

**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> : Mechatronics Engineering	<b>Discipline</b> : Engineering & Technology
<b>Level</b> : Under Graduate	<b>Tier</b> : 2
<b>Application No</b> : 11219	<b>Date of Submission</b> : 18-12-2025

**PART A- Profile of the Institute**

<b>A1.Name of the Institute:</b> JYOTHI ENGINEERING COLLEGE	
Year of Establishment : 2002	Location of the Institute: Cheruthuruthy Thrissur
<b>A2. Institute Address:</b> JYOTHI HILLS, PANJAL ROAD VETTIKATTIRI P.O. CHERUTHURUTHY,	
City:Trichur	State:Kerala
Pin Code:679531	Website:www.jecc.ac.in
Email:principal@jecc.ac.in	Phone No(with STD Code):04884-259000
<b>A3. Name and Address of the Affiliating University (if any):</b>	
Name of the University : APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY	City: Thiruvananthapuram
State : Kerala	Pin Code: 695016
<b>A4. Type of the Institution:</b> Self-Supported Institute	
<b>A5. Ownership Status:</b> Self financing	

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

- No. of UG programs: 9
- 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	PG	Artificial Intelligence and Data Science	2025	--	Computer Science and Engineering
3	Engineering & Technology	UG	Civil Engineering	2012	--	Civil Engineering
4	Engineering & Technology	PG	Communication Engineering & Signal Processing	2017	2025	Electronics and Communication Engineering
5	Engineering & Technology	PG	Computer Science and Engineering	2013	--	Computer Science and Engineering
6	Engineering & Technology	UG	Computer Science and Engineering	2002	--	Computer Science and Engineering
7	Engineering & Technology	UG	Computer Science and Engineering (Cyber Security)	2023	--	Computer Science and Engineering (Cyber Security)
8	Engineering & Technology	UG	Electrical and Electronics Engineering	2002	--	Electrical and Electronics Engineering
9	Engineering & Technology	UG	Electronics & Communication Engineering	2002	--	Electronics and Communication Engineering
10	Engineering & Technology	PG	Industrial Automation & Robotics	2019	--	Mechanical Engineering
11	Engineering & Technology	UG	Mechanical Engineering	2004	--	Mechanical Engineering
12	Engineering & Technology	UG	Mechatronics Engineering	2017	--	Mechatronics Engineering
13	Engineering & Technology	PG	Power Electronics	2012	2025	Electrical and Electronics Engineering

14	Engineering & Technology	UG	Robotics and Automation	2020	2023	Robotics and Automation
15	Engineering & Technology	PG	Transportation Engineering	2017	--	Civil Engineering

**A7. Programs to be considered for Accreditation vide this Application:**

Table No. A7.1: List of programs to be considered for accreditation.

Name of the Department	Having Allied Departments	Name of the Program	Program Level
Artificial Intelligence and Data Science	Yes	Artificial Intelligence and Data Science	UG
Mechatronics Engineering	Yes	Mechatronics 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
Electronics and Communication Engineering	Electronics & Communication Engineering	UG
Mechanical Engineering	Mechanical Engineering	UG
Mechanical Engineering	Industrial Automation & Robotics	PG
Electronics and Communication Engineering	Communication Engineering & Signal Processing	PG

**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/COMPETE(AUTHORITY ARR) DETAILS
1	Mechatronics Engineering	UG	2017 / --	60	No	NA	60	2017	South-West/1-44640838012/2025

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
1	Electronics and Communication Engineering	Electronics & Communication Engineering	UG	2002 / --	60	No	NA	60	2002
2	Mechanical Engineering	Mechanical Engineering	UG	2004 / --	60	Yes	2021	60	2021

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
<b>Sanctioned Intake for Last Five Years for the Mechanical Engineering</b>									
<b>Academic Year</b>			<b>Sanctioned Intake</b>						
2025-26			60						
2024-25			60						
2023-24			60						
2022-23			60						
2021-22			60						
2020-21			120						
3	Mechanical Engineering	Industrial Automation & Robotics	PG	2019 / --	18	Yes	2020	6	2020
<b>Sanctioned Intake for Last Five Years for the Industrial Automation &amp; Robotics</b>									
<b>Academic Year</b>			<b>Sanctioned Intake</b>						
2025-26			6						
2024-25			6						
2023-24			6						
2022-23			6						
2021-22			6						
2020-21			6						
4	Electronics and Communication Engineering	Communication Engineering & Signal Processing	PG	2017 / 2025	18	Yes	2025	0	2025
<b>Sanctioned Intake for Last Five Years for the Communication Engineering &amp; Signal Processing</b>									
<b>Academic Year</b>			<b>Sanctioned Intake</b>						
2025-26			0						
2024-25			6						
2023-24			6						
2022-23			6						
2021-22			6						
2020-21			6						

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

A. Name of the HoD :	Dr. Anand Krishnan N.
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	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	50	44	34	24	26	47	42

N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	3	10	5	2	4	3
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.	50	47	44	29	28	51	45

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	50	0	83.33
2024-25 (CAYm1)	60	44	0	73.33
2023-24 (CAYm2)	60	34	0	56.67

Average  $[(ER1 + ER2 + ER3) / 3] = 71.11 \approx 14.00$

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

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

Item	(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).	62.00	64.00	63.00
B=No. of students who graduated from the program in the stipulated course duration	15.00	25.00	21.00
Success Rate (SR)=(B/A) * 100	24.19	39.06	33.33

Average SR of three batches  $((SR_1 + SR_2 + SR_3)/3)$ : 32.19

#### 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)	4.93	4.56	5.99
Y=Total no. of successful students	44.00	34.00	24.00
Z=Total no. of students appeared in the examination	44.00	34.00	24.00
API $[X*(Y/Z)]$	4.93	4.56	5.99

Average API  $[(AP1+AP2+AP3)/3]$  : 5.16

#### 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)	5.25	5.71	5.79
Y=Total no. of successful students	44.00	29.00	26.00
Z=Total no. of students appeared in the examination	44.00	29.00	26.00
API $[X * (Y/Z)]$	5.25	5.71	5.79

Average API  $[(AP1 + AP2 + AP3)/3]$  : 5.58

#### 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)	6.43	6.32	5.31
Y=Total no. of successful students	29.00	26.00	50.00
Z=Total no. of students appeared in the examination	29.00	26.00	50.00
API [ X*(Y/Z) ]:	6.43	6.32	5.31

Average API [ (AP1 + AP2 + AP3)/3 ] : 6.02

**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	62.00	64.00	63.00
X=No. of students placed	10.00	22.00	10.00
Y=No. of students admitted to higher studies	0.00	5.00	10.00
Z= No. of students taking up entrepreneurship	0.00	1.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	17.74	43.75	31.75

Average Placement Index = (P\_1 + P\_2 + P\_3)/3: 31.08 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)
1	Dr. Anand Krishnan N.	XXXXXXXX00H	Ph.D	NIT, Calicut	Mechanical Engineering	20/12/2021	3.11	Assistant Professor	Associate Professor	01/07/2024	Regular
2	Fr. Dr. Jose Kannampuzha	XXXXXXXX26G	Ph.D	Mahatma Gandhi University, Kottayam	Farm Machinery and Power	01/10/2019	6.2	Professor	Professor		Regular
3	Dr. Vivek Lukose	XXXXXXXX91L	Ph.D	IIT, Guwahati	Sensor System Technology	19/09/2006	19.2	Assistant Professor	Associate Professor	02/11/2020	Regular
4	Dr. Anooopa Jose Chittilappilly	XXXXXXXX01K	Ph.D	Karpagam Academy of Higher Education, Coimbatore	Applied Electronics	08/11/2021	4	Associate Professor	Associate Professor		Regular
5	Ms. Nyni K. A.	XXXXXXXX47H	M.E.	Anna University, Chennai	Applied Electronics	16/02/2009	16.9	Assistant Professor	Assistant Professor		Regular
6	Mr. Jinesh K. J.	XXXXXXXX63Q	M.Tech	Amrita Vishwa Vidyapeetham, Coimbatore	Embedded Systems	17/01/2011	14.10	Assistant Professor	Assistant Professor		Regular
7	Ms. Shamin Elizabeth Varkey	XXXXXXXX44Q	M.Tech	APJ Abdul Kalam Technological University, Thiruvananthapuram	Robotics and Automation	10/08/2020	5.3	Assistant Professor	Assistant Professor		Regular
8	Fr. Ajeesh Babu Perinchery	XXXXXXXX86Q	M.E.	Anna University, Chennai	Mechatronics Engineering	07/09/2020	5.3	Assistant Professor	Assistant Professor		Regular
9	Mr. Athul Krishna M. J.	XXXXXXXX27M	M.Tech	APJ Abdul Kalam Technological University, Thiruvananthapuram	Robotics	31/08/2022	3.3	Assistant Professor	Assistant Professor		Regular

10	Ms. Athira P. Preman	XXXXXXXX99N	M.Tech	APJ Abdul Kalam Technological University, Thiruvananthapuram	Robotics	31/08/2022	3.3	Assistant Professor	Assistant Professor		Regular
11	Mr. Sibin Johny	XXXXXXXX13A	M.Tech	Mahatma Gandhi University, Kottayam	VLSI & Embedded Systems	31/08/2022	3.3	Assistant Professor	Assistant Professor		Regular
12	Mr. Ashik M. S.	XXXXXXXX05M	M.Tech	APJ Abdul Kalam Technological University, Thiruvananthapuram	Industrial Automation and Robotics	01/02/2023	2.10	Assistant Professor	Assistant Professor		Regular
13	Mr. Jain Varghese	XXXXXXXX96E	M.Tech	APJ Abdul Kalam Technological University, Thiruvananthapuram	Power Electronics	31/07/2023	2.4	Assistant Professor	Assistant Professor		Regular
14	Mr. Manikandan N. R.	XXXXXXXX11R	M.Tech	APJ Abdul Kalam Technological University, Thiruvananthapuram	Internal Combustion Engines and Turbo Machinery	01/02/2023	2.10	Assistant Professor	Assistant Professor		Regular
15	Mr. Leo Mathew	XXXXXXXX37P	M.Tech	Dr. B. R. Ambedkar National Institute of Technology, Jalandhar	Manufacturing Technology	04/07/2023	2.5	Assistant Professor	Assistant Professor		Regular
16	Ms. Sreeshma Sasidharan	XXXXXXXX07C	M.Tech	APJ Abdul Kalam Technological University, Thiruvananthapuram	VLSI & Embedded Systems	01/11/2025	0.1	Assistant Professor	Assistant Professor		Regular
17	Dr. C. Karthik	XXXXXXXX29E	Ph.D	Kalasalingam Academy of Research and Education, Tamil Nadu	Control and Instrumentation	20/08/2020	4.10	Associate Professor	Professor	02/06/2025	Regular
18	Mr. Johny George	XXXXXXXX36A	M.Tech	APJ Abdul Kalam Technological University, Thiruvananthapuram	Propulsion Engineering	01/02/2023	1.6	Assistant Professor	Assistant Professor		Regular

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 Designat as Professo Associat Professo if any
1	Dr. Jose P Therattil	XXXXXXXX79Q	XXXXXXXX330	Ph.D	NIT Rourkela	Power Systems	02/08/2004	21.4	Assistant Professor	Professor	01/10/200
2	Dr. Sindhu S	XXXXXXXX02A	XXXXXXXX224	Ph.D	Amrita Vishwa Vidyapeetham, Coimbatore	Power Electronics	11/08/2010	15.4	Assistant Professor	Associate Professor	01/06/201
3	Dr. Prajoon P.	XXXXXXXX81H	XXXXXXXX554	Ph.D	Karunya Institute of Technology and Sciences	Micro Electronics	18/06/2018	7.5	Assistant Professor	Associate Professor	02/11/202
4	Dr. Bindhu K Rajan	XXXXXXXX74E	XXXXXXXX690	Ph.D	APJ Abdul Kalam Technological University, Thiruvananthapuram	Signal Processing	30/08/2011	14.3	Assistant Professor	Associate Professor	02/05/202
5	Dr.Saritha P	XXXXXXXX79C	XXXXXXXX119	Ph.D	APJ Abdul Kalam Technological University, Thiruvananthapuram	Power Electronics & Drives	21/07/2010	15.4	Assistant Professor	Associate Professor	02/05/202

6	Ms.Drisya M.K	XXXXXXX59H	XXXXXXXXX169	M.E.	Anna University	Applied Electronics	02/06/2008	17.6	Assistant Professor	Assistant Professor	
7	Ms.Ambily Francis	XXXXXXX24D	XXXXXXXXX731	M.Tech	Karunya Institute of Technology and Sciences	Applied Electronics	31/08/2010	15.3	Assistant Professor	Assistant Professor	
8	Ms.Roshni Rajan K.	XXXXXXX68E	XXXXXXXXX623	M.Tech	Karunya Institute of Technology and Sciences	Control and Instrumentation	04/07/2011	14.5	Assistant Professor	Assistant Professor	
9	Ms.Neethu Rose Thomas	XXXXXXX79Q	XXXXXXXXX359	M.E.	Anna University	Applied Electronics	04/06/2012	13.6	Assistant Professor	Assistant Professor	
10	Fr. David Nettikkadan	XXXXXXX00A	XXXXXXXXX164	M.Tech	APJ Abdul Kalam Technological University, Thiruvananthapuram	Embedded Systems	19/06/2018	7.5	Assistant Professor	Assistant Professor	
11	Sr. Jesna Catherine	XXXXXXX50G	XXXXXXXXX621	M.Tech	APJ Abdul Kalam Technological University, Thiruvananthapuram	Communication Systems	08/11/2021	4.1	Assistant Professor	Assistant Professor	
12	Mr.Melvin Joy	XXXXXXX24H	XXXXXXXXX435	M.Tech	APJ Abdul Kalam Technological University, Thiruvananthapuram	VLSI & Embedded Systems	02/12/2024	1	Assistant Professor	Assistant Professor	
13	Ms. Chippi P D	XXXXXXX45Q	XXXXXXXXX397	M.Tech	APJ Abdul Kalam Technological University, Thiruvananthapuram	Embedded Systems	09/08/2023	2.4	Assistant Professor	Assistant Professor	
14	Ms. Annie Joseph	XXXXXXX08R	NA	M.Tech	Visvesvaraya Technological University	Digital Communication	09/01/2017	7.11	Associate Professor	Associate Professor	
15	Dr. Gaswin Kastro G	XXXXXXX94E	NA	Ph.D	Bharath Institute of Higher Education and Research	Microwave Circuits	29/12/2021	2.10	Associate Professor	Associate Professor	
16	Mr.Ponmani Raja	XXXXXXX04G	NA	M.E.	Anna University	Communication Systems	25/06/2009	15.4	Assistant Professor	Assistant Professor	
17	Mr. Manoj Kumar V K	XXXXXXX51L	XXXXXXXXX336	M.Tech	Kerala University	Technology Management	01/08/2005	20.4	Assistant Professor	Assistant Professor	
18	Dr. Biju P. L	XXXXXXX01P	XXXXXXXXX570	Ph.D	Calicut University	Production & Industrial Engineering	18/06/2018	7.5	Professor	Professor	
19	Dr. S. Krishnanunni	XXXXXXX78E	XXXXXXXXX320	Ph.D	Cochin University of Science and Technology	Production & Industrial Engg	31/01/2022	3.10	Assistant Professor	Associate Professor	01/07/202
20	Dr. Thomas Joseph	XXXXXXX38G	XXXXXXXXX625	Ph.D	APJ Abdul Kalam Technological University, Thiruvananthapuram	CAD	01/02/2023	2.10	Assistant Professor	Associate Professor	02/05/202
21	Mr. Praveen Raj	XXXXXXX09J	XXXXXXXXX564	M.Tech	Calicut University	Production Engineering	03/10/2006	19.2	Assistant Professor	Assistant Professor	
22	Mr. Nikhil N. S	XXXXXXX91K	XXXXXXXXX761	M.Tech	Calicut University	Production	18/08/2008	17.3	Assistant Professor	Assistant Professor	
23	Mr. Christy V Vazhappilly	XXXXXXX09K	XXXXXXXXX005	M.E.	Anna University	CAD/CAM	22/06/2009	16.5	Assistant Professor	Assistant Professor	
24	Mr. Melvinraj C R	XXXXXXX38H	XXXXXXXXX613	M.Tech	Calicut University	Thermal Systems	15/10/2009	16.1	Assistant Professor	Assistant Professor	
25	Mr. Suneeth Sukumaran	XXXXXXX07P	XXXXXXXXX737	M.Tech	Kerala University	Machine Design	01/09/2011	14.3	Assistant Professor	Assistant Professor	
26	Mr. Sukesh O. P	XXXXXXX00M	XXXXXXXXX597	M.Tech	Pondicherry University	Product Design & Manufacturing	09/06/2014	11.6	Assistant Professor	Assistant Professor	

27	Mr. Nice Menachery	XXXXXXXX05F	XXXXXXXXXX812	M.Tech	Mahatma Gandhi University, Kottayam	Production & Industrial Engg	10/06/2013	12.6	Assistant Professor	Assistant Professor	
28	Mr. Hareesh N. V	XXXXXXXX82J	XXXXXXXXXX501	M.Tech	Visvesvaraya Technological University	Production Engineering & Systems Technology	19/11/2012	13	Assistant Professor	Assistant Professor	
29	Mr. Anto Zacharias	XXXXXXXX20F	XXXXXXXXXX545	M.Tech	Mahatma Gandhi University, Kottayam	Machine Design	13/07/2015	10.4	Assistant Professor	Assistant Professor	
30	Mr. Sathyadev D	XXXXXXXX20F	XXXXXXXXXX741	M.Tech	APJ Abdul Kalam Technological University, Thiruvananthapuram	Thermal Engineering	12/09/2022	3.2	Assistant Professor	Assistant Professor	
31	Dr. Deepanraj B	XXXXXXXX36L	XXXXXXXXXX061	Ph.D	NIT, Calicut	Thermal/Energy	18/06/2018	7.5	Assistant Professor	Associate Professor	01/08/201
32	Dr. Biju C. V	XXXXXXXX33C	NA	Ph.D	IIT Madras	Manufacturing	11/11/2002	21.8	Assistant Professor	Professor	02/11/202
33	Dr. Lawrence C. A	XXXXXXXX51F	NA	Ph.D	Karpagam Academy of Higher Education, Coimbatore	Metal Casting, Composite Materials	09/01/2017	7.11	Associate Professor	Associate Professor	
34	Dr. Cijil B. John	XXXXXXXX70F	XXXXXXXXXX181	Ph.D	Karunya Institute of Technology and Sciences	Internal Combustion Engg.	16/06/2014	11.5	Assistant Professor	Associate Professor	01/08/202

## 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 Department2

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

Description	CAY(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
UG1.B	63	66	65
UG1.C	66	65	62
UG1.D	65	62	64
<b>UG1: Mechatronics Engineering</b>	<b>194</b>	<b>193</b>	<b>191</b>
UG2.B	66	66	66
UG2.C	66	66	66
UG2.D	66	66	132
<b>UG2: Mechanical Engineering</b>	<b>198</b>	<b>198</b>	<b>264</b>
UG3.B	62	66	66
UG3.C	66	66	66
UG3.D	66	66	66
<b>UG3: Electronics &amp; Communication Engineering</b>	<b>194</b>	<b>198</b>	<b>198</b>
DS=Total no. of students in all UG and PG programs in the Department	194	193	191
AS=Total no. of students of all UG and PG programs in allied departments	410	420	486
S=Total no. of students in the Department (DS) and allied departments (AS)	<b>S1= 604</b>	<b>S2= 613</b>	<b>S3= 677</b>

Description	CAY(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
DF=Total no. of faculty members in the Department	15	16	17
AF= Total no. of faculty members in the allied Departments	29	28	33
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	F1= 44	F2= 44	F3= 50
FF=The faculty members in F who have a 100% teaching load in the first-year courses	0	0	0
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1= 13.73	SFR2= 13.93	SFR3= 13.54
Average SFR for 3 years	SFR= 13.73		

**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 = $2.5 * [(10X + 4Y) / RF]$
2025-26(CAY)	14	30	30.00	21.67
2024-25(CAYm1)	12	32	30.00	20.67
2023-24(CAYm2)	15	35	33.00	21.97

**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	3.00	3.00	6.00	11.00	20.00	30.00
2024-25	3.00	3.00	6.00	9.00	20.00	32.00
2023-24	3.00	4.00	7.00	9.00	22.00	37.00
Average	RF1=3.00	AF1=3.33	RF2=6.33	AF2=9.67	RF2=20.67	AF2=33.00

**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)

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr. Shaji James P.	Adjunct Professor	Jyothi Engineering College	Project & Seminar	50.00

**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	2	2	3
2	No. of peer reviewed conference papers published	1	1	1

3	No. of books/book chapters published	1	0	0
---	--------------------------------------	---	---	---

**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. Anand Krishnan N	nil	Mechatronics Engineering	Experimental Investigations on the influence of pre-machined AISi soft coated cutting tools on wear behavior and surface characteristics during precision machining of Inconel 718	KTU -CERD	3	1.18
						Amount received (Rs.):1.18

(CAYm2)

(CAYm3)

**Total Amount (Lacs) Received for the Past 3 Years: 1.18****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
Mr. Nice Menachery	Mr. Aanand krishnan N	Mechanical Engineering	Documentation and Application of Thrissur Bell Metal Utensil as a Geographical Indication	NABARD	1	2.70
						Amount received (Rs.):2.70

(CAYm2)

(CAYm3)

**Total amount (Lacs) received for the past 3 years: 2.70****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)

(CAYm2)

(CAYm3)

**Total amount (Lacs) received for the past 3 years :****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	PLC AND EMBEDDED SYSTEM LAB	33	Displacement Measurement Trainer Using LVDT, Strain Measurement	6	Mr. Majeendra	Trade instructr	Diploma in EC
2	MECHATRONICS & INSTRUMENTATION LAB	33	Basic Pneumatic Trainer Kit, Basic Hydraulic Trainer Kit, PLC - SIEI	6	Mr. C Sumesh	Trade instructr	BTech in ME
3	CAD AND EMBEDDED AI LAB	33	10 computers - cooler master (intel i5 processor 12th gen, 8gb ram, 256	6	Mr. C Sumesh	Trade instructr	BTech in ME
4	ANALOG AND DIGITAL ELECTRONICS LAB	33	2MHz Function Generator scientific -SM5060-2, Analog IC Tester Model-	6	Mr. Majeendra	Trade instructr	Diploma in EC
5	MECHANICAL ENGINEERING LAB	33	Lathe, Shaper, Universal Milling Machine, Slotting machine,	6	Mr. Davis CC	Instructor Gr.II	ITI in Fitter
6	ELECTRICAL TECHNOLOGY LAB	33	3Ph Squirrel cage Induction motor, 1Ph Induction motor, 3Ph Slip ring	6	Mr. Davis K T	Trade Instructr	Diploma, BTec

**D2. Safety Measures in Laboratories**

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

Sr. No	Laboratory Name	Safety Measures
1	PLC AND EMBEDDED SYSTEM LAB	• Fire extinguisher • First Aid Box in place. • All accidents, no matter how minor, should be reported to the faculty. • Students must be in proper uniform with shoes. • Preliminary Medical facility (clinic) is available inside campus for emergency. • All electrical equipment shall be properly grounded • Do's and Don'ts board.
2	MECHATRONICS INSTRUMENTATION LAB	• Fire extinguisher • First Aid Box in place. • All accidents, no matter how minor, should be reported to the faculty. • Students must be in proper uniform with shoes. • Preliminary medical facility is available inside campus for emergency. • Do's and Don'ts board.
3	CAD AND EMBEDDED AI LAB	• Fire extinguisher • First Aid Box in place. • All accidents, no matter how minor, should be reported to the faculty. • Students must be in proper uniform with shoes. • Preliminary Medical facility is available inside campus for emergency. • All electrical equipment shall be properly grounded • Do's and Don'ts board.
4	PROJECT LAB	• Fire extinguisher • First Aid Box in place. • All accidents, no matter how minor, should be reported to the faculty. • Students must be in proper uniform with shoes. • Preliminary Medical facility is available inside campus for emergency. • All electrical equipment shall be properly grounded • Do's and Don'ts board.
5	ANALOG AND DIGITAL ELECTRONICS LAB	• Fire extinguisher • First Aid Box in place. • All accidents, no matter how minor, should be reported to the faculty. • Students must be in proper uniform with shoes. • Preliminary medical facility is available inside campus for emergency. • Do's and Don'ts board

**D3. Project Laboratory/Research Laboratory**

--

**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)	600	30	15	64	83
2024-25(CAYm1)	600	30	16	70	89
2025-26(CAY)	600	30	20	77	105

## 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	750	655.4	570	585.54	150	157.38	150	184.77
Library	15	3.72	15	14.57	23.6	22.22	20	18.1
Laboratory equipment	860	708.08	710	722.26	654.04	687.5	513	457.86
Teaching and non-teaching staff	1200	868.52	960	1007.01	900	895.89	900	820.11
Outreach Programs	1	0.23	0	0	0	0	0	0
R&D	20	3.31	20	21.52	9.1	6.95	4	3.52
Training, Placement and	40	28.69	50	56.96	26.45	21.19	20	21.27
SDGs	3	2.18	0	0	0	0	0	0
Entrepreneurship	2	0.76	0	0	0	0	0	0
Others, specify	312	282.94	315	327.57	242	308.34	282	263.01
<b>Total</b>	<b>3203</b>	<b>2553.83</b>	<b>2640</b>	<b>2735.43</b>	<b>2005.19</b>	<b>2099.47</b>	<b>1889</b>	<b>1768.64</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	660000	902047	766000	899362	575000	435049.7	1160000	678747
Software	150000	0	100000	120000	200000	662800	0	120000
SDGs	0	0	20000	18514	50000	208991	0	35685
Support for faculty development	0	17500	0	0	0	0	0	0
R & D	100000	0	100000	30600	50000	0	0	2100
Industrial Training, Industry expert,	50000	46979	50000	87844	75000	33000	60000	55617
Miscellaneous Expenses*	28000	600	10000	21446.46	75000	19010	130000	117625

<b>Total</b>	<b>988000</b>	<b>967126</b>	<b>1046000</b>	<b>1177766.46</b>	<b>1025000</b>	<b>1358850.7</b>	<b>1350000</b>	<b>1009774</b>
--------------	---------------	---------------	----------------	-------------------	----------------	------------------	----------------	----------------