

NATIONAL BOARD OF ACCREDITATION

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

PART-A: Profile of the Institute

Name of the Program Applied for: Electronics & Communication Engineering

A1: Name of the Institute: - Toc H Institute of Science and Technology

Year of Establishment : 2002

Location of the Institute: Kerala

A2: Institute Address: -Arakunnam, Ernakulam Pin-682 313 Kerala

City : Ernakulam

State : Kerala

Pin Code : 682313

Website :www.tistcochin.edu.in

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

Name of the University : APJ Abdul Kalam
Technological University

City : Thiruvananthapuram
Pin Code :695016

State : Kerala

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

Institute of National Importance

☐

Deemed University

☐

University

☐

Autonomous

☐

Non-Autonomous (Affiliated)

☐

Any other (Please specify) *

☒

***Provide Details:** Self-Supported Institute

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

Central Government

☐

State Government

☐

Government Aided

☐

Self-financing

☒

Any Other (Please specify) *

☐

***Provide Details:** ____

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

❖ No. of UG programs: 9

❖ No. of PG programs: 6

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

S.N.	Level of program (UG/PG)	Name of the program	Year of Start	Year of close*	Name of the Department
1	UG	Civil Engineering	2006	-	Civil Engineering
2	UG	Computer Science and Engineering	2002	-	Computer Science and Engineering
3	PG	Construction Engineering & Management	2013	-	Civil Engineering
4	PG	Data Science	2020	-	Computer Science and Engineering
5	UG	Electrical and Computer Engineering	2020	-	Electrical and Computer Engineering
6	UG	Electrical and Electronics Engineering	2004	-	Electrical and Electronics Engineering
7	UG	Electronics & Communication Engineering	2002	-	Electronics and Communication Engineering
8	UG	Information Technology	2002	-	Information Technology
9	UG	Mechanical Engineering	2006	-	Mechanical Engineering
10	PG	Power Electronics	2012	2024	Electrical and Electronics Engineering
11	UG	Robotics and Automation	2019	-	Robotics and Automation
12	UG	Safety & Fire Engineering	2011	-	Safety and Fire Engineering
13	PG	Thermal Engineering	2013	2024	Mechanical Engineering

14	PG	Wireless Technology	2011	2024	Electronics and Communication Engineering
15	PG	Masters in Business Administration	2008	-	Management

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

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

Cluster ID.	Name of the Department	Name of the Program
1	Mechanical Engineering	Mechanical Engineering
2	Safety and Fire Engineering	Safety & Fire Engineering
3	Computer Science and Engineering	Computer Science and Engineering
4	Electronics and Communication Engineering	Electronics & Communication Engineering
5	Civil Engineering	Civil Engineering

Table No. A7.2: Allied Department(s) to the Department of the program considered for accreditation as above.

Cluster ID.	Name of the Department (in table no. A7.1)	Name of allied Departments/Cluster (for table no. A7.1)
1.	Electronics and Communication Engineering	Robotics and Automation

PART-B: Program information

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

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

Table No. B1: Program details.

Sl. No	Program Name	Year of start	Sanctioned Intake	Increase / decrease in intake, if any	Year of increase/decrease	AICTE Approval Details	Accreditation Status*	No. of times program accredited
1	Electronics & Communication Engineering	2002	60	Yes	2023	F.No. South-West/1-40381577688/2023/EOA Dated: 10-Jun-2023	Granted accreditation for 3 years for the period (2023-2026)	3

* Write applicable one:

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

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

A. Name of the HoD : Dr.Deepa Elizabeth George

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

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

C. Qualification: (Tick the applicable choice)

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

***Please provide details:** _____

B3: Program Details

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

Item (Information is to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	CAY	CAYm1	CAYm2	CAYm3	CAYm4 (LYG)	CAYm5 (LYGm1)	CAYm6 (LYGm2)
N= Sanctioned intake of the program (as per AICTE /Competent authority)	60	60	60	30	30	30	60
N1= Total no. of students admitted in the 1 st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program	60	60	45	30	26	28	33
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	1	4	1	1	0	1
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	1	5	0	1	0	0	0
Total number of students admitted in the program (N1 + N2 + N3+ N4) – excluding those admitted through multiple entry and exit points.	61	66	49	32	27	28	34

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.

Item (Students enrolled in the First Year on average over 3 academic years (CAY, CAYm1, and CAYm2))	CAY	CAYm1	CAYm2
N= Sanctioned intake of the program in the 1 st year (as per AICTE/Competent authority)	60	60	60
N1= Total no. of students admitted in the 1 st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program	60	60	45
N4= Total no. of students admitted in the 1 st year via all supernumerary quotas	1	5	0
Enrolment Ratio (ER)= (N1+N4)/N	1.02	1.08	0.75
Average ER= (ER_1+ ER_2+ ER_3)/3	0.95		

B5: Success Rate of the Students in the Stipulated Period of the Program**Table No.B5.1:** The success rate in the stipulated period of a program.

Item	LYG	LYGm1	LYGm2
A*= (No. of students admitted in the 1 st year of that batch and those actually admitted in the 2 nd year via lateral entry, plus the number of students admitted through multiple entry (if any) and separate division if applicable, minus the number of students who exited through multiple entry (if any).	31	30	61
B=No. of students who graduated from the program in the stipulated course duration	14	18	20
Success Rate (SR)= (B/A)*100	45.16	60	32.79
Average SR of three batches ((SR_1+SR_2+ SR_3)/3)	45.98		

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

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

Academic Performance	CAYm1	CAYm2	CAYm3
X= (Mean of 1 st year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 1 st year/10)	6.22	6.35	6.47
Y= Total no. of successful students	65	45	31
Z = Total no. of students appeared in the examination	65	45	31
API = X* (Y/Z)	6.22	6.35	6.47
Average API = (API_1 + API_2 + API_3)/3	6.35		

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

Academic Performance	CAYm1	CAYm2	CAYm3
X= (Mean of 2 nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2 nd year/10)	5.53	6.25	6.31
Y= Total no. of successful students	49	31	25
Z =Total no. of students appeared in the examination	49	32	27

$API = X * (Y/Z)$	5.53	6.05	5.84
Average API = $(API_1 + API_2 + API_3)/3$	5.81		

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

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

Academic Performance	CAYm1	CAYm2	CAYm3
X= (Mean of 3 rd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 3 rd year/10)	6.15	5.52	6.11
Y= Total no. of successful students	30	25	28
Z= Total no. of students appeared in the examination	31	25	28
$API = X * (Y/Z)$	5.95	5.52	6.11
Average API = $(API_1 + API_2 + API_3)/3$	5.86		

B9:Placement, Higher Studies, and Entrepreneurship

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

Item	LYG	LYGm1	LYGm2
FS*=Total no. of final year students	31	30	61
X= No. of students placed	18	19	25
Y= No. of students admitted to higher studies	0	2	0
Z= No. of students taking up entrepreneurship	0	0	0
$X + Y + Z =$	18	21	25
Placement Index (P) = $((X + Y + Z)/FS) * 100$	58.06	70	40.98
Average placement index = $(P_1 + P_2 + P_3)/3$	56.35		

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

PART C: Faculty Details in Department and Allied Departments
(Data to be filled in for the **Department and Allied Departments**)

C1: Faculty details of Department and Allied Departments

Table No.C1: Faculty details in the Department for the past 3 years including CAY

S.N.	Name of the Faculty	Highest degree	University	Area of Specialization	Date of Joining in this Institution	Experience in years in current institute	Designation at Time Joining in this Institution	Present Designation	The date on which Designated as Professor/ Associate Professor if any	Nature of Association (Regular/ Contract/ Ad hoc)	If contractual mention Full time or (Part time or hourly based)	Currently Associated (Y/N)	Date of Leaving if any (In case Currently Associated is " No")
1	Dr.Deepa Elizabeth George	Ph.D	Cochin University of Science and Technology	Signal Processing in Communication	23.09.2002	23.30	Lecturer	Professor	02.06.2025	Regular	-	Y	
2	Dr.S.Perumal Sankar	Ph.D	Anna University	MEMS	27.10.2014	11.20	Professor	Professor	27.10.2014	Regular		Y	
3	Dr.Sreelekshmi.S	Ph.D	APJ Abdul Kalam Technological University	Antenna Design and Analysis	03.07.2012	13.60	Assistant Professor	Assoc. Professor	01.05.2025	Regular		Y	
4	Ms.Deepa Mary Varghese	M.Tech	Anna University	Applied Electronics	02.06.2008	17.70	Lecturer	Assistant Professor	-	Regular		Y	
5	Mr.Nisanth Krishnan	ME	Anna University	Communication Systems	05.01.2009	17.00	Lecturer	Assoc. Professor	01.05.2025	Regular		Y	

6	Mr.Renjith P K	ME	Anna University	VLSI Design	07.03.2011	14.10	Assistant Professor	Assistant Professor	-	Regular		Y	
7	Ms.Sajitha K S	ME	Anna University	Embedded System Technology	02.06.2008	17.70	Lecturer	Assistant Professor	-	Regular		Y	
8	Ms.Annie Paul	M.Tech	Cochin University of Science and Technology	Wireless Technology	02.06.2008	17.70	Lecturer	Assistant Professor	-	Regular		Y	
9	Ms.Dhanya R	ME	Anna University	Communication Systems	10.07.2017	8.60	Assistant Professor	Assistant Professor	-	Regular		Y	
10	Ms.Roshni Polly	M.Tech	Anna University	Information & Communication	23.06.2008	17.00	Lecturer	Assistant Professor	-	Regular		N	28-06-2025

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

S.N.	Name of the Faculty	Highest degree	University	Area of Specialization	Date of Joining in this Institution	Experience in years in current institute	Designation at Time Joining in this Institution	Present Designation	The date on which Designated as Professor/ Associate Professor if any	Nature of Association (Regular/ Contract/ Ad hoc)	If contractual mention Full time or (Part time or hourly based)	Currently Associated (Y/N)	Date of Leaving if any (In case Currently Associated is " No")
1	Dr. Georgina Binoy Joseph	Ph.D	Hindustan Institute of Technol	High Performance Com	20.06.2016	9.60	Associate Professor	Associate Professor	20.06.2016	Regular	-	Y	

			ogy and Science	puting and Computer Vision									
2	Mr.Girish P	M.Tech	Visvesvaraya Technological University	Industrial Electronics	19.10.2009	16.20	Assistant Professor	Associate Professor	01.05.2025	Regular	-	Y	
3	Mr.Maresh C	M.Tech	Anna Univesrsity Chennai	CAD/CAM	11.5.2009	16.80	Assistant Professor	Assistant Professor	-	Regular	-	Y	
4	Ms. Anu Jose	M.Tech	Anna Univesrsity	Applied Electronics	11.06.2012	13.70	Assistant Professor	Assistant Professor	-	Regular	-	Y	
5	Ms. Swathy Satheesh	M.Tech	Cochin University of Science and Technology	Opto Electronics and Communication Systems	10.07.2017	8.60	Assistant Professor	Assistant Professor	-	Regular	-	Y	
6	Ms.Sheethal Ann Ajith	M.Tech	APJ Abdul Kalam Technological University	VLSI and Embedded Systems	23.08.2024	1.40	Assistant Professor	Assistant Professor	-	Regular	-	Y	
7	Mr. Edu Krishnan V	M.Tech	University of Calicut	Machine Design	01.01.2025	1.00	Assistant Professor	Assistant Professor	-	Contract	Full Time	Y	
8	Ms.Lekshmylal P L	M.Tech	Cochin University of Science and Technology	VLSI and Embedded Systems	01.01.2025	1.00	Assistant Professor	Assistant Professor	-	Contract	Full Time	Y	
9	Ms. Sanjana M Prabhu	M.Tech	APJ Abdul Kalam Technological University	Robotics and Automation	01.07.2025	0.60	Assistant Professor	Assistant Professor	-	Contract	Full Time	Y	

10	Ms. Smita Damodaran	M.Tech	Cochin University of Science and Technology	VLSI and Embedded Systems	01.01.2025	0.11	Assistant Professor	Assistant Professor	-	Contract	Full Time	N	11-12-2025
11	Mr. Akhil Krishnan M	M.Tech	APJ Abdul Kalam Technological University	Industrial Drives and Control	17.07.2024	1.30	Assistant Professor	Assistant Professor	-	Contract	Full Time	N	03-11-2025
12	Ms. Dilsha T A	M.Tech	Cochin University of Science and Technology	Electronics and Communication	17.07.2024	1.00	Assistant Professor	Assistant Professor	-	Contract	Full Time	N	17-07-2025
13	Ms. Rekha George	M.Tech	Anna University Chennai	Information and Communication Engineering	11.06.2007	17.10	Lecturer	Assistant Professor	-	Regular	Full Time	N	30-04-2025
14	Ms. Nezla N A	M.Tech	Cochin University of Science and Technology	Electronics and Communication	29.08.2022	2.10	Assistant Professor	Assistant Professor	-	Regular	-	N	09.10.2024
15	Mr. Nandu Gopakumar G	M.Tech	APJ Abdul Kalam Technological University	Robotics and Automation	14.08.2023	0.11	Assistant Professor	Assistant Professor	-	Contract	Full Time	N	31.07.2024
16	Ms. Nisha R	M.Tech	M G University	Industrial Drives and Control	1.12.2010	13.70	Assistant Professor	Assistant Professor	-	Regular	-	N	12.07.2024
17	Mr. Naveen Prakash	M.Tech	APJ Abdul Kalam Technological University	Machine Design	03.11.2021	2.70	Assistant Professor	Assistant Professor	-	Regular	-	N	01.07.2024

18	Ms. Hashfi Kalariparambil Hareed	M.Tech	APJ Abdul Kalam Technological University	Wireless Technology	29.08.2022	1.80	Assistant Professor	Assistant Professor	-	Contract	Full Time	N	30.04.2024
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C2: Student-Faculty Ratio (SFR)

- ❖ No. of UG(Engineering) programs in Department including allied departments/ clusters (UG_n):
 - UG₁=1st UG program
 - UG_n=nth UG program
 - **B**= No. of Students in UG 2nd year (**ST**)
 - **C**= No. of Students in UG 3rd year (**ST**)
 - **D**= No. of Students in UG 4th year (**ST**)
- ❖ No. of PG (Engineering) programs in Department including allied departments/ clusters (PG_m):
 - PG₁=1st PG program.
 - PG_m=mth PG program
 - **A**= No. of Students in PG 1st year
 - **B**= No. of Students in PG 2nd year
- ❖ Student Faculty Ratio (**SFR**) = S/F
 - **S**= No. of students of all programs in the Department including all students of allied departments/clusters.
 - **No. of students (ST)**=Sanctioned Intake (SA)+ Actual admitted students via lateral entry including leftover seats (L) if any (limited to 10 % of SA)
 - Students who admitted under supernumerary quotas (SNQ, EWS, etc) will not be considered in calculating SFR value. Those students are **exempted**.
 - **F**=Total no. of regular or contractual faculty members (Full Time) in the Department, including allied departments/clusters (excluding first year faculty (The faculty members who have a 100% teaching load in the first-year courses)).

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

Year	CAY(2025-26)	CAYm1(2024-25)	CAYm2 (2023-24)
UG ₁ . B// 2nd year students of UG1 program	61	64	31
UG ₁ . C// 3rd year students of UG1 program	64	30	31
UG ₁ . D// 4th year students of UG1 program	30	31	30
UG₁ (UG-Engineering-Electronics and Communication Engineering) // Total no.of students(2nd, 3rd, 4th) in UG1 program	U G ₁ . B+ U G ₁ . C+ U G ₁ . D=61+64+30=155	U G ₁ . B+ U G ₁ . C+ U G ₁ . D =64+30+31=125	U G ₁ . B+ U G ₁ . C+ U G ₁ . D =31+31+30= 92
UG ₂ . B// 2nd year students of UG2 program	64	63	60
UG ₂ . C// 3rd year students of UG2 program	62	60	61
UG ₂ . D// 4th year students of UG2 program	60	61	61
UG ₂ (UG-Engineering-Robotics and Automation) // Total no.of students(2nd, 3rd, 4th) in UG2 program	UG ₂ .B+ UG ₂ .C+ UG ₂ .D=186	UG ₂ .B+ UG ₂ .C+ UG ₂ .D =63+60+61=184	UG ₂ .B+ UG ₂ .C+ UG ₂ .D =60+61+62= 182
PG ₁ . A// 1 st year students of PG1 program	0	0	12
PG ₁ . B// 2 nd year students of PG1 program	0	12	12

PG₁ (PG-Engineering-ECE) // Total no. of students (1 st , 2 nd) in PG ₁ program	PG ₁ .A+ PG ₁ .B=0	PG ₁ .A+ PG ₁ .B = 0+12=12	PG ₁ .A+PG ₁ .B=12+ 12=24
DS=Total no. of students in all UG and PG programs in the Department	155	137	116
AS=Total no. of students of all UG and PG programs in allied departments	186	184	182
S=Total no. of students in the Department (DS) and allied departments (AS)	S1=UG ₁ +UG ₂ +PG ₁ =341	S2=UG ₁ +UG ₂ +PG ₁ =321	S3=UG ₁ +UG ₂ +PG ₁ =298
DF=Total no. of faculty members in the Department	9	10	10
AF= Total no. of faculty members in the allied Departments	9	9	11
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	F1=18	F2=19	F3=21
FF=The faculty members in F who have a 100% teaching load in the first-year courses	FF1=0	FF2=0	FF3=0
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1= S1/(F1-FF1)= 341/18=18.94	SFR2=S2/(F2-FF2)= 321/19=16.89	SFR3=S3/(F3-FF3)= 298/21= 14.19
Average SFR for 3 years	Average SFR=(SFR1+SFR2+SFR3)/3 =(18.94+16.89+14.19)/3 = 16.67		

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 5.1 of SAR; (RF=S/20).

Table No.C3.1: Faculty qualification.

Year	X	Y	RF	FQI= $2.5 * [(10X + 4Y)/RF]$
CAY	4	14	17	14.12
CAYm1	4	15	16	15.62
CAYm2	4	17	14	19.29

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 Faculty (RF1)	Available Faculty (AF1)	Required Faculty (RF2)	Available Faculty (AF2)	Required Faculty (RF3)	Available Faculty (AF3)
CAY	1	2	3	2	11	11
CAYm1	1	1	3	2	10	14
CAYm2	1	1	3	2	9	16
Average Numbers	RF1= 1	AF1= 1.33	RF2= 3	AF2= 2	RF3= 10	AF3= 13.67

C5: Visiting/Adjunct Faculty/Professor of Practice

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

S.N.	Name of the Person	Designation & Organization	Name of the Course	No. of hours handled
CAYm1(2024-2025)				
1	Dr.Sreenivasa Boppu	Associate Engineer Entuple Technologies	Digital Design and Verification using Cadence Tool	35 hrs
2	Mr.Anfil Shajo	Drone Engineer DC Robotics	Drone Technology	21 hrs
3	Mr.Sunil Paul	Chief Executive Officer Srishti Robotics Technologies Pvt. Ltd	Embedded Systems and IoT	14 hrs
4	Mr.PrithviUllas	Junior UAV Engineer Fuselage Innovation Pvt. Ltd	UAV Technology	21 hrs
Total no. of hours:				91 hrs
CAYm2(2023-2024)				
1	Mr.Sunil Paul	Chief Executive Officer Srishti Robotics Technologies Pvt. Ltd	Embedded Systems, IoT & Robotics	16 hrs
2	Mr.Sarath Krishna S	Project Scientist-I ACARR ,CUSAT	RF Microwave Design and Mixed Signal Processing	35 hrs
Total no. of hours:				51 hrs

CAYm3(2022-2023)				
1	Dr.Jeeva Jose	Associate Professor BPC,Piravom	Python/C Programming	30 hrs
2	Mr.Shine Sreedhar	Co-Founder Srishti Robotics Technologies Pvt. Ltd	Embedded System and IoT Workshop	7 hrs
3	Mr.Rejoy Rebella	Engineer ACARR ,CUSAT	TCAD & Antenna Design	35 hrs
4	Mr. Gunter Lammer	Researcher, Joanneum Research Austria	Technical Talk-2D video Disdrometer	7hrs
Total no. of hours:				79 hrs

C6: Academic Research

Table No. C6.1: Faculty publication details.

S.N.	Item	CAYm1	CAYm2	CAYm3
1	No. of peer reviewed journal papers published	9	5	0
2	No. of peer reviewed conference papers published	11	2	18
3	No. of books/book chapters published	0	0	0

C7: Sponsored Research Project

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

S. N.	PI name	Co-PI names if any	Name of the Dept.,where project is sanctioned	Project title*	Name of the Funding agency	Duration of the project	Amount (Lacs)
CAYm1							
1	Dr.S.Perumal Sankar	Dr.Deepa Elizabeth George/ Asst.Prof Dhanya.R	ECE	Real Time Soil Moisture monitoring System	ACARR ,CUSAT Approved by NSIL,ISRO	1 year	0.25 L
2	Dr.Sreele kshmi.S		ECE	Ecosentinel	PALS- innoWaH! Innovation competition 2024-2025	1 year	0.15 L

3	Dr. Georgina Binoy Joseph	Dr. Deepa Elizabeth George/Asst. Prof Dhanya.R	ECE	Integration of MEMS Accelerometer and GNSS for Landslide Prediction	ACARR, CUSAT Approved by NSIL, ISRO	1 year	0.33 L
Amount received (Rs.)							0.73 L
CAYm2							
1	Dr. Deepa Elizabeth George	Asst. Prof Sajitha K.S	ECE	Neuro Nav Chair	APJ KTU – Centre for Engineering Research and Development (CERD)	1 year	0.26L
Amount received (Rs.)							0.26L
CAYm3							
1	Dr. Deepa Elizabeth George		ECE	Offshore Communication and Tracking System(OCTS)	Seed Support - Jilla Panchayat Local Economic Development Scheme	6 months	0.29L
Amount received (Rs.)							0.29L
Total Amount (Lacs) Received for the Past 3 Years							1.28 L

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

S.N.	PI name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project title*	Name of the Funding agency	Duration of the project	Amount (Lacs)
CAYm1							
1	NIL	NIL	NIL	NA	NA	NA	0
Amount received (Rs.)							0
CAYm2							
1	NIL	NIL	NIL	NA	NA	NA	0
Amount received (Rs.)							0
CAYm3							
1	NIL	NIL	NIL	NA	NA	NA	0
Amount received (Rs.)							0
Total amount (Lacs) received for the past 3 years							0

C9: Institution Seed Money or Internal Research Grant to its Faculty for Research Work**Table No. C9.1:** List of faculty members received seed money or internal research grant from the Institution.

S.N.	Faculty name	Project title/ Support for Activity	Duration	Amount (Lacs)	Amount Utilized (Lacs)	Outcomes of the project
CAYm1						
1	Dr. Sreelekshmi.S	PALS Inno WAH challenge	6 months	0.15	0.15	Winner-Good Governance category ,PALS INNOWAH,IIT

						Madras
Amount received (Rs.)				0.15		
CAYm2						
1						
Amount received (Rs.)						NIL
CAYm3						
1						
Amount received (Rs.)						NIL
Total amount (Lacs) received for the past 3 years						0.15

PART-D: Laboratory Infrastructure in the Department

(Data to be filled in for the Department).

D1: Adequate and Well-Equipped Laboratories, and Technical Manpower

Table No.D1.1: List of laboratories and technical manpower.

S. N.	Name of the Laboratory	No. of students per setup (Batch Size)	Name of the major equipment	Weekly utilization status (all the courses for which the lab is utilized)	Technical Manpower support		
					Name of the technical staff	Designation	Qualification
1.	Signal Processing / Embedded Systems Lab	2	1. DSP:- TMS320C6748 VSK (Video/Voice Starter Kit) with 456 MHz C674x DSP, TMS320C6713 DSK Texas Instruments (VLIW architecture C6000 family) 2.Core i5 & Core i7 Computers High-performance workstations used to run software's 3.High-level programming and numeric computing platform-Math works MATLAB campus wide license with- Signal Processing Tools: -DSP System Toolbox, Communication Toolbox, Filter Design HDL Coder, Fixed	(12 Hrs.) ECL 333 & PCECL308	Ms. Nithya Mary K J	Lab Instructor	B Tech in Electronics & Communication Engineering

			Point Designer, Wavelet Toolbox, Phased Array System Toolbox, Audio Toolbox ,Control System Toolbox Antenna Design Tools: -Antenna Toolbox with Antenna Array Designer App, Antenna Importer and Antenna Catalogue, RF Toolbox, Phased Array System Toolbox Simulink 4. 8051 Microcontroller Trainer Kits- Hands- on hardware kits for learning and experimenting with 8051 microcontroller programming and Interfacing. 5.FPGA Design tool -AMD VIVADO 6.IDE for ARM based Microcontrollers- Keil µVision5				
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2.	Communication Lab	2	1.Klystron Based Microwave Test Bench -SKPS-610 with – KlystronMount, Isolator, Frequency Meter, Variable Attenuator, Slotted Section / Slotted Line, Tuneable Probe / Universal Probe Detector Mount , Movable Short, Matched Termination (Load), VSWR Meter, Waveguide Stands, Magic Tee / E-Plane Tee / H-Plane Tee, Cooling Fan and Cables and Mounting Hardware 2. Optical Trainer - ST2501 optical communication principles: analog & digital links, measurement of losses, numerical aperture, and fault diagnosis, includes its own function generator. 3.Software-Defined Radio -With tool - GNU Radio -Programmable radio architecture, Supports multiple wireless protocols,	6 Hrs ECL 332	Ms. Nisha Thomas	Lab Instructor Gr II	Diploma in Electronics & Communication Engineering
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			Reconfigurable and flexible, Wide frequency coverage, Real-time signal processing, Low-cost prototyping. 4.Measuring /Calibration Instruments -50 and 25 MHz Digital Storage Oscilloscopes, 2MHz and 1MHz Signal/Function Generator, 0-30V regulated DC Power Supply, +/-12V Dual Power Supply				
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3.	Electronics Circuits Lab	2	Measuring/Calibration Instruments -25 MHz Digital Storage Oscilloscopes, 20MHz Cathode Ray Oscilloscope, 2MHz and 1MHz Signal/Function Generator, 0-30V regulated DC Power Supply, +/-15V Dual Power Supply.	12 Hrs PCECL 307 PCRUL 308	Ms. Nisha Thomas	Lab Instructor Gr II	Diploma in Electronics & Communication Engineering
4.	Digital Electronics Lab	2	1.FPGA and Digital Development Trainer -Artix-7 FPGA Trainer / Development Board, Digital IC Trainer 2.Measuring /Calibration Instruments -50MHz Digital Storage Oscilloscope, 20MHz Cathode Ray Oscilloscope, 1MHzSignal/Function Generator, 0-30V Regulated DC Power Supply	12 Hrs PCECL308, PCRUL308	Ms. Manju M Pillai	Lab Instructor Gr II	MCA, Diploma in Electronics Engineering
5.	Electronics Workshop	3	1.Measuring /Calibration Instruments -100MHz & 25MHz Digital Storage Oscilloscope, 20MHz Cathode Ray	10 Hrs GXESL106	Ms. Manju M Pillai	Lab Instructor Gr II	MCA, Diploma in Electronics Engineering

			Oscilloscope, 1MHz Signal /Function Generator, 0-30V Regulated DC Power Supply, Digital Multi meter 2.Soldering Tools -Soldering Iron Crimping Tool, De soldering Pump				
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D2: ` Safety Measures in Laboratories

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

S.N.	Name of the Laboratory	Safety measures
1.	Signal Processing / Embedded Systems Lab	Electrical Infrastructure & Safety Measures: -Equipped with Uninterrupted Power Supply (UPS) systems to prevent data loss and ensure continuous operation of PCs and sensitive instruments -Standard earth and grounding mechanisms are installed in compliance with electrical safety norms -Earth Leakage Circuit Breakers (ELCBs) are installed in all labs to prevent electric shock hazards and equipment damage -The Electrical Maintenance Department conducts regular inspections and tests on the lab's electrical systems General Safety Measures -Lab is equipped with a functional fire extinguisher. -A fully stocked first aid box is available and maintained in every lab for handling minor injuries or accidents -Posters and charts displaying laboratory safety rules and emergency procedures are prominently displayed

		-Wearing of lab coats is mandatory for all students during lab hours
2.	Communication Lab	Electrical Infrastructure & Safety Measures -Standard earth and grounding mechanisms are installed in compliance with electrical safety norms -Earth Leakage Circuit Breakers (ELCBs) are installed in all labs to prevent electric shock hazards and equipment damage -The Electrical Maintenance Department conducts regular inspections and tests on the lab's electrical systems General Safety Measures -Lab is equipped with a functional fire extinguisher. -A fully stocked first aid box is available and maintained in every lab for handling minor injuries or accidents -Posters and charts displaying laboratory safety rules and emergency procedures are prominently displayed -Wearing of lab coats and appropriate footwear (shoes) is mandatory for all students during lab hours
3.	Electronic Circuits Lab	Electrical Infrastructure & Safety Measures -Standard earth and grounding mechanisms are installed in compliance with electrical safety norms -Earth Leakage Circuit Breakers (ELCBs) are installed in all labs to prevent electric shock hazards and equipment damage -The Electrical Maintenance Department conducts regular inspections and tests on the lab's electrical systems General Safety Measures -Lab is equipped with a functional fire extinguisher.

		-A fully stocked first aid box is available and maintained in every lab for handling minor injuries or accidents -Posters and charts displaying laboratory safety rules and emergency procedures are prominently displayed -Wearing of lab coats and appropriate footwear (shoes) is mandatory for all students during lab hours
4.	Digital Electronics Lab	Electrical Infrastructure & Safety Measures -Standard earth and grounding mechanisms are installed in compliance with electrical safety norms -Earth Leakage Circuit Breakers (ELCBs) are installed in all labs to prevent electric shock hazards and equipment damage -The Electrical Maintenance Department conducts regular inspections and tests on the lab's electrical systems General Safety Measures -Lab is equipped with a functional fire extinguisher. -A fully stocked first aid box is available and maintained in every lab for handling minor injuries or accidents -Posters and charts displaying laboratory safety rules and emergency procedures are prominently displayed -Wearing of lab coats and appropriate footwear (shoes) is mandatory for all students during lab hours
5.	Projects Lab	Electrical Infrastructure & Safety Measures: -Equipped with Uninterruptible Power Supply (UPS) systems to prevent data loss and ensure continuous operation of PCs and sensitive instruments -Standard earth and grounding mechanisms are installed in compliance with electrical safety norms

		-Earth Leakage Circuit Breakers (ELCBs) are installed in all labs to prevent electric shock hazards and equipment damage -The Electrical Maintenance Department conducts regular inspections and tests on the lab's electrical systems General Safety Measures -Lab is equipped with a functional fire extinguisher. -A fully stocked first aid box is available and maintained in every lab for handling minor injuries or accidents -Posters and charts displaying laboratory safety rules and emergency procedures are prominently displayed -Wearing of lab coats is mandatory for all students during lab hours
6	Electronics Workshop	Electrical Infrastructure & Safety Measures -Standard earth and grounding mechanisms are installed in compliance with electrical safety norms -Earth Leakage Circuit Breakers (ELCBs) are installed in all labs to prevent electric shock hazards and equipment damage -The Electrical Maintenance Department conducts regular inspections and tests on the lab's electrical systems General Safety Measures -Lab is equipped with a functional fire extinguisher. -A fully stocked first aid box is available and maintained in every lab for handling minor injuries or accidents -Posters and charts displaying laboratory safety rules and emergency procedures are prominently displayed

		-Wearing of lab coats and appropriate footwear (shoes) is mandatory for all students during lab hours
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D3: Project Laboratory/Research Laboratory

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

S.N.	Name of the Laboratory
1	Project Laboratory
2	Center of Excellence for Intelligent Embedded Edge AI and IoT Systems
3	CENTELON -TIST Industry-Academia Centre for Advanced Robotics

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 require 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))/RF4
CAY (2025-2026)	570	28	16	0	46
CAYm1(2024-2025)	480	24	16	0	53
CAYm2(2023-2024)	450	22	15	0	55

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

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

Items	Budgeted in CFY 2025-2026	Actual expenses in CFY (till 31 st December)	Budgeted in CFYm1 2024-2025	Actual Expenses in CFYm1 2024-2025	Budgeted in CFYm2 2023-2024	Actual Expenses in CFYm2 2023-2024	Budgeted in CFYm3 2022-2023	Actual Expenses in CFYm3 2022-2023
Infrastructure Built-Up	3800000	2884185	2600000	2375445	800000	625786	1250000	1107788
Library	3500000	2779682	3500000	3351460	3100000	2917670	2700000	2629599
Laboratory equipment	12761600	7964860	11035000	10374865	3362000	3273271	6900500	8364798
Teaching and non-teaching	122000000	91667044	114000000	113900726	110500000	110296330	110000000	108777371

staff salary								
Outreach Programs	42000	3105	50500	32664	33000	26250	39000	6605
R&D	1117000	797006	387000	345664	300000	248216	700000	638317
Training, Placement and Industry linkage	5725000	4205924	4368000	4004126	3628000	3245828	3445000	2957092
SDGs	143500	102900	182000	174698	334000	325105	278000	70000
Entrepreneurship	200000	0	150000	112000	0	0	0	0
Others*, pl.specify	63797000	49314181	59710500	57481134	61964300	60490540	59428500	56832291
Total amount	213086100	159718887	195983000	192152782	184021300	181448996	184741000	181383861

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

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

Items	Budget ed in CFY 2025-2026	Actual expense s in CFY (till Decemb er 31st)	Budget ed in CFYm1 2024-2025	Actual Expens es in CFYm1 2024-2025	Budget ed in CFYm2 2023-2024	Actual Expens es in CFYm2 2023-2024	Budget ed in CFYm3 2022-2023	Actual Expens es in CFYm3 2022-2023
Laboratory equipment	1005600	1001999	993000	991790	99000	97940	140000	403324
Software	530000	528000	0	0	0	0	0	0
SDGs	60000	49500	116000	114208	59000	57101	42000	35000
Support for faculty development	22000	20525	10000	9912	5000	5000	5000	0
R & D	20000	0	13000	12146	0	0	161000	150886

Industrial Training, Industry expert, Internship	417000	342365	385000	379181	207000	200315	282500	243122
Miscellaneous expenses *	115000	45239	236000	233220	192500	184421	189080	179617
Total amount	2169600	1987628	1753000	1740457	562500	544777	819580	1011949