

NATIONAL BOARD OF ACCREDITATION

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

| | |
|--|--|
| Program Name : Electrical and Electronics Engineering | Discipline : Engineering & Technology |
| Level : Under Graduate | Tier : 2 |
| Application No : 11348 | Date of Submission : 15-12-2025 |

PART A- Profile of the Institute

| | |
|---|---------------------------------------|
| A1.Name of the Institute : Bhoj Reddy Engineering College for Women | |
| Year of Establishment : 1997 | Location of the Institute: Hyderabad |
| A2. Institute Address : Vinaynagar, I S Sadan X Roads, Saidabad Hyderabad - 500 059, Telangana | |
| City: Hyderabad | State: Telangana |
| Pin Code: 500059 | Website: www.brecw.ac.in |
| Email: principal@brecw.ac.in | Phone No(with STD Code): 040-24531719 |
| A3. Name and Address of the Affiliating University (if any): | |
| Name of the University : Jawaharlal Nehru Technological University Hyderabad | City: Ranga Reddy |
| State : Telangana | Pin Code: 500085 |
| A4. Type of the Institution : Non-Autonomous (Affiliated) | |
| A5. Ownership Status : Self financing | |

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

- No. of UG programs: **5**
- No. of PG programs: **0**

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

| Sr.No. | Discipline | Level of program | Name of the program | Year of Start | Year of Closed | Name of The Department |
|--------|--------------------------|------------------|---|---------------|----------------|---|
| 1 | Engineering & Technology | UG | Computer Science and Engineering | 1997 | -- | Computer Science and Engineering |
| 2 | Engineering & Technology | UG | Computer Science and Engineering (Artificial Intelligence & Machine Learning) | 2022 | -- | Computer Science and Engineering (Artificial Intelligence and Machine Learning) |
| 3 | Engineering & Technology | UG | Electrical and Electronics Engineering | 2001 | -- | Electrical and Electronics Engineering |
| 4 | Engineering & Technology | UG | Electronics & Communication Engineering | 1997 | -- | Electronics and Communication Engineering |
| 5 | Engineering & Technology | UG | Information Technology | 2000 | -- | Information Technology |

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 |
| Information Technology | Yes | Information Technology | UG |
| Computer Science and Engineering | Yes | Computer Science and Engineering | UG |
| Electrical and Electronics Engineering | No | Electrical and Electronics Engineering | UG |

Table No. A7.2: Allied Department(s) to the Department of the program considered for accreditation as above.
Cluster ID. Name of the Department (in table no. A7.1) Name of allied Departments/Cluster (for table no. A7.1)

| |
|-----------|
| 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 ARROVAL DETAILS | ACCREDITATION STATUS | FROM | TO | NO. OF TIMES PROGRA ACCREDI |
|--------|--|-----------------------|--------------------------------|-------------------|-----------------------------------|---------------------------|----------------|------------------------|--|----------------------|------|----|-----------------------------|
| 1 | Electrical and Electronics Engineering | UG | 2001 / -- | 40 | Yes | 2002 | 60 | 2002 | F.No. South-Central/1-44641919472/2025/EOA | Applying first time | -- | -- | 0 |

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 : | S Asha Kiranmai |
| B. Nature of appointment: | Regular |
| C. Qualification: | Ph.D |

B3. Program Details

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

| Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable) | 2025-26 (CAY) | 2024-25 (CAYm1) | 2023-24 (CAYm2) | 2022-23 (CAYm3) | 2021-22 (CAYm4) | 2020-21 (CAYm5) | 2019-20 (CAYm6) |
|--|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| N=Sanctioned intake of the program (as per AICTE /Competent authority) | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| N1=Total no. of students admitted in the 1st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program | 44 | 60 | 34 | 30 | 38 | 47 | 60 |
| N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats | 0 | 6 | 20 | 22 | 12 | 7 | 6 |
| 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 | 2 | 1 | 3 | 4 | 0 | 0 | 0 |
| Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points. | 46 | 67 | 57 | 56 | 50 | 54 | 66 |

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) | 60 | 44 | 2 | 76.67 |
| 2024-25 (CAYm1) | 60 | 60 | 1 | 101.67 |
| 2023-24 (CAYm2) | 60 | 34 | 3 | 61.67 |

Average $[(ER1 + ER2 + ER3) / 3] = 80.00 \cong 17.00$

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

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

| Item | (2021-22) LYG | (2020-21) LYGm1 | (2019-20) LYGm2 |
|---|---------------|-----------------|-----------------|
| A*= (No. of students admitted in the 1st year of that batch and those actually admitted in the 2nd year via lateral entry, plus the number of students admitted through multiple entry (if any) and separate division if applicable, minus the number of students who exited through multiple entry (if any). | 72.00 | 67.00 | 66.00 |
| B=No. of students who graduated from the program in the stipulated course duration | 48.00 | 52.00 | 64.00 |
| Success Rate (SR)= (B/A) * 100 | 66.67 | 77.61 | 96.97 |

Average SR of three batches $((SR_1 + SR_2 + SR_3)/3)$: 80.42

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) | 7.01 | 6.87 | 6.26 |
| Y=Total no. of successful students | 60.00 | 36.00 | 34.00 |
| Z=Total no. of students appeared in the examination | 61.00 | 37.00 | 34.00 |
| API [X*(Y/Z)] | 6.90 | 6.68 | 6.26 |

Average API [(AP1+AP2+AP3)/3] : 6.61

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

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

| Academic Performance | CAYm1 (2024-25) | CAYm2 (2023-24) | CAYm3 (2022-23) |
|--|-------------------|-------------------|-------------------|
| X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2rd year/10) | 6.97 | 6.78 | 5.72 |
| Y=Total no. of successful students | 56.00 | 54.00 | 49.00 |
| Z=Total no. of students appeared in the examination | 76.00 | 78.00 | 62.00 |
| API [X * (Y/Z)] | 5.14 | 4.69 | 4.52 |

Average API [(AP1 + AP2 + AP3)/3] : 4.78

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) | 7.09 | 5.67 | 6.38 |
| Y=Total no. of successful students | 54.00 | 48.00 | 52.00 |
| Z=Total no. of students appeared in the examination | 54.00 | 49.00 | 53.00 |
| API [X*(Y/Z)]: | 7.09 | 5.55 | 6.26 |

Average API [(AP1 + AP2 + AP3)/3] : 6.30

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 | 72.00 | 67.00 | 66.00 |
| X=No. of students placed | 21.00 | 36.00 | 50.00 |
| Y=No. of students admitted to higher studies | 3.00 | 6.00 | 4.00 |
| Z= No. of students taking up entrepreneurship | 0.00 | 0.00 | 0.00 |
| Placement Index(P) = (((X + Y + Z)/FS) * 100): | 33.33 | 62.69 | 81.82 |

Average Placement Index = (P_1 + P_2 + P_3)/3: 59.28 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 | S Asha Kiranmai | XXXXXXXX82C | Ph.D | Osmania University | Electrical Engineering | 13/10/2008 | 17.1 | Assistant Professor | Associate Professor | 01/06/2022 | Regular | Yes | | Yes |
| 2 | S Deepti | XXXXXXXX09M | M.E. | Osmania University | Power Systems | 09/07/2007 | 18.5 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 3 | R Manju Bhargavi | XXXXXXXX41N | M.Tech | Jawaharlal Nehru Technological University | Power and Industrial Drives | 04/09/2006 | 19.3 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 4 | Swathi Sankepally | XXXXXXXX22M | M.Tech | Jawaharlal Nehru Technological University Hyderabad | Electrical Power Systems | 28/04/2022 | 3.7 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 5 | B Dhanadeepika | XXXXXXXX99D | Ph.D | Annamalai University | Electrical and Electronics Engineering | 10/11/2021 | 4 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 6 | S Mayuri | XXXXXXXX56K | M.Tech | Jawaharlal Nehru Technological University Hyderabad | Electrical Power Engineering | 10/01/2017 | 8.10 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 7 | J Ashwini Kumari | XXXXXXXX29B | M.Tech | Jawaharlal Nehru Technological University Hyderabad | Electrical Power Systems | 07/12/2020 | 4.11 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |

| | | | | | | | | | | | | | | |
|----|-----------------------|-------------|--------|---|--|------------|------|------------------------|------------------------|--|---------|-----|------------|----|
| 8 | K Uma Rani | XXXXXXXX87M | M.Tech | Jawaharlal Nehru Technological University Hyderabad | Electrical Power Systems | 23/02/2022 | 3.9 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 9 | Ch Shravani | XXXXXXXX44H | M.Tech | Jawaharlal Nehru Technological University Hyderabad | Control Systems | 15/12/2023 | 1.11 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 10 | Ch Prasannalakshmi | XXXXXXXX78B | M.Tech | Jawaharlal Nehru Technological University Hyderabad | Power electronics & Electrical drives | 05/06/2024 | 1.6 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 11 | K Rajamani | XXXXXXXX71A | M.Tech | Jawaharlal Nehru Technological University Hyderabad | VLSI and Embedded Systems | 01/07/2025 | 0.5 | Assistant Professor | Assistant Professor | | Regular | Yes | | No |
| 12 | J Indu | XXXXXXXX73D | M.Tech | Jawaharlal Nehru Technological University Hyderabad | Electrical Power Systems | 28/11/2022 | 2.6 | Assistant Professor | Assistant Professor | | Regular | No | 31/05/2025 | No |
| 13 | G Poorna | XXXXXXXX23G | M.Tech | Jawaharlal Nehru Technological University Hyderabad | Electrical Power Systems | 17/07/2015 | 8.9 | Assistant Professor | Assistant Professor | | Regular | No | 04/05/2024 | No |
| 14 | K Chandana | XXXXXXXX77K | M.Tech | Jawaharlal Nehru Technological University Hyderabad | Electrical Power Systems | 01/04/2021 | 3 | Assistant Professor | Assistant Professor | | Regular | No | 30/04/2024 | 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 Department0

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

| Description | CAY(2025-26) | CAYm1 (2024-25) | CAYm2 (2023-24) |
|---|--------------------|--------------------|--------------------|
| UG1.B | 66 | 66 | 66 |
| UG1.C | 66 | 66 | 66 |
| UG1.D | 66 | 66 | 66 |
| UG1: Electrical and Electronics Engineering | 198 | 198 | 198 |
| DS=Total no. of students in all UG and PG programs in the Department | 198 | 198 | 198 |
| 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= 198 | S2= 198 | S3= 198 |
| DF=Total no. of faculty members in the Department | 11 | 11 | 11 |
| 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= 11 | F2= 11 | F3= 11 |
| 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= 19.80 | SFR2= 19.80 | SFR3= 19.80 |
| Average SFR for 3 years | SFR= 19.80 | | |

C3. Faculty Qualification

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

Table No.C3.1: Faculty qualification.

| Year | X | Y | RF | FQ = $2.5 \times [(10X + 4Y) / RF]$ |
|--------------|---|----|------|-------------------------------------|
| 2025-26(CAY) | 1 | 10 | 9.00 | 13.89 |

| | | | | |
|----------------|---|----|------|-------|
| 2024-25(CAYm1) | 1 | 10 | 9.00 | 13.89 |
| 2023-24(CAYm2) | 1 | 10 | 9.00 | 13.89 |

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 | 1.00 | 0.00 | 2.00 | 1.00 | 6.00 | 10.00 |
| 2024-25 | 1.00 | 0.00 | 2.00 | 1.00 | 6.00 | 10.00 |
| 2023-24 | 1.00 | 0.00 | 2.00 | 1.00 | 6.00 | 10.00 |
| Average | RF1=1.00 | AF1=0.00 | RF2=2.00 | AF2=1.00 | RF2=6.00 | AF2=10.00 |

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 | Dr G Raj Kiran | Scientist "F" | Advance Systems Lab, Defense Research & Development Organization, Kanchanbagh | Recent Trends and Technological Advances in Electric Vehicle Powertrains | 30.00 |
| 2 | Mr G Purushotham Chary | Manager | Greenvion Energy Technologies, Hyderabad | IoT and AI in Solar Monitoring and Control | 34.00 |

(CAYm2)

| S.No | Name of the Person | Designation | Organization | Name of the Course | No. of hours handled |
|------|--------------------|----------------------------|---|--|----------------------|
| 1 | Dr G Raj Kiran | Scientist "F" | Advance Systems Lab, Defense Research & Development Organization, Kanchanbagh | Electric Vehicle Technology and Battery Management Systems | 34.00 |
| 2 | Ms D Bharghavi | Electrical Design Engineer | Regal Rexnord Corporation | Advanced AC Motors and Drives for Industrial Applications | 32.00 |

(CAYm3)

| S.No | Name of the Person | Designation | Organization | Name of the Course | No. of hours handled |
|------|------------------------|-------------|--|---|----------------------|
| 1 | Mr G Purushotham Chary | Manager | Greenvion Energy Technologies, Hyderabad | Power Electronics for Advanced Solar Applications | 56.00 |

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 | 49 | 34 | 34 |
| 2 | No. of peer reviewed conference papers published | 1 | 0 | 1 |
| 3 | No. of books/book chapters published | 0 | 0 | 0 |

C7. Sponsored Research Project

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

(CAYm1)

(CAYm2)

(CAYm3)

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

Note*:

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

C8. Consultancy Work

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

(CAYm1)

(CAYm2)

(CAYm3)

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

Note*:

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

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

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

(CAYm1)

(CAYm2)

(CAYm3)

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

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 | Electrical Machines Lab/ Electrical & Electronics Design Lab | 30 | DC shunt motor, DC shunt generator, DC compound motor, Induction motors, Transformer, Synchronous machine, DC series motor, Variac | 21 Hrs | Ms O Madhuri | Lab Assistant | B Tech |
| 2 | Power Electronics Lab | 30 | 3-Phase Rectifier, Cyclo-converter, Inverters, AC voltage regulator, Forced commutation circuits, Push-Pull converter, Full-bridge, BPS, GPO | 6 Hrs | Ms K Rajamani | Lab Assistant | M Tech |
| 3 | Electrical Circuits Analysis Lab | 30 | Cathode Ray Oscilloscopes, Function Generators, Regulated Power Supplies, Power Analyzer, Measurement of 3-Phase Power, 24, 440V, 50Hz | 6 Hrs | Ms K Rajamani | Lab Assistant | M Tech |
| 4 | Electrical systems Simulation Lab/ Power System Simulation Lab/ | 30 | HP 406 computers with G1MT Processor (35), MATLAB Version 9.0, PSPICE Software, Batteries, UPS | 18 Hrs | Ms R Chaitanya | Lab Assistant | B Sc |
| 5 | Control Systems Lab | 30 | Synchro transmitter and receiver kit, PID Controller Kit, AC Servomotor, Magnetic Amplifier, ON-OFF temperature controller, system, Lead-Lag Network | 6 Hrs | Ms R Chaitanya | Lab Assistant | B Sc |
| 6 | Measurements and Instrumentation Lab | 30 | Crompton DC potentiometer, Single Phase energy meter, Kelvin double bridge, Schering bridge, Anderson bridge, Wheatstone bridge, Dielectric oil | 6 Hrs | Ms O Madhuri | Lab Assistant | B Tech |
| 7 | Basic Electrical Engineering Lab | 30 | Cathode Ray Oscilloscopes, Function Generators, Dual Channel Regulated Power Supplies, Bread Board, Decade Resistance, Power Decade | 15 Hrs | Ms R Chaitanya | Lab Assistant | B Sc |
| 8 | Power Systems Lab | 30 | DC Rectifier unit, 1-Phase & 3-Phase transformers, 3-Phase variac, IDMT relay, Measurement of O/W Meter, Differential | 6 Hrs | Ms O Madhuri | Lab Assistant | 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 | Electrical Machines Lab | General rules of conduct is displayed in the lab. Specific safety rules for students are prominently displayed. Fire extinguishers and sand buckets are available. RPS (Regulated Power Supply) units are provided in all labs to regulate voltage. Well-trained technical support staff are present. Regular checks for leakage in wiring and electrical installations are conducted by the maintenance team. All major equipment is provided with proper earthing systems to protect against electric shock. Periodical servicing of laboratory equipment is carried out. Laboratories are maintained clean and organized. Use of cell phones is discouraged inside the labs. Appropriate storage areas are provided for equipment and materials. A dust-free environment is maintained by regularly cleaning equipment and systems. Sufficient windows are available to ensure proper ventilation and natural light. Protective switch-gear equipment is installed in the lab to ensure safety. A first aid box is available in the department. |
| 2 | Power Electronics Lab | General rules of conduct is displayed in the lab. Specific safety rules for students are prominently displayed. Fire extinguishers is available. RPS (Regulated Power Supply) units are provided in all labs to regulate voltage. Well-trained technical support staff are present. Regular checks for leakage in wiring and electrical installations are conducted by the maintenance team. All major equipment is provided with proper earthing systems to protect against electric shock. Periodical servicing of laboratory equipment is carried out. Laboratories are maintained clean and organized. Use of cell phones is discouraged inside the labs. Appropriate storage areas are provided for equipment and materials. A dust-free environment is maintained by regularly cleaning equipment and systems. Sufficient windows are available to ensure proper ventilation and natural light. Protective switch-gear equipment is installed in all labs to ensure safety. A first aid box is available in the department. |
| 3 | Electrical Circuits Analysis Lab | General rules of conduct is displayed in the lab. Specific safety rules for students are prominently displayed. A first aid box is available in the department. Fire extinguisher is available. RPS (Regulated Power Supply) units are provided in all labs to regulate voltage. Well-trained technical support staff are present. Regular checks for leakage in wiring and electrical installations are conducted by the maintenance team. All major equipment is provided with proper earthing systems to protect against electric shock. Periodical servicing of laboratory equipment is carried out. Laboratories are maintained clean and organized. Use of cell phones is discouraged inside the labs. Appropriate storage areas are provided for equipment and materials. A dust-free environment is maintained by regularly cleaning equipment and systems. Sufficient windows are available to ensure proper ventilation and natural light. Protective switch-gear equipment is installed in all labs to ensure safety. |
| 4 | Power/Electrical Systems Simulation Lab | General rules of conduct is displayed in the lab. Specific safety rules for students are prominently displayed. UPS is available in the lab to avoid power failure. Permission denied for pen drives. A first aid box is available in the department. Fire extinguisher is available. Well-trained technical support staff are present. Regular checks for leakage in wiring and electrical installations are conducted by the maintenance team. Periodical servicing of laboratory equipment is carried out. Laboratories are maintained clean and organized. Use of cell phones is discouraged inside the labs. A dust-free environment is maintained by regularly cleaning equipment and systems. Sufficient windows are available to ensure proper ventilation and natural light. |
| 5 | Control systems Lab | General rules of conduct is displayed in the lab. Specific safety rules for students are prominently displayed. A first aid box is available in the department. Fire extinguishers is available. RPS (Regulated Power Supply) units are provided in all labs to regulate voltage. Well-trained technical support staff are present. Regular checks for leakage in wiring and electrical installations are conducted by the maintenance team. All major equipment is provided with proper earthing systems to protect against electric shock. Periodical servicing of laboratory equipment is carried out. Laboratories are maintained clean and organized. Use of cell phones is discouraged inside the labs. Appropriate storage areas are provided for equipment and materials. A dust-free environment is maintained by regularly cleaning equipment and systems. Sufficient windows are available to ensure proper ventilation and natural light. Protective switch-gear equipment is installed in all labs to ensure safety. |

| | | |
|---|--------------------------------------|---|
| 6 | Measurements and Instrumentation Lab | General rules of conduct is displayed in the lab. Specific safety rules for students are prominently displayed. A first aid box is available in the department. Fire extinguishers is available. RPS (Regulated Power Supply) units are provided in all labs to regulate voltage. Well-trained technical support staff are present. Regular checks for leakage in wiring and electrical installations are conducted by the maintenance team. All major equipment is provided with proper earthing systems to protect against electric shock. Periodical servicing of laboratory equipment is carried out. Laboratories are maintained clean and organized. Use of cell phones is discouraged inside the labs. Appropriate storage areas are provided for equipment and materials. A dust-free environment is maintained by regularly cleaning equipment and systems. Sufficient windows are available to ensure proper ventilation and natural light. Protective switch-gear equipment is installed in all labs to ensure safety. |
| 7 | Basic Electrical Engineering Lab | General rules of conduct is displayed in the lab. Specific safety rules for students are prominently displayed. A first aid box is available in the department. RPS (Regulated Power Supply) units are provided in all labs to regulate voltage. Well-trained technical support staff are present. Regular checks for leakage in wiring and electrical installations are conducted by the maintenance team. All major equipment is provided with proper earthing systems to protect against electric shock. Periodical servicing of laboratory equipment is carried out. Laboratories are maintained clean and organized. Use of cell phones is discouraged inside the labs. Appropriate storage areas are provided for equipment and materials. A dust-free environment is maintained by regularly cleaning equipment and systems. Sufficient windows are available to ensure proper ventilation and natural light. Protective switch-gear equipment is installed in all labs to ensure safety. |
| 8 | Power Systems Lab | General rules of conduct is displayed in the lab. Specific safety rules for students are prominently displayed. A first aid box is available in the department. RPS (Regulated Power Supply) units are provided in all labs to regulate voltage. Well-trained technical support staff are present. Regular checks for leakage in wiring and electrical installations are conducted by the maintenance team. All major equipment is provided with proper earthing systems to protect against electric shock. Periodical servicing of laboratory equipment is carried out. Laboratories are maintained clean and organized. Use of cell phones is discouraged inside the labs. Appropriate storage areas are provided for equipment and materials. A dust-free environment is maintained by regularly cleaning equipment and systems. Sufficient windows are available to ensure proper ventilation and natural light. Sand buckets are kept near the laboratories for immediate use in case of fire. Protective switch-gear equipment is installed in all labs to ensure safety. |

D3. Project Laboratory/Research Laboratory

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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 $((NS1*0.8) + (NS2*0.2)) / (\text{No. of required faculty (RF4)})$; Percentage= $((NS1*0.8) + (NS2*0.2)) / RF$ |
|----------------|---|--------------------------------------|---|---|--|
| 2023-24(CAYm2) | 480 | 24 | 24 | 4 | 83 |
| 2024-25(CAYm1) | 480 | 24 | 24 | 4 | 83 |

| | | | | | |
|--------------|-----|----|----|---|----|
| 2025-26(CAY) | 480 | 24 | 23 | 4 | 80 |
|--------------|-----|----|----|---|----|

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 2024-2025 | Actual Expenses in 2024-2025 till | Budgeted in 2023-2024 | Actual Expenses in 2023-2024 till | Budgeted in 2022-2023 | Actual Expenses in 2022-2023 till | Budgeted in 2021-2022 | Actual Expenses in 2021-2022 till |
|--|-----------------------|-----------------------------------|-----------------------|-----------------------------------|-----------------------|-----------------------------------|-----------------------|-----------------------------------|
| Infrastructure Built-Up | 5000000 | 3131652 | 11000000 | 10241467 | 6800000 | 6191397 | 8000000 | 7278469 |
| Library | 1300000 | 1279670 | 140000 | 1222337 | 1550000 | 1413542 | 1200000 | 1139267 |
| Laboratory equipment | 10000000 | 1444491 | 7000000 | 6609449 | 10400000 | 9309086 | 5700000 | 5126897 |
| Teaching and non-teaching staff salary | 10000000 | 72531803 | 100000000 | 91543423 | 80000000 | 72811774 | 72000000 | 65490352 |
| Outreach Programs | 10000 | 4300 | 20000 | 17200 | 18000 | 15600 | 24000 | 22396 |
| R&D | 150000 | 27850 | 370000 | 339870 | 138000 | 126090 | 110000 | 100890 |
| Training, Placement and Industry linkage | 1200000 | 168766 | 1200000 | 1147073 | 4200000 | 3785394 | 2000000 | 1708476 |
| SDGs | 200000 | 12230 | 650000 | 590251 | 12000 | 7100 | 10000 | 6640 |
| Entrepreneurship | 8000 | 5500 | 5000 | 4500 | 4500 | 4100 | 3500 | 3200 |
| Miscellaneous Expenses | 30000000 | 11328670 | 20000000 | 18714462 | 25000000 | 22733065 | 19388900 | 17626273 |
| Total | 57868000 | 89934932 | 140385000 | 130430032 | 128122500 | 116397148 | 108436400 | 98502860 |

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 2024-2025 | Actual Expenses in 2024-2025 till | Budgeted in 2023-2024 | Actual Expenses in 2023-2024 till | Budgeted in 2022-2023 | Actual Expenses in 2022-2023 till | Budgeted in 2021-2022 | Actual Expenses in 2021-2022 till |
|----------------------|-----------------------|-----------------------------------|-----------------------|-----------------------------------|-----------------------|-----------------------------------|-----------------------|-----------------------------------|
| Laboratory equipment | 380000 | 56116 | 500000 | 404427 | 250000 | 198418 | 150000 | 120159 |
| Software | 120000 | 103250 | 100000 | 84985 | 30000 | 18375 | 70000 | 63000 |
| SDGs | 40000 | 3057.5 | 170000 | 147562.75 | 5000 | 1775 | 5000 | 1660 |

| | | | | | | | | |
|--|----------------|-----------------|----------------|-------------------|----------------|----------------|----------------|------------------|
| Support for faculty development | 5000 | 4500 | 5000 | 3120 | 4000 | 550 | 4000 | 800 |
| R & D | 25000 | 2950 | 70000 | 59000 | 15000 | 12830 | 30000 | 25222.5 |
| Industrial Training, Industry expert, Internship | 250000 | 14244 | 250000 | 201567.25 | 180000 | 156459 | 150000 | 125597.5 |
| Miscellaneous Expenses* | 2500000 | 656295 | 3200000 | 2843373.13 | 2000000 | 1760239 | 2500000 | 2211879 |
| Total | 3320000 | 840412.5 | 4295000 | 3744035.13 | 2484000 | 2148646 | 2909000 | 2548318.0 |