

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 : 11572	Date of Submission : 03-03-2026

PART A- Profile of the Institute

A1.Name of the Institute: PSN COLLEGE OF ENGINEERING AND TECHNOLOGY	
Year of Establishment : 2001/2001	Location of the Institute:
A2. Institute Address: MELATHEDIYOOR,PALAYAMKOTTAI TALUK,TIRUNELVELI DISTRICT.	
City:TIRUNELVELI	State:Tamil Nadu
Pin Code:627152	Website:www.psnct.ac.in
Email:DRPSUYAMBU@GMAIL.COM	Phone No(with STD Code):04634-279680
A3. Name and Address of the Affiliating University (if any):	
Name of the University : NIL	City:
State :	Pin Code:
A4. Type of the Institution: Self-Supported Institute	
A5. Ownership Status:	

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

- No. of UG programs: **11**
- No. of PG programs: **8**

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

Sr.No.	Discipline	Level of program	Name of the program	Year of Start	Year of Closed	Name of The Department
1	Engineering & Technology	UG	Aeronautical Engineering	2005	--	Aeronautical Engineering
2	Engineering & Technology	PG	Applied Electronics	2007	--	Electronics and Communication Engineering
3	Engineering & Technology	UG	Artificial Intelligence and Data Science	2024	--	Artificial Intelligence and Data Science
4	Engineering & Technology	PG	Avionics Engineering	2009	--	Electronics and Communication Engineering
5	Engineering & Technology	UG	Biomedical Engineering	2024	--	Biomedical Engineering
6	Engineering & Technology	UG	Civil Engineering	2009	--	Civil Engineering
7	Engineering & Technology	PG	Communication Systems	2009	--	Electronics and Communication Engineering
8	Engineering & Technology	PG	Computer Science and Engineering	2008	--	Computer Science and Engineering

9	Engineering & Technology	UG	Computer Science and Engineering	2001	--	Computer Science and Engineering
10	Engineering & Technology	UG	Computer Science and Engineering (Artificial Intelligence & Machine Learning)	2024	--	Computer Science and Engineering (Artificial Intelligence and Machine Learning)
11	Engineering & Technology	PG	Cryogenic Engineering	2011	--	Mechanical Engineering
12	Engineering & Technology	UG	Electrical and Electronics Engineering	2004	--	Electrical and Electronics Engineering
13	Engineering & Technology	UG	Electronics & Communication Engineering	2001	--	Electronics and Communication Engineering
14	Engineering & Technology	PG	Embedded Systems Technologies	2009	--	Electrical and Electronics Engineering
15	Engineering & Technology	PG	Information Technology	2007	--	Computer Science and Engineering
16	Engineering & Technology	UG	Marine Engineering	2002	--	Marine Engineering
17	Engineering & Technology	UG	Mechanical & Automation Engineering	2011	--	Mechanical and Automation Engineering
18	Engineering & Technology	UG	Mechanical Engineering	2009	--	Mechanical Engineering
19	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
Electrical and Electronics Engineering	No	Electrical and Electronics Engineering	UG
Computer Science and Engineering	Yes	Computer Science and Engineering	UG
Electronics and Communication Engineering	Yes	Electronics & Communication Engineering	UG
Mechanical Engineering	Yes	Mechanical Engineering	UG

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

Allied Department/Cluster Name	Program Name	Program Level
Mechanical and Automation Engineering	Mechanical & Automation Engineering	UG

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 APPROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCREDITED	PROGRAM DURATION
1	Mechanical Engineering	UG	2009 / --	60	No	NA	60	2009	F.NO:Southern Region/1-10233347/2010/EOA	Granted accreditation for 3 years for the period (specify period)	2023	2026	1	4

List of the Allied Departments/Cluster and Programs:

SR.NO.	ALLIED DEPARTMENT NAME	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 APPROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCREDITED
1	Mechanical and Automation Engineering	Mechanical & Automation Engineering	UG	2011 / --	60	No	NA	60	2011	F.No. Southern/1-398268931/2011/EOA	Eligible but not applied	--	--	0

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

A. Name of the HoD :	Dr. Y. Carlin Calaph
B. Nature of appointment:	Regular
C. Qualification:	M.Tech and Ph.D.

B3. Program Details

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

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2025-26 (CAY)	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)	2021-22 (CAYm4)	2020-21 (CAYm5)	2019-20 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	60	60	60	60	60	60	60
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	54	19	42	48	41	49	60
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	10	11	17	18	19	9
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.	54	29	53	65	59	68	69

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

B4. Enrolment Ratio in the First Year

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

Year of entry	N (From Table 4.1)	N1 (From Table 4.1)	N4 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2025-26 (CAY)	60	54	0	90.00
2024-25 (CAYm1)	60	19	0	31.67
2023-24 (CAYm2)	60	42	0	70.00

Average $[(ER1 + ER2 + ER3) / 3] = 63.89 \approx 11.00$

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

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

Item	(2021-22) LYG	(2020-21) LYGm1	(2019-20) LYGm2
A*= (No. of students admitted in the 1st year of that batch and those actually admitted in the 2nd year via lateral entry, plus the number of students admitted through multiple entry (if any) and separate division if applicable, minus the number of students who exited through multiple entry (if any).	78.00	79.00	69.00
B=No. of students who graduated from the program in the stipulated course duration	30.00	49.00	49.00
Success Rate (SR)= (B/A) * 100	38.46	62.03	71.01

Average SR of three batches $((SR_1 + SR_2 + SR_3)/3)$: 57.17

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

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

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
Mean of CGPA or mean percentage of all successful students(X)	7.22	7.19	7.54
Y=Total no. of successful students	17.00	28.00	24.00
Z=Total no. of students appeared in the examination	17.00	28.00	24.00
API $[X*(Y/Z)]$	7.22	7.19	7.54

Average API $[(AP1+AP2+AP3)/3]$: 7.32

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

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

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2nd year/10)	7.11	7.37	7.17
Y=Total no. of successful students	37.00	34.00	39.00
Z=Total no. of students appeared in the examination	39.00	41.00	46.00

API [X * (Y/Z)]	6.75	6.11	6.08
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Average API [(AP1 + AP2 + AP3)/3] : 6.31

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

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

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 3rd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 3rd year/10)	7.24	7.20	6.97
Y=Total no. of successful students	34.00	38.00	59.00
Z=Total no. of students appeared in the examination	34.00	39.00	59.00
API [X*(Y/Z)]:	7.24	7.02	6.97

Average API [(AP1 + AP2 + AP3)/3] : 7.08

B9. Placement, Higher Studies, and Entrepreneurship

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

Item	LYG (2021-22)	LYGm1(2020-21)	LYGm2(2019-20)
FS*=Total no. of final year students	78.00	79.00	69.00
X=No. of students placed	37.00	56.00	57.00
Y=No. of students admitted to higher studies	1.00	3.00	2.00
Z= No. of students taking up entrepreneurship	0.00	0.00	0.00
Placement Index(P) = ((X + Y + Z)/FS) * 100):	48.72	74.68	85.51

Average Placement Index = (P_1 + P_2 + P_3)/3: 69.64 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. P. Selvakumar	XXXXXXX39R	M.E. and Ph.D.	NATIONAL INSTITUTE OF TECHNOLOGY,TIRUCHIRAPPALLI	HEAT TRANSFER	04/01/2016	10	Professor	Professor	18/08/2020	Regular	Yes		No
2	Dr.K.Chandrasekar	XXXXXXX14E	M.E. and Ph.D.	KALASALINGAM ACADEMY OF RESEARCH AND EDUCATION	CAD/CAM	08/11/2017	8.2	Associate Professor	Professor	15/06/2020	Regular	Yes		No

3	Dr.R.Satheesh Raja	XXXXXXX46C	M.E. and Ph.D.	ANNA UNIVERSITY	CAD	03/02/2022	3.11	Associate Professor	Professor	21/08/2023	Regular	Yes		No
4	Dr.P.Senthil kumar	XXXXXXX83C	M.E. and Ph.D.	ANNA UNIVERSITY	Energy Engineering	03/10/2024	1.3	Professor	Professor	03/10/2024	Regular	Yes		No
5	Dr. Y. Carlin Calaph	XXXXXXX85G	M.Tech and Ph.D.	ANNA UNIVERSITY	NANOTECHNOLOGY	16/08/2022	3.5	Assistant Professor	Associate Professor	14/08/2023	Regular	Yes		Yes
6	Dr.N.Vijay Ponraj	XXXXXXX64G	M.E. and Ph.D.	ANNA UNIVERSITY	MANUFACTURING ENGINEERING	27/06/2016	9.7	Assistant Professor	Associate Professor	08/08/2022	Regular	Yes		No
7	Dr.S.Siddarth	XXXXXXX69P	M.E. and Ph.D.	ANNA UNIVERSITY	MANUFACTURING ENGINEERING	10/06/2021	4.7	Associate Professor	Associate Professor	10/06/2021	Regular	Yes		No
8	Dr.A.Packia Antony Amalan	XXXXXXX06C	M.E. and Ph.D.	NATIONAL INSTITUTE OF TECHNOLOGY, PUTHUCHERY	CAD	01/07/2022	3.7	Assistant Professor	Associate Professor	09/07/2025	Regular	Yes		No
9	Dr. S. Mareeswaran	XXXXXXX60P	M.E. and Ph.D.	ANNA UNIVERSITY	ENGINEERING DESIGN	19/05/2022	3.8	Assistant Professor	Assistant Professor		Regular	Yes		No
10	Dr. K. Gangadharan	XXXXXXX31P	M.E. and Ph.D.	ANNA UNIVERSITY	MANUFACTURING ENGINEERING	08/04/2017	8.9	Assistant Professor	Associate Professor	10/08/2020	Regular	Yes		No
11	Dr.P.S.P.Shankar Ganesh	XXXXXXX58H	M.E. and Ph.D.	ANNA UNIVERSITY	CAD	20/07/2023	2.6	Assistant Professor	Associate Professor	14/07/2025	Regular	Yes		No
12	Dr.M.Armstrong	XXXXXXX99G	M.E. and Ph.D.	KALASALINGAM ACADEMY OF RESEARCH AND EDUCATION	THERMAL ENGINEERING	04/06/2024	1.7	Assistant Professor	Assistant Professor		Regular	Yes		No
13	Mr.P.Mathan	XXXXXXX89C	M.E.	ANNA UNIVERSITY	ENGINEERING DESIGN	02/06/2014	11.8	Assistant Professor	Assistant Professor		Regular	Yes		No
14	Mr.S.Paramasivan	XXXXXXX44R	M.E.	ANNA UNIVERSITY	CAD	17/06/2015	10.7	Assistant Professor	Assistant Professor		Regular	Yes		No
15	Dr.V.Manikandan	XXXXXXX01D	M.E. and Ph.D.	MANONMANIAM SUNDARANAR UNIVERSITY	COMPOSITE MATERIALS	30/05/2019	5.3	Professor	Professor	30/05/2019	Regular	No	03/09/2024	No
16	Dr. C. Muthusamy	XXXXXXX29L	M.E. and Ph.D.	ANNA UNIVERSITY	THERMAL ENGINEERING	03/01/2024	1.8	Professor	Professor	03/01/2024	Regular	No	30/09/2025	No
17	Dr. K. Arun Prasath	XXXXXXX87R	M.E. and Ph.D.	KALASALINGAM ACADEMY OF RESEARCH AND EDUCATION	MANUFACTURING ENGINEERING	05/07/2021	4.4	Assistant Professor	Associate Professor	05/07/2021	Regular	No	29/11/2025	No
18	Mr. M. Velmurugan	XXXXXXX69B	M.E.	ANNA UNIVERSITY	MANUFACTURING ENGINEERING	01/02/2020	6	Assistant Professor	Assistant Professor		Regular	Yes		No

19	Mr. R. Ratheesh	XXXXXXX33L	M.E.	ANNA UNIVERSITY	CRYOGENIC ENGINEERING	28/03/2022	2.4	Assistant Professor	Assistant Professor		Regular	No	07/08/2024	No
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Table No.C2: Faculty details of Allied Departments for the past 3 years including CAY.

Sr.No	Name of the Faculty	PAN No.	APAAR faculty ID*(if any)	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.M.Thirukumar	XXXXXXX44G	NA	M.E. and Ph.D.	KALASALINGAM ACADEMY OF RESEARCH AND EDUCATION	MANUFACTURING ENGINEERING	23/09/2024	1.4	Associate Professor	Associate Professor	23/09/2024	Regular	Yes		No
2	Dr. P.K Manikanda Pirapu	XXXXXXX08E	NA	M.E. and Ph.D.	VISVESVARAYA TECHNOLOGICAL UNIVERSITY	THERMAL ENGINEERING	17/01/2022	4.1	Associate Professor	Associate Professor		Regular	Yes		No
3	Mr.V.Ramkumar	XXXXXXX04B	NA	M.E.	ANNA UNIVERSITY	CAD	18/11/2013	12.2	Assistant Professor	Assistant Professor		Regular	Yes		Yes
4	Mr. M. Michael Simon	XXXXXXX27P	NA	M.E.	ANNA UNIVERSITY	CAD/CAM	02/01/2020	6	Assistant Professor	Assistant Professor		Regular	Yes		No
5	Mr. M. Balakrishnan	XXXXXXX99G	NA	M.E.	ANNA UNIVERSITY	AUTOMOBILE ENGINEERING	05/12/2016	9.1	Assistant Professor	Assistant Professor		Regular	Yes		No
6	Dr. S. R. Stalin	XXXXXXX45M	NA	M.E. and Ph.D.	KALASALINGAM ACADEMY OF RESEARCH AND EDUCATION	MANUFACTURING ENGINEERING	19/09/2019	6.4	Assistant Professor	Assistant Professor		Regular	Yes		No
7	Mr. S. Ananth	XXXXXXX85N	NA	M.E.	ANNA UNIVERSITY	THERMAL ENGINEERING	02/01/2020	6	Assistant Professor	Assistant Professor		Regular	Yes		No
8	Mr. D. Dineshkumar	XXXXXXX90G	NA	M.E.	ANNA UNIVERSITY	CAD	31/05/2023	2.8	Assistant Professor	Assistant Professor		Regular	Yes		No
9	Mr. K. Sudhakar	XXXXXXX58A	XXXXXXXXX052	M.E.	ANNA UNIVERSITY	ENGINEERING DESIGN	13/03/2018	7.10	Assistant Professor	Assistant Professor		Regular	Yes		No
10	Mrs. A.Subbulakshmi	XXXXXXX48F	NA	M.E.	ANNA UNIVERSITY	CAD/CAM	28/12/2023	2.1	Assistant Professor	Assistant Professor		Regular	Yes		No
11	Mr.K.Muthukumar	XXXXXXX17P	NA	M.E.	ANNA UNIVERSITY	MANUFACTURING ENGINEERING	17/06/2014	10.11	Assistant Professor	Assistant Professor		Regular	No	29/05/2025	No
12	Mr. T. Samrajan	XXXXXXX61A	NA	M.E.	ANNA UNIVERSITY	CAD/CAM	06/08/2015	9.9	Assistant Professor	Assistant Professor		Regular	No	29/05/2025	No

C2. Student-Faculty Ratio (SFR)

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

UG1=1st UG program

UGn=nth UG program

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

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

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

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

PG1=1st PG program.

PGm=mth PG program

A= No. of Students in PG 1st year

B= No. of Students in PG 2nd year

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

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

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

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

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

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

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

Description	CAY(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
UG1.B	60	66	66
UG1.C	66	66	66
UG1.D	66	66	66
UG1: Mechanical Engineering	192	198	198
UG2.B	60	60	60
UG2.C	60	60	61
UG2.D	60	61	66
UG2: Mechanical & Automation Engineering	180	181	187
PG1.A	18	18	18
PG1.B	18	18	18
PG1: Cryogenic Engineering	36	36	36
DS=Total no. of students in all UG and PG programs in the Department	228	234	234
AS=Total no. of students of all UG and PG programs in allied departments	180	181	187
S=Total no. of students in the Department (DS) and allied departments (AS)	S1= 408	S2= 415	S3= 421
DF=Total no. of faculty members in the Department	15	16	16
AF= Total no. of faculty members in the allied Departments	10	11	10
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	F1= 25	F2= 27	F3= 26
FF=The faculty members in F who have a 100% teaching load in the first-year courses	2	2	2
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1= 17.00	SFR2= 15.96	SFR3= 16.84
Average SFR for 3 years	SFR= 16.60		

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 = $2.5 \times [(10X + 4Y) / RF]$
2025-26(CAY)	15	10	20.00	23.75
2024-25(CAYm1)	13	14	20.00	23.25
2023-24(CAYm2)	12	14	21.00	20.95

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 RF1	Available AF1	Required RF2	Available AF1	Required RF3	Available AF3
2025-26	2.00	4.00	4.00	8.00	13.00	13.00
2024-25	2.00	4.00	4.00	6.00	13.00	17.00
2023-24	2.00	4.00	4.00	6.00	14.00	16.00
Average	RF1=2.00	AF1=4.00	RF2=4.00	AF2=6.67	RF2=13.33	AF2=15.33

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.A.Mahendran	Manager-Capex & Project	ATC Tires Pvt. Ltd.	ME640205 Engineering Materials and Metallurgy	30.00
2	Mr.S.Kumaresan	Technical Manager	CAD Arts designs & Drawings	ME660212 CAD/CAM/CAE	25.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.A.Mahendran	Manager-Capex & Project	ATC Tires Pvt. Ltd.	ME630203 Manufacturing Technology	30.00
2	Mr.S.Kumaresan	Technical Manager	CAD Arts designs & Drawings	ME650208 Engineering Metrology and Measurements	25.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.A.Mahendran	Manager-Capex & Project	ATC Tires Pvt. Ltd.	ME670215 Mechatronics and Robotics	30.00
2	S.Kumaresan	Technical Manager CAD Arts designs & Drawings	CAD Arts designs & Drawings	ME650209 Design of Machine Elements	25.00

C6. Academic Research

Table No. C6.1: Faculty publication details.

S.No.	Item	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)
1	No. of peer reviewed journal papers published	23	15	22
2	No. of peer reviewed conference papers published	18	12	5
3	No. of books/book chapters published	5	4	3

C7. Sponsored Research Project

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

(CAYm1)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. P. Selvakumar	-	Mechanical Engineering	AICTE - IDEA LAB	AICTE	2 Years	37.09
Dr. K. Arun Prasath	-	Mechanical Engineering	Movable and Integrated Shredding Machine	DST i-TBI	2 Years	3.00
Dr. P. Selvakumar	-	Mechanical Engineering	Rapidly developed app for agricultural workers to detect plant diseases	MSME 4.0	2 Years	11.00
						Amount received (Rs.):51.09

(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. P. Selvakumar	-	Mechanical Engineering	Reclaim, Reuse, Preloved home Items, Restored & Ready for a new Home	MSME 3.0	2 Years	11.00
Dr. P. Selvakumar	-	Mechanical Engineering	IOT based Battery Monitoring System	MSME 3.0	2 Years	9.00
						Amount received (Rs.):20.00

(CAYm3)

Total Amount (Lacs) Received for the Past 3 Years: 71.09

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)

(CAYm2)

(CAYm3)

Total amount (Lacs) received for the past 3 years:**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. P. Selvakumar	Experimental Investigation of a Sand based Sensible Heat Energy Storage System	2 years	1.90	1.90	Experimental Setup, Two Research papers publications
			Amount received (Rs.): 1.90		

(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. A. Packia Antony Amalan	Mathematical Modeling and experimental investigation of a forced convection mixed-mode solar dryer	2 Years	1.20	1.20	Experimental Setup, One Research papers publications
			Amount received (Rs.): 1.20		

(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. Y. Carlin Calaph	Experimental Analysis of TiAlN-SiC Nano-coated cryogenically treated cutting tool inserts	2 Years	1.50	1.50	Experimental Setup, One Research papers publications
			Amount received (Rs.): 1.50		

Total amount (Lacs) received for the past 3 years : 4.60

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	Workshop Practices Laboratory 30 Students Per Batch	30	Arc welding transformer with cables and holders Welding booth with exhaust facility Oxygen and acetylene gas cylinders, blowers and other Welding stuff Center lathe	30 Hrs/ Week	Mr.M.Kanagasa bapathy	Lab Technician	DME
2	Fluid Mechanics and Machinery lab	30	Orifice meter setup Venturi meter setup Rota meter setup Pipe Flow analysis setup Centrifugal pump/submergible pump setup	30 Hrs/ Week	Ms.M.Radha Krishnaveni	Lab Technician	BE
3	Manufacturing Technology Laboratory-I	30	Centre Lathes Shaper Arc welding transformer with cables and holders Oxygen and acetylene gas cylinders, blowers and other Welding stuff Metal lathe	18 Hrs/ Week	Mr.K.Sankar	Lab Technician	BE
4	Strength of Materials Laboratory	30	Universal Testing machine Torsion Testing Machine Impact Testing Machine Brinell Hardness Testing Machine Rockwell Hardness Testing Machine Compression Testing Machine	18 Hrs/ Week	Mr.R.Sivasankar	Lab Technician	DME
5	Manufacturing Technology Laboratory-II	30	Turret and Capstan Lathes Horizontal Milling Machine Vertical Milling Machine Surface Grinding Machine Collet Chuck Grinding Machine Radial Drill Machine	18 Hrs/Week	Mr.K.Sankar	Lab Technician	BE
6	Thermal Engineering Laboratory	30	I.C Engine – 2 stroke and 4 stroke model Red Wood Viscosimeter Apparatus for Flash and Fire Point 4-stroke Diesel Engine with mechanical loading Open Belt drive	18 Hrs /Week	Mr.M.Kanagasabapathy	Lab Technician	DME
7	Dynamics and Metrology Laboratory	30	Motorized Gyroscope Cam follower setup Governor Apparatus - Watt, Porter, Proell and Hartnell governors	18 Hrs /Week	Mr.P.Karol Sebastin	Lab Technician	ITI
8	Computer Aided Drafting and Machine drawing Lab	30	Solidworks AutoCAD ATX Cabinet Core i7 Processor Mercury motherboard 16GB DDRIII Ram 128SSD HDD 4TB Capacity Hard disk 1GB full keyboard and Mouse	18 Hrs /Week	Mr.K.Sankar	Lab Technician	BE
9	CAD/CAM Laboratory	30	Solidworks EDU edition Solidworks CAM ANSYS Academic ATX Cabinet Core i7 Processor Mercury motherboard 16GB DDRIII Ram 128SSD HDD 4TB	18 Hrs /Week	Mr.K.Sankar	Lab Technician	BE
10	Computer Aided Simulation & Analysis Lab	30	Solidworks EDU edition Solidworks CAM ANSYS Academic ATX Cabinet Core i7 Processor Mercury motherboard 16GB DDRIII Ram	18 Hrs /Week	Mr.K.Sankar	Lab Technician	BE
11	Mechatronics and Robotics Laboratory	30	Basic Pneumatic Trainer Kit (Electrical) VMT Basic Pneumatic Trainer Kit (PLC) VMT Advanced Hydraulic Trainer Kit PLC Motor Controller Trainer Kit Arduino	18 Hrs /Week	Mr.R.Sivasankar	Lab Technician	DME
12	Computer Numerical Control Laboratory	30	CNC MILLING,CNC LATHE	18 Hrs/Week	Mr.K.Sankar	Lab Technician	BE
13	Training in Centre for excellence - BOSCH	60	Hydraulic Trainer Kit - 2 (And related accessories) Pneumatic Trainer Kit - 2 (Compressor, single acting, double acting cylinders) PLC Training Kit - 5 Mechatronics	18 Hrs/Week	Mr.K.Sankar	Lab Technician	BE

14	3D Printing Laboratory	60	3D Printing machine -3	18 Hrs/Week	Mr.K.Sankar	Lab Technician	BE
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D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Strength of Materials Lab & Fluid Mechanics Lab	Fire extinguishers, first aid box, safety gloves, helmets, and safety shoes are available in all laboratories. At least two persons must be present while operating heavy machines or test rigs. Wearing safety shoes is mandatory. Avoid loose clothing, ties, and jewelry while working near rotating machinery. Do not touch moving or rotating parts during operation. Ensure proper clamping of specimens before testing. Keep work area clean and free from obstacles. Switch OFF machines before adjustments or measurements. Handle measuring instruments carefully. Report any damage or unsafe condition to the lab instructor immediately.
2	Thermal Engineering Lab	Fire extinguisher, first aid box, and proper ventilation facilities are provided. Do not operate boilers, engines, or compressors without instructor supervision. Never work alone in the lab. Avoid contact with hot surfaces and fluids. Use protective gloves while handling heated components. Ensure proper fuel handling and storage. Do not touch running engines or rotating parts. Maintain safe distance from high-temperature equipment.
3	CAD/CAM Lab	First aid kits and proper electrical safety measures are available. Follow proper system login and data security practices. Avoid unauthorized software installation. Maintain discipline and avoid misuse of computers. UPS backup is provided for uninterrupted operation. Follow all displayed lab instructions and guidelines.
4	Manufacturing Technology Lab (Workshop)	Fire extinguishers, first aid box, safety goggles, gloves, and aprons are provided. Wear safety shoes and protective equipment at all times. Do not operate machines like lathe, milling, or drilling without permission. Ensure proper guarding of machines before operation. Keep hands away from cutting tools and rotating parts. Use proper tools for each operation. Maintain cleanliness and proper arrangement of tools. Switch OFF machines after use. Report any malfunction or hazard immediately.
5	Dynamics Laboratory	Fire extinguisher and first aid box are available. Ensure proper mounting and balancing of rotating components before operation. Do not touch moving parts while equipment is running. Wear safety shoes during experiments. Follow instructor guidance while conducting tests. Keep the work area clean and free from obstructions. Report abnormal vibrations or equipment malfunctions immediately.
6	Metrology and Measurements Laboratory	Fire extinguisher and first aid box are available. Handle precision instruments carefully to avoid damage. Keep measuring equipment clean and properly stored after use. Avoid dropping or mishandling gauges and instruments. Ensure proper calibration before use. Follow laboratory procedures while taking measurements. Report damaged instruments immediately.
7	Heat Transfer Laboratory	Fire extinguisher, first aid box, and proper ventilation facilities are available. Avoid touching heated surfaces during experiments. Wear heat-resistant gloves when necessary. Ensure proper insulation of equipment before operation. Do not leave heating equipment unattended. Follow instructor instructions while operating experimental setups. Switch OFF equipment after completion of experiments.
8	Computer Integrated Manufacturing (CIM) Laboratory	Fire extinguisher, first aid box, and electrical safety measures are available. Operate CNC machines only with instructor permission. Wear safety shoes and protective equipment while working near machines. Keep hands away from moving parts and cutting tools. Ensure proper programming and machine setup before operation. Maintain cleanliness around workstations. Report machine faults immediately.

9	Computer Aided Simulation and Analysis Laboratory	Fire extinguisher, first aid box, and proper electrical safety arrangements are provided. Ensure computers, workstations, and simulation equipment are handled carefully. Do not connect unauthorized hardware or software to laboratory systems. Maintain proper posture and ergonomic practices while working on computers. Keep cables and workstations organized to prevent tripping hazards. Save and back up data regularly during simulation work. Switch OFF computers and equipment properly after use. Report any hardware, software, or electrical faults to the laboratory instructor immediately.
10	Mechatronics and Robotics Laboratory	Fire extinguishers, first aid box, safety gloves, and safety shoes are available in the laboratory. Do not operate robotic systems or automated equipment without instructor supervision. Ensure emergency stop switches are accessible and functional before operation. Keep hands, clothing, and other objects away from moving robotic arms and actuators. Verify all electrical connections before energizing the system. Do not bypass safety interlocks or protective guards. Maintain a safe distance from robots during programmed movements. Switch OFF power supplies before making adjustments or maintenance. Report any malfunction, abnormal movement, or unsafe condition to the laboratory instructor immediately.
11	CNC Laboratory	Fire extinguishers, first aid box, safety goggles, gloves, and safety shoes are available in the laboratory. Operate CNC machines only under the supervision of the instructor or authorized personnel. Ensure the workpiece and cutting tools are properly clamped before machining. Keep machine guards and safety enclosures closed during operation. Do not touch rotating tools, moving parts, or chips while the machine is running. Use appropriate tools for loading and unloading workpieces. Switch OFF the machine before tool changes, measurements, or maintenance activities. Keep the work area clean and free from metal chips and coolant spills. Report any machine malfunction or unsafe condition immediately.
12	3DPrinting Laboratory	Fire extinguishers, first aid box, and proper ventilation facilities are provided. Operate 3D printers only after receiving proper instructions. Avoid touching heated nozzles, print beds, and other hot components during and immediately after printing. Handle printing materials and resins as per manufacturer guidelines. Ensure adequate ventilation while operating printers, especially when using thermoplastic materials or resins. Keep hands away from moving parts during printing operations. Maintain cleanliness around printers and remove waste materials properly. Switch OFF equipment after use and allow components to cool before handling. Report any equipment malfunction, overheating, or unusual odor immediately.

D3. Project Laboratory/Research Laboratory

Project laboratory/Research lab/Centre of Excellence

A vital component of encouraging practical learning is done through Project laboratory, where students generate innovative ideas and complete their final year projects. In this respect project lab was being setup and actively in practice. Certain description about this laboratory is numbered below.

1. The project lab is utilized by UG and PG students and research Scholars.
2. Required facilities like system provision with internet, software (ANSYS LAB, BOSCH LAB, SOLAR LAB AND CAD LAB) REPUTED journals are available.
3. List of previous year projects are displayed at notice board which ensures no repetition and also encourages students to enhance the previous works.
4. In house and industrial projects are encouraged.
5. Students are motivated to present their work in project exhibitions. Intention is to provide common platform to exhibit their innovations and their work towards excellence in latest technology.
6. Students are encouraged to publish their work in reputed journal/conferences.

List of project works done in the project laboratory

<i>No.</i>	<i>Name of the Student(s)</i>	<i>Title of the Project done in Project laboratory</i>	<i>Academic Year</i>
	MUTHU KUMAR U	Comparative thermo physical characterization on Industrial waste sand for thermal energy storage application	2025-26
	NICKSON SAMUEL DURAI P	Experimental investigation of thermal performance of china clay industrial waste	2025-26



IDEA Lab :

IDEA LAB has divided into Four Sections.

- 1.CARPENTRY SECTION
- 2.MACHINING SECTION
- 3.COMPUTER SECTION
- 4.ELECTRONICS AND FABRICATIONSECTION

It Supports our students experiential learning through hands-on training in carpentry, machining, computing and electronics.

• Hands-on Skill Development

- The Carpentry Section with Bench Vice and hand tools enables students to develop practical fabrication, fitting and assembly skills essential for prototype development.

· **Advanced Manufacturing and Prototyping**

- The Machining Section equipped with a CNC Wood Lathe facilitates precision machining, computer-aided manufacturing, and rapid prototyping of innovative product designs.

· **Digital Design and Simulation**

- The Computer Section provides facilities for CAD/CAM design, programming, simulation, modeling and documentation, supporting the complete product development cycle.

· **Electronics Design and Product Realization**

- The Electronics Section with Soldering Stations and Oven enables PCB fabrication, circuit assembly, testing, and electronic product development, helping students transform ideas into functional prototypes.

**1.IDEA Laboratory –
Carpentry Section**

BENCH VICE



**2.IDEA Laboratory –
Machining Section**

CNC LATHE





NAME OF THE LABORATORY	PHOTOS
3.IDEA Laboratory – Machining Section MILLING MACHINE	
4.IDEA Laboratory – Machining Section MINI WOOD LATHE	



NAME OF THE LABORATORY	PHOTOS
5.IDEA Laboratory Machining Section Manual lathe and Drilling machine	 A photograph of a manual lathe and drilling machine. The machine is primarily white with a blue base. It features a large black motor on the left side and a complex arrangement of gears and levers for manual operation. The machine is positioned in a room with a white wall and a red and white patterned curtain in the background.
6.IDEA Laboratory – Machining Section Vinyl Cutter	 A photograph of a vinyl cutter machine. The machine is white and mounted on a grey metal stand. It has a large white roll of material (likely vinyl) loaded into the center. On the right side, there is a control panel with several buttons and a small display. The machine is situated in a room with a white wall and a red and white patterned curtain in the background.

NAME OF THE LABORATORY	PHOTOS
7.IDEA Laboratory – Machining Section WOOD ROUTER Machine	
8.IDEA Laboratory – Machining Section WOOD SANDER MACHINE	

NAME OF THE LABORATORY	PHOTOS
9.IDEA Laboratory – COMPUTER Section	
10.IDEA Laboratory – ELECTRONICS AND FABRICATION Section Cell phone Service Microscope	

NAME OF THE LABORATORY	PHOTOS
11.IDEA Laboratory – ELECTRONICS AND FABRICATION Section Digital Multimeter	
12.IDEA Laboratory – ELECTRONICS AND FABRICATION Section Fan Coil winding machine	

NAME OF THE LABORATORY	PHOTOS
13.IDEA Laboratory – ELECTRONICS AND FABRICATION Section Microwave OVEN	 A black microwave oven is placed on a table covered with a green plastic sheet. The microwave has a digital display and a control panel on the right side. The background shows a window and some items on a shelf.
14.IDEA Laboratory – ELECTRONICS AND FABRICATION Section SOLDERING STATION	 A soldering station is set up on a wooden table. It includes a soldering iron in a yellow stand, a box of solder labeled 'SOLDRON', a pair of pliers, and other tools. A patterned curtain is visible in the background.



NAME OF THE LABORATORY	PHOTOS
<p data-bbox="219 199 537 295">15.IDEA Laboratory – ELECTRONICS AND FABRICATION Section</p> <p data-bbox="219 331 448 395">Transformer Coli winding Machine</p>	 A photograph showing a person's hands operating a blue transformer coil winding machine. The machine is mounted on a wooden table. In the foreground, there is a green mechanical device with a yellow component. The background shows a window with patterned curtains.
<p data-bbox="219 845 537 941">16.IDEA Laboratory – ELECTRONICS AND FABRICATION Section</p> <p data-bbox="219 978 515 1010">Variable Power Supply</p>	 A photograph of a laboratory desk cluttered with electronic equipment. A variable power supply is connected to a breadboard and other components. A computer monitor and keyboard are also visible on the desk. The background features a window with patterned curtains.

PART E: First Year faculty and financial Resources
(Data to be filled in for the first year course faculty and budget allocation and utilization)

E1. First Year Student-Faculty Ratio (FYSFR)

Table No. E1.1: FYSFR details.

Year	Sanctioned intake of all UG programs (S4)	No. of required faculty (RF4= S4/20)	No. of faculty members in Basic Science Courses & Humanities and Social Sciences including Management courses (NS1)	No. of faculty members in Engineering Science Courses (NS2)	Percentage= No. of faculty members ((NS1*0.8) + (NS2*0.2))/(No. of required faculty (RF4)); Percentage= ((NS1*0.8) +(NS2*0.2))/RF
2023-24(CAYm2)	570	28	18	24	69
2024-25(CAYm1)	690	34	17	27	56
2025-26(CAY)	690	34	22	29	69

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

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

Items	Budgeted in 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Infrastructure Built-Up //	100.00	98.83	45.00	40.37	120.00	117.41	140.00	136.32
Library //	15.00	13.34	17.00	15.64	16.00	15.66	15.00	12.87
Laboratory equipment //	60.00	54.15	60.00	55.69	40.00	39.12	57.00	54.09
Teaching and non-teaching staff salary //	800.00	794.52	775.00	756.42	700.00	677.16	700.00	680.80
Outreach Programs //	0.25	0.15	0.10	0.04	1.00	0.92	0.25	0.21
R&D //	14.00	11.80	14.00	11.89	10.00	7.35	15.00	13.23
Training, Placement and Industry linkage //	62.00	59.78	60.00	56.26	40.00	31.99	35.00	28.60
SDGs //	110.00	101.21	110.00	114.13	110.00	113.40	260.00	258.35
Entrepreneurship //	8.00	6.83	6.00	3.55	4.00	3.24	10.00	8.66
Others, specify //	600.00	0580.00	510.00	500.38	600.00	578.58	400.00	393.05
Total	1769.25	1720.61	1597.10	1554.37	1641.00	1584.83	1632.25	1586.18

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

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

Items	Budgeted in 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Laboratory equipment //	264000.00	240000.00	160000.00	145000.00	580000.00	527467.00	154000.00	140000.00
Software //	11000.00	10000.00	9000.00	8149.93	62000.00	55823.03	7000.00	6367.28
SDGs //	385000.00	350000.00	831000.00	755000.00	856000.00	778181.00	2300000.00	2080547.12
Support for faculty development //	150000.00	135000.00	40000.00	35874.08	65000.00	59650.85	50000.00	45531.60
R & D //	160000.00	155000.00	160000.00	145000.00	150500.00	135000.00	116000.00	105000.00
Industrial Training, Industry expert, Internship //	28000.00	25000.00	44000.00	40000.00	50000.00	45000.00	40000.00	35000.00
Miscellaneous Expenses* //	8000000.00	7275792.00	8000000.00	7213576.00	8000000.00	7242980.00	7500000.00	6792545.00
Total	8998000.00	8190792.00	9244000.00	8342600.01	9763500.00	8844101.88	10167000.00	9204991.00