

NATIONAL BOARD OF ACCREDITATION

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

| | |
|---|---|
| Program Name : Electronics & Communication Engineering | Discipline: Engineering & Technology |
| Level : Under Graduate | Tier: 1 |
| Application No: 11536 | Date of Submission: 13-02-2026 |

PART A- Profile of the Institute

| | |
|--|--------------------------------------|
| A1.Name of the Institute: BONAM VENKATA CHALAMAYYA ENGINEERING COLLEGE | |
| Year of Establishment : 1997 | Location of the Institute: Odalarevu |
| A2. Institute Address: ODALAREVU,ALLAVARAM MANDAL,EAST GODAVARI DIST,ANDHRA PRADESH | |
| City:--Select-- | State:Andhra Pradesh |
| Pin Code:533210 | Website:www.bvcec.edu.in |
| Email:bvce@bvcegroup.in | Phone No(with STD Code):08856-250045 |
| A3. Name and Address of the Affiliating University (if any): | |
| Name of the University : JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINAD | City: east Godavari |
| State : Andhra Pradesh | Pin Code: 533003 |
| A4. Type of the Institution: Autonomous CAY(2018-19) | |
| A5. Ownership Status: Self financing | |

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

- No. of UG programs: 10
- No. of PG programs: 8

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 | PG | Advanced Manufacturing Systems | 2012 | -- | Mechanical Engineering |
| 2 | Engineering & Technology | UG | Artificial Intelligence and Machine Learning | 2021 | -- | Computer Science and Engineering |
| 3 | Engineering & Technology | UG | Civil Engineering | 2009 | -- | Civil Engineering |
| 4 | Engineering & Technology | UG | Computer Science and Engineering | 1998 | -- | Computer Science and Engineering |
| 5 | Engineering & Technology | PG | Computer Science and Engineering | 2009 | -- | Computer Science and Engineering |
| 6 | Engineering & Technology | UG | Computer Science and Engineering (Artificial Intelligence & Machine Learning) | 2022 | -- | Computer Science and Engineering |
| 7 | Engineering & Technology | UG | Computer Science and Engineering (Artificial Intelligence and Data Science) | 2020 | -- | Computer Science and Engineering |
| 8 | Engineering & Technology | UG | Electrical and Electronics Engineering | 1997 | -- | Electrical and Electronics Engineering |
| 9 | Engineering & Technology | UG | Electronics & Communication Engineering | 1997 | -- | Electronics and Communication Engineering |
| 10 | Engineering & Technology | PG | Embedded Systems | 2009 | -- | Electronics and Communication Engineering |
| 11 | Engineering & Technology | UG | Information Technology | 2024 | -- | Computer Science and Engineering |
| 12 | Engineering & Technology | UG | Mechanical Engineering | 1997 | -- | Mechanical Engineering |
| 13 | Engineering & Technology | UG | Mining Engineering | 2015 | 2016 | Civil Engineering |
| 14 | Engineering & Technology | PG | Power Electronics | 2010 | -- | Electrical and Electronics Engineering |
| 15 | Engineering & Technology | PG | Software Engineering | 2011 | 2016 | Computer Science and Engineering |
| 16 | Engineering & Technology | PG | Soil Mechanics & Foundation Engineering | 2012 | 2021 | Civil Engineering |
| 17 | Engineering & Technology | PG | Structural Engineering | 2015 | -- | Civil Engineering |
| 18 | Engineering & Technology | PG | Thermal Engineering | 2010 | 2021 | Mechanical Engineering |

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 | No | 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)

| |
|-----------|
| No Record |
|-----------|

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 APPROVAL DETAILS | ACCREDITATION STATUS | FROM | TO | NO. OF TIMES PROGRAM ACCREDITED | PROGRAM DURATION |
|--------|---|-----------------------|--------------------------------|-------------------|------------------------------------|----------------------------|----------------|------------------------|---|---|------|------|---------------------------------|------------------|
| 1 | Electronics & Communication Engineering | UG | 1997 / -- | 60 | Yes | 2011 | 180 | 2011 | SOUTH CENTRAL/1-420978451/2011/EOA 01-09-2011 | Granted accreditation for 3 years for the period (specify period) | 2009 | 2012 | 1 | 4 |

List of the Allied Departments/Cluster and Programs:

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

| | |
|---------------------------|--------------------|
| A. Name of the HoD : | Thoram Saran Kumar |
| B. Nature of appointment: | Regular |
| C. Qualification: | M.Tech and 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) | 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 | 154 | 157 | 178 | 168 | 180 | 148 | 173 |
| N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats | 0 | 29 | 21 | 31 | 18 | 33 | 18 |
| N3=Separate division if any | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| N4=Total no. of students admitted in the 1st year via all supernumerary quotas | 18 | 18 | 18 | 17 | 18 | 12 | 13 |
| Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points. | 172 | 204 | 217 | 216 | 216 | 193 | 204 |

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) | 180 | 154 | 18 | 95.56 |
| 2024-25 (CAYm1) | 180 | 157 | 18 | 97.22 |
| 2023-24 (CAYm2) | 180 | 178 | 18 | 108.89 |

Average $\{ (ER1 + ER2 + ER3) / 3 \} = 100.56 \approx 100$

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) LYG | (2020-21) LYGm1 | (2019-20) LYGm2 |
|--|---------------|-----------------|-----------------|
| A*=(No. of students admitted in the 1st year of that batch and those actually admitted in the 2nd year via lateral entry, plus the number of students admitted through multiple entry (if any) and separate division if applicable, minus the number of students who exited through multiple entry (if any). | 216.00 | 213.00 | 204.00 |
| B=No. of students who graduated from the program in the stipulated course duration | 177.00 | 165.00 | 156.00 |
| Success Rate (SR)= (B/A) * 100 | 81.94 | 77.46 | 76.47 |

Average SR of three batches $\{ (SR_1 + SR_2 + SR_3) / 3 \}$: 78.62

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) | 8.07 | 7.61 | 7.24 |
| Y=Total no. of successful students | 131.00 | 153.00 | 151.00 |
| Z=Total no. of students appeared in the examination | 157.00 | 178.00 | 168.00 |
| API $[X * (Y/Z)]$ | 6.73 | 6.54 | 6.51 |

Average API $\{ (AP1 + AP2 + AP3) / 3 \}$: 6.59

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) | 7.89 | 7.63 | 7.41 |
| Y=Total no. of successful students | 160.00 | 179.00 | 182.00 |
| Z=Total no. of students appeared in the examination | 174.00 | 190.00 | 189.00 |
| API $[X * (Y/Z)]$ | 7.26 | 7.19 | 7.14 |

Average API $\{ (AP1 + AP2 + AP3) / 3 \}$: 7.20

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

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

| Academic Performance | CAYm1 (2024-25) | CAYm2 (2023-24) | CAYm3 (2022-23) |
|----------------------|-----------------|-----------------|-----------------|
|----------------------|-----------------|-----------------|-----------------|

| | | | |
|--|--------|--------|--------|
| X=(Mean of 3rd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 3rd year/10) | 7.98 | 7.81 | 7.58 |
| Y=Total no. of successful students | 173.00 | 178.00 | 168.00 |
| Z=Total no. of students appeared in the examination | 179.00 | 182.00 | 171.00 |
| API [X*(Y/Z)]: | 7.71 | 7.64 | 7.45 |

Average API [(AP1 + AP2 + AP3)/3] : 7.60

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 | 198.00 | 213.00 | 198.00 |
| X=No. of students placed | 150.00 | 143.00 | 135.00 |
| Y=No. of students admitted to higher studies | 6.00 | 5.00 | 5.00 |
| Z= No. of students taking up entrepreneurship | 0.00 | 0.00 | 0.00 |
| Placement Index(P) = (((X + Y + Z)/FS) * 100): | 78.79 | 69.48 | 70.71 |

Average Placement Index = (P_1 + P_2 + P_3)/3: 72.99 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 | Inukonda Rama Satya Nageswara Rao | XXXXXXXX25L | M.Tech | K L Deemed to be University, Vaddeswaram | VLSI | 01/07/2016 | 9.7 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 2 | Akula Pravin | XXXXXXXX12F | M.Tech and Ph.D. | PRIST University, Thanjavur | Communications | 16/07/2001 | 24.7 | Lecturer | Professor | 06/04/2021 | Regular | Yes | | No |
| 3 | Thoram Saran Kumar | XXXXXXXX82B | M.Tech and Ph.D. | NIILM University, Kailthal | VLSI | 16/05/2012 | 13.8 | Assistant Professor | Associate Professor | 01/03/2024 | Regular | Yes | | Yes |
| 4 | Tammireddy Venkata Janardhana Rao | XXXXXXXX25P | M.Tech and Ph.D. | Sunrise University, Alwar | Signal Processing | 02/12/1999 | 24.9 | Lecturer | Professor | 04/01/2022 | Regular | No | 31/08/2024 | No |
| 5 | Kusuma Raja Sekhar | XXXXXX85M | M.Tech and Ph.D. | JNTUK, Kakinada | Communications | 04/09/2000 | 25.5 | Lecturer | Professor | 08/02/2024 | Regular | Yes | | No |
| 6 | Valluri Dhanaraj | XXXXXXXX98H | M.Tech and Ph.D. | JNTUK, Kakinada | Antennas | 18/09/2000 | 25.4 | Lecturer | Professor | 16/08/2022 | Regular | Yes | | No |
| 7 | Namburi Satya Nagendra Lakshmiathiraju | XXXXXXXX21R | M.Tech and Ph.D. | PRIST University, Thanjavur | Wireless Sensor Networks | 30/12/2010 | 15.1 | Assistant Professor | Professor | 01/03/2022 | Regular | Yes | | No |
| 8 | Kompella Bhaskara Srinivasa Sarma | XXXXXXXX25J | M.Tech and Ph.D. | JNTUH, Hyderabad | Signal Processing | 04/11/2016 | 9.3 | Associate Professor | Professor | 11/11/2019 | Regular | Yes | | No |
| 9 | Tammireddy Sivasankara Phani | XXXXXXXX28L | M.Tech and Ph.D. | K L Deemed to be University, Vaddeswaram | VLSI | 10/03/2008 | 16.1 | Assistant Professor | Associate Professor | 24/06/2023 | Regular | No | 03/05/2024 | No |
| 10 | Vijjapu Anuragh | XXXXXXXX43M | M.Tech and Ph.D. | NIILM University, Kailthal | CSE | 04/06/2009 | 15.2 | Assistant Professor | Associate Professor | 01/03/2024 | Regular | No | 31/07/2024 | No |
| 11 | Mandem Nomitha Reddy | XXXXXXXX91C | M.Tech and Ph.D. | VIT AP | VLSI | 30/07/2024 | 1.6 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 12 | S A Vara Prasad | XXXXXXXX04K | M.Tech and Ph.D. | NIT Silchar | Image Processing | 02/06/2025 | 0.8 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 13 | Chavakula Sridevi | XXXXXXXX83P | M.Tech | Acharya Nagarjuna University, Guntur | Mirowave Engineering | 01/06/2006 | 19.8 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 14 | Pangam Harika | XXXXXXXX73K | M.Tech | JNTUK, Kakinada | Embedded Systems | 04/01/2012 | 14.1 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 15 | Vallabhareddi Sandhya | XXXXXXXX25B | M.Tech | JNTUK, Kakinada | Embedded Systems | 14/11/2012 | 13.3 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 16 | Marisetty Mounika Varalakshmi | XXXXXXXX85D | M.Tech | JNTUK, Kakinada | VLSI | 03/01/2013 | 13.1 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 17 | Jalli Umamaheswari | XXXXXXXX94P | M.Tech | JNTUK, Kakinada | Embedded Systems | 09/02/2015 | 11 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |

| | | | | | | | | | | | | | | |
|----|-------------------------------------|-------------|--------|-----------------|------------------|------------|------|---------------------|---------------------|--|---------|-----|------------|----|
| 18 | Yegireddi Satya Vinod | XXXXXXXX07F | M.Tech | JNTUK, Kakinada | Communications | 13/06/2016 | 9.8 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 19 | Samsani Naga Venkata Durga Priyanka | XXXXXXXX03E | M.Tech | JNTUK, Kakinada | Embedded Systems | 23/07/2018 | 7.6 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 20 | Yandamuri Sai Sandeep | XXXXXXXX44P | M.Tech | JNTUK, Kakinada | Communications | 01/08/2018 | 7.6 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 21 | Gubbala Lakshmi Durga | XXXXXXXX69H | M.Tech | JNTUK, Kakinada | Embedded Systems | 01/01/2019 | 7.1 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 22 | Tikkireddy Sri Satya Mounika | XXXXXXXX33A | M.Tech | JNTUK, Kakinada | Communications | 01/01/2019 | 7.1 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 23 | Seelam Naga Bharghavi | XXXXXXXX05L | M.Tech | JNTUK, Kakinada | Communications | 15/12/2021 | 4.1 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 24 | Gundumenu Lakshmi Venkata Durga | XXXXXXXX23N | M.Tech | JNTUK, Kakinada | Embedded Systems | 01/09/2021 | 3.10 | Assistant Professor | Associate Professor | | Regular | No | 31/07/2025 | No |
| 25 | Gubbala Asha | XXXXXXXX10K | M.Tech | JNTUK, Kakinada | Embedded Systems | 03/01/2022 | 3.4 | Assistant Professor | Assistant Professor | | Regular | No | 06/05/2025 | No |
| 26 | Gosangi Sukanya | XXXXXXXX02G | M.Tech | JNTUK, Kakinada | Embedded Systems | 03/01/2022 | 4.1 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 27 | Nimmana Lakshmi Priyanka | XXXXXXXX54R | M.Tech | JNTUK, Kakinada | Embedded Systems | 20/06/2022 | 3.7 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 28 | Gidla Sudheer Babu | XXXXXXXX60J | M.Tech | JNTUK, Kakinada | VLSI | 05/07/2022 | 3.7 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 29 | Bonthu Chandra Praveen | XXXXXXXX49H | M.Tech | JNTUK, Kakinada | VLSI | 12/10/2022 | 2.9 | Assistant Professor | Assistant Professor | | Regular | No | 30/07/2025 | No |
| 30 | Kanakala Sivaranjini | XXXXXXXX55K | M.Tech | JNTUK, Kakinada | Embedded Systems | 06/12/2022 | 3.1 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 31 | Kankipati Swathi | XXXXXXXX79B | M.Tech | JNTUK, Kakinada | VLSI | 13/03/2023 | 2.10 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 32 | Peyyila Rajesh | XXXXXXXX05J | M.Tech | JNTUK, Kakinada | VLSI | 17/04/2023 | 2 | Assistant Professor | Assistant Professor | | Regular | No | 06/05/2025 | No |
| 33 | Dunaboyina Tulasi | XXXXXXXX76H | M.Tech | JNTUK, Kakinada | VLSI | 30/06/2023 | 2.7 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 34 | Seelam Lakshmi Anusha | XXXXXXXX08A | M.Tech | JNTUK, Kakinada | Embedded Systems | 01/08/2023 | 1.9 | Assistant Professor | Assistant Professor | | Regular | No | 08/05/2025 | No |
| 35 | Sabbathi Leelaveni Veni | XXXXXXXX44G | M.Tech | JNTUK, Kakinada | VLSI | 05/08/2023 | 2.5 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 36 | Chikkam Surya Rama Gouri | XXXXXXXX18C | M.Tech | JNTUK, Kakinada | Embedded Systems | 19/07/2023 | 2.6 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 37 | Kondamuri Naga Teja | XXXXXXXX15M | M.Tech | JNTUK, Kakinada | Embedded Systems | 01/08/2024 | 1.6 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 38 | Kondamuri Purma Sidhu | XXXXXXXX35M | M.Tech | JNTUK, Kakinada | Embedded Systems | 01/08/2024 | 1.6 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 39 | Nalla Ratna Priya | XXXXXXXX68A | M.Tech | JNTUK, Kakinada | Embedded Systems | 01/08/2024 | 1.6 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 40 | Paramkusam Arudra | XXXXXXXX24D | M.Tech | JNTUK, Kakinada | VLSI | 08/07/2023 | 2.7 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 41 | Balla Naga Lakshmi | XXXXXXXX42L | M.Tech | JNTUK, Kakinada | Communications | 03/04/2017 | 8.10 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 42 | Y Narayana Murty | XXXXXXXX99N | M.Tech | JNTUK, Kakinada | Embedded Systems | 01/02/2025 | 1 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 43 | B Sai Sree | XXXXXXXX45F | M.Tech | JNTUK, Kakinada | Embedded Systems | 01/02/2025 | 1 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 44 | Shanmukha Satya Sudheer Naidu M | XXXXXXXX94Q | M.Tech | JNTUK, Kakinada | Embedded Systems | 03/04/2025 | 0.10 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 45 | Kiran Kumar Rapaka | XXXXXXXX30N | M.Tech | JNTUK, Kakinada | Embedded Systems | 16/06/2025 | 0.7 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 46 | Nadimpalli Phani Kumar | XXXXXXXX01G | M.Tech | JNTUK, Kakinada | Communications | 08/06/2018 | 7.8 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 47 | Nakka Swami Dattatreya | XXXXXXXX66A | M.Tech | JNTUK, Kakinada | Embedded Systems | 20/12/2021 | 3.4 | Assistant Professor | Assistant Professor | | Regular | No | 12/05/2025 | No |

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

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 Department1
Table No.C2.1: Student-faculty ratio.

| Description | CAY(2025-26) | CAYm1 (2024-25) | CAYm2 (2023-24) |
|---|--------------------|--------------------|--------------------|
| UG1.B | 198 | 198 | 198 |
| UG1.C | 198 | 198 | 198 |
| UG1.D | 198 | 198 | 198 |
| UG1: Electronics & Communication Engineering | 594 | 594 | 594 |
| PG1.A | 18 | 18 | 18 |
| PG1.B | 18 | 18 | 18 |
| PG1: Embedded Systems | 36 | 36 | 36 |
| DS=Total no. of students in all UG and PG programs in the Department | 630 | 630 | 630 |
| AS=Total no. of students of all UG and PG programs in allied departments | 0 | 0 | 0 |
| S=Total no. of students in the Department (DS) and allied departments (AS) | S1= 630 | S2= 630 | S3= 630 |
| DF=Total no. of faculty members in the Department | 38 | 39 | 38 |
| AF= Total no. of faculty members in the allied Departments | 0 | 0 | 0 |
| F=Total no. of faculty members in the Department (DF) and allied Departments (AF) | F1= 38 | F2= 39 | F3= 38 |
| FF=The faculty members in F who have a 100% teaching load in the first-year courses | 1 | 1 | 1 |
| Student Faculty Ratio (SFR)=S/(F-FF) | SFR1= 17.03 | SFR2= 16.58 | SFR3= 17.03 |
| Average SFR for 3 years | SFR= 16.88 | | |

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 = $2.5 * [(10X + 4Y) / RF]$ |
|----------------|---|----|-------|--------------------------------|
| 2025-26(CAY) | 8 | 30 | 31.00 | 16.13 |
| 2024-25(CAYm1) | 7 | 32 | 31.00 | 15.97 |
| 2023-24(CAYm2) | 7 | 31 | 31.00 | 15.65 |

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 = $6/9 * \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per section C2 of this documents.}$
- 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 | 3.00 | 5.00 | 7.00 | 1.00 | 21.00 | 32.00 |
| 2024-25 | 3.00 | 5.00 | 7.00 | 1.00 | 21.00 | 33.00 |
| 2023-24 | 3.00 | 5.00 | 7.00 | 2.00 | 21.00 | 31.00 |
| Average | RF1=3.00 | AF1=5.00 | RF2=7.00 | AF2=1.33 | RF2=21.00 | AF2=32.00 |

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.

(CAYm1)

| S.No | Name of the Person | Designation | Organization | Name of the Course | No. of hours handled |
|------|--------------------|--------------|----------------------------------|---------------------|----------------------|
| 1 | Mr. R Kiran Kumar | Lab Engineer | Marathon Electric India Pvt. Ltd | Arduino Programming | 54.00 |

(CAYm2)

| S.No | Name of the Person | Designation | Organization | Name of the Course | No. of hours handled |
|------|---------------------|----------------------|--------------------------------|--------------------|----------------------|
| 1 | Mr. B D Vara Prasad | Staff DFT Engineer-1 | Sykatiya Technologies Pvt. Ltd | VLSID | 60.00 |

(CAYm3)

| S.No | Name of the Person | Designation | Organization | Name of the Course | No. of hours handled |
|------|---------------------|----------------------|--------------------------------|--------------------|----------------------|
| 1 | Mr. B D Vara Prasad | Staff DFT Engineer-1 | Sykatiya Technologies Pvt. Ltd | VLSID | 54.00 |

C6. Academic Research

Table No. C6.1: Faculty publication details.

| S.No. | Item | 2024-25 (CAYm1) | 2023-24 (CAYm2) | 2022-23 (CAYm3) |
|-------|--|-----------------|-----------------|-----------------|
| 1 | No. of peer reviewed journal papers published | 23 | 15 | 13 |
| 2 | No. of peer reviewed conference papers published | 10 | 5 | 5 |
| 3 | No. of books/book chapters published | 3 | 1 | 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) i.e. 15,25,000=15.25 |
|-------------------------------------|----------------------------|--|--|----------------------------|-------------------------|-----------------------------------|
| Dr.V.CHANDRA MOULI VENKATA SRINIVAS | Dr.N.S.N.LAKSHMIPATHI RAJU | ECE | EMPOWERING TRIBAL FISHING COMMUNITY THROUGH DEVELOPMENT OF INNOVATIVE AND STANDARDISED SMOKING KILNSAND IMPROVED TRADITIONAL FISHING GEARS | DST/SEED/ TSP/STI | 3 YEARS | 141.19 |
| | | | | | | Amount received (Rs.):141.19 |

(CAYm2)

(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) i.e. 15,25,000=15.25 |
|----------------------|----------------------------|--|--|----------------------------|-------------------------|-----------------------------------|
| Dr.VALLURI DHANA RAJ | --- | ECE | CREATING RURAL ENTERPRISE OF LOW COST LANTERN TO IMPROVE QUALITY OF LIVELIHOOD OF FISHERMEN OF KONASEEMA | DST/SEED/ SCSP | 2 YEARS | 55.82 |
| Dr.M.SRINIVASA RAO | Dr.N.S.N.LAKSHMIPATHI RAJU | ECE | SCIENCE AND TECHNOLOGY INTERVENTION TO MAKE LOW COST FISH DRYER TO ENHANCE SOCIOECONOMICV STATUS OF ST FISHING COMMUNITY OF KONASEEMA REGION | DST/SEED/ TSP/STI | 2 YEARS | 38.63 |
| | | | | | | Amount received (Rs.):94.45 |

Total Amount (Lacs) Received for the Past 3 Years: 235.64**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) i.e. 15,25,000=15.25 |
|------------------|--------------------|--|---|----------------------------|-------------------------|-----------------------------------|
| Dr.A.PRAVIN | P.HARIKA | ECE | DESIGN AND DEVELOPMENT OF IoT BASEDSMART SURVEILLANCE AND MONITORING SYSTEM | SEMI COLON LOGIC | 2 | 3.60 |
| Dr.T.SARAN KUMAR | I R S NAGESWARARAO | ECE | DEVELOPEMENT OF WIRELESS SENSOR NETWORKFOR INDUSTRIAL AUTOMATION AND DATA ACQUISITION | SEMI COLON LOGIC | 2 | 3.20 |
| | | | | | | Amount received (Rs.):6.80 |

(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) i.e. 15,25,000=15.25 |
|----------------------|--------------------|--|--|----------------------------|-------------------------|-----------------------------------|
| Dr.DHANA RAJ VALLURI | Y SATYA VINOD | ECE | DEVELOPEMENT OFWEARABLE VITAL PARAMETER MONITORING DEVICE WITH WIRELESS COMMUNICATION | SEMI COLON LOGIC | 2 | 4.30 |
| Dr.NSNLP RAJU | V SANDHYA | ECE | DESIGN AND DEVELOPMENT OF IoT BASED SMART HEALTH MONITORING SYSTEM FOR REMOTE PATIENT CARE | SEMI COLON LOGIC | 2 | 3.90 |
| | | | | | | Amount received (Rs.):8.20 |

(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) i.e. 15,25,000=15.25 |
|-----------------|--------------------|--|--|----------------------------|-------------------------|-----------------------------------|
| Dr.KBSD SARMA | Ch.SRIDEVI | ECE | PROTOTYPE DEVELOPMENT OF SMART BATTLE FIELD ENVIRONMENTAL MONITORING SYSTEM | SEMI COLON LOGIC | 2 | 3.40 |
| Dr.K.RAJASEKHAR | M.M.VARA LAKSHMI | ECE | DEPLOYMENT AND TESTING OF IoTBASED EMERGENCY MEDICAL RESPONSE AND ALERT SYSTEM | SEMI COLON LOGIC | 2 | 2.90 |
| | | | | | | Amount received (Rs.):6.30 |

Total amount (Lacs) received for the past 3 years: 21.30**Note*:**

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

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

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

(CAYm1)

| Faculty name | Project title/ Support for Activity | Duration of the project | Amount(Lacs) i.e. 15,25,000=15.25 | Amount Utilized(Lacs) i.e. 15,25,000=15.25 | Outcomes of the project |
|---------------------------------|--|-------------------------|--------------------------------------|---|--|
| Mrs.CH.S.R.Gowri | Blind Spot Detection System For Vehicles | 6 Months | 0.08 | 0.06 | Automotive Innovation |
| Mr.G.Sudheer Babu | Autonomous Plant Nursery Monitoring System | 6 Months | 0.08 | 0.06 | Reduced manual labor in plant care. |
| Ms.G.Sukanya | Biometric Voting System Using Iot | 6 Months | 0.09 | 0.05 | Eliminates duplicate and fraudulent voting. |
| Mrs.K.Swathi | Traffic Density Based Signal Timing Control | 6 Months | 0.08 | 0.05 | Reduced traffic congestion and waiting time. |
| Dr.Pravin Akula | Flood Disaster Management Alert System By Using Iot | 6 Months | 0.08 | 0.06 | Improved disaster preparedness and response. |
| Ms. Tikkireddy Sri SatyaMounika | Smart Home Energy Management System | 6 Months | 0.08 | 0.06 | Integration with renewable energy sources |
| Mr. Bonthu Chandra Praveen | Iot Based Ghat Road Signalling | 6 Months | 0.09 | 0.07 | Reduced collision risks. |
| Mr.G.Sudheerbabu | Smart Waste Management System Using Ultrasonic Sensor | 6 Months | 0.09 | 0.07 | Reduced operational costs for municipalities. |
| Mr.Y.Satyavinod | Gesture Controlled Home Appliances | 6 Months | 0.09 | 0.05 | Innovative human-machine interaction. |
| Ms. Kondamuri Naga Teja | Home Automation With Voice Control & Secure Entrance | 6 Months | 0.08 | 0.06 | Increased comfort and accessibility. |
| Dr.K.Raja Sekhar | Hand Free Pc Control With Eye Movement And Blink Sensor Using Raspberry Pi | 6 Months | 0.08 | 0.06 | Improved accessibility and assistive technology. |
| Mrs. Balla Naga Lakshmi | Real-Time Health Monitoring System Using Iot | 6 Months | 0.09 | 0.06 | Continuous monitoring of vital parameters |
| Mr.I.R.S.Nageswara Rao | Comparison of Different TFETs:An Overview | 6 Months | 0.10 | 0.08 | Research Finding and Published in book |
| Dr.K.Raja Sekhar | Embedded Software Development | 6 Months | 0.08 | 0.06 | Research Finding and Published as Book |
| | | | Amount received (Rs.): 1.19 | | |

(CAYm2)

| Faculty name | Project title/ Support for Activity | Duration of the project | Amount(Lacs) i.e. 15,25,000=15.25 | Amount Utilized(Lacs) i.e. 15,25,000=15.25 | Outcomes of the project |
|---------------------------------------|--|-------------------------|--------------------------------------|---|---|
| K.Lakshmi Priyanka | Design and Analysis of Quad-Element MIMO AntennaApplied to the WideBand Transmission | 6 Months | 0.05 | 0.03 | Research Finding |
| V.Sandhya | Design and Analysis of Quad-Element MIMO AntennaApplied to the WideBand Transmission | 6 Months | 0.04 | 0.02 | Research Finding |
| Ch.Sridevi | Design and Analysis of Quad-Element MIMO AntennaApplied to the WideBand Transmission | 6 Months | 0.06 | 0.05 | Research Finding |
| Ms.G.Asha | Carbon Emission Monitoring System | 6 Months | 0.08 | 0.06 | Data logging for analysis and decision-making |
| Dr. Tammireddy Venkata Janardhana Rao | Smart Greenhouse Using Arduino | 6 Months | 0.08 | 0.06 | Efficient water and energy usage |
| Dr.K.B.S.D.Sarma | Smart Home Automation | 6 Months | 0.08 | 0.06 | Energy savings through automation |
| Dr.A.Pravin | Embedded System Based Restaurant Automation | 6 Months | 0.08 | 0.06 | Embedded System |
| Mrs.D.Tulasi | Iot Based Lowcost Energy Meter | 6 Months | 0.08 | 0.06 | Real-time energy consumption tracking |
| Mr.Y.Satya Vinod | Smart Cradle | 6 Months | 0.06 | 0.04 | Reduces parental workload |
| Ms.K.Siva Ranjini | An Automatic Driver Drowsiness Alerting System Using Gsm Module | 6 Months | 0.07 | 0.05 | Enhances road safety |
| Mrs.K.Lakshmi Priyanka | Iot Base Industrial Monitoring System | 6 Months | 0.07 | 0.06 | Real-time monitoring of machinery parameters |
| Dr.K.Rajasekhar | System Surveillance Robot | 6 Months | 0.06 | 0.05 | Remote area monitoring with camera support |
| Mr.G.Sudheer Babu | Fire Fighting Robot In Crucial Areas | 6 Months | 0.07 | 0.05 | Detects and extinguishes fire automatically |
| Mrs.Ch.Sridevi | Eco-Friendly Farmier Robot Using Arduino | 6 Months | 0.07 | 0.05 | Promotes eco-friendly farming practices |
| Mr.Yandamuri Sai Sandeep | Iot Based Women Safety Device | 6 Months | 0.07 | 0.05 | Enhances personal safety |
| Ms. Tikkireddy Sri Satya Mounika | A Fully Portable Robot System For Dispensing Sanitizer In Hospitals | 6 Months | 0.07 | 0.05 | Supports hygiene and safety protocols |
| | | | Amount received (Rs.): 1.09 | | |

(CAYm3)

| Faculty name | Project title/ Support for Activity | Duration of the project | Amount(Lacs) i.e. 15,25,000=15.25 | Amount Utilized(Lacs) i.e. 15,25,000=15.25 | Outcomes of the project |
|----------------------------------|--|-------------------------|--------------------------------------|---|---|
| Dr.K.Rajasekhar | Dual axis solar tracker in agriculture | 6 months | 0.08 | 0.06 | Reduces dependency on conventional electricity. |
| Mr.Y.Satya Vinod | Detection of missing children by using IRIS and face recognition | 6 months | 0.08 | 0.06 | Enhances public safety systems. |
| Mrs.V.Sandhya | Arduino based lineman protection system | 6 months | 0.08 | 0.06 | Improves reliability of maintenance operations. |
| K.L.Priyanka | Seabin Floating Waste Collector Using Arduino | 6 months | 0.08 | 0.06 | Reduces water pollution and plastic accumulation. |
| Mr.T.S.S.Phani | RFID Basad Smart Card For Transpor T , Health And Shopping | 6 months | 0.08 | 0.06 | Secure data handling and authentication. |
| Dr.A.Pravin | Preventions Of Railway Accidents At High Risk Forests Using Arduino | 6 months | 0.09 | 0.07 | Protects wildlife and human lives. |
| Ms. Tikkireddy Sri Satya Mounika | Smart Helmet For Leading Industries To Manage Their Workforce | 6 months | 0.08 | 0.06 | Enhances industrial safety compliance. |
| Dr.N.S.N.Lakshmi Pathi Raju | Iot Basad Automated Horticulture For Farmers | 6 months | 0.07 | 0.05 | Enables precision farming. |
| Ms.G. Sukanya | Voice Based Smart Home Using Node Mcu | 6 months | 0.08 | 0.06 | Energy-efficient automation. |
| Mr.P.Harika | IOT Based accident prevention detection and reporting system using arduino | 6 months | 0.08 | 0.06 | Enhances road safety systems. |
| Mr.Y.Satya Vinod | Auto indoor hydroor hydroponic fodder grow chamber | 6 months | 0.07 | 0.05 | Improves livestock productivity. |
| Anuragh Vijapu | Mutual Noise Estimation Algorithm For Video Denoising | 6 Months | 0.05 | 0.02 | Research Finding and published in journal |
| Dr.T.V.JanadhanaRao | Virtual Technology For Smart Education | 6 Months | 0.05 | 0.02 | Research Finding and published in journal |
| T Saran Kumar | COST AWARE OPIMIZATION BASED SCHEDULING TECHNIQUES FOR IOT TASKS | 3 Months | 0.08 | 0.05 | Research Finding and published in journal |
| Dr.T.V.JanadhanaRao | An Examination Of The Tensile Strength,Hardness And SEM Analysis Of Al 5456 | 6 Months | 0.04 | 0.02 | Research Finding and published in journal |
| T Saran Kumar | ANALYSIS AND DETECTION OF DEPRESSION SEVERIETY SCORES BASED ON EEG SIGNAL | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| AKULA PRAVIN | A NOVEL CONTENT BASED IMAGE RETRIEVAL SYSTEM WITH EDGE | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| SANDHYA VALLABHAREDDY | A NOVEL BIOMEDICAL IMAGE PROCESSING METHOD FOR DETECTING | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| HARIKA PANGAM | A SYSTEM FOR RECOGNIZING AND STORING A BUSSINESS CARD | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| CH.SRIDEVI | ADAPTIVE AND FAULT TOLERANT DATA PROCESSING IN HEALTH CARE IOT | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| I RAMA SATYA NAGESWARA RAO | AN IMPROVED DESIGN AND DEVELOPMENT OF SOLAR CHARGING STATION FOR EV | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| I RAMA SATYA NAGESWARA RAO | RECOGNITION OF OCULAR DISEASE FROM FUNGUS IMAGES | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| AKULA PRAVIN | AN ADVANCED TUMOUR RECOGNITION BASED ON IOT AND ARTIFICIAL INTELLIGENCE IMAGE PROCESSING | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| T SARAN KUMAR | AN IMPROVED DESIGN AND DEVELOPMENT OF SOLAR CHARGING STATION FOR EV | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| Y SATYA VINOD | IOT BASED MONITORING SYSTEM FOR PHYSICAL REHABILATION OF STROKE PATIENTS | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| I RAMA SATYA NAGESWARA RAO | BANANA RIPE STAGE CLASSIFICATION USING CNN OPEN CV DEEP LEARNING PYTHON | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| T SARAN KUMAR | BANANA RIPE STAGE CLASSIFICATION USING CNN OPEN CV DEEP LEARNING PYTHON | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| T SARAN KUMAR | RECOGNITION OF OCULAR DISEASE FROM FUNGUS IMAGES USING MACHINE LEARNING APPROACH | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| Y SATYA VINOD | IOT BASED REMOTE SMART HEALTH CARE SYSTEM FOR TELEMIDICINE | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| T SARAN KUMAR | A SYSTEM FOR RECOGNIZING AND STORING A BUSSINESS CARD | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| T.V JANARDHANA RAO | BICEPS BULKING MACHINE | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| K LAKSHMI PRIYANKA | A NOVEL BIOMEDICAL IMAGE PROCESSING METHOD FOR DETECTING | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| HARIKA PANGAM | DETECTION AND AUTISM SPECTRUM DISORDER IN EEG SIGNAL USING AI | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| K RAJSEKHAR | AN ADVANCED TUMOUR RECOGNITION BASED ON IOT AND ARTIFICIAL INTELLIGENCE IMAGE PROCESSING | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| I RAMA SATYA NAGESWARA RAO | COST AWARE OPIMIZATION BASED SCHEDULING TECHNIQUES FOR IOT TASKS | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| I RAMA SATYA NAGESWARA RAO | MACHINE LEARNING APPROACH BASED MONITORING INSECT PESTS IN PLANTS USING CAMERA EQUIPPED DEVICE | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| T SARAN KUMAR | DETECTION AND AUTISM SPECTRUM DISORDER IN EEG SIGNAL USING AI | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| ANURAG VIJAPU | IOT BASED ELECTRIC VEHICLE FOR SMART EV CHARGING STATION | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| T S S PHANI | AN ADVANCED TUMOUR RECOGNITION BASED ON IOT AND ARTIFICIAL INTELLIGENCE IMAGE PROCESSING | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| ANURAG VIJAPU | DATA PRIVACY FOR PATIENTS HEALTH CARE INFORMATION USING IOMT AND BLOCK CHAIN INTEGRATION | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |

| | | | | | |
|----------------------------|--|----------|------|--------------------------------|---|
| ANURAG VIJJAPU | ENHANCEMENTS TO A PLANT HEALTH MONITORING SYSTEM USING IOT | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| ANURAG VIJJAPU | AI HEALTH CARE CHAT BOX SYSTEM | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| ANURAG VIJJAPU | A SYSTEM FOR RECOGNIZING AND STORING A BUSSINESS CARD | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| I RAMA SATYA NAGESWARA RAO | RECOGNITION OF OCULAR DISEASE FROM FUNGUS IMAGES USING MACHINE LEARNING APPROACH | 3 Months | 0.08 | 0.05 | Research Finding and published in Patent |
| Anuragh Vijjapu | Mutual Noise Estimation Algorithm For Video Denoising | 6months | 0.04 | 0.02 | Research Finding and published in journal |
| Dr.T.V.JanadhanaRao | An Examination Of The Tensile Strength,Hardness And SEM Analysis Of Al 5456 | 6months | 0.04 | 0.02 | Research Finding and published in journal |
| Dr.k.B.S.D Sarma | Design And Implementation Of Smart Wheel Chain UsingRaspberry-Pi | 6months | 0.04 | 0.02 | Research Finding and published in journal |
| Dr. V.Dhanaraj | Deep Convolutional Neural Network And Emotional Learning Based Breast Cancer Detection | 6months | 0.04 | 0.02 | Research Finding and published in journal |
| Dr.Rajasekhar kusuma | Prediction Of Cardiovascular Disease Using Machine Learning Algorithms With Relief And Lasso Feature | 6months | 0.04 | 0.02 | Research Finding and published in journal |
| Dr.Rajasekhar kusuma | Design And Implementation Of Smart Wheel Chain UsingRaspberry-Pi | 6months | 0.04 | 0.02 | Research Finding and published in journal |
| Dr.A.Pravin | Design And Implementation Of Smart Wheel Chain UsingRaspberry-Pi | 6months | 0.04 | 0.02 | Research Finding and published in journal |
| Dr.T.V.JanadhanaRao | Influence Of Nano Alumina/Vegetable Oil Based Cutting Fluid On MQL Turning Of Stainless Steel 304 | 6months | 0.04 | 0.02 | Research Finding and published in journal |
| Dr.T.V.JanadhanaRao | Examination Of Friction Stir-Welded AA 6262/5456 Joints Through The Optimization Technique | 6months | 0.04 | 0.02 | Research Finding and published in journal |
| Y.Satya Vinod | Steganalysis Using Convolution Neural Network | 6months | 0.04 | 0.02 | Research Finding and published in journal |
| Anuragh Vijjapu | Steganalysis Using Convolution Neural Network | 6months | 0.04 | 0.02 | Research Finding and published in journal |
| Dr.T.V.JanadhanaRao | Design And Optimization The Wear Characteristics For A17178/TiO2/B4C/FA Central Hybrid Composite | 6months | 0.04 | 0.02 | Research Finding and published in journal |
| Dr.T.V.JanadhanaRao | Modeling And Parametric Optimization Of Electrical Discharge Machining On Casted Composite | 6months | 0.04 | 0.02 | Research Finding and published in journal |
| | | | | Amount received (Rs.): 3.93 | |

Total amount (Lacs) received for the past 3 years : 6.21

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 | EDC LAB | 4 | Power supplies, Function generators, Digital storage oscilloscopes, Cathode Ray Oscilloscopes | Odd sem:18, E | Mr. A Srinivas Rao | Lab Technician | ITI |
| 2 | ECA/PDC LAB | 4 | Power supplies, Function generators, Digital storage oscilloscopes, Cathode Ray Oscilloscopes | Odd sem:18, E | Mr.P V V Harish | Lab Technician | Diploma |
| 3 | COMMUNICATIONS LAB | 4 | Microwave Bench Setup, Function generators, Digital storage oscilloscopes, Cathode Ray Oscilloscopes. | Odd sem:18, E | Mr. P. Srinivas | Lab Technician | ITI |
| 4 | IC APPLICATIONS LAB | 4 | Power supplies, Function generators, Digital storage oscilloscopes, Cathode Ray Oscilloscopes | Odd sem:18, E | Mr. A. Rajesh kumar | Lab Technician | Diploma |
| 5 | SIMULATION LAB | 1 | Personal Computers,Matlab, Lab view, Multisim, Dsch, Microwind, Anakonda (Jupyter) | Odd sem:27, E | Mr. P.Srinu | Lab Technician | Diploma |
| 6 | MPMC LAB | 1 | Personal Computers,EMU 8086, Vivado, Arduino, Keil, Matlab | Odd Sem: 24. | Mr. K.santhosh Kumar | Lab Technician | B.Tech |

D2. Safety Measures in Laboratories

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

| Sr. No | Laboratory Name | Safety Measures |
|--------|-----------------|--|
| 1 | EDC LAB | <ul style="list-style-type: none"> ◆ General Rules of Conduct in Laboratories are displayed. ◆ Specific Safety Rules for students displayed. ◆ First aid box, Fire extinguisher ◆ Well trained technical supporting staff. ◆ Avoiding the use of damaged equipments and provides needful equipments and components. ◆ Periodical servicing of the lab equipments. ◆ Maintain a clean and organized laboratory ◆ Avoiding the use of cell phones. ◆ Racks to store student belongings. ◆ All electrical installations are equipped with earthing and Miniature Circuit breakers (MCB). ◆ CCTV Surveillance. ◆ UPS is available in case of power failure. |
| 2 | ECA/PDC LAB | <ul style="list-style-type: none"> ◆ General Rules of Conduct in Laboratories are displayed. ◆ Specific Safety Rules for students displayed. ◆ First aid box, Fire extinguisher ◆ Well trained technical supporting staff. ◆ Avoiding the use of damaged equipments and provides needful equipments and components. ◆ Periodical servicing of the lab equipments. ◆ Maintain a clean and organized laboratory ◆ Avoiding the use of cell phones. ◆ Racks to store student belongings. ◆ All electrical installations are equipped with earthing and Miniature Circuit breakers (MCB). ◆ CCTV Surveillance. ◆ UPS is available in case of power failure. |

| | | |
|---|---------------------|---|
| 3 | COMMUNICATIONS LAB | <ul style="list-style-type: none"> ❖ General Rules of Conduct in Laboratories are displayed. ❖ Specific Safety Rules for students displayed. ❖ First aid box, Fire extinguisher ❖ Well trained technical supporting staff. ❖ Avoiding the use of damaged equipments and provides needful equipments and components. ❖ Periodical servicing of the lab equipments. ❖ Maintain a clean and organized laboratory ❖ Avoiding the use of cell phones. ❖ Racks to store student belongings. ❖ All electrical installations are equipped with earthing and Miniature Circuit breakers (MCB). ❖ CCTV Surveillance. ❖ UPS is available in case of power failure. |
| 4 | IC APPLICATIONS LAB | <ul style="list-style-type: none"> ❖ General Rules of Conduct in Laboratories are displayed. ❖ Specific Safety Rules for students displayed. ❖ First aid box, Fire extinguisher ❖ Well trained technical supporting staff. ❖ Avoiding the use of damaged equipments and provides needful equipments and components. ❖ Periodical servicing of the lab equipments. ❖ Maintain a clean and organized laboratory ❖ Avoiding the use of cell phones. ❖ Racks to store student belongings. ❖ All electrical installations are equipped with earthing and Miniature Circuit breakers (MCB). ❖ CCTV Surveillance. ❖ UPS is available in case of power failure. |
| 5 | SIMULATION LAB | <ul style="list-style-type: none"> ❖ General Rules of Conduct in Laboratories are displayed. ❖ Specific Safety Rules for students displayed. ❖ First aid box, Fire extinguisher ❖ Well trained technical supporting staff. ❖ Periodical servicing of the lab equipments. ❖ Maintain a clean and organized laboratory ❖ Avoiding the use of cell phones. ❖ Racks to store student belongings. ❖ All electrical installations are equipped with earthing and Miniature Circuit breakers (MCB). ❖ CCTV Surveillance. ❖ UPS is available in case of power failure. |
| 6 | MPMC LAB | <ul style="list-style-type: none"> ❖ General Rules of Conduct in Laboratories are displayed. ❖ Specific Safety Rules for students displayed. ❖ First aid box, Fire extinguisher ❖ Well trained technical supporting staff. ❖ Periodical servicing of the lab equipments. ❖ Maintain a clean and organized laboratory ❖ Avoiding the use of cell phones. ❖ Racks to store student belongings. ❖ All electrical installations are equipped with earthing and Miniature Circuit breakers (MCB). ❖ CCTV Surveillance, Antivirus and firewall. ❖ UPS is available in case of power failure. |

D3. Project Laboratory/Research Laboratory

| S.No. | Name of the Laboratory | Equipment |
|-------|---|---|
| 1 | Project Lab | <ul style="list-style-type: none"> ◦ Computer Systems with internet -10 ◦ Legacy Project Prototypes ◦ Printer ◦ Scanner ◦ LCD Projector ◦ CC Camera |
| 2 | Research & Development Lab | <ul style="list-style-type: none"> ◦ Computer Systems with internet-10 ◦ Drafting, Modeling & Analysis Software: ACT CAD, SOLIDWORKS, ANSYS, ABAQUS ◦ Access to e-journals ◦ Printer ◦ Scanner ◦ LCD Projector ◦ CC Camera |
| 3 | Centre of Excellence – Robotics and Artificial Intelligence | <ul style="list-style-type: none"> ◦ Micro Controller & Control Boards – Arduino UNO R3 ◦ Robotics Base Kits ◦ Sensors – IR, LDR ◦ Value Add Visual Components ◦ Displays & Output ◦ Printer ◦ Scanner ◦ LCD Projector ◦ CC Camera |

1. Project Laboratory

The Project Laboratory serves as a dedicated facility to support final-year undergraduate students in carrying out design projects. The laboratory is structured to promote design thinking, innovation, experimentation, and problem-solving in core mechanical engineering domains such as Design Engineering, Thermal & Fluid Engineering, and Manufacturing Engineering.

The facility enables students to conceptualize, design, fabricate, test, and validate engineering systems and components. It encourages interdisciplinary teamwork, application of modern engineering tools, project planning, documentation, and outcome-based execution. The laboratory environment promotes collaborative learning and provides access to necessary equipment, software, and internet resources to facilitate project development.

Through structured project reviews and mentor guidance, students develop competencies in:

- Design and development of solutions
- Engineering tool usage
- Project management and documentation
- Teamwork and communication
- Sustainable and socially responsible engineering practices

2. Research & Development Laboratory

The **Research & Development (R&D) Laboratory** is established to cultivate a research-oriented mindset among students and faculty members. The laboratory supports investigative learning, experimentation, data analysis, and innovation-driven projects aligned with contemporary technological advancements and sustainability goals.

The facility enables:

- Experimental investigations
- Prototype development
- Performance testing and validation
- Emission and environmental impact studies
- Applied research activities

Students are encouraged to undertake mini-projects, funded projects, and research-based final-year projects under faculty supervision. The laboratory fosters analytical thinking, interpretation of experimental data, and development of sustainable engineering solutions.

The R&D Laboratory enhances:

- Research-based knowledge application
- Design of experiments and data interpretation
- Environmental awareness and sustainability focus
- Ethical engineering practices
- Innovation and entrepreneurship culture

3. Centre of Excellence – Robotics and Artificial Intelligence

The **Centre of Excellence (CoE) – Robotics and Artificial Intelligence** is established to provide advanced training, industry-aligned skill development, and research exposure in emerging technologies such as robotics, automation, artificial intelligence, and control systems.

Available Equipment / Components List

| S.No | Category | Equipment / Component |
|------|------------------------|---------------------------|
| 1 | Microcontroller Boards | Arduino UNO R3 |
| 2 | Microcontroller Boards | ESP32 / NodeMCU |
| 3 | Motor Control | Motor Driver L298N |
| 4 | Prototyping | Mini Breadboards |
| 5 | Prototyping | Jumper Wire Sets |
| 6 | Robotics Kits | 2-Wheel Robot Chassis Kit |
| 7 | Robotics Kits | SG90 Servo Motor |
| 8 | Robotics Kits | MG996R Heavy Servo |
| 9 | Sensors | Ultrasonic Sensor HC-SR04 |
| 10 | Sensors | IR Pair Sensor |

| | | |
|----|-----------------------|-------------------------------------|
| 11 | Sensors | IR Proximity Sensor |
| 12 | Sensors | LDR Light Sensor Module |
| 13 | Sensors | Flame Sensor Module |
| 14 | Sensors | Sound Sensor Module |
| 15 | Sensors | DHT11 Temperature & Humidity Sensor |
| 16 | Sensors | MQ-2 Gas Sensor |
| 17 | Sensors | Soil Moisture Sensor |
| 18 | Sensors | Tilt / Vibration Sensor |
| 19 | Sensors | MPU6050 Accelerometer + Gyro |
| 20 | Sensors | Hall Effect Magnetic Sensor |
| 21 | Sensors | PIR Motion Sensor |
| 22 | Visual Components | RGB LED Modules |
| 23 | Visual Components | Single LEDs (Various Colors) |
| 24 | Input Devices | Push Button / Tact Switch Pack |
| 25 | Electronic Components | Resistors |
| 26 | Electronic Components | Potentiometer 10k/50k |
| 27 | Output Devices | Buzzer Module |
| 28 | Displays | 7-Segment Display |
| 29 | Displays | LCD 16x2 Display |
| 30 | Displays | OLED Mini Display |
| 31 | Tools | Soldering Station Set |
| 32 | Tools | Hot Glue Gun + Sticks |
| 33 | Testing Tools | Continuity Tester |
| 34 | Tools | Cutter |
| 35 | Tools | Screw Driver Set |

The CoE bridges the gap between academia and industry by offering:

- Hands-on training in robotic systems
- Automation and control experimentation
- AI-based applications in mechanical systems
- Industry-oriented workshops and certification programs
- Support for innovation and interdisciplinary projects

Key outcomes of the Centre include:

- Advanced design and automation competencies
- Practical exposure to intelligent systems
- Collaborative and multidisciplinary teamwork
- Adaptability to emerging technologies
- Innovation-driven project development

PART E: First Year faculty and financial Resources

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

E1. First Year Student-Faculty Ratio (FYSFR)

Table No. E1.1: FYSFR details.

| Year | Sanctioned intake of all UG programs (S4) | No. of required faculty (RF4= S4/20) | No. of faculty members in Basic Science Courses & Humanities and Social Sciences including Management courses (NS1) | No. of faculty members in Engineering Science Courses (NS2) | Percentage= No. of faculty members ((NS1*0.8)+(NS2*0.2))/(No. of required faculty (RF4)); Percentage=((NS1*0.8)+(NS2*0.2))/RF |
|----------------|---|--------------------------------------|---|---|---|
| 2023-24(CAYm2) | 660 | 33 | 37 | 11 | 96 |
| 2024-25(CAYm1) | 780 | 39 | 42 | 11 | 92 |
| 2025-26(CAY) | 780 | 39 | 42 | 11 | 92 |

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 | 400 | 397.63 | 110 | 109.54 | 77 | 76.72 | 93 | 92.71 |

| | | | | | | | | |
|--|-------------|----------------|----------------|----------------|----------------|----------------|-------------|----------------|
| Library | 7 | 6.98 | 10 | 9.84 | 16 | 15.53 | 8 | 7.95 |
| Laboratory equipment | 24 | 23.12 | 61 | 60.30 | 34 | 33.52 | 66 | 65.67 |
| Teaching and non-teaching staff salary | 1257 | 1255.27 | 1273 | 1271.72 | 1119 | 1117.28 | 1024 | 1023.98 |
| Outreach Programs | 0 | 0 | 0.45 | 0.41 | 0.95 | 0.92 | 0 | 0 |
| R&D | 10 | 6.74 | 16 | 11.43 | 15 | 10.68 | 18 | 16.43 |
| Training, Placement and Industry linkage | 32 | 30.87 | 12 | 11.86 | 25 | 23.35 | 18 | 17.51 |
| SDGs | 14 | 13.77 | 32 | 30.75 | 21 | 20.31 | 27 | 25.21 |
| Entrepreneurship | 6 | 5.23 | 6 | 5.03 | 5 | 4.31 | 4 | 3.80 |
| Others, specify | 250 | 249.83 | 700 | 698.12 | 510 | 504.50 | 450 | 447.24 |
| Total | 2000 | 1989.44 | 2220.45 | 2209.00 | 1822.95 | 1807.12 | 1708 | 1700.50 |

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 | 6.0 | 5.78 | 16.0 | 15.73 | 9.0 | 8.93 | 17.5 | 17.13 |
| Software | 3.0 | 0.0 | 8.0 | 7.37 | 2.0 | 0.0 | 3.0 | 0.0 |
| SDGs | 4.0 | 3.44 | 8.5 | 8.02 | 5.45 | 5.41 | 7.0 | 6.57 |
| Support for faculty development | 2.2 | 2.05 | 2.20 | 2.10 | 2.10 | 2.00 | 2.05 | 1.95 |
| R & D | 2.0 | 1.68 | 3.0 | 2.98 | 3.0 | 2.85 | 4.5 | 4.28 |
| Industrial Training, Industry expert, Internship | 9.0 | 8.69 | 5.0 | 4.07 | 8.0 | 7.15 | 6.0 | 5.43 |
| Student Activities | 1.0 | 0.90 | 1.2 | 1.0 | 1.5 | 1.1 | 1.3 | 1.0 |
| Total | 27.2 | 22.54 | 43.90 | 41.27 | 31.05 | 27.44 | 41.35 | 36.36 |