

**NATIONAL BOARD OF ACCREDITATION**

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

|                                                                 |                                             |
|-----------------------------------------------------------------|---------------------------------------------|
| <b>Program Name :</b> ELECTRONICS AND COMMUNICATION ENGINEERING | <b>Discipline:</b> Engineering & Technology |
| <b>Level :</b> Under Graduate                                   | <b>Tier:</b> 1                              |
| <b>Application No:</b> 12010                                    | <b>Date of Submission:</b> 27-07-2026       |

**PART A- Profile of the Institute**

|                                                                                                    |                                      |
|----------------------------------------------------------------------------------------------------|--------------------------------------|
| <b>A1.Name of the Institute:</b> SRI SAI RAM ENGINEERING COLLEGE                                   |                                      |
| Year of Establishment : 1995-1995                                                                  | Location of the Institute:           |
| <b>A2. Institute Address:</b> SAI LEO NAGAR,POONTHANDALAM VILLAGE,DHARKAST POST,POST WEST TAMBARAM |                                      |
| City:CHENNAI                                                                                       | State:Tamil Nadu                     |
| Pin Code:600044                                                                                    | Website:www.sairam.edu.in            |
| Email:SAIRAM@SAIRAM.EDU.IN                                                                         | Phone No(with STD Code):044-22512222 |
| <b>A3. Name and Address of the Affiliating University (if any):</b>                                |                                      |
| Name of the University : NIL                                                                       | City:                                |
| State :                                                                                            | Pin Code:                            |
| <b>A4. Type of the Institution:</b> Self-Supported Institute                                       |                                      |
| <b>A5. Ownership Status:</b>                                                                       |                                      |

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

- No. of UG programs: **16**
- No. of PG programs: **12**

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

| Sr.No. | Discipline               | Level of program | Name of the program                         | Year of Start | Year of Closed | Name of The Department                    |
|--------|--------------------------|------------------|---------------------------------------------|---------------|----------------|-------------------------------------------|
| 1      | Engineering & Technology | UG               | Artificial Intelligence and Data Science    | 2020          | --             | Artificial Intelligence and Data Science  |
| 2      | Engineering & Technology | PG               | Big Data Analytics                          | 2025          | --             | Computer Science and Engineering          |
| 3      | Engineering & Technology | PG               | CAD/CAM                                     | 2009          | --             | Mechanical Engineering                    |
| 4      | Engineering & Technology | UG               | Civil Engineering                           | 2007          | --             | Civil Engineering                         |
| 5      | Engineering & Technology | PG               | Communication Systems                       | 2009          | --             | Electronics and Communication Engineering |
| 6      | Engineering & Technology | UG               | Computer & Communication Engineering        | 2025          | --             | Computer and Communication Engineering    |
| 7      | Engineering & Technology | PG               | Computer Science & Engineering (Integrated) | 2021          | --             | Computer Science and Engineering          |
| 8      | Engineering & Technology | UG               | Computer Science and Business System        | 2020          | --             | Computer Science and Business System      |

|    |                          |    |                                                                               |      |      |                                                                                 |
|----|--------------------------|----|-------------------------------------------------------------------------------|------|------|---------------------------------------------------------------------------------|
| 9  | Engineering & Technology | UG | Computer Science and Engineering                                              | 1998 | --   | Computer Science and Engineering                                                |
| 10 | Engineering & Technology | PG | Computer Science and Engineering                                              | 2011 | --   | Computer Science and Engineering                                                |
| 11 | Engineering & Technology | UG | Computer Science and Engineering (Artificial Intelligence & Machine Learning) | 2022 | --   | Computer Science and Engineering (Artificial Intelligence and Machine Learning) |
| 12 | Engineering & Technology | UG | Computer Science and Engineering (Cyber Security)                             | 2024 | --   | Computer Science and Engineering (Cyber Security)                               |
| 13 | Engineering & Technology | UG | Computer Science and Engineering (Internet of Things)                         | 2022 | --   | Computer Science and Engineering (Internet of Things)                           |
| 14 | Engineering & Technology | PG | Computer Science and Engineering (Networks)                                   | 2007 | --   | Information Technology                                                          |
| 15 | Engineering & Technology | PG | Data Sciences                                                                 | 2026 | --   | Computer Science and Engineering                                                |
| 16 | Engineering & Technology | PG | Defence Technology                                                            | 2021 | --   | Electronics and Communication Engineering                                       |
| 17 | Engineering & Technology | UG | Electrical and Electronics Engineering                                        | 1995 | --   | Electrical and Electronics Engineering                                          |
| 18 | Engineering & Technology | UG | Electronics & Communication Engineering                                       | 1995 | --   | Electronics and Communication Engineering                                       |
| 19 | Engineering & Technology | UG | Electronics & Instrumentation Engineering                                     | 2007 | --   | Electronics and Instrumentation Engineering                                     |
| 20 | Engineering & Technology | UG | Electronics Instrumentation & Control Engineering                             | 1998 | 2025 | Electronics Instrumentation and Control Engineering                             |
| 21 | Engineering & Technology | PG | Embedded Systems Technologies                                                 | 2010 | --   | Electronics and Communication Engineering                                       |
| 22 | Engineering & Technology | PG | Industrial Safety Engineering                                                 | 2025 | --   | Mechanical Engineering                                                          |
| 23 | Engineering & Technology | UG | Information Technology                                                        | 1999 | --   | Information Technology                                                          |
| 24 | Engineering & Technology | UG | Mechanical & Automation Engineering                                           | 2021 | 2025 | Mechanical and Automation Engineering                                           |
| 25 | Engineering & Technology | UG | Mechanical Engineering                                                        | 1995 | --   | Mechanical Engineering                                                          |
| 26 | Engineering & Technology | UG | Mechatronics Engineering                                                      | 2025 | --   | Mechatronics Engineering                                                        |
| 27 | Engineering & Technology | PG | Power Electronics & Drives                                                    | 2010 | --   | Electrical and Electronics Engineering                                          |
| 28 | Management               | PG | Master of Business Administration                                             | 2025 | --   | 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            |

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 Instrumentation Engineering         | Electronics & Instrumentation Engineering         | UG            |
| Electronics Instrumentation and Control Engineering | Electronics Instrumentation & Control 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 | TC |
|--------|-----------------------------------------|-----------------------|--------------------------------|-------------------|-----------------------------------|---------------------------|----------------|------------------------|----------------------------------------------------------------------|-------------------------------------------------------------------|------|----|
| 1      | Electronics & Communication Engineering | UG                    | 1995 / --                      | 60                | Yes                               | 2025                      | 480            | 1995                   | F.No. Southern/1-44641423641/2025/EOA/Corrigendum-1 Dated 08.05.2025 | Granted accreditation for 3 years for the period (specify period) | 2023 | 20 |

#### Sanctioned Intake for Last Five Years for the Communication Systems

| Academic Year | Sanctioned Intake |
|---------------|-------------------|
| 2025-26       | 480               |
| 2024-25       | 240               |
| 2023-24       | 240               |
| 2022-23       | 240               |
| 2021-22       | 240               |
| 2020-21       | 240               |

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                                              | F  |
|--------|---------------------------------------------|-------------------------------------------|-----------------------|--------------------------------|-------------------|-----------------------------------|---------------------------|----------------|------------------------|-------------------------------------------|-------------------------------------------------------------------|----|
| 1      | Electronics and Instrumentation Engineering | Electronics & Instrumentation Engineering | UG                    | 2007 / --                      | 60                | Yes                               | 2025                      | 120            | 2025                   | F.No. Southern/1-44641423641/2025/EOA     | Granted accreditation for 3 years for the period (specify period) | -- |

| 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     | F  |               |                   |         |     |         |    |         |    |         |    |         |    |         |    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------|-----------------------|--------------------------------|-------------------|-----------------------------------|---------------------------|----------------|------------------------|-----------------------------------------------------------------------|--------------------------|----|---------------|-------------------|---------|-----|---------|----|---------|----|---------|----|---------|----|---------|----|
| <div>Sanctioned Intake for Last Five Years for the Electronics &amp; Instrumentation Engineering</div> <table><thead><tr><th>Academic Year</th><th>Sanctioned Intake</th></tr></thead><tbody><tr><td>2025-26</td><td>120</td></tr><tr><td>2024-25</td><td>90</td></tr><tr><td>2023-24</td><td>90</td></tr><tr><td>2022-23</td><td>90</td></tr><tr><td>2021-22</td><td>90</td></tr><tr><td>2020-21</td><td>90</td></tr></tbody></table>       |                                                     |                                                   |                       |                                |                   |                                   |                           |                |                        |                                                                       |                          |    | Academic Year | Sanctioned Intake | 2025-26 | 120 | 2024-25 | 90 | 2023-24 | 90 | 2022-23 | 90 | 2021-22 | 90 | 2020-21 | 90 |
| Academic Year                                                                                                                                                                                                                                                                                                                                                                                                                                | Sanctioned Intake                                   |                                                   |                       |                                |                   |                                   |                           |                |                        |                                                                       |                          |    |               |                   |         |     |         |    |         |    |         |    |         |    |         |    |
| 2025-26                                                                                                                                                                                                                                                                                                                                                                                                                                      | 120                                                 |                                                   |                       |                                |                   |                                   |                           |                |                        |                                                                       |                          |    |               |                   |         |     |         |    |         |    |         |    |         |    |         |    |
| 2024-25                                                                                                                                                                                                                                                                                                                                                                                                                                      | 90                                                  |                                                   |                       |                                |                   |                                   |                           |                |                        |                                                                       |                          |    |               |                   |         |     |         |    |         |    |         |    |         |    |         |    |
| 2023-24                                                                                                                                                                                                                                                                                                                                                                                                                                      | 90                                                  |                                                   |                       |                                |                   |                                   |                           |                |                        |                                                                       |                          |    |               |                   |         |     |         |    |         |    |         |    |         |    |         |    |
| 2022-23                                                                                                                                                                                                                                                                                                                                                                                                                                      | 90                                                  |                                                   |                       |                                |                   |                                   |                           |                |                        |                                                                       |                          |    |               |                   |         |     |         |    |         |    |         |    |         |    |         |    |
| 2021-22                                                                                                                                                                                                                                                                                                                                                                                                                                      | 90                                                  |                                                   |                       |                                |                   |                                   |                           |                |                        |                                                                       |                          |    |               |                   |         |     |         |    |         |    |         |    |         |    |         |    |
| 2020-21                                                                                                                                                                                                                                                                                                                                                                                                                                      | 90                                                  |                                                   |                       |                                |                   |                                   |                           |                |                        |                                                                       |                          |    |               |                   |         |     |         |    |         |    |         |    |         |    |         |    |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                            | Electronics Instrumentation and Control Engineering | Electronics Instrumentation & Control Engineering | UG                    | 1998 / 2025                    | 40                | Yes                               | 2024                      | 0              | 2024                   | F.No. Southern/1-44641423641/2025/EOA/Corrigendum-1, dated 08.05.2025 | Eligible but not applied | -- |               |                   |         |     |         |    |         |    |         |    |         |    |         |    |
| <div>Sanctioned Intake for Last Five Years for the Electronics Instrumentation &amp; Control Engineering</div> <table><thead><tr><th>Academic Year</th><th>Sanctioned Intake</th></tr></thead><tbody><tr><td>2025-26</td><td>0</td></tr><tr><td>2024-25</td><td>60</td></tr><tr><td>2023-24</td><td>30</td></tr><tr><td>2022-23</td><td>30</td></tr><tr><td>2021-22</td><td>30</td></tr><tr><td>2020-21</td><td>30</td></tr></tbody></table> |                                                     |                                                   |                       |                                |                   |                                   |                           |                |                        |                                                                       |                          |    | Academic Year | Sanctioned Intake | 2025-26 | 0   | 2024-25 | 60 | 2023-24 | 30 | 2022-23 | 30 | 2021-22 | 30 | 2020-21 | 30 |
| Academic Year                                                                                                                                                                                                                                                                                                                                                                                                                                | Sanctioned Intake                                   |                                                   |                       |                                |                   |                                   |                           |                |                        |                                                                       |                          |    |               |                   |         |     |         |    |         |    |         |    |         |    |         |    |
| 2025-26                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0                                                   |                                                   |                       |                                |                   |                                   |                           |                |                        |                                                                       |                          |    |               |                   |         |     |         |    |         |    |         |    |         |    |         |    |
| 2024-25                                                                                                                                                                                                                                                                                                                                                                                                                                      | 60                                                  |                                                   |                       |                                |                   |                                   |                           |                |                        |                                                                       |                          |    |               |                   |         |     |         |    |         |    |         |    |         |    |         |    |
| 2023-24                                                                                                                                                                                                                                                                                                                                                                                                                                      | 30                                                  |                                                   |                       |                                |                   |                                   |                           |                |                        |                                                                       |                          |    |               |                   |         |     |         |    |         |    |         |    |         |    |         |    |
| 2022-23                                                                                                                                                                                                                                                                                                                                                                                                                                      | 30                                                  |                                                   |                       |                                |                   |                                   |                           |                |                        |                                                                       |                          |    |               |                   |         |     |         |    |         |    |         |    |         |    |         |    |
| 2021-22                                                                                                                                                                                                                                                                                                                                                                                                                                      | 30                                                  |                                                   |                       |                                |                   |                                   |                           |                |                        |                                                                       |                          |    |               |                   |         |     |         |    |         |    |         |    |         |    |         |    |
| 2020-21                                                                                                                                                                                                                                                                                                                                                                                                                                      | 30                                                  |                                                   |                       |                                |                   |                                   |                           |                |                        |                                                                       |                          |    |               |                   |         |     |         |    |         |    |         |    |         |    |         |    |

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

|                           |                   |
|---------------------------|-------------------|
| A. Name of the HoD :      | Dr J.Thamil Selvi |
| 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)                                                                                                       | 480           | 240             | 240             | 240             | 240             | 240             | 240             |
| 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 | 480           | 240             | 240             | 240             | 240             | 199             | 190             |
| N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats                                                                      | 0             | 11              | 4               | 8               | 9               | 9               | 10              |

|                                                                                                                                         |     |     |     |     |     |     |     |
|-----------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|
| N3=Separate division if any                                                                                                             | 0   | 0   | 0   | 1   | 1   | 2   | 0   |
| N4=Total no. of students admitted in the 1st year via all supernumerary quotas                                                          | 23  | 10  | 9   | 11  | 6   | 0   | 0   |
| Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points. | 503 | 261 | 253 | 260 | 256 | 210 | 200 |

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)   | 480                | 480                 | 23                  | 104.79                        |
| 2024-25 (CAYm1) | 240                | 240                 | 10                  | 104.17                        |
| 2023-24 (CAYm2) | 240                | 240                 | 9                   | 103.75                        |

Average [ (ER1 + ER2 + ER3) / 3 ] = 104.24  $\approx$  100

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

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

| Item                                                                                                                                                                                                                                                                                                          | (2021-22)<br>LYG | (2020-21)<br>LYGm1 | (2019-20)<br>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). | 256.00           | 249.00             | 250.00             |
| B=No. of students who graduated from the program in the stipulated course duration                                                                                                                                                                                                                            | 247.00           | 200.00             | 190.00             |
| Success Rate (SR)= (B/A) * 100                                                                                                                                                                                                                                                                                | 96.48            | 80.32              | 76.00              |

Average SR of three batches ((SR\_1+ SR\_2+ SR\_3)/3): 84.27

#### B6. Academic Performance of the First-Year Students of the Program

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

| Academic Performance                                          | CAYm1( 2024-25 ) | CAYm2( 2023-24 ) | CAYm3 ( 2022-23 ) |
|---------------------------------------------------------------|------------------|------------------|-------------------|
| Mean of CGPA or mean percentage of all successful students(X) | 8.18             | 8.08             | 7.98              |
| Y=Total no. of successful students                            | 230.00           | 231.00           | 244.00            |
| Z=Total no. of students appeared in the examination           | 247.00           | 246.00           | 251.00            |
| API [X*(Y/Z)]                                                 | 7.62             | 7.65             | 7.76              |

Average API[ (AP1+AP2+AP3)/3 ] : 7.68

#### 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 2nd year/10) | 7.95              | 7.82              | 7.92              |
| Y=Total no. of successful students                                                                                                                                     | 246.00            | 258.00            | 250.00            |
| Z=Total no. of students appeared in the examination                                                                                                                    | 250.00            | 259.00            | 253.00            |

|                   |      |      |      |
|-------------------|------|------|------|
| API [ X * (Y/Z) ] | 7.82 | 7.79 | 7.83 |
|-------------------|------|------|------|

Average API [ (AP1 + AP2 + AP3)/3 ] : 7.81

**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 (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) | 8.19            | 8.01            | 7.72            |
| Y=Total no. of successful students                                                                                                                                     | 254.00          | 250.00          | 204.00          |
| Z=Total no. of students appeared in the examination                                                                                                                    | 258.00          | 250.00          | 206.00          |
| API [ X*(Y/Z) ]:                                                                                                                                                       | 8.06            | 8.01            | 7.65            |

Average API [ (AP1 + AP2 + AP3)/3 ] : 7.91

**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           | 256.00        | 249.00         | 250.00         |
| X=No. of students placed                       | 187.00        | 175.00         | 180.00         |
| Y=No. of students admitted to higher studies   | 10.00         | 21.00          | 9.00           |
| Z= No. of students taking up entrepreneurship  | 0.00          | 0.00           | 1.00           |
| Placement Index(P) = (((X + Y + Z)/FS) * 100): | 76.95         | 78.71          | 76.00          |

Average Placement Index = (P\_1 + P\_2 + P\_3)/3: 77.22 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 J.Raja           | XXXXXXXX82N | Ph.D           | AU Chennai            | Digital Communication       | 19/11/2012                          | 13.7                                     | Professor                                       | Professor           | 19/11/2012                                                            | Regular                                           | Yes                        |                                | No      |
| 2     | Dr J.Thamil Selvi   | XXXXXXXX09J | Ph.D           | AU Chennai            | Biomedical Image Processing | 26/12/2002                          | 23.6                                     | Assistant Professor                             | Professor           | 01/08/2018                                                            | Regular                                           | Yes                        |                                | Yes     |
| 3     | Dr S. Sumathi       | XXXXXXXX43A | Ph.D           | Sathyabama University | Biometrics-Image processing | 09/03/1998                          | 28.4                                     | Assistant Professor                             | Professor           | 01/08/2018                                                            | Regular                                           | Yes                        |                                | No      |

|    |                      |            |      |                                                       |                                     |            |       |                     |                     |            |         |     |  |    |
|----|----------------------|------------|------|-------------------------------------------------------|-------------------------------------|------------|-------|---------------------|---------------------|------------|---------|-----|--|----|
| 4  | Dr S. Brindha        | XXXXXXX57A | Ph.D | AU Chennai                                            | Radio over fiber networks           | 14/06/1999 | 27.1  | Assistant Professor | Professor           | 01/06/2019 | Regular | Yes |  | No |
| 5  | Dr K. Sumathi        | XXXXXXX31L | Ph.D | AU Chennai                                            | Bio-medical Image Processing        | 14/09/2005 | 20.10 | Assistant Professor | Professor           | 01/08/2020 | Regular | Yes |  | No |
| 6  | Dr J.Manikandan      | XXXXXXX14H | Ph.D | St.Peter's University                                 | VLSI Design                         | 18/02/2008 | 18.5  | Assistant Professor | Professor           | 01/02/2019 | Regular | Yes |  | No |
| 7  | Dr K.Lakshmi Joshiha | XXXXXXX93G | Ph.D | AU Chennai                                            | Wireless Sensor Networks            | 06/07/2006 | 20    | Assistant Professor | Professor           | 01/08/2020 | Regular | Yes |  | No |
| 8  | Dr J..Arunarasi      | XXXXXXX49N | Ph.D | AU Chennai                                            | Wireless Communication              | 21/12/2018 | 7.6   | Associate Professor | Professor           | 01/03/2022 | Regular | Yes |  | No |
| 9  | Dr M. Baskaran       | XXXXXXX99K | Ph.D | AU Chennai                                            | Optical Communication               | 05/11/2020 | 5.8   | Associate Professor | Professor           | 01/03/2022 | Regular | Yes |  | No |
| 10 | Dr P Saravanan       | XXXXXXX55G | Ph.D | AU Chennai                                            | Signal Processing                   | 28/08/2025 | 0.10  | Professor           | Professor           | 28/08/2025 | Regular | Yes |  | No |
| 11 | Dr R. Prabha         | XXXXXXX21P | Ph.D | AU Chennai                                            | Wireless Networks                   | 28/08/2025 | 0.10  | Professor           | Professor           | 28/08/2025 | Regular | Yes |  | No |
| 12 | Dr B.Panjavarnam     | XXXXXXX83E | Ph.D | AU Chennai                                            | Wireless Networks and Communication | 03/10/2005 | 20.9  | Assistant Professor | Associate Professor | 01/08/2011 | Regular | Yes |  | No |
| 13 | Dr V.Sasikala        | XXXXXXX68H | Ph.D | VIT                                                   | Optical Communication               | 27/01/2016 | 10.5  | Assistant Professor | Associate Professor | 01/08/2020 | Regular | Yes |  | No |
| 14 | Dr K.Moorthi         | XXXXXXX75C | Ph.D | AU Chennai                                            | Image Processing                    | 23/06/2022 | 4     | Assistant Professor | Associate Professor | 01/08/2023 | Regular | Yes |  | No |
| 15 | Dr D.Anita Daniel    | XXXXXXX24K | Ph.D | Sathyabama University                                 | Wireless Sensor Networks            | 22/05/2023 | 3.1   | Assistant Professor | Associate Professor | 01/08/2024 | Regular | Yes |  | No |
| 16 | Dr C.Alwin Vinifred  | XXXXXXX53F | Ph.D | AU Chennai                                            | Applied Electronics                 | 19/01/2011 | 15.5  | Assistant Professor | Associate Professor | 01/08/2022 | Regular | Yes |  | No |
| 17 | Dr C.N.Savithri      | XXXXXXX83D | Ph.D | AU Chennai                                            | Bio-medical modeling                | 13/06/2011 | 15.1  | Assistant Professor | Associate Professor | 01/08/2022 | Regular | Yes |  | No |
| 18 | Dr. G.Tony Santhosh  | XXXXXXX33B | Ph.D | AU Chennai                                            | Vehicular Adhoc Networks            | 21/07/2022 | 3.11  | Assistant Professor | Associate Professor | 01/08/2024 | Regular | Yes |  | No |
| 19 | Dr. G.Sudha          | XXXXXXX34R | Ph.D | B.S. Abdur Rahman Crescent Institute of Technology    | Wireless sensor networks            | 05/07/2002 | 24    | Assistant Professor | Associate Professor | 01/08/2012 | Regular | Yes |  | No |
| 20 | Dr N Anitha          | XXXXXXX56G | Ph.D | Kalasalingam Academy of Research and Education (KARE) | Medical Image Processing            | 22/07/2022 | 3.11  | Assistant Professor | Associate Professor | 01/08/2024 | Regular | Yes |  | No |

|    |                      |            |        |                       |                              |            |       |                     |                     |            |         |     |            |    |
|----|----------------------|------------|--------|-----------------------|------------------------------|------------|-------|---------------------|---------------------|------------|---------|-----|------------|----|
| 21 | Dr. P.S. Arthy       | XXXXXXX63B | Ph.D   | AU Chennai            | VLSI Image processing        | 28/08/2025 | 0.10  | Associate Professor | Associate Professor | 28/08/2025 | Regular | Yes |            | No |
| 22 | Dr S. Parameswari    | XXXXXXX73Q | Ph.D   | AU Chennai            | RF antenna design            | 28/08/2025 | 0.10  | Associate Professor | Associate Professor | 28/08/2025 | Regular | Yes |            | No |
| 23 | Dr A.R. Rajini       | XXXXXXX43E | Ph.D   | VEL's University      | RF Antenna Design            | 06/08/1997 | 28.11 | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 24 | Ms.S.Usha            | XXXXXXX75Q | M.E.   | AU Chennai            | Embedded system technologies | 01/06/2007 | 19.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 25 | Ms.N.Shivaanivarsha  | XXXXXXX90N | M.E.   | Sathyabama University | Applied Electronics          | 21/06/2007 | 19    | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 26 | Ms. G.Shanthakumari  | XXXXXXX82Q | M.E.   | AU Chennai            | Embedded system technologies | 01/06/2012 | 14.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 27 | Ms.V.A.Velvizhi      | XXXXXXX78F | M.E.   | AU Chennai            | Communication Systems        | 16/06/2008 | 18.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 28 | Ms. N. Nazeeya Anjum | XXXXXXX99E | M.E.   | AU Chennai            | Medical Electronics          | 06/06/2013 | 13.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 29 | Ms.K.Subhashini      | XXXXXXX45G | M.E.   | AU Chennai            | Medical Electronics          | 10/10/2007 | 18.9  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 30 | Ms.R.Chitra          | XXXXXXX89K | M.E.   | AU Chennai            | VLSI Design                  | 03/06/2011 | 15.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 31 | Mr.K.Srinivasan      | XXXXXXX76N | M.Tech | Sathyabama University | VLSI Design                  | 09/07/2012 | 14    | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 32 | Ms.N.Logeswari       | XXXXXXX95N | M.E.   | AU Chennai            | Embedded system technologies | 10/06/2013 | 13.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 33 | Ms.S.Rajalakshmi     | XXXXXXX56B | M.E.   | AU Chennai            | Computer Communication       | 01/09/2009 | 15.10 | Assistant Professor | Assistant Professor |            | Regular | No  | 01/07/2025 | No |
| 34 | Mr.K.Devi balan      | XXXXXXX17H | M.E.   | AU Chennai            | Communication Systems        | 03/06/2011 | 15.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 35 | Ms.S.Gayathri        | XXXXXXX96G | M.Tech | Bharath University    | Applied Electronics          | 01/10/2012 | 13.9  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 36 | Ms.V.Remya           | XXXXXXX66M | M.E.   | AU Chennai            | Communication Systems        | 13/06/2013 | 13.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 37 | Mr.T.Sivasakthi      | XXXXXXX85K | M.E.   | AU Coimbatore         | Applied Electronics          | 27/01/2016 | 10.5  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 38 | Ms.S. Saranya        | XXXXXXX96G | M.E.   | AU Chennai            | VLSI design                  | 27/01/2016 | 10.5  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 39 | Ms.S. Surya          | XXXXXXX98M | M.Tech | SRM University        | Communication Systems        | 16/06/2016 | 10.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 40 | Ms.B.Rajalakshmi     | XXXXXXX06M | M.E.   | AU Coimbatore         | Applied Electronics          | 16/06/2016 | 10.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |

|    |                       |            |        |                       |                                                  |            |      |                     |                     |            |         |     |            |    |
|----|-----------------------|------------|--------|-----------------------|--------------------------------------------------|------------|------|---------------------|---------------------|------------|---------|-----|------------|----|
| 41 | Ms.M. Shabana Parveen | XXXXXXX20A | M.E.   | AU Chennai            | Communication Systems                            | 15/06/2017 | 9.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 42 | Ms.G.Lakshmi          | XXXXXXX24A | M.E.   | AU Chennai            | Embedded system technologies                     | 06/08/2020 | 5.11 | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 43 | Ms.J. Sandhya         | XXXXXXX20D | M.E.   | AU Chennai            | Wireless Technology                              | 06/08/2020 | 5.11 | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 44 | Ms.A.Rashmi           | XXXXXXX34F | M.E.   | AU Chennai            | Applied Electronics                              | 06/08/2020 | 5.11 | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 45 | Ms.V.MyvizhiSelvi     | XXXXXXX98H | M.E.   | AU Chennai            | Wireless Technology                              | 06/08/2020 | 5.11 | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 46 | Ms.S.Bhuvaneswari     | XXXXXXX75Q | M.E.   | Sathyabama University | Embedded system technologies                     | 22/05/2023 | 2.3  | Assistant Professor | Assistant Professor |            | Regular | No  | 25/08/2025 | No |
| 47 | Dr P. Poornima        | XXXXXXX42P | Ph.D   | AU Chennai            | Cognitive Radio Networks                         | 07/06/2023 | 3.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 48 | Ms.M.Uma              | XXXXXXX61G | M.E.   | AU Coimbatore         | Communication Systems                            | 07/06/2023 | 3.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 49 | Ms.R.Tamezheneal      | XXXXXXX30Q | M.E.   | AU Chennai            | Communication Systems                            | 07/06/2023 | 3.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 50 | Dr K.Kayalvizhi       | XXXXXXX06K | Ph.D   | AU Chennai            | RF Antenna Design                                | 12/06/2023 | 3.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 51 | Ms.S.Lavanya Devi     | XXXXXXX18C | M.E.   | AU Chennai            | Power Electronics & Drives                       | 03/05/2024 | 2.2  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 52 | Ms.R. Gowri Manohari  | XXXXXXX32K | M.E.   | AU Chennai            | Communication Systems                            | 09/05/2024 | 2.2  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 53 | Dr N. Balaji          | XXXXXXX78E | Ph.D   | AU Chennai            | VLSI Design                                      | 01/06/2024 | 2.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 54 | Dr.S Alagu            | XXXXXXX61L | Ph.D   | AU Chennai            | Biomedical Image Processing and Machine Learning | 04/11/2024 | 1.8  | Assistant Professor | Associate Professor | 04/11/2025 | Regular | Yes |            | No |
| 55 | Mr. H. Arun           | XXXXXXX41R | M.E.   | AU Chennai            | Communication Systems                            | 01/04/2025 | 1.3  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 56 | Mr. Vairamanikandan G | XXXXXXX53H | M.E.   | AU Chennai            | Communication Systems                            | 01/04/2025 | 1.3  | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 57 | Dr. R. Ramya          | XXXXXXX55B | Ph.D   | AU Chennai            | Optical Communication                            | 28/08/2025 | 0.10 | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |
| 58 | Ms J. Lurdhumary      | XXXXXXX24P | M.Tech | AU Chennai            | Nanoscience and Technology                       | 28/08/2025 | 0.10 | Assistant Professor | Assistant Professor |            | Regular | Yes |            | No |

|    |                   |            |      |                    |                             |            |       |                     |                     |            |         |    |            |    |
|----|-------------------|------------|------|--------------------|-----------------------------|------------|-------|---------------------|---------------------|------------|---------|----|------------|----|
| 59 | Mr.S.Vinoth Kumar | XXXXXXX82M | M.E. | AU Chennai         | VLSI Design                 | 02/11/2020 | 3.10  | Assistant Professor | Assistant Professor |            | Regular | No | 18/09/2024 | No |
| 60 | Dr.P. Prakash     | XXXXXXX21K | Ph.D | AU Chennai         | VLSI Design                 | 20/06/2007 | 16.11 | Assistant Professor | Associate Professor | 02/08/2010 | Regular | No | 31/05/2024 | No |
| 61 | Ms.S. Kohila      | XXXXXXX35H | M.E. | AU Chennai         | Avionics                    | 03/06/1996 | 28    | Assistant Professor | Assistant Professor |            | Regular | No | 31/05/2024 | No |
| 62 | Ms.M. Methini     | XXXXXXX90D | M.E. | AU Chennai         | Applied Electronics         | 21/06/2007 | 16.11 | Assistant Professor | Assistant Professor |            | Regular | No | 31/05/2024 | No |
| 63 | Dr S Balamurugan  | XXXXXXX52R | Ph.D | Calicut University | Nano Science and technology | 19/11/2020 | 2.10  | Assistant Professor | Associate Professor | 01/08/2022 | Regular | No | 05/10/2023 | No |
| 64 | Dr M. Jenath      | XXXXXXX73F | Ph.D | AUChennai          | Antenna Design              | 27/06/2022 | 1.5   | Assistant Professor | Assistant Professor |            | Regular | No | 26/12/2023 | No |
| 65 | Mr.K.Gopi         | XXXXXXX88C | M.E. | AU Chennai         | VLSI Design                 | 12/07/2022 | 1     | Assistant Professor | Assistant Professor |            | Regular | No | 07/08/2023 | No |

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

| Sr.No | Name of the Faculty    | PAN No.    | APAAR faculty ID*(if any) | Highest degree | University                                     | Area of Specialization                      | Date of Joining in this Institution | Experience in years in current institute | Designation at Time Joining in this Institution | Present Designation | The date on which Designated as Professor/ Associate Professor if any | Nature of Association (Regular/ Contract/ Ad hoc) | Currently Associated (Y/N) | In case of NO, Date of Leaving |
|-------|------------------------|------------|---------------------------|----------------|------------------------------------------------|---------------------------------------------|-------------------------------------|------------------------------------------|-------------------------------------------------|---------------------|-----------------------------------------------------------------------|---------------------------------------------------|----------------------------|--------------------------------|
| 1     | Dr. K.Renganathan      | XXXXXXX79K | XXXXXXXXXX895             | Ph.D           | SRM UNIVERSITY                                 | FAULT DIAGNOSIS AND FAULT TOLERANCE CONTROL | 29/06/2006                          | 20                                       | Lecturer                                        | Professor           | 02/01/2017                                                            | Regular                                           | Yes                        |                                |
| 2     | Dr.M.NALINI            | XXXXXXX63A | XXXXXXXXXX687             | Ph.D           | SCSVMV UNIVERSITY                              | BIOMEDICAL ENGINEERING                      | 03/06/2010                          | 16.1                                     | Assistant Professor                             | Professor           | 01/06/2019                                                            | Regular                                           | Yes                        |                                |
| 3     | Dr.S.DURGADEVI         | XXXXXXX30A | XXXXXXXXXX809             | Ph.D           | ANNA UNIVERSITY                                | POWER ELECTRONICS                           | 02/05/2011                          | 15.2                                     | Assistant Professor                             | Professor           | 01/01/2024                                                            | Regular                                           | Yes                        |                                |
| 4     | Dr.K.THIRUPURA SUNDARI | XXXXXXX73E | XXXXXXXXXX834             | Ph.D           | ANNA UNIVERSITY                                | POWER ELECTRONICS                           | 15/06/2009                          | 17.1                                     | Assistant Professor                             | Associate Professor | 01/06/2017                                                            | Regular                                           | Yes                        |                                |
| 5     | Dr.B.RAJAPANDIAN       | XXXXXXX43E | XXXXXXXXXX196             | Ph.D           | SATHYABAMA UNIVERSITY                          | POWER ELECTRONICS                           | 02/01/2009                          | 17.6                                     | Assistant Professor                             | Associate Professor | 02/01/2017                                                            | Regular                                           | Yes                        |                                |
| 6     | Dr.K.ANBUMANI          | XXXXXXX34A | XXXXXXXXXX381             | Ph.D           | SATHYABAMA INSTITUTE OF TECHNOLOGY AND SCIENCE | PROCESS CONTROL AND INSTRUMENTATION         | 10/06/2010                          | 16.1                                     | Assistant Professor                             | Associate Professor | 02/01/2017                                                            | Regular                                           | Yes                        |                                |
| 7     | Ms.T.MANGAYARKARASI    | XXXXXXX13A | XXXXXXXXXX963             | M.E.           | Sathyabama Institute of Technology and Science | ELECTRONICS & CONTROL                       | 20/11/2000                          | 25.8                                     | Assistant Professor                             | Assistant Professor |                                                                       | Regular                                           | Yes                        |                                |
| 8     | Mr. R. CHITHRAKKANNAN  | XXXXXXX60R | XXXXXXXXXX375             | M.Tech         | SASTRA                                         | CONTROL AND INSTRUMENTATION                 | 15/12/2003                          | 22.7                                     | Assistant Professor                             | Assistant Professor |                                                                       | Regular                                           | Yes                        |                                |

|    |                     |            |               |        |                                                |                                     |            |       |                     |                     |            |         |     |            |
|----|---------------------|------------|---------------|--------|------------------------------------------------|-------------------------------------|------------|-------|---------------------|---------------------|------------|---------|-----|------------|
| 9  | Ms. S. GOWRISHWARI  | XXXXXXX88L | XXXXXXXXXX694 | M.Tech | AU CHENNAI                                     | MEDICAL ELECTRONICS                 | 07/10/2005 | 20.9  | Assistant Professor | Assistant Professor |            | Regular | Yes |            |
| 10 | Ms. B. UMAMAHESWARI | XXXXXXX40L | XXXXXXXXXX720 | M.E.   | AU CHENNAI                                     | INSTRUMENTATION ENGINEERING         | 09/06/2010 | 16.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            |
| 11 | Mr. R. ILAYARAJA    | XXXXXXX66R | XXXXXXXXXX332 | M.E.   | Sathyabama Institute of Technology and Science | ELECTRONICS AND CONTROL             | 01/10/2012 | 13.9  | Assistant Professor | Assistant Professor |            | Regular | Yes |            |
| 12 | Dr. K. MOHAN RAJ    | XXXXXXX13E | XXXXXXXXXX633 | Ph.D   | ANNA UNIVERSITY                                | CONTROL AND INSTRUMENTATION         | 16/06/2016 | 8.11  | Assistant Professor | Assistant Professor |            | Regular | No  | 31/05/2025 |
| 13 | Dr. B. MEENAKSHI    | XXXXXXX88Q | XXXXXXXXXX887 | Ph.D   | AU CHENNAI                                     | Wireless Sensor Networks            | 01/06/2024 | 1     | Professor           | Professor           | 01/06/2024 | Regular | No  | 30/06/2025 |
| 14 | Dr. P. SIVAPERUMAL  | XXXXXXX55H | XXXXXXXXXX993 | Ph.D   | AU CHENNAI                                     | Power Electronics and Drives        | 01/06/2024 | 1     | Associate Professor | Associate Professor | 01/06/2024 | Regular | No  | 30/06/2025 |
| 15 | Dr. B.SUMATHY       | XXXXXXX31G | XXXXXXXXXX262 | Ph.D   | AU CHENNAI                                     | MEDICAL IMAGE PROCESSING            | 21/06/2007 | 17    | Assistant Professor | Professor           | 01/06/2019 | Regular | No  | 24/06/2024 |
| 16 | Mr. R. KARTHIKEYAN  | XXXXXXX02L | XXXXXXXXXX336 | M.E.   | Sathyabama Institute of Technology and Science | ELECTRONICS & CONTROL               | 21/12/2011 | 12.5  | Assistant Professor | Assistant Professor |            | Regular | No  | 31/05/2024 |
| 17 | Ms. G. JAYANTHI     | XXXXXXX13C | XXXXXXXXXX098 | M.E.   | ANNA UNIVERSITY                                | APPLIED ELECTRONICS                 | 02/07/2008 | 15.11 | Assistant Professor | Assistant Professor |            | Regular | No  | 31/05/2024 |
| 18 | Mr. N. BALAJI       | XXXXXXX78E | XXXXXXXXXX833 | M.Tech | ANNA UNIVERSITY                                | VLSI DESIGN                         | 16/06/2016 | 7.11  | Assistant Professor | Assistant Professor |            | Regular | No  | 31/05/2024 |
| 19 | Dr.T.Sathies Kumar  | XXXXXXX35D | XXXXXXXXXX429 | Ph.D   | AU CHENNAI                                     | Biomedical Engineering              | 01/06/2011 | 15.1  | Assistant Professor | Associate Professor | 01/08/2022 | Regular | Yes |            |
| 20 | Dr.S.Subha          | XXXXXXX67C | XXXXXXXXXX639 | Ph.D   | AU CHENNAI                                     | Digital Electronics & Communication | 19/12/2011 | 14.7  | Assistant Professor | Associate Professor | 01/08/2022 | Regular | Yes |            |
| 21 | Ms.K.Srividya       | XXXXXXX53P | XXXXXXXXXX956 | M.E.   | ANNA UNIVERSITY                                | Applied Electronics                 | 10/06/2010 | 16.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            |
| 22 | Ms.T.Tamilselvi     | XXXXXXX31B | XXXXXXXXXX972 | M.E.   | Sathyabama Institute of Technology and Science | Applied Electronics                 | 01/06/2012 | 14.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            |
| 23 | Mr.R.Premkumar      | XXXXXXX89R | XXXXXXXXXX423 | M.E.   | ANNAMALAI UNIVERSITY                           | Process Control and Instrumentation | 10/06/2010 | 16.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            |
| 24 | Dr.B.Puviyarasi     | XXXXXXX80G | XXXXXXXXXX373 | Ph.D   | AU CHENNAI                                     | Control and Instrumentation         | 01/06/2012 | 14.1  | Assistant Professor | Associate Professor | 01/08/2024 | Regular | Yes |            |
| 25 | Dr.R.Gayathiri      | XXXXXXX23G | XXXXXXXXXX750 | Ph.D   | AU CHENNAI                                     | Image Processing                    | 31/05/2013 | 13.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            |
| 26 | Mr.K.Madhanamohan   | XXXXXXX81A | XXXXXXXXXX536 | M.E.   | AU CHENNAI                                     | Applied Electronics                 | 10/06/2010 | 16.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            |
| 27 | Ms.N.Nithya Rani    | XXXXXXX71A | XXXXXXXXXX515 | M.E.   | AU CHENNAI                                     | Control and Instrumentation         | 16/06/2016 | 10.1  | Assistant Professor | Assistant Professor |            | Regular | Yes |            |

|    |                    |             |               |      |                                                         |                                 |            |       |                        |                        |            |         |     |            |
|----|--------------------|-------------|---------------|------|---------------------------------------------------------|---------------------------------|------------|-------|------------------------|------------------------|------------|---------|-----|------------|
| 28 | Mr. R. KARTHIKEYAN | XXXXXXXX02L | XXXXXXXXXX336 | M.E. | Sathyabama<br>Institute of<br>Technology<br>and Science | ELECTRONICS &<br>CONTROL        | 01/07/2025 | 0.11  | Assistant<br>Professor | Assistant<br>Professor |            | Regular | No  | 02/06/2026 |
| 29 | Ms. G. JAYANTHI    | XXXXXXXX13C | XXXXXXXXXX098 | M.E. | Anna<br>University                                      | Applied Electronics             | 01/07/2025 | 1     | Assistant<br>Professor | Assistant<br>Professor |            | Regular | Yes |            |
| 30 | Ms.S.Premalatha    | XXXXXXXX73A | XXXXXXXXXX508 | M.E. | AU CHENNAI                                              | COMPUTER AND<br>COMMUNICATION   | 01/11/2010 | 14.8  | Assistant<br>Professor | Assistant<br>Professor |            | Regular | No  | 30/06/2025 |
| 31 | Dr. K. MOHAN RAJ   | XXXXXXXX13E | XXXXXXXXXX633 | Ph.D | AU CHENNAI                                              | PROCESS<br>CONTROL              | 01/07/2025 | 1     | Assistant<br>Professor | Associate<br>Professor | 01/08/2025 | Regular | Yes |            |
| 32 | Mr.M.Subramanian   | XXXXXXXX35R | XXXXXXXXXX807 | M.E. | AU CHENNAI                                              | COMPUTER AND<br>COMMUNICATION   | 07/07/2011 | 13.11 | Assistant<br>Professor | Assistant<br>Professor |            | Regular | No  | 30/06/2025 |
| 33 | Dr.C.Komathi       | XXXXXXXX42P | NA            | Ph.D | AU CHENNAI                                              | Power Electronics<br>and Drives | 01/06/2012 | 12.1  | Assistant<br>Professor | Professor              | 01/03/2022 | Regular | No  | 01/07/2024 |

**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 Department3

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

| Description                                                       | CAY(2025-26) | CAYm1 (2024-25) | CAYm2 (2023-24) |
|-------------------------------------------------------------------|--------------|-----------------|-----------------|
| UG1.B                                                             | 251          | 244             | 248             |
| UG1.C                                                             | 244          | 248             | 249             |
| UG1.D                                                             | 248          | 249             | 249             |
| <b>UG1: Electronics &amp; Communication Engineering</b>           | <b>743</b>   | <b>741</b>      | <b>746</b>      |
| UG2.B                                                             | 61           | 33              | 31              |
| UG2.C                                                             | 33           | 31              | 32              |
| UG2.D                                                             | 31           | 32              | 30              |
| <b>UG2: Electronics Instrumentation &amp; Control Engineering</b> | <b>125</b>   | <b>96</b>       | <b>93</b>       |
| UG3.B                                                             | 91           | 96              | 90              |

| Description                                                                         | CAY(2025-26)       | CAYm1 (2024-25)    | CAYm2 (2023-24)    |
|-------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|
| UG3.C                                                                               | 96                 | 90                 | 91                 |
| UG3.D                                                                               | 90                 | 91                 | 93                 |
| <b>UG3: Electronics &amp; Instrumentation Engineering</b>                           | <b>277</b>         | <b>277</b>         | <b>274</b>         |
| PG1.A                                                                               | 6                  | 6                  | 6                  |
| PG1.B                                                                               | 6                  | 6                  | 12                 |
| <b>PG1: Communication Systems</b>                                                   | <b>12</b>          | <b>12</b>          | <b>18</b>          |
| PG2.A                                                                               | 6                  | 6                  | 6                  |
| PG2.B                                                                               | 6                  | 6                  | 12                 |
| <b>PG2: Defence Technology</b>                                                      | <b>12</b>          | <b>12</b>          | <b>18</b>          |
| PG3.A                                                                               | 6                  | 6                  | 6                  |
| PG3.B                                                                               | 6                  | 6                  | 12                 |
| <b>PG3: Embedded Systems Technologies</b>                                           | <b>12</b>          | <b>12</b>          | <b>18</b>          |
| DS=Total no. of students in all UG and PG programs in the Department                | 779                | 777                | 800                |
| AS=Total no. of students of all UG and PG programs in allied departments            | 402                | 373                | 367                |
| S=Total no. of students in the Department (DS) and allied departments (AS)          | <b>S1= 1181</b>    | <b>S2= 1150</b>    | <b>S3= 1167</b>    |
| DF=Total no. of faculty members in the Department                                   | 56                 | 49                 | 50                 |
| AF= Total no. of faculty members in the allied Departments                          | 23                 | 25                 | 28                 |
| F=Total no. of faculty members in the Department (DF) and allied Departments (AF)   | <b>F1= 79</b>      | <b>F2= 74</b>      | <b>F3= 78</b>      |
| FF=The faculty members in F who have a 100% teaching load in the first-year courses | 0                  | 0                  | 0                  |
| Student Faculty Ratio (SFR)=S/(F-FF)                                                | <b>SFR1= 14.95</b> | <b>SFR2= 15.54</b> | <b>SFR3= 14.96</b> |
| Average SFR for 3 years                                                             | <b>SFR= 15.15</b>  |                    |                    |

### C3. Faculty Qualification

- Faculty qualification index (FQI) =  $2.5 * [(10X + 4Y)/RF]$  where
- X=No. of faculty members with Ph.D. degree or equivalent as per AICTE/UGC norms.
- Y=No. of faculty members with M. Tech. or ME degree or equivalent as per AICTE/ UGC norms.
- RF=No. of required faculty in the Department including allied Departments to adhere to the 20:1 Student-Faculty ratio, with calculations based on both student numbers and faculty requirements as per section C2 of this documents: (RF=S/20).

Table No.C3.1: Faculty qualification.

| Year           | X  | Y  | RF    | $FQ = 2.5 \times [(10X + 4Y) / RF ]$ |
|----------------|----|----|-------|--------------------------------------|
| 2025-26(CAY)   | 35 | 44 | 59.00 | 22.29                                |
| 2024-25(CAYm1) | 27 | 47 | 57.00 | 20.09                                |
| 2023-24(CAYm2) | 24 | 54 | 58.00 | 19.66                                |

### C4. Faculty Cadre Proportion

- Faculty Cadre Proportion is 1(RF1): 2(RF2): 6(RF3)
- RF1= No. of Professors required =  $1/9 * \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per C2 of this documents.}$
- RF2= No. of Associate Professors required =  $2/9 * \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per section C2 of this documents.}$

- RF3= No. of Assistant Professors required = 6/9 \* 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 | 7.00         | 14.00         | 13.00                | 18.00         | 39.00                | 47.00         |
| 2024-25 | 6.00         | 13.00         | 13.00                | 13.00         | 38.00                | 48.00         |
| 2023-24 | 6.00         | 13.00         | 13.00                | 8.00          | 39.00                | 57.00         |
| Average | RF1=6.33     | AF1=13.33     | RF2=13.00            | AF2=13.00     | RF2=38.67            | AF2=50.67     |

**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.

(CAYm1)

| S.No | Name of the Person | Designation | Organization     | Name of the Course                | No. of hours handled |
|------|--------------------|-------------|------------------|-----------------------------------|----------------------|
| 1    | Dr.K.Swaminathan   | Professor   | IGCAR, Kalpakkam | Project Phase I, Project Phase II | 65.00                |

(CAYm2)

| S.No | Name of the Person | Designation | Organization     | Name of the Course                | No. of hours handled |
|------|--------------------|-------------|------------------|-----------------------------------|----------------------|
| 1    | Dr.K.Swaminathan   | Professor   | IGCAR, Kalpakkam | Project Phase I, Project Phase II | 65.00                |

(CAYm3)

| S.No | Name of the Person | Designation | Organization     | Name of the Course                | No. of hours handled |
|------|--------------------|-------------|------------------|-----------------------------------|----------------------|
| 1    | Dr.K.Swaminathan   | Professor   | IGKAR, Kalpakkam | Live in Lab-III, Project Phase II | 72.00                |

**C6. Academic Research**

Table No. C6.1: Faculty publication details.

| S.No. | Item                                             | 2024-25<br>(CAYm1) | 2023-24<br>(CAYm2) | 2022-23<br>(CAYm3) |
|-------|--------------------------------------------------|--------------------|--------------------|--------------------|
| 1     | No. of peer reviewed journal papers published    | 18                 | 17                 | 14                 |
| 2     | No. of peer reviewed conference papers published | 131                | 106                | 102                |
| 3     | No. of books/book chapters published             | 19                 | 6                  | 3                  |

**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)<br>i.e. 15,25,000=15.25 |
|-----------------------|--------------------|------------------------------------------------|-------------------------------------------------------------------------------------------|----------------------------|-------------------------|--------------------------------------|
| Dr. S. Brindha        | Ms.G.Gayathri      | ECE                                            | Study and comparative analysis of functional and safety requirements of ocular prosthesis | BIS                        | 6 Months                | 7.00                                 |
| Dr B Panjavarnam      |                    | ECE                                            | Smart and Sustainable Forest                                                              | IEEE EPICS                 | 1 Year                  | 5.40                                 |
| Dr K Lakshmi Joshitha |                    | ECE                                            | MultimodalL Smart Glove for enhancing the livelihood of disabled Children                 | IEEE EPICS                 | 1 Year                  | 4.30                                 |
| Dr J Arunarasi        |                    | ECE                                            | Multi-Carrier Signal Amplification for rural connectivity                                 | IEEE SIGHT                 | 1 Year                  | 4.15                                 |
|                       |                    |                                                |                                                                                           |                            |                         | Amount received (Rs.):20.85          |

## (CAYm2)

| PI Name      | Co-PI names if any | Name of the Dept., where project is sanctioned | Project Title*                                                                                     | Name of the Funding agency                           | Duration of the project | Amount(Lacs)<br>i.e. 15,25,000=15.25 |
|--------------|--------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------|-------------------------|--------------------------------------|
| Dr S Sumathi |                    | ECE                                            | Comparative study of Image Processing techniques for measuring in-situ bow of FBR fuel subassembly | BRNS Department of Atomic Energy Government of India | 3 Years                 | 24.49                                |
| Dr S Sumathi |                    | ECE                                            | Vertical Tower farming                                                                             | IEEE SIGHT                                           | 1 Year                  | 3.16                                 |
|              |                    |                                                |                                                                                                    |                                                      |                         | Amount received (Rs.):27.65          |

## (CAYm3)

| 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)<br>i.e. 15,25,000=15.25 |
|------------|--------------------|------------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------|-------------------------|--------------------------------------|
| Dr.E.Priya | Dr.J.ThamilSelvi   | ECE                                            | An Artificial Intelligence(AI) enabled comprehensive and portable public health care screening system | AICTE - RPS                | 3 Years                 | 18.18                                |
|            |                    |                                                |                                                                                                       |                            |                         | Amount received (Rs.):18.18          |

**Total Amount (Lacs) Received for the Past 3 Years: 66.68**

**Note\*:**

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

**C8. Consultancy Work**

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

(CAYm1)

| PI Name         | Co-PI names if any                     | Name of the Dept., where project is sanctioned | Project Title*                                                                                         | Name of the Funding agency          | Duration of the project | Amount(Lacs)<br>i.e. 15,25,000=15.25 |
|-----------------|----------------------------------------|------------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------|--------------------------------------|
| Dr S. Sumathi   |                                        | ECE                                            | Smart Sensors for Smart City Environmental Monitoring                                                  | MIT Square Services Private Limited | 6 Months                | 0.20                                 |
| Dr M. Baskaran  |                                        | ECE                                            | Design and implementation of Dual axis iFOG based rate gyro unit for armored vehicle gun stabilization | Armor Grandeur Pvy. Ltd. Chennai    | 18 Months               | 7.20                                 |
| Dr C N Savithri | Ms. K. Subhashini Ms. N. Nazeeya Anjum | ECE                                            | Development of Robotics Kit                                                                            | LMES Startup for R&D work           | 1 Year                  | 1.24                                 |
|                 |                                        |                                                |                                                                                                        |                                     |                         | Amount received (Rs.):8.64           |

(CAYm2)

| PI Name          | Co-PI names if any                     | Name of the Dept., where project is sanctioned | Project Title*                        | Name of the Funding agency          | Duration of the project | Amount(Lacs)<br>i.e. 15,25,000=15.25 |
|------------------|----------------------------------------|------------------------------------------------|---------------------------------------|-------------------------------------|-------------------------|--------------------------------------|
| Dr C N Savithri  | Ms. K. Subhashini Ms. N. Nazeeya Anjum | ECE                                            | Development of Robots                 | LMES Startup for R&D work           | 1 Year                  | 7.09                                 |
| Dr S. Sumathi    |                                        | ECE                                            | Design of Smart Virus Detection Kit   | MIT Square Services Private Limited | 3 Months                | 0.30                                 |
| Dr S. Sumathi    |                                        | ECE                                            | Automatic hand sanitizer (touch-free) | Raj Square Charity Foundatio        | 3 Months                | 0.20                                 |
| Dr S. Sumathi    |                                        | ECE                                            | Design of Smart Ventilator            | MIT Square Services Private Limited | 3 Months                | 0.30                                 |
| Dr S. Sumathi    |                                        | ECE                                            | Dementia                              | MIT Square Services Private Limited | 3 Months                | 0.10                                 |
| Mr T. Sivasakthi |                                        | ECE                                            | Data Analyst                          | Pg HR Consulting                    | 2 Months                | 0.10                                 |
|                  |                                        |                                                |                                       |                                     |                         | Amount received (Rs.):8.09           |

(CAYm3)

| 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)<br>i.e. 15,25,000=15.25 |
|-----------------|----------------------------------------|------------------------------------------------|-----------------------------------------------|-------------------------------------|-------------------------|--------------------------------------|
| Dr C N Savithri | Ms. K. Subhashini Ms. N. Nazeeya Anjum | ECE                                            | Development of Robotics Kit                   | LMES Startup for R&D work           | 1 Year                  | 0.07                                 |
| Dr S. Sumathi   |                                        | ECE                                            | Automatic Health Machine                      | MIT Square Services Private Limited | 3 Months                | 0.10                                 |
| Ms. S. Surya    |                                        | ECE                                            | Automated conveyor systems                    | ELLONE ENGINEERS & ERECTORS         | 3 Months                | 0.10                                 |
| Dr S. Sumathi   |                                        | ECE                                            | Solar Powered IOT Enabled Sanitizer Dispenser | MIT Square Services Private Limited | 3 Months                | 0.10                                 |
| Dr S. Sumathi   |                                        | ECE                                            | IOT Based UV-C Disinfecting Device            | Raj Square Charity Foundation       | 3 Months                | 0.10                                 |
|                 |                                        |                                                |                                               |                                     |                         | Amount received (Rs.):0.47           |

**Total amount (Lacs) received for the past 3 years: 17.20**

**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)<br>i.e. 15,25,000=15.25 | Amount Utilized(Lacs)<br>i.e. 15,25,000=15.25 | Outcomes of the project                                                                                    |
|-------------------------|-------------------------------------------------------------------------------------------|-------------------------|--------------------------------------|-----------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Ms. S. Surya            | Development of STEM Lab                                                                   | 3 Months                | 1.11                                 | 1.11                                          | Development of a STEM Lab to promote hands on learning, innovation and research among students and faculty |
| Dr.C.N.Savithri         | Deepfake Detection and deletion system integrating CNN in GAN for Social media Platforms  | 1 Month                 | 0.09                                 | 0.09                                          | Promoting an intellectual property (IPR) culture                                                           |
| Dr.J.Thamilselvi        | SOS MED Bracelet An intelligent device to predict the onset of seizures                   | 1 Month                 | 0.09                                 | 0.09                                          | Promoting an intellectual property (IPR) culture                                                           |
| Ms.S.Lavanyadevi        | Blockchain Enhanced Smart Grid with Real time Energy monitoring and secure energy trading | 1 Month                 | 0.09                                 | 0.09                                          | Promoting an intellectual property (IPR) culture                                                           |
| Ms.N.Nazeeya Anjum      | Intelli Home A Smart Predictive Maintenance System for Household Utilities and activities | 1 Month                 | 0.09                                 | 0.09                                          | Promoting an intellectual property (IPR) culture                                                           |
| Dr. K. Lakshmi Joshitha | FATIGUE IDENTIFICATION IN DRIVING SYSTEM USING LEARNING ALGORITHM                         | 1 Month                 | 0.09                                 | 0.09                                          | Promoting an intellectual property (IPR) culture                                                           |
| Ms.R.Gowri Manohari     | CRIMSON EYE-FACIAL RECOGNITION SECURITY CAMERA TO IDENTIFY CRIMINALS                      | 1 Month                 | 0.09                                 | 0.09                                          | Promoting an intellectual property (IPR) culture                                                           |
| Dr.S.Sumathi            | PORTABLE NARCOTIC DRUG DETECTOR                                                           | 1 Month                 | 0.09                                 | 0.09                                          | Promoting an intellectual property (IPR) culture                                                           |
| Dr.S.Sumathi            | SMART VEST:A SMART WEARABLE SOLUTION FOR ENHANCED CARE AND SAFETY IN DEMENTIA PATIENTS    | 1 Month                 | 0.09                                 | 0.09                                          | Promoting an intellectual property (IPR) culture                                                           |
| Dr.K.Kayalvizhi         | ENVIROCARE:REAL TIME VEHICLE EMISSION MONITORING                                          | 1 Month                 | 0.09                                 | 0.09                                          | Promoting an intellectual property (IPR) culture                                                           |
| Ms.R.Chitra             | AQUAVISION 14.1-UNDERWATER POLLUTION DETECTION AND REDUCTION SYSTEM                       | 1Month                  | 0.09                                 | 0.09                                          | Promoting an intellectual property (IPR) culture                                                           |
|                         |                                                                                           |                         | Amount received (Rs.): 2.01          |                                               |                                                                                                            |

(CAYm2)

| Faculty name         | Project title/ Support for Activity                             | Duration of the project | Amount(Lacs)<br>i.e. 15,25,000=15.25 | Amount Utilized(Lacs)<br>i.e. 15,25,000=15.25 | Outcomes of the project                                                                                    |
|----------------------|-----------------------------------------------------------------|-------------------------|--------------------------------------|-----------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Mr. S. Vinoth Kumar  | Development of STEM Lab                                         | 3 Months                | 5.53                                 | 5.53                                          | Development of a STEM Lab to promote hands on learning, innovation and research among students and faculty |
| Dr. J. Thamilselvi   | MSME                                                            | 6 Months                | 2.10                                 | 2.10                                          | Start up                                                                                                   |
| Dr. S. Sumathi       | An IoT Based Women Safety Device                                | 3 Months                | 0.09                                 | 0.09                                          | Promoting an intellectual property (IPR) culture                                                           |
| Ms. S. Gayathri      | Automata Bin                                                    | 3 Months                | 0.09                                 | 0.09                                          | Promoting an intellectual property (IPR) culture                                                           |
| Ms. S. Gayathri      | Design and Development of a Yolov8 Based Real time Surveillance | 3 Months                | 0.09                                 | 0.09                                          | Promoting an intellectual property (IPR) culture                                                           |
| Dr. M. Baskaran      | A Jaw Bone Conductive hearing device                            | 3 Months                | 0.05                                 | 0.05                                          | Promoting an intellectual property (IPR) culture                                                           |
| Ms. S. Gayathri      | Novel Communication System for Deaf and Dumb using Gestures     | 3 Months                | 0.05                                 | 0.05                                          | Promoting an intellectual property (IPR) culture                                                           |
| Mr. G. Tony Santhosh | Automated Mine Haulage System and Its Process                   | 3 Months                | 0.05                                 | 0.05                                          | Promoting an intellectual property (IPR) culture                                                           |
|                      |                                                                 |                         | Amount received (Rs.):<br>8.05       |                                               |                                                                                                            |

(CAYm3)

| Faculty name          | Project title/ Support for Activity               | Duration of the project | Amount(Lacs)<br>i.e. 15,25,000=15.25 | Amount Utilized(Lacs)<br>i.e. 15,25,000=15.25 | Outcomes of the project                                            |
|-----------------------|---------------------------------------------------|-------------------------|--------------------------------------|-----------------------------------------------|--------------------------------------------------------------------|
| Ms. N. Shivaanivarsha | Design and Development of home automation         | 3 Months                | 0.05                                 | 0.05                                          | Research innovation in smart home technologies                     |
| Dr. C. Alwin Vinifred | Design and Development of Bio Gas from food waste | 6 Months                | 0.43                                 | 0.43                                          | Promoting renewable energy research, sustainable waste management. |
| Ms. N. Logeswari      | Design and Development of Bio Gas from food waste | 6 Months                | 0.30                                 | 0.30                                          | Sustainable waste management, and prototype development.           |
|                       |                                                   |                         | Amount received (Rs.):<br>0.78       |                                               |                                                                    |

Total amount (Lacs) received for the past 3 years : 10.84

## 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  | ELECTRONICS LABORATORY -2023-24-ODD-R programming with lab         | 62 | PC with R Studio                                                                                                                              | 40%  | Mr NandaKumar.D   | Lab Technician    | DECE     |
| 2  | ELECTRONICS LABORATORY -2023-24-EVEN-PCB Design Lab, Electronics   | 62 | Hand Drilling machine, Soldering guns, PCs with Layout design software, DSO, Function generator, Dual DRS, Digital Multimeter, PC with PSpice | 80%  | Mr.NandaKumar.D   | Lab Technician    | DECE     |
| 3  | COMMUNICATION LABORATORY -2023-24-ODD-Communication System         | 30 | Kits for Signal Sampling, TDM, AM, FM, PCM, DM and Line Coding Schemes, DSO, PCs with MATLAB Software                                         | 80%  | Mr Tamilselvam R  | Lab Technician    | DECE     |
| 4  | COMMUNICATION LABORATORY -2023-24-EVEN-Circuits & Devices Lab      | 60 | DSO, Ammeter, Voltmeter, Function generator, RPS                                                                                              | 40%  | Mr Tamilselvam R  | Lab Technician    | DECE     |
| 5  | MICROPROCESSOR & MICROCONTROLLER LABORATORY-                       | 15 | Soldering guns, Multimeter, DSO, Function generator, Digital Trainer Kit                                                                      | 100% | Mr Nithiyandam P  | Lab Technician    | DECE     |
| 6  | INTEGRATED CIRCUITS LABORATORY -2023-24-ODD-Digital                | 31 | Digital Trainer Kit                                                                                                                           | 80%  | Mr Ramnath S      | Lab Technician    | DECE     |
| 7  | INTEGRATED CIRCUITS LABORATORY -2023-24-EVEN-                      | 62 | Soldering guns, Multimeter, DSO, Function generator, Digital Trainer Kit, PC with Pspice                                                      | 80%  | Mr Ramnath S      | Lab Technician    | DECE     |
| 8  | OPTICAL & MICROWAVE LABORATORY-2023-24-ODD-Advanced                | 30 | SDR Optical fiber trainer kit - LED, PIN PD, Numerical APerture MM/SM Glass and plastic fiber patch cords, Microwave Bench setup              | 80%  | Ms Meenakshi R    | Lab Technician    | DECE     |
| 9  | OPTICAL & MICROWAVE LABORATORY-2023-24-EVEN- Antenna               | 30 | Microwave signal source Transmitting/Receiving antenna test bench, Antenna – Helical, Broadside, End-fire, Biconical, Horn, Yagi-Uda, etc.    | 80%  | Ms Meenakshi R    | Lab Technician    | DECE     |
| 10 | DIGITAL SIGNAL PROCESSING LABORATORY-2023-24-ODD-Artificial        | 60 | PC with Prolog software, PC with MATLAB, DSP Processor kit, DSO                                                                               | 100% | Mr Sivaprasad T H | System Programmer | B.E(CSE) |
| 11 | DIGITAL SIGNAL PROCESSING LABORATORY-2023-24-EVEN-                 | 31 | LAN trainer kit, PC with NS2 and JAVA netbeans JDK                                                                                            | 80%  | Mr Sivaprasad T H | System Programmer | B.E(CSE) |
| 12 | VLSI LABORATORY-2023-24-ODD-VLSI Lab                               | 31 | PC with Xilinx Software, FPGA Board                                                                                                           | 80%  | Mr Anabunathan U  | Lab Technician    | DECE     |
| 13 | VLSI LABORATORY-2023-24-EVEN-Microcontroller& Embedded system Lab  | 31 | 8086, 8051 Kit, Interface Board – Traffic light, Stepper motor, LED, LCD, PWM, ADC & DAC, PC with MATLAB Software                             | 40%  | Mr Anabunathan U  | Lab Technician    | DECE     |
| 14 | EMBEDDED LABORATORY -2023-24-ODD-Discrete Time Signal Processing   | 62 | PC with MATLAB, DSP Processor kit, DSO                                                                                                        | 10%  | Mr Gopi N         | Lab Technician    | DECE     |
| 15 | EMBEDDED LABORATORY -2023-24-EVEN-Microcontroller& Embedded        | 31 | 8086, 8051 Kit, Interface Board – Traffic light, Stepper motor, LED, LCD, PWM, ADC & DAC, PC with MATLAB Software                             | 40%  | Mr Gopi N         | Lab Technician    | DECE     |
| 16 | INTEGRATED CIRCUITS LABORATORY -II-2023-24-EVEN-                   | 15 | Soldering guns, Multimeter, DSO, Function generator, Digital Trainer Kit                                                                      | 100% | Mr Nandakumar D   | Lab Technician    | DECE     |
| 17 | ELECTRONICS LABORATORY -2024-25-ODD-R programming with lab         | 62 | PC with R Studio                                                                                                                              | 40%  | Mr NandaKumar.D   | Lab Technician    | DECE     |
| 18 | ELECTRONICS LABORATORY -2024-25-EVEN-Electronics Circuits with Lab | 62 | DSO, Function generator, Dual RPS, Digital Multimeter, PC with PSpice software                                                                | 40%  | Mr Nandakumar D   | Lab Technician    | DECE     |

|    |                                                                          |    |                                                                                                                                             |      |                   |                   |          |
|----|--------------------------------------------------------------------------|----|---------------------------------------------------------------------------------------------------------------------------------------------|------|-------------------|-------------------|----------|
| 19 | COMMUNICATION LABORATORY<br>-2024-25-ODD-Communication System            | 30 | Kits for Signal Sampling, TDM, AM, FM, PCM, DM and Line Coding Schemes, DSO, PCs with MATLAB Software                                       | 80%  | Mr Tamilselvam R  | Lab Technician    | DECE     |
| 20 | COMMUNICATION LABORATORY<br>-2024-25-EVEN-Engineering practices          | 16 | Soldering guns, Multimeter, DSO, Function generator, Digital Trainer Kit                                                                    | 40%  | Mr Tamilselvam R  | Lab Technician    | DECE     |
| 21 | MICROPROCESSOR &<br>MICROCONTROLLER LABORATORY-                          | 16 | Soldering guns, Multimeter, DSO, Function generator, Digital Trainer Kit                                                                    | 80%  | Mr Nithiyandam P  | Lab Technician    | DECE     |
| 22 | MICROPROCESSOR &<br>MICROCONTROLLER LABORATORY-                          | 31 | 8086, 8051 Kit, Interface Board – Traffic light, Stepper motor, LED, LCD, PWM, ADC & DAC, PC with MATLAB Software                           | 80%  | Mr Nithiyandam P  | Lab Technician    | DECE     |
| 23 | INTEGRATED CIRCUITS<br>LABORATORY -2024-25-ODD-Digital                   | 31 | Digital Trainer Kit                                                                                                                         | 80%  | Mr Ramnath S      | Lab Technician    | DECE     |
| 24 | INTEGRATED CIRCUITS<br>LABORATORY -2024-25-EVEN-Linear                   | 62 | DSO, Function generator, Digital Trainer Kit, PC with Pspice Software                                                                       | 40%  | Mr Ramnath S      | Lab Technician    | DECE     |
| 25 | OPTICAL & MICROWAVE<br>LABORATORY-2024-25-ODD-Advanced                   | 32 | SDR Optical fiber trainer kit - LED, PIN PD, Numerical Aperture MM/SM Glass and plastic fiber patch cords, Micrometers, Beam splitter       | 80%  | Ms Meenakshi R    | Lab Technician    | DECE     |
| 26 | OPTICAL & MICROWAVE<br>LABORATORY-2024-25-EVEN- Antenna                  | 32 | Microwave signal source Transmitting/Receiving antenna test bench, Antenna – Helical, Broadside, End fire, SSB, Bistatic, Monopole, Antenna | 80%  | Ms Meenakshi R    | Lab Technician    | DECE     |
| 27 | DIGITAL SIGNAL PROCESSING<br>LABORATORY-2024-25-ODD-Artificial           | 62 | PC with Prolog software, PC with MATLAB, DSP Processor kit, DSO                                                                             | 100% | Mr Sivaprasad T H | System Programmer | B.E(CSE) |
| 28 | DIGITAL SIGNAL PROCESSING<br>LABORATORY-2024-25-EVEN-                    | 32 | LAN trainer kit, PC with NS2 and JAVA netbeans JDK                                                                                          | 80%  | Mr Sivaprasad T H | System Programmer | B.E(CSE) |
| 29 | VLSI LABORATORY-2024-25-ODD-<br>VLSI Lab, Discrete Time Signal           | 62 | PC with Xilinx Software, FPGA Board, PC with MATLAB, DSP Processor kit, DSO                                                                 | 90%  | Mr Anabunathan U  | Lab Technician    | DECE     |
| 30 | INTEGRATED CIRCUITS<br>LABORATORY -II-2024-25-ODD-                       | 16 | Soldering guns, Multimeter, DSO, Function generator, Digital Trainer Kit                                                                    | 50%  | Ms R Logeshwari   | Lab Technician    | DEEE     |
| 31 | INTEGRATED CIRCUITS<br>LABORATORY -II-2024-25-EVEN-                      | 16 | Soldering guns, Multimeter, DSO, Function generator, Digital Trainer Kit                                                                    | 100% | Ms R Logeshwari   | Lab Technician    | DEEE     |
| 32 | ELECTRONICS LABORATORY -2025-<br>26-ODD-Analog and Digital Circuits Lab, | 65 | DSO, Function Generator, Dual RPS, Digital Multimeter, PC with PSpice software, Digital Trainer Kit, PC with Xilinx Software, FPGA Board    | 50%  | Mr Nandakumar D   | Lab Technician    | DECE     |
| 33 | ELECTRONICS LABORATORY -2025-<br>26-EVEN-Linear Integrated Circuits Lab  | 32 | DSO, Function generator PC with Pspice Software, RPS, Soldering guns, Multimeter, Digital Trainer Kit                                       | 70%  | Mr Nandakumar D   | Lab Technician    | DECE     |
| 34 | COMMUNICATION LABORATORY-<br>2025-26-ODD-Communication System            | 32 | Kits for Signal Sampling, TDM, AM, FM, PCM, DM and Line Coding Schemes, DSO, PCs with MATLAB Software                                       | 80%  | Mr Tamilselvam R  | Lab Technician    | DECE     |
| 35 | COMMUNICATION LABORATORY-<br>2025-26-EVEN-Communication System           | 32 | Kits for Signal Sampling, TDM, AM, FM, PCM, DM and Line Coding Schemes, DSO, PCs with MATLAB Software                                       | 80%  | Mr Gopi N         | Lab Technician    | DECE     |
| 36 | MICROPROCESSOR &<br>MICROCONTROLLER LABORATORY-                          | 16 | Soldering guns, Multimeter, DSO, Function Generator, Digital Trainer Kit, PC with Xilinx Software, FPGA Board                               | 100% | Mr Vijayakumar S  | Lab Technician    | DECE     |

|    |                                                                     |    |                                                                                                                                         |      |                   |                   |          |
|----|---------------------------------------------------------------------|----|-----------------------------------------------------------------------------------------------------------------------------------------|------|-------------------|-------------------|----------|
| 37 | MICROPROCESSOR & MICROCONTROLLER LABORATORY-                        | 32 | 8086, 8051 Kit, Interface Board – Traffic light, Stepper motor, LED, LCD, PWM, ADC & DAC, PC                                            | 80%  | Mr Vijayakumar S  | Lab Technician    | DECE     |
| 38 | INTEGRATED CIRCUITS LABORATORY-2025-26-ODD-Analog                   | 32 | DSO, Function generator, Dual RPS, Digital Multimeter, PC with PSpice, Digital Trainer Kit                                              | 40%  | Mr Ramnath S      | Lab Technician    | DECE     |
| 39 | INTEGRATED CIRCUITS LABORATORY-2025-26-EVEN-Linear                  | 32 | DSO, Function generator, Digital Trainer Kit, PC with Pspice Software,RPS                                                               | 40%  | Mr Ramnath S      | Lab Technician    | DECE     |
| 40 | OPTICAL & MICROWAVE LABORATORY-2025-26-ODD-Advanced                 | 32 | SDR Optical fiber trainer kit - LED, PIN PD, Numerical APerture MM/SM Glass and plastic fiber                                           | 90%  | Ms Meenakshi R    | Lab Technician    | DECE     |
| 41 | OPTICAL & MICROWAVE LABORATORY-2025-26-EVEN- Antenna                | 32 | Microwave signal source Transmitting/Receiving antenna test bench, Antenna – Helical, Broadside, End fire & Reflecter, Network Analyzer | 80%  | Ms Meenakshi R    | Lab Technician    | DECE     |
| 42 | DIGITAL SIGNAL PROCESSING LABORATORY-2025-26-ODD-Artificial         | 62 | PC with Prolog software, PC with MATLAB, DSP Processor kit, DSO,PC with SystemVerilog - EDA Playground                                  | 100% | Mr Sivaprasad T H | System Programmer | B.E(CSE) |
| 43 | DIGITAL SIGNAL PROCESSING LABORATORY-2025-26-EVEN-                  | 32 | LAN trainer kit, PC with NS2 and JAVA netbeans JDK                                                                                      | 80%  | Mr Sivaprasad T H | System Programmer | B.E(CSE) |
| 44 | VLSI LABORATORY-2025-26-ODD-VLSI Lab,Discrete Time Signal           | 62 | PC with Xilinx Software, FPGA Board,PC with MATLAB, DSP Processor kit, DSO                                                              | 90%  | Ms Logeshwari R   | Lab Technician    | DEEE     |
| 45 | EMBEDDED LABORATORY -2025-26-ODD-Discrete Time Signal Processing    | 62 | PC with MATLAB, DSP Processor kit, DSO                                                                                                  | 10%  | Mr Vijayakumar S  | Lab Technician    | DECE     |
| 46 | INTEGRATED CIRCUITS LABORATORY -II-2025-26-ODD-                     | 16 | Soldering guns, Multimeter, DSO, Function generator, Digital Trainer Kit                                                                | 90%  | Ms Logeshwari R   | Lab Technician    | DEEE     |
| 47 | INTEGRATED CIRCUITS LABORATORY -II-2025-26-EVEN-                    | 16 | Soldering guns, Multimeter, DSO, Function generator, Digital Trainer Kit                                                                | 90%  | Ms Logeshwari R   | Lab Technician    | DEEE     |
| 48 | VLSI LABORATORY-2025-26-EVEN-System Verilog for Design Verification | 65 | PC with SystemVerilog - EDA Playground                                                                                                  | 20%  | Ms Logeshwari R   | Lab Technician    | DEEE     |

## D2. Safety Measures in Laboratories

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

| Sr. No | Laboratory Name          | Safety Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1      | Electronics Laboratory   | <ul style="list-style-type: none"> <li>● Fire Extinguisher is installed.</li> <li>● Wearing lab uniform and safety shoes during the lab hours is mandatory.</li> <li>● Switch Gear for short circuit protection is provided.</li> <li>● Switch OFF all equipment after completing the experiment.</li> <li>● Avoid operating switches or panels with damp hands.</li> <li>● Check polarity for components before connection.</li> <li>● Power must be deactivated prior to doing any maintenance or modifications on equipment.</li> <li>● Ensure proper connections of probe and grounding of the circuit.</li> <li>● Ensure the proper voltage/current limits of the circuit.</li> </ul>                              |
| 2      | Communication Laboratory | <ul style="list-style-type: none"> <li>● Fire Extinguisher is installed.</li> <li>● Wearing lab uniform and safety shoes during the lab hours is mandatory.</li> <li>● Switch Gear for short circuit protection is provided.</li> <li>● Switch OFF all equipment after completing the experiment.</li> <li>● Must read the manual carefully before handling the kits.</li> <li>● Properly identify modules and connectors before use.</li> <li>● Ensure proper grounding of the kits.</li> <li>● Use signals at specified amplitude or frequency limits.</li> <li>● Set suitable voltage/division and time/division settings before measurement.</li> <li>● Gently connect patch cords and ensure tightness.</li> </ul> |

|   |                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3 | Microprocessor and Microcontroller Laboratory | <ul style="list-style-type: none"> <li>● Fire Extinguisher is installed.</li> <li>● Wearing lab uniform and safety shoes during the lab hours is mandatory.</li> <li>● Switch Gear for short circuit protection is provided.</li> <li>● Switch OFF all equipment after completing the experiment. Do not insert or remove ICs while the kit is powered ON.</li> <li>● Avoid short circuits while interfacing peripherals.</li> <li>● Refrain from installing unauthorized software or modify system configurations.</li> <li>● Ensure the use of resistors and driver circuits to prevent component damage while interfacing</li> </ul>                                                                                                                |
| 4 | Integrated Circuits Laboratory                | <ul style="list-style-type: none"> <li>● Fire Extinguisher is installed.</li> <li>● Wearing lab uniform and safety shoes during the lab hours is mandatory.</li> <li>● Switch Gear for short circuit protection is provided.</li> <li>● Switch OFF all equipment after completing the experiment.</li> <li>● Ensure the Use of rated voltage/current of ICs.</li> <li>● Insert ICs gently and ensure correct orientation before powering.</li> <li>● Before making or altering connections, always switch OFF the power supply.</li> </ul>                                                                                                                                                                                                             |
| 5 | Optical & Microwave Laboratory                | <ul style="list-style-type: none"> <li>● Fire Extinguisher is installed.</li> <li>● Wearing lab uniform and safety shoes during the lab hours is mandatory.</li> <li>● Switch Gear for short circuit protection is provided.</li> <li>● Switch OFF all equipment after completing the experiment.</li> <li>● Avoid operating equipment with open or disconnected waveguides.</li> <li>● Ensure proper terminations (matched loads).</li> <li>● Gently handle waveguides and components while connecting flanges to avoid misalignment.</li> <li>● Gradually increase voltage to avoid overloading.</li> <li>● Avoid sharp bends or twisting of optical fibers.</li> <li>● Ensure proper alignment of transmitter and receiver modules.</li> </ul>      |
| 6 | Digital Signal Processing Laboratory          | <ul style="list-style-type: none"> <li>● Fire Extinguisher is installed.</li> <li>● Wearing lab uniform and safety shoes during the lab hours is mandatory.</li> <li>● Switch Gear for short circuit protection is provided.</li> <li>● Switch OFF all equipment after completing the experiment.</li> <li>● Students are required to log in only using their designated credentials and refrain from installing unapproved software.</li> <li>● Refrain from disconnecting or interfering with wires linked to CPUs, displays, or networking devices.</li> <li>● Ensure antivirus protection, Data backup procedures And Controlled access to systems.</li> <li>● To avoid physical shocks, do not touch IC pins of DSP kits unnecessarily</li> </ul> |
| 7 | Embedded Laboratory                           | <ul style="list-style-type: none"> <li>● Fire Extinguisher is installed.</li> <li>● Wearing lab uniform and safety shoes during the lab hours is mandatory.</li> <li>● Switch Gear for short circuit protection is provided.</li> <li>● Switch OFF all equipment after completing the experiment.</li> <li>● Promptly report flickering displays, exposed cables, or inoperative ports to laboratory personnel</li> <li>● Access is permitted only for authorised personnel for IDEs</li> <li>● Ensure the use of proper current rating for sensors and actuators and Avoid overloading GPIO pins.</li> </ul>                                                                                                                                          |
| 8 | VLSI Laboratory                               | <ul style="list-style-type: none"> <li>● Fire Extinguisher is installed.</li> <li>● Wearing lab uniform and safety shoes during the lab hours is mandatory.</li> <li>● Switch Gear for short circuit protection is provided.</li> <li>● Switch OFF all equipment after completing the experiment.</li> <li>● Check the tool paths and material positions before running the program and Save design files regularly to prevent data loss.</li> <li>● Use authorized IDEs</li> <li>● Ensure the use of proper voltage levels for FPGA/ASIC boards.</li> <li>● Refrain from unauthorized installations or system changes</li> </ul>                                                                                                                      |
| 9 | Integrated Circuits Laboratory-II             | <ul style="list-style-type: none"> <li>● Fire Extinguisher is installed.</li> <li>● Wearing lab uniform and safety shoes during the lab hours is mandatory.</li> <li>● Switch Gear for short circuit protection is provided.</li> <li>● Switch OFF all equipment after completing the experiment.</li> <li>● Consistently check wiring and connections prior to powering the equipment.</li> <li>● Ensure the Use of rated voltage/current of ICs.</li> <li>● Ensure that the correct range is set in multimeters, oscilloscopes, and function generators before measurement.</li> <li>● Power must be deactivated prior to doing any maintenance or modifications on equipment.</li> </ul>                                                            |

### D3. Project Laboratory/Research Laboratory

### 7.5.1 Project laboratory

The Project Laboratory provides students with a dedicated environment for carrying out innovative, multidisciplinary and application-oriented projects.

- Beyond the prescribed curriculum, students use the Project Laboratory for experiential, project-based learning, gaining hands-on exposure, developing prototypes, experimenting with emerging technologies, and solving real-world engineering problems. Students use this lab for PCB design, simulation, hardware implementation, testing, and performance evaluation.
- Students can access research papers from reputed journals through the internet for their project work. Students are using this facility based on their requirements.
- The laboratory also supports faculty-guided projects, participation in project exhibitions, hackathons, innovation competitions and student research activities.
- Project laboratory activities are sufficiently connected with faculty research, publications, funded projects and innovation. .
- A Project Laboratory Utilization Register containing team name, project title, date, activities performed, equipment used and faculty mentor is maintained.
- Our curriculum includes a Final Year Project, carried out in Phase I and Phase II during the VII and VIII semesters, respectively.
- Additionally, an Innovative Design Project is part of the VI semester, and the Student Innovation Ecosystem includes Live-in-Lab I, II, and III, scheduled during the III, IV, and V semesters, respectively. The following table shows the facilities available in the project laboratory.

#### List of Facilities available in the project laboratory:

Table No. 7.5.1 List of Facilities available in project laboratory.

| Sl.No | Equipment /Facility                                                                              |
|-------|--------------------------------------------------------------------------------------------------|
| 1     | DSO                                                                                              |
| 2     | Renesas Kit                                                                                      |
| 3     | 3D printer                                                                                       |
| 4     | IOT kit                                                                                          |
| 5     | EAGLE software(open source)                                                                      |
| 6     | Hand Held Drilling Machine 2600 rpm with accessories & Drill Bits                                |
| 7     | S Iron 939 Temperature Controlled (Manual)<br>Soldering Station with Temperature Adjustment      |
| 8     | PC (Lenovo Desktop TC neo 50s, Intel i5-12400 12th Gen processor,<br>Lenovo MonitorS22E-20 21.5) |
| 9     | Arduino UNO                                                                                      |
| 10    | Raspberry Pi                                                                                     |
| 11    | CST (Student version)                                                                            |
| 12    | Multimeter                                                                                       |
| 13    | Proteus 8.11                                                                                     |
| 14    | MATLAB                                                                                           |
| 15    | KEIL Microvision 4 & 5                                                                           |
| 16    | LabView RIO Evaluation Kit                                                                       |

| Sl.No | Equipment /Facility                 |
|-------|-------------------------------------|
| 1     | DSO                                 |
| 2     | Renesas Kit                         |
| 3     | 3D printer                          |
| 17    | Wireless Sensor Network Starter kit |

Students utilize the laboratory for Development and prototyping of Final-year projects and mini-projects and experimental validation. The Lab is also utilized for Preparation for hackathons, design challenges and innovation competitions.

Table No. 7.5.2 Utilization of Project Laboratory

| S.No | Title of project                                                                                                                         | Name of students                                 | Batch     | Facility Utilized                   | Relevance to PO's/ PSO's                           |
|------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-----------|-------------------------------------|----------------------------------------------------|
| 1    | Design of Wireless sensor network system using arduino and zigbee                                                                        | Varsha S,<br>Sandeep Krishnan S<br>Yogesh V      | 2020-2024 | Wireless Sensor Network Starter kit | PO1, PO2, PO3, PO4, PO5, PO9, PSO1, PSO2           |
| 2.   | Comparative Analysis Of Performance Characteristics Between Flexible Single Element Patch Antenna And Flexible Two-Element Array Antenna | Deva K<br>Dinesh Balaji R<br>Dinesh Kumar R      | 2020-2024 | CST                                 | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PSO1, PSO2      |
| 3    | Design of PIFA antenna for health care application                                                                                       | Dharunraj S S<br>Vignesh<br>Harish E             | 2020-2024 | CST                                 | PO1, PO2, PO3, PO4, PO5, PO6, PSO1, PSO2           |
| 4    | Design of MIMO Antenna for M2M Applications                                                                                              | Jayamaran S<br>Jeyamurugan M S<br>Ganesh P       | 2020-2024 | CST                                 | PO1, PO2, PO3, PO4, PO5, PSO1                      |
| 5    | Fire Detection And Extinguishing Robot Using Arduino                                                                                     | Jessica Sharon W<br>Shrajana M S                 | 2020-2024 | Arduino UNO, 3D printer             | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO9, PSO1, PSO2 |
| 6    | Sign Language Detection Using Raspberry Pi                                                                                               | Keerthana R.G<br>Shanmathi S<br>Shajitha M       | 2020-2024 | Raspberry Pi                        | PO1, PO2, PO3, PO4, PO5, PO6, PO8; PSO1, PSO2      |
| 7    | Automatic Engine Locking Through Alcohol And Theft Alert                                                                                 | Gokula Krishnan R<br>Sakthivelu S<br>Sriganesh N | 2020-2024 | LabView RIO Evaluation Kit          | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PSO1, PSO2      |

|    |                                                                                                |                                              |           |                                                                 |                                                    |
|----|------------------------------------------------------------------------------------------------|----------------------------------------------|-----------|-----------------------------------------------------------------|----------------------------------------------------|
| 8  | Detection Of Epileptic Seizure Using Eeg Signals                                               | Bakkiyalakshmi S<br>Harini A<br>Supriya D    | 2021-2025 | MATLAB                                                          | PO1, PO2, PO4, PO5, PO6, PO8; PSO1, PSO2           |
| 9  | Ignition Interruption Device Using Alcohol Sensor                                              | Edal Queen C<br>Harshini V<br>Subalaksmi L M | 2021-2025 | Wireless Sensor Network Starter kit, LabView RIO Evaluation Kit | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO9, PSO1, PSO2 |
| 10 | Smart Light Illumination                                                                       | Supradha S N<br>Durgashree T<br>Boomika T    | 2021-2025 | IOT kit                                                         | PO1, PO2, PO3, PO4, PO5, PO7; PSO1, PSO2           |
| 11 | Crop Selection And Monitoring System Using Machine Learning                                    | Vishal.B<br>Sudarshan.P<br>Saptha Ghiri.K    | 2021-2025 | MATLAB                                                          | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PSO1, PSO2      |
| 12 | Aqua Smurf                                                                                     | Sandhya R<br>Varsha K                        | 2021-2025 | 3D printer                                                      | PO2, PO3, PO4, PO5, PO9, PSO1, PSO2                |
| 13 | Smart Energy Grid                                                                              | Daranya R<br>Sruthi R<br>Adelin Dona E       | 2022-2026 | MATLAB                                                          | PO1, PO2, PO3, PO4, PO5, PO7, PSO1, PSO2           |
| 14 | Pinna Voting Machine                                                                           | Rithesh R S<br>Bharath V<br>Kavusik S        | 2022-2026 | Arduino UNO, LabView RIO Evaluation Kit                         | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO9, PSO1, PSO2 |
| 15 | IOT - Enabled Intelligent Streetlight With Adaptive Brightness And 360 - Degree Solar Tracking | Gopika N<br>Tamilvani A S<br>Abirami S       | 2022-2026 | MATLAB, IOT Kit                                                 | PO1, PO2, PO3, PO4, PO5, PO7, PO9; PSO1, PSO2      |
| 16 | Smart Glasses - A Wearable Assistive Device For Visually Impaired                              | Aarthi K<br>Priya Josse A                    | 2022-2026 | Arduino UNO                                                     | PO1, PO2, PO3, PO4, PO5, PO6, PO8; PSO1, PSO2      |
| 17 | Power Reduction Techniques In CMOS                                                             | Danishka N<br>Jeno M<br>Madhumitha L.G       | 2022-2026 | Proteus 8.11                                                    | PO1, PO2, PO4, PO5, PO7, PSO1                      |
| 18 | Rectannea                                                                                      | Balasrinivas C S<br>Mukesh K<br>Srikanth V T | 2022-2026 | CST                                                             | PO1, PO2, PO3, PO4, PO5, PO7, PSO1                 |

|    |                                                     |                                                   |           |              |                                                 |
|----|-----------------------------------------------------|---------------------------------------------------|-----------|--------------|-------------------------------------------------|
| 19 | Implementation Of Bough Wooley Multiplier By Xilinx | Janarthanarajan S<br>Karthikeyan M<br>Bhuvanesh T | 2021-2025 | Proteus 8.11 | PO1, PO2, PO3, PO4,<br>PO5, PO9 , PSO1,<br>PSO2 |
|----|-----------------------------------------------------|---------------------------------------------------|-----------|--------------|-------------------------------------------------|

**Impact Analysis:**

The outcome of a project laboratory in our program typically includes both technical and professional skills development. This includes Conduct experiments, collect data, analyze results, and interpret findings to make engineering decisions. Utilization of these facilities helps students in timely completion of their work but without compromising the quality of the projects. This lab supports students to participate in hackathons, project competitions and research activities

**7.5.2 Research Laboratory**

The Research Laboratory plays a vital role in bridging theoretical knowledge with practical application in the field of Electronics and Communication Engineering. It serves as a dynamic platform for innovation, experimentation and prototyping, enabling students and researchers to engage deeply with advanced engineering concepts.

**List of Facilities available in the Research laboratory:**

A Research laboratory provides an environment for innovation, experimentation and prototyping. It facilitates publication of research papers and patents in Multidisciplinary areas.

Table No. 7.5.3 List of Facilities in Research Laboratory

| Sl.No | Name of the Facilities                                                                                                                                                                                                                                          |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | Hardware Testing and 3D Design                                                                                                                                                                                                                                  |
| 2     | SS5LB- Respiratory effort Transducer                                                                                                                                                                                                                            |
| 3     | SS4LA - Photoplethysmogram for pulse waveform                                                                                                                                                                                                                   |
| 4     | MATLAB with Simulink and Toolboxes(Image processing, DSP system, signal processing, Computer vision, Deep learning, Machine Learning)<br>Mathwork Toolboxes (Image processing, DSP system, signal processing, Computer vision, Deep learning, Machine Learning) |
| 5     | BIOPAC Student lab basic system:MP 36 Data Acquisition Unit with USB Cable, DC Adapter IIOV/60Hz or 220VI50H2) & Cord                                                                                                                                           |
| 6     | Optisystem 23.0                                                                                                                                                                                                                                                 |
| 7     | Optsim V5.0 single user node                                                                                                                                                                                                                                    |
| 8     | Network Analyser - 6GHz                                                                                                                                                                                                                                         |
| 9     | PC- HP Victus TG02-0006in-12th Gencore i7, 12700F, 16GBDDR4, 1TB SSD,WIN 11, MSO 19                                                                                                                                                                             |

The list of Publications and Patents made by faculties and students by using our research laboratory is given in the below Table No 7.5.4.

Table No. 7.5.4 Utilization of Research Laboratory

| S.No | Title                                                                                                                                           | Journal /Patent / Funding | Facility Utilized                                                                                                                                     | Academic year | Relevance to PO's/ PSO's                            |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------|
| 1.   | Real time power line fault detection and insulator condition monitoring with automated alert mechanism                                          | Patent                    | MATLAB                                                                                                                                                | 2025-2026     | PO1, PO2, PO3, PO4, PO5, PO7, PO12, PSO1, PSO2      |
| 2    | SOS MED BRACELET- An Intelligent device to predict the onset of seizures                                                                        | Journal                   | BIOPAC Student lab basic system:MP 36 Data Acquisition Unit with USB Cable, DC Adapter IIOV/60Hz or 220V/50Hz) & Cord, Hardware Testing and 3D Design | 2025-2026     | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO12, PSO1, PSO2 |
| 3    | Ultra Wideband Dual Polarized Vivaldi Antenna Arrays for High Resolution Synthetic Aperture Radar (SAR)                                         | Patent                    | Network Analyser - 6GHz                                                                                                                               | 2025-2026     | PO1, PO2, PO3, PO4, PO5, PO12, PSO1                 |
| 4    | Enhanced Voice Pathology Classification Using Hybrid Machine Learning and Deep Learning Models                                                  | International conference  | MATLAB                                                                                                                                                | 2025-2026     | PO1, PO2, PO4, PO5, PO6, PO8, PO12, PSO1, PSO2      |
| 5    | A novel DWDM-based comb source for future optical network                                                                                       | Journal                   | Optisystem 23.0                                                                                                                                       | 2024-2025     | PO1, PO2, PO3, PO4, PO5, PO12, PSO1                 |
| 6    | A review of optical beam steering technologies in LiDAR photonic chips                                                                          | Journal                   | Optisystem 23.0                                                                                                                                       | 2024-2025     | PO1, PO2, PO4, PO5, PO12, PSO1, PSO2                |
| 7    | Generation of 103 ultra-flat broadband optical frequency comb lines using cascaded amplitude modulator and single drive Mach-Zehnder modulators | Journal                   | Optisystem 23.0                                                                                                                                       | 2024-2025     | PO1, PO2, PO3, PO4, PO5, PO12, PSO1                 |
| 8    | Hybrid lifetime prediction of DFB lasers using Arrhenius theory and machine learning                                                            | Journal                   | MATLAB                                                                                                                                                | 2024-2025     | PO1, PO2, PO4, PO5, PO12, PSO1, PSO2                |
| 9    | ShLSTM: Shepard long short-term memory for early detection of diabetic retinopathy using color fundus image                                     | Journal                   | MATLAB                                                                                                                                                | 2024-2025     | PO1, PO2, PO4, PO5, PO6, PO8, PO12, PSO1, PSO2      |
| 10   | Developed a Machine Learning and Deep Learning Model for 5G MIMO Data Based Beam Selection and Intelligent Network Analytics                    | Journal                   | MATLAB                                                                                                                                                | 2024-2025     | PO1, PO2, PO3, PO4, PO5, PO12, PSO1                 |

|    |                                                                                                                                   |                          |                                                       |           |                                                     |
|----|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------------------------|-----------|-----------------------------------------------------|
| 11 | Performance analysis and parameter optimization of all-optical encryption using the FWM effect in semiconductor optical amplifier | Journal                  | OptsimV5.0 single user node                           | 2023-2024 | PO1, PO2, PO3, PO4, PO5, PO8, PO12, PSO1, PSO2      |
| 12 | Portable Device to Predict Diabetic Foot Ulcer                                                                                    | Journal                  | SS4LA - Photoplethysmogram for pulse waveform         | 2023-2024 | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PSO1, PSO2       |
| 13 | Ensuring Resilience:IoT-Driven Fault Detection in Fiber Optic Networks                                                            | Journal                  | Optsim V5.0 single user node                          | 2023-2024 | PO1, PO2, PO3, PO4, PO5, PO6, PO12, PSO1, PSO2      |
| 14 | DIABETIC CARE-Non Invasive Glucometer & Diabetic Foot Ulcer Scanner                                                               | International conference | SS4LA - Photoplethysmogram for pulse waveform, MATLAB | 2023-2024 | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PSO1, PSO2       |
| 15 | Non-Invasive Device to Predict Human Well Being from Wrist Radial Artery                                                          | International conference | SS4LA - Photoplethysmogram for pulse waveform, MATLAB | 2023-2024 | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PSO1, PSO2       |
| 16 | Respiratory Sound Analysis for Lung Disease Diagnosis                                                                             | International conference | MATLAB                                                | 2023-2024 | PO1, PO2, PO4, PO5, PO6, PO8, PO12, PSO1, PSO2      |
| 17 | A Compact Multiband Patch Antenna For Wireless Applications                                                                       | Patent                   | Network Analyser                                      | 2025-2026 | PO1, PO2, PO3, PO4, PO5, PO12, PSO1                 |
| 18 | An Intelligent Wearable Device To Predict The Onset On Epileptic Seizure                                                          | Patent                   | SS4LA - Photoplethysmogram for pulse waveform,        | 2023-2024 | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO12, PSO1, PSO2 |

### Impact Analysis

The Research laboratory was extensively utilized for a variety of purposes, including prototype development, testing, design validation, and data acquisition. Additionally, the research laboratory provided a collaborative environment that encouraged learning, teamwork, and technical discussion. Adherence to lab safety protocols and ethical standards was maintained throughout the project duration, ensuring a professional and responsible research experience. It supports research in biomedical instrumentation, signal processing, Image processing, Communication system and related interdisciplinary domains.

### 7.5.3 Centre of Excellence -VLSI EDA Tools

The Department has established a Centre of Excellence in VLSI Design under the Government of India's Chip to Startup (C2S) Programme, initiated by the Ministry of Electronics and Information Technology (MeitY). Under this initiative, the institution has received access to industry-standard Electronic Design Automation (EDA) tools, advanced computing infrastructure, and training support for semiconductor design. It enables students and faculty to work on RTL design, simulation, synthesis, verification, physical design, FPGA implementation, and ASIC/SoC development. It also strengthens the industry interactions with Academia through collaborative research projects.

Ministry of Electronics and Information Technology (MeitY)

Chips to Startup C2S

09 Sept. 2020, 03:22:17 pm (15)

ABOUT

RESOURCES

ChipIN CENTRE

INTERNSHIPS

CALL FOR PROPOSAL

HACKATHONS

GRAND CHALLENGE

LOGIN

|    |                 | Engineering, Coimbatore                                               |                         |                                |                      | Ansys, Keysight, Silvaco, Cadre and Compcarta |
|----|-----------------|-----------------------------------------------------------------------|-------------------------|--------------------------------|----------------------|-----------------------------------------------|
| 01 | Tiruchirappalli | SRM Institute of Science & Technology, Tiruchirappalli                | Dr. R. Jagadeesh Kannan | dean.eti@srmit.edu.in          | Dr. R. Balaji Ganesh | balajiganesh.r@srmit.edu.in                   |
| 02 | Chennai         | National Institute of Electronics and Information Technology, Chennai | Shant Kumar Bapal       | shant@nielit.gov.in            | Shoukath Cherukat    | shoukath@nielit.gov.in                        |
| 03 | Chennai         | SRM Institute of Science & Technology, Chennai                        | Dr. A. Shety Edward     | hod.eca.vdp.et@srmit.edu.in    | Dr. Karthik S        | karthik.s@srmit.edu.in                        |
| 04 | Chengalpattu    | Sri Saranam Engineering College, Chennai                              | Dr. J. Thamil Selvi     | hod.eca@saranam.edu.in         | Dr. K. Ranganathan   | hod.e@saranam.edu.in                          |
| 05 | Chengalpattu    | Chennai Institute of Technology, Chennai                              | Dr. R. Suresh Kumar     | sureshkumar@cietchennai.in     | Dr. R. M. Bommi      | bonnmr@cietchennai.net                        |
| 06 | Madurai         | Thiagarajar College of Engineering, Madurai                           | Dr. N.B. BALAJIRUGAN    | nbalamurugan@tce.edu           | Dr. S. RAJARAM       | rajaram_siva@tce.edu                          |
| 07 | Tiruvallur      | J.N.N Institute of Engineering, Chennai                               | Dr. B. Anand kumar      | vb@jnn.edu.in                  | Dr. N. Malathy       | malathy@jnn.edu.in                            |
| 08 | Kannyakumari    | Arunachala College of Engineering For Women, Tamilnadu                | Dr. S.S. VINSLEY        | svinsley@arunachalacollege.com | Dr. E. P. KANNAN     | epkannan@arunachalacollege.com                |
| 09 | Coimbatore      | Government College of Technology, Coimbatore                          | Dr. P. Deepa            | deepap@gct.ac.in               | Dr. G. Suchitra      | suchitra.g.eca@gct.ac.in                      |
| 10 | Coimbatore      | Sri Shakti Institute of Engineering and Technology, Coimbatore        | Dr. Bindu Selim         | director@siet.ac.in            | Dr. S. Shavani       | hodesi@siet.ac.in                             |
| 11 | Vruthunagar     | P.S.R. Engineering College, Sivakasi                                  | Dr. R. Vinith           | vinith@psr.edu.in              | Dr. K. Valarmathi    | valarmathi@psr.edu.in                         |

Fig 7.5.1 Organizations supported for the EDA Tools by the ChipIN Centre under C2S Programme

List of Facilities available in the Centre of Excellence lab:

Table No 7.5.5: List of EDA tools and Facilities

| Sl.No | Description |
|-------|-------------|
| 1     | Synopsys    |
| 2     | Cadence     |
| 3     | Siemens     |
| 4     | Ansys       |
| 5     | Keysight    |
| 6     | Silvaco     |
| 7     | Cadre       |
| 8     | Compcarta   |

9

PC (HP Desktop 2G1 A: AMD Ryzen 5 8500G Processor (3.55 GHz up to 5.00 GHz), 260W 90% Power Supply, No Operating System, 16 GB DDR5- 5200MHz (UDIMM)/1 TB SSD t1.2 2280 PCIe Gen4 TLC Opal, Wi-Fi 6E RZ616 2x2 AX & Bluetooth 5.3/HP 21"5 inch Monitor, USB Keyboard & Mouse,

Students use the CoE Laboratory for advanced practical learning, industry-focused training, and extracurricular research and innovation initiatives. Application-focused initiatives, design and simulation, prototyping, testing, and performance analysis in cutting-edge fields like VLSI and SoC are supported by the facilities.



Fig 7.5.2 Utilization Report of C2S tools

Table No. 7.5.6 Utilization of CoE Laboratory

| S.No | Title                                                                                                                                   | Journal /Patent / Funding/ Project                                                      | Name of students                                              | Academic year | Tools Utilized | Relevance to PO's/ PSO's                            |
|------|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------|---------------|----------------|-----------------------------------------------------|
| 1.   | BIONEX - A Bioelectronic Interfacing chip                                                                                               | <b>Project - IIITB - Chip Design Studio (Design Your Chip) - Runner up</b>              | Joel John<br>Praneet M S<br>Rajkumar D<br>Udayanandhini S     | 2025-2026     | Synopsys       | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PSO1, PSO2  |
| 2    | Simulation and Characterization of Self-Biased Current Mirror bandgap reference circuit in 14nm PDK                                     | <b>Project - IIITB - Chip Design Studio (Design Your Chip) - shortlisted for finals</b> | Mamitha.M<br>Hemapriya.S.J<br>Yuvabharathi.R<br>Shanmathi.S.N | 2025-2026     | Synopsys       | PO1, PO2, PO3, PO4, PO5, PO11, PSO1                 |
| 3    | Sparse Systolic Array for AI Acceleration and Matrix Computation based chip design                                                      | <b>Project - IIITB - Chip Design Studio (Design Your Chip)- shortlisted for finals</b>  | Jeswin S<br>Mokshith M<br>Moneswaran P                        | 2025-2026     | Synopsys       | PO1, PO2, PO3, PO4, PO5, PO8, PO11, PSO1, PSO2      |
| 4    | Sub- $\mu$ W Digital- Assisted CMOS Reference Generator with Duty-Cycled Biasing and Auto-Calibration for Next-Generation IoT/AIoT SoCs | <b>Project - IIITB - Chip Design Studio (Design Your Chip) - shortlisted for finals</b> | Rithika B<br>Sanjeev D<br>Anuradha S<br>Yugenthar A P         | 2025-2026     | Synopsys       | PO1, PO2, PO3, PO4, PO5, PO6, PO11, PSO1, PSO2      |
| 5.   | Deep Fake Shield: Ultra Low-Power Hardware Accelerator for on-Device Fake image detection.                                              | <b>Project - IIITB - Chip Design Studio (Design Your Chip) shortlisted for finals</b>   | Naresh Kumar E<br>Lokith Sharan R<br>Nivedita S-<br>Abinaya M | 2025-2026     | Synopsys       | PO1, PO2, PO3, PO4, PO5, PO7, PO8, PO11, PSO1, PSO2 |
| 6    | Zero-Skipping Chip Link: Low-Power Sparsity - Aware Interconnect for AI Accelerators                                                    | <b>Project - IIITB - Chip Design Studio (Design Your Chip)</b>                          | Saravanan RK<br>Anishruban S<br>Ganesh S<br>Adityan K         | 2025-2026     | Synopsys       | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO11, PSO1, PSO2 |
| 7    | SatMini: Low-Power SoC for Maritime and Remote Satellite Communication                                                                  | <b>Project - IIITB - Chip Design Studio (Design Your Chip)</b>                          | Rajkumar D<br>Praneet M S<br>Sailendrael S                    | 2025-2026     | Synopsys       | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO11, PSO1, PSO2 |

|    |                                                                                                                                                  |                                                                                                                  |                                                                                    |           |          |                                                     |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------|----------|-----------------------------------------------------|
| 8  | Design and VLSI implementation of a Low-Power 32-bit ALU Using 28nm CMOS Technology                                                              | <b>Project - IIITB - Chip Design Studio (Design Your Chip)</b>                                                   | Aishwarya Y<br>Anu Shree M<br>Shree Nithi G<br>Pavithra S                          | 2025-2026 | Synopsys | PO1, PO2, PO3, PO4, PO5, PO6, PO11, PSO1,           |
| 9  | AquaSignal - SoC : A Laser Communication Receiver- on- Chip for Autonomous Underwater Vehicles                                                   | <b>Project - IIITB - Chip Design Studio (Design Your Chip)</b>                                                   | Udaya M R<br>Keerthana S<br>PL Arunachalam<br>Raghav Gs                            | 2025-2026 | Synopsys | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO11, PSO1, PSO2 |
| 10 | <b>Team Name - Logicx</b><br>LEOPNT- based Drone Navigation: System Level Latency Analysis of GPS Denied Navigation Using VisualSim              | VisualSim Electronics Hackathon 2026 - Mirabilis Design Inc., USA- Overall <b>Winner</b> for 2026                | Karthick Raam<br>V.SBathrinarayana N<br>Udaya M.R<br>Keerthana S<br>Harini S       | 2025-2026 | Cadence  | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO11, PSO1, PSO2 |
| 11 | <b>Team Name -Debug</b><br>PicoRV32 Dual-core SoC Performance Optimization-                                                                      | VisualSim Electronics Hackathon 2026 - Mirabilis Design Inc.,- Special Category Award for Best Explanation Video | Harshavardhan R<br>Dheepak D<br>Yugendhar A.P<br>Anuradha S<br>Monishaa Shri S     | 2025-2026 | Cadence  | PO1, PO2, PO3, PO4, PO5, PO8, PO11, PSO1, PSO2      |
| 12 | <b>Team Name - Silicon Knights</b><br>CMN Cyprus SoC Diagnostic Dashboard – Automated Performance Analysis and Bottleneck Detection using Python | VisualSim Electronics Hackathon 2026 - Mirabilis Design Inc., USA- Engineers Choice Award Winner                 | Moneswaran P<br>Jeswin S<br>Sriram Karthik S<br>Srivatsan Murugan<br>Sivashanker G | 2025-2026 | Cadence  | PO1, PO2, PO3, PO4, PO5, PO8, PO9, PO11, PSO1, PSO2 |

**Impact Analysis:**

The program has signed an MOU with MEITY and established the centre for excellence in our campus for the benefit of students, research scholars and the local industrial community in and around our college. By integrating academic curriculum with practical industry exposure gives students real-world experience and hands-on instruction with cutting-edge machinery and contemporary automotive technologies play a pivotal role in producing industry-ready graduates.

By simulating actual industrial settings, this center aids in bridging the knowledge gap between classroom theory and practical applications. The collaboration with MEITY benefits from improved curriculum design and increased placement opportunities. Students are using this facility and participating in various Chip Design contests and highly competitive Semiconductor System Modeling Competition.

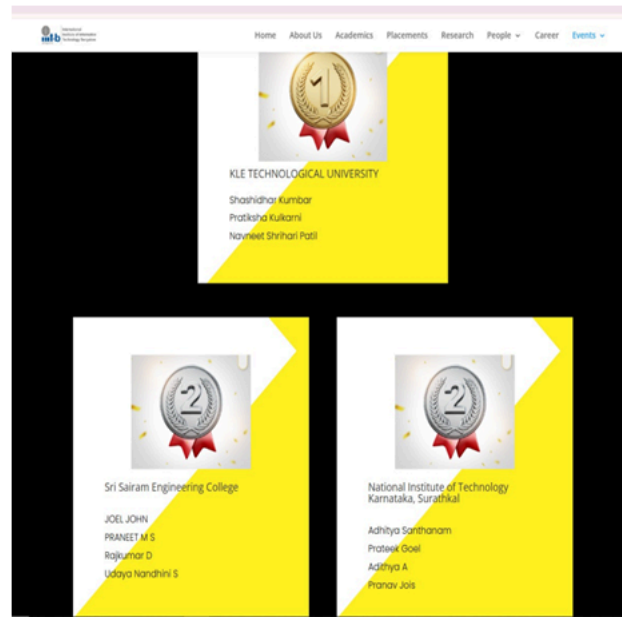


Fig: 7.5.3 IITB - Design Your Chip –Runner up



Fig 7.5.4 Visual Sim Electronics Hackathon 2026, by Mirabilis Design Inc., - Overall Winner

## 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 $((NS1*0.8) + (NS2*0.2))/(No. \text{ of required faculty (RF4)})$ ; Percentage= $((NS1*0.8) + (NS2*0.2))/RF$ |
|----------------|-------------------------------------------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| 2023-24(CAYm2) | 1680                                      | 84                                   | 72                                                                                                                  | 17                                                          | 73                                                                                                                                              |
| 2024-25(CAYm1) | 1770                                      | 88                                   | 83                                                                                                                  | 15                                                          | 79                                                                                                                                              |
| 2025-26(CAY)   | 3030                                      | 152                                  | 136                                                                                                                 | 30                                                          | 76                                                                                                                                              |

## 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                  | 1150.00             | 993.01                          | 1125.00             | 1490.64                         | 1600.00             | 2225.04                         | 825.00              | 791.30                          |
| Library                                  | 120.00              | 101.21                          | 35.00               | 29.57                           | 55.00               | 42.75                           | 55.00               | 53.84                           |
| Laboratory equipment                     | 650.00              | 645.39                          | 530.00              | 569.70                          | 317.50              | 557.70                          | 345.00              | 338.36                          |
| Teaching and non-teaching staff salary   | 6375.00             | 5848.44                         | 5040.00             | 5182.48                         | 4205.00             | 4379.40                         | 3780.00             | 3542.78                         |
| Outreach Programs                        | 229.00              | 233.26                          | 125.00              | 137.00                          | 150.00              | 160.63                          | 115.00              | 162.31                          |
| R&D                                      | 185.00              | 194.10                          | 185.00              | 187.85                          | 185.00              | 206.72                          | 142.00              | 188.37                          |
| Training, Placement and Industry linkage | 150.00              | 111.10                          | 135.00              | 129.73                          | 230.00              | 186.58                          | 205.00              | 208.12                          |
| SDGs                                     | 245.00              | 248.90                          | 94.00               | 95.40                           | 80.00               | 78.94                           | 45.00               | 85.39                           |
| Entrepreneurship                         | 117.00              | 117.82                          | 95.00               | 95.00                           | 80.00               | 78.95                           | 75.00               | 80.09                           |
| Others, specify                          | 4510.65             | 4766.49                         | 3239.86             | 3507.19                         | 2961.05             | 3242.00                         | 2078.95             | 2191.08                         |
| <b>Total</b>                             | <b>13731.65</b>     | <b>13259.72</b>                 | <b>10603.86</b>     | <b>11424.56</b>                 | <b>9863.55</b>      | <b>11158.71</b>                 | <b>7665.95</b>      | <b>7641.64</b>                  |

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

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

| Items                | Budgeted in 2025-26 | Actual Expenses in 2025-26 till | Budgeted in 2024-25 | Actual Expenses in 2024-25 till | Budgeted in 2023-24 | Actual Expenses in 2023-24 till | Budgeted in 2022-23 | Actual Expenses in 2022-23 till |
|----------------------|---------------------|---------------------------------|---------------------|---------------------------------|---------------------|---------------------------------|---------------------|---------------------------------|
| Laboratory equipment | 7410000             | 6307577                         | 6155000             | 6086778                         | 3940000             | 3812626                         | 7975000             | 7840720                         |

|                                                  |                 |                 |                 |                 |                 |                 |                 |                 |
|--------------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Software                                         | 1890000         | 4012434         | 2680000         | 2662560         | 2900000         | 2846539         | 1350000         | 1282560         |
| SDGs                                             | 1350000         | 3598016         | 1595000         | 1579814         | 1425000         | 1393928         | 1575000         | 1540916         |
| Support for faculty development                  | 950000          | 1703214         | 1005000         | 987965          | 1415000         | 1385183         | 750000          | 701230          |
| R & D                                            | 2900000         | 2805755         | 3040000         | 3022093         | 3460000         | 3374334         | 3280000         | 3201345         |
| Industrial Training, Industry expert, Internship | 2370000         | 1605992         | 2105000         | 2089653         | 3075000         | 3024560         | 6100000         | 6069882         |
| Miscellaneous Expenses*                          | 22795000        | 22616985        | 20570000        | 20415747        | 20420000        | 20231230        | 13980000        | 13475062        |
| <b>Total</b>                                     | <b>39665000</b> | <b>42649973</b> | <b>37150000</b> | <b>36844610</b> | <b>36635000</b> | <b>36068400</b> | <b>35010000</b> | <b>34111715</b> |