Program Name : Mechanical Engineering	**Discipline**: Engineering & Technology
Level : Under Graduate	**Tier**: 1
Application No: 10052	**Date of Submission**: 25-02-2025

PART A- Profile of the Institute

A1.Name of the Institute: VELAMMAL COLLEGE OF ENGINEERING AND TECHNOLOGY	
Year of Establishment : 2007	Location of the Institute: Madurai
A2. Institute Address:Velammal College of Engineering and Technology,Madurai Rameswaram High Road,Velammal Nagar, ViraganoorMadurai 625 009.	
City:Madurai	State:Tamil Nadu
Pin Code:625009	Website:www.vcet.ac.in
Email:principal@vcet.ac.in	Phone No(with STD Code):0452-2465289
A3. Name and Address of the Affiliating University (if any):	
Name of the University : ANNA UNIVERSITY CHENNAI	City: Madurai
State : Tamil Nadu	Pin Code: 625009
A4. Type of the Institution: Autonomous CAY(2021-22)	
A5. Ownership Status: Self financing	

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

- No. of UG programs: **9**
- 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	Artificial Intelligence and Data Science	2023	--	Artificial Intelligence and Data Science
2	Engineering & Technology	UG	Civil Engineering	2011	--	Civil Engineering
3	Engineering & Technology	PG	Communication Systems	2011	--	Electronics and Communication Engineering
4	Engineering & Technology	UG	Computer Science and Engineering	2007	--	Computer Science and Engineering
5	Engineering & Technology	PG	Computer Science and Engineering	2011	--	Computer Science and Engineering
6	Engineering & Technology	UG	Computer Science and Engineering (Cyber Security)	2024	--	Computer Science and Engineering (Cyber Security)
7	Engineering & Technology	UG	Electrical and Electronics Engineering	2007	--	Electrical and Electronics Engineering
8	Engineering & Technology	UG	Electronics & Communication Engineering	2007	--	Electronics and Communication Engineering

9	Engineering & Technology	UG	Electronics Engineering (VLSI Design and Technology)	2024	--	Electronics Engineering (VLSI Design and Technology)
10	Engineering & Technology	UG	Information Technology	2007	--	Information Technology
11	Engineering & Technology	PG	Manufacturing Engineering	2011	--	Mechanical Engineering
12	Engineering & Technology	UG	Mechanical Engineering	2008	--	Mechanical Engineering
13	Engineering & Technology	PG	Network Engineering	2012	--	Information Technology
14	Engineering & Technology	PG	Power Systems Engineering	2013	--	Electrical and Electronics 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
Electronics and Communication Engineering	Yes	Electronics & Communication Engineering	UG
Computer Science and Engineering	Yes	Computer Science and Engineering	UG
Information Technology	Yes	Information Technology	UG

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

No Record

PART-B: Program information

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

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

SR.NO.	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/DECREASE INTAKE (if any)	YEAR OF INCREASE/DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/COMPETENT AUTHORITY ARROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCREDITE
1	Mechanical Engineering	UG	2008 / --	60	Yes	2020	60	2020	F. No. Southern/1-43664989643/2024/EOA	Granted accreditation for 3 years for the period (specify period)	2022	2025	2

Sanctioned Intake for Last Five Years for the Manufacturing Engineering	
Academic Year	Sanctioned Intake
2024-25	60
2023-24	60
2022-23	60
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 :	MANIKANDAN G
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)	60	60	60	60	60	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	47	53	42	47	35	64	79
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	4	15	13	7	10	7
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.	47	57	57	60	42	74	86

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

B4. Enrolment Ratio in the First Year

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

Year of entry	N (From Table 4.1)	N1 (From Table 4.1)	N4 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2024-25 (CAY)	60	0	0	78.33
2023-24 (CAYm1)	60	0	0	88.33
2022-23 (CAYm2)	60	0	0	70.00

Average [(ER1 + ER2 + ER3) / 3] = 78.89≡ 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).	42.00	73.00	80.00
B=No. of students who graduated from the program in the stipulated course duration	30.00	64.00	79.00

Success Rate (SR)= (B/A) * 100		71.43	87.67	98.75

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 85.95

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)	7.88	7.84	8.06
Y=Total no. of successful students	41.00	21.00	30.00
Z=Total no. of students appeared in the examination	51.00	41.00	46.00
API [X*(Y/Z)]	6.33	4.02	5.26

Average API[(AP1+AP2+AP3)/3] : 5.20

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 2nd year/10)	7.96	8.18	8.24
Y=Total no. of successful students	26.00	29.00	30.00
Z=Total no. of students appeared in the examination	41.00	42.00	37.00
API [X * (Y/Z)]	5.05	5.65	6.68

Average API [(AP1 + AP2 + AP3)/3] : 5.79

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)	8.05	7.87	8.25
Y=Total no. of successful students	29.00	30.00	64.00
Z=Total no. of students appeared in the examination	29.00	30.00	64.00

Average API [(AP1 + AP2 + AP3)/3] : 7.35

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	67.00	130.00	127.00
X=No. of students placed	27.00	40.00	52.00
Y=No. of students admitted to higher studies	2.00	5.00	6.00
Z=Total no. of students appeared in the examination	0.00	1.00	1.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	43.28	35.38	46.46

Average Placement Index = (P_1 + P_2 + P_3)/3: 41.71 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	MANIKANDAN G	XXXXXXX15F	ME/M. Tech and PhD	Anna University, Chennai	Quality Engineering	18/06/2007	17.7	Assistant Professor	Professor	01/06/2009	Regular	Yes		Yes
2	ANBUMALAR V	XXXXXXX99A	ME/M. Tech and PhD	Anna University, Chennai	Production Engineering	01/02/2011	13.11	Professor	Professor	01/02/2011	Regular	Yes		No
3	MARAN M	XXXXXXX08P	ME/M. Tech and PhD	Anna University, Chennai	Manufacturing Engineering	01/06/2011	13.7	Assistant Professor	Professor	01/04/2020	Regular	Yes		No
4	KAMATCHI T	XXXXXXX71C	ME/M. Tech and PhD	Anna University, Chennai	Production Engineering	23/06/2010	14.7	Assistant Professor	Associate Professor	01/04/2020	Regular	Yes		No
5	ESWARA PRASATH N	XXXXXXX39G	ME/M. Tech and PhD	Anna University, Chennai	Production Engineering	24/01/2024	0.11	Associate Professor	Associate Professor	24/01/2024	Regular	Yes		No
6	AMUTHAN T	XXXXXXX08L	ME/M. Tech and PhD	Anna University, Chennai	Engineering Design	01/06/2013	11.7	Assistant Professor	Associate Professor	01/04/2020	Regular	Yes		No
7	ELILVANAN R	XXXXXXX26B	M.E/M.Tech	Anna University, Chennai	Energy Engineering	07/06/2010	14.7	Assistant Professor	Assistant Professor		Regular	Yes		No
8	MOTHILAL A	XXXXXXX87A	M.E/M.Tech	Anna University, Chennai	Engineering Design	01/06/2013	11.7	Assistant Professor	Assistant Professor		Regular	Yes		No
9	AMBROSE EDWARD I	XXXXXXX85R	M.E/M.Tech	Anna University, Chennai	Product Design and Development	01/06/2012	12.7	Assistant Professor	Assistant Professor		Regular	Yes		No
10	VARUN KUMAR B	XXXXXXX45K	ME/M. Tech and PhD	Anna University, Chennai	Thermal Engineering	17/06/2013	11.7	Assistant Professor	Assistant Professor		Regular	Yes		No
11	RAJA CHANDRA SEKAR M	XXXXXXX11R	M.E/M.Tech	Anna University, Coimbatore	Industrial Engineering	01/07/2013	11.6	Assistant Professor	Assistant Professor		Regular	Yes		No

12	VIVEK PRABHU M	XXXXXXX69F	ME/M. Tech and PhD	Anna University, Chennai	CAD/CAM	01/07/2013	11.6	Assistant Professor	Assistant Professor		Regular	Yes		No
13	RAM KUMARESH H	XXXXXXX88L	M.E/M.Tech	Anna University, Chennai	Thermal Engineering	02/06/2014	10.7	Assistant Professor	Assistant Professor		Regular	Yes		No
14	KARTHICK R	XXXXXXX25K	M.E/M.Tech	Anna University, Chennai	Manufacturing Engineering	15/06/2017	7.7	Assistant Professor	Assistant Professor		Regular	Yes		No
15	KARUPPAIAH RAJKUMAR M	XXXXXXX91B	M.E/M.Tech	Anna University, Chennai	Engineering Design	27/06/2018	6.6	Assistant Professor	Assistant Professor		Regular	Yes		No
16	JEGAN B	XXXXXXX44M	M.E/M.Tech	Anna University, Trichy	Thermal Engineering	27/06/2018	6.6	Assistant Professor	Assistant Professor		Regular	Yes		No
17	ARUN SENTHIL KUMAR A	XXXXXXX33C	M.E/M.Tech	Annamalai University	Nano Materials and Surface Engineering	13/06/2012	10.4	Assistant Professor	Assistant Professor		Regular	No	07/11/2022	No
18	SURUTHI DEVI R	XXXXXXX97N	M.E/M.Tech	B. S. Abdur Rehuman University	CAD/CAM	07/08/2017	6	Assistant Professor	Assistant Professor		Regular	No	07/08/2023	No

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

C2. Student-Faculty Ratio (SFR)

No. of UG(Engineering) programs in Department including allied departments/ clusters (UGn):

UG1=1st UG program

UGn=nth UG program

B= No. of Students in UG 2nd year (ST)

C= No. of Students in UG 3rd year (ST)

D= No. of Students in UG 4th year (ST)

No. of PG (Engineering) programs in Department including allied departments/ clusters (PGm):

PG1=1st PG program.

PGm=mth PG program

A= No. of Students in PG 1st year

B= No. of Students in PG 2nd year

Student Faculty Ratio **(SFR)** = S/F

S= No. of students of all programs in the Department including all students of allied departments/clusters.

No. of students (ST)=Sanctioned Intake (SA)+ Actual admitted students via lateral entry including leftover seats (L) if any (limited to 10 % of SA)

Students who admitted under supernumerary quotas (SNQ, EWS, etc) will not be considered in calculating SFR value. Those students are exempted.

F=Total no. of regular or contractual faculty members (Full Time) in the Department, including allied departments/clusters (excluding first year faculty (The faculty members who have a 100% teaching load in the first-year courses)).

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

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

Description	CAY(2024-25)	CAYm1 (2023-24)	CAYm2 (2022-23)
UG1.B	64	66	66
UG1.C	66	66	66
UG1.D	66	66	130

Description	CAY(2024-25)	CAYm1 (2023-24)	CAYm2 (2022-23)
UG1: Mechanical Engineering	**196**	**198**	**262**
PG1.A	9	9	9
PG1.B	9	9	9
PG1: Manufacturing Engineering	**18**	**18**	**18**
DS=Total no. of students in all UG and PG programs in the Department	214	216	280
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=** 214	**S2=** 216	**S3=** 280
DF=Total no. of faculty members in the Department	16	15	16
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=** 15	**F3=** 16
FF=The faculty members in F who have a 100% teaching load in the first-year courses	0	0	0
Student Faculty Ratio (SFR)=S/(F-FF)	**SFR1= 13.38**	**SFR2= 14.40**	**SFR3= 17.50**
Average SFR for 3 years	**SFR= 15.09**		

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	8	10.00	28.00
2023-24(CAYm1)	6	9	10.00	24.00
2022-23(CAYm2)	6	10	13.00	19.23

C4. Faculty Cadre Proportion

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

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

Year	Professors		Associate Professors		Assistant Professors	
	Required RF1	Available AF1	Required RF2	Available AF1	Required RF3	Available AF3
2024-25	1.00	3.00	2.00	3.00	7.00	10.00
2023-24	1.00	3.00	2.00	2.00	7.00	10.00

| 2022-23 | 1.00 | 3.00 | 3.00 | 2.00 | 9.00 | 11.00 |
| Average | RF1=1.00 | AF1=3.00 | RF2=2.33 | AF2=2.33 | RF2=7.67 | AF2=10.33 |

C5. Visiting/Adjunct Faculty/Professor of Practice

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

(CAYm1)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr. E. Venkatesh	CEO & Lead CAE Analyst	Meshoft Innotech Engineering, Chennai	Short Term Course on HyperMesh	40.00
2	Mr K Meenakshi Sundar	CFD specialist	CFD specialist in Lennox India Technology	"Fundamentals of Computational Fluid dynamics & its Applications"	8.00
3	Dr. Harjit Singh	Professor	Brunel University, London	"Solar energy generation and energy efficient technology research at Brunel".	8.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.S.Mohamed Shazuli	Teaching Fellow	MIT Chennai	Robotics	8.00
2	Srimathi K. Susi	Examiner of Patent and Designs	Intellectual Property Office, Chennai	Intellectual Property Rights (IPR)	8.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr. Rajesh Dhanasekaran & Mr. Manoj,	Project Manager, & Senior Consultant,	Amazon, Chennai. & Intelligence Quality, Chennai	TUV certified Lean Six Sigma Green belt course	32.00

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	22	16
2	No. of peer reviewed conference papers published	7	3	2
3	No. of books/book chapters published	1	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. T. Amuthan		Mechanical Engineering Department	PMKVY 4.0 – Offer demand-driven and Industry Linked Skilling Courses - A Skill Hub Initiative	MSDE	1 Year	35.00
Mr. M. Karuppaiah Rajkumar	Dr. T. Kamatchi Mr. B. Jegan	Mechanical Engineering Department	Modern Automatic Toilet Cleaning Equipment	MSME	1 Year	15.00
						Amount received (Rs.):50.00

(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. T. Kamatchi	Dr. G. Manikandan, Dr. V. Anbumalar, Dr. M. Maran	Mechanical Engineering Department	SMART CPR	MSME	1 Year	14.95
Dr. B. Varun Kumar, Dr. T. Kamatchi		Mechanical Engineering Department	Egg Cleaver	MSME	1 Year	14.00
Dr. M. Raja Chandra Sekar		Mechanical Engineering Department	Portable Tool Holder	MSME	1 Year	1.46
						Amount received (Rs.):30.41

(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. T. Kamatchi	Dr. M. Maran, Dr. M. Vivek Prabhu	Mechanical Engineering Department	Ankle Rehabilitation Device	DST- BDTD	2 years	16.29
						Amount received (Rs.):16.29

Total Amount (Lacs) Received for the Past 3 Years: 96.70

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. M. Vivek Prabhu		Mechanical Engineering Department	Revolutionizing Breast Health by Mammobot - A novel approach for early detection and diagnosis	MSME	1 Year	1.50
M. Karuppaiah Rajkumar	Dr. T. Kamatchi, Mr. B. Jegan	Mechanical Engineering Department	Modern Automatic Toilet Cleaning Equipment	MSME	1 Year	1.50
						Amount received (Rs.):3.00

(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. T. Kamatchi	Dr. G. Manikandan, Dr. V. Anbumalar, Dr. M. Maran	Mechanical Engineering Department	SMART CPR	MSME	1 Year	2.95
Dr. B. Varun Kumar, Dr. T. Kamatchi		Mechanical Engineering Department	Egg Cleaver	MSME	1 Year	3.00
						Amount received (Rs.):5.95

(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. G. Manikandan Mr. A. Arun Senthil Kumar		Mechanical Engineering Department	HCL-TECHBEES	HCL, Madurai	1 Year	1.98
						Amount received (Rs.):1.98

Total amount (Lacs) received for the past 3 years: 10.93

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
Mr. M. Karuppaiah Rajkumar	Modern Automatic Toilet Cleaning Equipment	1 Year	2.25	2.25	Prototype Developed
			Amount received (Rs.): 2.25		

(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. T. Kamatchi, Dr. G. Manikandan, Dr. V. Anbumalar, Dr. M. Maran	SMART CPR	1 Year	2.25	2.25	Prototype Developed
			Amount received (Rs.): 2.25		

(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. T. Kamatchi	Ankle Rehabilitation Device	2 Years	0.50	0.50	Prototype Developed
Dr. M. Maran	Hemiplegia and Finger Rehabilitation Therapy device for Stroke Patients	2 Years	0.50	0.50	Prototype Developed
			Amount received (Rs.): 1.00		

Total amount (Lacs) received for the past 3 years : 5.50

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	Manufacturing technology Laboratory – I	2	Centre Lathe (13 Nos), Shaping M/c	6	Mr. M. Suresh	Lab Instructor	ITI
2	Manufacturing technology Laboratory – II	2	Grinding M/c, Capstan lathe, Gear Hobbing machine, Milling, Tool Dynamometer, Gear Shaper, Center less grinding machine, Tool and cutter	6	Mr. M. Suresh	Lab Instructor	ITI
3	Thermal Engineering Laboratory-I	2	I.C Engine 2 stroke and 4 stroke model ,Red Wood Viscometer, Apparatus for Flash and Fire Point, 4 stroke Diesel Engine with mechanical	6	Mr. A. Vijay Murugan	Lab Assistant	ITI, DME
4	Thermal Engineering Laboratory -II	2	Thermal conductivity of insulating powder apparatus Refrigeration system, Air-conditioning system, Composite wall apparatus	6	Mr. A. Vijay Murugan	Lab Assistant	ITI, DME
5	CAD Laboratory	1	ProE, SolidWorks (30 Licenses)	6	Mr. A. Abdul Rehman	Lab Instructor	DME
6	Digital Manufacturing Laboratory	1	3D Printer, CNC Milling Trainer Kit, CNC Lathe, ANSYS	6	Mr. A. Abdul Rehman	Lab Instructor	DME
7	Mechatronics Laboratory	2	8051 Microcontroller kit with stepper motor and drive circuit sets , Motion controller using AC motor, DC motor, Servo motor and encoder, Computers	6	Mr. P. Jaiganesh	Lab Assistant	ITI
8	Dynamics Laboratory	2	Bifilar Suspension, Single Rotor with Viscous Damping, Dunkerly's Rule Apparatus ,Motorized Gyroscope Whirling Speed & shaft, Two & three	6	Mr. P. Jaiganesh	Lab Assistant	ITI
9	Metrology & Measurement Laboratory	2	Co-ordinate measuring machine, Surface finish measuring equipment's, Telescopic gauge, Bore micrometer, Bore Gauge	6	Mr. N.Pandiarajan	Lab Assistant	I.T.I, DME
10	Basic workshop	2	Plumbing Accessories Sets, Power Tools, and Power hack saw, heavy duty, Carpentry models for dams, Angular grinder, Oxygen & Acetylene	6	Mr. N.Pandiarajan	Lab Assistant	I.T.I, DME

| 11 | Fluid Mechanics Laboratory | 2 | Submergible pump test rig, Reciprocating pump test rig, Gear oil pump test rig, Combined calibration tata rig (venture meter & orifice meter) | 6 | Mr. M. Karuppaiah | Lab Assistant | I.T.I, DME |
| 12 | Strength of Materials Laboratory | 2 | Universal Tensile Testing machine (100T), Torsion Testing Machine, Impact Testing Machine, Brinell Hardness Testing Machine, Rockwell Hardness | 6 | Mr. M. Karuppaiah | Lab Assistant | I.T.I, DME |

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Manufacturing Technology Laboratory – I	Wearing shoes, safety glasses, Gloves, avoiding long hair, clothing, and jewelry. First aid box, Fire extinguisher and emergency phone are kept in easily accessible place
2	Manufacturing Technology Laboratory – II	Wearing shoes, safety glasses, Gloves, avoiding long hair, clothing, and jewelry. First aid box, Fire extinguisher and emergency phone are kept in easily accessible place
3	Thermal Engineering Laboratory – I	Wearing shoes, Gloves, avoiding long hair, clothing, and jewelry. First aid box, Fire extinguisher and emergency phone are kept in easily accessible place.
4	Thermal Engineering Laboratory – II	Wearing shoes, Gloves, avoiding long hair, clothing, and jewelry. First aid box, Fire extinguisher and emergency phone are kept in easily accessible place.
5	CAD Laboratory	Proper grounding given to all electrical equipment, No bare terminals, Insulation is kept adequate, First aid box, Fire extinguisher and emergency phone are kept in easily accessible place.
6	Digital Manufacturing Laboratory	Proper grounding given to all electrical equipment, No bare terminals, Insulation is kept adequate, First aid box, Fire extinguisher and emergency phone are kept in easily accessible place.
7	Mechatronics Laboratory	Proper grounding given to all electrical equipment ,No bare terminals , Insulation is kept adequate, First aid box, Fire extinguisher and emergency phone are kept in easily accessible place
8	Dynamics Laboratory	The oil and other fluids are cleaned up in the place near the experimental set up to avoid slippage. First aid box, Fire extinguisher and emergency phone are kept in easily accessible place.

9	Metrology & Measurement Laboratory	The oil and other fluids are cleaned up in the place near the experimental set up to avoid slippage. First aid box, Fire extinguisher and emergency phone are kept in easily accessible place.
10	Basic workshop	Wearing shoes, safety glasses, Gloves, avoiding long hair, clothing, and jewelry. First aid box, Fire extinguisher and emergency phone are kept in easily accessible place.
11	Fluid Mechanics Laboratory	The oil and other fluids are cleaned up in the place near the experimental set up to avoid slippage. Proper grounding given to all electrical equipment, No bare terminals, Insulation is kept adequate. First aid box, Fire extinguisher and emergency phone are kept in easily accessible place.
12	Strength of Material Laboratory	The oil and other fluids are cleaned up in the place near the experimental set up to avoid slippage. Proper grounding given to all electrical equipment, No bare terminals, Insulation is kept adequate. First aid box, Fire extinguisher and emergency phone are kept in easily accessible place
13	CoE on Advanced Welding Research (CFAWR) Lab	Wearing shoes, safety glasses, Gloves, avoiding long hair, clothing, and jewelry. First aid box, Fire extinguisher are kept in easily accessible place.
14	CoE on Robotics and Automation Lab	Wearing shoes, safety glasses, Gloves, avoiding long hair, clothing, and jewelry. First aid box, Fire extinguisher are kept in easily accessible place.
15	CoE on Innovative Product Development Lab	Wearing shoes, safety glasses, Gloves, avoiding long hair, clothing, and jewelry. First aid box, Fire extinguisher are kept in easily accessible place.
16	CoE on Electrical Drives System in Electric Vehicle Lab	Wearing shoes, safety glasses, Gloves, avoiding long hair, clothing, and jewelry. First aid box, Fire extinguisher and emergency phone are kept in easily accessible place.

D3. Project Laboratory/Research Laboratory

7.5.   Project Laboratory/Research Laboratory /Centre of Excellence (20)

(Provide details of laboratories for supporting projects, research, Centre of Excellence, innovation, and startups etc. Please do not give duplicate data from the sections 7.1 and 7.2.)

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

7.5. Project Laboratory/Research Laboratory /Centre of Excellence

S. No.	FACILITIES
1	Centre of Excellence for Advanced Welding Research (CFAWR) Lab
2	Centre of Excellence for Innovative Product Development Lab
3	Centre of Excellence for Robotic & Automation Lab
4	Centre of Excellence for Electrical Drives System in Electric Vehicle Lab
5	AICTE - IDEA Lab (Idea Development, Evaluation & Application Lab)
6	CIPD - BI (Centre for Innovative Product Development – Business Incubator)
7	PMKVY 4.0: NSDC, New Delhi – Nodal Centre for Training and Evaluation of students

1. Centre of Excellence for Advanced Welding Research (CFAWR)

Velammal College of Engineering and Technology, jointly with Fronius International India and FANUC has set up first "Center For Advanced Welding Research (CFAWR)" with an investment of Rs. 2,01,85,587/- (Rupees Two Crores One Lakh Eighty Five Thousand Five Hundred and Eighty Seven Only). CFAWR has been established a state-of-art welding skill center comprising of latest advance Welding Technology for Skill Development & Research as per industry needs and employments.

The facilities in the center are

i. GMAW-Pulse Welding Machines with Steel Transfer Technology Based 300

AMPS Pulsed Synergic Digital MIG/MAG Welding System.

ii. SMART GTAW Welding System with Industry 4.0 (Active Wave Technology in

Digital AC/DC TIG Welding System)

iii. Fronius make TPS/i CMT Water Cooled Intelligent Revolution Based Robotic

Welding System with Industrial Robot (FANUC).

iv. Hand Plasma Cutting Machine and beveling machine
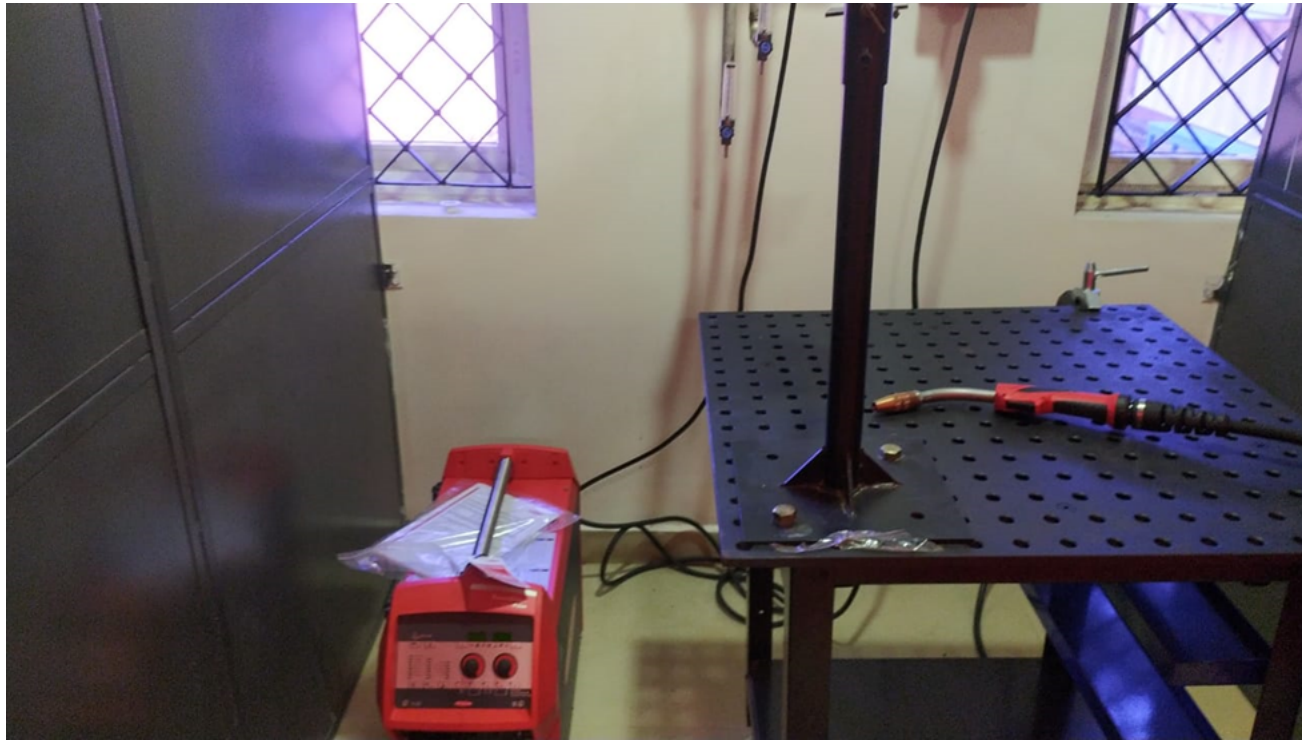
Gallery: Robotic Welding Cell
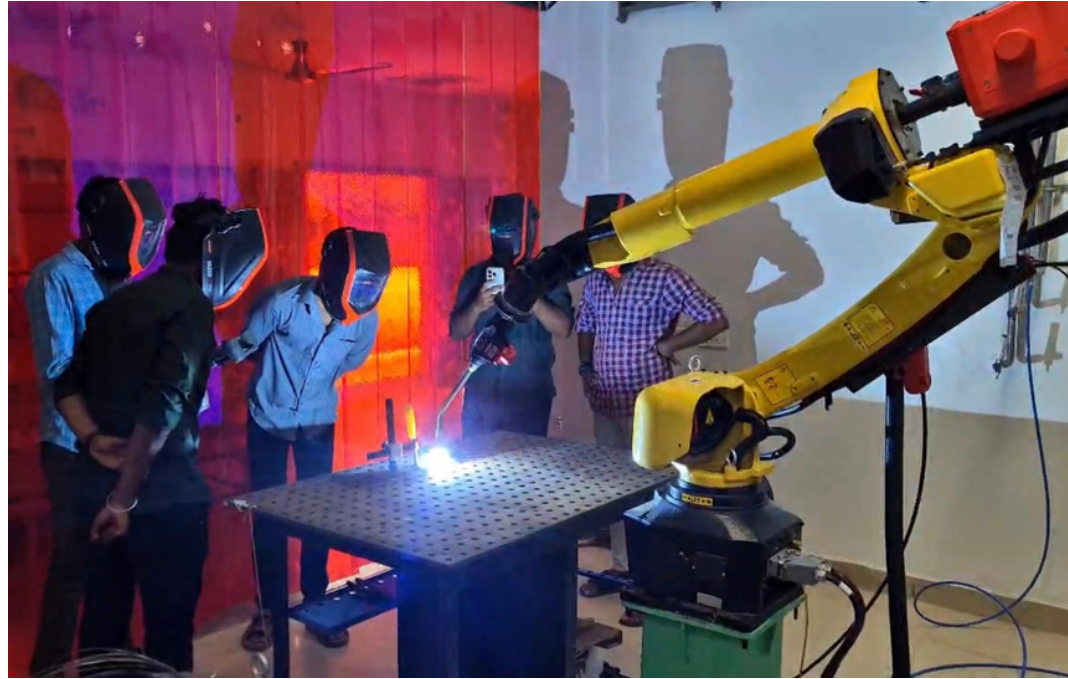
Gallery: TIG Welding Equipment

Gallery: TIG Welding Process

Gallery: MIG Welding Equipment

Gallery: MIG Welding Process

2. Centre of Excellence for Innovative Product Development:

A **Centre of Excellence for Innovative Product Development** has been established with an outlay of Rs. 21 Lakhs to encourage students and faculty members to engage in creative and research-driven activities. This center is equipped with modern tools and technology to support multidisciplinary projects, product development, and the exploration of new technologies. It serves as a platform for collaboration with industry partners and promotes innovation through research, thereby contributing to the academic growth of the institution.
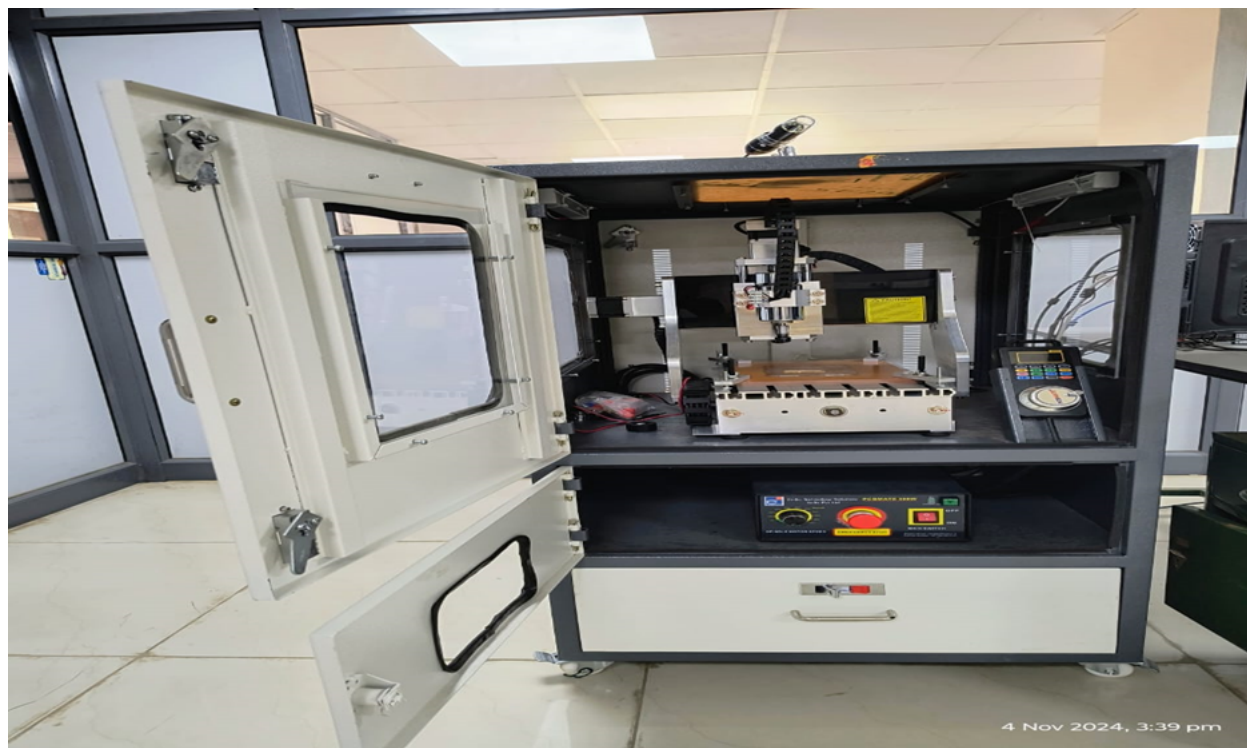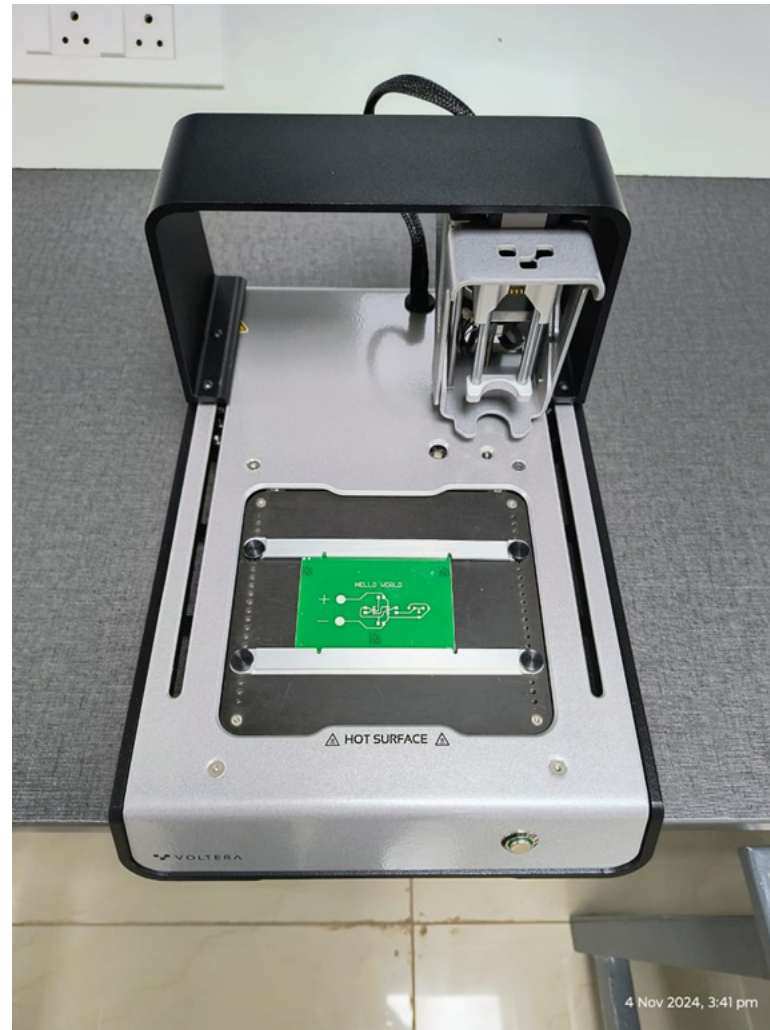
Impact:

- Promotes research and innovation across departments.
- Fosters collaboration between industry and academia.
- Enhances the employability of students through skill development in emerging technologies.

**Gallery: 3D Printing Machine**
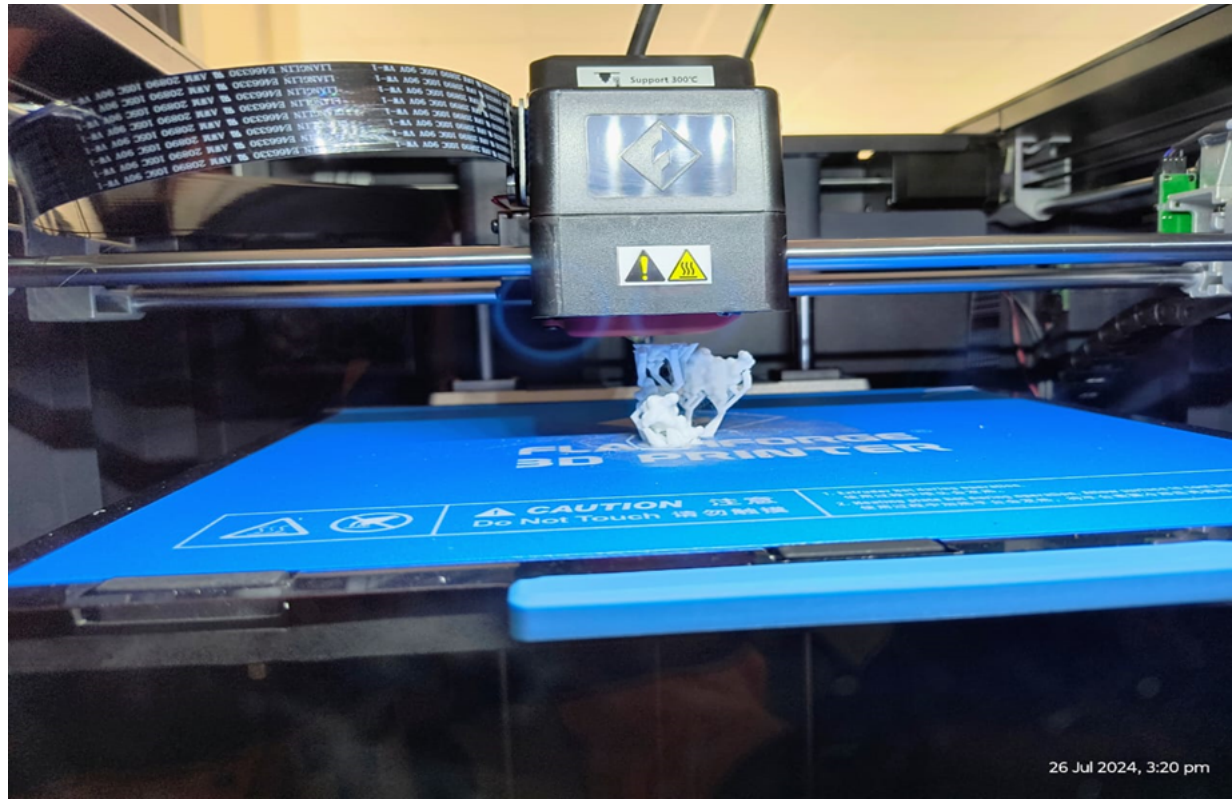
26 Jul 2024, 3:20 pm

4 Nov 2024, 3:39 pm

Printed Circuit Board Machine

Laser Cutting Machine

3. Centre of Excellence for Robotics and Automation Lab:

The institute has set up a **Robotic and Automation Lab**, which offers students hands-on experience in the design, development, and programming of robots. The lab is equipped with advanced robotic kits and systems to facilitate learning and experimentation in automation and artificial intelligence.
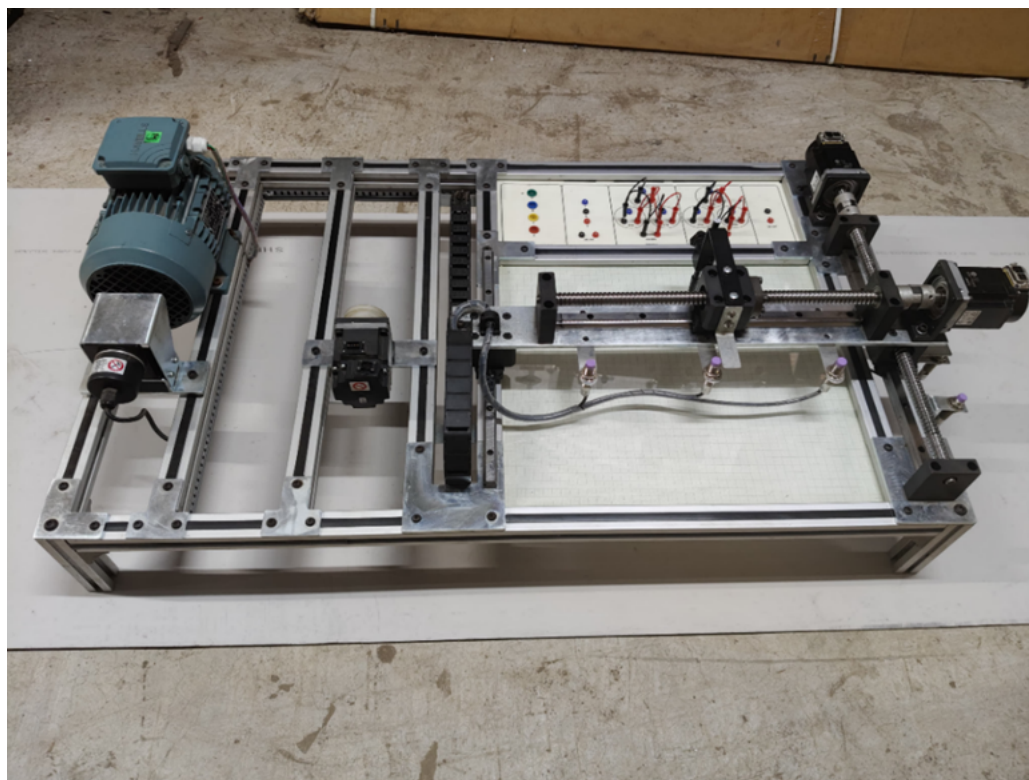
Impact:

- Provides practical exposure to robotics and automation, essential for engineering students.
- Encourages project-based learning and interdisciplinary research.
- Prepares students for future roles in industries relying on robotics and AI.

4. Centre of Excellence for Electrical Drives System in Electric Vehicle Lab

To support the growing needs of students in the electrical and electronics disciplines, an advanced **Electrical Drives System in Electric Vehicle Lab** has been added. This facility includes modern testing and simulation equipment, which enhances students understanding of concepts like circuit design, power systems, and electronics.

Impact:

- Improves technical proficiency and practical skills of students in core subjects.
- Supports research and project work in emerging electrical and electronics technologies.
- Strengthens the institutes capacity to offer industry-relevant training

The facilities in the center are

1. 2 Wheeler Electric Vehicle Training Systems
2. Tricycle EV Development Systems (Viev – 3 W)
3. BLDC Hub Motor test Bed set Up
4. 5 KW LLC Based Electrical Vehicle Quick Charger With Front End PFC Correction
5. Battery Management Systems
6. NX (CAD/CAM/CAE/MCD)Software For Electrical Vehicle
7. Siemens Simcenter Amesim Software For Electric vehicle
8. 3 φ Inverter With MPPT DC-DC boost Converter and Bi Directional Battery Charger For 48 V BLDC motor
9. 3 Phase Thyristorized Drive for DC Motor

10. Closed Loop Control of Chopper Fed DC Motor Drive
11. Embedded Control of Slip Ring Induction Motor Using Static Krammer Drive
12. Speed Control of Single Phase Induction Motor Drive Using 3 Phase to Single Phase Matrix Converter
13. Speed Control Of Brushless Dc Drive
14. Embedded Control Of Switched Reluctance Motor Drive
15. PLC Based Four Quadrant Operation Of 3 Phase Squirrel Cage Induction Motor Drive
16. Speed Control Of 3 Phase Multilevel Inverter Fed Squirrel Cage Induction Motor Drive

Gallery:
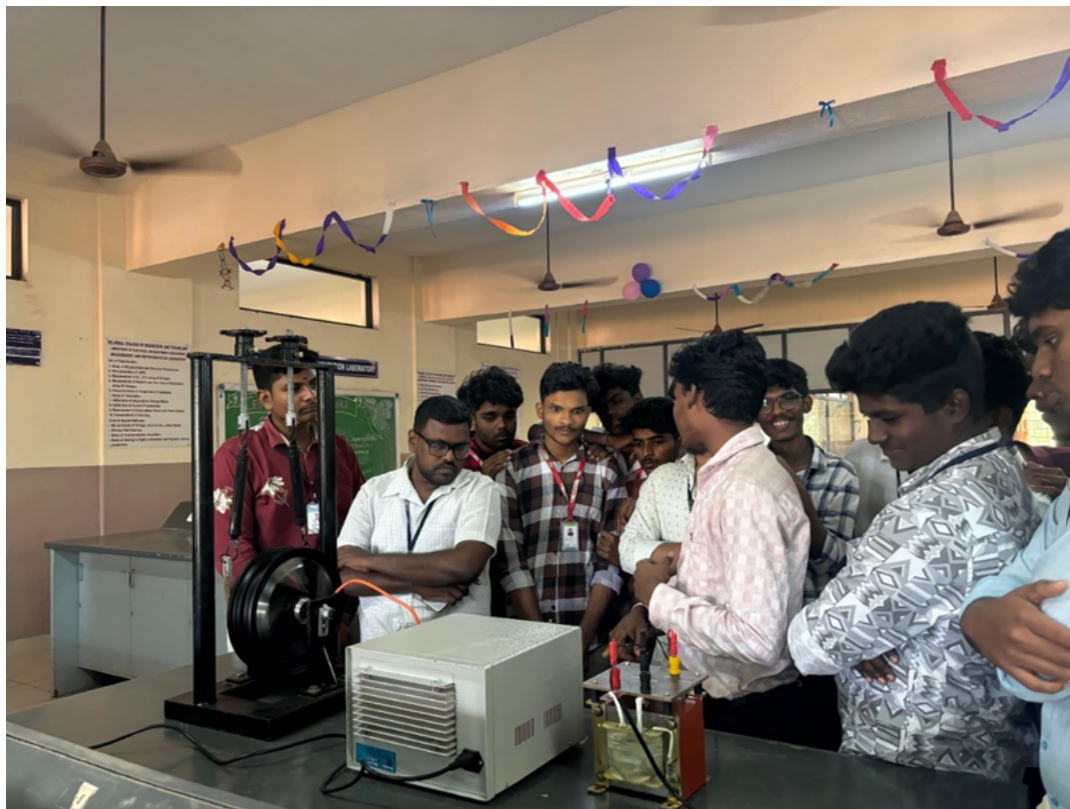
5. AICTE - IDEA LAB

AICTE (All India Council for Technical Education) sponsors "IDEA Labs" (Idea Development, Evaluation & Application Labs) in AICTE-approved institutions to encourage students to apply STEM fundamentals, fostering hands-on experience, learning by doing, and product visualization. As of now, there are **110 AICTE IDEA (Idea Development, Evaluation & Application) Labs** established across India and we are proud to say we are among the one. These labs are part of an initiative by the **All India Council for Technical Education (AICTE)** to promote hands-on learning, innovation, and product development in technical institutions. AICTE approved the launching of IDEA Lab in our Institution.

Students are encouraged to utilize the IDEA lab to fabricate their innovative ideas into products and participated in various competitions.

Faculty were given training on "ATAL Idea Lab Basic FDP" by AICTE sponsored AICTE Training and Learning Academy at Bangalore between 19.12.2022 and 23.12.2022.

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training and Learning (ATAL) Academy

Certificate

This is certified that kamatchi T, Associate Professor of Velammal College of Engineering and Technology,Madurai participated & completed successfully AICTE Training And Learning (ATAL) Academy Offline FDP on "ATAL Idea Lab Basic FDP 4(Hands On Training)" from 19/12/2022 to 23/12/2022 at VISVESVARAYA TECHNOLOGICAL UNIVERSITY CENTRE FOR POST GRADUATE STUDIES MUDDENAHALLI .

Advisor-I, ATAL Academy
Mamta Rani Agarwal

Coordinator

Activate
Go to Sett

No: ATAL/2023/1673013811

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training and Learning (ATAL) Academy

Certificate

This is certified that KARUPPAIAH RAJKUMAR M, Assistant Professor of Velammal College of Engineering and Technology, Madurai participated & completed successfully AICTE Training And Learning (ATAL) Academy Offline FDP on "Advanced Faculty Development Program (Hands On Training) on Smart Manufacturing" from 05/01/2023 to 11/01/2023 at VISVESVARAYA TECHNOLOGICAL UNIVERSITY CENTRE FOR POST GRADUATE STUDIES MUDDENAHALLI .

Advisor-I, ATAL Academy
Mamta Rani Agarwal

Coordinator

Activate
Go to Setti

From the outcome of IDEA Lab, students done innovative projects. That are demonstrated in the AICTE Headquarters Delhi on 7.3.2025. Around 80 colleges were shortlisted out of 140 colleges to participate in this event.

6. CIPD – BI (Centre for innovation and product development – Business Incubator)

- Centre for innovation and product development – Business Incubator is exclusively used for doing students projects and recognized by **Ministry of MSME as "Business Incubation Centre"**
- The facilities like LCD Projectors and Computers are available to conduct the project reviews.
- Large working space of 75 X 40 feet is available.
- Adequate working tables are provided with power supply.
- For fabrication of projects, drilling tool, cutting tools and raw materials etc. are available.
- This Lab is well utilized for the project demonstration to guests visiting our campus.
- This Lab is utilized 12 -16 hours/ Week by the students and faculty members

VELAMMAL COLLEGE OF ENGINEERING & TECHNOLOGY, MADURAI

(Autonomous)

(Accredited by NAAC with 'A' Grade and by NBA for 5 UG Programmes)
(Approved by AICTE and affiliated to Anna University, Chennai)

CIPD

Department of Mechanical Engineering

CENTRE FOR INNOVATION AND PRODUCT DEVELOPMENT - BUSINESS INCUBATOR

(Recognized by Ministry of Micro, Small & Medium Enterprises, Govt. of India)

Shri. M. V. Muthuramalingam
Chairman,
Velammal Educational Trust

Dr. P. Alli
Principal
Velammal College of Engineering &
Technology
Vice Chairman CIPD-BI

Dr. G. Marikandan
Dean (III), Professor & Head
Mechanical Engineering Dept.,
Velammal College of Engineering &
Technology
Director, CIPD-BI

Dr. V. Anbumalar
Professor,
Mechanical Engineering Dept.,
Velammal College of Engineering &
Technology
Joint Director, CIPD-BI

Dr. M. Vivek Prabhu
Assistant Professor,
Mechanical Engineering Dept.,
Velammal College of Engineering &
Technology
Manager, CIPD-BI

Dr. B. Varun Kumar
Assistant Professor,
Mechanical Engineering Dept.,
Velammal College of Engineering &
Technology
Coordinator, MSME Projects

Details of MSME Projects

- ✓ 2014: 8 projects – Rs. 42.274 lakhs
- ✓ 2022: 6 projects – Rs. 61.73 lakhs
- ✓ 2023: 4 projects – Rs. 50 lakhs
- ✓ 2024: 2 projects – Rs. 25.10 lakhs

S. No.	Name of the Incubatee approved by MSME	Title of the Project	Funding in Lakh Rs.
1	Mr. Karthick R	Natural sisal fiber reinforced hybrid composite chairs and construction blocks	6.25
2	Mr. Sarang V K	Equipment for plantation agricultural automation	5.00
3	Mr. Mathan C	Conveyor fed fish scaling machine	5.00
4	Mr. Athava Moorthy R	Semi Automatic dish washer for Indian utensils	5.00
5	Mr. Emmanuel Richards S	Mechanized step in automatic flushing system without sensor and spray platform	4.00
6	Mr. Ramprasath R N	Saline bottle level indicator	4.00
7	Mr. Emmanuel Richards S	Semi Automatic rubber tapping machine	5.00
8	Mr. Sundara Moorthy P S	Low cost high efficient sugar cane peeler	5.00
9	Dr. Kamatchi T	SMART CPR	14.95
10	Mr. Aathi J	Egg Cleaner	14.00
11	Mr. Jothi Vignesh R	Portable tool holding device for friction Welding machine	1.46
12	Dr. Babu Karuppaiah A	Lifesaving IoT based hazardous gas monitoring and drainage system to prevent manual scavenging	15.00
13	Dr. Rajeswari P	AI enabled assist for visually impaired movements	7.65
14	Mr. A. Gobinath	AI enabled robotic stacker for mechanized distribution of food grains	8.67
15	Mr. Karuppaiah Rajkumar M	Modern semi automatic toilet Cleaning equipment	15.00
16	Dr. Sridevi B	Design and Development of an Indigenous Multi analyte Food Adulteration Detection Device	15.00
17	Mr. Pradeep Kumar G	Indigenously developed indoor drone for rapid stock management in warehouse	12.50

Centre for Innovation and Product Development (CIPD-BI)

- o Recognized by the Ministry of MSME, coordinated and managed by the Department of Mechanical Engineering.
- o Supports technology start-ups through prototyping, product development, and scaling, fostering innovation.

7. PMKVY 4.0: National Skill Development Corporation (NSDC), New Delhi - Nodal Centre for Training and Evaluation of students

PMKVY 4.0 – offer demand-driven and industry linked skilling courses from the **National Skill Development Corporation (NSDC), New Delhi** under the **Ministry of Skill Development & Entrepreneurship (MSDE), Govt. of India.**

Title of the Project Proposal: **"PMKVY 4.0 – offer demand-driven and industry linked skilling courses"**

Project ID: **53493**

Principal Investigator / SPOC: **Dr Amuthan T, ASP / Mechanical, VCET**

Total Cost of the Project: **40 Lakhs**

Duration: **1 Year**

The Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 4.0 is an enhanced iteration of India's flagship skill development program aimed at equipping the youth with industry-relevant skills. Launched under the Skill India Mission, PMKVY 4.0 aims to address the evolving needs of the job market and boost employability through a more structured and targeted approach.

NSDC had circulated an online form to aggregate demand, and our institution has expressed interest in participating in PMKVY 4.0. Accordingly, our institute **Velammal College of Engineering and Technology (1-8119871)** has been allocated **240 targets** for implementing training under PMKVY 4.0.

Objectives:

- **Skill Development:** To provide quality skill training aligned with industry requirements across various sectors.
- **Enhancement of Employability:** To improve job prospects for youth through tailored skill development initiatives.
- **Inclusivity:** To promote skill development among marginalized groups, including women, rural populations, and differently-abled individuals.
- **Global Standards:** To align training and certification with global skill benchmarks, facilitating international opportunities for Indian workers.

Key Features:

- **Sector-Specific Training:** Focus on high-demand sectors like healthcare, manufacturing, information technology, and renewable energy.
- **Digital Integration:** Utilization of technology to offer online courses, e-learning platforms, and virtual assessments to reach a wider audience.
- **Quality Assurance:** Implementation of rigorous quality control measures to ensure training centers meet national and international standards.
- **Public-Private Partnerships:** Collaboration with industries and educational institutions to design courses that meet real-time job market needs.
- **Recognition of Prior Learning (RPL):** A framework to assess and certify skills acquired through experience, enabling workers to gain formal recognition.

Implementation Strategy:

- **Skill Training Providers (STPs):** Empowering STPs to deliver training programs, ensuring they adhere to guidelines set by the National Skill Development Corporation (NSDC).
- **Monitoring and Evaluation:** Regular assessment of training outcomes and placement rates to gauge the effectiveness of the program.
- **Awareness Campaigns:** Conducting outreach programs to inform youth about the available opportunities and benefits of skill development.

Expected Outcomes:

- **Increased Employability:** Enhanced job placement rates among trained individuals.
- **Economic Growth:** Contribution to India's GDP by creating a skilled workforce that meets industry demands.
- **Empowerment of Youth:** Providing the youth with the tools they need to succeed in the global job market.

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)	600	30	19	7	55
2023-24(CAYm1)	660	33	22	7	58
2024-25(CAY)	840	42	27	12	57

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	30000000	0	20000000	13567087	20000000	16276200	2000000	1033633
Library	2155000	0	2230000	1786589	1448000	974449	1833000	1344752
Laboratory equipment	60987795	0	5788461	5215310	22335412	10582939	9437318	443708
Teaching and non-teaching staff salary	130000000	0	122653013	111502739	98308624	89371477	91107566	82825060
Outreach Programs	70000	60350	80000	71500	100000	93000	62000	56650
R&D	5255000	0	2337560	2129609	296500	1422335	585500	1901137
Training, Placement and Industry linkage	0	0	0	0	0	0	0	0
SDGs	60000	50085	0	0	0	0	0	0
Entrepreneurship	0	0	0	0	0	0	0	0
Others, specify	0	0	0	0	0	0	0	0
Total	**228527795**	**110435**	**153089034**	**134272834**	**142488536**	**118720400**	**105025384**	**87604940**

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	22772620	19285930	2560305	2503665	4791390	3416615	1181770	0

Software	1534000	0	0	0	0	0	0	0
SDGs	0	0	0	0	0	0	0	0
Support for faculty development	75000	0	15000	0	100000	0	70000	938
R & D	100000	0	80000	0	100000	0	100000	11000
Industrial Training, Industry expert, Internship	50000	0	0	0	0	0	0	0
Miscellaneous Expenses*	932673	0	570814	312299	1217886	21210	775603	0
Total	**25464293**	**19285930**	**3226119**	**2815964**	**6209276**	**3437825**	**2127373**	**11938**