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: 10318	**Date of Submission**: 15-03-2025

PART A- Profile of the Institute

A1.Name of the Institute: MLR INSTITUTE OF TECHNOLOGY	
Year of Establishment : 2005	Location of the Institute: Dundigal
A2. Institute Address:NA	
City:--Select--	State:Andhra Pradesh
Pin Code:500043	Website:www.mlrit.ac.in
Email:DIRECTOR@MLRINSTITUTIONS.AC.IN	Phone No(with STD Code):99-49810842
A3. Name and Address of the Affiliating University (if any):	
Name of the University : JNT UNIVERSITY HYDERABAD	City: Medchal
State : Telangana	Pin Code: 500085
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: **11**
- No. of PG programs: **5**

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	Aeronautical Engineering	2005	--	Aeronautical Engineering
2	Engineering & Technology	PG	Aerospace Engineering	2010	2024	Aeronautical Engineering
3	Engineering & Technology	UG	Artificial Intelligence and Machine Learning	2021	2022	Artificial Intelligence and Machine Learning
4	Engineering & Technology	UG	Computer Science & Information Technology	2020	2024	Computer Science and Information Technology
5	Engineering & Technology	UG	Computer Science and Engineering	2005	--	Computer Science and Engineering
6	Engineering & Technology	PG	Computer Science and Engineering	2011	--	Computer Science and Engineering
7	Engineering & Technology	UG	Computer Science and Engineering (Artificial Intelligence & Machine Learning)	2020	--	Computer Science and Engineering (Artificial Intelligence and Machine Learning)

8	Engineering & Technology	UG	Computer Science and Engineering (Cyber Security)	2020	2023	Computer Science and Engineering (Cyber Security)
9	Engineering & Technology	UG	Computer Science and Engineering (Data Science)	2020	--	Computer Science and Engineering (Data Science)
10	Engineering & Technology	UG	Electrical & Electronics Engineering	2017	--	Electrical and Electronics Engineering
11	Engineering & Technology	UG	Electronics & Communication Engineering	2005	--	Electronics and Communication Engineering
12	Engineering & Technology	PG	Embedded Systems	2014	--	Electronics and Communication Engineering
13	Engineering & Technology	UG	Information Technology	2005	2024	Information Technology
14	Engineering & Technology	UG	Mechanical Engineering	2009	--	Mechanical Engineering
15	Engineering & Technology	PG	Thermal Engineering	2013	--	Mechanical Engineering
16	Management	PG	Master of Business Administration	2006	--	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
Aeronautical Engineering	No	Aeronautical Engineering	UG
Mechanical Engineering	No	Mechanical Engineering	UG
Computer Science and Engineering	Yes	Computer Science and Engineering	UG
Electronics and Communication Engineering	No	Electronics & Communication 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	2009 / --	60	Yes	2022	30	2022	F.No. South-Central/1-10981277252/2022/EOA	Granted accreditation for 3 years for the period (specify period)	2016	2025	3	4

Sanctioned Intake for Last Five Years for the Thermal Engineering	
Academic Year	**Sanctioned Intake**
2024-25	30
2023-24	30
2022-23	30
2021-22	60
2020-21	60
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.Krishnaraj J
B. Nature of appointment:	Regular
C. Qualification:	ME/M. Tech and PhD

B3. Program Details

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

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2024-25 (CAY)	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)	2020-21 (CAYm4)	2019-20 (CAYm5)	2018-19 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	30	30	30	60	60	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	29	25	16	36	60	101	173
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	8	14	22	5	30	25
N3=Separate division if any	0	0	0	0	0	0	0
N4=Total no. of students admitted in the 1st year via all supernumerary quotas	0	0	0	0	0	0	0

Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	29	33	30	58	65	131	198

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)	30	0	0	96.67
2023-24 (CAYm1)	30	0	0	83.33
2022-23 (CAYm2)	30	0	0	53.33

Average [(ER1 + ER2 + ER3) / 3] = 77.78≡ 14.00

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).	65.00	150.00	205.00
B=No. of students who graduated from the program in the stipulated course duration	50.00	119.00	183.00
Success Rate (SR)= (B/A) * 100	76.92	79.33	89.27

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 81.84

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)	5.34	5.99	5.87
Y=Total no. of successful students	20.00	14.00	35.00
Z=Total no. of students appeared in the examination	21.00	14.00	35.00
API [X*(Y/Z)]	5.09	5.99	5.87

Average API[(AP1+AP2+AP3)/3] : 5.65

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)	6.28	6.22	6.01
Y=Total no. of successful students	28.00	47.00	56.00
Z=Total no. of students appeared in the examination	28.00	57.00	65.00
API [X * (Y/Z)]	6.28	5.13	5.18

Average API [(AP1 + AP2 + AP3)/3] : 5.53

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 (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)	6.61	6.53	6.73
Y=Total no. of successful students	46.00	56.00	119.00
Z=Total no. of students appeared in the examination	47.00	56.00	128.00
API [X*(Y/Z)]:	6.47	6.53	6.26

Average API [(AP1 + AP2 + AP3)/3] : 6.42

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	65.00	150.00	205.00
X=No. of students placed	32.00	90.00	130.00
Y=No. of students admitted to higher studies	3.00	22.00	33.00
Z= No. of students taking up entrepreneurship	3.00	3.00	2.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	58.46	76.67	80.49

Average Placement Index = (P_1 + P_2 + P_3)/3: 71.87 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.Krishnaraj J	XXXXXXX15E	XXXXXXXXXXXXXXXPhD	Annamalai University	Thermal Power Engineering	05/12/2015	9.2	Professor	Professor	05/12/2015	Regular	Yes		Yes
2	Dr.P.Bridjesh	XXXXXXX27A	XXXXXXXXXXXXXXXPhD	St Peter's Institute of Higher Education	Thermal Engineering	16/11/2015	8.6	Assistant Professor	Associate Professor	16/08/2022	Regular	No	18/05/2024	No
3	Dr.Muhammed Anaz Khan	XXXXXXX26L	XXXXXXXXXXXXXXXPhD	NIT Tiruchurapalli	Manufacturing Engineering	24/06/2017	7.7	Assistant Professor	Associate Professor	25/06/2019	Regular	Yes		No

4	Dr. K.Limbadri	XXXXXXX21K	XXXXXXXXXXXXXXXPhD	BITS Pilani Hyderabad	Materials Technology	25/05/2018	6.8	Assistant Professor	Associate Professor	25/05/2023	Regular	Yes		No
5	Dr.Ravikiran Chintalapudi	XXXXXXX21R	XXXXXXXXXXXXXXXPhD	JNTUA	Thermal Engineering	09/06/2018	6.8	Assistant Professor	Associate Professor	09/06/2023	Regular	Yes		No
6	Dr.Lokasani Bhanuprakash	XXXXXXX58C	XXXXXXXXXXXXXXXPhD	NIT Calicut	Nano Technology	30/07/2018	6.6	Assistant Professor	Associate Professor	30/09/2020	Regular	Yes		No
7	Dr.Harikishor Kumar	XXXXXXX95D	XXXXXXXXXXXXXXXPhD	IIT BHU	Manufacturing Technology	02/07/2019	5.7	Assistant Professor	Associate Professor	02/12/2021	Regular	Yes		No
8	Dr.P.Pramod Kumar	XXXXXXX67R	XXXXXXXXXXXXXXXPhD	JNTUK	CAD/CAM	01/07/2021	3.7	Assistant Professor	Associate Professor	01/05/2023	Regular	Yes		No
9	Dr.Prabhu Kishore Nutakki	XXXXXXX19F	XXXXXXXXXXXXXXXPhD	NIT AP	Production Engineering	08/09/2012	12.5	Assistant Professor	Assistant Professor		Regular	Yes		No
10	Dr.Vemuri Venkata Phani Babu	XXXXXXX01M	XXXXXXXXXXXXXXXPhD	NIT AP	Advanced Manufacturing Systems	18/06/2018	6.8	Assistant Professor	Assistant Professor		Regular	Yes		No
11	Mr. E C Prasad Nidumolu	XXXXXXX25C	M.E/M.Tech	JNTUH	CAD/CAM	06/04/2015	9.10	Assistant Professor	Assistant Professor		Regular	Yes		No
12	Mr. G. Ananda Rao	XXXXXXX18E	M.E/M.Tech	JNTUK	Machine Design	04/05/2015	9.9	Assistant Professor	Assistant Professor		Regular	Yes		No
13	Mr.G.Chandra Mohana Reddy	XXXXXXX19R	M.E/M.Tech	JNTUH	CAD/CAM	09/11/2015	9.3	Assistant Professor	Assistant Professor		Regular	Yes		No
14	Mr. J.Laxmi Prasad	XXXXXXX45R	M.E/M.Tech	JNTUH	Mechatronics	14/12/2016	8.2	Assistant Professor	Assistant Professor		Regular	Yes		No
15	Mr. Mudhuganti Mahender	XXXXXXX99B	M.E/M.Tech	JNTUH	CAD/CAM	04/01/2017	8.1	Assistant Professor	Assistant Professor		Regular	Yes		No
16	Mr.Jyothula Sunil Kumar	XXXXXXX73A	M.E/M.Tech	JNTUH	Machine Design	04/12/2017	7.2	Assistant Professor	Assistant Professor		Regular	Yes		No
17	Mr.M.Venkateswar Reddy	XXXXXXX24C	M.E/M.Tech	JNTUH	CAD/CAM	18/06/2018	6.8	Assistant Professor	Assistant Professor		Regular	Yes		No
18	Mrs K Vasundhara	XXXXXXX37Q	M.E/M.Tech	Andhra University	Machine Design	23/06/2018	5	Assistant Professor	Assistant Professor		Regular	No	30/06/2023	No
19	Mr.Moyya Sundeep	XXXXXXX95B	M.E/M.Tech	JNTUH	Engineering Design	29/06/2018	6.7	Assistant Professor	Assistant Professor		Regular	Yes		No
20	Mr.Nagaraju S	XXXXXXX54Q	M.E/M.Tech	NIT Tiruchurapalli	Industrial Engineering	30/06/2018	6.7	Assistant Professor	Assistant Professor		Regular	Yes		No
21	Mr. G.V.Rambabu	XXXXXXX78K	M.E/M.Tech	JNTUH	Thermal Engineering	08/07/2019	5.7	Assistant Professor	Assistant Professor		Regular	Yes		No
22	Mr. Chintala Muralikrishna	XXXXXXX50E	M.E/M.Tech	JNTUH	Thermal Engineering	01/07/2021	3.7	Assistant Professor	Assistant Professor		Regular	Yes		No
23	Ms.Gaikwad Laxmi	XXXXXXX66N	M.E/M.Tech	JNTUH	Thermal Engineering	01/07/2021	3.7	Assistant Professor	Assistant Professor		Regular	Yes		No

24	Mr.L.B.Bharath Raju	XXXXXXX45G	M.E/M.Tech	JNTUH	Advanced Manufacturing Systems	01/07/2021	2	Assistant Professor	Assistant Professor		Regular	No	29/07/2023	No
25	Mr.Mahender Thotakuri	XXXXXXX20D	M.E/M.Tech	JNTUH	Thermal Engineering	02/02/2024	1	Assistant Professor	Assistant Professor		Regular	Yes		No

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

C2. Student-Faculty Ratio (SFR)

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

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

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

Description	**CAY(2024-25)**	**CAYm1 (2023-24)**	**CAYm2 (2022-23)**
UG1.B	33	33	66
UG1.C	33	66	66
UG1.D	66	66	132
UG1: Mechanical Engineering	**132**	**165**	**264**
PG1.A	6	12	12
PG1.B	12	12	18
PG1: Thermal Engineering	**18**	**24**	**30**
DS=Total no. of students in all UG and PG programs in the Department	150	189	294
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=** 150	**S2=** 189	**S3=** 294
DF=Total no. of faculty members in the Department	22	22	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=** 22	**F2=** 22	**F3=** 24
FF=The faculty members in F who have a 100% teaching load in the first-year courses	8	8	8

Description	CAY(2024-25)	CAYm1 (2023-24)	CAYm2 (2022-23)
Student Faculty Ratio (SFR)=S/(F-FF)	**SFR1= 10.71**	**SFR2= 13.50**	**SFR3= 18.38**
Average SFR for 3 years	**SFR= 14.20**		

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)	8	14	7.00	48.57
2023-24(CAYm1)	8	14	9.00	37.78
2022-23(CAYm2)	8	16	14.00	25.71

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	1.00	1.00	6.00	5.00	15.00
2023-24	1.00	1.00	2.00	7.00	6.00	14.00
2022-23	1.00	1.00	3.00	4.00	9.00	19.00
Average	RF1=1.00	AF1=1.00	RF2=2.00	AF2=5.67	RF2=6.67	AF2=16.00

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	G Vijay Kumar	Director	Synergem Consultancy Pvt Ltd	QA/QC Welding	30.00
2	B Ravi Teja	Technical Manager	Synergem Consultancy Pvt Ltd	Non Destructive Testing	25.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	G Vijay Kumar	Director	Synergem Consultancy Pvt Ltd	QA/QC Welding	16.00
2	L Krishna	Quality Manager & ASNT Level III	GMM Pfaudler Ltd	Non Destructive Testing	20.00
3	B Ravi Teja	Technical Manager	Synergem Consultancy Pvt Ltd	Non Destructive Testing	28.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	G Vijay Kumar	Director	Synergem Consultancy Pvt Ltd	QA/QC Welding	20.00
2	L Krishna	Quality Manager & ASNT Level III	GMM Pfaudler Ltd	Non Destructive Testing	20.00
3	Ramprasad L V	Founder CEO	R&AC Academy	Refrigeration & Air Conditioning	12.00

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	30	17	4
2	No. of peer reviewed conference papers published	25	70	3
3	No. of books/book chapters published	2	0	1

C7. Sponsored Research Project

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

(CAYm1)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. Lokasani Bhanuprakash	Dr. Muhammed Anaz Khan	Department of Mechanical Engineering	Development of Hybrid Thermoplastic Filament for 3D printing applications	AMT, DST, New Delhi	2 Years	2200858.00
						Amount received (Rs.):2200858.00

(CAYm2)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Mr. Vemuri Venkata Phani Babu	Dr. Ch. Ravi Kiran	Department of Mechanical Engineering	Adjustable Tapered Vice	National Research Development Corporation (NRDC), New Delhi	1 Year	200000.00
						Amount received (Rs.):200000.00

(CAYm3)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
-	-	-	-	-	-	0.00
						Amount received (Rs.):0.00

Total Amount (Lacs) Received for the Past 3 Years: 2400858.00

Note*:

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

C8. Consultancy Work

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

(CAYm1)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
-	-	-	-	-	-	0.00
						Amount received (Rs.):0.00

(CAYm2)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. Muhammed Anaz Khan	Dr. L. Bhanuprakash and Prof. M. Venkateshwara Reddy	Dept. Of Mechanical Engineering	Development of Composite Multilayer Thermal Barrier Coatings (TBCs) with improved thermal properties for aerospace applications	Defense Research & Development Laboratory (DRDL), Hyderabad	2 Years	983176.00
Dr. P. Bridjesh	Mr. G. C. M. Reddy	Dept. Of Mechanical Engineering	Development of Cross Over Benches, L Shaped Cross Over Benches	Ms. ZAINT Health Care Private Limited, Hyderabad	1 year	282539.00
Mr. V. Venkata Phani Babu	Mr. S. Nagaraju	Dept. Of Mechanical Engineering	Development of 12″ Coating Pan Spray Gun for 16 mm gun holder and Aprone cupboard with bottom 4 no. of segments-GMP Model	Ms. ZAINT Health Care Private Limited, Hyderabad	1 year	396716.00
Dr. Ch. Ravi Kiran	Mr. G. V. Rambabu	Dept. Of Mechanical Engineering	Annual Maintenance of Duct System for Supply of Air for Central Chiller Unit	Ms. ZAINT Health Care Private Limited, Hyderabad	1 year	189848.00
						Amount received (Rs.):1852279.00

(CAYm3)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. Ch. Ravi Kiran	Mr. N. Prabhu Kishore	Dept. Of Mechanical Engineering	Machines Annual Maintenance of Multi Mill, Tablet coating machine, Homogenizer, Tablet packing machine, Thermo Lab Stability Chamber, Thermo Lab Stability Chamber	Ms. ZAINT Health Care Private Limited, Hyderabad	1 Year	280840.00
						Amount received (Rs.):280840.00

Total amount (Lacs) received for the past 3 years: 2133119.00

Note*:

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

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

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

(CAYm1)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Dr. Harikishor	Nano Particles Reinforcements Via Friction Stir Processing (FSP)	1 Year	0.08	0.08	Published a book chapter
Dr N Prabhu Kishore	Trade-off study on environmental aspects of a reactivity controlled compression ignition engine	1 Year	1.00	1.00	SCI Q1 paper published, ME project
Dr. Ch. Ravi Kiran	The effects of gradient index, aspect ratio, porosity, and boundary conditions on	1 Year	1.80	1.80	SCI Q1 paper published, ME Project, working models
			Amount received (Rs.): 2.88		

(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. K Limbadri	Comparative Study of Flow Stress Modeling of Zircaloy-4 Sheets Manufactured from Different Routes	1 Year	0.50	0.50	SCI Q3 paper published, Guidance of students projects
Mr. G. V. Rambabu	Energy, exergy and emission [3E] analysis of Mesua Ferrea seed oil biodiesel	1 Year	0.30	0.30	SCI Q1 paper published, Working models
Dr. Harikishor	Nugget zone characterization of friction stir welded hypereutectic Al-Si alloy	1 Year	0.10	0.10	Published SCI Journal Paper
			Amount received (Rs.): 0.90		

(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 N Prabhu Kishore	Numerical Analysis of Supersonic Combustion of Hydrogen Flow Characteristics in Scramjet	1 Year	1.00	1.00	SCI Q1 paper published, working models
Dr. K Limbadri	Flow Stress Modeling of Tube and Slab Route Sheets of Zircaloy-4 Using Machine Learning Techniques	1 Year	0.65	0.65	SCI Q2 paper published, students guidance
Dr. Harikishor	Filler Dispersion and Unidirectional Sliding Characteristics of As-Cast and Multi-Pass Friction Stir	1 Year	0.48	0.48	SCI Q1 paper published, working models
Dr. Muhammed Anaz Khan	Thermal Shock Resistance and Thermal Insulation Capability of Laser-Glazed	1 Year	0.30	0.30	SCI Q1 paper published, ME Project
			Amount received (Rs.): 2.43		

Total amount (Lacs) received for the past 3 years : 6.21

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 Workshop Practices, Engineering Workshop (VSB-001 A, VSB-	1	1. Fitting tools 2. Carpentry tools 3. Tin-Smithy tools 4. Electrical equipments 5. Electronic equipments 6. Black Smithy tools	1. I Yr/I Sem C	Mr. K. Mallesh, Mr. S. Mac	Lab Assistant	ITI
2	Manufacturing Processes Lab	3	1. Foundry tools 2. Arc welding machine 3. Spot welding machine 4. TIG welding machine 5. Injection moulding machine 6. Blow moulding machine	1. II Yr/I Sem M	Mr. N. Nagaraju	Lab Assistant	ITI
3	Strength of Materials Lab(Mech.), Solid Mechanics for Aeronautics Lab(Aero.)	2	1. Impact testing machine 2. Torsion testing machine 3. Spring testing machine 4. Simply supported beam deflection test apparatus 5. Cantilever beam deflection	1. II Yr/I Sem M	Mr. Md. Shareef Pasha	Lab Assistant	ITI
4	Material science and Metallurgy Lab	1	1. Microscope 2. Belt Grinder 3. Jominy End Quench Test 4. Disc Polisher 5. Muffle Furnace 6. Rockwell hardness tester	1. II Yr/I Sem M	Mr. Md. Shareef Pasha	Lab Assistant	ITI
5	Python Lab for Mechanical Applications	1	Computers equipped with Python Software	1. II Yr/I Sem M	Mr. N. Nagaraju	Lab Assistant	ITI
6	Fluid Mechanics and Hydraulic Machines Lab(Mech.), Aero Dynamics Lab(Aero.)	2	1. Venturi Meter and Orifice Meter 2. Pipe friction apparatus 3. Pelton Wheel 4. Francis Turbine 5. Kaplan Turbine 6. Single Stage Centrifugal Pump	1. II Yr/I Sem A	Mr. B. Hanmandlu	Lab Assistant	ITI

7	Computer Aided Machine Drawing Lab	1	Computers equipped with AutoCAD Software	1. II Yr/II Sem I	Mr. N. Nagaraju	Lab Assistant	ITI
8	CAD Lab	1	Computers equipped with CATIA V5 Software	1. III Yr/I Sem I	Mr. N. Nagaraju	Lab Assistant	ITI
9	Thermal Engineering Lab	3	1. Single cylinder, 4-stroke, water cooled diesel engine cut section model (valve timing diagram) 2. Single	1. III Yr/I Sem I	Mr. K. Krishna	Lab Assistant	ITI
10	Heat Transfer Lab	1	1. Composite wall apparatus 2. Lagged pipe apparatus 3. Thermal conductivity of given metal rod 4. Pin-fin	1. III Yr/II Sem	Mr. G. Mahipal Reddy	Lab Assistant	ITI
11	Machine Tools Lab(Mech.), Aircraft Production Technology Lab(Aero.)	2	1. Lathe Machines 2. Milling Machine 3. Drilling Machine 4. Shaping Machine 5. Slotting Machine 6.	1. III Yr/I Sem A	Mr. N. Nagaraju	Lab Assistant	ITI
12	Production Drawing Practice & Computer Aided Engineering Lab	1	Computers equipped with AutoCAD & Analysis Software	1. III Yr/II Sem	Mr. N. Nagaraju	Lab Assistant	ITI
13	Composite Materials Lab	2	1. Forced Convection Oven 2. Universal Testing Machine 3. Barcol Hardness Tester 4. Digital Ultrasonic	1. IV Yr/I Sem I	Mr. G. Mahipal Reddy	Lab Assistant	ITI
14	Engineering Metrology and Instrumentation Lab	3	1. Vernier Calipers 2. Micrometer 3. Vernier height gauge 4. LVDT Transducer 5. Photo and magnetic	1. IV Yr/I Sem I	Mr. K. Krishna	Lab Assistant	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	• CC Cameras • First Aid Box • Fire Extinguishers • Sand buckets
2	Manufacturing Processes Lab	• CC Cameras • First Aid Box • Sand buckets • Fire Extinguishers • Hand Gloves • Eye Shields /Goggles
3	Strength of Materials Lab	• CC Cameras • First Aid Box
4	Material science and Metallurgy Lab	• CC Cameras • First Aid Box

5	Python Lab for Mechanical Applications	• CC Cameras • UPS (for data safety) • Earth pit
6	Fluid Mechanics and Hydraulic Machines Lab	• CC Cameras • First Aid Box
7	Computer Aided Machine Drawing Lab	• CC Cameras • UPS (for data safety) • Earth pit
8	CAD Lab	• CC Cameras • UPS (for data safety) • Earth pit
9	Thermal Engineering Lab	• CC Cameras • First Aid Box • Fire Extinguishers • Sand buckets
10	Heat Transfer Lab	• CC Cameras • First Aid Box
11	Machine Tools Lab	• CC Cameras • First Aid Box • Earth pit
12	Production Drawing Practice & Computer Aided Engineering Lab	• CC Cameras • UPS (for data safety) • Earth pit
13	Composite Materials Lab	• CC Cameras • First Aid Box • Fire Extinguishers • Hand Gloves
14	Engineering Metrology and Instrumentation Lab	• CC Cameras • First Aid Box

D3. Project Laboratory/Research Laboratory

Table No. 7.5.1: List of project laboratory/research laboratory /Centre of Excellence.

S.N.	Name of the Laboratory
1.	Centre of Excellence – Welding Technologies
2.	Centre of Excellence – Non-Destructive Testing
3.	Centre of Excellence – Advanced Composite Materials
4.	Centre of Excellence - Product Life Cycle Management
5.	Centre of Excellence – Digital Manufacturing
6.	Centre for Innovation, Entrepreneurship and development cell

1. Centre of Excellence – Welding Technologies

Fig.7.5.1 CoE – Welding Technologies

The Department of Mechanical Engineering has established a Centre of Excellence in Welding Technologies in collaboration with Synergem and it is well equipped with SUPERSONIC 305I (ARC Welding), Supersonic TIG200 (TIG Welding), TIG Machines 400 Amps, MIG Machine 400 AMP, Welding Cable 35MM Square Copper Cable, Holder & Earth Clap (Set), Remote Control (Set). This CoE focuses on developing and implementing cutting-edge welding technologies, training professionals, and providing research and development opportunities. This lab offers students and faculty members to master various welding processes and utilize in their project work and research work. It supports project-based learning by enabling students to work on real life fabrication and assembly challenges. Short-term skill training programs, welding certifications, and industrial workshops are organized regularly through the CoE, ensuring alignment with industry expectations.

List of equipment's available:

Sl. No.	Equipment Name	Qty
1.	Supersonic 305I (ARC Welding)	3
2.	Supersonic TIG200 (TIG Welding)	2
3.	TIG Machines 400 Amps	2
4.	MIG Machine 400 AMP	1
5.	Welding Cable 35MM Square (Copper Cable)	60

6.	Holder & Earth Clap (Set)	5
7.	Remote Control (Set)	2

2. Centre of Excellence – Non-Destructive Testing

Fig.7.5.2 CoE – Non-Destructive Testing

The Department of Mechanical Engineering has established a Centre of Excellence in NDT Technologies in collaboration with Synergem and it is well equipped with advanced testing methodologies such as Ultrasonic Testing (UT), Radiographic Testing (RT), Magnetic Particle Testing (MPT), Liquid Penetrant Testing (LPT), and Visual Testing (VT). The Centre of Excellence (CoE) in Non-Destructive Testing (NDT) is a specialized facility established to promote advanced skill development, industry-oriented training, and research in the field of inspection and evaluation of materials without causing damage. The lab ensures the integrity and reliability of critical parts in industries like Aerospace, Automotive, Manufacturing, Construction, Marine, Petrochemical, Military and Defence. NDT helps detect defects, discontinuities, or flaws that could compromise on safety or performance. The CoE enhances employability by providing NDT certifications, which are in high demand in industries like fabrication, pressure vessels, pipelines, railways, power plants, and defense.

List of equipment's available:

Sl. No.	Equipment Name	Qty
1.	Ultrasonic Testing (UT)	2
2.	Radiographic Testing (RT)	2
3.	Magnetic Particle Testing (MPT)	5
4.	Liquid Penetrant Testing (LPT)	5
5.	Visual Testing (VT)	1

3. Centre of Excellence – Advanced Composite Materials

Fig.7.5.3 CoE – Advanced Composite Materials

The Department of Mechanical Engineering has Advanced Composite Materials Laboratory and it is well equipped with furnace, Bottom pouring type stir casting machine, Digital Ultrasonic Flow Detector, Barcol Hardness Tester. The Centre of Excellence (CoE) in Advanced Composite Materials has been established to promote interdisciplinary learning, research, innovation, and industry collaboration in the field of high-performance composite materials. Promotes eco-friendly bio-composites and lightweight structural alternatives. CoE focus on consultancy work for small and medium enterprises for Industry Level Project and also helps the students to understand the various characteristics of composites and fabricate models for their research projects. The students and faculty members are using this laboratory for pursuing their research activities in the fields of advanced composite materials. The CoE supports industry-relevant mini and major projects, internships, and startup incubation in composite applications.

List of equipment's available:

Sl. No.	Equipment Name	Qty
1.	Bottom Pouring Type Stir Casting Machine – Swamequip	1
2.	Universal Testing Machine – Unitech 94100/250	1
3.	Digital Ultrasonic Flaw Detector Einstein-II TFT	1
4.	Barcol Hardness Tester	1
5.	Muffle Furnace	1
6.	Drop Weight Impact Tester – FSA Make FW-1650	1
7.	Forced Convection Oven – Equitron #7051-150	1
8.	Mechanical Overhead Stirrer – IKA RW 20	1
9.	Magnetic Stirrer – IKA RCT Basic	1

4. Centre of Excellence – Product Life Cycle Management

Fig.7.5.4 CoE – Product Life Cycle Management

The Department of Mechanical Engineering has Product Life Cycle Management Laboratory with the help of Tata Technologies Pvt. Ltd. and it is well equipped with Windchill Software, 3D-Enovia Software, Learning platform iGATE IT Software. The Centre of Excellence (CoE) in Product Lifecycle Management (PLM) has been established to provide a state-of-the-art platform for design, development, collaboration, and lifecycle management of engineering products. Facilitates project-based learning and industry simulations where students manage digital product development life cycles. Used for design validation, virtual prototyping, and collaboration-based engineering assignments. Integrated with subjects such as Product Design and Development, CAD/CAM, Engineering Design, and Industrial Engineering. The students are using this software to analysis the Product Life Cycle Management, where every part manufacture will be under continuous monitoring right from raw materials to finished product.

List of equipment's available:

Sl. No.	Equipment Name	Qty
1.	Computers	20
2.	Software(PLM ENOVIA)	10
3.	Software(PLM Windchill)	10
4.	Software(Learning Platform iGATE IT)	10
5.	Projector	1

5. Centre of Excellence – Digital Manufacturing

Fig.7.5.5 CoE – Digital Manufacturing

The Department of Mechanical Engineering has Digital Manufacturing Laboratory centre and it is well equipped with CNC-Lathe, CNC Drill Tap machining center (CNC Milling). The Centre of Excellence (CoE) on Digital Manufacturing is established to provide a state-of-the-art learning environment that integrates traditional manufacturing techniques with modern digital technologies. The CoE is equipped with CNC Lathe and CNC Milling machines, supporting both academic and industrial applications. Students develop industry-relevant technical skills in CNC programming, machining, and automation. This will enhance student employability by developing competencies in CNC machine operations and digital manufacturing. This Centre of Excellence also focuses on consultancy work which fulfills the need of small and medium scale industries. The students are using this laboratory for the precision machining works like turning, milling etc., are carried out for the project work.

List of equipment's available:

Sl. No.	Equipment Name	Qty
1.	CNC Lathe (Tutor)	1
2.	CNC Drill Tap machining center (CNC Mill)	1

6. Centre for Innovation, Entrepreneurship and development cell (SRUSHTI)

Fig.7.5.6 Centre for Innovation, Entrepreneurship and development cell (SRUSHTI)

The Department of Mechanical Engineering has Centre for Innovation, Entrepreneurship and development cell (SRUSHTI) and it is well equipped with CNC wood Engraver, Ultimaker 3D Printer, SLA 3-D Printer, other kind of 3D Printers and IOT. The Centre for Innovation, Entrepreneurship and Development (SRUSHTI) is an institutional initiative aimed at fostering a culture of innovation, promoting entrepreneurial thinking, and nurturing start-up ecosystems among students and faculty. The facilities available is used to conduct some of the advanced manufacturing related project works which include additive manufacturing or direct digital manufacturing technology to produce proto type of a product. Enhanced innovation capacity among students, demonstrated through product prototypes, patents, and problem-solving competitions. Startup creation and early-stage entrepreneurial ventures by students and alumni. Strengthened industry-institute collaboration through sponsored challenges, mentorship, and funding support.

List of equipment's available:

Sl. No.	Equipment Name	Qty
1.	CNC wood Engraver	1
2.	Ultimaker 3D Printer	1
3.	SLA 3D Printer	1
4.	3D Printers	3

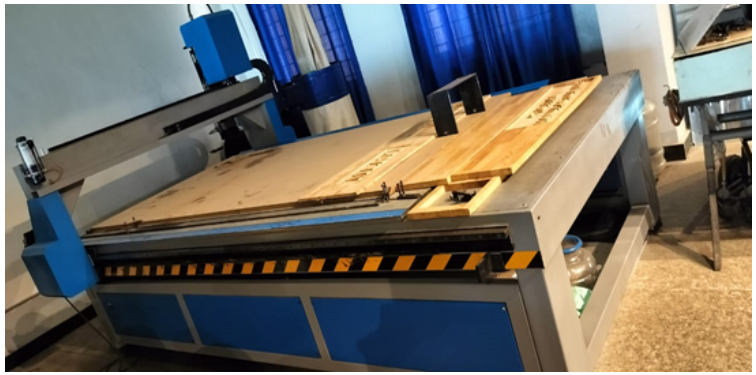

Fig.7.5.7 CNC wood Engraver

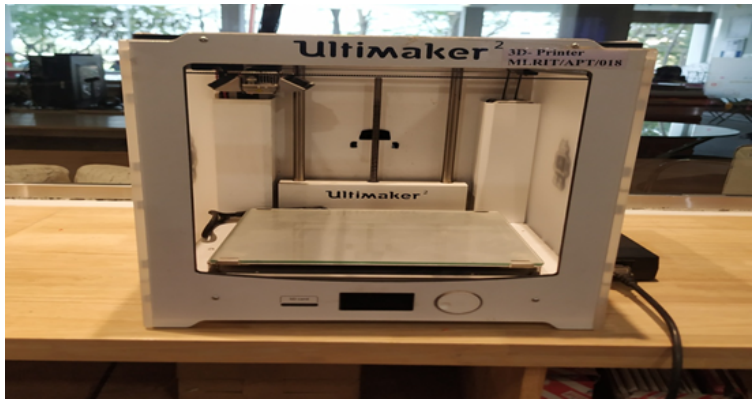

Fig.7.5.8 Ultimaker 3D Printer

Fig.7.5.9 SLA 3D printer

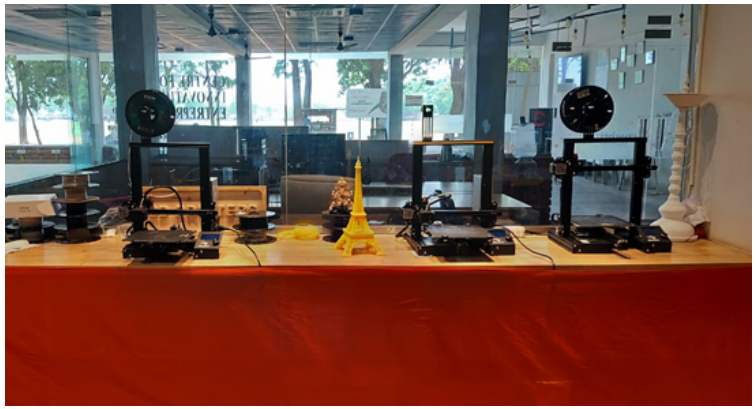

Fig.7.5.10 3D Printers

List of Projects done by Students using CoE's:

Sl. No.	Roll Numbers	Project Title	Guide
1.	19R21A0303 19R21A0306 19R21A0317 19R21A0327	Formulation and characterisation of Hotmelt adhesives reinforced with microfibres for improved Adhesion Strength and Wettability	Dr. Md. Anaz Khan
2.	19R21A0304 19R21A0350 20R25A0303 20R25A0304	Experimental Studies on Mechanical Properties of Aluminium Matrix Composites Reinforced with Natural Fibre Ashes	Dr. Ch. Ravi Kiran / Dr. Md. Anaz Khan
3.	19R21A0305 19R21A0309 19R21A0315 19R21A0346	Mechanical and Tribological characterization of Aluminium matrix composites reinforced with Graphane / Zirconia biphase nano-particles	Mr. G. Anand Rao

4.	19R21A0326 19R21A0338 19R21A0339 19R21A0341	Tribological characterization of Aluminimum Matrix Composites reinforced with Fibre Ash Particulates	Dr. Md. Anaz Khan
5.	19R21A0335 19R21A0334 19R21A0313	Design and fabrication of EV vehicle	Prof. M. Vekateswar Reddy / Mr. J. Sunil Kumar
6.	19R21A0321 19R21A0323 19R21A0324 19R21A0332	Particle dispersed Matrix modification in polymer matrix composites: Processing and characterisation	Dr. Y. Balram
7.	19R21A0375 19R21A0379 19R21A0387 19R21A0388	Fabrication and Characterization of Aluminium Metal Matrix Nanocomposites using Powder Metallurgical Techniques	Dr. Hari Kishor Kumar (Guide) & Dr. L. Bhanuprakash (Co-Guide)
8.	19R21A0362 19R21A0371 19R21A0384 19R21A03A1	Development of 3D Filament Extruder Setup for Uniform and Continuous Thermoplastic Filaments	Dr. L. Bhanuprakash
9.	19R21A0355 19R21A0376 19R21A0378 19R21A0383	Fabrication and Characterization of Aluminium Metal Matrix Composites	Mr. M. Sundeep (Guide) & Dr. L. Bhanuprakash (coguide)

10.	19R21A0366 19R21A0373 19R21A0374 20R25A0321	Characterization of A7075/fibre composites fabricated via stir casting	Dr. Harikishor Kumar (Guide) & Dr. L. Bhanuprakash (Co-Guide)
11.	19R21A0386 20R25A0324 20R25A0329 19R21A0370	Composite Rebars: Fabrication and Characterization	Dr. L. Bhanuprakash
12.	20R21A0322 20R21A0333 21R25A0302	Experimental and numerical residual stress analysis on Al alloys dissimilar weldments developed by TIG welding technique	Dr. Y. Balram (Guide)
13.	20R21A0316 20R21A0330 20R21A0341	Design and Fabrication of Work Holding Device for Convex Milling	Dr. J. Krishna Raj (Guide), Mr. V. Phani Babu (Co-Guide)
14.	20R21A0312 20R21A0340 20R21A0328	Investigation of Mechanical properties of SS316L Additive manufactured with different printing parameters	Mr. V. Venkata Phani Babu
15.	19R21A0365 20R21A0353 20R21A0359 20R21A0357	Design and Fabrication of Passenger Electric Three Wheeler Vehicle	Mr. G. V. Rambabu (Guide), Mr. V.V. Phani Babu (co-guide)
16.	20R21A0301 20R21A0306 20R21A0334 20R21A0344	Modelling and Fabrication of Dosa Printer	Mr. Moyya.Sundeep (Guide), Mr. V.V. Phani Babu (Co-Guide)

17.	20R21A0315 20R21A0323 20R21A0345 20R21A0324	Fabrication and Characterization of Hybrid Thermoplastic Filaments using Filment Extruder Setup	Dr. L. Bhanuprakash (Guide), Dr. Muhammed Anaz Khan (Co-Guide)
18.	22R25A0318 22R25A0312 22R25A0313	Optimization of a Hybrid Composite Bulletproof Vest: Combining Kevlar, Steel Mesh, and Flax Fiber Mat with Varying Stacking Sequences for Enhanced Ballistic Performance	Dr. Muhammed Anaz Khan
19.	22R25A0311 22R25A0307 21R21A0304	Optimization of Mechanical Properties in 3D Printable PLA/Coal Ash Composite Filaments: Effects of Reinforcement Percentage and Printing Parameters	Dr. K. Limbadri (Guide) & Dr. L. Bhanuprakash Reddy (Co-guide)
20.	22R25A0301 22R25A0304 21R21A0310	Investigations on Mechanical and Metallurgical Characterization of CMT dissimilar weldments of AA 5083 and AA7075: as-weld and friction stir processing conditions	Dr. Y. Balram (Guide) & Mr. T. Mahender (Co-guide)
21.	21R21A0320 21R21A0327 21R21A0331 22R25A0319	Development of Kevlar and Jute Fiber Reinforced Polymer Matrix Composites for Bulletproof Vests: Influence of Layer Alignment on Ballistic Performance	Dr. P. Pramod Kumar (Guide) & Dr. Anaz Khan (Co-guide)
22.	21R21A0307 22R25A0302 22R25A0309	Fabrication and characterisation of reinforced PLA materials for 3-D printing applications	Dr. L. Bhanuprakash Reddy
23.	22R25A0305 22R25A0314 22R25A0320 22R25A0316	Design and fabricate of automatic hammering machine	Mr. G. CM Reddy (Guide) & Mr. S. Nagaraju (Co-Guide)

24.	22R25A0310	Design and fabrication of staircase for carrying heavy loads	Dr. Harikishor Kumar (Guide) & Mr. V. V. Phani Babu (Co-Guide)
	21R21A0312		
	22R25A0315		
	21R21A0318		

List of Funded Projects / Consultancy done by Faculty Using COE's

S. No.	Project Title	Funding Agency	Faculty	COE's Used
1.	Development of Hybrid Thermoplastic Filament for 3D printing applications	AMT, DST, New Delhi	Dr. Lokasani Bhanuprakash & Dr. Muhammed Anaz Khan	• **Advanced Composite Materials** • **Digital Manufacturing** • **Centre for Innovation Entrepreneurship and Development Cell (SRUSHTI)**
2.	Adjustable Tapered Vice	National Research Development Corpor ation (NRDC), New Delhi	Dr. Vemuri Venkata Phani Babu & Dr.Ch.Ravi Kiran	• **Digital Manufacturing** • **Welding Technologies**
3.	Development of Composite Multilayer Thermal Barrier Coatings (TBCs) with improved thermal properties for aerospace applications	Defense Research & Development Laboratory (DRDL), Hyderabad	Dr. Muhammed Anaz Khan & Dr. Lokasani Bhanuprakash	• **Advanced Composite Materials** • **Digital Manufacturing** • **Non-Destructive Testing**
4.	Development of Cross Over Benches, L Shaped Cross Over Benches	Ms. ZAINT Health Care Private Limited, Hyderabad	Dr. P. Bridjesh & Dr. G. Chandramohana Reddy	• **Digital Manufacturing** • **Welding Technologies**

5.	Development of 12″ Coating Pan Spray Gun for 16 mm gun holder and Apron cupboard with bottom 4 n o. of segments GMP Model	Ms. ZAINT Health Care Private Limited, Hyderabad	Dr. Vemuri Venkata Phani Babu & Mr. S. Nagaraju	• **Digital Manufacturing** • **Welding Technologies** • **Non-Destructive Testing**

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)	1320	66	50	15	65
2023-24(CAYm1)	1440	72	58	19	70
2024-25(CAY)	1020	51	58	21	99

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	7500000.00	7574506.00	9000000.00	8594884.00	117000000.00	115980277.00	50000000.00	49352618.00
Library	1900000.00	1849230.00	3000000.00	2839275.00	2400000.00	2385029.00	4100000.00	4037917.00
Laboratory equipment	10500000.00	10219503.00	24500000.00	24444761.00	28500000.00	28129329.00	25500000.00	25173922.00
Teaching and non-teaching staff salary	350000000.00	345020998.00	350000000.00	330938647.00	207500000.00	206774402.00	255000000.00	250938539.00
Outreach Programs	830000	808552	830000	826839	780000	773949	720000	712543
R&D	14500000.00	14206905.00	12000000.00	11740304.00	5500000.00	5238455.00	4000000.00	3946389.00
Training, Placement and Industry linkage	6000000.00	5517732.00	9200000.00	9041809.00	5000000.00	4820897.00	4200000.00	4194012.00

SDGs	500000.00	495627.00	170000.00	167471.00	420000.00	412896.00	230000.00	224377.00
Entrepreneurship	360000.00	358265.00	1000000.00	996986.00	930000.00	925537.00	2200000.00	2129530.00
Others, specify	177910000	174323811	190300000	185251428	191970000	182044553	204050000	197371341
Total	**570000000.00**	**560375129.00**	**600000000.00**	**574842404.00**	**560000000.00**	**547485324.00**	**550000000.00**	**538081188.00**

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	220000.00	215628.00	400000.00	378408.00	1300000.00	1304164.00	550000.00	537308.00
Software	0	0	0	0	0	0	0	0
SDGs	0	0	0	0	0	0	0	0
Support for faculty development	40000.00	37813.00	80000.00	77521.00	80000.00	68737.00	120000.00	118401.00
R & D	370000.00	360808.00	230000.00	222167.00	100000.00	93471.00	380000.00	377213.00
Industrial Training, Industry expert, Internship	170000.00	162286.00	210000.00	207767.00	125000.00	109566.00	200000.00	190637.00
Miscellaneous Expenses*	90000.00	85831.00	280000.00	272186.00	150000.00	110169.00	600000.00	607650.00
Total	**890000.00**	**862366.00**	**1200000.00**	**1158049.00**	**1755000.00**	**1686107.00**	**1850000.00**	**1831209.00**