

NATIONAL BOARD OF ACCREDITATION

Data Capturing Points of the Program Applied for NBA Accreditation– Tier I/II UG (Engineering) Institute Programs

PART-A: Profile of the Institute

Name of the Program Applied for: B.E.Mechanical Engineering

A1: Name of the Institute: - M.I.E.T. Engineering College

Year of Establishment :1998

Location of the Institute: Gundur, Trichy

A2: Institute Address: -

City : Trichy

State : Tamil Nadu

Pin Code : 620007

Website : www.miet.edu

E-mail : contact@miet.edu

Phone No (with STD Code): 0431-2660 303

A3: Name and Address of the Affiliating University (If any): -

Name of the University : Anna University

City : Chennai

State : Tamil Nadu

Pin Code: 620025

A4: Type of the Institution: - (Tick the applicable choice)

Institute of National Importance

☐

Deemed University

☐

University

☐

Autonomous

☒

Non-Autonomous (Affiliated)

☐

Any other (Please specify) *

☐

***Provide Details:** _____

A5: Ownership Status: - (Tick the applicable choice)

Central Government

☐

State Government

☐

Government Aided

☐

Self-financing

☒

Any Other (Please specify) *

☐

***Provide Details:** _____

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

❖ No. of UG programs: 08

❖ No. of PG programs: 06

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

S.N.	Level of program (UG/PG)	Name of the program	Year of Start	Year close*	Name of the Department
1	UG	B.E. Civil Engineering	2006	-	Civil Engineering
2	UG	B.E. Mechanical Engineering	1998	-	Mechanical Engineering
3	UG	B.E. Electrical and Electronics Engineering	1998	-	Electrical and Electronics Engineering
4	UG	B.E. Electronics and Communication Engineering	2001	-	Electronics and Communication Engineering
5	UG	B.E. Computer Science and Engineering	1998	-	Computer Science and Engineering
6	UG	B.E. Bio Medical Engineering	2022	-	Electronics and Communication Engineering
7	UG	B.Tech. Artificial Intelligence and Data Science	2022	-	Computer Science and Engineering
8	UG	B.Tech. Information Technology	2022	-	Computer Science and Engineering
9	PG	M.E. Structural Engineering	2011	-	Civil Engineering
10	PG	M.E. Manufacturing Engineering	2006	-	Mechanical Engineering
11	PG	M.E. Power Electronics and Drives	2011	-	Electrical and Electronics Engineering
12	PG	M.E. VLSI Design	2010	-	Electronics and Communication Engineering
13	PG	M.E. Computer Science and Engineering	2006	-	Computer Science and Engineering
14	PG	MBA-Master of Business Administration	2009	-	Management Studies

A7: Programs to be considered for Accreditation vide this Application:**Table No. A7.1:** List of programs to be considered for accreditation.

Cluster ID.	Name of the Department	Name of the Program
1.	Computer Science and Engineering	BE (Computer Science and Engineering)
2.	Mechanical Engineering	BE (Mechanical Engineering)
3.	Electrical and Electronics Engineering	BE (Electrical and Electronics Engineering)

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)
1.	Computer Science and Engineering	Artificial Intelligence and Data Science
2.	Computer Science and Engineering	Information and Technology

PART-B: Program information

(Data to be filled in for the program applied for Accreditation)

B1: Provide the Required Information for the Program Applied For: -**Table No. B1:** Program details.

S. N.	Program Name	Year of start	Sanctioned Intake	Increase/decrease	Year of increase/decrease	AICTE Approval Details	Accreditation Status*	No. of times program accredited
1.	B.E. Mechanical Engineering	1998	60	60	-	F.No.730-52-300(E)/ET/97 dt:17-11-1997	Granted accreditation for 3 years for the period 2019-20 to 2021-22 & 2022-23 to 2024-25	02
				40	2004-05	F.No. 730-52-300(E)/ET/97 dt:17-11-2004		
				60	2005-06	F.No. 730-52-300(E)/ET/97 dt:07-07-2005		
				180	2012-13	F.No.South Central/1-700208231/2012/EOA dt:10-05-2012		
				240	2013-14	F.No.South Central/1-143277732/2013/EOA dt:19-03-2013		
				180	2015-16	F.No. Southern/1-2454289850/2015/EOA dt:07-04-2005		
				150	2019-20	F.No. Southern/1-4260676711/2019/EOA dt:10-04-2019		
				120	2020-21	F.No. Southern/1-7013058101/2020/EOA dt:09-06-2020		
				60	2023-24	F.No. Southern/1-36541855052/2023/EOA dt:02-06-2023		
				60	2023-24	F.No. Southern/1-36541855052/2023/EOA dt:02-06-2023		

* Write applicable one:

- ❖ Applying first time
- ❖ Granted accreditation for 2/3 years for the period (specify period)
- ❖ Granted accreditation for 5/6 years for the period (specify period)
- ❖ Not accredited (specify visit dates, year).
- ❖ Withdrawn (specify visit dates, year)
- ❖ Not eligible for accreditation.

B2: Detail of Head of the Department for the program under consideration:

A. Name of the HoD : Dr. K. Panneer Selvam

B. Nature of appointment: (Tick the applicable choice)

- ❖ Regular ☒
- ❖ Contract ☐
- ❖ Ad hoc ☐

C. Qualification: (Tick the applicable choice)

- ❖ Ph.D. ☒
- ❖ ME/M.Tech ☐
- ❖ Any other* ☐

****Please provide details:*** _____

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

Item (Information is to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	CAY	CAYm1	CAYm2	CAYm3	CAYm4 (LYG)	CAYm5 (LYGm1)	CAYm6 (LYGm2)
N= Sanctioned intake of the program (as per AICTE /Competent authority)	60	60	60	120	120	120	150
N1= Total no. of students admitted in the 1 st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program	35	32	33	63	69	45	87
N2= Number of students admitted in 2 nd year in the same batch via lateral entry including leftover seats	13*	18	14	21	30	97	29
N3= Separate division if any	0	0	0	0	0	0	0
N4= Total no. of students admitted in the 1 st 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.	48	50	47	84	99	142	116

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.

*Provisionally admitted till date

B4: Enrolment Ratio in the First Year**Table No. B4.1:** Student enrolment ratio in the 1st year.

Item (Students enrolled in the First Year on average over 3 academic years (CAY, CAYm1, and CAYm2))	CAY	CAYm1	CAYm2
N= Sanctioned intake of the program in the 1 st year (as per AICTE/Competent authority)	60	60	60
N1= Total no. of students admitted in the 1 st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program	35	32	33
N4= Total no. of students admitted in the 1 st year via all supernumerary quotas	-	-	-
Enrolment Ratio (ER)= (N1+N4)/N	58.33	53.33	55
Average ER= (ER_1+ ER_2+ ER_3)/3	55.55%		

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	LYG	LYGm1	LYGm2
A*= (No. of students admitted in the 1 st year of that batch and those actually admitted in the 2 nd 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).	56	113	122
B=No. of students who graduated from the program in the stipulated course duration	39	45	63
Success Rate (SR)= (B/A)*100	69.64	39.23	51.64
Average SR of three batches ((SR_1+SR_2+ SR_3)/3)	53.50		

Note *: If the value of A in Table No. B5.1 is less than the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2), then the value of A in Table No.B5.1 should be the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2) of Table No.B3.1.

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	CAYm2	CAYm3
X= (Mean of 1 st 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 1 st year/10)	7.56	8.21	8.32
Y= Total no. of successful students	11	18	20
Z = Total no. of students appeared in the examination	11	18	20
API = X* (Y/Z)	7.56	8.21	8.32
Average API = (API_1 + API_2 + API_3)/3	8.03		

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	CAYm2	CAYm3
X= (Mean of 2 nd 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 2 rd year/10)	7.38	7.70	7.00
Y= Total no. of successful students	29	37	57
Z =Total no. of students appeared in the examination	29	37	58
API = X* (Y/Z)	7.38	7.70	6.88
Average API = (API_1 + API_2 + API_3)/3	7.32		

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	CAYm2	CAYm3
X= (Mean of 3 rd 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 3 rd year/10)	7.93	7.33	6.30
Y= Total no. of successful students	37	56	116
Z= Total no. of students appeared in the examination	37	56	116
API = X* (Y/Z)	7.93	7.33	6.30
Average API = (API_1 + API_2 + API_3)/3	7.19		

B9: Placement, Higher Studies, and Entrepreneurship**Table No.B9.1:** Placement, higher studies, and entrepreneurship details.

Item	LYG	LYGm1	LYGm2
FS*=Total no. of final year students	60	120	120
X= No. of students placed	53	110	114
Y= No. of students admitted to higher studies	00	00	03
Z= No. of students taking up entrepreneurship	00	01	00
X + Y + Z =	53	111	117
Placement Index (P) = ((X + Y + Z)/FS) * 100)	88.33	91.66	97.5
Average placement index = (P_1 + P_2 + P_3)/3	92.49		

Note *: If the value of FS in Table No. B9.1 is less than the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2), then the value of FS in Table No. B9.1 should be the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2) of Table No.B3.1.

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

S. No.	Name of the Faculty	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)	If contractual mention Full time or (Part time or hourly based)	Currently Associated (Y/N)	Date of Leaving if any (In case Currently Associated is " No")
1.	Dr.B.Selvam	Ph.D.	Anna University	Manufacturing Technology	06-04-2022	3.6	Associate Professor	Professor	21-06-2023	Permanent	-	Y	-
2.	Dr.A.Naveen Sait	Ph.D.	National Institute of Technology-Trichy	Production Engineering	06-12-2019	5.10	Professor	Professor	06-12-2019	Permanent	-	Y	-
3.	Dr.M.Y.Abdul Jaleel	Ph.D.	National Institute of Technology-Trichy	Advanced Manufacturing	02-07-2004	21.3	Senior Lecturer	Professor	29-04-2017	Permanent	-	Y	-
4.	Dr.M.Dhandayuthabani	Ph.D.	Anna University	Thermal Engineering	16-05-2012	13.5	Associate Professor	Associate Professor	16-05-2012	Permanent	-	Y	-
5.	Dr.K.Panneer Selvam	Ph.D.	Anna University	Engineering Design	28-06-2017	8.3	Assistant Professor	Associate Professor	02-01-2023	Permanent	-	Y	-
6.	Dr.G.Pranesh	Ph.D.	Anna University	Thermal Engineering	15-04-2021	4.6	Assistant Professor	Associate Professor	11-07-2024	Permanent	-	Y	-
7.	Dr.K.P.Vasanth Kumar	Ph.D.	Anna University	Manufacturing Engineering	31-07-2023	2.2	Assistant Professor	Assistant Professor	-	Permanent	-	Y	-
8.	Dr.M.Vishnukumar	Ph.D.	National Institute of Technology-Trichy	Manufacturing Engineering	28-06-2024	1.3	Assistant Professor	Assistant Professor	-	Permanent	-	Y	-
9.	Mr.R.Manickam	M.E.	Anna University	Thermal Engineering	03-12-2021	3.7	Assistant Professor	Assistant Professor	-	Permanent	-	N	28-07-2025
10.	Mr.B.Rajakarthi	M.E.	Anna University	Manufacturing Engineering	11-12-2021	3.10	Assistant Professor	Assistant Professor	-	Permanent	-	Y	-

11.	Mr.S.Sathish Kumar	M.E.	Anna University	Energy Engineering	24-12-2021	3.9	Assistant Professor	Assistant Professor	-	Permanent	-	Y	-
12.	Mr.R.Narayanan	M.E.	Anna University	Manufacturing Engineering	06-04-2022	3.6	Assistant Professor	Assistant Professor	-	Permanent	-	Y	-
13.	Mr.M.Hari Prasath	M.E.	Anna University	Manufacturing Engineering	15-07-2024	1.2	Assistant Professor	Assistant Professor	-	Permanent		Y	-
14.	Mr.C.Manikandan	M.E.	Anna University	Manufacturing Engineering	11-04-2022	3.3	Assistant Professor	Assistant Professor	-	Permanent	-	N	28-07-2025
15.	Mr.K.Baskar	M.E.	Anna University	Thermal Engineering	21-04-2022	3.5	Assistant Professor	Assistant Professor	-	Permanent	-	Y	-
16.	Mr.S.Manikandan	M.E.	Anna University	Manufacturing Engineering	20-12-2023	1.9	Assistant Professor	Assistant Professor	-	Permanent	-	Y	-
17.	Mr.D.Manikandan	M.E.	Anna University	Manufacturing Engineering	15-07-2021	4.3	Assistant Professor	Assistant Professor	-	Permanent	-	Y	-
18.	Mr.S.Jeevanantham	M.E.	Anna University	Manufacturing Engineering	16-05-2023	2.4	Assistant Professor	Assistant Professor	-	Permanent	-	Y	-
19.	Mr.V.Venkata Subramanian	M.E.	Anna University	Manufacturing Engineering	04-06-2025	0.4	Assistant Professor	Assistant Professor	-	Permanent	-	Y	-
20.	Mr.S.Rajaram	M.E.	Anna University	Manufacturing Engineering	28-08-2025	0.1	Assistant Professor	Assistant Professor	-	Permanent	-	Y	-
21.	Mr.M.Mohammed Ibrahim	M.E.	Anna University	Manufacturing Engineering	30-07-2022	3	Assistant Professor	Assistant Professor	-	Permanent		N	06-08-2025
22.	Mr.J.S.Veera Jagadheeshwaran	M.E.	Anna University	Thermal Engineering	30-07-2022	3	Assistant Professor	Assistant Professor	-	Permanent		N	26-08-2025
23.	Dr.M.Kirubakaran	Ph.D.	National Institute of Technology-Trichy	Engineering Design	26-05-2010	14.11	Assistant Professor	Associate Professor	02-01-2023	Permanent	-	N	07-05-2025
24.	Mr.T.Ramkumar	M.E.	Anna University	Manufacturing Engineering	24-07-2010	13.2	Assistant Professor	Assistant Professor	-	Permanent	-	N	09-10-2023
25.	Mr.S.Kumaradevan	M.E.	Anna University	Engineering Design	06-07-2011	12.5	Assistant Professor	Assistant Professor	-	Permanent	-	N	29-12-2023
26.	Mr.P.Mariya Felix	M.E.	Anna University	Manufacturing Engineering	18-05-2021	4	Assistant Professor	Assistant Professor	-	Permanent	-	N	04-06-2025
27.	Mr.N.Arunachalam	M.E.	Anna University	Manufacturing Engineering	18-05-2021	4.3	Assistant Professor	Assistant Professor	-	Permanent	-	N	20-08-2025
28.	Mr.V.Rajeswaran	M.E.	Anna University	Manufacturing Engineering	03-06-2021	3	Assistant Professor	Assistant Professor	-	Permanent	-	N	20-06-2024
29.	Mr.S.David Kalaiselvan	M.E.	Anna University	Manufacturing Engineering	02-12-2021	2.7	Assistant Professor	Assistant Professor	-	Permanent	-	N	08-07-2024
30.	Mr.A.Pandianathan	M.E.	Anna University	Manufacturing Engineering	10-05-2023	2.3	Assistant Professor	Assistant Professor	-	Permanent	-	N	20-08-2025
31.	Mr.S.Vinoth Kumar	M.E.	Anna University	Manufacturing Engineering	10-05-2023	2.3	Assistant Professor	Assistant Professor	-	Permanent	-	N	28-08-2025
32.	Mr.K.Vijayakumar	M.E.	Anna University	Manufacturing Engineering	06-04-2022	2.1	Assistant Professor	Assistant Professor	-	Permanent	-	N	08-05-2024
33.	Mr.R.Ramesh	M.E.	Anna University	Industrial Engineering	20-08-2021	1.5	Assistant Professor	Assistant Professor		Permanent	-	N	31-01-2023

C2: Student-Faculty Ratio (SFR)

- ❖ No. of UG(Engineering) programs in Department including allied departments/ clusters (UG_n):
 - UG₁=1st UG program
 - UG_n=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 (PG_m):
 - PG₁=1st PG program.
 - PG_m=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)).

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

Year	CAY	CAYm1	CAYm2
UG ₁ . B // 2 nd year students of UG ₁ program	66	66	132
UG ₁ . C // 3 rd year students of UG ₁ program	66	132	132
UG ₁ . D // 4 th year students of UG ₁ program	132	132	132
UG ₁ // Total no.of students(2 nd , 3 rd , 4 th) in UG ₁ program	264	330	396
PG ₁ . A // 1 st year students of PG ₁ program	18	18	18
PG ₁ . B // 2 nd year students of PG ₁ program	18	18	18
PG ₁ // Total no.of students(1 st , 2 nd) in PG ₁ program	36	36	36
DS=Total no. of students in all UG and PG programs in the Department	300	366	432
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)	300	366	432
DF=Total no. of faculty members in the Department	18	25	25
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)	18	25	25
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)	16.66	14.64	17.28
Average SFR for 3 years	16.193		

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	FQI= $2.5 * [(10X + 4Y)/RF]$
CAY	8	10	15	20
CAYm1	9	16	18.3	21.03
CAYm2	8	17	21.6	17.12

C4: Faculty Cadre Proportion

- ❖ Faculty Cadre Proportion is 1(RF1): 2(RF2): 6(RF3)
 - RF1= No. of Professors required = $1/9 * \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per C2 of this documents:}$.
 - RF2= No. of Associate Professors required = $2/9 * \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per section C2 of this documents:}$.
 - RF3= No. of Assistant Professors required = $6/9 * \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per section C2 of this documents:}$.
- ❖ 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 Faculty(RF1)	Available Faculty(AF1)	Required Faculty(RF2)	Available Faculty(AF2)	Required Faculty(RF3)	Available Faculty(AF3)
CAY	2	3	3	3	10	12
CAYm1	2	3	4	4	12	18
CAYm2	2	3	5	3	14	19
Average Numbers	RF1=2	AF1=3	RF2=4	AF2=3	RF3=12	AF3=16

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.

S.N.	Name of the Person	Designation & Organization	Name of the Course	No. of hours handled
CAYm1				
1	Dr. P. Shahul Hameed	Professor (Retired), Jamal Mohamed College, Tiruchirappalli.	Environmental Science and Engineering	51
Total no. of hours:				51
CAYm2				

1	Mr. A. Imran Sheriff	BIM Manager, Unique MEP Engineering Academy Private Limited, Chennai.	MEP-HVAC Design and Training	53
Total no. of hours:				53
CAYm3				
1	Dr. T. Suthakar	Retired Professor, NIT, Trichy	Engineering Mechanics	54
Total no. of hours:				54

C6: Academic Research

Table No. C6.1: Faculty publication details.

S.N.	Item	CAYm1	CAYm2	CAYm3
1	No. of peer reviewed journal papers published	7	3	2
2	No. of peer reviewed conference papers published	2	2	11
3	No. of books/book chapters published	1	1	1

C7: Sponsored Research Project

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

S.N.	PI name	Co-PI names	Name of the Dept., where project is sanctioned	Project title*	Name of the Funding agency	Duration of the project	Amount (Lacs)
CAYm1							
1	Dr.K.Panneer Selvam	-	Mechanical Engineering	Automatic Coconut endosperm scraping machine.	MSME	12 Months	15
2	Dr.K.Panneer Selvam	-	Mechanical Engineering	Hybrid solar and wind energy smart Pole with E vehicle charging port	TNSCST	6 Months	0.075
Amount received (Rs.)							15.075
CAYm2							
1	Dr.G. Pranesh	-	Mechanical Engineering	Solar powered tomato seed remover	TNSCST	6 months	0.075
Amount received (Rs.)							0.075
CAYm3							
1	Dr.K.Panneer Selvam	-	Mechanical Engineering	Auto scavenging machine	TNSCST	6 months	0.075
Amount received (Rs.)							0.075
Total Amount (Lacs) Received for the Past 3 Years							15.225

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

S. N.	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)
CAYm1(2024-2025)							
1.	Dr.K.Panneer Selvam	-	Mechanical	CAD/CAE design of hybrid conversion kits.	Unique MEP Engg Academy Private Limited, Chennai	6 Months	2.0
2.	Dr.G. Pranesh	-	Mechanical	Design of smart assembly jigs	Ashok Leyland limited-Hosur	6 Months	1.0
3.	Dr.G. Pranesh	-	Mechanical	Optimization of Suspension Geometry for Improved Ride Comfort in Ashok Leyland Buses	Ashok Leyland limited-Hosur	6 Months	1.5
Amount received (Rs.)							4.5
CAYm2(2023-2024)							
1	Dr.K.Panneer Selvam	-	Mechanical	Lightweight Composite Material Design for Vehicle Structural Components	Ashok Leyland limited-Hosur	6 Months	2.8
2	Dr.K.Panneer Selvam	-	Mechanical	Design and simulate a mechanical conveying/robotic arm system	LIFT INDIA Trichy	6 Months	3.5
3	Dr.M.Kirubakaran	-	Mechanical	Energy Audit and Retrofitting Design for Existing MEP Systems in Manufacturing Plants	Unique MEP Engineering Academy Private Limited, Chennai	6 Months	1.0
Amount received (Rs.)							7.3

CAYm3 (2022-2023)							
1	Dr.K.Panneer Selvam	-	Mechanical	CAD/CAE-based optimization of an energy-efficient air-conditioning system.	Unique MEP Engg Academy Private Limited, Chennai	6 Months	1.2
2	Dr.M.Kirubakaran	-	Mechanical	Set up simulation-based digital twin models for industrial training.	Synergy school of business skills-Trichy	6 Months	2.9
Amount received (Rs.)							4.1
Total amount (Lacs) received for the past 3 years							15.9

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.

S.N	Faculty name	Project title/Support for Activity	Duration	Amount (Lacs)	Amount Utilized (Lacs)	Outcomes of the project
CAYm1(2024-2025)						
1.	Mr.S.Sathish Kumar	Design and Development Of Downdraft Gasifier For Syngas Production By Using Cofeeding Of Baggase And Face Mask Waste.	6 Months	0.5 (Rs 50,000)	0.49 (Rs. 49,000)	SynGas production setup
2.	Dr. K.Paneer Selvam	Design and development of heating system for decapods shells drying.	6 Months	0.5 (Rs 50,000)	0.45 (Rs 45,000)	Miniature of model is fabricate and tested
3.	Mr.K.Basker	Characterization of Syngas Produced from Biomass Feed Stock in Circulating Fluidized Bed Gasifier	6 Months	0.5 (Rs 50,000)	0.48 (Rs. 48,000)	SynGas production setup
4.	Dr.K.P.Vasanth Kumar	Design and Fabrication of hybrid wind and solar powered charging station for electrical vehicles and smart street lighting	6 Months	0.1 (Rs 10,000)	0.1 (Rs 10,000)	Miniature of MODEL is fabricate and tested
Amount received (Rs.)				1.6	1.52	1.52

S.N	Faculty name	Project title/ Support for Activity	Duration	Amount (Lacs)	Amount Utilized (Lacs)	Outcomes of the project
CAYm2(2023-2024)						
1.	Mr.C.Manikandan	Development of electrical resistance heating furnace for melting of Nonferrous materials	6 Months	0.5 (Rs 50,000)	0.5 (Rs 50,000)	Prototype is fabricated.
2.	Mr.R.Manickam	Experimental investigation of oxy hydrogen gas (HHO) production from wet cell electrolyser	6 Months	0.2 (Rs 20,000)	0.198 (Rs 19,800)	prototype is fabricated
3.	Dr.M. Kirubakaran.	Experimental Investigation on production of biodiesel from okra (abelmoschusculentus) seed oil and its performance characteristics on compression ignition (CI) engine	6 Months	0.5 (Rs. 50,000)	0.5 (Rs. 50,000)	Bio diesel production facility is developed
Amount received (Rs.)				1.2	1.198	1.198
CAYm3(2022-2023)						
1.	Mr.R. Narayanan	Investigation of process parameters of friction stir welding on aluminium alloy (AA6061) and brass by using super high speed steel	6 Months	0.5 (Rs 50,000)	0.488 Rs 48,800	Experiment conducted
Amount received (Rs.)				0.5	0.488	0.488
Total amount (Lacs) received for the past 3 years						3.02

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.

S. No.	Name of the Laboratory	No. of students per Setup (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 Practices Laboratory	30	❖ Arc welding transformer with cables and holders ❖ Welding booth with exhaust facility ❖ Welding shield, goggles, chipping hammer, wire brush, etc ❖ Oxygen and acetylene gas cylinders ❖ Welding torch, double stage double gauge, welding gloves, chapping hammers, blow pipe, tong. ❖ Hearth furnace ❖ Smithy tool: Anvil, black smithy tongs, chisels and punches. ❖ Foundry: Moulding table, trowels, rammers, shovel, ladles, sprue pin ❖ Power Tool: Angle Grinder ❖ Sheet metal: bender, pliers, Finishing hammer angle finder, power	6	R.Krishnan	Technical Assistant	Carpenter
2	Manufacturing Technology Laboratory -	30	❖ Centre Lathes ❖ Horizontal Milling Machine ❖ Vertical Milling Machine ❖ Shaper ❖ Capstan and Turret Lathes ❖ Gear Hobbing Machine ❖ Gear Shaping machine ❖ Slotting Machine ❖ Planning Machine ❖ Horizontal Milling Machine ❖ Vertical Milling Machine ❖ Surface Grinding Machine	6	R.Alagiri	Technical Assistant	ITI

			❖ Cylindrical Grinding Machine ❖ Center less grinding machine ❖ Radial Drilling Machine ❖ lathe Tool and Milling Tool Dynamometer ❖ Tool Makers Microscope ❖ Tool and cutter grinder ❖ Centrifugal pump, air-conditioner.				
3	Strength of Materials Laboratory	30	❖ Universal Tensile Testing machine with double 1 shear attachment – 100 Ton Capacity ❖ Torsion Testing Machine ❖ Impact Testing Machine ○ Izod test ○ Charpy test ❖ Brinell Hardness Testing Machine ❖ Rockwell Hardness Testing Machine ❖ Vickers hardness testing Machine ❖ Spring Testing Machine for tensile and compressive loads ❖ Extensometer ❖ Metallurgical Microscopes ❖ Muffle Furnace	6	M.Nather basha	Assistant	-
4	Fluid Mechanics and Machinery Laboratory	30	❖ Orifice meter setup ❖ Venturi meter setup ❖ Rota meter setup ❖ Pipe Flow analysis setup ❖ Centrifugal pump/submergible pump setup ❖ Reciprocating pump setup ❖ Gear pump setup ❖ Pelton wheel setup ❖ Francis turbine setup ❖ Kaplan turbine setup	6	B.Ganesa Rathinam	Technical Assistant	ITI
5	Kinematics and Dynamics Laboratory	30	❖ Cam follower setup. ❖ Motorized gyroscope. ❖ Governor apparatus -Watt, Porter, Proell and Hartnell governors. ❖ Whirling of shaft apparatus. ❖ Dynamic balancing machine. ❖ Two rotor vibration setup. ❖ Spring mass vibration system. ❖ Torsional Vibration of single rotor system setup.	6	R.Alagiri	Technical Assistant	ITI

			❖ Gear Models ❖ Kinematic Models to study various mechanisms. ❖ Turn table apparatus. ❖ Transverse vibration setup of a cantilever				
6	Thermal Engineering Laboratory	30	❖ 4-stroke Diesel Engine with mechanical loading. ❖ 4-stroke Diesel Engine with hydraulic loading. ❖ 4-stroke Diesel Engine with electrical loading. ❖ Multi-cylinder Petrol Engine ❖ Single cylinder Petrol Engine ❖ Data Acquisition system with single cylinder diesel engine. ❖ Steam Boiler with turbine setup ❖ I.C Engine – 2 stroke and 4 stroke model ❖ Apparatus for Flash and Fire Point	6	A.Arun Kumar	Technical Assistant	Diploma
7	Heat Transfer Laboratory	30	❖ Guarded plate apparatus. ❖ Lagged pipe apparatus. ❖ Natural convection from a vertical cylinder. ❖ Forced convection from a tube. ❖ Composite wall. ❖ Thermal conductivity of insulating powder. ❖ Pin-fin apparatus ❖ Stefan – Boltzmann constant. ❖ Emissivity of a grey surface. ❖ Parallel / counter flow heat exchanger	6	V.Muthukumar	Technical Assistant	Diploma
8	Refrigeration And Air Conditioning Laboratory	30	❖ Single/two stage reciprocating air compressor ❖ Refrigeration test rig ❖ Air-conditioning test rig	6	V.Muthukumar	Technical Assistant	Diploma
9	Metrology and Measurements Laboratory	30	❖ Autocollimator ❖ Floating Carriage Micrometer ❖ Profile Projector / Tool Makers Microscope ❖ Surface finish measuring equipment	6	R.Krishnan	Assistant	-

			❖ Telescope gauge ❖ Mechanical / Electrical / Pneumatic Comparator ❖ Micrometer ❖ Gear Tooth Vernier ❖ Vernier Caliper ❖ Vernier Height Gauge ❖ Vernier depth Gauge ❖ Slip Gauge ❖ Sine Bar ❖ Bevel protractor ❖ Temperature Measuring Setup ❖ Force Measuring Setup ❖ Torque Measuring Setup ❖ Bore gauge				
10	CAD/CAM Laboratory	30	HARDWARE ❖ Computer Server ❖ Lenevo think centerM72e Intel core 13-3220 processor intel H61 Chipset mother board 4gb Ddr3@1333mhz Ram networked to the server 30 ❖ Acre Pentium Dual core system 2GB Ram, 500 GB Hdd 128.5" monitor. ❖ HP Laser Printer ❖ CNC stand bed Lathe ❖ CNC bench milling machine SOFTWARE ❖ AutoCAD 2024 software ❖ Autodesk Inventor 2024 ❖ CAD/ CAM software ❖ CAM Software for machining centre and turning centre ❖ (CNC Programming and tool path simulation for FANUC / Sinumeric and Heidenhain controller) ❖ Licensed operating system ❖ Support for CAPP	6	B.Ganesa Rathinam	Technical Assistant	ITI
11	Simulation and Analysis Laboratory	30	❖ Computer Work Station ❖ Color Desk Jet Printer ❖ Multibody Dynamic Software Suitable for Mechanism ❖ simulation and analysis ❖ C / Scilab	6	M.Nather basha	Technical Assistant	-

12	Mechatronics and IOT Laboratory	30	❖ Basic Pneumatic Trainer Kit with manual and electrical controls/ ❖ PLC Controlled pneumatic trainer kit ❖ Basic Hydraulic Trainer Kit ❖ AutoSIM Software (Hydraulics and Pneumatics Systems Simulation) ❖ HP Prp 3330MT-business intel core i3 processor 2GB DDR-3 gb ram,18.5" monitor ❖ 8051 - Microcontroller kit ❖ stepper motor and drive ❖ circuit sets ❖ ADC & DAC measurement control module.Arudino ESP 32 sensor IOT - SB#1 ❖ Water Level control system trainer ❖ Conveyor control module VPAT 24P	6	A.Arun Kumar	Technical Assistant	Diploma
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D2: Safety Measures in Laboratories

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

S. No.	Name of the Laboratory	Safety Measures
1	Engineering Practices Laboratory	✦ First aid box, fire extinguisher and hand gloves are properly maintained in laboratory. Ask questions if you are unsure of how to operate these things in emergency period. ✦ Safety goggles must be worn in the laboratory all times. ✦ Students have to wear shoes while coming to laboratory ✦ Never perform an unauthorized experiment and never work in the lab without an instructor in charge. ✦ Avoid touching hot objects. ✦ Girls are instructed to wear their lab coats and long hair must be tied back especially near machinery. ✦ Jewels and watches are likely to cause accidents and hence it is to be avoided. ✦ Ambulance service is available in an emergency.
2	Manufacturing Technology Laboratory -	✦ First aid box, fire extinguisher and hand gloves are properly maintained in laboratory. Ask questions if you are unsure of how to operate these things in emergency period. ✦ Students have to wear proper lab uniform ✦ Students have to wear shoes while coming to laboratory ✦ Don't touch any power line wire, switches and knob without knowledge of technicians ✦ Keep a laboratory clean and tidy ✦ Girls are instructed to wear their lab coats and long hair must be tied back especially near machinery. ✦ Jewels and watches are likely to cause accidents and hence it is to be avoided. ✦ Ambulance service is available in an emergency.
3	Strength of Materials Laboratory and Fluid Mechanics and Machinery Laboratory	✦ First aid box, fire extinguisher and hand gloves are properly maintained in laboratory. Ask questions if you are unsure of how to operate these things in emergency period. ✦ Students have to wear proper lab uniform ✦ Students have to wear shoes while coming to laboratory ✦ Don't touch any power line wire, switches and knob without knowledge of technicians ✦ Keep a laboratory clean and tidy

		- Girls are instructed to wear their lab coats and long hair must be tied back especially near machinery. - Jewels and watches are likely to cause accidents and hence it is to be avoided. - Ambulance service is available in an emergency.
4	Kinematics and Dynamics Laboratory	- First aid box, fire extinguisher and hand gloves are properly maintained in laboratory. Ask questions if you are unsure of how to operate these things in emergency period. - Students have to wear proper lab uniform - Students have not wear shoes while coming to laboratory - Don't touch any power line wire, switches and knob without knowledge of technicians - Keep a laboratory clean and tidy - Girls are instructed to wear their lab coats and long hair must be tied back especially near machinery. - Jewels and watches are likely to cause accidents and hence it is to be avoided. - Ambulance service is available in an emergency.
5	Thermal Engineering Laboratory and Heat Transfer Laboratory	- First aid box, fire extinguisher and hand gloves are properly maintained in laboratory. Ask questions if you are unsure of how to operate these things in emergency period. - Students have to wear proper lab uniform - Students have not wear shoes while coming to laboratory - Don't touch any power line wire, switches and knob without knowledge of technicians - Make sure that you stay away from hot exhaust lines and moving parts of ic engines. - How engine operate read the instruction before operating it. - Make sure that there is no fuel or oil spill on the floor. - Girls are instructed to wear their lab coats and long hair must be tied back especially near machinery. - Ambulance service is available in an emergency.
6	Refrigeration and Air Conditioning Laboratory	- First aid box, fire extinguisher and hand gloves are properly maintained in laboratory. Ask questions if you are unsure of how to operate these things in emergency period. - Students have to wear proper lab uniform - Students have not wear shoes while coming to laboratory - Don't touch any power line wire, switches and knob without knowledge of technicians

		- Girls are instructed to wear their lab coats and long hair must be tied back especially near machinery. - Ambulance service is available in an emergency.
7	Metrology and Measurements Laboratory	- Students have to wear proper lab uniform - Students have not wear shoes while coming to laboratory - Keep a laboratory clean and tidy - Girls are instructed to wear their lab coats and long hair must be tied back especially near machinery. - Ambulance service is available in an emergency.
8	CAD/CAM Laboratory And Simulation and Analysis Laboratory	- Do not plug in external devices without scanning them for computer viruses. - Ensure that the temperature in the room stays cool, since there are a lot of machines inside a lab as these can overheat easily. this is one of the many ways of ensuring computer safety.
9	Mechatronics and IOT Laboratory	- First aid box, fire extinguisher and hand gloves are properly maintained in laboratory. Ask questions if you are unsure of how to operate these things in emergency period. - Students have to wear proper lab uniform - Students have not wear shoes while coming to laboratory - Don't touch any power line wire, switches and knob without knowledge of technicians - Experiments are conducted in such a way that no equipment is broken or lost, and no one is hurt. - Electronic components and electrical circuits are handled with care. - Electrical supplies are properly grounded. - Ambulance service is available in an emergency.

D3: Project Laboratory/Research Laboratory

Table No. D3.1: List of project laboratory/research laboratory /Centre of Excellence.

S. No.	Major Equipment Name	Outcomes
1.	Fluidized Bed Gasifier	Expertise in putting the ideas to use in real time applications.
2.	Two stage Down Draft Gasifier	
3.	Entrained Flow Gasifier	
4.	Circulated Fluidized Bed	
5.	Gasifier	

6.	Dry and Wet electrolysis	 Develop clean green fuel production and utilization.  Analyze the various fostering bio-fuel and applications in view of the described problem
7.	Material preparation devices (Plastic crusher, Grinder, screw feeder, etc.,)	
8.	Flash point and fire point apparatus	
9.	Distillation process equipment's	
10.	Car suspension system	

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= $\frac{\text{No. of faculty members } ((NS1*0.8) + (NS2*0.2))}{\text{No. of required faculty (RF4)}}$; Percentage= $\frac{((NS1*0.8) + (NS2*0.2))}{RF4}$
CAY	600	30	28	10	$\frac{((28*0.8)+(10*0.2))}{30} = \frac{(22.4+2)}{30} = 81.33\%$
CAYm1	600	30	29	9	$\frac{((29*0.8)+(9*0.2))}{30} = \frac{(23.2+1.8)}{30} = 83.33\%$
CAYm2	600	30	29	9	$\frac{((29*0.8)+(9*0.2))}{30} = \frac{(23.2+1.8)}{30} = 83.33\%$
Average Percentage					82.66

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 CFY 25-26	Actual expenses in CFY (till ...)	Budgeted in CFYm1 24-25	Actual Expenses in CFYm1	Budgeted in CFYm2 23-24	Actual Expenses in CFYm2	Budgeted in CFYm3 22-23	Actual Expenses in CFYm3
Infrastructure Built-Up	28.50	11.52	26.50	25.97	84.50	82.16	32.10	30.35
Library	0.80	0.36	0.25	0.21	1.50	1.30	2.60	2.56
Laboratory equipment	23.50	8.19	25.50	24.13	38.50	37.65	11.30	11.28
Teaching and non-teaching staff salary	625.00	328.15	600.25	600.10	497.10	496.89	448.50	448.38
Outreach Programs	2.10	0.13	2.95	2.92	2.60	2.39	0.75	0.67
R&D	0.75	-	0.50	0.44	0.50	0.40	0.25	0.20

Training, Placement and Industry linkage	4.75	4.33	4.50	4.47	5.20	4.95	2.90	2.83
SDGs	74.33	53.64	73.87	73.60	73.27	72.73	66.75	66.10
Entrepreneurship	49.55	35.76	49.25	49.06	48.85	48.49	44.5	44.07
Others*, pl. specify	371.62	268.18	369.38	368.01	366.38	363.66	333.75	330.52
Total amount	1180.90	710.26	1152.95	1148.92	1118.40	1110.61	943.40	936.97

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 CFY (25-26)	Actual expenses in CFY (till ...)	Budgeted in CFYm1 (24-25)	Actual Expenses in CFYm1	Budgeted in CFYm2 (23-24)	Actual Expenses in CFYm2	Budgeted in CFYm3 (22-23)	Actual Expenses in CFYm3
Laboratory equipment	18.05	16.97	10.11	9.60	9.70	9.12	15.5	14.60
Software	2.5	0	0	0	2.5	0	-	0
SDGs	0.20	0.19	0.13	0.12	0.16	0.15	0.18	0.17
Support for faculty development	0.28	0.26	0.15	0.14	0.24	0.23	0.17	0.16
R&D	0.60	0.56	0.50	0.47	0.34	0.32	0.50	0.47
Industrial Training, Industry expert, Internship	0.32	0.30	0.10	0.09	0.25	0.24	0.40	0.38
Miscellaneous expenses *	6.84	2.43	6.41	6.09	6.72	6.32	8.34	7.85
Total amount	28.79	20.71	17.40	16.52	19.91	16.37	25.09	23.63