

## NATIONAL BOARD OF ACCREDITATION

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

<b>Program Name</b> : Mechanical Engineering	<b>Discipline</b> : Engineering & Technology
<b>Level</b> : Under Graduate	<b>Tier</b> : 1
<b>Application No</b> : 11518	<b>Date of Submission</b> : 23-01-2026

### PART A- Profile of the Institute

<b>A1. Name of the Institute:</b> KPR INSTITUTE OF ENGINEERING AND TECHNOLOGY	
Year of Establishment : 2009	Location of the Institute: Coimbatore
<b>A2. Institute Address:</b> S.F No. 204/2, 204/4, Arasur,Coimbatore	
City:Coimbatore	State:Tamil Nadu
Pin Code:641407	Website:www.kpriet.ac.in
Email:principal@kpriet.ac.in	Phone No(with STD Code):0422-2635600
<b>A3. Name and Address of the Affiliating University (if any):</b>	
Name of the University : Anna University Chennai	City: Chennai
State : Tamil Nadu	Pin Code: 600025
<b>A4. Type of the Institution:</b> Autonomous CAY(2019-20)	
<b>A5. Ownership Status:</b> Self financing	

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

- No. of UG programs: 13
- No. of PG programs: 6

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	2020	--	Artificial Intelligence and Data Science
2	Engineering & Technology	UG	Biomedical Engineering	2017	--	Biomedical Engineering
3	Engineering & Technology	PG	CAD/CAM	2012	--	Mechanical Engineering
4	Engineering & Technology	UG	Chemical Engineering	2018	--	Chemical Engineering
5	Engineering & Technology	UG	Civil Engineering	2009	--	Civil Engineering
6	Engineering & Technology	UG	Computer Science and Business System	2022	--	Computer Science and Business System
7	Engineering & Technology	UG	Computer Science and Engineering	2010	--	Computer Science and Engineering
8	Engineering & Technology	PG	Computer Science and Engineering	2014	--	Computer Science and Engineering

9	Engineering & Technology	UG	Computer Science and Engineering (Artificial Intelligence & Machine Learning)	2022	--	Computer Science and Engineering (Artificial Intelligence and Machine Learning)
10	Engineering & Technology	UG	Computer Science and Engineering (Cyber Security)	2025	--	Computer Science and Engineering (Cyber Security)
11	Engineering & Technology	PG	Data Sciences	2025	--	Artificial Intelligence and Data Science
12	Engineering & Technology	UG	Electrical and Electronics Engineering	2009	--	Electrical and Electronics Engineering
13	Engineering & Technology	UG	Electronics & Communication Engineering	2009	--	Electronics and Communication Engineering
14	Engineering & Technology	UG	Information Technology	2022	--	Information Technology
15	Engineering & Technology	UG	Mechanical Engineering	2009	--	Mechanical Engineering
16	Engineering & Technology	UG	Mechatronics Engineering	2022	--	Mechatronics Engineering
17	Engineering & Technology	PG	Structural Engineering	2014	--	Civil Engineering
18	Engineering & Technology	PG	VLSI Design	2012	--	Electronics and Communication Engineering
19	Management	PG	Master of Business Administration	2024	--	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
Computer Science and Engineering	Yes	Computer Science and Engineering	UG
Electronics and Communication Engineering	No	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
Mechatronics Engineering	Mechatronics 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	Yes	2022	60	2022	Southern/1-10974616582/2022/EOA Dt.11.07.2022	Granted accreditation for 3 years for the period (specify period)	2023	2026	1	4

**Sanctioned Intake for Last Five Years for the Mechanical Engineering**

Academic Year	Sanctioned Intake
2025-26	60
2024-25	60
2023-24	60
2022-23	60
2021-22	120
2020-21	120

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	Mechatronics Engineering	Mechatronics Engineering	UG	2022 / --	60	No	NA	60	2022	F.No. Southern/1-10974616582/2022/EOA	Not eligible for accreditation	--	--	0

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

A. Name of the HoD :	Dr.S.Ramesh Babu
B. Nature of appointment:	Regular
C. Qualification:	Ph.D

**B3. Program Details**

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

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2025-26 (CAY)	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)	2021-22 (CAYm4)	2020-21 (CAYm5)	2019-20 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	60	60	60	60	120	120	180

N1=Total no. of students admitted in the 1st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program	60	60	60	60	120	98	88
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	5	6	6	13	37	55
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	8	12	9	6	7	0	0
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	68	77	75	72	140	135	143

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	60	8	113.33
2024-25 (CAYm1)	60	60	12	120.00
2023-24 (CAYm2)	60	60	9	115.00

Average [ (ER1 + ER2 + ER3) / 3 ] = 116.11  $\approx$  100

#### 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).	140.00	157.00	235.00
B=No. of students who graduated from the program in the stipulated course duration	121.00	118.00	136.00
Success Rate (SR)= (B/A) * 100	86.43	75.16	57.87

Average SR of three batches ((SR\_1+ SR\_2+ SR\_3)/3): 73.15

#### 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)	7.97	7.75	7.62
Y=Total no. of successful students	60.00	67.00	65.00
Z=Total no. of students appeared in the examination	72.00	69.00	66.00
API [X*(Y/Z)]	6.64	7.53	7.50

Average API[ (AP1+AP2+AP3)/3 ] : 7.22

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

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

Academic Performance	CAYm1 ( 2024-25 )	CAYm2 ( 2023-24 )	CAYm3 ( 2022-23 )
X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2rd year/10)	7.80	7.59	7.80
Y=Total no. of successful students	70.00	68.00	125.00
Z=Total no. of students appeared in the examination	73.00	71.00	136.00
API [ X * (Y/Z) ]	7.48	7.27	7.17

Average API [ (AP1 + AP2 + AP3)/3 ] : 7.31

#### 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)	7.74	7.86	7.37
Y=Total no. of successful students	67.00	121.00	122.00
Z=Total no. of students appeared in the examination	68.00	125.00	125.00
API [ X*(Y/Z) ]:	7.63	7.61	7.19

Average API [ (AP1 + AP2 + AP3)/3 ] : 7.48

#### 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	133.00	157.00	235.00
X=No. of students placed	112.00	118.00	120.00
Y=No. of students admitted to higher studies	9.00	11.00	6.00
Z= No. of students taking up entrepreneurship	0.00	0.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	90.98	82.17	53.62

Average Placement Index = (P\_1 + P\_2 + P\_3)/3: 75.59 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?
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1	Dr.S.Ramesh Babu	XXXXXXX89N	Ph.D	Anna University, Chennai	Engineering Design	25/05/2016	9.7	Professor	Professor	25/05/2016	Regular	Yes		Yes
2	Dr.B.Arulmurugan	XXXXXXX71G	Ph.D	Vellore Institute of Technology, Vellore	CAD/CAM	14/11/2014	11.2	Assistant Professor	Associate Professor	01/07/2021	Regular	Yes		No
3	Dr.B.Thamaraikannan	XXXXXXX86A	Ph.D	Anna University, Chennai	Engineering Design	01/10/2015	10.3	Associate Professor	Associate Professor	01/10/2015	Regular	Yes		No
4	Dr.M.Makeshkumar	XXXXXXX14A	Ph.D	Anna University, Chennai	Engineering Design	04/09/2019	6.4	Assistant Professor	Associate Professor	01/07/2022	Regular	Yes		No
5	Dr.S.M.Senthil	XXXXXXX42K	Ph.D	Anna University, Chennai	Design and Manufacturing	01/06/2023	2.7	Associate Professor	Associate Professor	01/06/2023	Regular	Yes		No
6	Dr.N.Mathan Kumar	XXXXXXX61M	Ph.D	Indian Institute of Technology (ISM),Dhanbad	Composite Materials	14/06/2023	2.7	Associate Professor	Associate Professor	14/06/2023	Regular	Yes		No
7	Dr.R.R.Shenthil Kumar	XXXXXXX91P	Ph.D	Anna University, Chennai	Nano technology	01/02/2022	3.11	Assistant Professor	Associate Professor	15/08/2024	Regular	Yes		No
8	Dr.S.Arivazhagan	XXXXXXX00M	Ph.D	Anna University, Chennai	Manufacturing (Materials)	21/06/2021	4.7	Assistant Professor	Associate Professor	01/12/2023	Regular	Yes		No
9	Dr.R.Anandkumar	XXXXXXX69J	Ph.D	Anna University, Chennai	Advanced Manufacturing Technology	16/05/2012	13.8	Assistant Professor	Assistant Professor		Regular	Yes		No
10	Dr.N.Udhayakumar	XXXXXXX81C	Ph.D	Anna University, Chennai	Internal Combustion Engineering	06/06/2016	9.7	Assistant Professor	Assistant Professor		Regular	Yes		No
11	Mr..D.Balaji	XXXXXXX14M	MS	Nanyang Technological University,Singapore	Precision Engineering	04/08/2016	9.5	Assistant Professor	Assistant Professor		Regular	Yes		No
12	Dr.V.Bhuvaneswari	XXXXXXX62C	Ph.D	Anna University, Chennai	Computer Aided Design	18/11/2013	12.2	Assistant Professor	Assistant Professor		Regular	Yes		No
13	Dr.S.Gokulkumar	XXXXXXX53K	Ph.D	Anna University, Chennai	Composite Materials	01/06/2017	8.7	Assistant Professor	Assistant Professor		Regular	Yes		No
14	Mr.S.N.Dinesh	XXXXXXX89F	M.E.	Anna University, Chennai	Industrial Engineering	19/06/2017	8.7	Assistant Professor	Assistant Professor		Regular	Yes		No
15	Dr.N.Karthi	XXXXXXX21A	Ph.D	Anna University, Chennai	CAD/CAM	21/08/2017	8.5	Assistant Professor	Assistant Professor		Regular	Yes		No
16	Mr. P.Arun Kumar	XXXXXXX95C	M.E.	Anna University, Chennai	Engineering design	16/02/2021	4.11	Assistant Professor	Assistant Professor		Regular	Yes		No
17	Dr.S.Dharani Kumar	XXXXXXX29C	Ph.D	Anna University, Chennai	CAD/CAM	26/08/2021	4.4	Assistant Professor	Assistant Professor		Regular	Yes		No
18	Mr.R.Vignesh	XXXXXXX73E	M.E.	Anna University, Chennai	Mechatronics - Robotics and Automation	01/12/2021	4.1	Assistant Professor	Assistant Professor		Regular	Yes		No
19	Dr.P.Manoj Kumar	XXXXXXX87A	Ph.D	Anna University, Chennai	CAD, Solar Thermal	01/07/2017	7.10	Assistant Professor	Associate Professor	01/08/2022	Regular	No	30/04/2025	No

20	Dr.M. Kumar	XXXXXXX19L	Ph.D	Anna University, Chennai	Engineering Design	04/01/2021	4.4	Associate Professor	Associate Professor	04/01/2021	Regular	No	23/05/2025	No
21	Mr.T.Kannan	XXXXXXX79J	M.E.	Anna University, Chennai	Engineering Design	15/06/2017	7.6	Assistant Professor	Assistant Professor		Regular	No	31/12/2024	No
22	Mr.E.Joel	XXXXXXX12P	M.E.	Anna University	Computer Integrated Manufacturing	10/06/2019	5.11	Assistant Professor	Assistant Professor		Regular	No	23/05/2025	No
23	Dr.K.Ravikumar	XXXXXXX29L	Ph.D	Anna University, Chennai	Production Engineering	28/08/2020	3.10	Professor	Professor	28/08/2020	Regular	No	29/06/2024	No
24	Dr.L.Rajesh Kumar	XXXXXXX10P	Ph.D	Anna University, Chennai	Engineering Design	01/09/2011	12.9	Assistant Professor	Associate Professor	27/12/2021	Regular	No	29/05/2024	No
25	Dr.L.Prabhu	XXXXXXX47N	Ph.D	Anna University, Chennai	Composite Materials	25/05/2012	12.1	Assistant Professor	Assistant Professor		Regular	No	29/06/2024	No
26	Dr.Ravishankar.S	XXXXXXX09J	Ph.D	Anna University, Chennai	Industrial Engineering	25/08/2020	3.8	Associate Professor	Associate Professor	25/08/2020	Regular	No	30/04/2024	No
27	Dr.S.Sathish	XXXXXXX00L	Ph.D	Anna University, Chennai	CAD/CAM	01/06/2015	9	Assistant Professor	Assistant Professor		Regular	No	14/06/2024	No
28	Mr.N.Vignesh Kumar	XXXXXXX39B	M.E.	Anna University, Chennai	Heat Power Engineering	01/06/2020	4.3	Assistant Professor	Assistant Professor		Regular	No	13/09/2024	No
29	Mr.B.K.Saravanan	XXXXXXX30L	M.E.	Anna University, Chennai	Thermal Engineering	16/12/2019	4	Assistant Professor	Assistant Professor		Regular	No	29/12/2023	No

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. Sampathkumar R	XXXXXXX84G	NA	Ph.D	Anna University	Electrical Engineering/Power Quality	01/05/2024	1.8	Assistant Professor	Assistant Professor		Regular	Yes		No
2	Ms. Anandhi S	XXXXXXX46R	NA	M.E.	Anna University	Controls and Instrumentation	07/08/2024	1.5	Assistant Professor	Assistant Professor		Regular	Yes		No
3	Dr. Hirak Sarkar	XXXXXXX71L	NA	Ph.D	Techno India University	Electronics and Communication, Signal Processing	12/07/2025	0.6	Assistant Professor	Assistant Professor		Regular	Yes		No
4	Dr. Arnab Sikidar	XXXXXXX31P	NA	Ph.D	Indian Institute of Technology, Delhi	Biomechanics and medical devices	19/05/2025	0.8	Assistant Professor	Assistant Professor		Regular	Yes		No

5	Balaji A	XXXXXXXX78F	NA	M.E.	Anna University	Mechatronics Engineering and Robotics & Automation	28/06/2023	2.6	Assistant Professor	Assistant Professor		Regular	Yes		No
6	Dr. Naveen C	XXXXXXXX33C	NA	Ph.D	Anna University	Mechatronics Engineering and Robotics & Automation	09/06/2023	0.7	Assistant Professor	Assistant Professor		Regular	No	02/02/2024	No
7	Dr. Arpit Anil Panwar	XXXXXXXX20G	NA	Ph.D	Anna University	Automobile Engineering	26/08/2022	3.4	Assistant Professor	Assistant Professor		Regular	No	31/12/2025	No
8	Dr. Sharmi Ganguly	XXXXXXXX01R	NA	Ph.D	Indian Institute of Technology, Kharagpur	Mechatronics Engineering and Materials	05/08/2024	0.10	Assistant Professor	Assistant Professor		Regular	No	19/06/2025	No
9	Dr. Saravanan K	XXXXXXXX14E	NA	Ph.D	Anna University	Cognitive Radio Networks and IoT	03/06/2019	6	Assistant Professor	Assistant Professor		Regular	No	20/06/2025	No
10	Dr. Tamilselvan G	XXXXXXXX83L	NA	Ph.D	Anna University	UAV Controls and Instrumentation	02/08/2024	0.10	Assistant Professor	Assistant Professor		Regular	No	30/06/2025	No
11	Dr. Kiruba Shankar R	XXXXXXXX73B	NA	Ph.D	Anna University	Control and Instrumentation / Industrial Automation	04/06/2021	4.3	Professor	Professor		Regular	No	30/09/2025	No
12	Dr. Parimala V	XXXXXXXX61M	NA	Ph.D	Anna University	Power Electronics and Power Quality	02/06/2025	0.7	Associate Professor	Associate Professor	02/06/2025	Regular	Yes		No
13	Dr. M. Kumar	XXXXXXXX19L	NA	Ph.D	Anna University	Tribology of Composite Materials	24/05/2025	0.7	Associate Professor	Associate Professor		Regular	Yes		Yes
14	Mr. Joel E	XXXXXXXX12P	NA	M.E.	Anna University	Computer Integrated Manufacturing	24/05/2025	0.7	Assistant Professor	Assistant Professor		Regular	Yes		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	65	66	65
UG1.C	66	65	132
UG1.D	65	132	132
<b>UG1: Mechanical Engineering</b>	<b>196</b>	<b>263</b>	<b>329</b>
UG2.B	66	66	66
UG2.C	66	66	0
UG2.D	66	0	0
<b>UG2: Mechatronics Engineering</b>	<b>198</b>	<b>132</b>	<b>66</b>
PG1.A	18	18	9
PG1.B	18	9	9
<b>PG1: CAD/CAM</b>	<b>36</b>	<b>27</b>	<b>18</b>
DS=Total no. of students in all UG and PG programs in the Department	232	290	347
AS=Total no. of students of all UG and PG programs in allied departments	198	132	66
S=Total no. of students in the Department (DS) and allied departments (AS)	<b>S1= 430</b>	<b>S2= 422</b>	<b>S3= 413</b>
DF=Total no. of faculty members in the Department	18	21	28
AF= Total no. of faculty members in the allied Departments	8	8	4
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	<b>F1= 26</b>	<b>F2= 29</b>	<b>F3= 32</b>
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)	<b>SFR1= 16.54</b>	<b>SFR2= 14.55</b>	<b>SFR3= 12.91</b>
Average SFR for 3 years	<b>SFR= 14.67</b>		

### 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)	18	8	21.00	25.24
2024-25(CAYm1)	20	9	21.00	28.10
2023-24(CAYm2)	22	10	20.00	32.50

#### C4. Faculty Cadre Proportion

- Faculty Cadre Proportion is 1(RF1): 2(RF2): 6(RF3)
- RF1= No. of Professors required =  $1/9 \times$  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 =  $2/9 \times$  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 =  $6/9 \times$  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	1.00	4.00	9.00	14.00	16.00
2024-25	2.00	2.00	4.00	9.00	14.00	18.00
2023-24	2.00	3.00	4.00	9.00	13.00	20.00
Average	RF1=2.00	AF1=2.00	RF2=4.00	AF2=9.00	RF2=13.67	AF2=18.00

#### C5. Visiting/Adjunct Faculty/Professor of Practice

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

(CAYm1)

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.P.SURESH KUMAR	MANAGING DIRECTOR	BAS INSTITUTE AND INSPECTION SERVICES	U19ME701 TOTAL QUALITY MANAGEMENT	45.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.P.SURESH KUMAR	MANAGING DIRECTOR	BAS INSTITUTE AND INSPECTION SERVICES	U19MEX02 INDUSTRIAL SAFETY ENGINEERING	45.00
2	Mr.P.SURESH KUMAR	MANAGING DIRECTOR	BAS INSTITUTE AND INSPECTION SERVICES	U21ME401 MAUFACTURING TECHNOLOGY II	45.00

#### 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	53	56	79
2	No. of peer reviewed conference papers published	4	12	14
3	No. of books/book chapters published	16	31	9

**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.S. Parthiban	Mr.D.Balaji	MECH	Robust Nanocomposite Flexible Transparent Conductive Thin Films for Aeronautical Applications	AR&DB, DRDO	3 years	70.63
Dr.S.Dharani kumar		MECH	Non – Electrical Solar Tracking System	Unnat Bharat Abhiyan	1 year	1.00
						Amount received (Rs.):71.63

**(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.S.Arivazhagan		MECH	Optimization of Fixed-Wing Delivery System for Efficient Transport of Payload with High Endurance and Long Range	C-DAC - MeitY	2 years	1.50
Dr.V. Bhuvaneshwari		MECH	Waste Management - Waste to Wealth	TNSDC – Naan Mudhalvan AU – Niral Thiruvizha	3 Months	0.10
						Amount received (Rs.):1.60

**(CAYm3)****Total Amount (Lacs) Received for the Past 3 Years: 73.23****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.S.Ramesh Babu	-	Mech	Implementation of Potassium nitrate and sodium nitrate for refrigeration cycles	Guru Engineering Works	2 months	0.98
Dr.S.Dharani Kumar	-	Mech	Industrial Testing and Technical Consultancy Services using CMMT facility	GTS Engineering & Tech Research (OPC) Pvt Ltd, Coimbatore	1 year	2.25
Dr.N.Karthi	-	Mech	Technical Consultancy and Training on Autodesk Design Tools	Autodesk	3 months	0.35
Dr.B.Arulmurugan	-	Mech	Fabrication and Experimental Evaluation of Hexagonal and X-Shaped Specimens using Wire Arc Additive Manufacturing for Shear Stress Analysis	Kavin Inc	10 days	0.27
Dr.S.Ramesh Babu	-	Mech	Fabrication of Sofa cum bed model	CNM Engineering Works	1 month	0.32
Dr.S.Ramesh Babu	-	Mech	Auto Replacement of SC valve in VCM Unit	BPCL	10 months	4.15
Mr.D.Balaji	Dr.H.Shankar	Mech	Phase Identification of Advanced Alloys using X-ray Diffraction	Metastable Materials	1 month	0.40
Mr.D.Balaji	Dr.H.Shankar	Mech	Microstructural Analysis of Plasma Deposited Coatings using XRD	3D Plasma Tech Chennai	1 month	0.35
Mr.D.Balaji	Dr.H.Shankar	Mech	Phase Analysis of Cast Iron Components using XRD Technique	VR Foundries	1 month	0.45
Mr.D.Balaji	Dr.H.Shankar	Mech	Crystallographic Characterization of Metastable Alloys using XRD	Metastable Materials Pvt Ltd	1 month	0.50
Mr.D.Balaji	Dr.H.Shankar	Mech	XRD Analysis of Surface Coatings for Wear Resistance	Superfil Products Pvt	1 month	0.20
Mr.D.Balaji	Dr.H.Shankar	Mech	Phase identification of Industrial Components using XRD	Superfil Products Pvt	1 month	0.69
						Amount received (Rs.):10.91

**(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.N.Udhayakumar	-	Mech	Flexa- an AI powered Podium Mic to reduce speaker fatigue	MSME	2 years	9.75
Dr.S.Dharani kumar		Mech	CMMT Testing	GTS Engineering	1 year	2.69
Mr.D.Balaji	Dr.H.Shankar	Mech	Phase Identification of Titanium Alloy Components using XRD	Titan Industry	6 Month	0.12
Mr.D.Balaji	Dr.H.Shankar	Mech	Phase Stability Analysis of Metastable Alloys using XRD	Metastable Materials PVT . Ltd Bengaluru	6 Months	0.18
Mr.D.Balaji	Dr.H.Shankar	Mech	XRD Characterization of Surface Coated Industrial Components	Superfil Products Pvt	1 Month	0.13
						Amount received (Rs.):12.87

**(CAYm3)**

Total amount (Lacs) received for the past 3 years: 23.78

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.S.Parthiban & Mr.D.Balaji	Slot Die and Spray thin film coating equipment	1 year	4.00	3.73	Prototype development for DRDO project
Mr.N.Udhaya kumar	All Terrain vehicle fabrication for national level competition	1 Year	0.58	0.43	Won the Overall Championship in the national-level competition
			Amount received (Rs.): 4.58		

(CAYm2)

(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.S.Arivazhagan	Design and Fabrication of InMoov Humanoid Robot.	2 years	4.78	4.78	A working model, InMoov humanoid robot model was developed
			Amount received (Rs.): 4.78		

Total amount (Lacs) received for the past 3 years : 9.36

**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	Machine Shop	35	Medium Duty Lathe Machine along with accessories, Heavy Duty Lathe Machine along with accessories, All	30 hrs	Mr.P.Balasubramanian	Sr.Lab Technician	M.E.,
2	Mechatronics laboratory	35	Air compressor, Servo controller interfacing, Electro pneumatic trainer kit (jtk8)with Smpls, Automation	40 hrs	Mr.J.Alex	Sr.Lab Technician	M.E.,
3	Thermal Engineering laboratory	35	Single Cylinder Four Stroke Diesel Engine With Rope Brake Dynamometer, Multi Stage Reciprocating Air	24 hrs	Mr.A.Sivakumar	Lab Assistant	I.T.I.,
4	Cadd laboratory	75	Dell Optiplex 380 Dt Desktop, Solidworks Education Edition 2019, Ansys Education Edition 2015	40 hrs	Mr.Joseph Praveen	Tech.Lead	M.E.,

5	Basic workshop	75	Welding machine, Moulding Table,Box,Tools,Patterns, Power Hack Saw Machine, Drilling machine, Laser	30 hrs	Mr.M.Boopathi	Lab Assistant	I.T.I.,
6	Dynamics laboratory	35	Balancing of rotating Masses, Kinematics of Universal Joint, Kinematics of four bar mechanism apparatus, Cam mechanism, Crank train, Compound pendulum	20 hrs	Mr.E.M Praven	Tech.Lead	M.E.,
7	Metrology & Measurements laboratory	35	Slip Gauge Blocks , Precision Gear Module Caliper, Plunger Dial Indicator, Mechanical Comparator, Surface Plate with stand, Bench center, Electric Surface	20 hrs	Mr.P.Balasubramanian	Sr.Lab Technician	M.E.,
8	Automobile laboratory	35	Piston With Connecting Rod, Matador F11 Set Engine, Maruthi Car Half Block, 407 Engine assy, 407 Housing	30 hrs	Mr.S.Kathirvel	Associate Tech.Lead	B.E.,
9	Strength Of Materials Laboratory (Common Lab)	35	Universal Testing Machine 40 tonne capacity with double shear attachments, Torsion Testing Machine (60 mm), Impact Testing Machine (200 J), Brinell Hardness	30 hrs	Mr.K.Senthilkumar	Junior Assistant	D.M.E.,
10	Hydraulic Engineering Laboratory (Sharing)	35	Flow through Orificemeter, Flow through Venturimeter, Rotometer, Centrifugal Pump (Single Stage), Centrifugal Pump (Multi Stage), Submersible pump	30 hrs	Mr.Joseph Praveen	Tech.Lead	M.E.,

## D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Machine Shop	Use of PPE: Safety goggles, gloves, apron, safety shoes Machine guards for lathe, milling, drilling machines No loose clothing or ornaments Proper clamping of work pieces Chips removal using brush only (not hands) Emergency stop switches accessible
2	Mechatronics laboratory	Insulated tools for electrical experiments Proper wire management to avoid tripping Fire extinguisher (CO <sub>2</sub> type) Avoid live circuit handling Use of MCB/ELCB protection
3	Thermal Engineering laboratory	Fire extinguisher (CO <sub>2</sub> /Dry Powder) Safety valves in boilers and compressors Proper ventilation system Avoid contact with hot surfaces Temperature and pressure gauges calibrated regularly
4	Cad laboratory	Proper cable management Surge protection devices Avoid food and liquids near systems Regular system maintenance Adequate ventilation for computers
5	Basic workshop	PPE for welding (helmet, gloves, apron) Proper storage of tools Fire extinguisher availability Proper lighting and ventilation Safe handling of sharp tools
6	Dynamics laboratory	Proper guarding of rotating parts Secure mounting of experimental setups Avoid loose clothing Controlled operation during vibration tests

7	Metrology & Measurements laboratory	Careful handling of precision instruments Clean and dust-free environment Calibration of instruments periodically Proper storage after use
8	Strength Of Materials Laboratory (Common Lab)	Safety shields for testing machines Proper specimen fixing Do not exceed load limits Safe distance during fracture testing
9	Hydraulic Engineering Laboratory (Common Lab)	Avoid water spillage (prevent slipping) Proper pipe connections Pressure gauges maintained Switch off pumps after use
10	Automobile laboratory	Proper ventilation for exhaust gases Use of jack stands (not only hydraulic jack) Safe handling of fuels and lubricants No smoking inside laboratory Fire extinguisher availability

**D3. Project Laboratory/Research Laboratory**

**Table 7.5.1. List of project laboratory/research laboratory /Centre of Excellence**

Sr.No	Name of the Laboratory	Name of the Important equipment
1	Centre for manufacturing and material testing	Surface Roughness Tester
		Stir Casting
		Trinocular Microscope
		Double Disk Polishing
		Specimen Mounting Press
		Pin on Disk
		Ball Milling
		Fatigue Tester
		Shore D Hardness Tester
		Digitalized Impact Testing Machine
2	Joint Certification Centre (BOSCH lab)	Auto Electricl Test BEnch 3 Phase - AETB035
		Battery Charger - BML 2415, Battery Tester - BAT 131, Ampere Clamp
		ECS Scanner KTS590, ESI Diagnostics Software for School - Institution License
		Air Conditioning Service Equipment - ACS 701, UV Dye KIT
3	Centre of excellence for vertical Transportation	Landing door setup
		NMX07 Machine
		signalization
		KDL 16s Drive (control panel)
		MRC car
		HMS 16 Sling
		Counter weight Setup
		Over Speed Governor

4	Center for Robotic Welding	ABB robo with kempfi welding power source
		WAAM Attachment
5	3D Printing laboratory	Creality CR-10S5 3D Printer
		laser Engraver
		Mosaic Palette 2 Pro
		Artec 3D Scanner
		Bambulab A1 printer
		Creality ender 3 pro
		Wanhao Duplicator 7 DLP Printer
6	Project laboratory	Digital Multimeter
		Digital Tachometer
		Soldering Iron & Accessories
		Green Hose 3/4
		Funnel
		Combination Spanner
		Torque Wrench
		Rhino' Car Jack 3 Ton
		Bullwark Bearing Puller
		Hacksaw Frame
		19 Pcs Hss Twist Dril Bits Set
		Digital AC Clamp Meter
		Auto Air Compressor
		Lithium Battery Pack
Fast Intelligent Charger		
Digital AC Clamp Meter		

7	Center of excellence for Robotics and Automation	Unitrain Base Unit
		LabSOFT with Course Modules
		CPR 1 3-Axis Gantry Robot
		CRL 10 4-Axis Handling Robot Mover 4HD
		CRL 11 Kuka Industrial Robot with Testing Station
		CAV 10 Automated Guided Vehicle with Conveyor Belt
		CCR 2 Collaborative 6-Axis Robot Arm with Processing Station
		Samsung 65" Portable Interactive Display
		Dell Desktop (i7 12 <sup>th</sup> Gen, 16 GB Ram 512 GB SSD)
8	Centre of Excellence for Hybrid & Electric Vehicles	Unitrain base unit
		Elotrain unit
		CAN bus with VW golf passenger door
		48V on-board power network
		Audi Q5
		Computerizes hybrid engine test ring
		Component paint booth
		3D wheel aligner
		Digital wheel balancer with weights
		Tyre charger standards
		Wall mounted tyre inflator
		Air dryer ELRD-020
		Air Compressor
9	Aviation and Robotics laboratory	WorkBee CNC Router
		Ender 3D Printer

10	Centre of Excellence Advanced Materials Characterization	XRD
		UV-VIS Absorption Spectra

**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)	900	45	47	145	148
2024-25(CAYm1)	1140	57	50	142	120
2025-26(CAY)	1500	75	52	151	96

**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	4370000	6341758	145046000	135497009.5	25719200	73648776.17	42200000	41221950
Library	10772500	3370952	6092025	3847181.67	3789275	1345154.01	2850000	2795920
Laboratory equipment	36850750	18509719	40925574	30857159.96	65422968	49295771.88	9700000	9575024
Teaching and non-teaching staff salary	388000000	278349728	338000000	311401430	380431625	318626309.4	260000000	253191880
Outreach Programs	70000000	75717357	3700000	2430712.93	7095500	3168571.17	2000000	1800000
R&D	27102400	6194353	24581700	12587452.16	72995500	261988.30	12000000	12194000
Training, Placement and Industry linkage	16716000	17298031	29137880	20204583.41	10381000	23851629.91	26000000	26429900
SDGs	38007000	15050992	15499500	9400597.21	2201100	3902638	1000000	1013000
Entrepreneurship	4000000	2325503	5222500	4919948.26	300000	149109	1000000	900000

Others, specify	290905850	229677531	76710090	77573330.73	76726332	74079979.95	138000000	137026786
<b>Total</b>	<b>886724500</b>	<b>652835924</b>	<b>684915269</b>	<b>608719405.83</b>	<b>645062500</b>	<b>548329927.79</b>	<b>494750000</b>	<b>486148460</b>

### 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	1659950	1244282	2207480	2101399	7807500	6727564	390000	299085
Software	50000	0	900000	846691	500000	560500	120000	118000
SDGs	100000	58860	50000	48235	0	0	0	0
Support for faculty development	150000	94330	150000	146977	150000	100818	150000	120511
R & D	1062800	740179	600000	474266	1000000	851820	800000	771096
Industrial Training, Industry expert, Internship	100000	56649	150000	100503	200000	183957	250000	184578
Miscellaneous Expenses*	355000	346290	90000	18223	1224795	1002000	823000	749532
<b>Total</b>	<b>3477750</b>	<b>2540590</b>	<b>4147480</b>	<b>3736294</b>	<b>10882295</b>	<b>9426659</b>	<b>2533000</b>	<b>2242802</b>