NATIONAL BOARD OF ACCREDITATION

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

Program Name : Biomedical Engineering	**Discipline**: Engineering & Technology
Level : Under Graduate	**Tier**: 2
Application No: 11657	**Date of Submission**: 02-03-2026

PART A- Profile of the Institute

A1.Name of the Institute: GRT INSTITUTE OF ENGINEERING AND TECHNOLOGY	
Year of Establishment : 2008	Location of the Institute: Tiruttani
A2. Institute Address:GRT MAHALAKSHMI NAGAR CHENNAI - TIRUPATHI HIGH WAY TIRUTTANI - 631 209	
City:Tiruvallur	State:Tamil Nadu
Pin Code:631209	Website:www.grt.edu.in
Email:arumugam.s@grt.edu.in	Phone No(with STD Code):044-27887011
A3. Name and Address of the Affiliating University (if any):	
Name of the University : ANNA UNIVERSITY	City:
State :	Pin Code: 0
A4. Type of the Institution: Self-Supported Institute	
A5. Ownership Status: Self financing	

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

- No. of UG programs: **7**
- No. of PG programs: **1**

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	2022	--	Artificial Intelligence and Data Science
2	Engineering & Technology	UG	Biomedical Engineering	2014	--	Biomedical Engineering
3	Engineering & Technology	UG	Computer Science and Engineering	2008	--	Computer Science and Engineering
4	Engineering & Technology	UG	Electrical and Electronics Engineering	2008	--	Electrical and Electronics Engineering
5	Engineering & Technology	UG	Electronics & Communication Engineering	2008	--	Electronics and Communication Engineering
6	Engineering & Technology	UG	Information Technology	2024	--	Information Technology
7	Engineering & Technology	UG	Mechanical Engineering	2009	--	Mechanical Engineering
8	Management	PG	Master of Business Administration	2009	--	Management

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

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

Name of the Department	Having Allied Departments	Name of the Program	Program Level
Electronics and Communication Engineering	Yes	Electronics & Communication Engineering	UG
Biomedical Engineering	Yes	Biomedical Engineering	UG
Computer Science and Engineering	Yes	Computer Science and Engineering	UG
Mechanical Engineering	No	Mechanical Engineering	UG
Electrical and Electronics Engineering	No	Electrical and Electronics 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

PART-B: Program information

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

Table No. B1: Program details.
A. List of the Programs Offered by the Department:

SR.NO.	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/DECREASE INTAKE (if any)	YEAR OF INCREASE/DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/COMPETENT AUTHORITY ARROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCREDITED	PROGRAM DURATION
1	Biomedical Engineering	UG	2014 / --	60	Yes	2024	30	2024	F.No.Southem/1-43656637770/2024/EOA	Applying first time	--	--	0	4

Sanctioned Intake for Last Five Years for the Biomedical Engineering	
Academic Year	**Sanctioned Intake**
2025-26	30
2024-25	30
2023-24	60
2022-23	60
2021-22	60
2020-21	60

List of the Allied Departments/Cluster and Programs:

SR.NO.	ALLIED DEPARTMENT NAME	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/DECREASE INTAKE (if any)	YEAR OF INCREASE/DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/COMPETENT AUTHORITY ARROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGR ACCRE
1	Electronics and Communication Engineering	Electronics & Communication Engineering	UG	2008 / --	60	No	NA	60	2008	F.No.Southem/1-7013150656/2020/EOA	Granted accreditation for 3 years for the period (specify period)	2018	2025	0

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

A. Name of the HoD :	Dr.S.A.Yuvaraj
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)	30	30	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	21	22	33	41	48	45	37
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	0	2	1	0	0	0
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.	21	22	35	42	48	45	37

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)	30	21	0	70.00
2024-25 (CAYm1)	30	22	0	73.33

2023-24 (CAYm2)	60	33	0	55.00

Average [(ER1 + ER2 + ER3) / 3] = 66.11≡ 11.00

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

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

Item	(2021-22) LYG	(2020-21) LYGm1	(2019-20) LYGm2
A*= (No. of students admitted in the 1st year of that batch and those actually admitted in the 2nd year via lateral entry, plus the number of students admitted through multiple entry (if any) and separate division if applicable, minus the number of students who exited through multiple entry (if any).	60.00	60.00	60.00
B=No. of students who graduated from the program in the stipulated course duration	34.00	41.00	33.00
Success Rate (SR)= (B/A) * 100	56.67	68.33	55.00

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 60.00

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)
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)	7.87	7.75	6.99
Y=Total no. of successful students	21.00	33.00	39.00
Z=Total no. of students appeared in the examination	22.00	33.00	41.00
API [X*(Y/Z)]	7.51	7.75	6.65

Average API[(AP1+AP2+AP3)/3] : 7.30

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

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

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2rd year/10)	7.72	7.00	7.46
Y=Total no. of successful students	31.00	40.00	45.00
Z=Total no. of students appeared in the examination	35.00	40.00	48.00
API [X * (Y/Z)]	6.84	7.00	6.99

Average API [(AP1 + AP2 + AP3)/3] : 6.94

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

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

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 3rd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 3rd year/10)	7.60	7.63	7.79
Y=Total no. of successful students	39.00	43.00	44.00
Z=Total no. of students appeared in the examination	40.00	45.00	44.00
API [X*(Y/Z)]:	7.41	7.29	7.79

Average API [(AP1 + AP2 + AP3)/3] : 7.50

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	60.00	60.00	60.00
X=No. of students placed	30.00	38.00	32.00
Y=No. of students admitted to higher studies	3.00	3.00	1.00
Z= No. of students taking up entrepreneurship	1.00	0.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	56.67	68.33	55.00

Average Placement Index = (P_1 + P_2 + P_3)/3: 60.00 Placement Index Points:

PART C: Faculty Details in Department and Allied Departments

(Data to be filled in for the Department and Allied Departments)

C1. Faculty details of Department and Allied Departments

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

Sr.No	Name of the Faculty	PAN No.	Highest degree	University	Area of Specialization	Date of Joining in this Institution	Experience in years in current institute	Designation at Time Joining in this Institution	Present Designation	The date on which Designated as Professor/ Associate Professor if any	Nature of Association (Regular/ Contract/ Ad hoc)	Currently Associated (Y/N)	In case of NO, Date of Leaving	IS HOD?
1	Dr.S.A.Yuvaraj	XXXXXXX72F	Ph.D	St. PetersUniversity	Wireless Sensor Networks	28/06/2010	15.8	Assistant Professor	Professor	03/08/2020	Regular	Yes		Yes
2	Dr.G.UmaShankar	XXXXXXX21F	Ph.D	SathyabamaUniversity	Bio signal Processing	27/08/2021	4.5	Assistant Professor	Assistant Professor		Regular	Yes		No
3	Mr.S.Prasanth	XXXXXXX20N	M.Tech	Birla Institute of Technology	Birla Institute of Technology	02/01/2017	9.1	Assistant Professor	Assistant Professor		Regular	Yes		No
4	Mr.K.Naresh Kumar	XXXXXXX93A	M.E.	Anna University	Communication systems	29/06/2015	10.7	Assistant Professor	Assistant Professor		Regular	Yes		No
5	Mr.S.V.Dharani Kumar	XXXXXXX52Q	M.E.	Anna University	Applied Electronics	11/10/2011	14.4	Assistant Professor	Assistant Professor		Regular	Yes		No
6	Ms.R.Nathea	XXXXXXX57H	M.E.	Anna University	Communication systems	20/01/2016	10.1	Assistant Professor	Assistant Professor		Regular	Yes		No
7	Ms.S.Bharathi	XXXXXXX73D	M.E.	Anna University	Medical Electronics	08/08/2022	3.6	Assistant Professor	Assistant Professor		Regular	Yes		No
8	Mrs.K.M.Dhanalakshmi	XXXXXXX03E	M.E.	Anna University	Medical Electronics	08/05/2023	2.9	Assistant Professor	Assistant Professor		Regular	Yes		No
9	Mrs.V.Manasa	XXXXXXX73H	M.Tech	Anna University	Biopharmaceutical Technology	29/01/2024	2	Assistant Professor	Assistant Professor		Regular	Yes		No

10	Mrs.U.Vijayapreethy	XXXXXXX18N	M.Tech	SRM University	Biomedical Engineering	27/12/2018	5.6	Assistant Professor	Assistant Professor		Regular	No	28/06/2024	No

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

Sr.No	Name of the Faculty	PAN No.	APAAR faculty ID*(if any)	Highest degree	University	Area of Specialization	Date of Joining in this Institution	Experience in years in current institute	Designation at Time Joining in this Institution	Present Designation	The date on which Designated as Professor/ Associate Professor if any	Nature of Association (Regular/ Contract/ Ad hoc)	Currently Associated (Y/N)	In case of NO, Date of Leaving	IS HOD?
1	Dr.P.SIVAKUMAR	XXXXXXX86H	XXXXXXXXX952	Ph.D	St.Peters University	Image Processing	12/03/2012	13.11	Associate Professor	Professor	02/01/2018	Regular	Yes		Yes
2	Dr.K.Periyar Selvam	XXXXXXX56E	XXXXXXXXX908	Ph.D	St.Peters University	VLSI	26/07/2013	12.7	Assistant Professor	Associate Professor	03/02/2023	Regular	Yes		No
3	Dr.S.Swapna	XXXXXXX53P	XXXXXXXXX674	Ph.D	Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology	"Special electrical machine"	03/06/2024	1.8	Associate Professor	Associate Professor		Regular	Yes		No
4	Mr.S.Senthilkumar	XXXXXXX32A	XXXXXXXXX925	M.Tech	VTU	Information and Communication Systems	18/01/2017	9.1	Assistant Professor	Assistant Professor		Regular	Yes		No
5	Mr.K.Balaji	XXXXXXX73E	XXXXXXXXX967	M.E.	Anna University	Communication systems	29/06/2015	10.7	Assistant Professor	Assistant Professor		Regular	Yes		No
6	Mr C.E Mohan Kumar	XXXXXXX02E	XXXXXXXXX428	M.E.	Anna University	Industrial Engineering	28/09/2010	15.4	Assistant Professor	Assistant Professor		Regular	Yes		No
7	Mr.D.Sarathy	XXXXXXX33R	XXXXXXXXX503	M.E.	Anna University	Embedded systems and technology	03/06/2024	1.8	Assistant Professor	Assistant Professor		Regular	Yes		No
8	Mrs.P.Arthi	XXXXXXX74K	XXXXXXXXX648	M.E.	Anna University	"Applied Electronics"	28/07/2023	2.6	Assistant Professor	Assistant Professor		Regular	Yes		No
9	Mr.S.Dinesh	XXXXXXX27E	NA	M.E.	Anna University	Applied Electronics	14/08/2023	1.4	Assistant Professor	Assistant Professor		Regular	No	31/12/2024	No
10	Mr. G.Vinoth	XXXXXXX39M	XXXXXXXXX205	M.E.	Anna University	Embedded systems and technology	14/08/2023	0.9	Assistant Professor	Assistant Professor		Regular	No	31/05/2024	No
11	Ms.C.P. GOWTHAMI	XXXXXXX16R	NA	M.E.	Anna University	"Applied Electronics"	28/07/2023	1.10	Assistant Professor	Assistant Professor		Regular	No	31/05/2025	No
12	Mrs.K.Vasanthi	XXXXXXX40P	XXXXXXXXX434	M.E.	Sathyabama University	"Applied Electronics"	07/07/2025	0.7	Assistant Professor	Assistant Professor		Regular	Yes		No

C2. Student-Faculty Ratio (SFR)

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

No. of UG Programs in the Department1 No. of PG Programs in the Department0

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

Description	**CAY(2025-26)**	**CAYm1 (2024-25)**	**CAYm2 (2023-24)**
UG1.B	30	60	61
UG1.C	60	61	60
UG1.D	61	60	60
UG1: Biomedical Engineering	**151**	**181**	**181**
UG2.B	62	62	61
UG2.C	62	61	62
UG2.D	61	62	66
UG2: Electronics & Communication Engineering	**185**	**185**	**189**
DS=Total no. of students in all UG and PG programs in the Department	151	181	181
AS=Total no. of students of all UG and PG programs in allied departments	185	185	189
S=Total no. of students in the Department (DS) and allied departments (AS)	**S1=** 336	**S2=** 366	**S3=** 370
DF=Total no. of faculty members in the Department	9	9	9
AF= Total no. of faculty members in the allied Departments	9	9	9
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	**F1=** 18	**F2=** 18	**F3=** 18
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= 18.67**	**SFR2= 20.33**	**SFR3= 20.56**
Average SFR for 3 years	**SFR= 19.85**		

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 x [(10X + 4Y) / RF)]
2025-26(CAY)	5	13	16.00	15.94
2024-25(CAYm1)	5	13	18.00	14.17
2023-24(CAYm2)	3	15	18.00	12.50

C4. Faculty Cadre Proportion

- Faculty Cadre Proportion is 1(RF1): 2(RF2): 6(RF3)
- RF1= No. of Professors required = 1/9 * 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 * 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 * 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	1.00	2.00	3.00	2.00	11.00	14.00
2024-25	2.00	2.00	4.00	2.00	12.00	14.00
2023-24	2.00	2.00	4.00	1.00	12.00	15.00
Average	RF1=1.67	AF1=2.00	RF2=3.67	AF2=1.67	RF2=11.67	AF2=14.33

C5. Visiting/Adjunct Faculty/Professor of Practice

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

(CAYm1)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	S ATHEENAMILAI PANDIAN	MANAGING DIRECTOR	ATHEENAPANDIAN PVT LTD	BM3591-DIAGNOSTIC AND THERAPEUTIC EQUIPMENT	28.00
2	S ATHEENAMILAI PANDIAN	MANAGING DIRECTOR	ATHEENAPANDIAN PVT LTD	CBM355-MEDICAL IMAGING SYSTEMS	27.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	AYYAPPADAS M	DIRECTOR	HARVEY BIOMEDICAL, BANGALORE	BM8702-RADIOLOGICAL EQUIPMENTS	28.00
2	AYYAPPADAS M	DIRECTOR	HARVEY BIOMEDICAL, BANGALORE	BM8651-BIOMECHANICS	28.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	S ATHEENAMILAI PANDIAN	MANAGING DIRECTOR	ATHEENAPANDIAN PVT LTD	BM8703-REHABILITATION ENGINEERING	28.00
2	S ATHEENAMILAI PANDIAN	MANAGING DIRECTOR	ATHEENAPANDIAN PVT LTD	BM8601-DIAGNOSTIC AND THERAPEUTIC EQUIPMENT-I	27.00

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	8
2	No. of peer reviewed conference papers published	24	1	25
3	No. of books/book chapters published	0	1	1

C7. Sponsored Research Project

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

(CAYm1)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. S.A. Yuvaraj	Dr. G. Umashankar	Biomedical Engineering	A Multimodal Signal Fusion Framework for Real – Time Predictive Diagnostics in Neurodegenerative Care	Atheena Pandian Private Limited, Chennai	1 year	3.06
						Amount received (Rs.):3.06

(CAYm2)

(CAYm3)

Total Amount (Lacs) Received for the Past 3 Years: 3.06

Note*:

- Only sponsored research projects will be considered. Infrastructure-based projects will not be considered here.

C8. Consultancy Work

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

(CAYm1)

(CAYm2)

(CAYm3)

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

Note*:

- Only consultancy projects will be considered. Infrastructure-based projects will not be considered here.

C9. Institution Seed Money or Internal Research Grant to its Faculty for Research Work

Table No. C9.1: List of faculty members received seed money or internal research grant from the Institution.

(CAYm1)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Dr. G. Umashankar	Spinal Vision CNN-Driven Techniques	6 Months	0.10	0.10	Published in 5th ACE ICASTEM
Dr. G. Umashankar	Kidney working model	3 Months	0.10	0.10	Demonstrated
Dr. G. Umashankar	IOT Driven Wearable Device	6 Months	0.10	0.10	Patent published
Dr. S.A. Yuvaraj	Encryption in Communication for Network	6 Months	0.10	0.10	Prototype Patent published
Dr. S.A. Yuvaraj	Advancements in Machine Learning for IoT	1 Year	0.25	0.25	Published in JISEM
Dr. S.A. Yuvaraj	Preventing Drowsy State	6 Months	0.25	0.25	Published in International Conference on Frontiers of Intelligent Computing: Theory and Applications
Dr. S.A. Yuvaraj	Enhancing Liver Disease	6 Months	0.10	0.10	Published in 5th ACE ICASTEM
Dr. S.A. Yuvaraj	Neural dust – Nanochip	3 Months	0.10	0.10	Demonstrated
Dr. S.A. Yuvaraj	Solar energy based on mobile charger	3 Months	0.10	0.10	Demonstrated
Mr.S.V. Dharani Kumar	Over Load Protector design	6 Months	0.10	0.10	Design Patent published
Mr.S.V. Dharani Kumar	Advanced Day-Ahead Photovoltaic Power	1 Year	0.20	0.20	Published in IEEE Xplore
Mr. S.V. Dharani Kumar	Electrical Earthing Monitoring system	6 Months	0.20	0.20	Presented in Hackathon
Mr. S.V. Dharani Kumar	Adaptive Communication MORSECODE	6 Months	0.10	0.10	Published in 5th ACE ICASTEM
Mr. S. Prasanth	Modelling of Airbag Helmet	6 Months	0.10	0.10	Published in ICECSDEC
Mr. S. Prasanth	Early Anemia Detection and Diabetes	6 Months	0.10	0.10	Published in 5th ACE ICASTEM
Mr. S. Prasanth	Remote Monitoring of Respiratory Disease	6 Months	0.10	0.10	Published in 5th ACE ICASTEM
Ms. S. Bharathi	Radiation Disinfection Box	6 Months	0.10	0.10	Published in ICECSDEC
Ms. S. Bharathi	Predicting Pulmonary Tuberculosis	6 Months	0.10	0.10	Published in 5th ACE ICASTEM
Ms. V. Manasa	Brain Tumor Classification	6 Months	0.10	0.10	Published in 5th ACE ICASTEM
Mr. K. Naresh Kumar	Automated Skin Disease Detection	6 Months	0.10	0.10	Published in 5th ACE ICASTEM
			Amount received (Rs.): 2.50		

(CAYm2)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Dr. G. Umashankar	Eye Blink Based Biometric Authentication System	1 Year	0.25	0.25	Published in IEEE Xplore
Dr. G. Umashankar	Hemodialysis working model	3 Months	0.15	0.15	Demonstrated
Mr. S. Prasanth	Smart fabricated wearable vibrating system for pregnant women and prolonged standing people	6 Months	0.15	0.15	Presented in ICATSG
Mr. K. Naresh Kumar	Skin Disease Classification & Segmentation Using Ai Techniques”	6 Months	0.15	0.15	Published in IJERT
Mr. S.V. Dharani Kumar	E- Circular Monitoring system	6 Months	0.35	0.35	Demonstrated
Mr. S.V. Dharani Kumar	VLSI & Chip Design	3 Months	0.15	0.15	Book Published
Dr. S.A. Yuvaraj	Smart irrigation system using IOT	3 Months	0.10	0.10	Demonstrated
Ms. S. Bharathi	Design of Artificial ventilator	3 Months	0.10	0.10	Demonstrated
Mr. S.V. Dharani Kumar	Voice control system	3 Months	0.10	0.10	Demonstrated
Ms. R. Nathea	Design of Robot hand	3 Months	0.10	0.10	Demonstrated
Dr. G. Umashankar	Design of Obstacle avoiding robot	3 Months	0.10	0.10	Demonstrated
Mr. S. Prasanth	Smart Medicine Reminder System	3 Months	0.10	0.10	Demonstrated
Mr. K. Naresh Kumar	DIY smart home with ESP8266 control lights	3 Months	0.10	0.10	Demonstrated
			Amount received (Rs.): 1.90		

(CAYm3)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Mr. G. Umashankar	IoT Based Automated Saline Drip	1 Year	0.20	0.20	Published in Biosciences Biotechnology Research Asia
Mr. G. Umashankar	Detecting Diabetes Mellitus	1 Year	0.20	0.20	Published in IEEE Xplore
Mr. G. Umashankar	Bringing Intelligence to Medical Devices	6 Months	0.10	0.10	Published in IGI global scientific publishing
Mr. G. Umashankar	Lung Cancer Testing Device	1 Year	0.10	0.10	Published in Design Patent
Mr. G. Umashankar	Real Time Operating System	6 Months	0.10	0.10	Published in IJIRSET
Ms. R. Nathea	Design and Simulation of Customized 3D Knee Braces	6 Months	0.25	0.25	Published in GIS SCIENCE JOURNAL
Mr. S.V. Dharani Kumar	Intelligent and smart hearing aid	6 Months	0.10	0.10	Published in IJIRSET
Mr. S.V. Dharani Kumar	Electricity Leakage Detection and Overvoltage	9 Months	0.15	0.15	Published in IJIRSET
Mr. K. Naresh Kumar	Smart flow control and monitoring system	6 Months	0.10	0.10	Published in IJIRSET
Mr. S. Prasanth	Tremor Disease Identification and Analysing	6 Months	0.10	0.10	Published in IJIRSET
Mr. S. Prasanth	Chatbot for Multispecialty Hospital	6 Months	0.10	0.10	Published in NCIEAM
Ms. S. Bharathi	Gyroscopic Supportive system	6 Months	0.10	0.10	Published in IJIRSET
Ms. R. Nathea	Automatic handwriting robot	3 Months	0.10	0.10	Demonstrated
Ms. U. Vijayapreethy	smart attendance system	3 Months	0.10	0.10	Demonstrated
			Amount received (Rs.): 1.80		

Total amount (Lacs) received for the past 3 years : 6.20

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	Biomedical Instrumentation Lab/ Diagnostics and Therapeutic Equipment Lab	30	1.Multi Parameter Patient Monitoring System 2.EEG recorder with accessories 3.ECG recorder 4.EMG	8 Hours	Mr.S.Prabu	Lab Technician	Diploma ECE
2	Bio–Sciences Lab	30	1.Compound Microscopes 2. Incubator 3. Microtome 4. Slide warming table 5.Spectrophotometer 6. Distillation	4 Hours	Ms.M.Janani	Lab Technician	Diploma ECE
3	Biomedical Systems Lab	30	1. 30 desktop computers with accessories 2.software MATLAB, Arduino and Dev - C++	15 Hours	Mr.M.Kamesh	Lab Technician	Diploma ECE

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Biomedical Instrumentation Lab / Diagnostics and Therapeutic Equipment Lab	1. Wearing shoes and lab coats. 2. Usage of fire extinguisher. 3. First Aid Box 4. Use only the recommended voltage/current settings to avoid equipment damage or shock. 5. Report overheating, burning smell, or sparks immediately. 6. Handle biosensors (ECG electrodes, pulse oximeters, pressure transducers) with care. 7. Use medical-grade isolation amplifiers to prevent electrical shock. 8. Dispose of contaminated materials (gauze, gloves, sensors) in biohazard bins. 9. Wash hands thoroughly with soap after completing experiments. 10. Therapeutic devices like diathermy/IR emitters may cause burns -check temperature settings before use. 11. Do not touch sensitive optical/electronic surfaces with bare hands. 12. Disconnect devices from power before cleaning or inspection. 13. Turn off all equipment and disconnect power supplies. 14. To avoid electric shock used MCBs.
2	Bio-Sciences lab	1. Wearing shoes and lab coats. 2. Usage of fire extinguisher. 3. First Aid Box 4. To avoid electric shock used MCBs. 5. Properly label all biological samples with hazard symbols, dates, and contents. 6. Do not mix biological waste with regular trash. 7. Store chemicals according to compatibility groups (acids, bases, organics, etc.). 8. Ensure centrifuge tubes are balanced before running the centrifuge. 9. Never open a centrifuge until the rotor has completely stopped. 10. Use sterile technique when working with cell culture or biological sensors. 11. Treat blood, saliva, tissue samples, or patient-derived specimens as biohazardous. 12. Ensure electrodes, probes, or bio-signal devices are sterile or properly disinfected. 13. For thermal or electrical stimulators, remain within safe exposure limits to avoid burns or shocks. 14. Calibrate biosensors before recording data (pH, oxygen, glucose, pressure sensors, etc.). 15. Wash hands before and after lab work even if gloves were used. 16. Ethical and Human-Subject Considerations (BME-specific)
3	Biomedical Systems Lab	1. Wearing lab coats. 2. Usage of fire extinguisher. 3. First Aid Box 4. To avoid electric shock used MCBs. 5. Data will be preserved using UPS Backup 6. Students and Faculty are instructed to follow Do's and Don'ts in the Laboratories. 7. The Firewalls are enabled on each and every Computer. 8. Students inserting USB Stick, the Pen drives have to be scanned for any malicious content.

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)	360	18	15	4	71
2024-25(CAYm1)	450	22	17	6	67
2025-26(CAY)	450	22	19	3	72

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	240	236.68	175	168.96	40	35.94	20	18.13
Library	10	8.03	10	9.29	10	8.08	4	3
Laboratory equipment	425	414.24	12	10.31	40	38.90	125	123.35
Teaching and non-teaching staff salary	975	949.92	800	752.34	650	630.09	650	601.34
Outreach Programs	2	1.07	4	3.77	3.50	2.06	7	6.33
R&D	14	13.56	13	12.09	10	9.30	13	12.07
Training, Placement and Industry linkage	35	33.10	25	22.87	15	13.63	10	8.34
SDGs	55	52.06	60	58.59	80	75.45	85	79.99
Entrepreneurship	1	0.31	1	0.38	1.50	0.45	1	0.40
Others, specify	920	908.88	850	832.80	700	678.12	500	457.36
Total	**2677**	**2617.85**	**1950**	**1871.40**	**1550.00**	**1492.02**	**1415**	**1310.31**

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	650000	638100	15000	0	100000	99698	1800000	1735069
Software	50000	26870	30000	24491	25000	17938	50000	38171
SDGs	10000	0	10000	0	10000	0	10000	0
Support for faculty development	175000	160000	175000	162000	175000	156000	175000	159000
R & D	300000	251750	270000	257000	200000	190000	200000	188760
Industrial Training, Industry expert, Internship	250000	229781	200000	191986	150000	142206	80000	77506
Miscellaneous Expenses*	50000	34454	45000	42978	150000	148894	225000	212945

Total	**1485000**	**1340955**	**745000**	**678455**	**810000**	**754736**	**2540000**	**2411451**