NATIONAL BOARD OF ACCREDITATION

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

PART-A: Profile of the Institute

Name of the Program Applied for: B.E. - ELECTRONICS AND COMMUNICATION ENGINEERING

A1: Name of the Institute: HINDUSTHAN INSTITUTE OF TECHNOLOGY

Year of Establishment: 2007 | Location of the Institute: Coimbatore-641032

A2: Institute Address: -

Hindusthan Institute of Technology,
Valley Campus,
Pollachi Highway,
Coimbatore - 641032

City: Coimbatore | State: Tamil Nadu

Pin Code: 641032 | Website: http://www.hit.edu.in/

E-mail: hitprincipal@hindusthan.net | Phone No (with STD Code): 0422 4242477

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

Name of the University : Anna University | City : Chennai

State : Tamil Nadu | Pin Code: 600025

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

Institute of National Importance	☐	Deemed University	☐
University	☐	Autonomous	☑
Non-Autonomous (Affiliated)	☐	Any other (Please specify) *	☐

***Provide Details:** _____

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

Central Government	☐	State Government	☐
Government Aided	☐	Self-financing	☑
Any Other (Please specify) *	☐	***Provide Details:**	_____

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

- No. of UG programs: 6
- No. of PG programs: 3

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	B.E (Computer Science and Engineering)	2007	-	Computer Science and Engineering
2.	UG	B.E (Electronics and Communication Engineering)	2007	-	Electronics and Communication Engineering
3.	UG	B.E (Mechanical Engineering)	2007	-	Mechanical Engineering
4.	UG	B.E (Aeronautical Engineering)	2007	-	Aeronautical Engineering
5.	UG	B.Tech(Information Technology)	2007	-	Information Technology
6.	UG	B.Tech(Artificial Intelligence and Data Science)	2021	-	Artificial Intelligence and Data Science
7.	PG	M.E (Computer Science and Engineering)	2010	-	Computer Science and Engineering
8.	PG	M.E (VLSI Design)	2012	-	Electronics and Communication Engineering
9.	PG	Master of Business Administration	2008	-	Master of Business Administration

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.	Aeronautical Engineering	B.E (Aeronautical Engineering)
2.	Computer Science and Engineering	B.E (Computer Science and Engineering)
3.	Electronics and Communication Engineering	B.E (Electronics and Communication Engineering)
4.	Mechanical Engineering	B.E (Mechanical 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)
2.	Computer Science and Engineering	Information Technology
		Artificial Intelligence and Data Science

PART-B: Program information

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

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

Table No. B1: Program details.

S.N.	Program Name	Year of start	Sanctioned Intake	Increase/ decrease in intake, if any	Year of increase/ decrease	AICTE Approval Details	Accreditat ion Status*	No. of times program accredited
1.	Electronics and Communication Engineering	2007	60	120	2012-13	Southern/1-44641827052 /2025/EOA	**Accredited TIER-II** Granted accreditation for 3 years for the period 2018-2021, (**Covid 19 Extension** 2021-2022) (**Compliance** 2022-2025)	1

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

A. Name of the HoD : Dr.B.Paulchamy

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 (2024-2025)	CAYm1 (2023-2024)	CAYm2 (2022-2023)	CAYm3 (2021-2022)	CAYm4 (LYG) (2020-2021)	CAYm5 (LYGm1) (2019-2020)	CAYm6 (LYGm2) (2018-2019)
N= Sanctioned intake of the program (as per AICTE /Competent authority)	120	120	120	120	120	120	120
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	120	120	120	117	110	104	35
N2= Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	00	03	09	09	08	00	00
N3= Separate division if any	00	00	00	01	00	00	00
N4= Total no. of students admitted in the 1st year via all supernumerary quotas	06	06	02	06	00	00	00
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	**126**	**129**	**131**	**133**	**118**	**104**	**35**

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 (2024-2025)	CAYm1 (2023-2024)	CAYm2 (2022-2023)
N= Sanctioned intake of the program in the 1st year (as per AICTE/Competent authority)	120	120	120
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	120	120	120
N4= Total no. of students admitted in the 1st year via all supernumerary quotas	06	06	02
Enrolment Ratio (ER)= (N1+N4)/N	105	105	101.66
Average ER= (ER_1+ ER_2+ ER_3)/3	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	LYG	LYGm1	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).	118	104	36
B=No. of students who graduated from the program in the stipulated course duration	102	101	35
Success Rate (SR)= (B/A)*100	86.44	97.12	97.22
Average SR of three batches ((SR_1+SR_2+ SR_3)/3)	**93.59**		

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 (2023-2024)	CAYm2 (2022-2023)	CAYm3 (2021-2022)
X= (Mean of 1st 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 1st year/10)	7.88	7.71	7.80
Y= Total no. of successful students	126	122	126
Z = Total no. of students appeared in the examination	126	122	126
API = X* (Y/Z)	7.88	7.71	7.80
Average API = (API_1 + API_2 + API_3)/3	**7.80**		

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 (2023-2024)	CAYm2 (2022-2023)	CAYm3 (2021-2022)
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)	7.98	7.96	8.27
Y= Total no. of successful students	131	135	118
Z =Total no. of students appeared in the examination	131	135	118
API = X* (Y/Z)	7.98	7.96	8.27
Average API = (API_1 + API_2 + API_3)/3	**8.07**		

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 (2023-2024)	CAYm2 (2022-2023)	CAYm3 (2021-2022)
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)	8.48	8.31	8.29
Y= Total no. of successful students	134	118	104
Z= Total no. of students appeared in the examination	134	118	104
API = X* (Y/Z)	8.48	8.31	8.29
Average API = (API_1 + API_2 + API_3)/3	**8.36**		

B9: Placement, Higher Studies, and Entrepreneurship

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

Item	LYG (2020-2024)	LYGm1 (2019-2023)	LYGm2 (2018-2022)
FS*=Total no. of final year students	118	104	36
X= No. of students placed	88	76	23
Y= No. of students admitted to higher studies	8	8	4
Z= No. of students taking up entrepreneurship	2	2	2
X + Y + Z =	98	86	29
Placement Index (P) = (((X + Y + Z)/FS) * 100)	83.05	82.69	80.55
Average placement index = (P_1 + P_2 + P_3)/3	**82.10**		

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. B. Paulchamy	Ph.D	Anna University	Signal Processing	03.07.2009	15 years 9 months	Senior Lecturer	Professor	02.05.2014	Regular	--	Y	--
2.	Dr. S. Kavitha	Ph.D	Anna University	Wireless Communication	01.07.2009	15 years 9 months	Senior Lecturer	Professor	01.06.2017	Regular	--	Y	--
3.	Dr.P M Balasubramaniam	Ph.D	Anna University	Power Electronics and Drives	03.01.2024	1 year 3 months	Professor	Professor	03.01.2024	Regular	--	Y	--
4.	Dr.A.Purushothaman	Ph.D	Anna University	Image Processing	05.03.2021	4 years	Associate Professor	Professor	26.02.2024	Regular	--	Y	--

5.	Dr.D.Jeyakumari	Ph.D	Anna University	Image Processing	20.02.2025	1 month	Professor	Professor	20.02.2025	Regular	--	Y	--
6.	Dr.K.Mahendrakan	Ph.D	Anna University	Low Power VLSI Design	16.06.2010	14 years 9 months	Lecturer	Associate Professor	02.06.2014	Regular	--	Y	--
7.	Dr. K. Kalpana	Ph.D	Anna University	Low Power VLSI Design	14.06.2012	12 years 10 months	Assistant Professor	Associate Professor	02.06.2014	Regular	--	Y	--
8.	Mr.B Hakkem	M.E	Anna University	Embedded system technologies	01.07.2013	11 years 9 months	Assistant Professor	Associate Professor	03.06.2024	Regular	--	Y	--
9.	Mr.R. Sundar	M.E	Anna University	Applied Electronics	01.07.2015	9 years 9 months	Assistant Professor	Assistant Professor	01.07.2015	Regular	--	Y	--
10.	Ms.T.Sivamani	M.E	Anna University	Embedded system technologies	01.07.2015	9 years 9 months	Assistant Professor	Assistant Professor	01.07.2015	Regular	--	Y	--
11.	Mr.K R Kannan	M.E	Anna University	Applied Electronics	01.07.2016	8 years 9 months	Assistant Professor	Assistant Professor	01.07.2016	Regular	--	Y	--

12.	Ms.S Saranya	M.E	Karpagam University	Embedded Systems	01.07.2016	8 years 9 months	Assistant Professor	Assistant Professor	01.07.2016	Regular	--	Y	--
13.	Ms.S. Brindha	M.E	Anna University	Communication Systems	17.07.2017	7 years 8 months	Assistant Professor	Assistant Professor	17.07.2017	Regular	--	Y	--
14.	Ms.M.Sherin Angel	M.E	Anna University	VLSI Design	24.02.2020	5 years 1 month	Assistant Professor	Assistant Professor	24.02.2020	Regular	--	Y	--
15.	Mr.G.Rajeshbabu	M.Tech	VIT University	VLSI Design	26.02.2020	5 years 1 month	Assistant Professor	Assistant Professor	26.02.2020	Regular	--	Y	--
16.	Mr.A.Abdul Hayum	M.E	Anna University	Medical Image Processing	18.11.2020	4 years 4 months	Assistant Professor	Assistant Professor	18.11.2020	Regular	--	Y	--
17.	Mrs.S.Surya	M.E	Anna University	VLSI Design	02.08.2021	3 years 8 months	Assistant Professor	Assistant Professor	02.08.2021	Regular	--	Y	--
18.	Mr.M.Manoj	M.E	Anna University	VLSI Design	02.08.2021	3 years 8 months	Assistant Professor	Assistant Professor	02.08.2021	Regular	--	Y	--

19.	Mr.A Vidhya Sekar	M.E	Karpagam University	VLSI Design	05.01.2022	3 years 3 months	Assistant Professor	Assistant Professor	05.01.2022	Regular	--	Y	--
20.	Mr.P.Suresh	M.E	Anna University	VLSI Design	05.01.2022	3 years 3 months	Assistant Professor	Assistant Professor	05.01.2022	Regular	--	Y	--
21.	Mrs.B.Kavitha	M.E	Anna University	Power Electronics and Drives	01.07.2022	2 years 9 months	Assistant Professor	Assistant Professor	01.07.2022	Regular	--	Y	--
22.	Mrs.S.Suganya	M.E	Anna University	VLSI Design	01.07.2022	2 years 9 months	Assistant Professor	Assistant Professor	01.07.2022	Regular	--	Y	--
23.	Mrs.K.Kowsalya	M.E	Anna University	Power Electronics and Drives	04.07.2022	2 years 9 months	Assistant Professor	Assistant Professor	04.07.2022	Regular	--	Y	--
24.	Mr.R.Karuppusamy	M.E	Anna University	Applied Electronics	27.07.2022	2 years 8 months	Assistant Professor	Assistant Professor	27.07.2022	Regular	--	Y	--
25.	Mrs.N.Saranya	M.E	Anna University	Communication Systems	03.07.2023	1 year 9 months	Assistant Professor	Assistant Professor	03.07.2023	Regular	--	Y	--

26.	Mrs.B.Laveena Sri	M.E	Anna University	VLSI Design	04.01.2024	1 year 3 months	Assistant Professor	Assistant Professor	04.01.2024	Regular	--	Y	--
27.	Mrs.A.Roopasree	M.E	Anna University	Embedded system technologies	13.02.2024	1 year 2 months	Assistant Professor	Assistant Professor	13.02.2024	Regular	--	Y	--
28.	Mr Karthi K	M.E	Anna University	VLSI Design	03.06.2024	10 months	Assistant Professor	Assistant Professor	03.06.2024	Regular	--	Y	--
29.	Mrs.N.Sargunapriya	M.E	Anna University	Applied Electronics	03.06.2024	10 months	Assistant Professor	Assistant Professor	03.06.2024	Regular	--	Y	--
30.	Mr. Jeyavel S	M.E	Anna University	Embedded system technologies	03.06.2024	10 months	Assistant Professor	Assistant Professor	03.06.2024	Regular	--	Y	--
31.	MS. PooraniswasthikaM	M.E	Anna University	VLSI Design	03.06.2024	10 months	Assistant Professor	Assistant Professor	03.06.2024	Regular	--	Y	--
32.	Mrs.L.Yogapriya	M.E	Anna University	VLSI Design	23.07.2024	8 months	Assistant Professor	Assistant Professor	23.07.2024	Regular	--	Y	--
33.	Dr.C.Kalamani	Ph.D	Anna University	VLSI Testing	27.01.2025	2 months	Assistant Professor	Assistant Professor	27.01.2025	Regular	--	Y	--

34.	Dr.A.S.Narmadha	Ph.D	Anna University	Wireless Communication	06.07.2022	2 years 9 months	Assistant Professor	Assistant Professor	06.07.2022	Regular	--	N	11.01.2025
35.	Mr.N Rathan	M.Tech	Anna University	Image Processing	14.06.2012	12 years 5 months	Assistant Professor	Associate Professor	01.06.2019	Regular	--	N	27.11.2024
36.	Mr.G.Muthuraj	M.E	Anna University	Communication Systems	01.07.2019	5 years 5 months	Assistant Professor	Assistant Professor	01.07.2019	Regular	--	N	27.11.2024
37.	Ms.Jayamol Joseph	M.Tech	MG University	Applied Electronics	01.07.2019	5 years 5 months	Assistant Professor	Assistant Professor	01.07.2019	Regular	--	N	27.11.2024
38.	Mr.D.Kamalakannan	M.E	Anna University	Communication Systems	24.02.2020	4 years 9 months	Assistant Professor	Assistant Professor	24.02.2020	Regular	--	N	27.11.2024
39.	Mrs.M.Rineesha	M.E	Anna University	Embedded and Real Time Systems	03.07.2023	1 year 5 months	Assistant Professor	Assistant Professor	03.07.2023	Regular	--	N	27.11.2024
40.	Dr.V.Suresh Babu	Ph.D	Anna University	Image Processing	22.06.2015	8 years 11 months	Associate Professor	Associate Professor	22.06.2015	Regular	--	N	31.05.2024

41.	Dr. S Chinnapparaj	Ph.D	Anna University	Low Power VLSI Design	01.07.2010	13 years 11 months	Senior Lecturer	Associate Professor	01.12.2016	Regular	--	N	31.05.2024
42.	Mrs.S.Ramya	M.E	Anna University	Wireless Communication	06.06.2018	5 years 7 months	Assistant Professor	Assistant Professor	06.06.2018	Regular	--	N	27.12.2023
43.	Ms.R.Umamaheshwari	M.E	Anna University	VLSI Design	24.02.2020	3 years 3 months	Assistant Professor	Assistant Professor	24.02.2020	Regular	--	N	31.05.2023

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	Currently Associated (Y/N)	Date of Leaving if any (In case Currently Associated is " No")
1.	NIL												

C2: Student-Faculty Ratio (SFR)

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

Year	CAY 2024-2025	CAYm1 2023-2024	CAYm2 2022-2023
UG1. B 2nd year	123	129	129
UG1. C 3rd year	129	128	128
UG1. D 4th year	128	128	120
UG1 B.E ECE	380	385	377
PG1. A 1st year	24	24	24
PG1. B 2nd year	24	24	12
PG1 M.E VLSI DESIGN	48	48	36
DS=Total no. of students in all UG and PG programs in the Department	428	433	413
S=Total no. of students in the Department (DS) and allied departments (AS)	S1=428	S2=433	S3=413
DF=Total no. of faculty members in the Department	31	31	31
AF=Total no. of faculty members in the Allied Departments (AF)	0	0	0
Total no. of faculty members (F) in the Department (DF) and Allied Departments (AF)	31	31	31
FF=The faculty members in F who have a 100% teaching load in the first-year courses	2	2	2
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1= 428/29 =14.76	SFR2=433/29 =14.93	SFR3=413/29 =14.24
Average SFR for 3 years	Average SFR=(SFR1+SFR2+SFR3)/3 = (14.76+14.93+14.24)/3 =**14.64**		

C3: Faculty Qualification

Table No.C3.1: Faculty qualification.

Year	X	Y	RF	FQI= 2.5 * [(10X +4Y)/RF]
CAY 2024-2025	6	25	21	19.05
CAYm1 2023-2024	7	24	22	18.86
CAYm2 2022-2023	7	24	21	19.76

C4: Faculty Cadre Proportion

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 (2024-2025)	2	4	5	2	14	25
CAYm1 (2023-2024)	2	2	5	5	15	24
CAYm2 (2022-2023)	2	2	5	4	14	25
Average (Numbers)	RF1=2	AF1=3	RF2=5	AF2=4	RF3=14	AF3=25

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(2023- 2024)				
1.	Dr. J Balan	Product Head Soltek Energy, Coimbatore	22EC403- Electronics Circuits I	26
			22EC411- Transmission Lines and Waveguides	26
2.	Mr. D Devaraj	Managing Director Dev System Coimbatore, Tamil Nadu, India	22EC410- Linear Integrated Circuits	26
			22EC416 -Antenna and Wave Propagation	26
			Total no. of hours:	52 Hrs /Faculty
CAYm2 (2022- 2023)				
1.	Dr. J Balan	Product Head Soltek Energy, Coimbatore	20EC414- Transmission Lines and Waveguides	26
			20EC419- Antenna and Wave Propagation	26
2.	Mr. Mohankumar	Effica Solar Pvt. Ltd. Chennai, Tamil Nadu, India	20EC413 Digital Communication	26
			20EC420-Optical Communication and Networks	26
			Total no. of hours:	52 Hrs /Faculty
CAYm3(2021- 2022)				
1.	Mr. D Devaraj	Managing Director Dev System Coimbatore, Tamil Nadu, India	20EC414- Transmission Lines and Waveguides	26
			20EC419- Antenna and Wave Propagation	26
2.	Mr. P N Deen	Managing Director Golden Electronic Controls Private Limited, Coimbatore, Tamil Nadu, India	20EC407- Electronic Circuit Design	26
			20EC413 Digital Communication	26
			Total no. of hours:	52 Hrs /Faculty

C6: Academic Research

Table No. C6.1: Faculty publication details.

S.N.	Item	CAYm1 (2023-2024)	CAYm2 (2022-2023)	CAYm3 (2021-2022)
1	No. of peer reviewed journal papers published	20	12	31
2	No. of peer reviewed conference papers published	6	12	5
3	No. of books/book chapters published	5/12	5/3	7/2

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 (2023-2024)							
1.	Dr. B Paulchamy	Dr.A.Purushothaman	ECE	Design and Implementation of Smart Sensors based Solar –Powered Intelligent Monitoring System for Agricultural Environment in IOT & AI"	Institution of Electronics Engineers India (IEI) Ref No: R.4/2/UG/2022-23/UG2023022	2024	0.32
2.	Dr. B Paulchamy	Dr.A.Purushothaman	ECE	"Portable Camera- Based Assistive Text and Product Information Reading System for Blind People"	Institute of Electrical and Electronics Engineers (IEEE) Ref: Mail Copy Dated12.04.2024	2024	0.075
						Amount received (Rs.)	**0.395**
CAYm2 (2022-2023)							
1.	Dr. B Paulchamy	Dr. K Kalpana	ECE	Design and Development of Solar Powered Multipurpose Drone for Praying pesticides, Fertilizers and Disinfectants for Precision Agriculture	Institution of Electronics Engineers India (IEI) Ref No: R.4/2/UG/2022-23/UG2023022	2023	0.22

2.	Dr. K Kalpana	Dr.K.Mahendrakan	ECE	Development of Autonomous Quadcopter for Farmland Surveillance Using GPS navigation algorithm for the benefit of farmers	TNSCST	2023	0.075
						Amount received (Rs.)	**0.295**
CAYm3 (2021-2022)							
1.	Dr. B Paulchamy	Mr.A.Abdul Hayum Dr.S.Chinnapparaj	ECE	Development of Innovation, Science and Technology Generation Skills for Rural School Children.	Department of Science & Technology (DST-NCSTC DIVISION) Ref No: CO/B/FP/G88/2021(C)	2021	11.55232
2.	Dr. B Paulchamy	NA	ECE	A novel approach to communicate and to detect emotion of differently-abled persons using sensor devices and Electroencephalogram Signals	Tamil Nadu State Council for Science and Technology (TNSCST) Ref No: TNSCST/SPS/AR/2021-22/0559	2022	0.075
						Amount received (Rs.)	**11.62732**
						Total Amount (Lacs) Received for the Past 3 Years	**12.31732**

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 (2023-2024)							
1.	Dr. B Paulchamy	Dr. A Purushothaman	ECE	A Modified Recurrent Neural, Network (MRNN) Model for Breast Cancer	M/s. Salzer Electronics Limited Samichettipalayam, Coimbatore - 641 047,	1 year	3.60

				Classification System	Tamil Nadu. India.		
2.	Dr. A Purushothaman	Mrs. S Suganya	ECE	Design and Evaluation of Faster Adaptive Filter Topologies for The Denoising of ECG and EEG Signals	M/s. Salzer Electronics Limited Samichettipalayam, Coimbatore - 641 047, Tamil Nadu. India	1 year	3.80
3.	Dr. A Purushothaman	Mr. R Karuppusamy	ECE	Design and Development of Face and License Plate Recognition Smart Authentication System Using Deep Learning Techniques	M/s. Roots Group of Companies, R.K.G Industrial Estate Ganapathy, Coimbatore-641006	1 year	3.50
4.	Dr. K Mahendrakan	Mrs. K Kowsalya	ECE	Breast Cancer Detection and Monitoring System Using Machine Learning Approaches on Microwave Based Data	M/s. Roots Group of Companies, R.K.G Industrial Estate Ganapathy, Coimbatore-641006	1 year	2.95
5.	Dr. B Paulchamy	Dr. K Mahendrakan	ECE	Shielding Digital Authenticity: An AI-Driven Framework for Deepfake Detection and Societal Trust Restoration	M/s.DCJ Corporation, Chandy Bhavan, East Fort P.O, Thrissur-680005	1 year	4.00
6.	Dr. S Kavitha	Dr. K Kalpana	ECE	Efficient Nano Scale Circuit Designs in Combinational and Sequential Circuits Using QCA Paradigm	M/s. CVC Pvt.Ltd,422 Vibhu Complex, HSR Layout, Bangalore-560 102	1 year	3.10
						Amount received (Rs.)	**20.95**
CAYm2 (2022-2023)							
1.	Dr. B Paulchamy	Dr. A Purushothaman	ECE	"Morphological Operations based Vehicle Detection and Counting System".	M/s. Roots Group of Companies, R.K.G Industrial Estate Ganapathy,	1 year	2.50

					Coimbatore-641006		
2.	Dr. B Paulchamy	Dr. A Purushothaman	ECE	"Anticancer Activity of Methanolic Leaf Extract of Lantana Camara by HPTLC Analysis"	M/s. Salzer Electronics Limited, Samichettipalayam, Coimbatore - 641 047	1 year	2.50
3.	Dr. A Purushothaman	NA	ECE	"A Secure Authenticated Message Transfer in Vehicle to Grid Networks"	M/s. Roots Group of Companies, R.K.G Industrial Estate Ganapathy, Coimbatore-641006	1 year	2.00
Amount received (Rs.)							**7.00**
CAYm3 (2021-2022)							
1.	Dr. B Paulchamy	Dr. A Purushothaman	ECE	Design and implementation of Omni-Directional Underwater Robotic Vehicle	M/s. Roots Group of Companies, R.K.G Industrial Estate Ganapathy, Coimbatore-641006	1 year	2.50
Amount received (Rs.)							**2.50**
Total amount (Lacs) received for the past 3 years							**30.45**

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 (2023-2024)						
1.	Dr. K Mahendrakan	Improvement of Monitoring and Regulatory system for Cardiorespiratory signals using sensors and IoT based Technique.	1 year	1.50	1.50	➢ Developed a real-time monitoring system for continuous tracking of heart and lung functions. ➢ IoT-enabled remote monitoring for early abnormality detection. ➢ Improved accuracy in diagnosis and timely medical intervention.
2.	Dr. K	Low-Cost hand-held	1 year	1.70	1.70	➢ Designed an affordable,

	Kalpana	Reading and Writing Device for Visually Impaired People.				portable device for visually impaired users. ➢ Integrated voice-assisted technology for text-to-speech conversion. ➢ Provided tactile feedback for improved usability and accessibility.
3.	Dr. S Kavitha	Solar Powered Napkin Dispenser for Rural Government Girls School	1 year	1.50	1.50	➢ Developed an automated, hygienic napkin dispensing system. ➢ Promoted menstrual hygiene awareness among schoolgirls. ➢ Sustainable and cost-effective solution using solar power.
4.	Mr. A Abdul Hayum	ACL Injury Smart Indicator using IOT for Athletes	1 Year	1.60	1.60	➢ Real-time detection and monitoring of ACL stress or injuries. ➢ Immediate alerts to athletes and coaches via IoT-enabled devices. ➢ Published a patent on 26.07.2024.
5.	Ms. K Kowsalya	Low-Cost Novel Solar Chargers	1 year	1.50	1.50	➢ Developed portable, sustainable solar chargers for off-grid areas. ➢ Improved energy efficiency with eco-friendly materials. ➢ Enhanced accessibility for rural and remote regions.
6.	Mr. R Karuppusamy	Multifunctional Smart Robot for Military Applications	1 year	1.50	1.50	➢ Designed an autonomous navigation system for military surveillance. ➢ Integrated real-time threat detection using AI-based sensors. ➢ Published a patent.
Amount received (Rs.)					**9.30**	
CAYm2 (2022-2023)						
1.	Dr. A Purushothaman	To design a self Defense smart Device for child security monitoring system using IoT system	1 year	1.50	1.50	➢ Real-time tracking and geofencing for child safety. ➢ Integrated emergency alert system with panic button. ➢ IoT-based monitoring for continuous security updates.
2.	Mr. K R Kannan	An Efficient Online Token/Ticket Vending System	1 year	1.50	1.50	➢ Enabled seamless online ticket booking with real-time availability. ➢ Reduced wait times with automated processing. ➢ Improved user experience

						with secure payment options.
3.	Ms. S Ramya	Design and Implementation of compact UWB – WBAN microwave antenna for Early Breast Cancer Detection	1 year	2.00	2.00	➢ Developed a high-precision breast cancer detection system. ➢ Compact and wearable antenna design for patient comfort. ➢ Non-invasive technology for early-stage diagnosis.
4.	Mrs. A S Narmadha	To develop a self-defense Foot device for Safety applications	1 year	1.50	1.50	➢ Integrated emergency alert system with IoT tracking. ➢ Concealed self-defense mechanism for real-time protection. ➢ Enhanced personal security through smart wearable technology.
Amount received (Rs.)					**6.50**	
CAYm3 (2021-2022)						
1.	Dr. S Chinnappa raj	Designing of IOT based Health Monitoring and Fall Detection System for Old People	1 year	2.00	2.00	➢ Developed a continuous health monitoring system. ➢ Integrated real-time fall detection with emergency alerts. ➢ IoT-enabled secure system for elderly care.
2.	Mr. B Hakkem	Self Defense Smart Device for Women's Safety from Abusing and Harassment	1 year	2.00	2.00	➢ GPS-enabled emergency alert system for real-time tracking. ➢ Integrated shock and alarm mechanisms for self-defense. ➢ Published a patent.
Amount received (Rs.)					**4.00**	
Total amount (Lacs) received for the past 3 years					**19.80**	

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 technic al staff	Designation	Qualification
1.	ENGINEERING PRACTICES LABORATORY	30	➢ Megger 250v 550v ➢ Digital live wire detector ➢ Soldering guns ➢ Multimeter ➢ CRO ➢ Function generator ➢ Digital trainer kit ➢ Regulated power supply ➢ wire cutter ➢ Energy meter	30 Hours	B BALAKISHORE	Lab Technician	DECE
2.	BASIC ELECTRICAL AND ELECTRONICS ENGINEERING	30	➢ Ammeter ➢ Voltmeter ➢ Wattmeter ➢ CRO ➢ Dual regulated power supply ➢ Signal generator	21 Hours	B BALAKISHORE	Lab Technician	DECE
3.	CIRCUITS AND DEVICES LABORATORY	30	➢ CRO ➢ Function Generator ➢ Dual regulated power supplies	12 Hours	MMUTHUVEL	Lab Technician	B.E-ECE
4.	ELECTRONICS CIRCUITS I LABORATORY	30	➢ Cro 30mhz ➢ Function Generator ➢ Dual regulated power supplies ➢ Voltmeters ➢ Ammeters ➢ Digital multimeter ➢ Digital LCR meter ➢ Standalone desktop	12 Hours	S KEERTHANA	Lab Technician	B.E-ECE
5.	DIGITAL ELECTRONICS LABORATORY	30	➢ Dual regulated power supplies ➢ Standalone desktop pc’s with spice software ➢ IC trainer kit ➢ Digital multimeter	12 Hours	SGAYATHRI	Lab Technician	B.E-ECE

			➢ Computer with HDL ➢ Software				
6.	ELECTRONICS CIRCUITS II LABORATORY	30	➢ CRO ➢ Function Generator ➢ Dual regulated power supplies ➢ Voltmeters ➢ Ammeters ➢ Digital multimeter ➢ Digital LCR meter ➢ Standalone desktop	12 Hours	S KEERTHANA	Lab Technician	B.E-ECE
7.	LINEAR INTEGRATED CIRCUITS LABORATORY	30	➢ CRO ➢ DSO ➢ Function Generators ➢ Dual regulated power Supplies ➢ Digital multimeter ➢ IC tester ➢ Standalone desktop pc's with spice software ➢ Transformers	12 Hours	SGAYATHRI	Lab Technician	B.E-ECE
8.	DIGITAL SIGNAL PROCESSING LABORATORY	30	➢ Desktop systems ➢ DSP Processors kit ➢ Signal generators ➢ CRO	12 Hours	MMUTHUVEL	Lab Technician	B.E-ECE
9.	COMMUNICATION SYSTEMS LABORATORY	30	➢ Trainer kits for AM ➢ Trainer kits for FM ➢ Trainer kits for signal sampling ➢ Trainer kits for TDM ➢ Trainer kits for PCM ➢ Trainer kits for PAM ➢ Trainer kits for PPM ➢ Trainer kits for PWM ➢ Trainer kits for DM ➢ Trainer kits for line ➢ Coding schemes ➢ Trainer kits for ASK ➢ Trainer kits for FSK ➢ Trainer kits for PSK ➢ CRO ➢ DSO ➢ Function Generators ➢ Standalone Desktop pcs	12 Hours	S KALAIARASI	Lab Technician	B.E-ECE
10.	MICROPROCESSOR AND MICROCONTROLLER LABORATORY	30	➢ 8086 microprocessor Trainer kit with Power supply ➢ 8051	12 Hours	S KEERTHANA	Lab Technician	B.E-ECE

			microcontroller Trainer kit ➢ Stepper motor ➢ Control Interfacing Compatible with 8086 and 8051 kits ➢ Keyboard and Display interface ➢ Board compatible with 8086 and 8051Kits ➢ ADC and DAC ➢ Interfacing card Compatible with 8086 and 8051 kits ➢ Serial and parallel Interfacing card ➢ Compatible with 8086 and 8051 kits				
11.	VLSI DESIGN LABORATORY	30	➢ Personal Computers ➢ DSO ➢ Function Generator ➢ Power supplies ➢ FPGA trainer board	12 Hours	R VAISHNAVI	Lab Technician	B.E-ECE
12.	OPTICAL COMMUNICATION AND MICROWAVE LABORATORY	30	➢ Trainer kit for carrying out led and pin diode characteristics ➢ Digital multimeter ➢ Optical power meter ➢ Trainer kit for determining the mode characteristics losses in optical fiber ➢ Trainer kit for analyzing analog and digital link performance 2mbps PRBS ➢ Data source signal	12 Hours	SGAYATHRI	Lab Technician	B.E-ECE

			generator ➢ Digital storage oscilloscope ➢ Kit for measuring numerical aperture and attenuation of Fiber advanced optical Fiber ➢ Trainer kit for pc-to-pc communication BER ➢ Measurement pulse ➢ broadening ➢ software defined radio transceiver platform with antennas and accessories				
13.	EMBEDDED SYSTEMS LABORATORY	30	➢ Embedded trainer kits with arm board ➢ Embedded trainer kits suitable for wireless communication ➢ Adequate quantities of hardware software and consumables	12 Hours	S KEERTHANA	Lab Technician	B.E-ECE
14.	VLSI DESIGN LAB I	30	➢ Pc's ➢ FPGA simulator ➢ Tool ➢ FPGA trainer board ➢ Logic Analyzer ➢ DSO ➢ Motor control	6 Hours	R VAISHNAVI	Lab Technician	B.E-ECE
15.	VLSI DESIGN LAB II	30	➢ PC's ➢ Cadence/Mentor Graphics/ tanner or synopses	6 Hours	R VAISHNAVI	Lab Technician	B.E-ECE

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.	ENGINEERING PRACTICES LABORATORY	➢ Keep the floor clean, free from dirt. ➢ Wear tight-fitting clothing. ➢ Never operate a machine without understanding the controls. ➢ Keep oil and grease away from the floor. ➢ Ensure all safety guards are in place before operating machinery. ➢ Store unused tools properly. ➢ Keep sharp tools with edges pointing towards the table edge. ➢ Avoid adjusting belts while machines are running. ➢ Keep sharp tools in their proper place. ➢ Never work on electrical wires when the power is on. ➢ Maintain sufficient distance between yourself and the working table while cutting.
2.	BASIC ELECTRICAL AND ELECTRONICS ENGINEERING	➢ Insulated flooring and shock-proof workstations. ➢ Circuit breakers and surge protectors for electrical safety. ➢ Regular testing of earth connections.
3.	CIRCUITS AND DEVICES LABORATORY	➢ Isolation transformers for safe circuit testing. ➢ Availability of insulated tools and equipment. ➢ Display of component handling guidelines.
4.	ELECTRONICS CIRCUITS I LABORATORY	➢ Fire extinguishers near workstations. ➢ Clear labeling of power supply terminals. ➢ Training on safe soldering techniques.
5.	DIGITAL ELECTRONICS LABORATORY	➢ Safe storage for ICs and semiconductor components. ➢ Instructions on proper grounding techniques.
6.	ELECTRONICS CIRCUITS II LABORATORY	➢ Circuit testing under supervision to prevent overvoltage or short circuits. ➢ Emergency power cutoff switches. ➢ Use of low-power, safe-to-handle components for experiments.
7.	LINEAR INTEGRATED CIRCUITS LABORATORY	➢ Proper insulation of OP-AMP and IC modules. ➢ Protective covers for exposed connections. ➢ Safety training for high-frequency signal generation.
8.	DIGITAL SIGNAL PROCESSING LABORATORY	➢ Proper earthing of DSP kits and workstations. ➢ Use of software emulation tools to minimize hardware risks. ➢ Regular software backups to prevent data loss.
9.	COMMUNICATION SYSTEMS LABORATORY	➢ Signal generators and analyzers with inbuilt safety features. ➢ Shielded cables to avoid signal interference. ➢ Controlled RF exposure to maintain safe levels.
10.	MICROPROCESSOR AND MICROCONTROLLER LABORATORY	➢ Voltage regulators to prevent damage to microcontrollers. ➢ Anti-static storage for microprocessor kits. ➢ Display of pin configuration and safe handling instructions.
11.	VLSI DESIGN LABORATORY	➢ Guidelines for safe usage of FPGA boards and power supplies. ➢ Access control to high-performance workstations. ➢ Instructions for EDA software usage to prevent accidental data loss.
12.	OPTICAL COMMUNICATION AND MICROWAVE LABORATORY	➢ Protective goggles for working with lasers and optical fibers. ➢ Shielded enclosures for microwave devices. ➢ Safe handling and disposal of optical fibers.
13.	EMBEDDED SYSTEMS LABORATORY	➢ Isolated power supplies for embedded kits. ➢ Safe handling of IoT devices and sensors.

		➢ Training on proper wiring techniques for modular components.
14.	VLSI DESIGN LAB I	➢ Proper ventilation for heat dissipation from FPGA boards. ➢ Secure software licenses to avoid unauthorized access. ➢ Fire extinguishers within easy reach.
15.	VLSI DESIGN LAB II	➢ Periodic inspection of high-performance servers. ➢ Overload protection for power circuits. ➢ Clear display of safety protocols and troubleshooting steps.

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.	Research Laboratory
3.	Centre of Excellence for PLC & SCADA
4.	Centre of Excellence for Embedded lab

PART E: Fist 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))/RF4
CAY (2024-2025)	660	33	32	11	((32*0.8) +(11*0.2))/33 =84
CAYm1 (2023-2024)	600	30	34	11	((34*0.8) +(11*0.2))/30=98
CAYm2 (2022-2023)	600	30	37	10	((37*0.8) +(10*0.2))/30=100

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 till (Feb 2025) (Lacs)	Actual expenses in CFY till (Feb 2025) (Lacs)	Budgeted in CFYm1 (23-24) (Lacs)	Actual Expenses in CFYm1 (23-24) (Lacs)	Budgeted in CFYm2 (22-23) (Lacs)	Actual Expenses in CFYm2 (22-23) (Lacs)	Budgeted in CFYm3 (21-22) (Lacs)	Actual Expenses in CFYm3 (21-22) (Lacs)
Infrastructure Built-Up	169.23	161.17	156.70	149.23	37.20	35.38	27.10	25.84
Library	7.75	7.6776	7.39	7.10	16.41	15.77	7.73	7.43
Laboratory equipment	12.77	11.94	11.61	11.05	10.84	10.31	10.76	10.25
Teaching and non-teaching staff salary	797.64	683.20	693.6	642.17	660.50	611.54	483.20	447.40
Outreach Programs	7.99	7.26	7.40	6.72	30.56	27.77	66.50	60.45
R&D	53.46	48.63	48.60	45.03	71.70	66.378	46.70	43.22
Training, Placement and Industry linkage	0.47	0.45	0.43	0.41	4.81	4.58	7.90	7.56
SDGs	130.26	124.06	120.62	114.87	89.28	85.03	43.14	41.08
Entrepreneurship	23.24	22.07	21.13	20.12	5.22	4.97	4.64	4.41
Others*	190.39	189.25	181.33	176.04	53.49	51.92	43.58	42.30
Total amount (Lacs)	1393.23	1255.75	1248.81	1172.79	980.01	913.70	741.25	689.98

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

Table No. E3.1: Budget and actual expenditure incurred at program level. (in Lacs)

Items	**Budgeted in CFY (Feb 2025) (Lacs)**	**Actual expenses in CFY (till Feb 2025) (Lacs)**	**Budgeted in CFYm1 (23-24) (Lacs)**	**Actual Expenses in CFYm1 (23-24) (Lacs)**	**Budgeted in CFYm2 (22-23) (Lacs)**	**Actual Expenses in CFYm2 (22-23) (Lacs)**	**Budgeted in CFYm3 (21-22) (Lacs)**	**Actual Expenses in CFYm3 (21-22) (Lacs)**
Laboratory equipment	22.50	21.564	16.00	15.60824	6.77	6.76542	6.70	6.65
Software	0	0	0	0	0	0	0	0
SDGs	0.60	0.53	0.50	0.50	0.74	0.75	0.20	0.20
R & D	4.20	4.16	3.60	3.58458	3.70	3.69958	2.00	2.00
Support for faculty development	0.50	0.48	0.50	0.50	0.10	0.10	0.10	0.10
Industrial Training, Industry expert, Internship	2.50	2.42	21.30	21.22	8.13	8.13	9.93	9.93
Miscellaneous expenses *	1.70	1.62	1.50	1.45	2.36	2.35	0.80	0.80
Total amount	32.00	30.774	43.40	42.86282	21.80	21.795	19.73	19.68