**NATIONAL BOARD OF ACCREDITATION**

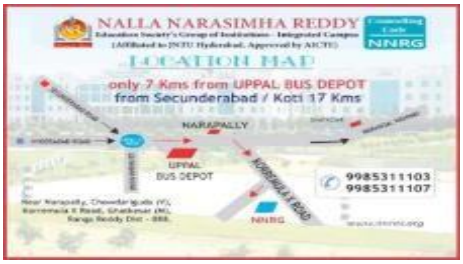
**Data Capturing Points of the Program Applied for NBA Accreditation– Tier I/II UG (Engineering) Institute Programs**

**PART-A: Profile of the Institute**

**Name of the Program Applied for: UG – B.Tech. - Electronics & Communication Engineering**

**A1: Name of the Institute:** NALLA NARASIMHA REDDY EDUCATION SOCIETY'S GROUP OF INSTITUTIONS

Year of Establishment : 2009 Location of the Institute:




**A2: Institute Address: -** KORREMULA 'X' ROAD, CHOWDARIGUDA (VILLAGE), GHATKESAR (MANDAL), MEDCHAL-MALKAJGIRI (Dt.)

City : Hyderabad State : Telangana

Pin Code :500088 Website : www.nnrg.edu.in

E-mail : director@nnrg.edu.in Phone No (with STD Code): 040-29705282

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

Name of the University :JawaharlalNehru Technological UniversityCity : Hyderabad

State : Telangana Pin Code: 500085

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

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

***Provide Details:** _____

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

| | | | |
|---|---|---|---|
| Central Government | ☐ | State Government | ☐ |
| Government Aided | ☐ | Self-finance | √ |
| Any Other (Please specify) * | ☐ | ***Provide Details:** _____ | |

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

- No. of UG programs: **6**
- No. of PG programs: **2**

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

| S.N. | Level of program (UG/PG) | Name of the program | Year of Start | Year of close* | Name of the Department |
|---|---|---|---|---|---|
| **1** | **UG** | Civil Engineering | 2010 | | Civil Engineering |
| **2** | **UG** | Computer Science and Engineering | 2009 | | Computer Science and Engineering |
| **3** | **UG** | Computer Science and Engineering (Artificial Intelligence & Machine Learning) | 2021 | | Computer Science and Engineering (Artificial Intelligence & Machine Learning) |
| **4** | **UG** | Computer Science and Engineering (Data Science) | 2021 | | Computer Science and Engineering (Data Science) |
| **5** | **UG** | Electronics & Communication Engineering | 2009 | | Electronics & Communication Engineering |
| **6** | **PG** | Embedded System & VLSI | 2024 | | |
| **7** | **UG** | Pharmacy | 2009 | | Pharmacy |
| **8** | **PG** | Master of Business Administration | 2009 | | Master of Business Administration |

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

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

| Cluster ID. | Name of the Department | Name of the Program |
|---|---|---|
| **1.** | Electronics & Communication Engineering | UG - B.Tech – Electronics & Communication Engineering |
| **…** | | |

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

| Cluster ID. | Name of the Department (in table no. A7.1) | Name of allied Departments/Cluster (for table no. A7.1) |
|---|---|---|
| **1.** | - | **-** |
| **…** | | |

## PART-B: Program information

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

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

**Table No. B1:** Program details.

| S. N. | Program Name | Year of start | Sanctioned Intake | Increase/ decrease in intake, if any | Year of increase/ decrease | AICTE Approval Details | Accreditation Status* | No. of times program accredited |
|---|---|---|---|---|---|---|---|---|
| **1.** | Electronics & Communication Engineering | 2009 | 60 | 120<br>180 | 2011<br>2019 | South central Region /1-4263510748/ 2019/EOA | Accredited From 2022-23 to 2024-25 i.e., upto 30/06/2025 | 2 |

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

**A. Name of the HoD : Dr. B. Ravi**

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

- **Regular** [√]
- **Contract** [ ]
- **Ad hoc** [ ]

**C. Qualification: (Tick the applicable choice)**

- **Ph.D.** [√]
- **ME/M.Tech** [ ]
- **Any other*** [ ]

***Please provide details:** _____

**B3: Program Details**

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

| Item (Information is to be provided cumulatively for all the shifts with explicit headings, wherever applicable) | CAY 2025-26 | CAYm1 2024-25 | CAYm2 2023-24 | CAYm3 2022-23 | CAYm4 (LYG) 2021-22 | CAYm5 (LYGm1) 2020-21 | CAYm6 (LYGm2) 2019-20 |
|---|---|---|---|---|---|---|---|
| N= Sanctioned intake of the program (as per AICTE /Competent authority) | 180 | 180 | 180 | 180 | 180 | 180 | 180 |
| 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 | 142 | 180 | 180 | 180 | 97 | 137 | 130 |
| N2= Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats | NA | 20 | 18 | 20 | 82 | 23 | 20 |
| N3= Separate division if any | NA | NA | NA | NA | NA | NA | NA |
| N4= Total no. of students admitted in the 1st year via all supernumerary quotas | 09 | 11 | 12 | 11 | 6 | NA | NA |
| Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points. | 151 | 211 | 210 | 211 | 185 | 160 | 150 |

CAY= Current Academic Year.
CAYm1= Current Academic Year Minus 1
CAYm2= Current Academic Year Minus 2.
LYG= Last Year Graduate.
LYGm1= Last Year Graduate Minus 1.
LYGm2= Last Year Graduate Minus 2.

**B4: Enrolment Ratio in the First Year**

**Table No. B4.1:** Student enrolment ratio in the 1st year.

| Item (Students enrolled in the First Year on average over 3 academic years (CAY, CAYm1, and CAYm2)) | CAY 2025-26 | CAYm1 2024-25 | CAYm2 2023-24 | CAYm3 2022-23 |
|---|---|---|---|---|
| N= Sanctioned intake of the program in the 1st year (as per AICTE/Competent authority) | 180 | 180 | 180 | 180 |
| 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 | 142 | 180 | 180 | 180 |
| N4= Total no. of students admitted in the 1st year via all supernumerary quotas | 09 | 11 | 12 | 11 |
| Enrolment Ratio (ER)= (N1+N4)/N | 83.89 | 106.11 | 106.67 | 106.11 |
| **Average ER=** (ER_1+ ER_2+ ER_3)/3 | | 106.30 | | |
| | 98.89 | | | |

**B5:Success Rate of the Students in the Stipulated Period of the Program**

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

| Item | LYG 2021-22 | LYGm1 2020-21 | LYGm2 2019-20 | LYGm3 2018-19 |
|---|---|---|---|---|
| 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). | 185 | 160 | 150 | 121 |
| B=No. of students who graduated from the program in the stipulated course duration | 151 | 96 | 98 | 82 |
| Success Rate (SR)= (B/A)*100 | **81.62** | **60** | **65.33** | **67.77** |
| Average SR of three batches ((SR_1+SR_2+ SR_3)/3) | | **64.37** | | |
| | **68.98** | | | |

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

**B6: Academic Performance of the First-Year Students of the Program**

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

| Academic Performance | CAYm1 2024-25 | CAYm2 2023-24 | CAYm3 2022-23 | CAYm3 2022-23 |
|---|---|---|---|---|
| X= (Mean of 1st year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 1st year/10) | 6.06 | 7.54 | 7.40 | 7.1 |
| Y= Total no. of successful students | 182 | 178 | 179 | 99 |
| Z = Total no. of students appeared in the examination | 185 | 180 | 180 | 101 |
| API = X* (Y/Z) | 5.96 | 7.46 | 7.36 | 6.96 |
| Average API = ( API_1 + API_2 + API_3)/3 | | 7.26 | | |
| | 6.93 | | | |

**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 | CAYm4 2021-22 |
|---|---|---|---|---|
| X= (Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2rd year/10) | 5.94 | 7.45 | 6.68 | 5.9 |
| Y= Total no. of successful students | 195 | 193 | 174 | 149 |
| Z =Total no. of students appeared in the examination | 197 | 194 | 175 | 156 |
| API = X* (Y/Z) | 5.88 | 7.41 | 6.64 | 5.64 |
| Average API = ( API_1 + API_2 + API_3)/3 | | 6.56 | | |
| | 6.64 | | | |

**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 | CAYm4 2021-22 |
|---|---|---|---|---|
| X= (Mean of 3rd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 3rd year/10) | 6.57 | 7.4 | 5.71 | 5.48 |
| Y= Total no. of successful students | 190 | 169 | 146 | 145 |
| Z= Total no. of students appeared in the examination | 192 | 170 | 146 | 145 |
| API = X* (Y/Z) | 6.50 | 7.36 | 5.71 | 5.48 |
| Average API = ( API_1 + API_2 + API_3)/3 | | 6.18 | | |
| | 6.52 | | | |

**B9: Placement, Higher Studies, and Entrepreneurship**

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

| Item | LYG 2024-25 | LYGm1 2023-24 | LYGm2 2022-23 | LYGm3 2021-22 |
|---|---|---|---|---|
| FS*=Total no. of final year students | 170 | 160 | 150 | 121 |
| X= No. of students placed | 70 | 71 | 89 | 81 |
| Y= No. of students admitted to higher studies | 08 | 20 | 18 | 22 |
| Z= No. of students taking up entrepreneurship | 02 | 3 | 5 | 4 |
| X + Y + Z = | 80 | 94 | 112 | 107 |
| Placement Index (P) = (((X + Y + Z)/FS) * 100) | 47.06 | 58.75 | 74.67 | 88.43 |
| Average placement index = (P_1 + P_2 + P_3)/3 | | 73.95 | | |
| | 60.16 | | | |

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

## PART C: Faculty Details in Department and Allied Departments

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

### C1: Faculty details of Department and Allied Departments

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

| S.No | Name of the Faculty | Highest degree | University | Area of Specialization | Date of Joining in this Institution | Experience in years in current institute | Designation at Time Joining in this Institution | Present Designation | The date on which Designated as Professor/Associate Professor if any | Nature of Association (Regular/ Contract/ Ad hoc) | If contractual mention Fulltime or (Part time or hourly based) | Currently Associated(Y/N) | Date of Leaving if any(Incase Currently Associated is "No") |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Dr.RaviBolimera | M.E/M.Tech and Ph.D | National Institute of Technology Warangal | AI for Signal Processing | 01-07-2022 | 3Y 7M | Associate Professor | Associate Professor | 01-07-2022 | Regular | | Y | |
| 2 | Dr. C V Krishna Reddy | M.E/M.Tech and Ph.D | JNTUH Hyderabad | VLSI | 03-07-2010 | 15Y 7M | Professor | Professor | 03-07-2010 | Regular | | Y | |
| 3 | Dr.B.Hari Prasad Naik | M.E/M.Tech and Ph.D | Osmania University, Hyderabad | VLSI | 25-11-2019 | 6Y 2M | Associate Professor | Professor | 25-07-2022 | Regular | | Y | |
| 4 | Dr. Sk. Fairooz | M.E/M.Tech and Ph.D | JNTUH Hyderabad | VLSI | 02-08-2024 | 1Y 6M | Associate Professor | Professor | 14-07-2025 | Regular | | Y | |
| 5 | Dr.V.Sravan Kumar | M.E/M.Tech and Ph.D | BITS Pilani, Hyderabad Campus | Video Processing & VLSI | 14-02-2022 | 3Y 11M | Associate Professor | Associate Professor | 14-02-2022 | Regular | | Y | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | Dr.S.Rekha | M.E/M.Tech and Ph.D | Karunya Institute of Technology and Sciences, Coimbatore | Antenna Design | 22-08-2022 | 3Y 5M | Associate Professor | Associate Professor | 22-08-2022 | Regular | | Y | |
| 7 | Dr. S. Karthick | M.E/M.Tech and Ph.D | NITTiruchirappalli | Signal & Image Processing | 25-01-2021 | 5Y 0M | Assistant Professor | Associate Professor | 01-07-2023 | Regular | | Y | |
| 8 | Dr.P.Ashok Kumar | M.E/M.Tech and Ph.D | SSSUTMS | Digital Signal Processing | 12-08-2024 | 1Y 5M | Associate Professor | Associate Professor | 12-08-2024 | Regular | | Y | |
| 9 | Mr. P.S. Sreenivasa Reddy | M.E/M.Tech | Madras University | Applied Electronics | 19-05-2011 | 14Y 8M | Associate Professor | Associate Professor | 19-05-2011 | Regular | | Y | |
| 10 | Mr. P. K. Kulkarni | M.E/M.Tech | Shivaji University, Kolhapur | Communication System | 18-10-2021 | 4Y 3M | Associate Professor | Associate Professor | 18-10-2021 | Regular | | Y | |
| 11 | Dr.AareGopal | M.E/M.Tech and Ph.D | Osmania University (O.U) | Wireless communication | 18-08-2025 | 10Y 8M | Associate Professor | Associate Professor | 18-08-2025 | Regular | | Y | |
| 12 | Ms.SoumyaGudepu | M.E/M.Tech | JNTUH Hyderabad | DECS | 01-07-2019 | 6Y 7M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 13 | Mr.KoustubhKulkarni | M.E/M.Tech | Osmania University (O.U) | C.E&SP | 01-07-2019 | 6Y 7M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 14 | Ms.K.Madhavi | M.E/M.Tech | JNTUH Hyderabad | SSP | 11-07-2019 | 6Y 7M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 15 | Ms.N.Lavanya | M.E/M.Tech | JNTUH Hyderabad | W &MC | 16-07-2019 | 6Y 6M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 16 | Mr.A.Aravind | M.E/M.Tech | JNTUH Hyderabad | ECE | 25-01-2021 | 5Y 0M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 17 | Mr.ChennojuPhanindra | M.E/M.Tech | JNTUH Hyderabad | SSP | 19-03-2021 | 4Y 10M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 18 | Ms.K.Anuradha | M.E/M.Tech | JNTUH Hyderabad | DSCE | 03-01-2022 | 4Y 1M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 19 | Dr.NiteshGaikwad | M.E/M.Tech and Ph.D | Vel Tech RangarajanDr. Sagunthala R&D Institute of Science and Technology | Embedded Systems &IoT | 20-07-2022 | 3Y 6M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 20 | Mr.N.Raju | M.E/M.Tech | JNTUH Hyderabad | Embedded Systems | 27-07-2022 | 3Y 6M | Assistant Professor | Assistant Professor | | Regular | | Y | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | Mr.K.Ramesh | M.E/M.Tech | JNTUH Hyderabad | VLSI System Design | 27-07-2022 | 3Y 6M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 22 | Mr.N.Suresh | M.E/M.Tech | JNTUH Hyderabad | DECS | 01-08-2022 | 3Y 6M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 23 | Mr.K.Rambabu | M.E/M.Tech | JNTUH Hyderabad | DECS | 16-08-2022 | 3Y 5M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 24 | Ms.V.Neelavathi | M.E/M.Tech | JNTUA, Ananthapur | DECS | 16-08-2022 | 3Y 5M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 25 | Mr.B.Saidulu | M.E/M.Tech | JNTUH Hyderabad | Embedded Systems & VLSI Design | 17-08-2022 | 3Y 5M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 26 | Mrs.V.V.Nandini | M.E/M.Tech | JNTUH Hyderabad | VLSI DESIGN | 18-08-2022 | 3Y 5M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 27 | Ms.K.ShivaPrasanna | M.E/M.Tech | JNTUH Hyderabad | VLSI & Embedded Systems | 01-06-2023 | 2Y 8M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 28 | Mr.Abraham Thomas | M.E/M.Tech | University of Kerala | Signal Processing | 02-08-2023 | 2Y 6M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 29 | Mr.K.Srinivas | M.E/M.Tech | JNTUH Hyderabad | VLSI & ES | 01-08-2023 | 2Y 6M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 30 | Ms.B.NagaPrasanna | M.E/M.Tech | KL university | Communications & Radar Systems | 18-06-2024 | 1Y 7M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 31 | Ms.ShettySravanthi | M.E/M.Tech | JNTUH Hyderabad | Embedded Systems | 05-08-2024 | 1Y 6M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 32 | Ms.M.H.Sushma Mercilin | M.E/M.Tech | JNTUH Hyderabad | VLSI System Design | 05-08-2024 | 1Y 6M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 33 | Ms.K.Hemalatha | M.E/M.Tech | JNTUH Hyderabad | DSCE | 12-08-2024 | 1Y 5M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 34 | Ms.K.Thrisandhya | M.E/M.Tech | JNTUH Hyderabad | VLSI System Design | 19-08-2024 | 1Y 5M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 35 | Ms.P.Kiranmayee | M.E/M.Tech | JNTUH Hyderabad | Embedded Systems | 21-08-2024 | 1Y 5M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 36 | Mr.Y.Sathish | M.E/M.Tech | JNTUH Hyderabad | Embedded Systems | 07-07-2025 | 0Y 7M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 37 | Ms.D.BinduTushara | M.E/M.Tech | JNTUH Hyderabad | VLSI | 17-07-2025 | 0Y 6M | Assistant Professor | Assistant Professor | | Regular | | Y | |
| 38 | Ms.G.T.Sandhya | M.E/M.Tech | JNTUH Hyderabad | VLSI System Design | 23-07-2025 | 0Y 6M | Assistant Professor | Assistant Professor | | Regular | | Y | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 39 | Ms.T.Swetha | M.E/M.Tech | JNTUH Hyderabad | VLSI System Design | 28-07-2022 | 2Y 11M | Assistant Professor | Assistant Professor | | Regular | | N | 04-07-2025 |
| 40 | Mr.U.Bharadwaja | M.E/M.Tech | JNTUK Kakinada | VLSI & ES | 08-08-2022 | 2Y 8M | Assistant Professor | Assistant Professor | | Regular | | N | 30-04-2025 |
| 41 | Dr. B. Suneetha | M.E/M.Tech and Ph.D | Dr.M.G.R Educational and Research Institute | Signal & Image Processing | 21-06-2016 | 8Y 4M | Associate Professor | Associate Professor | 21-06-2016 | Regular | | N | 06-11-2024 |
| 42 | Mrs.MummadiRajeswari | M.E/M.Tech | JNTUH Hyderabad | VLSI System Design | 01-07-2024 | 0Y 3M | Assistant Professor | Assistant Professor | | Regular | | N | 03-10-2024 |
| 43 | Mr.M.Sharath Chandra | M.E/M.Tech | JNTUH Hyderabad | VLSI System Design | 08-08-2022 | 2Y 0M | Assistant Professor | Assistant Professor | | Regular | | N | 16-08-2024 |
| 44 | Dr.SRavichand | M.E/M.Tech and Ph.D | JNTUK Kakinada | VLSI, Processor | 28-01-2021 | 3Y 6M | Professor | Professor | 28-01-2021 | Regular | | N | 05-08-2024 |
| 45 | Dr.N.AdithyaVallli | M.E/M.Tech and Ph.D | | Radar Signal Processing | 02-06-2022 | 2Y 1M | Assistant Professor | Assistant Professor | | Regular | | N | 25-07-2024 |
| 46 | Ms.Sk.Shafiya | M.E/M.Tech | JNTUH Hyderabad | ES | 31-08-2015 | 6Y 10M | Assistant Professor | Assistant Professor | | Regular | | N | 15-07-2024 |
| 47 | Ms.V.Ramya | M.E/M.Tech | JNTUH Hyderabad | W &MC | 01-07-2019 | 5Y 0M | Assistant Professor | Assistant Professor | | Regular | | N | 15-07-2024 |
| 48 | Dr.T.Rajasekhar | M.E/M.Tech and Ph.D | AcharyaNagarjuna University | VLSI DESIGN | 19-04-2021 | 3Y 1M | Associate Professor | Associate Professor | 19-04-2021 | Regular | | N | 13-06-2024 |
| 49 | Mr.K.Naveen Kumar | M.E/M.Tech | | SSP | 29-06-2021 | 2Y 11M | Assistant Professor | Assistant Professor | | Regular | | N | 10-06-2024 |
| 50 | Dr.B.C.Premkumar | Ph.D | Dr.M.G.R Educational and Research Institute | ES | 12-07-2017 | 6Y 10M | Professor | Professor | 12-07-2017 | Regular | | N | 31-05-2024 |
| 51 | Dr. P Michael Preetam Raj | M.E/M.Tech and Ph.D | BITS Pilani, Hyderabad Campus | Microelectronics | 01-02-2021 | 3Y 3M | Associate Professor | Associate Professor | 01-02-2021 | Regular | | N | 10-05-2024 |

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

| S.No | Name of the Faculty | Highest degree | University | Area of Specialization | Date of Joining in this Institution | Experience in years in current institute | Designation at Time Joining in this Institution | Present Designation | The date on which Designated as Professor/Associate Professor if any | Nature of Association (Regular/ Contract/ Ad hoc) | If contractual mention Fulltime or (Part time or hourly based) | Currently Associated(Y/N) | Date of Leaving if any(Incase Currently Associated is "No") |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | |

**C2: Student-Faculty Ratio (SFR)**

- No. of UG(Engineering) programs in Department including allied departments/ clusters ($UG_n$):
  - $UG_1$=1st UG program
  - $UG_n$=nth UG program
    - **B=** No. of Students in UG 2nd year (**ST**)
    - **C=** No. of Students in UG 3rd year (**ST**)
    - **D=** No. of Students in UG 4th year (**ST**)
- No. of PG (Engineering) programs in Department including allied departments/ clusters ($PG_m$):
  - $PG_1$=1st PG program.
  - $PG_m$=mth PG program
    - **A=** No. of Students in PG 1st year
    - **B=** No. of Students in PG 2nd year ❖Student Faculty Ratio (**SFR**) = S/F
  - **S**= No. of students of all programs in the Department including all students of allied departments/clusters.
    - **No. of students (ST)=**Sanctioned Intake (SA)+ Actual admitted students via lateral entry including leftover seats (L) if any (limited to 10 % of SA)
    - Students who admitted under supernumerary quotas (SNQ, EWS, etc) will not be considered in calculating SFR value. Those students are **exempted**.
  - **F**=Total no. of regular or contractual faculty members (Full Time) in the Department, including allied departments/clusters (excluding first year faculty (The faculty members who have a 100% teaching load in the first-year courses)).

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

| Student | CAY (2025-26) | | CAYm1 (2024-25) | | CAYm2 (2023-24) | | CAYm3 (2022-23) | |
|---|---|---|---|---|---|---|---|---|
| $UG_1$. B | 198 | 180+18 | 198 | 180+18 | 198 | 180+18 | 198 | 180+18 |
| $UG_1$. C | 198 | 180+18 | 198 | 180+18 | 198 | 180+18 | 198 | 180+18 |
| $UG_1$. D | 198 | 180+18 | 198 | 180+18 | 198 | 180+18 | 198 | 180+18 |
| $UG_1$ (UG-Engineering-ECE) | 594 | | 594 | | 594 | | 594 | |
| $PG_1$. A | 18 | | 18 | | | | | |
| $PG_1$. B | 18 | | | | | | | |
| $PG_1$ (PG-Engineering-ECE-ES&VLSI) | 18 | | 0 | | 0 | | 0 | |
| **S**=Total no. of students in the Department ($UG_1$, $PG_1$) | **630** | | **612** | | **594** | | **594** | |
| **F**=Total no. of faculty members in the Department | **38** | | **36** | | **38** | | **35** | |
| **FF**=The faculty members who have a 100% teaching load in the first-year courses | 1 | | 1 | | 1 | | 1 | |
| **Student Faculty Ratio (SFR)=S/(F-FF)** | 17.03 | | 17.49 | | 16.05 | | 17.47 | |
| **Average SFR for 3 years** | | | **17.00** | | | | | |
| | **16.86** | | | | | | | |

**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 | FQI= 2.5 * [(10X +4Y)/RF] |
|---|---|---|---|---|
| **CAY** | 9 | 29 | 32 | 16.35 |
| **CAYm1** | 8 | 28 | 31 | 15.69 |
| **CAYm2** | 10 | 28 | 30 | 17.85 |
| **CAYm3** | 10 | 25 | 30 | 16.84 |

### C4: Faculty Cadre Proportion

- Faculty Cadre Proportion is 1(RF1): 2(RF2): 6(RF3)
  - RF1= No. of Professors required = 1/9 * No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per C2 of this documents:.
  - RF2= No. of Associate Professors required = 2/9 * No. of Faculty required to comply with 20:1 StudentFaculty 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 StudentFaculty ratio based on no. of students (S) as per section C2 of this documents:. ❖Faculty cadre and qualification and experience should be as per AICTE/UGC norms.

**Table No.C4.1:** Faculty cadre proportion details.

| Year | Professors | | Associate Professors | | Assistant Professors | |
|---|---|---|---|---|---|---|
| | Required Faculty(RF1) | Available Faculty(AF1) | Required Faculty(RF2) | Available Faculty(AF2) | Required Faculty(RF3) | Available Faculty(AF3) |
| **CAY** | 3.50 | 3 | 7.00 | 8 | 21.00 | 27 |
| **CAYm1** | 3.40 | 2 | 6.80 | 8 | 20.40 | 26 |
| **CAYm2** | 3.30 | 4 | 6.60 | 9 | 19.80 | 25 |
| **Average Numbers** | RF1= 3.40 | AF1=3.00 | RF2= 6.80 | AF2= 8.33 | RF3= 20.40 | AF3= 26.00 |

### C5: Visiting/Adjunct Faculty/Professor of Practice

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

| S.N. | Name of the Person | Designation &Organization | Name of theCourse | No. of hours handled |
|---|---|---|---|---|
| **CAYm1** | | | | |
| **1** | Dr. R. S. Sairam | Board of Director, Lemon Flip Solutions, Hyderabad | CMOS VLSI Design | 30 |
| **2** | Dr. P. Suryanarayana | Retd. DRDO Scientist | IoT Architectures and Protocals | 30 |
| **Total no. of hours:** | | | | 60 |
| **CAYm2** | | | | |
| **1** | Dr. P. Suryanarayana | Retd. DRDO Scientist | Embedded system Design | 30 |
| **2** | Dr. R. S. Sairam | Board of Director, Lemon Flip Solutions, Hyderabad | Low Power VLSI Design | 30 |
| **Total no. of hours:** | | | | 60 |
| **CAYm3** | | | | |
| **1** | Dr. P. Suryanarayana | Retd. DRDO Scientist | Micro Processor and Micro Controllers | 30 |
| **2** | Dr. R. S. Sairam | Board of Director, Lemon Flip Solutions, Hyderabad | Low Power VLSI Design | 30 |
| **Total no. of hours:** | | | | 60 |

### C6: Academic Research

**Table No. C6.1:** Faculty publication details.

| S.N. | Item | CAYm1 (2024-25) | CAYm2 (2023-24) | CAYm3 (2022-23) | CAYm4 (2021-22) |
|---|---|---|---|---|---|
| 1 | No. of peer reviewed journal papers published | 6 | 17 | 5 | 6 |
| 2 | No. of peer reviewed conference papers published | 26 | 15 | 4 | 6 |
| 3 | No. of books/book chapters published | 8 | - | 2 | - |

### C7: Sponsored Research Project

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

| S.N. | PI name | Co-PI names if any | Name of the Dept., where project is sanctioned | Project title* | Name of the Funding agency | Duration of the project | Amount (Lacs) |
|---|---|---|---|---|---|---|---|
| **CAYm1** | | | | | | | |
| **1** | | | | | | | |
| **..** | | | | | | | |
| **Amount received (Rs.)** | | | | | | | |
| **CAYm2** | | | | | | | |
| **1** | | | | | | | |
| **...** | | | | | | | |
| **Amount received (Rs.)** | | | | | | | |
| **CAYm3** | | | | | | | |
| **1** | Dr. B. Hari Prasad Naik | Mr P. Sreenivasa Reddy | ECE | Moderization of VLSI E-CAD Laboratory | AICTE | 2 Years | Rs 4,83,000 |
| **..** | | | | | | | |
| **Amount received (Rs.)** | | | | | | | |
| **Total Amount (Lacs) Received for the Past 3 Years** | | | | | | | |

### C8: Consultancy Work

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

| S.N. | PI name | Co-PI names if any | Name of the Dept., where project is sanctioned | Project title* | Name of the Funding agency | Duration of the project | Amount (Lacs) |
|---|---|---|---|---|---|---|---|
| **CAYm1** | | | | | | | |
| **1** | | | | | | | |
| **..** | | | | | | | |
| **Amount received (Rs.)** | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CAYm2** | | | | | | | |
| **1** | | | | | | | |
| **…** | | | | | | | |
| **Amount received (Rs.)** | | | | | | | |
| **CAYm3** | | | | | | | |
| **1** | | | | | | | |
| **..** | | | | | | | |
| **Amount received (Rs.)** | | | | | | | |
| **Total amount (Lacs) received for the past 3 years** | | | | | | | |

**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 researchgrantfrom the Institution.

| S.N. | Faculty name | Project title/ Support for Activity | Duration | Amount (Lacs) | Amount Utilized (Lacs) | Outcomes of the project |
|---|---|---|---|---|---|---|
| **CAYm1 (2024-25)** | | | | | | |
| 1 | Ms. K. Madhavi | Blockchain-Integrated Smart Home Hub | 01-09-2024 to 31-07-2025 | Nil | Nil | 1. Secure communication and data integrity<br>2. Decentralized authentication and access control mechanisms |
| 2 | Mr. Prashant Kulkarni | Ai-Powered Data Processing Device For Stock Market Forecasting | | 20000 | 15250 | 1. Improved stock trend prediction accuracy using AI models<br>2. Automated real-time financial data analysis and decision support |
| 3 | Mr. Prashant Kulkarni | Integrated System For Cyclone Detection, Prediction, And Tracking Using Ai-Driven Ensemble Models, Satellite Data And Coupled Ocean-Atmosphere Simulations | | 20000 | 15250 | 1. Early cyclone detection improving disaster preparedness<br>2. Accurate cyclone path and intensity prediction using coupled atmosphere-ocean simulations |
| 4 | Ms. Soumya Reddy Gudepu | Ai-Driven Innovations In Financial Technology For Fraud Prevention And Anti-Money Laundering Applications | | 5000 | 4500 | 1. Eeffective detection and prevents financial fraud, reducing losses for institutions and customers.<br>2. Anti-Money Laundering compliance, identifying suspicious transactions |
| 5 | Dr. S. Rekha | System to Perform Self Charge Electric Vehicle Battery Using IoT Based System | | 5000 | 5000 | 1. The system monitors and manages battery charging automatically, improving battery efficiency and reducing the need for manual charging.<br>2. The IoT platform allows users to track battery status remotely and helps increase vehicle reliability and energy savings |

| | | | | | |
|---|---|---|---|---|---|
| 6 | Mr. Nitesh Gaikwad | AI Based Camera Device For Traffic Law Violation Detection | 5000 | 4500 | 1. Improved Road Safety<br>2. Automated and Accurate Enforcement<br>3. Smart Traffic Management and Data Analytics |
| 7 | Ms. Shiva Prasanna | Development of Quality Of Service For Massive MIMO Joint Optimization | 5000 | 4800 | 1. Evaluate system performance under multi-user conditions.<br>2. Optimization strategies for power allocation, beamforming, and resource management to enhance QoS. |
| 8 | Ms. Shiva Prasanna | Machine Learning Model For Automated Decision Making In IoT Networks | 5000 | 4800 | Intelligent and optimized automated decision-making in IoT networks. |
| 9 | Ms. M H Sushma Mercilin | Implementation Of FIFO Using Ternary Content Addressable Memories | 5000 | 4800 | 1. To develop a hardware architecture for FIFO implementation using Ternary Content Addressable Memory (TCAM)<br>2. To optimize high-speed data access and queue management<br>3. To enhance scalability and resource efficiency in queue-based |
| 10 | Ms.K. Thrisandhya | IoT Based Automatic Vehicle Accident Detection And Rescue System | 5000 | 4800 | 1. To design and develop an IoT-enabled accident detection system<br>2. To implement an automatic alert and location tracking mechanism |
| 11 | Ms. B. Naga Prasanna | Metamaterial Based Antennas For Enhanced Signal Propagation | 20000 | 20500 | 1. Improved Signal Gain and Directivity<br>2. Reduced Signal Loss and Interference<br>3. Compact and Efficient Design |
| 12 | Ms. Boddapati Naga Prasanna | Mimo Antenna System Optimized For 5g Networks | 25000 | 30500 | 1. High Data Rate Performance<br>2. Reduced Mutual Coupling<br>3. Compact and Multi-Band Operation |
| 13 | Ms.Shetty Sravanthi | Xg Boost Model Based Alpha Signal Prediction Using Microblogging Data From Social Media | 5000 | 5100 | 1. Predict stock returns/price movements.<br>2. higher accuracy than price/volume-only baselines.<br>3. Reusable end-to-end pipeline |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | **Amount received (Rs.)** | | 119850 | |
| **CAYm2 (2023-24)** | | | | | | |
| 1 | Ms.K.Madhavi | IoT enabled Device for Monitoring Oxygen And Blood Pressure In Human Body | 01-09-2023 to 31-08-2024 | 5000 | 5500 | 1. Measure physiological parameters such as blood oxygen saturation ($SpO_2$) and blood pressure in real time.<br>2. remote monitoring, data analysis, and alert generation in healthcare applications. |
| 2 | Ms.K.Madhavi | AI Based Driver Drowsiness Detecting Device | | 5000 | 5500 | 1. detecting driver<br>2. analyze facial features such as eye closure, blinking rate, and head movement, and generate alerts to prevent road accidents. |
| 3 | Ms.K.Madhavi | Revolutionizing Rice Quality Evaluation Using A Novel Image Processing Approach For Physical Quality Assessment | | 5000 | 5500 | 1. automatic evaluation of physical quality parameters of rice grains, such as size, shape, color, and defects.<br>2. improved accuracy, consistency, and efficiency |
| 4 | Mr. Prashant K Kulkarni | Design Of Single-Layer Fingers Shaped Microstrip Antenna For Sub 6 GHz Wireless Communication | | 25000 | 25250 | 1. Enhanced antenna gain and radiation efficiency for 5G sub-6 GHz bands<br>2. Compact and low-cost antenna suitable for IoT and wireless devices |
| 5 | Ms. Soumya Reddy Gudepu | Advanced Imaging Analytics:Machine Learning And Deep Learning In Cancer Detection And Segmentation | | 5000 | 4500 | 1. The patent leads to development of an AI model that accurately detects and segments cancerous tumors from medical images.<br>2. The technology enables faster and more precise cancer diagnosis, improving patient outcomes and treatment effectiveness. |
| 6 | Dr. Ravi Bolimera | Smart Healthcare Monitoring System Using IoT And Artificial Intelligence | | 5000 | 4500 | The patent results in development of an AI model that accurately monitor the Health of the human being |

| | | | | | |
|---|---|---|---|---|---|
| 7 | Dr. Ravi Bolimera | Developing A Python Opencv-Based System To Detect Driver Drowsiness | 10000 | 13000 | To design and develop an IoT-enabled accident detection system |
| 8 | Dr. S. Rekha | IoT and Cloud Based Smart Agriculture Device To Detect Flames Using WSN And Image Processing Techniques | 5000 | 4500 | 1. The system identifies and analyzes flames in the agricultural field and alerts the farmer in real time.<br>2. Farmers can monitor, evaluate, and protect their crops using cloud-based fire detection data. |
| 9 | Ms.Anuradha K | Enhancing the Power by Reducing the Harmonics in Grid Connected Inverters using Deep Learning Technique | 5000 | 4500 | 1. Explain how deep learning reduces harmonics in grid-connected inverters to get cleaner power.<br>2. Apply deep learning control to an inverter model and compare waveforms before/after to see more useful power output.<br>3. Evaluate the deep learning method versus traditional filters, then design a better smart control for harmonic reduction. |
| 10 | Mr.Nitesh Gaikwad | IoT based Robotic Device for Seed Dispersing and Pesticide Spraying | 5000 | 4500 | 1. Increased Agricultural Efficiency<br>2. Cost Reduction and Resource Optimization<br>3. Improved Crop Yield and Environmental Protection |
| 11 | Ms. Suresh N | Creating A Connected Mirror: Harnessing IoT For Real-Time Applications | 15000 | 17500 | 1. The connected mirror enables real-time data display and interaction using IoT integration.<br>2. The system allows seamless connectivity with IoT-enabled devices and services. |
| 12 | Dr. Shaik Fairoz | IoT based Crop Monitoring Method using Smart Device with Machine Learning Technique to Assist the Agriculture Industry | 5000 | 4500 | 1. Continuous remote supervision.<br>2. Intelligent decision-making, including irrigation prediction, crop health analysis, and yield forecasting, to improve productivity and reduce resource wastage in agriculture. |

| | | | | | | |
|---|---|---|---|---|---|---|
| 13 | Ms. N. Lavanya | Fire Rescue Drone | | 50000 | 50000 | 1. Improved Responder Safety<br>2. Faster Victim Location |
| 14 | Dr. B. Hari Prasad Naik | SoC based temperature sensor for low power VLSI applications | | 50000 | 50000 | 1. Successful Integration of Temperature Sensor into SoC Design<br>2. Low Power Consumption Achieved<br>3. Accurate Temperature Monitoring<br>4. Area-Efficient Layout 5. Functional Simulation and Verification |
| **Amount received (Rs.)** | | | | | 199250 | |
| **CAYm3 (2022-23)** | | | | | | |
| 1 | Ms. K. Madhavi | IMAGE FUSION ON MRI AND CT IMAGE USING WAVELET TRANSFORM | 01-09-2023 to 31-08 2024 | 5000 | 5200 | 1. Image fusion of MRI and CT images for improved diagnostic visualization<br>2. Performance of fused medical images using appropriate quality metrics such as PSNR, SSIM, and entropy. |
| 2 | Mr. Prashant Kulkarni | A Novel Approach for Integrating the Techniques of IoT ,Fog and Cloud Computing for Smart and Accurateprediction of Earthquake | | 15000 | 15250 | 1. Early earthquake warning through real-time sensor data fusion<br>2. Reduced prediction delay using fog-layer edge processing |
| 3 | Mr. K. Rambabu | AI &IoT Based Smart Irrigation system | | 50000 | 50000 | 1. Water Conservation<br>2. Remote monitoring & Control<br>3. Data Driven Decisions |
| 4 | Dr. T. RajaSekhar | AI & ML Based VLSI Architectures for Low power Applications | | 50000 | 50000 | 1. Optimize power, area for low power<br>2. Low Power Consumption for smart systems<br>3. Low latency |
| **Amount received (Rs.)** | | | | | 120450 | |
| **Total amount (Lacs) received for the past 3 years** | | | | | 439500 | |

## PART-D: Laboratory Infrastructure in the Department

(Data to be filled in for the Department).

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

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

| S.No | Name of the Laboratory | No. of Students per set up (Batch size) | Name of the major equipment | Weekly Utilization Status (all the courses for which the lab is utilized) | Technical Manpower Support | | |
|---|---|---|---|---|---|---|---|
| | | | | | Name of the Technical Staff | Designation | Qualification |
| **1** | Analog Circuits Laboratory | 3(22) | Class A Power Amplifier Trainer kit(1)<br>Class C Power Amplifier Trainer kit(1)<br>Single Tuned Voltage Amplifier Trainer kit(1)<br>Hartley Oscillator Trainer kit(1)<br>Colpitts Oscillator Trainer kit(1)<br>Wein Bridge Oscillator Trainer kit(1)<br>RC Phase Shift Oscillator Trainer kit(1)<br>Clipper and Clamper Trainer kit(1)<br>FET Common Source Amplifier Trainer kit(1)<br>Decade Resistance Box(10)<br>Decade Inductance Box(10)<br>Decade Capacitance Box(10)<br>Cathode Ray Oscilloscope (0-25MHz)(8)<br>Function Generators (10Hz-10MHz) (8)<br>Regulated Power Supply (0-30V) (8)<br>Electronic Servo Voltage Stabilizer(1) | 27 Hours/Week | Ms. K. Mamatha | Lab Assistant | B.Tech |
| **2** | Digital Circuits Laboratory | 3(22) | General purpose trainer with breadboard and IC base (10)<br>MonostableMultivibrator Trainer kit(1)<br>Digital IC trainer Trainer kit(8)<br>Digital Multimeter (10)<br>Function Generators (1Hz-30MHz)(8)<br>Cathode Ray Oscilloscope (0-20MHz)(8)<br>Regulated power supply (0-30V)(8)<br>Servo Voltage Stabilizer(1)<br>Analog IC's(100), Digital IC's(100) | 27 Hours/Week | Ms. R. Manasa | Lab Assistant | B. Tech. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **3** | MODROBS Laboratory | 1(30) | Personal Computers (30)<br>Xilinx Vivado Software (30 users)<br>Zynq 7000 series FPGA Development Boards(5)<br>Xilinx 7 Series FPGA Artix-7 Boards(5)<br>UPS 5KVA (1) | 27 Hours/Week | Ms. Y. Subhashini | Lab Assistant | B. Tech. |
| **4** | Embedded & IOT Laboratory | 1(30) | Personal Computers (30)<br>Raspberry Pi4 (8GB)(6)<br>ESP 32 Microcontroller Board(10)<br>Arduino UNO R3(10), GSM Modem SIM900A(10),<br>Ultrasonic sensor(10)<br>Relay module(10), Soil Sensor(10)<br>DHT11 sensor(10), Water Pumps(10)<br>LED's(50), Web Cameras(5)<br>ARM Cortex M3 Development Board (5)<br>Microprocessor 8086(10)<br>Microcontrollers Trainer kit(8051)(8)<br>7 Segment Display Interface (2)<br>Matrix Keypad Interface (1)<br>ADC Interface (2), DAC Interface (1)<br>Cathode Ray Oscilloscope (0-20MHz) (2)<br>UPS 5 KVA(1) | 27 Hours/Week | Mr.K.Jagdish | Lab Assistant | M.Sc.(I.T.) |
| **5** | Communication Laboratory | 3(22) | Klystron Microwave Bench Setup(3)<br>Gunn Microwave Bench Setup(1)<br>E plane T(1),<br>H plane T(1)<br>EH Plane T(1),<br>Circulator(1)<br>Directional Coupler(1)<br>Fiber Optic Analog Transmitter & Receiver Trainer kit(1)<br>Fiber Optic Digital Transmitter & Receiver Trainer kit(1),<br>Numerical Aperture Trainer kit(1)<br>LED Trainer kit(1),<br>LASER Trainer kit(1)<br>Optical Fiber Cables(3)<br>AM Transmitter Trainer kit(2)<br>AM Receiver Trainer kit(2)<br>FM Transmitter Trainer kit(1)<br>FM Receiver Trainer kit(1) | 27 Hours/Week | Ms. V. Swapna | Lab Assistant | B. Tech. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | PAM Trainer kit(1),PWM Trainer kit(1)<br>PPM Trainer kit(2),FSK Trainer Kit(1)<br>QPSK Trainer Kit(1),OFDM Trainer kit(1)<br>PCM Trainer kit(1),DM Trainer kit(1)<br>Data Transmitter Trainer kit(1)<br>Data Receiver Trainer kit(1)<br>FDM Trainer kit(1)<br>QAM Trainer kit.(1)<br>Sampling & Reconstruction Trainer kit(1)<br>Cathode Ray Oscilloscope (0-20MHz) (8)<br>Function Generator (0-1 MHz) (4)<br>Spectrum Analyser(1Khz -2.5 Ghz)(1) | | | | |
| **6** | Basic Electronics Laboratory | 3(22) | RPS (0-30V)(8),<br>CROs (0-20 MHz)(8),<br>Function generators (0-1 MHz)(8)<br>Bread Boards(15),<br>AM Trainee Kits(1),<br>FM trainer kits(1)<br>74XX IC's (100)<br>Ammeter(0-20mA)(5)<br>Ammeter(0-200mA)(5)<br>DMM(10)<br>Voltmeter(0-20V)(10) | 27 Hours/Week | Mr. Ashok Kulkarni | Lab Assistant | Diploma |
| **7** | Signal Processing Laboratory | 1(30) | Personal Computers (P-IV)(30)<br>MATLAB Software with Signal Processing Tool Box (30)<br>DSP Processor starter kits with Code Composer Studio (10)<br>CRO (30MHz) (2)<br>Function Generator (0-1 MHz) (2) | 27 Hours/Week | Mr.D.Sridhar | Lab Assistant | Diploma(ECE) |
| **8** | Robotics (Project) Laboratory | - | Desktop Computers (I5 configuration),<br>Matlab Software,<br>Digital storage Oscilloscope,<br>3D Printer,<br>Arduino/Raspberry Pi Kits,<br>Light Sensors,<br>LEDs,<br>USB Webcam, etc | As per project requirement | Ms. V Neelavathi | Lab Incharge | M.Tech |

## D2: `Safety Measures in Laboratories

### Common Safety Measures in the Laboratories:

1. First Aid Trainer kitis available at the entrance of the laboratory in case of emergency.
2. Fire extinguisher is available in the laboratory in case of fire emergency.
3. Students are instructed to avoid direct contact with any voltage source and power line voltages.
4. Students must ensure that their hands are dry and they are not standing on wet floors.
5. Students are advised to wear rubber-soled shoes, laboratory coats, and avoid loose clothing.
6. Students are advised not to switch ON the experiments without permission from the faculty/lab technician.
7. Students must ensure that the electric supply is OFF before giving connections.
8. Earthing of line circuits is periodically checked and always before use.

### Safety Measures in Laboratory wise:

| S.No. | Name of the Laboratory | Safety Measures |
|---|---|---|
| 1 | Analog Electronics Laboratory | - First aid kit.<br>- Dry type fire extinguisher.<br>- Guidelines and instructions displayed in the laboratory.<br>- Electrical earthing is well maintained.<br>- Power to all panel boards supplied through a 440V distribution panel.<br>- Power supply terminals connected to any circuit are energized only in the presence of the instructor or lab staff.<br>- Emergency power shutdown facility is provided.<br>- Students instructed to wear apron and shoes. |
| 2 | Digital Circuits Laboratory | - First aid kit.<br>- Dry type fire extinguisher.<br>- Guidelines and instructions displayed in the laboratory.<br>- Electrical earthing is well maintained.<br>- Power to all panel boards supplied through a 440V distribution panel.<br>- Power supply terminals connected to any circuit are energized only in the presence of the instructor or lab staff.<br>- Emergency power shutdown facility is provided.<br>- Students instructed to wear apron and shoes. |
| 3 | MODROBS Laboratory | - First aid kit.<br>- Dry type fire extinguisher.<br>- Guidelines and instructions displayed in the laboratory.<br>- Electrical earthing is well maintained.<br>- Power to all panel boards supplied through a 440V distribution panel.<br>- Uninterrupted power supply provided with UPS.<br>- Power supply terminals connected to any circuit are energized only in the presence of the instructor or lab staff.<br>- Emergency power shutdown facility is provided.<br>- Students instructed to wear apron and shoes.<br>- 5 KVA UPS is provided for continuous uninterrupted regulated power supply. |
| 4 | Embedded System &IoT Laboratory | - First aid kit.<br>- Dry type fire extinguisher.<br>- Guidelines and instructions displayed in the laboratory.<br>- Electrical earthing is well maintained.<br>- Power to all panel boards supplied through a 440V distribution panel.<br>- 5 KVA UPS is provided for continuous uninterrupted regulated power supply.<br>- Power supply terminals connected to any circuit are energized only in the presence of the instructor |

| | | |
|---|---|---|
| | | or lab staff.<br>- Emergency power shutdown facility is provided.<br>- Students instructed to wear apron and shoes. |
| 5 | Communication Laboratory | - First aid kit.<br>- Dry type fire extinguisher.<br>- Guidelines and instructions displayed in the laboratory.<br>- Electrical earthing is well maintained.<br>- Power to all panel boards supplied through a 440V distribution panel.<br>- Power supply terminals connected to any circuit are energized only in the presence of the instructor or lab staff.<br>- Emergency power shutdown facility is provided.<br>- Students instructed to wear apron and shoes. |
| 6 | Basic Electronics Laboratory | - First aid kit.<br>- Dry type fire extinguisher.<br>- Guidelines and instructions displayed in the laboratory.<br>- Electrical earthing is well maintained.<br>- Power to all panel boards supplied through a 440V distribution panel.<br>- Power supply terminals connected to any circuit are energized only in the presence of the instructor or lab staff.<br>- Emergency power shutdown facility is provided.<br>- Students instructed to wear apron and shoes. |
| 7 | Signal Processing Laboratory | - First aid kit.<br>- Dry type fire extinguisher.<br>- Guidelines and instructions displayed in the laboratory.<br>- Electrical earthing is well maintained.<br>- Power to all panel boards supplied through a 440V distribution panel.<br>- Power supply terminals connected to any circuit are energized only in the presence of the instructor or lab staff.<br>- Emergency power shutdown facility is provided.<br>- Students instructed to wear apron and shoes. |
| 8 | Robotics (Project) Laboratory | - First aid kit.<br>- Dry type fire extinguisher.<br>- Guidelines and instructions displayed in the laboratory.<br>- Electrical earthing is well maintained.<br>- Power to all panel boards supplied through a 440V distribution panel.<br>- Power supply terminals connected to any circuit are energized only in the presence of the instructor or lab staff. - Emergency power shutdown facility is provided.<br>- Students instructed to wear apron and shoes. |

**D3: Project Laboratory/Research Laboratory**

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

| S.NO. | Name of the Laboratory |
|---|---|
| 1 | Robotics (Project) Laboratory |

## PART E: Fist Year faculty and financial Resources.

(Data to be filled in for the first year course faculty and budget allocation and utilization)

### E1: First Year Student-Faculty Ratio (FYSFR)

**Table No. E1.1**: FYSFR details.

| Year | Sanctioned intake of all UG programs (S4) | No. of required faculty (RF4= S4/20) | No. of faculty members in Basic Science Courses & Humanities and Social Sciences including Management courses (NS1) | No. of faculty members in Engineering Science Courses (NS2) | Percentage= No. of faculty members ((NS1*0.8) +(NS2*0.2))/(No. of required faculty (RF4)); Percentage=((NS1*0.8)+ (NS2*0.2))/RF4 |
|---|---|---|---|---|---|
| CAY | 930 | 46.5 | 36 | 32 | 75.69% |
| CAYm1 | 810 | 40.5 | 36 | 14 | 78.02% |
| CAYm2 | 690 | 34.5 | 37 | 12 | 92.75% |
| CAYm3 | 690 | 34.5 | 30 | 12 | 76.52% |

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

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

| Items | Budgeted in CFY | Actual expenses in CFY(till Jan 2026) | Budgeted in CFYm1 | Actual Expenses in CFYm1 | Budgeted in CFYm2 | Actual Expenses in CFYm2 | Budgeted in CFYm3 | Actual Expenses in CFYm3 |
|---|---|---|---|---|---|---|---|---|
| Infrastructure Built-Up | 20000000 | 10608429 | 40000000 | 26151868 | 21400000 | 21440031 | 9600000 | 9682332 |
| Library | 700000 | 28570 | 1500000 | 1083234 | 500000 | 536461 | 550000 | 588683 |
| Laboratory equipment | 2000000 | 31012 | 14500000 | 9906967 | 1000000 | 1113355 | 2650000 | 2674920 |
| Teaching and non-teaching staff salary | 185000000 | 139056932 | 185000000 | 178876972 | 162000000 | 162054568 | 112900000 | 112957110 |
| Outreach Programs | 200000 | 223000 | 300000 | 280000 | 300000 | 270000 | 250000 | 280000 |
| R&D | 1500000 | 845000 | 1500000 | 1712542 | 2300000 | 2359945 | 2000000 | 2000475 |
| Training, Placement and Industry linkage | 1800000 | 1212113 | 5000000 | 4080404 | 4700000 | 4741350 | 4900000 | 4926659 |
| SDGs | 200000 | 215120 | 500000 | 500015 | 600000 | 651245 | 550000 | 570000 |
| Entrepreneurship | 200000 | 162320 | 300000 | 222000 | 250000 | 278156 | 250000 | 278156 |
| Others*, pl. specify | 89900000 | 82134002 | 39200000 | 72254547 | 37000000 | 37127621 | 62450000 | 62788274 |
| **Total amount** | **301500000** | **234516498** | **287800000** | **295068549** | **230050000** | **230572732** | **196100000** | **196746609** |

**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 CFY** | **Actual expenses in CFY(till Jan 2026)** | **Budgeted in CFY*m*1** | **Actual Expenses in CFY*m*1** | **Budgeted in CFY*m*2** | **Actual Expenses in CFY*m*2** | **Budgeted in CFY*m*3** | **Actual Expenses in CFY*m*3** |
|---|---|---|---|---|---|---|---|---|
| Laboratory equipment | 45000 | | 700000 | 720023 | 700000 | 776249 | 300000 | 312022 |
| Software | | | | | | | | |
| SDGs | 150000 | 140020 | 350000 | 315042 | 450000 | 450045 | 400000 | 425124 |
| Support for faculty development | 200000 | 172343 | 200000 | 210000 | 200000 | 201900 | 200000 | 199000 |
| R & D | 832000 | 212000 | 425000 | 450243 | 575000 | 589986 | 500000 | 612451 |
| Industrial Training, Industry expert, Internship | 1800000 | 854000 | 1650000 | 1689097 | 1400000 | 1422405 | 1470000 | 1477997 |
| Miscellaneous expenses * | | | | | | | | |
| **Total amount** | 3027000 | 1378363 | 3325000 | 3384405 | 3325000 | 3440585 | 2870000 | 3026594 |