor	Assistant Professor	
28	LAVNYALAKSHMI GANJA	XXXXXXX89G	M.Tech	JNTU KAKINADA	Thermal Engineering	15/12/2015	8.5	Assistant Professor	Assistant Professor	
29	ANITHA SANTOSHI M	XXXXXXX30K	Ph.D	JNTU KAKINADA	Mechanical Engineering	01/06/2022	4	Assistant Professor	Associate Professor	01/08/2024

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: CAD/CAM	**36**	**36**	**36**

Description	CAY(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
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	22	26	23
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=** 22	**F2=** 26	**F3=** 23
FF=The faculty members in F who have a 100% teaching load in the first-year courses	4	3	3
Student Faculty Ratio (SFR)=S/(F-FF)	**SFR1= 13.00**	**SFR2= 13.04**	**SFR3= 18.30**
Average SFR for 3 years	**SFR= 14.78**		

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)]
2025-26(CAY)	7	15	11.00	29.55
2024-25(CAYm1)	7	19	14.00	26.07
2023-24(CAYm2)	6	17	18.00	17.78

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	3.00	3.00	8.00	17.00
2024-25	2.00	3.00	3.00	3.00	10.00	20.00
2023-24	2.00	2.00	4.00	2.00	12.00	19.00
Average	RF1=1.67	AF1=2.33	RF2=3.33	AF2=2.67	RF2=10.00	AF2=18.67

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. M. Chitti Babu	Senior Lead	Global Technologies 1st Floor, 3rd main, 4th cross, Dattatreya Nagar, Hosakere halli, Banashankari 3	Advanced Dynamic Analysis of Slider crank Mechanisms: Theory and Applications	50.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.N.Parameswara Rao	Senior Technologist	Tata Steel Limited P.O. Bistupur Jamshedpur - 831 001 Jharkhand, India	Manufacturing Technologies	50.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.T.Madhu kumar	Senior executive	Novartis Healthcare Pvt. Ltd. Hyderabad	Planning and control	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	10	8	7
2	No. of peer reviewed conference papers published	4	6	2
3	No. of books/book chapters published	1	2	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.Venkata Narayana B	Mr.V.Saran Tej	Mechanical Engineering	Sustainable Material Development from Waste Resources	Vingas Industries Pvt. Ltd. Gajuwaka, Visakhapatnam	1 year	1.12
Dr.Ch.Suresh	Mr.S.Rajesh	Mechanical Engineering	Solar-Powered Cold Storage System for Rural Farmers	Rain CII Carbon, Visakhapatnam	1 Year	2.10
						Amount received (Rs.):3.22

(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.Madda Raghava Rao	Dr.Venkata Narayana B	Mechanical Engineering	Agricultural Waste Briquetting Machine	Sri Lakshmi Prabha Engineering Industries Pvt. Ltd. Auto Nagar, Visakhapatnam	1 Year	1.95
Dr.M. Venkata Praveen A	Mr.S.Ganesh	Mechanical Engineering	Industry Readiness and Career Development Programme	YRC Society Vizianagaram	1 Year	2.25
						Amount received (Rs.):4.20

(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
Mr.G.Ramu	K.K.R.Parimala	Mechanical Engineering	Renewable Energy-Based Mechanical Systems	TVR Projects Pvt. Ltd. Visakhapatnam	1 Year	1.83
Mr.Sunil Jena	Mr.K.Sarika	Mechanical Engineering	Low-Cost Agricultural Equipment Development	Olam Agro India Pvt. Ltd, Visakhapatnam	1 Year	2.23
						Amount received (Rs.):4.06

Total Amount (Lacs) Received for the Past 3 Years: 11.48

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.A.M.V.Praveen	Dr.G.Ramu	Mechanical Engineering	Design and Fabrication of a Mechanical Component Using PLA-Based 3D Printing	Robocoupler Pvt Ltd,Visakhapatnam	1 Year	2.40
Dr.Sheik Hidayatulla Shariff	Dr.Anitha Santoshi M	Mechanical Engineering	Animal Detection using Drone	R Radiant Engineering Services,Visakhapatnam	1 Year	2.20
						Amount received (Rs.):4.60

(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.Avinash Ben	MrV.Saran Tej	Mechanical Engineering	Design and Development of an Automatic Dust Cleaning Machine	HMIES Solutions.Pvt.Ltd,Visakahapatnam	1 Year	2.59
Dr.CH.Suresh	Mr.Pappu Rama Krishna	Mechanical Engineering	Design and Fabrication of a Portable Paddy Thresher	RVS Quality Certifications Pvt Ltd, Madhurawada, Visakhapatnam	1 Year	2.64
						Amount received (Rs.):5.23

(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.B.Venkatanarayana	Mr.P.Anil Kumar	Mechanical Engineering	Fatigue Life Prediction of Mechanical Components Using FEA	Bench Marks Solutions,Visakahpatnam	1 Year	2.25
Dr.Sheik Hidayatulla Shariff	Mr.L.Bhavani Shankar	Mechanical Engineering	Design and Development of an Energy-Efficient Regenerative Braking System for Electric Vehicles with Real-Time Energy Recovery Monitoring	HMIES Solutions.Pvt.Ltd,Visakahapatnam	1 Year	2.52
						Amount received (Rs.):4.77

Total amount (Lacs) received for the past 3 years: 14.60

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.Sheik Hidayatulla Shariff	Characterization And Combustion Analysis Of Densified Fuel Briquettes Made From Bio Waste Materials	4 Months	0.20	0.19	Developed bio-waste fuel briquettes as an alternative fuel.
Dr.B.Murali Krishna	Prediction Of CI Engine Performance With Hydrogen Gas Using Simulation Technique	4 Months	0.20	0.19	Predicted engine performance using hydrogen enrichment.
Dr.B.Murali Krishna	Performance And Emission Modeling Of HHO Enriched CI Engine.	4 Months	0.20	0.19	Evaluated engine performance and emissions with HHO.
Dr.Ch.Suresh	GNP Augmented Al-Si1MgMn-Based Hybrid Composites Using CRITIC-MABAC Technique	4 Months	0.20	0.19	Identified the optimum composite material
Dr.A.M.V.Praveen	Fabrication Of Multipurpose Agriculture Machine	4 Months	0.20	0.19	Developed a machine for multiple agricultural operations.
Mr.V.Pradeep Kumar	Automatic Tire Inflating System	4 Months	0.20	0.19	Developed an automatic tire pressure maintenance system.
Mrs.K.K.R.Parimala	Solar Grass Cutter With Bluetooth Control	4 Months	0.20	0.19	Developed a solar-powered, Bluetooth-controlled grass cutter.
Dr.G.Ramu	RC Controlled Drone	4 Months	0.20	0.19	Developed and demonstrated an RC-controlled drone.
Madda Raghava Rao	Two-Wheel Segway Balancing	4 Months	0.20	0.19	Developed and simulated a self-balancing two-wheel Segway System
Mr.V. Pradeep Kumar	Analysis On Audi Car Model Using CFD	4 Months	0.20	0.19	performance of the Audi car model using CFD.
Mr.V.Saran Tej	Digital Manufacturing with Ender 3 Printer	4 Months	0.20	0.19	Developed 3D-printed prototypes using an Ender 3 printer,
Dr. B Avinash Ben	Design and Fabrication of Drone with Long Range	4 Months	0.20	0.19	Developed a functional drone with extended-range wireless control
Mrs.K.Deepthi	Fabrication Of 90 Degree Steering System.	4 Months	0.20	0.19	Developed a steering system for improved vehicle
			Amount received (Rs.): 2.60		

(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.Ramu	Experimental Investigation On Diesel Engine Operating With Cuo Nanoparticles	4 Months	0.20	0.19	Evaluated Engine Performance And Emission Characteristics
Dr.A.M.V.Praveen	To Specimen Design For Accurate Tensile And Compressive Testing Using FEA	4 Months	0.20	0.19	specimen design for accurate tensile and compressive testing.
Purushotama anil kumar P	Mechanical and Tribological properties of aluminium metal matrix composite	4 Months	0.20	0.19	Developed an aluminium nanocomposite
Dr.Avinash Ben	Amine Functionalized Maleimide Grafted MWCNT–CFRP Hybrid Composites	4 Months	0.20	0.19	Improved self-healing and mechanical properties
Mr.G.Ramu	Enhancement of heat transfer Performance Of water-Based Hybrid Nanofluids	4 Months	0.20	0.19	Evaluated enhanced heat transfer using CFD
Mr.G.Lavanya Lakshmi	Isolation Robot Surveillance Delivery	4 Months	0.20	0.19	Developed a robotic system for remote surveillance
Mr.Sunil Jena	Design & Simulation Regenerative Braking System	4 Months	0.20	0.19	Developed and simulated a regenerative braking system
Dr.B.Venkatanarayana	Design of SLA 3D Printer	4 Months	0.20	0.19	Developed an SLA 3D printer for rapid prototyping
Dr.Anitha Santoshi M	Design and Development of a Go-Kart Steering System	4 Months	0.20	0.19	Developed Go-Kart Steering System
			Amount received (Rs.): 1.80		

(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.G.Ramu	Experimental Investigation On Diesel Engine Operating- Cuo Nanoparticles Dispersed Azadirachta	4 Months	0.20	0.19	Engine Performance And Emission Characteristics Using Cuo Biodiesel Blends.
Mr.L.Bhavani Shankar	Flow and crash analysis of an F16 air craft using ANSYS	4 Months	0.20	0.19	analyzed the F16 aircraft for improved aerodynamic performance and structural safety
Dr.Avinash Ben	Self-Healing Of Matrix Cracking And Delamination Damage Assessment	4 Months	0.20	0.19	Assessed Self-Healing Capability And Damage Recovery Of Composite Materials.
Mr.K.Deepthi	Modelling and Analysis on Intercontinental Ballistic Missiles Using CATIA and ANSYS	4 Months	0.20	0.19	Provided A Platform For Dissemination Of Engineering And Technology Research.
K.K.R.Parimala	Design And Analysis Of Car Bumper Beam Comparing With Different Composite Materials In ANSYS	4 Months	0.20	0.19	Compared Composite Materials For Improved Bumper Strength And Performance.
Dr.Sheik Hidayatulla Shariff	Advancements In Energy Recovery From Waste Plastic	4 Months	0.20	0.19	Explored Waste Plastic Conversion For Energy Recovery And Sustainability.
Dr.A.M.V.Praveen	Multi-Response Optimization Generated With GRA Using Sensitivity Analysis	4 Months	0.20	0.19	Evaluated Optimization Consistency Using GRA And Sensitivity Analysis.
Mr.G.Ramu	Evaporation Characteristics Influence On Exhaust Emissions Of Waste Plastic Oil Petro Diesel Blends	4 Months	0.20	0.19	Characteristics And Their Effect On Exhaust Emissions.
Dr.Avinash Ben	Assessment In Microcapsules Reinforced Carbon Fibre	4 Months	0.20	0.19	Assessed Self-Healing Capability And Damage Recovery Of Composite Materials.
			Amount received (Rs.): 1.80		

Total amount (Lacs) received for the past 3 years : 6.20

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	Engineering work shop lab-1	36	1.Fitting Trade Tools 2.Carpentry Trade Tools 3.Tin Smithy Trade	Total weekly U	Mr.V.Prem ku	Lab Technicia	Diploma in M
2	Engineering work shop lab -2	36	1.Fitting Trade Tools . 2.Carpentry Trade Tools 3.Tin	Total weekly U	Mr. B.Narend	Lab Technicia	Diploma in M
3	Production Technology lab	36	1. Arc Welding Equipment 2. 2.Hand Screw with German Glass	Total weekly U	Mr. B. Sriniva	Lab Technicia	ITI
4	Fluid mechanics &Hydraulic machines lab	36	1.Impact of Jets on vanes 2. 2. Pelton Wheel. 3. 3. Francis	Total weekly U	Mr. S.Rames	Lab Technicia	Diploma in M
5	Theory of Machines lab	36	1.Moment of Inertia of Fly Wheel-25cm, 2. 2.Inversion of Single	Total weekly U	Mr. P. Kames	Lab Technicia	ITI
6	Engineering Mechanics lab	36	1.Universal force table setup 2.Fly wheel Apparatus.	Total weekly U	Mr. B. Sriniva	Lab Technicia	ITI
7	Machine Tools lab	36	1. All Geared Lathe Machine 2. Radial Drilling Machine 3. Milling	Total weekly U	Mr. N. Suresh	Lab Technicia	ITI
8	Mechanics of Soilds & Material Science lab	36	1. Universal Testing Machine 2. Torsion Test Machine 3.	Total weekly U	Mr. V. Lakshr	Lab Technicia	Diploma in M
9	Thermal Engineering Lab	36	1. Air Compressor Test Rig 2. Boiler Models 3. Valve Timing Of	Total weekly U	Mr. K. Appala	Lab Technicia	ITI
10	Heat Transfer lab	36	1. Thermal Conductivity of Metal Bar 2. Forced Convention 3.	Total weekly U	Mr. S. Rames	Lab Technicia	Diploma in M
11	Simulation Lab	36	No of Systems: 61 Processor: core i3 4th gen -55, core i5 4th gen	Total weekly U	Mr. K. Uma S	Lab Technicia	B. Tech in Me
12	Instrumentation and control systems	36	1. Pressure gauge. 2. Transducer for temperature Measurement.	Total weekly U	B. Srinivas	Lab Technicia	ITI
13	Mechtronics lab	36	1. Transducer Trainer Kit 2. PLC Programming Unit 3. Traffic	Total weekly U	Mr. V. Lakshr	lab Technicia	Diploma in M
14	Metrology Lab	36	1. Mechanical Vernier Caliper(0-150mm) 2. Mechanical Vernier	Total weekly U	Mr. P. Kames	lab Technicia	ITI

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 Laboratory	1. General Safety Instructions are Displayed in the laboratory. 2. Safety goggles & hand gloves are available for students. 3. Additional safety equipment is utilized based on specific experiment requirements. 4. Avoid the use of damaged equipment are displayed 5. Periodical servicing of the lab equipment is done. 6. Loose clothing and wearing of jewelers are prohibited 7. Moving machine parts are covered with safety guards. 8. The floor is made free from oil, grease, and chips. 9. First aid kit and fire extinguisher are available in the lab.

2	Mechanics of Solids & Material Science Laboratory	1. Students should wear a laboratory apron and safety shoes. 2. First aid box and fire extinguisher are available in each laboratory. 3. Specific safety rules in the form of Do's and Don'ts are Displayed in the llaboratory. 4. Avoiding the use of damaged equipment that is displayed. 5. General Rules of Conduct in Laboratories are displayed. 6. Electrical Wires Protected by MCB (Miniature Circuit Breaker) and Fuses 7. Proper earthing is done for electrical safety. 8. Leather gloves are provided for safety.
3	Instrumentation & Metrology Laboratory	1. Protective clothing (apron) and shoes 2. First aid box and fire extinguisher are kept in the laboratory. 3. Specific safety rules in the form of do's and don'ts are displayed in the laboratory. 4. Electrical Wires Protected by MCB (Miniature Circuit Breaker) and Fuses
4	Fluid Mechanics & Hydraulic machines Laboratory	1. Protective clothing (apron) and shoes 2. First aid box and fire extinguisher are kept in the laboratory. 3. Specific safety rules in the form of do's and don'ts are displayed in the laboratory.
5	Machine tools Laboratory	1. Specific Safety Rules in the form of Do's and Don'ts are Displayed in the laboratory. 2. Avoiding the use of damaged equipment which is displayed 3. Protective clothing (apron) and footwear 4. Electrical wires protected by MCBs (miniature circuit breakers) and fuses are used. 6. A First aid box and fire extinguisher are kept in the laboratory. 7. Safety Gloves
6	Production Technology Laboratory	1. Students wear lab aprons and safety shoes 2. First aid box and Fire extinguisher are kept in the laboratory 3. Leather gloves & welding goggles are provided for safety. 4. Specific Safety Rules in the form of Do's and Don'ts are Displayed in the laboratory 5. MCB boards are fixed to avoid overloading and short-circuiting in the lab.
7	Heat transfer Laboratory	1.First aid box and fire extinguisher are kept in the laboratory. 2. Specific safety rules in the form of Do's and Don'ts are Displayed in the laboratory. 3. Apron and footwear 4. Electrical wires protected by MCB (miniature circuit breaker) and fuses.
8	Thermal Engineering Laboratory	1. Students wear lab aprons and safety shoes 2. First aid box and Fire extinguisher are kept in the laboratory 3. MCB boards are fixed to avoid overloading and short- circuiting in the lab. 4. Specific Safety Rules in the form of Do's and Don'ts are displayed in the laboratory
9	Simulation Laboratory	1. ACs are provided in the lab to prevent overheating of systems. 2. Safety rules, including dos and don'ts, are displayed and are communicated to all students. 3. Do not attempt to repair, open, tamper with, or interfere with any of the computer, printer, or network components. 4. Avoid contact with extension boxes and electrical terminals. 5. Report safety hazards like open wire / shock malfunctioning immediately to staff. 6. Students should neither unplug the keyboard or mouse nor put in the pen drive without prior approval. 7. Follow the instructions given by the staff member.
10	Theory of machines Laboratory	1. First aid box and fire extinguisher are kept in the laboratory. 2. Specific safety rules in the form of Do's and Don'ts are Displayed in the laboratory 3. Apron and footwear 4. Electrical Wires Protected by MCB (Miniature Circuit Breaker) and Fuses.

D3. Project Laboratory/Research Laboratory

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)	600	30	30	17	91
2024-25(CAYm1)	780	39	37	20	86
2025-26(CAY)	1200	60	47	19	69

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	68100000	67891010	57400000	57260503	39000000	38040795	25110000	24854502
Library	1871000	1782401	1805000	1706156	1750000	1662108	1744000	1495897
Laboratory equipment	1085000	934053	2260000	2154219	4275000	4070252	6942000	6732312
Teaching and non-teaching staff	126000000	100396670	118000000	98212662	105000000	97280900	85000000	74004123
Outreach Programs	116500	107402	107000	76638	97500	77660	87500	69041
R&D	1945000	1856220	2300000	2153307	2676000	2549873	1805200	1748154
Training, Placement and	7500000	7364611	5300000	5276294	5010000	5008593	1810000	1757126
SDGs	192000	182115	160000	152115	144000	136103	129000	122492
Entrepreneurship	134000	113828	114400	94334	87000	77210	74300	63156
Others, specify	21866000	25185210	18787800	16270943	16766150	20629995	14864800	19316436
Total	**228809500**	**205813520**	**206234200**	**183357171**	**174805650**	**169533489**	**137566800**	**130163239**

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	238600	218851	417000	399003	500000	472461	1310000	1235312.75
Software	60000	53778	130000	128189	150000	149389	300000	279793
SDGs	110000	100998	100000	98566	1200000	1100689	100000	92899
Support for faculty development	200000	185000	175000	173500	125000	123000	150000	138000
R & D	400000	350000	450000	416000	400000	372400	350000	321000
Industrial Training, Industry expert,	180000	168839	150000	137899	200000	192876	130000	118289
Miscellaneous Expenses*	170000	158999	150000	137283	180000	168239	200000	192324
Total	**1358600**	**1236465**	**1572000**	**1490440**	**2755000**	**2579054**	**2540000**	**2377617.75**