Hyderabad Institute of Technology and Management

SELF ASSESSMENT REPORT(TIER - I) FOR Electrical & Electronics Engineering

Part A : Institutional Information

1 Name and Address of the Institution

Hyderabad Institute of Technology and Management,
Gowdavelli Village Medchal Mandal Ranga Reddy District Telangana State PIN 501401

2 Type of the Institution:

○ Self-Supported Institute	◉ Autonomous
○ Deemed University	○ Non-Autonomous (Affiliated)
○ University	○ Any Other(Please Specify)
○ Institute of National Importance	

3 Year of establishment of the Institution:

2001

4 Ownership Status:

○ Central Government	☐ Any Other(Please Specify)
○ State Government	
○ Government Aided	
◉ Self financing	

5 Name and Address of Affiliating University(if any)

Jawaharlal Nehru Technological University, Kukatpally, Hyderabad, Telangana 500085

6 Other Academic Institutions of the Trust/Society/Company etc., if any

Name of Institutions	Year of Establishment	Programs of Study	Location

7 Details of all the programs being offered by the Institution under consideration:

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
Electrical and Electronics Engineering	UG	2001	2023	60	Yes	30	Granted accreditation for 3 years for the period (specify period)	2022	2025		4

Sanctioned Intake for Last Five Years for the Electrical and Electronics Engineering	
Academic Year	**Sanctioned Intake**
2024-25	30
2023-24	30
2022-23	60
2021-22	60
2020-21	60
2019-20	60

8 Programs to be considered for Accreditation vide this application:

S No	Level	Discipline	Program
1	Under Graduate	Engineering & Technology	Computer Science and Engineering
2	Under Graduate	Engineering & Technology	Electrical & Electronics Engineering
3	Under Graduate	Engineering & Technology	Electronics & Communication Engineering

4	Under Graduate	Engineering & Technology	Mechanical Engineering

Table No. A8.2

S No	Name of the Department	Name of the Program	Name of Allied Departments/Cluster	Name of Allied Program
No record exist(s)				

9 Total Number of Faculty Members in Various Departments:

ID	Deparment Name	Number of faculty members in the Department (UG and PG)											
		2024-25 (CAY)				2023-24 (CAYm1)				2022-23 (CAYm2)			
		No. of Professors	No. of Associate Professors	No. of Assistant Professors	Total faculty members	No. of Professors	No. of Associate Professors	No. of Assistant Professors	Total faculty members	No. of Professors	No. of Associate Professors	No. of Assistant Professors	Total faculty members
1	Electronics and Communication Engineering	2	3	8	13	2	2	11	15	4	0	13	17
2	Electrical and Electronics Engineering	1	1	12	14	1	1	11	13	1	0	12	13
3	Mechanical Engineering	1	2	12	15	2	0	12	14	2	0	12	14

10 Total Number of Engineering Students in Various Departments:

ID	Deparment Name	Number of students in the Department (UG and PG)		
		2024-25 (CAY)	2023-24 (CAYm1)	2022-23 (CAYm2)
1	Electronics and Communication Engineering	198	198	264
2	Electrical and Electronics	165	198	198

	Engineering			
3	Mechanical Engineering	165	198	264

11 Vision of the Institution:

To be a role model technological university of national repute that imparts research-based multi-disciplinary competencies in students to enable their career aspirations and contribute to society.

12 Mission of the Institution:

1. Build students' competencies through HITAM's 'Doing Engineering' approach with relevant curriculum, pedagogy and assessment.
2. Collaborate with industry and institutions for capacity building in research, innovation and real time knowledge.
3. Develop employability skills for emerging trends and societal needs
4. Excel by adopting NEP 2020 and improving Accreditations & national rankings.

13 Contact Information of the Head of the Institution and NBA coordinator, if designated:

Head of the Institution	
Name	Dr. Arvind Siddapuram
Designation	Principal
Mobile No.	9573714385
Email ID	principal@hitam.org

NBA Coordinator, If Designated

Name	Dr. Devika SV
Designation	Professor
Mobile No.	9000448835
Email ID	associate.deanaccreditation@h

PART B: Criteria Summary

Critera No.	Criteria	Total Marks	Institute Marks
1	OUTCOME-BASED CURRICULUM	120	120.00
2	OUTCOME-BASED TEACHING LEARNING	120	120.00
3	OUTCOME-BASED ASSESSMENT	120	120.00
4	STUDENTS' PERFORMANCE	120	80.92
5	FACULTY INFORMATION	100	91.71
6	FACULTY CONTRIBUTIONS	120	103.00
7	FACILITIES AND TECHNICAL SUPPORT	100	100.00
8	CONTINUOUS IMPROVEMENT	80	80.00
9	STUDENT SUPPORT AND GOVERNANCE	120	117.00
	Total	**1000**	**933**

Part B : Criteria Summary

1 OUTCOME-BASED CURRICULUM (120)

Total Marks 120.00

1.1 Vision, Mission and Program Educational Objectives (PEOs) (35)

Total Marks 35.00

1.1.1 State the Vision and Mission of the Institute and the Department (5)

Institute Marks : 5.00

Vision of the institute	To be a role model technological university of national repute that imparts research-based multi-disciplinary competencies in students to enable their career aspirations and contribute to society.
Mission of the institute	1. Build students' competencies through HITAM's 'Doing Engineering' approach with relevant curriculum, pedagogy and assessment. 2. Collaborate with industry and institutions for capacity building in research, innovation and real time knowledge. 3. Develop employability skills for emerging trends and societal needs 4. Excel by adopting NEP 2020 and improving Accreditations & national rankings.

Vision of the Department	To become a role model department where students are nurtured to achieve multidisciplinary skills leading to their employability, research and can contribute to the society
Mission of the Department	**Mission No.** / **Mission Statements** M1 — To implement effective learning Strategies with a well-structured curriculum and assessment methods M2 — To develop expertise in emerging technologies through collaboration with industry and Academic institutions. M3 — To empower socially responsible Engineers by promoting sustainable practices that address societal needs and enhance employability

1.1.2 State PEOs of the Program (5)

Institute Marks : 5.00

PEO No.	Program Educational Objectives Statements
PEO1	To excel in technical and professional careers in design and product realization, effectively meeting the demands of industry and organizations
PEO2	To acquire foundational knowledge in mathematics, science, and electrical engineering, equipping them to pursue higher studies
PEO3	To attain holistic education to enhance professional skills with changing societal needs

1.1.3 Process of Defining Vision, Mission and PEOs (10)

Institute Marks : 10.00

Process of framing Vision and Mission of the Department

The process of formulating the Vision and Mission of the department begins with referencing the Institute's Vision and Mission to ensure alignment. This alignment ensures that the department's aspirations and commitments contribute meaningfully to the broader goals of the institution. Inputs are also considered from regulatory bodies such as AICTE and NBA, which provide policy frameworks and educational standards to be reflected in the department's guiding statements. Figure 1.1.1 shows the process for brief understanding.

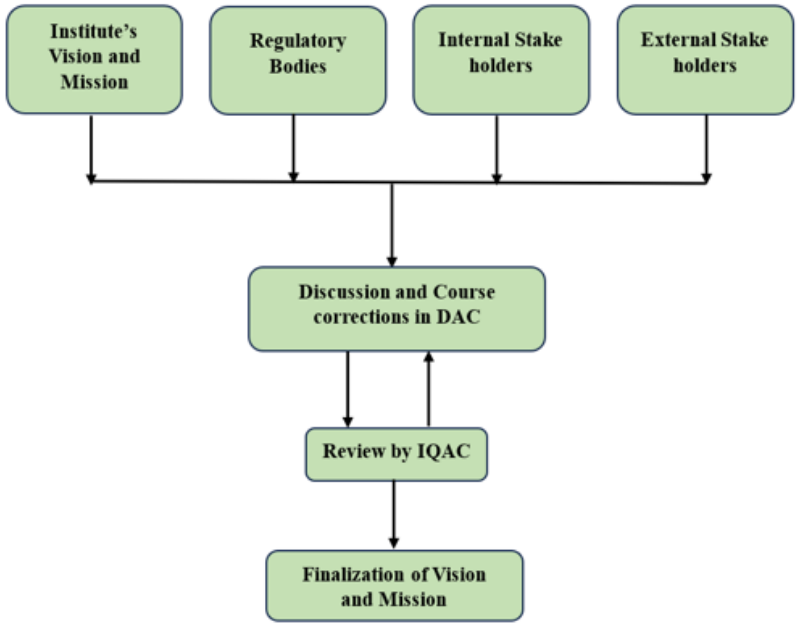

Figure 1.1.1 Process Flowchart of Framing Vision and Mission

In parallel, the department actively engages both internal stakeholders such as faculty members, administrative staff and current students and external stakeholders including alumni and industry professionals. These stakeholders offer critical perspectives and expectations that enrich the relevance and practicality of the Vision and Mission statements. The goal is to ensure that the statements are not only aspirational but also grounded in the realities and evolving demands of the academic and professional ecosystem.

Following the collection of these inputs, a draft version of the Vision and Mission is prepared and presented for discussion and revision by the Department Academic Committee (DAC). This committee evaluates the alignment of the draft with the institutional vision, stakeholder expectations and guidelines. The DAC proposes modifications and refinements if any.

After revisions, the updated Vision and Mission statements are submitted to the Internal Quality Assurance Cell (IQAC) for review. The IQAC validates the process, checks for consistency with quality benchmarks and ensures that the statements meet institutional and accreditation standards. Based on IQAC's approval or suggestions, final adjustments are made.

The final step involves the formalization of the Vision and Mission. These finalized statements are then communicated through official institutional channels such as websites, brochures, curriculum documents and public displays within the department.

Process flowchart for framing PEOs of the Department.

The process of defining Program Educational Objectives (PEOs) in the Electrical and Electronics Engineering (EEE) department is initiated by gathering inputs from three primary sources: regulatory bodies, the departments vision and mission statements and key stakeholders. Regulatory bodies such as AICTE and NBA provide essential guidelines to ensure the PEOs align with national educational standards. Simultaneously, the department's vision and mission offer internal direction, ensuring the objectives are consistent with long-term institutional goals. Stakeholders comprising faculty, students, alumni, industry representatives and employers contribute valuable insights that reflect current trends, industry expectations and societal needs. Figure 1.1.2 shows the process of framing PEOs of EEE Program.

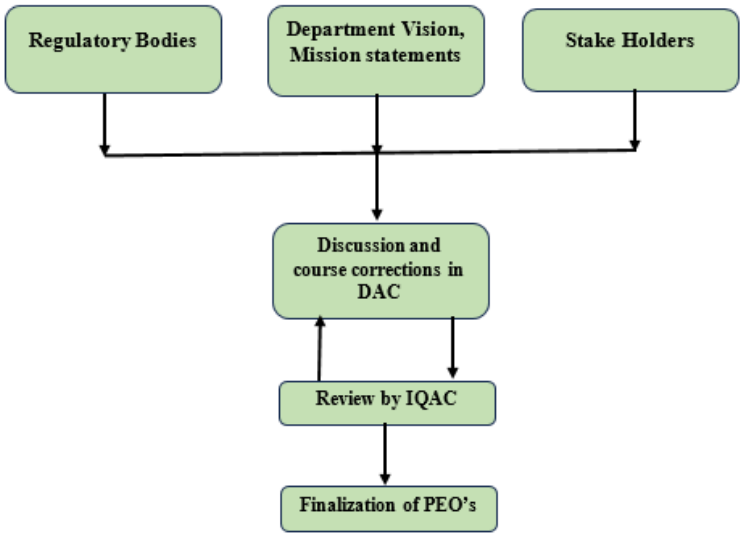

Figure 1.1.2: Process framework for framing PEOs

Using this collective input, a preliminary draft of the PEOs is developed. This draft aims to incorporate the essence of the department's strategic intentions while remaining grounded in practical relevance and future-readiness. The drafted PEOs are then presented to the Department Academic Committee (DAC) for further discussion. The DAC, comprising senior faculty, undertakes a critical review to validate the objectives. During this stage, revisions or course corrections may be recommended based on feedback, stakeholder perspectives, or evolving educational trends.

Following this internal deliberation, the revised PEOs are forwarded to the Internal Quality Assurance Cell (IQAC) for formal review. The IQAC ensures that the process followed is systematic, transparent and in line with institutional quality assurance practices. Their evaluation also confirms that the PEOs support broader academic and strategic goals, including compliance with Outcome-Based Education (OBE) principles.

Once receiving the endorsement from IQAC, the PEOs are finalized. These finalized PEOs are then published and disseminated.

1.1.4 Dissemination of Vision, Mission and PEOs (5)

Institute Marks : 5.00

The Vision, Mission, and Program Educational Objectives (PEOs) of the institution and department are disseminated through the platforms to ensure awareness among both internal and external stakeholders. These are published on the college website, displayed in departmental faculty rooms, classrooms, and laboratories and included in all official departmental documents. Faculty introduce and explain them to students at the beginning of each semester, reinforcing their relevance. The Learning Management System (MOODLE), accessed daily by faculty and students, hosts these elements on each course page. The institutional newsletter also carries the Vision, Mission and Values, further extending outreach to alumni, employers and other external stakeholders. This multi-channel approach ensures consistent communication and alignment with the institution's goals.

Sl. No.	Location	Description

1	College Website	https://hitam.org/electrical-and-electronics-engineering/
2	Departmental Faculty Room	The Vision, Mission and PEOs of the department are displayed in the faculty room notice boards.
3	Departmental Classrooms	The HOD briefs the Vision, Mission and PEOs of the department to the students at the beginning of every semester. The PEOs of the department are displayed in all classrooms.
4	Departmental Laboratories	The Vision, Mission and PEOs of the department are displayed in all labs.
5	Departmental Documents	Printed and attached in the files related to various documents in the department
6	LMS(MOODLE)	HITAM maintains MOODLE platform for sharing the course details and material with the students. All the faculty and students have access to MOODLE every day. Hence College vision, mission & values and Department vision, mission, PEOs are uploaded in the respective faculty course page of LMS.
7	Newsletter	Vision, Mission and Values of the institution are included in the Institutional News letter twice a year.

1.1.5 Mapping of PEOs with Mission (10)

Institute Marks : 10.00

PEO Statements	M1	M2	M3
To excel in technical and professional careers in design and product realization, effectively meeting the demands of industry and organizations	2	3	3
To acquire foundational knowledge in mathematics, science, and electrical engineering, equipping them to pursue higher studies	3	2	3
To attain holistic education to enhance professional skills with	3	2	3

changing societal needs			

Table 1: Table showing Consistency of PEOs with Mission of the Department

PEOs	M 1 Learning Strategies	M 2 Emerging Technologies	M 3 Sustainable Practices
PEO1: To excel in **technical and professional careers** in design and product realization, effectively meeting the demands of industry and organizations.	2	3	3
PEO2: To acquire **foundational knowledge in mathematics, science, and electrical engineering,** equipping them to pursue higher studies.	3	2	3
PEO3: To attain **holistic education** to enhance professional skills with changing societal needs	3	2	3

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Justification of PEO's mapping with Mission statements:

PEOs	Justification with Mission Elements
	◦ **M1 : A** robust curriculum delivery system, including structured lesson planning, uploading of course materials on the LMS (Moodle), and conducting assessments via Cocubes, ensures students develop the technical competence necessary to become industry-ready professionals.

PEO 1	◦ **M2 :** The Students Skill Development Center (SSDC) trains students in emerging technologies such as PLC and MATLAB. Additionally, the Career Design Center (CDC) supports development in vital industry-required skills including communication, aptitude, and reasoning, thereby contributing to successful professional careers. ◦ **M3 :** Students engage in Engineering Projects in Community Services (EPICS), where they work in multidisciplinary teams to address real-world community issues. This fosters teamwork, societal awareness, and career readiness.
PEO 2	◦ **M1 :** Through various pedagogical methods, students apply their skills in developing course-related projects. The department fosters technical competency by encouraging students to author technical papers based on their projects in emerging technology domains. ◦ **M2** : Students utilize their technical knowledge in initiatives such as Unnat Bharat Abhiyan (UBA), Pallesrujana, and Engineering Without Borders (EWB), contributing to their continuous personal and professional development. ◦ **M3 :** Problem-based learning methodologies cultivate critical thinking and equip students with practical problem-solving abilities, essential for modern engineering challenges.
PEO 3	◦ **M1 :** A holistic education is promoted through diverse teaching strategies like Jigsaw, Problem/Project-Based Learning, group discussions, quizzes, and Think-Pair-Share activities, fostering comprehensive intellectual growth.. ◦ **M2** : Exposure to the latest technological advancements within relevant social contexts reinforces holistic learning and adaptability. ◦ **M3 :** Both academic and co-curricular engagements nurture knowledge, skills, and ethical values, contributing to societal betterment. Additionally, the emphasis on self-directed learning empowers students for sustained career growth.

1.2 Curriculum Structure and Features (30) **Total Marks 30.00**

1.2.1 State the Process for Developing/Revising the Program Curriculum (10) Institute Marks : 10.00

The curriculum development or revision process begins with the collection of feedback from the stake holders and then a Gap Analysis that considers existing course offerings considering expected Graduate Attributes, industry requirements, emerging technologies and accreditation standards such as those from NBA. This step identifies the gaps in the current curriculum and suggests directions for improvement. The outcome of the analysis informs the next stage of action.

Once gaps are identified, the proposed changes are reviewed by the Department Academic Committee (DAC). The DAC, comprising senior faculty members and subject experts, discusses the findings and provides direction for curriculum enhancement. Based on this input, the Detailed Course Structure is prepared, which outlines the number of credits, course distribution across semesters and integration of new modules if necessary.

Following this, a draft syllabus for each course is developed with the involvement of subject experts. These experts bring in domain-specific insights to ensure that the proposed syllabus is appropriate, up-to-date and relevant. Once the syllabus is drafted, it is presented in a Pre-Board of Studies (Pre-BoS) meeting for preliminary evaluation. This meeting provides an opportunity to suggest modifications or enhancements before the formal review.

If the Pre-BoS committee suggests changes, the draft undergoes modifications. Otherwise, if accepted, the curriculum progresses to the Board of Studies (BoS) for official review. The BoS, comprising internal and external academic and industry members, evaluates the curriculum thoroughly. If approved, the curriculum is forwarded to the Academic Council (AC) for final ratification.

After obtaining final approval by the Academic Council, the revised or newly developed curriculum is ready for implementation. The institution then proceeds to communicate these changes to faculty, update course documents and initiate delivery in the academic calendar.

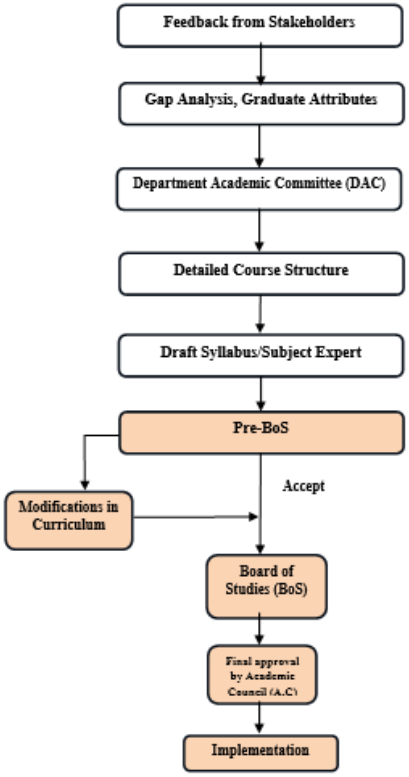

Figure. 1.1.3. Process flow of Content Delivery of University curriculum for attaining PO's & PSO's.

1.2.2 Curriculum Structure (10)

Institute Marks : 10.00

ID	Course Code	Course Title	Classroom Instruction (CI) (in hours per semester)		Lab Instruction (LI) (in hours per semester)	Term Work (TW) and Self Learning (SL) (TW+ SL) (in hours per semester)	Total no. of Hours per semester	Total Credits (C)* (Total Hours/30)
			L	T	P	SL		
1	21BS1MT01	Matrix Algebra and Calculus48	48	16	0	56	120	4.00

1.2.3 Components of Curriculum (5)

Institute Marks : 5.00

Course Components	Curriculum Content (% of total number of credits of the program)	Total number of contact hours	Total number of credits
Basic Sciences	13.75	352.00	22.00
Basic Engineering	14.37	368.00	23.00
Humanities and Social S	5.62	144.00	9.00
Program Core	36.87	944.00	59.00
Program Electives	11.25	288.00	18.00
Open Electives	7.5	192.00	12.00
Project(s)	8.12	208.00	13.00
Internships/Seminars	2.5	64.00	4.00
Any other (Please specify	0	0.00	0.00
Total number of Credits			**160.00**

1.2.4 Strategies for Education Reforms (5)

Institute Marks : 5.00

EEE Department strives to offer engineering education by embedding experiential learning, interdisciplinary engagement and real-world relevance into its academic practices. The institute adopts strategies to

ensure that students are equipped with domain-specific knowledge and develop the ability to work across disciplines, think critically and contribute meaningfully to society in alignment with NEP(National Education Policy) 2020, India.

Unnat Bharat Abhiyan (UBA) is a flagship initiative under the Ministry of Education, Government of India, in which HITAM actively participates. The institute has adopted nearby villages and engages in identifying grassroots problems through field visits and community interaction. Students and faculty collaboratively learn feasible technological and social interventions, aligning with HITAM's commitment to rural development and societal transformation.

APAAR ID: To facilitate the smooth implementation of the APAAR initiative, awareness sessions were conducted for both students and faculty. Detailed instructions, including step-by-step demonstrations, were provided to guide them through the APAAR ID registration process. Faculty mentors supported students in understanding the benefits of APAAR and assisted them in completing their registrations through the official portal.Top of Form

IKS: As part of its strategic alignment with NEP 2020, HITAM has introduced the Indian Knowledge Systems (IKS) course into the HR-24 curriculum to promote awareness of India's rich intellectual traditions and contributions to science, engineering and society. This initiative aims to help a deeper understanding of indigenous knowledge in areas such as mathematics, architecture, metallurgy, linguistics and environmental sustainability. To support this, HITAM has enriched its central library with a curated collection of IKS-focused books and resources, enabling students and faculty to explore traditional knowledge alongside modern engineering practices. Faculty teaching the course are encouraged to adopt interdisciplinary and experiential pedagogies, including the use of case studies, reflective assignments, and guest lectures by subject experts. Additionally, students are motivated to undertake mini-projects and research activities connected to IKS themes, thereby embedding cultural relevance and ethical awareness into their academic journey. Through these efforts, HITAM seeks to nurture holistic, critically informed engineers who value both global innovation and India's intellectual heritage.

Grand Challenges Scholars Program (GCSP) at HITAM is inspired by the U.S. National Academy of Engineerings initiative to prepare students to address the world's most pressing challenges. As the first college in Telangana recognized under GCSP, HITAM integrates research, entrepreneurship, global exposure, interdisciplinary learning, and service into its academic journey. This equips students with the mindset and competencies needed to innovate for the greater good.

In addition to the regular practices of academic delivery, Implementation of PBL Approach at HITAM Inspired by Aalborg UNESCO PBL Center

HITAM has actively adopted the Problem-Based Learning (PBL) approach inspired by the Aalborg UNESCO PBL Center to transform engineering education by making students active participants in their learning journey. This initiative focuses on faculty training, curriculum redesign and integrating PBL principles into teaching and assessment methods

By integrating the Aalborg PBL model, HITAM faculty are empowering students to become self-driven learners, critical thinkers and problem solvers. The emphasis on teamwork, accountability and real-world application ensures that HITAM graduates are adaptable.

EPICS (Engineering Projects in Community Service) at HITAM enables students to apply engineering knowledge to address real-world community challenges. Through this program, students work in interdisciplinary teams to design and implement solutions for social issues such as sanitation, education, health, and sustainability. EPICS not only enhances technical and problem-solving skills but also inculcates empathy, civic responsibility and leadership.

1.3 PO, PSO and their Mapping with Courses (20) **Total Marks 20.00**

1.3.1 POs and PSOs (5) :

PSO1	Analyze, Model, Test and provide engineering solutions in the areas related to electric drives, control and power systems.
PSO2	Apply fundamentals of electrical engineering to simulate and develop electrical and electronic systems using MATLAB, PSPICE tools

1.3.2 Mapping between the Courses and POs/PSOs (15) Institute Marks : 15.00

PO:

PO Number	List of Courses
PO1	1. Matrix Algebra and Calculus 2. APPLIED PHYSICS 3. Problem Solving using C 4. Applied Physics Lab 5. Problem Solving using C -Lab 6. Advanced Calculus for Engineers 7. Engineering Chemistry 8. Engineering Graphics 9. Electric Circuit Analysis-I 10. Engineering Chemistry-Lab 11. Electric Circuit Analysis-I Lab 12. Engineering Prototyping-Lab 13. Environmental Science 14. Laplace Transforms, Numerical Methods & Complex variables 15. Data Structures using C 16. Electrical Circuit Analysis-II 17. Electrical Machines – I 18. Electromagnetic Fields 19. Electrical Circuit Analysis-II Lab 20. Electrical Machines – I Lab 21. Internship-1 22. Electrical Machines-II 23. Control Systems 24. Power Systems-I 25. Analog and Digital Electronics Lab 26. Electrical Machines-II Lab 27. Control Systems Lab 28. Analog and Digital Electronics 29. Signals and Systems 30. Doing Engineering-1 31. Power Systems-II 32. Power Electronics 33. Power Electronics Lab 34. Micro controller and Applications 35. Micro controller and Applications Lab 36. Electrical and Electronics Design-Lab 37. Doing Engineering-2 38. Internship-2 39. Introduction to Artificial Intelligence 40. Utilization of Electrical Power 41. Electrical Measurements 42. Power systems III 43. Power Systems Lab 44. Electrical Measurements Lab 45. High Voltage Engineering 46. Sensors & Devices 47. Power Semiconductor Drives 48. Power System Operation and Control 49. PQ & FACTS 50. Electrical Distribution Systems 51. Doing Engineering-3(MINI PROJ/Internship) 52. Project Stage-I 53. Smart Grid System 54. Project Stage-II 55. Electrical Hybrid Vehicles
PO2	1. Problem Solving using C 2. Engineering Chemistry 3. Engineering Graphics 4. Electric Circuit Analysis-I 5. Engineering Chemistry-Lab 6. Electric Circuit Analysis-I Lab 7. Engineering Prototyping-Lab 8. Environmental Science 9. Data Structures using C 10. Electrical Circuit Analysis-II 11. Electrical Machines – I 12. Electromagnetic Fields 13. Data Structures using C-Lab 14. Electrical Circuit Analysis-II Lab 15. Electrical Machines – I Lab 16. Internship-1 17. Electrical Machines-II 18. Control Systems 19. Power Systems-I 20. Analog and Digital Electronics Lab 21. Electrical Machines-II Lab 22. Control Systems Lab 23. Analog and Digital Electronics 24. Signals and Systems 25. Doing Engineering-1 26. Power Systems-II 27. Power Electronics 28. Power Electronics Lab 29. Micro controller and Applications 30. Micro controller and Applications Lab 31. Advanced English Communication Skills-Lab 32. Doing Engineering-2 33. Internship-2 34. Electrical Measurements 35. Power systems III 36. Python Programming-Lab 37. Power Systems Lab 38. Electrical Measurements Lab 39. High Voltage Engineering 40. Sensors & Devices 41. Power Semiconductor Drive 42. Power System Operation and Control 43. PQ & FACTS 44. Electrical Distribution Systems 45. Doing Engineering-3(MINI PROJ/Internship) 46. Project Stage-I 47. Smart Grid System 48. Project Stage-II 49. Electrical Hybrid Vehicles
PO3	1. Problem Solving using C 2. Problem Solving using C -Lab 3. Engineering Prototyping-Lab 4. Data Structures using C-Lab 5. Electrical Circuit Analysis-II Lab 6. Internship-1 7. Electrical Machines-II Lab 8. Control Systems Lab 9. Analog and Digital Electronics 10. Signals and Systems 11. Power Electronics 12. Power Electronics Lab 13. Micro controller and Applications Lab 14. Advanced English Communication Skills-Lab 15. Internship-2 16. Python Programming 17. Python Programming-Lab 18. Doing Engineering-3(MINI PROJ/Internship) 19. Project Stage-I 20. Project Stage-II
PO4	1. Electric Circuit Analysis-I Lab 2. Engineering Prototyping-Lab 3. Electrical Circuit Analysis-II Lab 4. Internship-1 5. Analog and Digital Electronics Lab 6. Power Systems-II 7. Power Electronics Lab 8. Doing Engineering-2 9. Internship-2 10. PQ & FACTS 11. Doing Engineering-3(MINI PROJ/Internship) 12. Project Stage-I 13. Project Stage-II

PO5	1. Problem Solving using C 2. Problem Solving using C -Lab 3. Electric Circuit Analysis-I 4. Electric Circuit Analysis-I Lab 5. Engineering Prototyping-Lab 6. Electrical Circuit Analysis-II 7. Data Structures using C-Lab 8. Internship-1 9. Control Systems 10. Signals and Systems 11. Doing Engineering-1 12. Power Electronics 13. Power Electronics Lab 14. Micro controller and Applications 15. Micro controller and Applications Lab 16. Doing Engineering-2 17. Internship-2 18. Python Programming 19. Python Programming-Lab 20. Power Systems Lab 21. High Voltage Engineering 22. Doing Engineering-3(MINI PROJ/Internship) 23. Project Stage-I 24. Project Stage-II 25. Electrical Hybrid Vehicles
PO6	1. Engineering Prototyping-Lab 2. Signals and Systems 3. Doing Engineering-3(MINI PROJ/Internship) 4. Project Stage-I 5. Project Stage-II 6. Electrical Machines – I Lab
PO7	1. Engineering Prototyping-Lab 2. Universal Human Values 3. Doing Engineering-3(MINI PROJ/Internship) 4. Project Stage-I 5. Project Stage-II
PO8	1. ENGLISH 2. English Language Communication Skills Lab 3. Engineering Prototyping-Lab 4. English for Employ-ability-Lab 5. English for Employ ability 6. Fundamentals of Engineering 7. Enterprise Resourse planning 8. Doing Engineering-3(MINI PROJ/Internship) 9. Project Stage-I 10. Project Stage-II
PO9	1. ENGLISH 2. Business Economics and Financial Accountancy 3. English Language Communication Skills Lab 4. Engineering Prototyping-Lab 5. Internship-1 6. Signals and Systems 7. English for Employability-Lab 8. English for Employ ability 9. Micro controller and Applications Lab 10. Internship-2 11. Fundamentals of Engineering Management 12. Enterprise Resourse planning 13. Doing Engineering-3(MINI PROJ/Internship) 14. Project Stage-I 15. Smart Grid System 16. Project Stage-II
PO10	1. Business Economics and Financial Accountancy 2. Engineering Prototyping-Lab 3. Data Structures using C 4. Doing Engineering-1 5. Fundamentals of Engineering Management 6. Enterprise Resourse planning 7. Doing Engineering-3(MINI PROJ/Internship) 8. Project Stage-I 9. Project Stage-II
PO11	1. Engineering Prototyping-Lab 2. Doing Engineering-1 3. Micro controller and Applications 4. Introduction to Artificial Intelligence 5. Electrical Measurements 6. Electrical Measurements Lab 7. Intellectual Property Rights 8. Doing Engineering-3(MINI PROJ/Internship) 9. Project Stage-I 10. Project Stage-II

PSO:

PO Number	List of Courses
PSO1	Matrix Algebra and Calculus APPLIED PHYSICS Problem Solving using C Problem Solving using C -Lab Electric Circuit Analysis-I Electric Circuit Analysis-I Lab Engineering Prototyping-Lab Laplace Transforms, Numerical Methods & Complex variables Electrical Circuit Analysis-II Electrical Machines – I Electromagnetic Fields Electrical Circuit Analysis-II Lab Electrical Machines – I Lab Internship-1 Electrical Machines-II Control Systems Power Systems-I Electrical Machines-II Lab Control Systems Lab Analog and Digital Electronics Signals and Systems Doing Engineering-1 Power Systems-II Power Electronics Power Electronics Lab Microcontroller and Applications Doing Engineering-2 Internship-2 Utilization of Electrical Power Python Programming Electrical Measurements Power systems III Power Systems Lab Electrical Measurements Lab High Voltage Engineering Power Semiconductor Drives Power System Operation and Control PQ & FACTS Electrical Distribution Systems Doing Engineering-3(MINI PROJ/Internship) Project Stage-I Smart Grid System Project Stage-II Electrical Hybrid Vehicles
PSO2	

	Electrical Machines – I Electrical Circuit Analysis-II Lab Electrical Machines – I Lab Electrical Machines-II Control Systems Power Systems-I Analog and Digital Electronics Lab Electrical Machines-II Lab Control Systems Lab Signals and Systems Doing Engineering-1 Power Systems-II Power Electronics Power Electronics Lab Microcontroller and Applications Lab Electrical and Electronics Design-Lab Doing Engineering-2 Introduction to Artificial Intelligence Python Programming Power systems III Python Programming-Lab Power Systems Lab Electrical Measurements Lab Sensors & Devices Power Semiconductor Drives Power System Operation and Control PQ & FACTS Doing Engineering-3(MINI PROJ/Internship) Project Stage-I Project Stage-II Electrical Hybrid Vehicles

1.4 Course Outcomes and Course Articulation Matrix (30) **Total Marks 30.00**

1.4.1 Course Outcome (Semester Wise) (15) Institute Marks : 15.00

No. of Core Courses : 10	**C2 :** 4	**C3 :** 4	**C4 :** 2

Note : Number of Outcomes for a Course is expected to be around 6.

Course Code :	**21PC3EE04**	**Semester :**	**3**

Course Outcome	Statements
21PC3EE04.1	Illustrate different parts of a DC machine & understand its operation
21PC3EE04.2	Analyze different testing methods to predetermine the efficiency of DC machines
21PC3EE04.3	Describe different excitation and starting methods of DC machines and Control the voltage and speed of a DC machines
21PC3EE04.4	Classify single phase and three phase transformers circuits

Course Code :	**21PC3EE05**	**Semester :**	**3**

Course Outcome	Statements
21PC3EE05.1	Illustrate the basic laws of electromagnetism.
21PC3EE05.2	Calculate the electric and magnetic fields for simple configurations under static conditions.
21PC3EE05.3	Analyze time varying electric and magnetic fields.
21PC3EE05.4	Derive the maxwell’s equation, propagation of electromagnetic waves in different forms and different medium

Course Code :	21PC4EE09	Semester :	4

Course Outcome	Statements
21PC4EE09.1	Compare the operation of conventional generating stations and renewable sources.
21PC4EE09.2	Analyze power tariff methods.
21PC4EE09.3	Formulate electric circuit parameters of transmission lines.
21PC4EE09.4	Classify the parts and layout of substation ,underground cables

Course Code :	21PC4EE08	Semester :	4

Course Outcome	Statements
21PC4EE08.1	Apply various control strategies to different applications (power systems, electrical drives, mechanical systems)
21PC4EE08.2	Apply various time domain and frequency domain techniques to assess the system performance.
21PC4EE08.3	Design a suitable controller and/or a compensate for the specific application to improve the system performance.
21PC4EE08.4	Test system controllability and observability using state space representation and applications of state space representation to various systems.

Course Code :	21PC5EE15	Semester :	5

Course Outcome	Statements
21PC5EE15.1	Analyze transmission line performance.
21PC5EE15.2	Apply load compensation techniques to control reactive power & understand the application of per unit quantities.
21PC5EE15.3	Design over voltage protection and insulation coordination
21PC5EE15.4	Determine the fault currents for symmetrical and unbalanced faults

Course Code :	21PC5EE17	Semester :	5

Course Outcome	Statements

21PC5EE17.1	Compare the differences between signal level and power level devices.
21PC5EE17.2	Analyze controlled rectifier circuits.
21PC5EE17.3	Analyze the operation of DC-DC choppers.
21PC5EE17.4	Analyze the operation of voltage source inverters.

Course Code :	**21PC6EE21**	**Semester :**	**6**

Course Outcome	**Statements**
21PC6EE21.1	Analyze different types of measuring instruments, their construction, operation, and characteristics
21PC6EE21.2	Identify the instruments suitable for typical measurement
21PC6EE21.3	Apply the knowledge about transducers and instrument transformers to use them effectively.
21PC6EE21.4	Apply the knowledge of smart and digital metering for industrial applications.

Course Code :	**21PC6EE22**	**Semester :**	**6**

Course Outcome	**Statements**
21PC6EE22.1	Compare and contrast electromagnetic, static and microprocessor-based relays
21PC6EE22.2	Apply technology to protect power system components.
21PC6EE22.3	Select relay settings of over current and distance relays.
21PC6EE22.4	Analyze quenching mechanisms used in air, oil and vacuum circuit breakers

Course Code :	**21PC7EE26**	**Semester :**	**7**

Course Outcome	**Statements**
21PC7EE26.1	Compare the difference between transmission, and distribution lines and design the feeders.
21PC7EE26.2	Analyze power loss and voltage drop of the feeders.
21PC7EE26.3	Analyze the various protection schemes of distribution systems.

21PC7EE26.4	Illustrate the importance of voltage control and power factor improvement

Course Code :	**21PE7EE32**	**Semester :**	**7**

Course Outcome	Statements
21PE7EE32.1	Compare the difference between transmission, and distribution lines and design the feeders.
21PE7EE32.2	Analyze power loss and voltage drop of the feeders.
21PE7EE32.3	Analyze the various protection schemes of distribution systems.
21PE7EE32.4	Illustrate the importance of voltage control and power factor improvement

1.4.2 Course Articulation Matrix (15) :

1 . course name : C221PC3EE04

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C221PC3EE04	Illustrate dif	2	-	-	-	-	-	-	-	-	-	-
C221PC3EE04	Analyze diff	3	-	-	-	-	-	-	-	-	-	-
C221PC3EE04	Describe di	2	2	-	-	-	-	-	-	-	-	-
C221PC3EE04	Classify sin	2	2	-	-	-	-	-	-	-	-	-
Average		**2.25**	**2.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2 . course name : C221PC3EE05

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C221PC3EE05	Illustrate th	1	1	-	-	-	-	-	-	-	-	-
C221PC3EE05	Calculate th	3	2	-	-	-	-	-	-	-	-	-
C221PC3EE05	Analyze tim	3	3	-	-	-	-	-	-	-	-	-
C221PC3EE05	Derive the r	3	3	-	-	-	-	-	-	-	-	-

Average		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3 . course name : C221PC4EE09

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C221PC4EE09	Compare th	3	3	-	-	-	-	-	-	-	-	-
C221PC4EE09	Analyze po	3	3	-	-	-	-	-	-	-	-	-
C221PC4EE09	Formulate e	3	3	-	-	-	-	-	-	-	-	-
C221PC4EE09	Classify the	3	3	-	-	-	-	-	-	-	-	-
Average		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4 . course name : C221PC4EE08

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C221PC4EE08	Apply vario	3	2	-	-	-	-	-	-	-	-	-
C221PC4EE08	Apply vario	3	2	-	-	1	-	-	-	-	-	-
C221PC4EE08	Design a su	3	2	-	-	1	-	-	-	-	-	-
C221PC4EE08	Test syster	3	2	-	-	1	-	-	-	-	-	-
Average		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5 . course name : C321PC5EE15

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C321PC5EE15	Analyze trai	3	3	-	3	-	-	-	-	-	-	-
C321PC5EE15	Apply load	3	2	-	-	-	-	-	-	-	-	-
C321PC5EE15	Design ove	3	3	-	2	-	-	-	-	-	-	-
C321PC5EE15	Determine t	2	3	-	3	-	-	-	-	-	-	-
Average		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

6 . course name : C321PC5EE17

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C321PC5EE17	Compare th	3	1	-	-	-	-	-	-	-	-	-
C321PC5EE17	Analyze co	2	2	3	-	2	-	-	-	-	-	-
C321PC5EE17	Analyze the	1	2	3	-	2	-	-	-	-	-	-
C321PC5EE17	Analyze th	1	2	3	-	2	-	-	-	-	-	-
Average		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

7 . course name : C321PC6EE21

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C321PC6EE21	Analyze diff	3	2	-	-	-	-	-	-	-	-	-
C321PC6EE21	Identify the	2	3	-	-	-	-	-	-	-	-	-
C321PC6EE21	Apply the k	2	3	-	-	-	-	-	-	-	-	-
C321PC6EE21	Apply the k	3	2	-	-	-	-	-	-	-	-	-
Average		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

8 . course name : C321PC6EE22

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C321PC6EE22	Compare al	2	2	-	-	-	-	-	-	-	-	-
C321PC6EE22	Apply tech	2	2	-	-	-	-	-	-	-	-	-
C321PC6EE22	Select relay	3	3	-	-	-	-	-	-	-	-	-
C321PC6EE22	Analyze qu	2	2	-	-	-	-	-	-	-	-	-
Average		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

9 . course name : C421PC7EE26

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C421PC7EE26	Compare th	3	3	-	-	-	-	-	-	-	-	-
C421PC7EE26	Analyze po	3	3	-	-	-	-	-	-	-	-	-
C421PC7EE26	Analyze the	2	3	-	-	-	-	-	-	-	-	-
C421PC7EE26	Illustrate th	3	2	-	-	-	-	-	-	-	-	-
Average		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

10 . course name : C421PE7EE32

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C421PE7EE32	Compare th	3	3	-	-	-	-	-	-	-	-	-
C421PE7EE32	Analyze po	3	3	-	-	-	-	-	-	-	-	-
C421PE7EE32	Analyze the	2	3	-	-	-	-	-	-	-	-	-
C421PE7EE32	Illustrate th	3	2	-	-	-	-	-	-	-	-	-
Average		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

1 . Course Name : C221PC3EE04

Course	PSO1	PSO2
C221PC3EE04	3	2
C221PC3EE04	2	2
C221PC3EE04	2	3
C221PC3EE04	3	2
Average	**0.00**	**0.00**

2 . Course Name : C221PC3EE05

Course	PSO1	PSO2

C221PC3EE05	2	-
C221PC3EE05	2	-
C221PC3EE05	3	-
C221PC3EE05	2	-
Average	**0.00**	**0.00**

3 . Course Name : C221PC4EE09

Course	PSO1	PSO2
C221PC4EE09	2	-
C221PC4EE09	3	-
C221PC4EE09	2	-
C221PC4EE09	2	-
Average	**0.00**	**0.00**

4 . Course Name : C221PC4EE08

Course	PSO1	PSO2
C221PC4EE08	3	3
C221PC4EE08	3	3
C221PC4EE08	2	2
C221PC4EE08	2	2
Average	**0.00**	**0.00**

5 . Course Name : C321PC5EE15

Course	PSO1	PSO2
C321PC5EE15	3	1
C321PC5EE15	2	2

C321PC5EE15	2	1
C321PC5EE15	3	2
Average	**0.00**	**0.00**

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6 . Course Name : C321PC5EE17

Course	PSO1	PSO2
C321PC5EE17	2	2
C321PC5EE17	3	2
C321PC5EE17	3	3
C321PC5EE17	2	3
Average	**0.00**	**0.00**

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7 . Course Name : C321PC6EE21

Course	PSO1	PSO2
C321PC6EE21	2	3
C321PC6EE21	2	2
C321PC6EE21	2	3
C321PC6EE21	2	2
Average	**0.00**	**0.00**

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8 . Course Name : C321PC6EE22

Course	PSO1	PSO2
C321PC6EE22	3	3
C321PC6EE22	2	2
C321PC6EE22	2	3

C321PC6EE22	3	2
Average	**0.00**	**0.00**

9 . Course Name : C421PC7EE26

Course	PSO1	PSO2
C421PC7EE26	2	2
C421PC7EE26	3	2
C421PC7EE26	3	2
C421PC7EE26	3	2
Average	**0.00**	**0.00**

10 . Course Name : C421PE7EE32

Course	PSO1	PSO2
C421PE7EE32	3	1
C421PE7EE32	2	2
C421PE7EE32	3	1
C421PE7EE32	2	2
Average	**0.00**	**0.00**

1.5 Program Articulation Matrix (5) Total Marks 5.00

Program Articulation Matrix :

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
21BS1MT01	3										
21BS1PH01	3										

21HS1EG01								2.25	2.25		
21HS1MB01									2	2	
21ES1CS01	2.5	1	2		2						
21BS1PH02	3										
21ES1CS02	3		2		2.3						
21HS1EG02								2	3		
21BS2MT02	3										
21BS2CH01	3	2									
21ES2ME01	3	2									
21PC2EE01	2.25	2			2						
21BS2CH02	3	1									
21PC2EE02	2.5	2.75		3	2						
21ES2ME02	2	2	1.5	1.5	1	1.25	2	1.5	2	2	1.5
21MC2HS02	2.75	2.25									
21BS3MT05	3										
21PC3CS01	2.25	2								2.7	
21PC3EE03	3	1.75			1						
21PC3EE04	2.25	2									
21PC3EE05	2.5	2.25									
21PC3CS04		3	3		2						
21PC3EE06	2.5	3	3	3							
21PC3EE07	2.25	2				1					
21PR3IN01	2.25	2	1.75	2	2.5				3		
21MC3HS01							3				
21PC4EE11	2.75	2									
21PC4EE08	3	2			1						
21PC4EE09	3	3									

21PC4EE13	2.25	1.5		2							
21PC4EE12	3	2	3								
21PC4EE14	3	1	1								
21PC4EE10	3	2.7	3								
21PC4EC03	2.8	2	1		2.3	1			1		
21HS4EG04								2	3		
21HS4EG03								2.5	3		
21PR4EE01	1.75	2			2					1	2
21PC5EE15	2.75	2.75		2.7							
21PC5EE17	1.75	1.75	3		2						
21PC5EE19	1.75	1.75	3	2.5	3						
21PC5EC16	2.25	2			2						2
21PC5EC18	2.5	3	3		3				3		
21PC5EE20	3										
21HS5EG05		2	3								
21PR5EE02	2	2		3	3						
21PR5IN02	2.25	2	1.75	2	2.5				3		
210E5CM01	3	3									2
21PE5EE11	2	2									
21ES6CS03			2.3		2						
21PC6EE21	2.5	2.5									1.75
21PC6EE22	2.25	2.25									
21HS6MB02								1.75	2	2	
21ES6CS04		1	1		2						
21PC6EE23	3	1.3			2						
21PC6EE24	2.5	2.5									1.75

21PE6EE23	3	2.75			1						
21OE6CO05	3	1									
21MC7HS06											2.5
21OE8HS04								1.75	2	2	
21PC7EE25	2.5	2									
21PC7EE26	2.75	2.75									
21PE7EE41	2.75	2.75		2.7							
21PE7EE32	2.75	2.75									
21PR7IN03	3	3	3	2.5	3		3	3	2.5	3	3
21PR7PS01	3	3	3	2.5	3		3	3	2.5	3	3
21PE8EE61	2.5	2.5									
21PR8PS02	2.5	2.5	2	2.3	3		3	3	3	3	2
21PE8EE52	2.75	2.75			2						

Course Code	PSO1	PSO2
21PE8EE52	1.75	2
21BS1MT01	2	
21BS1PH01	2	
21BS1PH02		
21BS2CH01		
21BS2CH02		
21BS2MT02		
21BS3MT05	3	
21ES1CS01	2	
21ES1CS02	2	
21ES2ME01		
21ES2ME02	2	

21ES6CS03	3	2
21ES6CS04		2
21HS1EG01		
21HS1EG02		
21HS1MB01		
21HS4EG03		
21HS4EG04		
21HS5EG05		
21HS6MB02		
21OE5CM01		2
21OE6CO05		2
21PC2EE01	3	
21PC2EE02	3	
21PC3CS01		
21PC3CS04		
21PC3EE03	3	
21PC3EE04	2.5	2.25
21PC3EE05	3	
21PC3EE06	3	3
21PC3EE07	3	2
21PC4EC03	2	2
21PC4EE08	2.5	2.5
21PC4EE09	2.1	1.2
21PC4EE10	2	
21PC4EE11	2.7	1.2
21PC4EE12	2	1.2
21PC4EE13		3

21PC4EE14	1.2	1.2
21PC5EC16	[illegible]	[illegible]
21PC5EC16	3	[illegible]
21PC5EC18	[illegible]	2
21PC5EE15	1.19	1.19
21PC5EE17	1.75	1.8
21PC5EE19	3	3
21PC5EE20	[illegible]	2
21PC6EE21	3	[illegible]
21PC6EE22	3	3
21PC6EE23	3	3
21PC6EE24	2.1	1.8
21PC7EE25	3	3
21PC7EE26	2	2
21PE5EE11	3	[illegible]
21PE7EE32	3	[illegible]
21PE7EE41	1	1
21PE8EE52	[illegible]	[illegible]
21PE8EE61	[illegible]	[illegible]
21PE8EE61	3	[illegible]
21PR3IN01	3	[illegible]
21PR4EE01	2	3
21PR5EE02	3	3
21PR5IN02	3	[illegible]
21PR7IN03	3	2
21PR7PS01	3	3

21PR8PS02	3	3

2 OUTCOME-BASED TEACHING LEARNING (120)

Total Marks 120.00

2.1 Describe Processes Followed to Ensure Quality of Teaching & Learning (20)

Total Marks 20.00

Institute Marks : 20.00

The Department of Electrical and Electronics Engineering ensures curriculum delivery through a process which enables us to deliver the quality teaching in line with the principles of Outcome-Based Education (OBE) that focuses on learning outcomes for every course. In order to implement OBE effectively we follow the below process. The process flow diagram is shown in figure 2.1.1.

An Academic Calendar is prepared before the commencement of the semester.

Each faculty is required to furnish their choice of courses to teach for the coming semester.

The course allocation will be done by considering:

a. Faculty Specialization.

b. No. of times same course is taught by the faculty.

c. Previous performance in their teaching.

d. Faculty Presentation if new course.

Once the subject is allotted, the faculty will prepare the following documentation for review by the DAC.

1. Lesson Plan (scheduling, TLOs, COs, CO-PO mapping, planned pedagogies).

2. Course File:

- Course Structure.
- Course Contents.
- Lesson Plan.
- Study Material/Lecture Notes.
- Course Applications.
- Assignments.
- Sample/Model Questions.
- Previous Question Papers if any.
- Sample Course Level Project Proposals if any.

3. Course Delivery.

4. CIE Assessments towards Theory Courses and Day to Day Evaluation for Laboratory Courses.

5. Identification of Fast and Slow Learners.

6. Supportive Actions towards the Slow Learners

7. Initiatives towards Fast Learners.

8. Once the course is completed the faculty will add the following information for later use in the next academic year.

- Observations from CIE and SEE
- Recommendations for Course Corrections if any.

9. Faculty Conclave to present the pedagogies implemented to achieve the OBE outcomes.

10. Attainment of Course Outcomes and CO-PO.

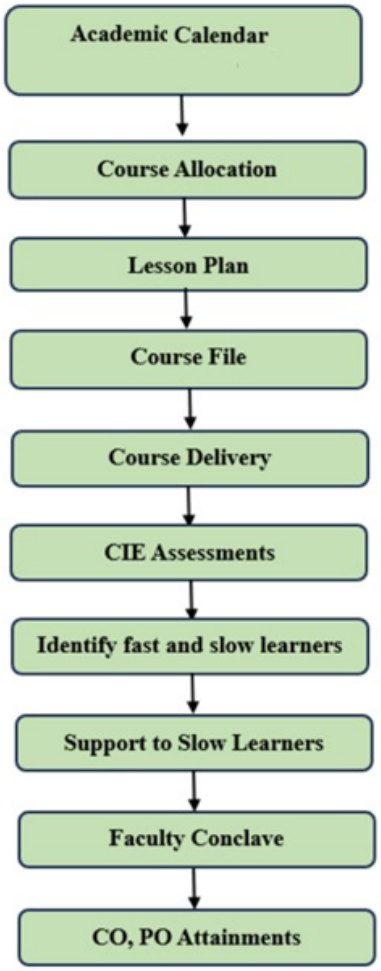


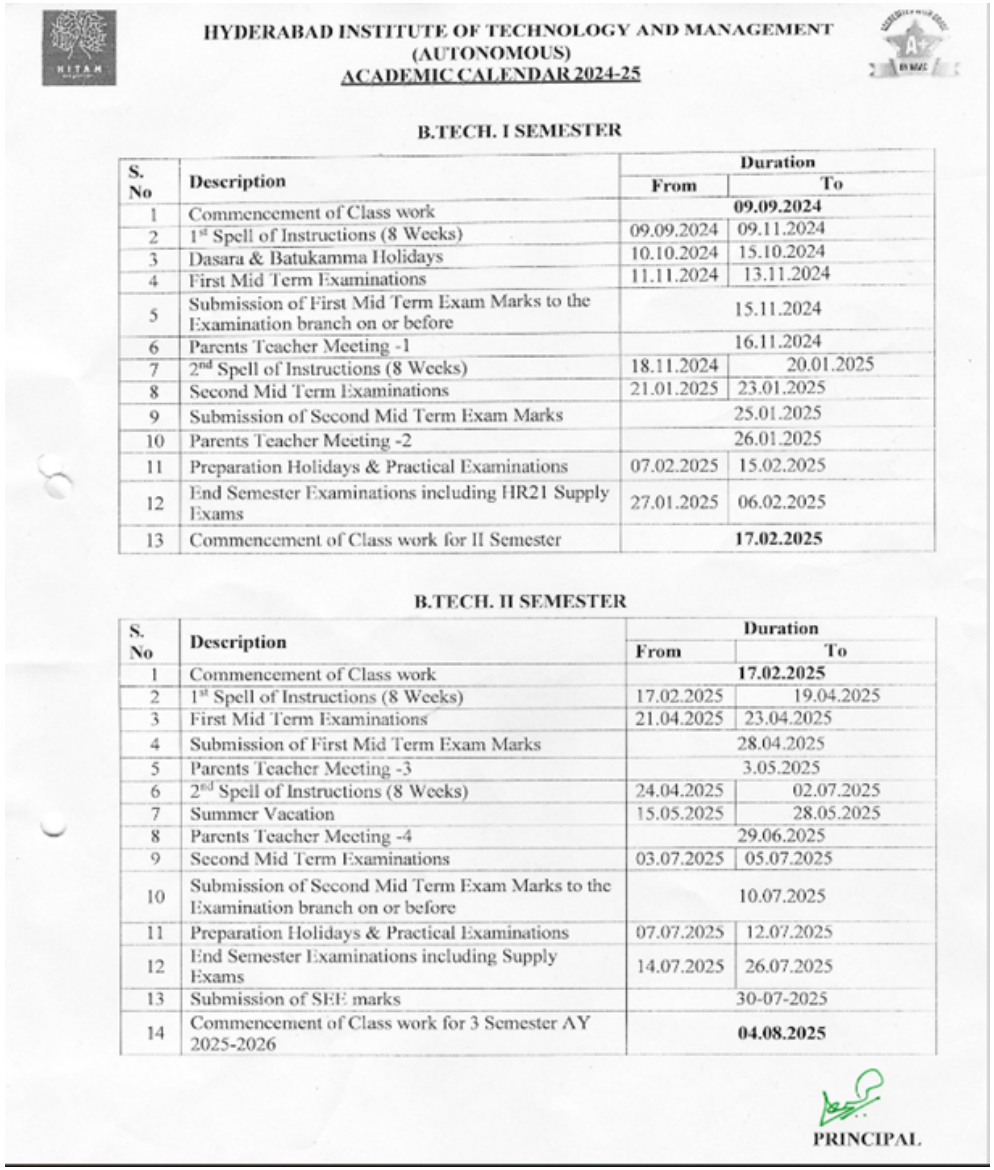
Figure.2.1.1. Teaching Learning Process Flowchart

A.Structured Academic Planning:

HITAM ensures adherence to the academic calendar which is prepared considering the guidelines from the affiliating university and state government. Being an Autonomous Institution we design the course structure and its contents based on the AICTE model curriculum and the local industry needs.

The academic calendar for the Academic Year 2024-25 as shown in figure 2.1.2.

Academic Calendar for the Academic Year 2024-25:



HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AUTONOMOUS)
ACADEMIC CALENDAR 2024-25

B.TECH. I SEMESTER

S. No	Description	Duration	
		From	To
1	Commencement of Class work	**09.09.2024**	
2	1st Spell of Instructions (8 Weeks)	09.09.2024	09.11.2024
3	Dasara & Batukamma Holidays	10.10.2024	15.10.2024
4	First Mid Term Examinations	11.11.2024	13.11.2024
5	Submission of First Mid Term Exam Marks to the Examination branch on or before	15.11.2024	
6	Parents Teacher Meeting -1	16.11.2024	
7	2nd Spell of Instructions (8 Weeks)	18.11.2024	20.01.2025
8	Second Mid Term Examinations	21.01.2025	23.01.2025
9	Submission of Second Mid Term Exam Marks	25.01.2025	
10	Parents Teacher Meeting -2	26.01.2025	
11	Preparation Holidays & Practical Examinations	07.02.2025	15.02.2025
12	End Semester Examinations including HR21 Supply Exams	27.01.2025	06.02.2025
13	Commencement of Class work for II Semester	**17.02.2025**	

B.TECH. II SEMESTER

S. No	Description	Duration	
		From	To
1	Commencement of Class work	**17.02.2025**	
2	1st Spell of Instructions (8 Weeks)	17.02.2025	19.04.2025
3	First Mid Term Examinations	21.04.2025	23.04.2025
4	Submission of First Mid Term Exam Marks	28.04.2025	
5	Parents Teacher Meeting -3	3.05.2025	
6	2nd Spell of Instructions (8 Weeks)	24.04.2025	02.07.2025
7	Summer Vacation	15.05.2025	28.05.2025
8	Parents Teacher Meeting -4	29.06.2025	
9	Second Mid Term Examinations	03.07.2025	05.07.2025
10	Submission of Second Mid Term Exam Marks to the Examination branch on or before	10.07.2025	
11	Preparation Holidays & Practical Examinations	07.07.2025	12.07.2025
12	End Semester Examinations including Supply Exams	14.07.2025	26.07.2025
13	Submission of SEE marks	30-07-2025	
14	Commencement of Class work for 3 Semester AY 2025-2026	**04.08.2025**	

PRINCIPAL

HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AUTONOMOUS)

ACADEMIC CALENDAR 2024-25

B.TECH. III & VII SEMESTER

S. No	Description	Duration	
		From	To
1	Commencement of Class work	**29.07.2024**	
2	1st Spell of Instructions (09 Weeks)	29.07.2024	01.10.2024
3	First Mid Term Examinations	03.10.2024	05.10.2024
4	Intramural Sports	07.10.2024	09.10.2024
5	Dasara & Batukamma Holidays	10.10.2024	15.10.2024
6	Submission of First Mid Term Exam Marks to Exam Branch, ERP, IonCudos on or before	09.10.2024	
7	Parents Teacher Meeting -1	12.10.2024	
8	2nd Spell of Instructions (7 Weeks)	16.10.2024	07.12.2024
9	Second Mid Term Examinations	09.12.2024	11.12.2024
10	Submission of Second Mid Term Exam Marks to Exam Branch, ERP, IonCudos on or before	13.12.2024	
11	Parents Teacher Meeting -2	14.12.2024	
12	End Semester Examinations	16.12.2024	27.12.2024
13	Practical Examinations	28.12.2024	03.01.2025
14	Submission of SEE marks	04.01.2025	
15	Elysian-Sports &Cultural events	**8.1.2025 to 11.1.2025**	
16	Commencement of Class work for IV Semester	**17.01.2025**	

B.TECH. IV & VIII SEMESTER

S. No	Description	Duration	
		From	To
1	Commencement of Class work	**17.01.2025**	
2	1st Spell of Instructions (8 Weeks)	17.01.2025	15.03.2025
3	First Mid Term Examinations	17.03.2025	19.03.2025
4	Submission of First Mid Term Exam Marks to Exam Branch, ERP, IonCudos on or before	22.03.2025	
5	Parents Teacher Meeting -1	22.03.2025	
6	2nd Spell of Instructions	20.03.2025	28.05.2025
7	Second Mid Term Examinations (8 Weeks)	29.05.2025	31.05.2025
8	Submission of Second Mid Term Exam Marks to Exam Branch, ERP, IonCudos on or before	02.06.2025	
9	Summer Vacation	11.05.2024	24.05.2024
10	End Semester Examinations	02.06.2025	14.06.2025
11	Practical Examinations	17.06.2025	21.06.2025
12	Submission of SEE marks	20.06.2025	

PRINCIPAL

HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AUTONOMOUS)
REVISED ACADEMIC CALENDAR 2024-25

B.TECH. V SEMESTER

S. No	Description	Duration	
		From	To
1	Commencement of Class work	28.08.2024	
2	1st Spell of Instructions	28.08.2024	28.10.2024
3	First Mid Term Examinations	29.10.2024	31.10.2024
4	Intramural Sports	07.10.2024	09.10.2024
5	Dasara & Bathukamma Holidays	10.10.2024	15.10.2024
6	Submission of First Mid Term Exam Marks to Exam Branch, ERP, IonCudos on or before	09.11.2024	
7	Parents Teacher Meeting -1	09.11.2024	
8	2nd Spell of Instructions	04.11.2024	31.12.2024
9	Second Mid Term Examinations	02.01.2025	04.01.2025
10	Submission of Second Mid Term Exam Marks to Exam Branch, ERP, IonCudos on or before	11.01.2025	
11	Parents Teacher Meeting -2	11.01.2025	
12	End Semester Examinations	17.01.2025	29.01.2025
13	Practical Examinations	06.01.2025	10.01.2025
14	Submission of SEE marks	15.02.2025	
15	Commencement of Class work for VI Semester	30.01.2025	

B.TECH. VI SEMESTER

S. No	Description	Duration	
		From	To
1	Commencement of Class work	30.01.2025	
2	1st Spell of Instructions	30.01.2025	26.03.2025
3	Elysian-Sports &Cultural events	1st week of March 2025	
4	First Mid Term Examinations	27.03.2025	29.03.2025
5	Submission of First Mid Term Exam Marks to Exam Branch, ERP, IonCudos on or before	04.04.2025	
6	Parents Teacher Meeting -1	06.04.2025	
7	2nd Spell of Instructions	01.04.2025	06.06.2025
8	Second Mid Term Examinations	09.06.2025	11.06.2025
9	Submission of Second Mid Term Exam Marks to Exam Branch, ERP, IonCudos on or before	14.06.2025	
10	Parents Teacher Meeting -2	15.06.2025	
11	Summer Vacation	15.05.2025	28.05.2025
12	End Semester Examinations	19.06.2025	28.06.2025
13	Practical Examinations	12.06.2025	17.06.2025
14	Submission of SEE marks	05.07.2025	
15	Commencement of Class work for VII Semester	30.06.2025	

PRINCIPAL

Figure 2.1.2. Academic Calendars for Academic year 2024-25

B. **Pedagogical implemented**

For an effective teaching we adopt various pedagogical approaches. These include:

- Real-world examples integrated into teaching
- Student Presentations
- Flipped Classrooms
- Problem-Based Learning (PBL) and Course-Level Projects (CLP)
- Brainstorming sessions
- Video lectures and MOOCs
- Experiential and activity-based learning
- Virtual labs to enhance conceptual clarity
- Jigsaw method
- Peer learning

These initiatives are strategically implemented to enhance critical thinking, problem-solving skills, and long-term retention, while also encouraging communication, collaboration, and leadership among students.

Sample Pedagogy implementation report of EEE Faculty:

Name of the Activity: Student seminar

Course : Electric Hybrid Vehicles

Name Of Topic : Series and Parallel Configuration

Year/Branch : IV B. Tech I Semester EEE

Date of conduction : 28/12/2024

INTRODUCTION ON PEDAGOGY:

Student seminars are an effective way to enhance learning by allowing students to research, present, and discuss topics in a structured format. These seminars encourage active participation, improve communication skills, and deepen subject understanding. This method is focused on improving students' communication skills and their ability to explain technical concepts clearly. It allows students to take ownership of their learning by researching and presenting topics to their peers. It was shown in figure 2.1.3. Faculty assess students based on content depth, presentation clarity, confidence, and engagement. Constructive feedback is provided to help students refine their delivery and subject knowledge. This activity also promotes public speaking skills, which are essential for academic and professional success. Rubrics were designed and evaluated.

IMPLEMENTATION:

1. Topic is given to students and asked students to come voluntarily to give a seminar.

2. Students prepared notes for the topic and informed the class about the seminar prior.

Figure 2.1.3. Student Seminar Presentations

OUTCOME: Students actively participated to give a seminar.

TIME TAKEN TO COMPLETE THE ACTIVITY: 60 minutes

EVALUATION:

Here's a basic rubric for student seminars with a total of **5 marks**, formatted as shown in table 2.1.1.

Table 2.1.1. Rubrics for Student Seminar Presentation

Criteria	Excellent (5)	Good (4)	Satisfactory (3)	Needs Improvement (2)	Poor (1)
Content (2 Marks)	Clear, well-structured, and relevant content with strong subject knowledge	Good content with minor gaps in clarity or relevance	Basic content with some gaps in understanding	Limited content with significant gaps	Incomplete or irrelevant content
Presentation Skills (1 Mark)	Confident, well-paced, engaging delivery with good voice modulation	Clear delivery with minor hesitations or lack of engagement	Understandable but lacks confidence or fluency	Frequent hesitations, unclear speech, or monotone delivery	Difficult to understand or disorganized
Visual Aids (1 Mark)	Well-designed, clear, and relevant slides/visuals that enhance understanding	Good visuals but minor issues with clarity or relevance	Basic visuals, somewhat helpful but lacking impact	Poorly designed visuals, difficult to follow	No visuals or irrelevant visuals
Q&A Handling (1 Mark)	Effectively answers all questions with confidence and clarity	Answers most questions well but with minor gaps	Answers some questions but lacks confidence or depth	Struggles to answer questions with little clarity	Unable to answer questions effectively

Problem-Based Learning: The Problem-Based Learning (PBL) aims to provide students with a platform to showcase their innovative solutions to real-world challenges. It encourages teamwork, critical thinking, and industry-oriented learning. Students work in groups on problem statements provided at the beginning of the semester. The projects are then exhibited in a formal setting where a team from Aalborg University visited our campus to evident these projects and appreciated EEE Students. This approach enhances experiential learning and prepares students for practical applications in their careers. This pedagogy is aimed at providing hands-on experience in designing and analyzing Induction Motor using MATLAB software. Students work on mini-projects related to Electrical Machines, where they use MATLAB to simulate, optimize, and analyze different antenna models. The projects are then presented, with students explaining their methodologies, challenges, and findings. This method enhances problem-solving skills and industry readiness by integrating theoretical knowledge with practical application. One sample PBL is shown in figure 2.1.4.

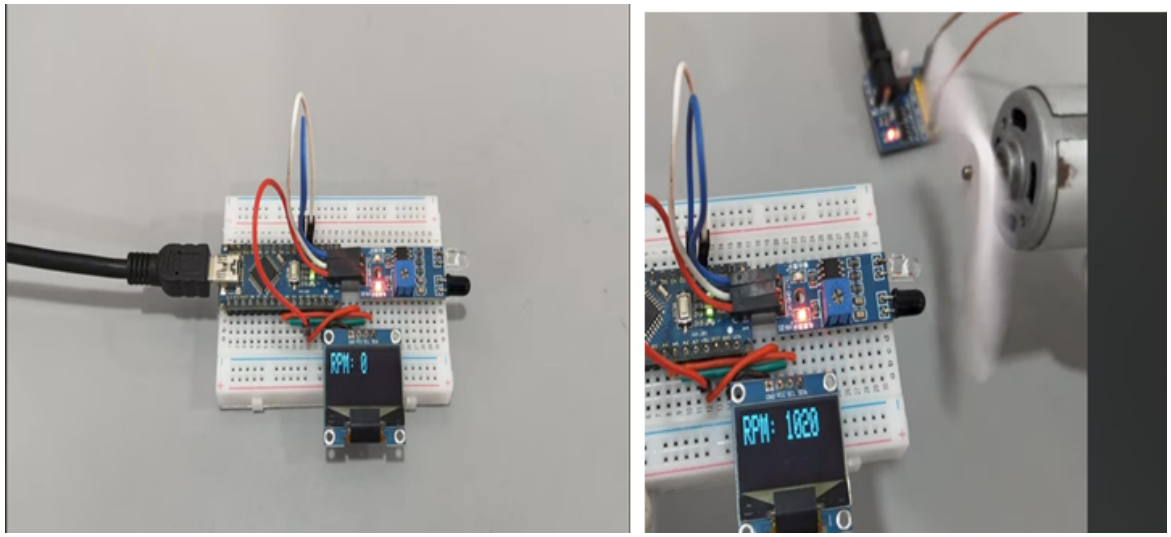


Figure 2.1.4. Speed Control of Induction motor PBL project

HITAM has an MOU with Aalborg University. Faculty from HITAM are getting trained from the Aalborg team. Faculty at HITAM implemented PBL for this batch of EEE students. We were successful in implementing it. The student Learning Outcomes were achieved.

Problem statement: Design speed control of an Induction motor using suitable methods using MATLAB

Outcomes:

- Application of Knowledge
- Problem-Solving Skills
- Design and Implementation
- Teamwork and Collaboration
- Communication Skills
- Project Management
- Critical Thinking and Innovation
- Use of Tools and Technologies

Challenges: Initially students resisted towards PBL

Number of Students Participated: 35

Student Feedback:

1. More active to participate in the activity

2. Feels more satisfactory with outcome of activity

Many students appreciate PBL for its engaging and interactive nature. They often report improved critical thinking, problem-solving, and teamwork skills. They find it relevant and feel better prepared for real-world challenges. Some students found PBL initially uncomfortable, as it requires active participation and self-directed learning. They requested clearer guidelines and expectations. Feedback is taken from the students to understand the student's interests and suggestions for effective implementation for further semesters.

The Problem-Based Learning is a valuable educational approach for improving student engagement and academic performance in the Antennas and Wave Propagation course. By providing a structured, real-world problem for students to solve, PBL enhances their understanding of complex concepts and prepares them for professional practice. The Academic Performance of the students has been gradually improved with the experiential learning in the class. The positive results from this implementation suggest that PBL can effectively address gaps in traditional teaching methods and contribute to the achievement of Program Outcomes.

C. Quality of Classroom Teaching

Each class room is provided with Information and Communication Technology-ICT facilities so as to enable the faculty to make use of the same during their lecture delivery. As part of ICT each class room is provided with Internet, Audit-Visual equipment for make use of online presentations and communications. Each Faculty make of these digital resources for presentations, videos, simulations, and learning management systems to explain concepts and provide additional reference materials. These tools are also towards real-time interaction between faculty and students through quizzes. Online assessments and automated evaluation tools are used for monitoring progress. Communication between faculty and students is maintained through emails, forums, and messaging platforms. Overall, ICT facilities support the organization, delivery, and assessment of academic content in the classroom.

For certain quality improvement we will take regular Feedback collected from students at different stages through Class Representatives (CRs), the Student Self Governance (SSG) Cell, and HR feedback. These feedbacks will help us to redesign our method of teaching to ensure teaching quality.

Outcome-Based Education (OBE) Implementation:

Each of the faculty members are either certified in IIEECP, or PBL Certification from Aalborg, Denmark or enhance their teaching methodologies by participating in workshops on Outcome-Based Education (OBE). Each session in the class begins with a clear articulation of the objectives of the class and concludes with the topic-level outcomes, allowing students to assess their understanding and the value of the sessions. This active learning approach ensures continuous student engagement, promotes higher-order thinking, collaboration and critical thinking among learners.

D. Conduct of Laboratory Experiments

The curriculum includes experiments designed to support theoretical concepts and practical applications. These experiments are developed and reviewed through discussions in the Board of Studies (BOS) meetings, which involve academic members and industry representatives. Inputs from the BOS help ensure that the experiments are relevant to current practices and technologies used in the industry. The content and structure of the experiments are mapped with industry requirements to provide students with exposure to tools, methods, and procedures.

If students perform all the experiments, they reach a stage where they can implement course-level projects. The experiments included in the curriculum, approved by the Board of Studies (BOS), form part of the process followed to support the implementation of course-level projects.

To ensure clarity and precision in execution, each experimental cycle begins with faculty-led demonstrations, providing students with a clear understanding of the underlying concepts and procedures. A comprehensive list of experiments is shared with students in two distinct phases:

- **Cycle 1:** Completed before Mid-Term 1
- **Cycle 2:** Completed before Mid-Term 2

Students are given detailed laboratory manuals and are required to attend each session with their observation books and a preliminary understanding of the assigned experiment. Faculty members verify these preparations and organize students into batches for systematic execution of the experiments. During lab sessions, students engage in performing the experiments, accurately record data, and draw graphs based on their observations. These results are reviewed and validated by the faculty.

A key element of the laboratory process is the day-to-day evaluation, which serves as an important criterion in assessing student performance. One typical day to day evaluation sheet shown in figure 2.1.5. It ensures that students remain consistent, engaged, and technically sound throughout the course. This continuous assessment approach allows faculty to monitor individual progress, identify learning gaps, and provide timely feedback for improvement. The corresponding rubrics for Day to Day Evolution is shown in table 2.1.2

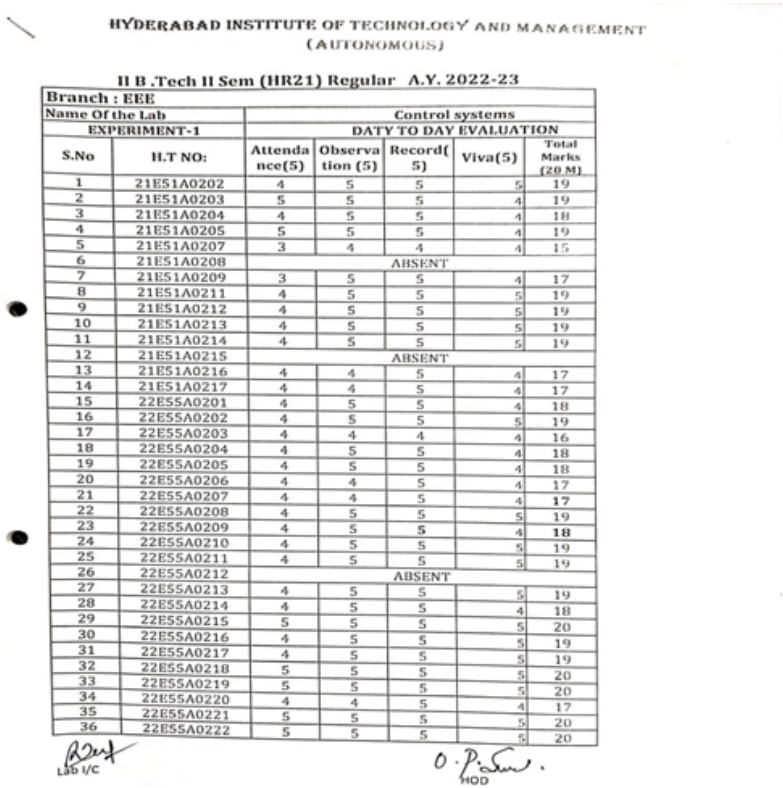
Evaluation of Laboratory

Each Laboratory is evaluation for 40 marks towards CIE covering Day to Day Evaluation for 20 marks, and 20 marks towards the Mid assessments and 60 Marks towards SEE.

Criteria	**Excellent (5 Marks)**	**Good (3–4 Marks)**	**Needs Improvement (1–2 Marks)**
Observation	Actively engaged, follows instructions, attentive throughout	Generally attentive, minor distractions or prompting needed	Often distracted, uninterested, or needs constant guidance
Record Book	All entries complete, neat, well-organized, accurate	Most entries complete, legible, minor errors	Incomplete, untidy, or contains major errors

Experiment Execution and Team collaboration	Performs steps accurately and shows clear understanding among team members	Performs with minor help, small errors	Needs major help or makes critical mistakes
Viva Voce	Answers confidently with clear, accurate understanding	Answers most questions correctly, some hesitation or errors	Poor or incorrect answers, lack of understanding

Table 2.1.3 Rubrics for Day to Day Evaluation in Laboratory



HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AUTONOMOUS)

II B.Tech II Sem (HR21) Regular A.Y. 2022-23

Branch : EEE

Name Of the Lab: Control systems

EXPERIMENT-1: DATY TO DAY EVALUATION

S.No	H.T NO:	Attendance(5)	Observation (5)	Record(5)	Viva(5)	Total Marks (20 M)
1	21E51A0202	4	5	5	5	19
2	21E51A0203	5	5	5	4	19
3	21E51A0204	4	5	5	4	18
4	21E51A0205	5	5	5	4	19
5	21E51A0207	3	4	4	4	15
6	21E51A0208	ABSENT				
7	21E51A0209	3	5	5	4	17
8	21E51A0211	4	5	5	5	19
9	21E51A0212	4	5	5	5	19
10	21E51A0213	4	5	5	5	19
11	21E51A0214	4	5	5	5	19
12	21E51A0215	ABSENT				
13	21E51A0216	4	4	5	4	17
14	21E51A0217	4	4	5	4	17
15	22E55A0201	4	5	5	4	18
16	22E55A0202	4	5	5	5	19
17	22E55A0203	4	4	4	4	16
18	22E55A0204	4	5	5	4	18
19	22E55A0205	4	5	5	4	18
20	22E55A0206	4	4	5	4	17
21	22E55A0207	4	4	5	4	17
22	22E55A0208	4	5	5	5	19
23	22E55A0209	4	5	5	4	18
24	22E55A0210	4	5	5	5	19
25	22E55A0211	4	5	5	5	19
26	22E55A0212	ABSENT				
27	22E55A0213	4	5	5	5	19
28	22E55A0214	4	5	5	4	18
29	22E55A0215	5	5	5	5	20
30	22E55A0216	4	5	5	5	19
31	22E55A0217	4	5	5	5	19
32	22E55A0218	5	5	5	5	20
33	22E55A0219	5	5	5	5	20
34	22E55A0220	4	4	5	4	17
35	22E55A0221	5	5	5	5	20
36	22E55A0222	5	5	5	5	20

Lab I/C

HOD

Figure 2.1.5. Day to Day Evaluation

E. Classification of Fast & Slow Learners

HITAM has instituted a Student Progression Framework (SPF) to provide personalized guidance and support to students across the academic spectrum. Students are classified into four performance bands—A, B, C, and D.

A & B category of students falls under fast learners and C & D category of students falls under slow learners based on key parameters. This classification enables targeted academic support, mentoring, and engagement strategies aligned with students learning needs and aspirations.

Students are classified using a Band Metric, calculated based on the following factors:

1. **Attendance** - considered for the period from the previous band classification to the current classification
2. **Score in continuous internal examinations, including the mid examination** - considered from the time of previous band classification
3. **Active backlogs** as on the date of band classification (Note: If the supplementary result for a subject is awaited as on date of the band classification, it will be considered as an active backlog for that cycle)

Frequency of SPF Bands classification:

- SPF band classification is done **twice a semester**, once after the performance evaluation after Mid-1 and second one after the announcement of Mid-2 and SEE performance.

'Band Metric' classification:

Band Metric is the total score achieved by a student based on their attendance, backlogs and

continuous internal examination score, and is used for band classification.

Band Classification based on Band Metric

Band Classification	
Band Metric (Range)	**Band**
75 to 100	A
60 to 75	B
45 to 60	C
Less than 45	D

Attendance weightage towards the Band Metric:

Maximum contribution of attendance towards the metric: 30

Attendance Percentage	**Contribution Towards Band Metric**
Less than 75	0
75 to 80	5
80 to 85	10
85 to 90	15

90 to 95	20
95 to 100	30

CIE contribution towards the Band Metric:

Maximum contribution of CIE towards the metric: 30

Average of Score in Continuous Internal Examinations and Mid Examination (Scaled to 100)	**Contribution Towards Band Score**
Less than 40%	0
40 to 50	5
50 to 60	10
60 to 75	20
75 to 100	30

Backlogs towards the Band Metric:

Maximum contribution of backlogs towards the metric: 40

Number of Active Backlogs (Theory and Lab Included)	**Contribution Towards Band Score**
More than 5	0
4	5
3	10
2	20
1	30
0	40

Initiatives for Fast Students: Department of Mechanical Engineering provides value-added opportunities for fast Learners to participate in the following events

1)Participating & organizing Hackathons: Every year, alumni from industry return to campus and provide real-world problem statements to conduct hackathons. These events serve as a platform for fast learners' students to apply theoretical knowledge to industry-relevant challenges

2)Participating in Industrial Visits: Industrial visit to the MEIL, T-Hub, CITD, CII-IGBC, and others. Fast learner students are taken on visits to these institutions for hands-on exposure to industry practices, sustainable technologies, and cutting-edge innovations. These visits often lead to internship opportunities and real-time learning.

3)Leadership Development: HITAM cultivates leadership through structured activities:

a. IUCEE EWB HITAM, mechanical students are taking part and organizing competitions.

b. TEDxHITAM

c. Student Skill Development Center (SSDC): SSDC empowers students with industry-relevant skills through hands-on training in areas like programming and IoT.

d. Grand Challengers Scholar Program (GCSP

e. Students taking part in NCC, FMAE & NSS.

Support towards C & D Band Students

Recognizing the academic and personal challenges faced by students in C and D categories, we offers a robust academic support system:

a)**Remedial Classes:** Scheduled into the official timetable, these sessions focus on:

- Reinforcing core concepts
- Solving previous examination papers
- Clarifying doubts in smaller groups

b. **Mentor Hour**: A dedicated Mentor Hour is built into the academic schedule

- Faculty mentors visit classrooms to discussions with students
- Mentors help identify and address both academic difficulties and personal challenges
- A Mentoring Policy guides this initiative

c. **Counseling Support:** Professional **student counselors** are available on campus to address

- Emotional or psychological stress
- Time management and concentration issues
- Career and personal development concerns

d. **Peer Mentorship:** Senior students are encouraged to mentor juniors, especially those in C & D bands, offering support in:

- Understanding complex topics
- Preparing for exams
- Adapting to the campus environment

Impact of Remedial class & Mentoring

- After conduction of Remedial classes & mentoring 10% of students improved their academic performance & more than 60% of the students clear their backlogs and migrate to the next level learners.

2.2 Quality of Student Capstone Project (25) **Total Marks 25.00**

Each student is required to implement the Capstone Project as per the course structure for those regulations.

General Procedure for Project Selection and implementation:

Each student submits the aspirations detailing the area of interest, domain/technology interested to the coordinator at the beginning of the semester. The aspirations of the students are mapped to the faculty who has the specialization and or interest in that domain.

Student Groups will be formulated based on the common aspirations based on their SPF bands, and a faculty mentor is assigned to each group for further necessary action.

The students group along with the faculty mentors arrive at the various problems statements leading towards employability, mapping to sustainable development goals, to be considered for implementation and the same will be submitted to the PRC committee for final approvals.

Faculty Specialization **2023-2024**		
Sl.No	**Faculty Name**	**Specialization**
1	Dr. Pedda Suresh Ogeti	Power Electronics
2	Dr. Madduluri Chiranjivi	Power Systems
3	Mr. Suresh kanaparthi	Power Electronics
4	Mr. Salva Satyanarayana	Power Systems
5	Ms. Pillalamarri madhavi	Power Electronics
6	Mr. D. Hari Krishna	Communication systems
7	Ms. Thirlangi Sirisha	Power Electronics
8	Mr. Mallarapu Siddartha	Power Electronics
9	Ms. U Divya	Power Electronics
10	Ms. M. Rani	Power Electronics
11	Mr. Raviteja Madala	Power Electronics
12	Mr. Ravi Naragani	Power Electronics
13	Ms. CH. Rajasri	Power Electronics
14	Ms. CH. Swathi Lakshmi	Power Electronics

Table 2.2.1. Faculty list with their Specialization

Implementation process

The project implementation process begins with students submitting a one-page abstract of their proposed project, formatted according to a predefined template shared by the Department. This abstract provides a brief overview of the problem statement, objectives, proposed methodology, and expected outcomes. The initial project review is conducted by the Project Review Committee (PRC), where students present their ideas and receive constructive feedback and suggestions to refine their approach and solution strategy.

Following the initial review, students engage regularly with their assigned project guides, who mentor them throughout the development process. The guides play a crucial role in monitoring progress, providing technical guidance, and ensuring that the students remain aligned with the project goals and timelines.

A second review is scheduled mid-way through the project timeline, during which the PRC evaluates the progress made, including any prototypes or models developed. This stage is crucial for ensuring that the students are on track and any deviations or challenges are addressed in a timely manner.

The final review serves as the comprehensive evaluation of the completed project. At this stage, the PRC assesses the overall quality of the work, implementation of the proposed solution, technical innovation, and effectiveness in addressing the problem statement.

After the final review, students prepare a detailed dissertation following the sample template shared by the Project Coordinator. This dissertation is submitted to their respective guides for thorough verification and feedback. Once approved, students proceed with printing and formally submit their final thesis.

Before their external viva-voce, projects were demonstrated in Project Expo and best projects were selected and awarded by the organization through internal and external evaluators. In parallel, students are encouraged to prepare a research paper based on their project work and submit it to peer-reviewed journals, promoting a culture of research and publication.

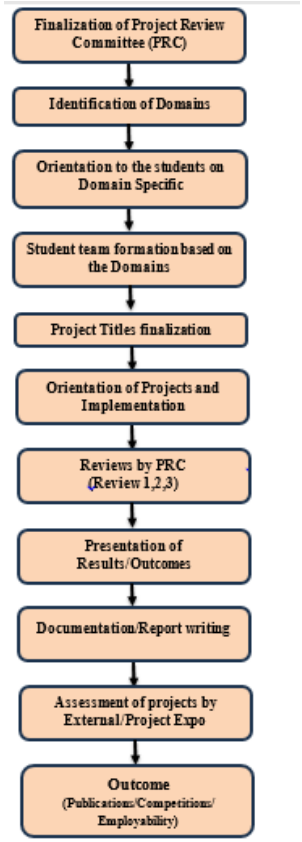


Figure 2.2.1. Project process flow diagram

A detailed project schedule as given below figure 2.2.2, including timelines, milestones, and review dates, was then communicated to the students to ensure a structured and goal-oriented project execution process.

PROJECTS STAGE-I (2023-24) schedule

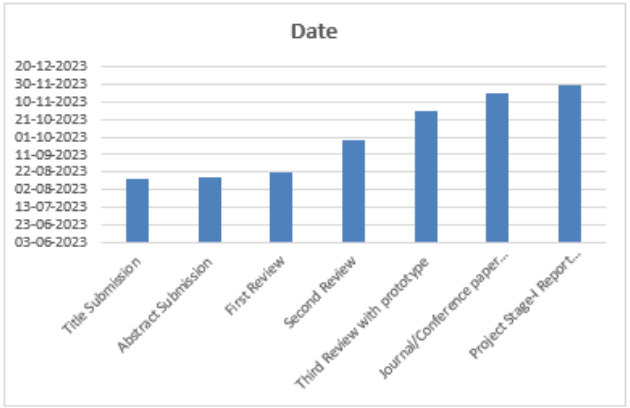


Figure. 2.2.2 The Project Schedule

Project PRC committee A.Y 2023-24

1.Project committee chairman- Dr.O.P.Suresh

2.Project committee Member- S V Sathyanarayana

3.Project committee Member- K.Suresh

Hyderabad Institute of Technology and Management
Department of EEE
Major Projects (2023-24)

Batch No	Roll No	Name of student	Project title	Classification	POs Mapped	PSOs Mapped	Justification
1	20E51A0215	P.Hema Bindu	Solar Wireless Electric Vehicle Charging	Application/Product (Focus on sustainable transportation and energy efficiency)	PO1, PO3, PO5, PO7	PSO1, PSO2	Involves electrical system design (PO1, PSO1), energy transmission technology (PO3), and advanced tools like MATLAB/Simulink (PO5), with emphasis on clean energy (PO7).
	21E55A0219	Kyaram Anand					
	21E55A0224	N.Srujith Kumar					
	21E55A0235	V.Sujith					
	21E55A0213	G. Mahesh	Smart IOT based energy metering	Application/Research (Incorporates IoT and energy	PO2, PO3,		

2	21E55A0212 21E55A0236 20E51A0203	G. Shiva Sai Y. Nithya Avusali Narotham	system for Microgrid with load management algorithm	optimization for microgrids, addressing cost and efficiency)	PO4, PO5, PO7	PSO2	Solves energy imbalance (PO2), with intelligent algorithms (PO4), embedded systems (PO5), and contributes to sustainable infrastructure (PO7).
3	21E55A0220 21E55A0208 21E55A0226 21E55A0211	Laka Sandeep Gangavath Shyamlal Pallati Nagarjuna Guguloth Vijay	Design of Fuzzy Logic controller for Solar PV fed BLDC Motor with Zeta Converter for Precision Controlled System	Research/Application (Focus on renewable energy integration and control system efficiency)	PO1, PO3, PO4, PO5, PO7	PSO1, PSO2	Demonstrates control systems application (PO3, PSO2), AI integration with fuzzy logic (PO4, PSO2), and renewable application (PO7).
4	21E55A0209 21E55A0216 21E55A0232 21E55A0221	G.Arthi K.Sathwika Shaik Abdul Adil Lakavath Suman	LifeGuardian: Enhancing Health Awareness through Sensor Fusion	Product/Application (Health and safety-focused wearable or monitoring system)	PO3, PO4, PO6, PO8	PSO2	Health monitoring system design (PO3), integrating multiple sensors (PO4), addressing ethical and societal health concerns (PO6, PO8), with embedded AI logic (PSO2).
5	21E55A0222 21E55A0223 21E55A0230 21E55A0231	Mamindla Udaykiran Mangali Shiva Kumar Puttapaka Mahesh Babu Sannidhi Yashwanth	Virtual Control of Short Circuit Test on Single Phase Transformer	Research/Application (Simulation-based approach for transformer testing, addressing safety and standards)	PO1, PO3, PO5	PSO1	Applies theoretical knowledge virtually (PO1), enhances learning through simulation tools (PO5), and deepens transformer system understanding (PSO1).
6	20E51A0206 20E51A0221 20E51A0210 20E51A0220	D. Srinivas Varma V. Harsha Vardhan Reddy K.Devipriya V.Vasavipriya	Design of Finger print Tricycle using renewable resources	Application/Product (Innovative mobility solution for security and sustainability)	PO3, PO6, PO7, PO8	PSO1, PSO2	Combines design and social responsibility (PO3, PO6), supports sustainability (PO7), and offers secure renewable transport (PO8, PSO2).
7	20E51A0219 20E51A0204 21E55A0234 21E55A0207	Thanikonda Avinash Bandaru Durgesh Uppugandla Gnanender Elaboina Nithin Teja	Accident Prevention System for vehicles in hill Area.	Application/Product (Focus on safety and accident prevention technology)	PO2, PO3, PO4, PO8	PSO2	Solves real-world problems (PO2), sensor-based automation (PO3, PO4), and promotes safe driving (PO8).
8	20E51A0207 20E51A0208 20E51A0212 20E51A0202	D Sai Vamshi D Mohan M. Koteshwar Reddy A. Naveen	Generation of power from railway track	Research/Application (Energy harvesting and sustainability-oriented research)	PO1, PO2, PO3, PO7	PSO1, PSO2	Converts motion to power (PO1), renewable use (PO7), innovative design (PO3), with practical electrical design knowledge (PSO2).
9	21E55A0204 21E55A0214 21E55A0215 21E55A0218	Bodapatla Ramya Guntuku Sainaveen Jambuka Ruchitha Kaveti Avinash	Wheelchair controller using Bluetooth and voice proceesing on Arudino	Application/Product (Assistive technology improving accessibility and affordability)	PO3, PO5, PO6, PO8	PSO2	Voice and Bluetooth control logic (PO3), embedded development (PO5), and promotes accessibility (PO6, PO8).

10	21E55A0203	Bairi Uday	Cruising with Confidence: Electric Tricycles for Empowered Handicapped Travel	Product/Application (Mobility and accessibility solution, addressing ethics and inclusion)	PO3, PO6, PO7, PO8	PSO1, PSO2	Design for social impact (PO6), electric drive system (PO3), eco-friendly mobility (PO7), safety and accessibility (PO8).
	21E55A0206	Durgam Praneeth					
	21E55A0225	Oruganti Tharun					
	21E55A0228	Pampari Rakesh					
11	20E51A0216	R. Nikhil Raj	Interactive intelligent shopping trolley using RFID and zigbee technology	Application/Product (Smart shopping system, focusing on automation and convenience)	PO2, PO3, PO5	PSO2	Problem-solving using RFID tech (PO2), embedded control logic (PO3, PO5), and user-oriented retail automation (PSO2).
	20E51A0201	A. Durga Rao					
	20E51A0205	B. Chiranjeevi Rao					
	20E51A0218	S. Hukesh					
12	21E55A0201	Asam Karthikeya	Smart BLIND stick with GPS Tracking system using GSM	Product/Application (Assistive technology improving safety and navigation for the visually impaired)	PO3, PO5, PO6, PO8	PSO2	Combines hardware and communication tech (PO3, PO5), focused on aiding vulnerable groups (PO6, PO8).
	21E55A0210	Godugu Rahul					
	21E55A0217	Katakam Srikanth					
	21E55A0233	Siddam Uday Krishna					
13	21E55A0227	Pambi Kailash Nath	Automatic vehicle accident detection and messaging system using GSM and GPS	Application/Product (Safety-focused technology for accident response)	PO3, PO4, PO5, PO6	PSO2	Embedded system design (PO3), real-time data transmission (PO4, PO5), and focuses on public safety and ethics (PO6).
	21E55A0229	Poloju Saketh					
	20E51A0222	Y.Manoj Kumar					
	21E55A0205	B.Ramanujan					

Table 2.2.2 Students Capstone Projects

PROJECT EXPO

Project expo is organized to display the proto types/ simulation to the Experts from Industry and academia is shown in figure 2.2.3.a. The Experts suggest the participants about the scope of the project for patent/start-up. And the Evaluation is shown in figure 2.2.3.b

Figure 2.2.3.a. Projects Exhibited in Project Expo

Project Expo-2025:

PROJECT EXPO 2025
RUBRICS TO EVALUTION OF PROJECTS

JUDGE: | BRANCH: EEE | Date: 06/05/2025

S.NO	PROJECT TITLE	PROBLEM IDENTIFICATION & PROPOSED SOLUTION(5 M)	COMMUNICATION (5 M)	PRESENTATION &CREATIVITY (10 M)	DESIGN,PROGRAMMING, ANALYSIS & RESULTS (10M)	Working Prototype (20 M)	TOTAL (50M)
EEE/2025-01	V2V charging integrated with solar panel	6	6	7	8	10	38
EEE/2025-02	Smart Monitoring and Control of Single-Phase Induction Motor Using IoT	7	6	6	5	5	29
EEE/2025-03	Real-Time Bus Arrival Alert System Using Raspberry Pi	5	5	5	6	7	29
EEE/2025-04	Optimized Power Distribution in Regenerative Braking with Smart Relay Control	5	5	5	5	8	28
EEE/2025-05	Development of a Modular Multilevel Converter for Enhanced Power Quality	6	7	6	5	5	29
EEE/2025-06	IOT Based Smart Battery Monitoring System with Fault Analysis and Battery Life Prediction for Electric Vehicles	5	7	6	5	5	28
EEE/2025-07	Design and Implementation of a Solar and Dynamo-Powered Hybrid Energy System for E-Bike.	5	7	5	5	6	28
EEE/2025-08	Sustainable Energy Solution Using Solar Panel and Micro Turbine	6	6	6	7	9	34
EEE/2025-09	Design, Development, and Performance Evaluation of a Self-Charging Solar-Powered medical assistance Unmanned Aerial Vehicle (UAV)	5	5	5	6	8	33

Evaluator

EEE -

1. Mr. Surya Prakash, CEO. 6/5/25

Figure 2.2.3.b. Evaluation of Projects in Project Expo 2025

2.3 Internship/Industrial Training (10)

Total Marks 10.00

Institute Marks : 10.00

An internship is a professional work experience where the student takes on responsibilities in that organization and participates in observing and learning while actively performing duties supporting the business endeavours. The importance of an internship is for the student to make a clear and distinct connection between their academic learning and the professional work place.

- An intern is someone who works in a temporary position with an emphasis on on-the-job training rather than merely employment, making it similar to an apprenticeship.
- A job taken by a student in order to learn a profession or trade.

In order to participate in any of the internships offered by various companies, a student will put up a requisition for permission to the institute through the Career Design Centre (CDC) upon getting selected for any of the company.

The CDC verifies for the authenticity of the company and the standard of internships provided to the students then recommends the same for approval.

Once the internship requisition is approved then a student will be permitted to carry out the internship in the said company for not less than 2-4 weeks after every semester as per the company norms and selection criteria.

The assessment of the internship is carried out in the subsequent semester as per the evaluation guidelines provided in the Academic Regulations (HR21, HR22, HR24). During the assessments the learning outcomes from the internship is mapped suitably to the relevant POs/PSOs.

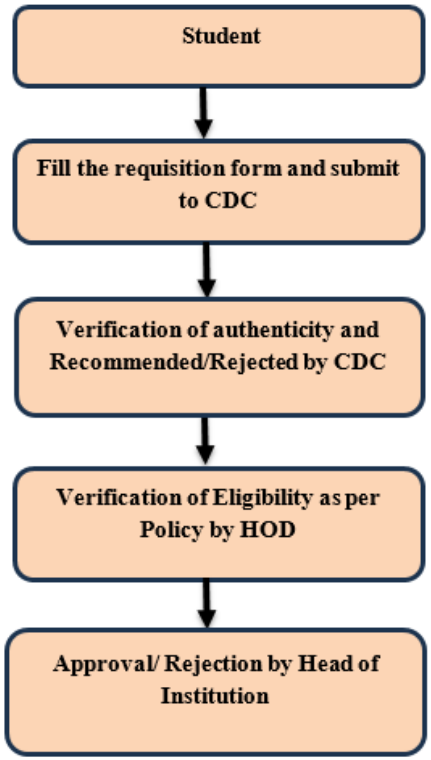


Figure 2.3.1. Internship process flow diagram.

Efforts to collaborate with organizations such as CITD, IIIT-H, HBL, and BHEL provide opportunities for students to receive training and address industry-related problems. Students can explore internships through these collaborations, or they may apply on their own to companies, start-ups, or research institutes, in line with institutional procedures. A list of potential companies offering internships is shared with students by the CDC.

Ensuring the internship aligns with their academic program and contributes to Program Outcomes (POs) and Program Specific Outcomes (PSOs).

Some of the companies where our Students did Internship as listed inn Table 3.1.1.

S.No	**Name of Company**
1	Megha Engineering Industry Limited-MEIL
2	BHAGYA SRI INDUSTRIES
3	DRDO
4	HATSUN
5	Kothagudem Thermal Power Station-KTPS
6	BHEL
7	Central warehousing corporation

8	POWER TECH
9	CODE BIND TECHNOLOGIES
10	BIONICS
11	SUBSTATION 33/11KV NIRMAL
12	IBM
13	NSIC
14	SFS PVT LTD
15	Central Institute of Tool Design-CITD
16	IIIT HYDERABAD

Internships A.Y. 2023-24

S.No	ROLL NUMBER	NAME OF THE STUDENT	Internship Place/Industry Name	From	To	Days	PO/PSO Mapping	
1	20E51A0201	Addagala Durga Rao	STARTON/SANJAY TECHNICAL SERVICES PVT LTD	15-05-2023	27-05-2023	12 Days	PSO2	PO3, PO4, PO6
2	20E51A0202	Athkuri Naveen	POWERTECH	15-05-2023	27-05-2023	12 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
3	20E51A0203	Avusali Narotham	POWERTECH	15-05-2023	27-05-2023	12 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
4	20E51A0204	Bandaru Durgesh	VVE TRANSFORMERS PVT LTD	14-11-2023	20-11-2023	7 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
5	20E51A0205	Bhogadi Chiranjeevi Rao	STARTON/SANJAY TECHNICAL SERVICES PVT LTD	15-05-2023	27-05-2023	12 Days	PSO2	PO3, PO4, PO6
6	20E51A0206	Dandu Srinivas Varma	BHEL	17-05-2023	31-05-2023	14 Days	PSO1, PSO2	PO1, PO3, PO5, PO7
7	20E51A0207	Dharmapuri Sai Vamshi	POWERTECH	15-05-2023	27-05-2023	12 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
8	20E51A0208	Dokku Mohan	POWERTECH	15-05-2023	27-05-2023	12 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
9	20E51A0210	Kattamuri Devi Priya	BHEL	17-05-2023	31-05-2023	14 Days	PSO1, PSO2	PO1, PO3, PO5, PO7
10	20E51A0212	Malkannagari Koteshwar Reddy	POWERTECH	15-05-2023	27-05-2023	12 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
11	20E51A0215	P Hema Bindu	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
12	20E51A0216	Ramavath Nikhil Raj	STARTON/SANJAY TECHNICAL SERVICES PVT LTD	15-05-2023	27-05-2023	12 Days	PSO2	PO3, PO4, PO6

13	20E51A0218	Silari Hukesh	STARTON/SANJAY TECHNICAL SERVICES PVT LTD	15-05-2023	27-05-2023	12 Days	PSO2	PO3, PO4, PO6
14	20E51A0219	Thanikonda Avinash	VVE TRANSFORMERS PVT LTD	14-11-2023	20-11-2023	7 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
15	20E51A0220	Vemuganti Vasavi Priya	BHEL	17-05-2023	31-05-2023	14 Days	PSO1, PSO2	PO1, PO3, PO5, PO7
16	20E51A0221	Vundhyala Harsha Vardhan Reddy	BHEL	17-05-2023	31-05-2023	14 Days	PSO1, PSO2	PO1, PO3, PO5, PO7
17	20E51A0222	Yadama Manoj Kumar	POWERTECH	17-05-2023	31-05-2023	14 Days	PSO1, PSO2	PO1, PO3, PO5, PO7
18	21E55A0201	Asam Karthikeya	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO2, PO4
19	21E55A0203	Bairi Uday	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO2, PO4
20	21E55A0204	Bodapatla Ramya	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
21	21E55A0205	Boini Ramanujan	BHEL	17-05-2023	31-05-2023	14 Days	PSO1, PSO2	PO1, PO3, PO5, PO7
22	21E55A0206	Durgam Praneeth	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
23	21E55A0207	Elaboina Nithin Teja	VVE TRANSFORMERS PVT LTD	14-11-2023	20-11-2023	7 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
24	21E55A0208	Gangavath Shyamlal	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
25	21E55A0209	Gardas Arthi	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
26	21E55A0210	Godugu Rahul	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO2, PO4
27	21E55A0211	Guguloth Vijay	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
28	21E55A0212	Gujjari Shiva Sai	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
29	21E55A0213	Gundarapu Mahesh	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
30	21E55A0214	Guntuku Sainaveen	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
31	21E55A0215	Jambuka Ruchitha	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
32	21E55A0216	Kamuni Sathwika	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7

33	21E55A0217	Katakam Srikanth	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
34	21E55A0218	Kaveti Avinash	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
35	21E55A0219	Kyaram Anand	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
36	21E55A0220	Laka Sandeep	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
37	21E55A0221	Lakavath Suman	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
38	21E55A0222	Mamindla Uday Kiran	IIIT HYDERABAD	05-08-2023	30-10-2023	3 Months	PSO2	PO5, PO6, PO7
39	21E55A0223	Mangali Shiva Kumar	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
40	21E55A0224	Nagula Srujith Kumar	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
41	21E55A0225	Oruganti Tharun	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
42	21E55A0226	Pallati Nagarjuna	VVE TRANSFORMERS PVT LTD	14-11-2023	20-11-2023	7 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
43	21E55A0227	Pambi Kailash Nath	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
44	21E55A0228	Pampari Rakesh	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
45	21E55A0229	Poloju Saketh	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
46	21E55A0230	Puttapaka Mahesh Babu	POWERTECH	07-08-2023	21-08-2023	14 Days	PO2, PO4	PO2, PO4
47	21E55A0231	Sannidhi Yashwanth	IIIT HYDERABAD	05-08-2023	30-10-2023	3 Months	PSO2	PO5, PO6, PO7
48	21E55A0232	Shaik Abdul Adil	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
49	21E55A0233	Siddam Uday Krishna	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
50	21E55A0234	Uppugandla Gnanender	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
51	21E55A0235	Vangari Sujith	POWERTECH	07-08-2023	21-08-2023	14 Days	PSO1, PSO2	PO1, PO2, PO5, PO7
				07-08-	21-08-		PSO1,	PO1, PO2, PO5,

52	21E55A0236	Yella Nithya	POWERTECH	2023	2023	14 Days	PSO2	PO7

Table 2.3.2. Students Internship with duration, PO, PSO mapping

Impact Analysis:

After the completion of the internship feedback will be collected from students. The students will submit a report of the internship as it will be evaluated by the Committee consisting of HOD & Senior faculty from the Department. During the internships it is being observed that the students:

a) Students gained a better understanding of how theoretical concepts apply to real-world scenarios, which improved their ability to apply what they have learned in practical settings.

b) Industry experts provided valuable insights into the latest tools and technologies, ensuring that students gained a clear understanding of current industry standards and best practices.

c) students who were mentored by industry professionals gained skills that closely align with current job market demands, enhancing their employability and making them more attractive to potential employers. Additionally, the internship experience helped students in the following ways:

d) Identified the right career path based on real-world exposure and hands-on experience.
e) Established professional networks that may support future career opportunities.
f) Developed confidence through practical learning, teamwork, and problem-solving in an industry setting.

Real-world exposure gained through these internships in the form of hands-on training at companies like **Powertech, BHEL, IIIT Hyderabad**, and **STARTON** has provided the students to gain:

- Practical understanding of core engineering concepts.
- Improved technical and communication skills.
- Familiarity with corporate environments and expectations.

These internship have resulted in creating an impact in getting the placements in various companies. Out of 52 students, **100% secured internships**, and more than **60% of those were successfully placed**. This indicates a strong correlation between internship exposure and placement success.

Few of the details are given in the table below:

S.No	ROLL NUMBER	NAME OF THE STUDENT	Internship Place/Industry Name	Placement Company
1	20E51A0201	ADDAGALA DURGA RAO	STARTON/SANJAY TECHNICAL SERVICES PVT LTD	DEXTERITY
2	20E51A0202	ATHKURI NAVEEN	POWERTECH	Interested to go Higher Studies
3	20E51A0203	AVUSALI NAROTHAM	POWERTECH	Interested in Public sector

4	20E51A0204	BANDARU DURGESH	VVE TRANSFORMERS PVT LTD	Looking about family business
5	20E51A0205	BHOGADI CHIRANJEEVI RAO	STARTON/SANJAY TECHNICAL SERVICES PVT LTD	iMatiz
6	20E51A0206	DANDU SRINIVAS VARMA	BHEL	VPCL
7	20E51A0207	DHARMAPURI SAI VAMSHI	POWERTECH	Interested to do MS
8	20E51A0208	DOKKU MOHAN	POWERTECH	Looking about family business
9	20E51A0210	KATTAMURI DEVI PRIYA	BHEL	PIE INFOCOMM
10	20E51A0212	MALKANNAGARI KOTESHWAR REDDY	POWERTECH	Interested to go Higher Studies
11	20E51A0215	P HEMA BINDU	POWERTECH	PIE INFOCOMM
12	20E51A0216	RAMAVATH NIKHIL RAJ	STARTON/SANJAY TECHNICAL SERVICES PVT LTD	Interested in Public sector
13	20E51A0218	SILARI HUKESH	STARTON/SANJAY TECHNICAL SERVICES PVT LTD	Interested in Public sector
14	20E51A0219	THANIKONDA AVINASH	VVE TRANSFORMERS PVT LTD	Looking about family business
15	20E51A0220	VEMUGANTI VASAVI PRIYA	BHEL	PIE INFOCOMM
16	20E51A0221	VUNDHYALA HARSHA VARDHAN REDDY	BHEL	PIE INFOCOMM
17	20E51A0222	YADAMA MANOJ KUMAR	POWERTECH	Looking about family business
18	21E55A0201	ASAM KARTHIKEYA	POWERTECH	PIE INFOCOMM

19	21E55A0203	BAIRI UDAY	POWERTECH	Interested in Public sector
20	21E55A0204	BODAPATLA RAMYA	POWERTECH	QUANTUM ENERGY
21	21E55A0205	BOINI RAMANUJAN	BHEL	Q SPIDERS
22	21E55A0206	DURGAM PRANEETH	POWERTECH	Olive rypto systems
23	21E55A0207	ELABOINA NITHIN TEJA	VVE TRANSFORMERS PVT LTD	Looking about family business
24	21E55A0208	GANGAVATH SHYAMLAL	POWERTECH	Interested in Public sector
25	21E55A0209	GARDAS ARTHI	POWERTECH	PIE INFOCOMM
26	21E55A0210	GODUGU RAHUL	POWERTECH	Olive Crypto systems
27	21E55A0211	GUGULOTH VIJAY	POWERTECH	Techno Serve Electricals (GET)
28	21E55A0212	GUJJARI SHIVA SAI	POWERTECH	PIE INFOCOMM
29	21E55A0213	GUNDARAPU MAHESH	POWERTECH	HIGH - TECHNEXT
30	21E55A0214	GUNTUKU SAINAVEEN	POWERTECH	VGS AND TECHNOLOGIES PVT.LMT
31	21E55A0215	JAMBUKA RUCHITHA	POWERTECH	VGS AND TECHNOLOGIES PVT.LMT
32	21E55A0216	KAMUNI SATHWIKA	POWERTECH	PIE INFOCOMM
33	21E55A0217	KATAKAM SRIKANTH	POWERTECH	PIE INFOCOMM
34	21E55A0218	KAVETI AVINASH	POWERTECH	PIE INFOCOMM
35	21E55A0219	KYARAM ANAND	POWERTECH	Techno Serve Electricals (GET)

36	21E55A0220	LAKA SANDEEP	POWERTECH	Looking about family business
37	21E55A0221	LAKAVATH SUMAN	POWERTECH	TECHNOLOGICS GLOBAL
38	21E55A0222	MAMINDLA UDAY KIRAN	IIIT HYDERABAD	KINETRICS
39	21E55A0223	MANGALI SHIVA KUMAR	POWERTECH	Q SPIDERS
40	21E55A0224	NAGULA SRUJITH KUMAR	POWERTECH	Looking about family business
41	21E55A0225	ORUGANTI THARUN	POWERTECH	HIGH - TECHNEXT
42	21E55A0226	PALLATI NAGARJUNA	VVE TRANSFORMERS PVT LTD	HIGH - TECHNEXT
43	21E55A0227	PAMBI KAILASH NATH	POWERTECH	HIGH - TECHNEXT
44	21E55A0228	PAMPARI RAKESH	POWERTECH	PALLE TECHNOLOGIES
45	21E55A0229	POLOJU SAKETH	POWERTECH	DEXTERITY
46	21E55A0230	PUTTAPAKA MAHESH BABU	POWERTECH	QUANTUM ENERGY
47	21E55A0231	SANNIDHI YASHWANTH	IIIT HYDERABAD	HIGH - TECHNEXT
48	21E55A0232	SHAIK ABDUL ADIL	POWERTECH	Kehansri technologies and services pvt ltd
49	21E55A0233	SIDDAM UDAY KRISHNA	POWERTECH	KINETRICS
50	21E55A0234	UPPUGANDLA GNANENDER	POWERTECH	Looking about Higher Studies
51	21E55A0235	VANGARI SUJITH	POWERTECH	RESUSTAINABILITY
52	21E55A0236	YELLA NITHYA	POWERTECH	PIE INFOCOMM

Table 2.3.3 Mapping of Students Internship with the placement

Measures for Enhancing Internship-to-Placement Conversion

1. **Strategic Internship Tie-ups with Tech-Driven Companies**

- Partner with industries working in **AI/ML, EV systems, IoT, Automation, Cybersecurity, Renewable Energy, and Embedded Systems**.
- Encourage internships with startups and innovation labs to boost adaptability and innovation skills.

2. **Skill Development Before Internship**

- Organize **pre-internship training programs** to equip students with tools used in the industry (e.g., MATLAB, AutoCAD, Python, PLC/SCADA).
- Introduce **boot camps on latest technologies** like:
    - Artificial Intelligence in Power Systems
    - Data Analytics for Electrical Load Forecasting
    - Industry 4.0 Smart Manufacturing Concepts

3. **Certification and Micro-Credentials**

- Make certifications in **Python, MATLAB, Arduino Programming, AI/ML, Cloud Computing** mandatory or elective.
- Promote platforms like **Coursera, NPTEL, edX** for domain-specific learning.

4. Mock Interviews and Resume Building

- Regular **mock interviews with industry experts** and alumni.
- Workshops on resume building tailored to **specific job roles and technologies**.

2.4 Seminar and Mini/Micro Projects (10)

Total Marks 10.00

Institute Marks : 10.00

As part of the course structure students need to present a seminar on any of the technical topics relevant to the trends in the industry. An awareness session will be provided to the students about selection of Seminar topics. Students select topics related to current technologies, social issues, or their area of interest in consultation with faculty mentors. The Seminar Coordinator reviews and approves the topics based on relevance. Students then carry out a review of available literature, collect information, and study the selected topic. Faculty mentors assist in improving the content and presentation. Students present their seminar to a panel that includes HOD, Seminar Coordinator and one senior faculty, and are assessed on the content, communication, and responses to questions. Coordinator share the sample report template to students as per that the seminar report will be prepared, verified by the respective guides before they submit the documentation.

The report should be well-formatted, original. The technical seminar process in JNTUH is designed to inculcate research aptitude, technical knowledge, communication skills, and professionalism among engineering students. By following a structured methodology—from topic selection to final presentation students are better prepared for industry challenges, higher education, and research opportunities.

Evaluation and Marks Allocation

The evaluation is typically based on a rubric-based scoring system, the seminar report and the seminar presentation shall be evaluated for 100 marks.

One typical Seminar Presentation is shown in figure 2.4.1.

Hyderabad Institute of Technology and Management										
Department of EEE										
SEMINAR 2023-2024 Panel Members Marks										
S.NO (http://s.no/)	ROLL NUMBER	NAME OF THE STUDENT	Attair(5)	Introduction(5)	Content (10)	Slides Design (5)	Presentation (5)	Querries (10)	Total (40)	Signature

Hyderabad Institute of Technology and Management									
Department of EEE									
SEMINAR 2023-2024 Guide Marks									
S.NO (http://s.no/)	ROLL NUMBER	NAME OF THE STUDENT	Introduction (2)	Content(3)	Slides Design(1)	Presentation (2)	Queries(2)	Total(10)	Signature
1									

Figure 2.4.1. Technical Seminar Presentation

Mini/Micro Project:

Mini and micro projects at Department of EEE are an essential component of the academic curriculum designed to foster hands-on learning, innovation, and application of theoretical knowledge. These projects are implemented under the umbrella of Course-Level Projects or Problem-Based Learning (PBL) initiatives, promoting experiential learning and interdisciplinary problem-solving skills.

The following structured process is adopted for the effective implementation of mini/micro projects:

Ensuring the quality of mini projects at Department of EEE that align with students aspirations is crucial for fostering meaningful learning experiences. In the Project Review meeting, faculty research interests were gathered to identify key focus areas and as per student's aspirations to decide specific domains of expertise within the department. To further enrich this process, faculty members submitted open-ended problem statements aligned with their research interests.

These problem statements were then thoroughly reviewed and discussed in the Project Review Committee (PRC) meeting. Once validated, the finalized domains and associated problem statements were shared with students to help them explore and select areas that matched their interests and career aspirations. Student preferences were collected and analyzed in conjunction with their SPF (Student Performance Factor) bands to ensure balanced and effective batch formation. Based on this data-driven approach, student project groups were formed strategically to promote collaborative learning and domain-specific engagement. Following this, the Project Coordinator assigned appropriate faculty guides to each batch, ensuring that guidance aligned with the chosen domain and problem complexity.

A detailed project schedule as given below, including timelines, milestones, and review dates, was then communicated to the students to ensure a structured and goal-oriented project execution process.

Implementation process:

The mini project implementation process begins with students submitting a one-page abstract of their proposed project, formatted according to a predefined template shared by the department. This abstract provides a brief overview of the problem statement, objectives, proposed methodology, and expected outcomes. The initial project review is conducted by the Project Review Committee (PRC), where students present their ideas and receive constructive feedback and suggestions to refine

their approach and solution strategy.

Following the initial review, students engage regularly with their assigned project guides, who mentor them throughout the development process. The guides play a crucial role in monitoring progress, providing technical guidance, and ensuring that the students remain aligned with the project goals and timelines.

A second review is scheduled mid-way through the project timeline, during which the PRC evaluates the progress made, including any prototypes or models developed. This stage is crucial for ensuring that the students are on track and any deviations or challenges are addressed in a timely manner.

The final review serves as the comprehensive evaluation of the completed project. At this stage, the PRC assesses the overall quality of the work, implementation of the proposed solution, technical innovation, and effectiveness in addressing the problem statement.

After the final review, students prepare a detailed dissertation following the sample template shared by the Project Coordinator. This dissertation is submitted to their respective guides for thorough verification and feedback. Once approved, students proceed with printing and formally submit their final thesis. The process flow diagram is given in figure 2.4.2.

In parallel, students are encouraged to prepare a research paper based on their mini project work and submit it to peer-reviewed journals, promoting a culture of research and publication. This structured process ensures academic rigor, continuous mentoring, and industry-relevant project outcomes.

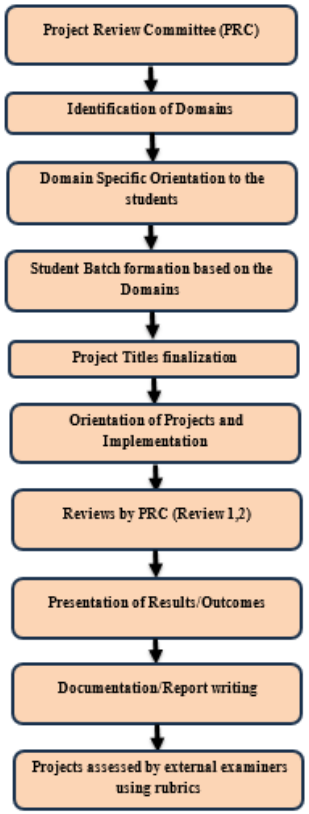


Figure 2.4.2. Mini Project process Flow Diagram

BATCH NO	ROLL NUMBER	NAME OF THE STUDENT	Intern-Ship /Mini-Project Topic	POs /PSOs Addressed	Process
1	20E51A0206	Dandu Srinivas Varma	Manufacturing of turbo generator	PO1, PO3, PO5, PO7	Design phase involving electromagnetic, mechanical, and thermal modeling.
	20E51A0210	Kattamuri Devi Priya		PSO1, PSO2	Material selection for rotor, stator, and housing.
	20E51A0220	Vemuganti Vasavi Priya			Fabrication of components including windings and laminations.
	20E51A0221	Vundhyala Harsha Vardhan Reddy			Assembly and alignment of the rotor-stator structure.
	20E51A0222	Yadama Manoj Kumar			Testing for performance parameters like efficiency, vibration, and thermal stability.
	21E55A0205	Boini Ramanujan			
2	20E51A0202	Athkuri Naveen	Manufacturing of dry type and oil type transformers	PO1, PO2, PO5, PO7	Core design and lamination stacking.
	20E51A0203	Avusali Narotham		PSO1, PSO2	Winding design and insulation application.
	20E51A0207	Dharmapuri Sai Vamshi			Assembly of core and windings in a dry or oil-filled casing.
	20E51A0208	Dokku Mohan			Vacuum drying and oil filling (for oil types).
	20E51A0212	Malkannagari Koteshwar Reddy			Testing for short circuit, dielectric strength, and thermal performance.
3	20E51A0205	Bhogadi Chiranjeevi Rao	Motor control centre and power control centre panels	PO3, PO4, PO6	Panel layout design for efficient wiring and component placement.
	20E51A0216	Ramavath Nikhil Raj		PSO2	Selection of appropriate cables and connectors.
	20E51A0201	Addagala Durga Rao			Routing and terminating cables as per wiring diagrams.

	20E51A0218	Silari Hukesh	cable wiring and testing		Conducting testing for insulation resistance, continuity, and functionality.
4	21E55A0222	Mamindla Uday Kiran	Smart labs	PO5, PO6, PO7	Infrastructure planning and setup of IoT-enabled devices.
				PSO2	Integration of sensors, controllers, and monitoring systems.
	21E55A0231	Sannidhi Yashwanth			Development of user interfaces for data visualization and analysis.
					Testing and calibration of smart systems for efficiency and accuracy.
5	20E51A0215	P Hema Bindu	Manufacturing of dry type and oil type transformers	PO1, PO2, PO5, PO7	Core design and lamination stacking.
	21E55A0219	Kyaram Anand		PSO1, PSO2	Winding design and insulation application.
	21E55A0236	Yella Nithya			Assembly of core and windings in a dry or oil-filled casing.
	21E55A0212	Gujjari Shiva Sai			Vacuum drying and oil filling (for oil types).
	21E55A0213	Gundarapu Mahesh			Testing for short circuit, dielectric strength, and thermal performance.
6	21E55A0214	Guntuku Sainaveen	Manufacturing of dry type and oil type transformers	PO1, PO2, PO5, PO7	Core design and lamination stacking.
	21E55A0215	Jambuka Ruchitha		PSO1, PSO2	Winding design and insulation application.
	21E55A0216	Kamuni Sathwika			Assembly of core and windings in a dry or oil-filled casing.
	21E55A0218	Kaveti Avinash			Vacuum drying and oil filling (for oil types).
	21E55A0204	Bodapatla Ramya			Testing for short circuit, dielectric strength, and thermal performance.

7	21E55A0221	Lakavath Suman	Manufacturing of dry type and oil type transformers	PO1, PO2, PO5, PO7	Core design and lamination stacking.
	21E55A0224	Nagula Srujith Kumar		PSO1, PSO2	Winding design and insulation application.
	21E55A0232	Shaik Abdul Adil			Assembly of core and windings in a dry or oil-filled casing.
	21E55A0235	Vangari Sujith			Vacuum drying and oil filling (for oil types).
	21E55A0209	Gardas Arthi			Testing for short circuit, dielectric strength, and thermal performance.
8	21E55A0230	Puttapaka Mahesh Babu	Analysis of Transformers	PO2, PO4	Data collection from operational transformers.
	21E55A0210	Godugu Rahul		PSO1, PSO2	Simulation and modeling of electromagnetic and thermal behavior.
	21E55A0201	Asam Karthikeya			Fault diagnosis and efficiency analysis.
	21E55A0203	Bairi Uday			Recommendations for design or operational improvements.
9	21E55A0208	Gangavath Shyamlal	Manufacturing of dry type and oil type transformers	PO1, PO2, PO5, PO7	Core design and lamination stacking.
	21E55A0211	Guguloth Vijay		PSO1, PSO2	Winding design and insulation application.
	21E55A0217	Katakam Srikanth			Assembly of core and windings in a dry or oil-filled casing.
	21E55A0206	Durgam Praneeth			Vacuum drying and oil filling (for oil types).
10	21E55A0220	Laka Sandeep	Manufacturing of dry type and oil type transformers	PO1, PO2, PO5, PO7	Testing for short circuit, dielectric strength, and thermal performance.
	21E55A0223	Mangali Shiva Kumar		PSO1, PSO2	Core design and lamination stacking.
	21E55A0225	Oruganti Tharun			Winding design and insulation application.
	21E55A0229	Poloju Saketh			Assembly of core and windings in a dry or oil-filled casing.

11	21E55A0227	Pambi Kailash Nath	Manufacturing of dry type and oil type transformers	PO1, PO2, PO5, PO7	Vacuum drying and oil filling (for oil types).
	21E55A0228	Pampari Rakesh		PSO1, PSO2	Testing for short circuit, dielectric strength, and thermal performance.
	21E55A0233	Siddam Uday Krishna			Core design and lamination stacking.
	21E55A0234	Uppugandla Gnanender			Winding design and insulation application.
12	20E51A0204	Bandaru Durgesh	Manufacturing of dry type and oil type transformers	PO1, PO2, PO5, PO7	Assembly of core and windings in a dry or oil-filled casing.
	20E51A0219	Thanikonda Avinash		PSO1, PSO2	Vacuum drying and oil filling (for oil types).
	21E55A0207	Elaboina Nithin Teja			Testing for short circuit, dielectric strength, and thermal performance.
	21E55A0226	Pallati Nagarjuna			Core design and lamination stacking.

Table 2.4.3. Mini Project Titles mapped to POs, PSOs mapping for A.Y. 2023-24

A.Y. 2022-23

S.NO	ROLL NUMBER	NAME OF THE STUDENT	Intern-Ship /Mini-Project Topic	POs /PSOs Addressed	Process
1	19E51A0225	S.Aditya	SOLAR FIELDS	PO3, PO7	Design and simulation of solar field layouts.
	20E55A0217	M.Soumith		PSO1, PSO2	Analysis of solar irradiance, energy generation, and shadow effects.
	19E51A0205	Govind			Selection of photovoltaic (PV) or concentrated solar power (CSP) systems.
	19E51A0226	V.Sairam			Integration with energy storage systems.
2	20E55A0206	B.Vishwanth	HTF PUMPS	PO4, PO5	Evaluation of pump efficiency and thermal properties of HTF.
	19E51A0221	P.Sai Kiran		PSO2	Optimization of flow rates for CSP systems.
	19E51A0206	G.Kranthi Sairam			System modeling for thermal energy transport.
	19E51A0209	Krishnakanth			
3	20E55A0222	Siddarth	TURBINES	PO1, PO3	Analysis of turbine efficiency and performance under varying loads.
				PSO1	Simulation of mechanical and thermal stresses.

	20E55A0223	Uday Kiran			Integration with power generation systems (solar, thermal, or hydro).
4	20E55A0220	M.Sai Nikhil	GENERATORS	PO2, PO4	Design and testing of synchronous/asynchronous generators.
				PSO1	Analysis of efficiency, voltage regulation, and fault conditions.
	20E55A0224	P.Kiran Kumar			Integration with turbines and grid systems.
5	19E51A0220	P.Naveen	TRANSFORMERS	PO3, PO5	Selection and design of transformers for grid integration.
				PSO1	Testing for core losses, winding losses, and efficiency.
	19E51A0222	P.Akash			Ensuring compliance with power quality standards.
6	20E55A0201	A.Sandeep Kumar	COOLING TOWERS	PO7	Analysis of heat dissipation and water circulation systems.
	20E55A0218	M.Eshwar Valmiki		PSO2	Optimization of cooling efficiency under varying climatic conditions.
7	19E51A0208	J.Anu Reddy	SWITCH GEAR	PO4, PO6	Study of protection and control mechanisms.
	19E51A0213	L.Sindhu Sri		PSO1	Design of circuit breakers, relays, and isolators.
	19E51A0214	M.Manasa			Testing of fault tolerance and reliability.
	19E51A0216	M.Katyayani			
	18E51A0212	M.Divya			
	20E55A0230	V.Sai Akaksha			
8	19E51A0201	A.Sowmya	INSTRUMENTATION	PO5, PO10	Selection and calibration of sensors and measuring devices.
	19E51A0215	M.Vaishnavi		PSO2	Integration with monitoring and control systems.
	20E55A0204	B.Mounika			
	20E55A0214	K.Kalyani			
9	18E51A0222	S Anuragh Reddy	working of various electronics equipment	PO1, PO2	Study of power electronic converters, inverters, and other equipment.
	19E51A0202	Anumula Sai Nikhil		PSO2	Fault analysis and performance testing.
	19E51A0217	Nadirega Shiva Prasad Reddy			
	20E55A0231	Zubair Khan			
10	19E51A0212	Kondepudi Sai Preetham	Iot remote labs	PO4, PO9	Design of IoT-enabled platforms for remote experimentation.
	19E51A0218	Nalla Pranay		PSO2	Integration of sensors, communication modules, and cloud systems.
	20E55A0202	Aman Kumar Choudhary			
11	19E51A0224	Sarikonda Sai Vaibhav Raju	Electrical relay	PO6, PO8	Design and testing of relay protection schemes.
				PSO1	Simulation of fault detection and circuit isolation mechanisms.

12	20E55A0227	Pamulaparthi Sandeep Reddy	Hatsun agro private limited	PO7	Design and maintenance of electrical systems for industrial applications.
	20E55A0229	Vemula Vamshi Krishna		PSO1, PSO2	Energy efficiency improvements in agro-processing plants.
13	19E51A0203	Bobbili Roshini Phanitha Devi	Manufacturing of turbo generator	PO1, PO3	Study of manufacturing processes, including material selection.
				PSO1	Testing of generators for performance and compliance.
14	19E51A0227	Yaram Dinesh Kumar Reddy	MEIL 50MW concentrated solar thermal power plant	PO7	Analysis of CSP system design and heat transfer mechanisms.
	20E55A0203	Ambala Karthik		PSO2	Optimization of plant efficiency through control systems.
	20E55A0205	Bashaboinna Praveen			
	20E55A0206	Bhalke Sangamesh			
	20E55A0210	Chintham Vamshikrishna			
	20E55A0211	Chinthapoola Vijay			
	20E55A0215	Kmilla Sravan Kumar			
	20E55A0216	Kummari Vamshi Krishna			
	20E55A0221	Mukurala Shiva Goud			
	20E55A0228	Tejavath Rohith			
15	19E51A0204	Emadabattuni Chakra Harish	A detailed study on KTPS-VII Stage 1X800MW overview	PO4	Analysis of coal-based power generation.
	19E51A0207	Islavath Ganesh		PSO1	Study of boiler-turbine-generator interdependencies.
	19E51A0211	Kondaveeti Mayuk			
	20E55A0212	Dasari Anil Sai			
	20E55A0213	Jangili Harshith			
	20E55A0219	Middapaka Bharath			
16	20E55A0226	Palle Abhiram	MEIL 50MW concentrated solar thermal power plant	PO7	Analysis of CSP system design and heat transfer mechanisms.
	20E55A0208	Bora Tejusurya Reddy		PSO2	Optimization of plant efficiency through control systems.
	20E55A0209	Chavuri Kalyan			
			Designing the electrical didtribution		

17	19E51A0223	Puli Manoj	system and lighting solution for the warehouses	PO1, PO7 PSO1, PSO2	Load calculation and electrical layout design. Selection of energy-efficient lighting solutions.

Table 2.4.4. Mini Project Titles mapped to POs, PSOs mapping for A.Y. 2022-23

Evaluation of Mini-Project:

The Mini-Project in the relevant area shall be registered by the student in consultation with the supervisor and shall be carried out during the semester. Extensive research is conducted using academic resources to analyze the topic critically, understand applications, and prepare a detailed report.

It shall be evaluated for 100 marks. Out of total 100 marks allotted for the mini-project work 30 marks shall be for continuous internal evaluation and 70 marks for the end semester viva-voce examination. Out of 30 marks allocated for CIE, 30 marks shall be awarded by the Department of al Evaluation Committee consisting of Project Supervisor, and two senior faculty members nominated by the Head of the Department.

The mini-project viva-voce (SEE) shall be conducted by a committee comprising an External Examiner nominated by Head of the Institution, One Senior Faculty member nominated by Head of the Department and Project Supervisor.

2.5 Case Studies and Real-Life Examples (10)

Total Marks 10.00

Institute Marks : 10.00

In the Department of EEE, the teaching methodology is centered on experiential and application-based learning, in alignment with Outcome-Based Education (OBE) principles. One of the key strategies adopted is the integration of case studies and real-life examples into the course content, which serves to bridge the gap between theoretical knowledge and practical applications. This approach ensures that students not only understand concepts but also develop the critical thinking, problem-solving, and decision-making skills necessary for professional success in engineering domains.

Types of Case Studies and Real-Life Examples Used

Case studies are selected based on relevance, complexity, and alignment with course. They fall into the following categories:

1. Descriptive Case Studies

These case studies present well-documented real-world scenarios with a focus on understanding how and why certain technologies, systems, or policies work.

Key Features:

- Emphasis on explanation rather than problem-solving.
- Used for conceptual clarity and system understanding.
- Often involve historical, industrial, or policy-based examples.

2. Application-Based Case Studies

These case studies present a real-world problem and require students to apply their technical knowledge to analyze, design, or improve a system.

Key Features:

- Focused on problem identification and solution development.

- Encourages collaborative teamwork and innovation.
- Aligned with course-level problem-solving and design COs.

Some of the Case Studies and Real-Life Examples

S.No	Name of the Course	Year/Semester	Case Study/ Real Life Example	Description of Case Study/Real Life Example	PO/PSO addressed	Type	Complexity
1	BEEE	I/I	Case Study	Verification of Lamp by using a dual switch	PO4,PO12	Descriptive/ explanatory	Simple to moderate
2	CS	II/II	Real Life Example	Demonstrated how traffic lights operated to regulate traffic flow efficiently	PO4,PO12	Explanatory	Moderately Complex Case
3	EMI	II/II	Case Study	Calculation and Verification of Energy meter reading (Energy Bill) in the house	PO1,4,12	Descriptive	Simple Case
4	PS-II	II/II	Case Study	Analysis and Verification of Various Switchyard Equipment in a Substation	PO1,PO12	Exploratory & Descriptive	Highly Complex Case
5	EHV	IV/I	Case Study	Exploring the Battery powered Electric vehicle and Hybrid Electric vehicle in real time	PO1,2,7,12	Explanatory	Highly Complex Case
6	RDBMS	III/I	Case Study	Monitoring of college pay roll management system	PO1,4,5,12	Descriptive Case Study	Moderately Complex Case
7	PS-I	I/II	Case Study	Investigation of Hydro and Solar Power Plant working	PO1,3,7	Exploratory & Explanatory	Highly Complex Case
8	PSD	III/I	Real Life Example	Four Quadrant Operation Of Induction Motor in Elevators	PO1,4,12	Explanatory	Highly Complex Case
9	PS-III	III/II	Real Life Example	Electromagnetic relays used in daily appliances such as Refrigerator, Washing machine	PO4,12	Descriptive	Moderately Complex Case
				Using Electromechanical			

10	PS-III	III/II	Case Study	relay [OLR] in 3-point starter	PO4,12	Explanatory Case Study	Moderately Complex Case

Table 2.5.1. Case Studies and Real Life Examples

Impact on Student Learning

- Improved conceptual clarity and practical awareness.
- Development of soft skills such as teamwork, communication, and leadership.
- Stronger alignment with industry expectations and better placement readiness.
- Increased interest in research and innovation.

2.6 SWAYAM/NPTEL/MOOC/Self Learning (10)

Total Marks 10.00

Institute Marks : 10.00

The students are encouraged in different self-learning through various online platforms like SWAYAM, NPTEL, and other Massive Open Online Courses (MOOCs) which are integral parts of the learning ecosystem. These platforms provide students with the flexibility to enhance their knowledge in various subjects, including those not covered in the curriculum, and to acquire skills relevant to the rapidly evolving technological landscape. The courses opted through these platforms are aligned with industry standards and best practices, allowing the students to gain not only the additional knowledge but also the certifications which are recognized globally.

These courses cover a wide range of topics in engineering. Students can pursue these courses at their own pace and convenience, allowing them to learn beyond the prescribed curriculum and deepen their understanding in areas of interest.

Awareness and Motivation:

- Orientation sessions are organized to familiarize students with the benefits of SWAYAM, NPTEL, and other MOOCs.
- Students are encouraged to enroll in Infosys springboard courses that complement their curriculum or explore their areas of interest.

Outcomes of the SWAYAM/NPTEL/MOOC/Self-Learning Process:

- Students develop a deeper understanding of their core and elective subjects.
- Enhanced employability due to certifications in industry-relevant topics.
- Strengthened academic profile of students, making them competitive on a global stage.

Number of students Registered for MOOC, SWAYAM and self-Learning Courses are given in table 2.6.1 and 2.6.2.

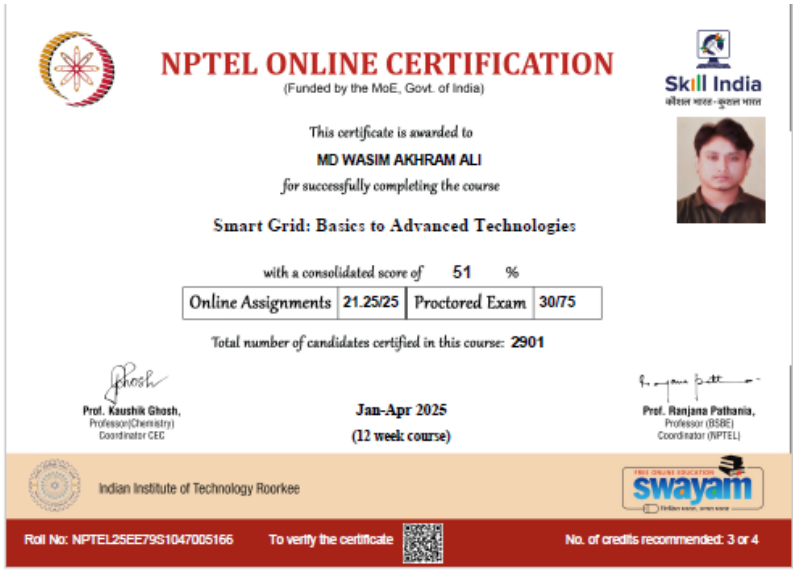
The courses mapped to PO1, PO2, PO5, PO8, PO9, PO11 and PO12.

S.No	Number of Students Registered	Batch	Certification	PO/PSOs Addressed
1	14	2024-25	Smart Grid – Basics to Advanced Technologies	PO1, PO2,PO12

2	01	2022-23	Sensors and Actuators - NPTEL	PO5, PO8, PO11

Table 2.6.1. No. of student's certifications through Swayam/NPTEL Courses

Sample Certificate is given below:



Self-Learning:

S.No	Academic Year	Number of Certifications	Certification	PO/PSOs Addressed
1	2024-25	99	Program Logic Controller-Automation eLearning	PO5, PO8, PO11,PO12
2	2023-24	34	Introduction to Factory Automation - Omron Automation eLearning	PO5, PO8, PO11,PO12
		35	Python Fundamentals for Beginners - Great Learning Academy	PO5, PO8, PO11,PO12
3	2022-23	50	Program Logic Controller- Omron Automation eLearning	PO5, PO8, PO11,PO12

Table 2.6.2. No. of student's certifications through Self Learning

2.7 Solving Complex Engineering Problems Incorporating Sustainability Goals (20)

Total Marks 20.00

Institute Marks : 20.00

Solving complex engineering problems is not only a technical challenge but also a moral responsibility. The Department encourages students to approach engineering challenges through the lens of sustainable development, integrating societal, environmental, and economic considerations aligned with the United Nations Sustainable Development Goals (SDGs). This is achieved through activity-based learning strategies including PBL, mini/micro projects, integrated design, capstone projects, and hackathons.

Complex Engineering Problems (CEPs) are those that require in-depth engineering knowledge, involve wide-ranging factors such as societal, environmental, ethical, and economic issues, and cannot be resolved with straightforward solutions. These problems typically require abstraction, interdisciplinary knowledge, simulation, prototyping, and decision-making under uncertainty.

Complexity and Technology Readiness Level (TRL)

Technology Readiness Level (TRL) is a measure used to assess the maturity level of a particular technology. Complexity increases with TRL, especially in the mid-range (TRL 4–7), where prototyping, integration, and validation become necessary.

- TRL 1-3: Conceptual stage with low complexity
- TRL 4-6: Prototype development with moderate complexity
- TRL 7-9: Full-scale deployment with high complexity

Problem-Based Learning (PBL)

Courses like Power Electronics, Electrical Machines, Smart Grid Technologies, Renewable Energy Systems, and Control Systems integrate semester-long projects.

This aims to enhance students ability to visually communicate complex ideas in a concise and engaging manner. It helps in developing critical thinking, creativity, and effective presentation skills. The implementation involves students designing posters on a given topic, summarizing key concepts, findings, or innovations. These posters are displayed in a classroom, where students present their work to faculty and peers. The evaluation is based on clarity, content depth, creativity, and the ability to articulate ideas effectively.

Problem statement: Design speed control of an Induction motor using suitable methods using MATLAB

Students will present their ideas in poster presentation for the given problem statement as shown in figure 2.7.1 a & b.

As per the suggestions given by the PRC, then students will present their Proposed solution as presentation. This method is focused on improving students' communication skills and their ability to explain technical concepts clearly. It allows students to take ownership of their learning by researching and presenting topics to their peers. Faculty assess students based on content depth, presentation clarity, confidence, and engagement. Constructive feedback is provided to help students refine their delivery and subject knowledge. This activity also promotes public speaking skills, which are essential for academic and professional success. Rubrics were designed and evaluated.

Figure 2.7.1.a: Probable Solution Posters prepared by the students for the given problem statement

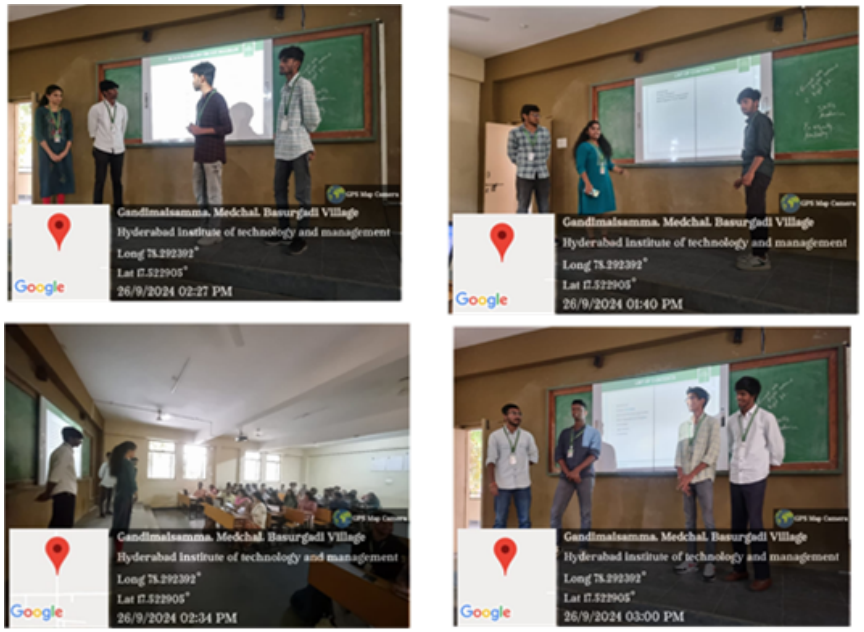


Figure 2.7.1.b: Presentations by the students

This is aimed at providing hands-on experience in designing and analyzing Induction Motor using MATLAB software. Students work on mini-projects related to Electrical Machines, where they use MATLAB to simulate, optimize, and analyze different antenna models. The projects are then presented, with students explaining their methodologies, challenges, and findings. This method enhances problem-solving skills and industry readiness by integrating theoretical knowledge with practical application.

The Problem-Based Learning (PBL) aims to provide students with a platform to showcase their innovative solutions to real-world challenges. It encourages teamwork, critical thinking, and industry-oriented learning. Students work in groups on problem statements provided at the beginning of the semester. The projects are then exhibited in a formal setting where a team from Aalborg University visited our campus to evident these projects and appreciated EEE Students. This approach enhances experiential learning and prepares students for practical applications in their careers.

HITAM has an MOU with Aalborg University. Faculty from Department of EEE are getting trained from the Aalborg team. Faculty at Department of EEE implemented PBL for this batch of EEE students. We were successful in implementing it. The student Learning Outcomes were achieved.

Figure 2.7.2 Show-casing the Projects to External Evaluators

Outcomes:

1) Real time experience using Animation videos in flipped classroom

2) Mid practice using open book exam

3) PBL Implementation to give hands on experience to the students

4) Poster presentation gave confidence on 2 topics about speed control of Induction Motor

5) Paper publications created excitement in students to know more about the subject

Challenges: Require support of another faculty.

Number of Students Participated: 35

Student Feedback:

1. More active to participate in the activity

2. Feels more satisfactory with outcome of activity

Mode of Feedback: Google forms

Many students appreciate PBL for its engaging and interactive nature. They often report improved critical thinking, problem-solving, and teamwork skills. They find it relevant and feel better prepared for real-world challenges. Some students found PBL initially uncomfortable, as it requires active participation and self-directed learning. They requested clearer guidelines and expectations. Feedback is taken from the students to understand the student's interests and suggestions for effective implementation for further semesters.

The Problem-Based Learning is a valuable educational approach for improving student engagement and academic performance in the Antennas and Wave Propagation course. By providing a structured, real-world problem for students to solve, PBL enhances their understanding of complex concepts and prepares them for professional practice. The Academic Performance of the students has been gradually improved with the experiential learning in the class. The positive results from this implementation suggest that PBL can effectively address gaps in traditional teaching methods and contribute to the achievement of Program Outcomes.

Students identify real-life problems aligned with SDGs such as:
SDG 7: Affordable and Clean Energy
SDG 9: Industry, Innovation, and Infrastructure
SDG 11: Sustainable Cities and Communities

Steps Involved:

1. **Problem Identification:**
   - Problems are chosen based on their real-world relevance and alignment with the United Nations Sustainable Development Goals (SDGs).
2. **Requirement Analysis:**
   - Students analyze the problem from multiple perspectives, including technical, social, and environmental dimensions.
3. **Design and Development:**
   - Innovative and eco-friendly solutions are designed, keeping resource optimization and minimal environmental impact in focus.
4. **Implementation:**
   - Solutions are implemented using modern tools, sustainable materials, and emerging technologies like IoT, AI, and green energy systems.
5. **Evaluation and Validation:**
   - Solutions are evaluated for their efficiency, feasibility, and long-term impact on sustainability.

Impact on POs/PSOs:

- **PO 1 (Engineering Knowledge):** Application of fundamental engineering concepts to solve real-world sustainability challenges.
- **PO 4 (Conduct Investigations of Complex Problems):** Researching and analyzing complex issues related to sustainability and engineering solutions.
- **PSO 3 (Sustainable Engineering Solutions):** Design and develop an energy efficient system in all engineering and interdisciplinary fields to meet the present challenges of industry and society

Engineering Complex Projects Mapping with SDGs and classification based on TRL

SNO	Roll No	Name of student	TITLE OF PROJECT	SDG Mapping	Complexity Elements	TRL
1	23E55A0206	BOLLEPELLI ARAVIND	Design a regenerative braking system to capture and reuse energy during braking	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation, and Infrastructure	Involves power electronics, motor control, energy storage, and safety mechanisms. Requires simulation, hardware integration, and optimization	TRL 4
	23E55A0211	GUGULOTH SAI PRIYA				
	22E51A0212	KOKKONDA SWATHI				
	23E55A0220	KUSAM RAHUL				

					for varying speeds/loads.	
2	21E55A0204	Bodapatla Ramya	Wheelchair controller using Bluetooth and voice proceesing on Arudino	SDG 3 – Good Health and Well-being SDG 9 – Industry, Innovation and Infrastructure SDG 10 – Reduced Inequalities	Voice recognition under varying conditions, real-time response, wireless communication, control system.	TRL 4
	21E55A0214	Guntuku Sainaveen				
	21E55A0215	Jambuka Ruchitha				
	21E55A0218	Kaveti Avinash				
3	21E55A0203	BAIRI UDAY	Cruising with Confidence: Electric Tricycles for Empowered Handicapped Travel	SDG 3 – Good Health and Well-being	Multidisciplinary – mechanical, electrical, safety, ergonomics, embedded control. Needs prototyping and testing.	TRL 4
	21E55A0206	DURGAM PRANEETH		SDG 11 – Sustainable Cities and Communities		
	21E55A0225	ORUGANTI THARUN				
	21E55A0228	PAMPARI RAKESH		SDG 10 – Reduced Inequalities		
4	19E51A0204	E.Chakra Harish	Electric Bicycle	SDG 11 – Sustainable Cities and Communities	Motor control, battery integration, user interface, energy optimization.	TRL 4
	19E51A0213	L. Sindhu Sri		SDG 13 – Climate Action		
	19E51A0221	P.Sai kiran Reddy		SDG 3 – Good Health and Well-being		
	20E55A0206	B.Sangamesh				
	19E51A0220	PEDDAGONI NAVEEN KUMAR		SDG 7 – Affordable and Clean Energy	Requires modeling, real-time	

5	19E51A0216	MEDURI KATYAYANI	Battery management System (BMS) and SOC in electric vehicles	SDG 9 – Industry, Innovation and Infrastructure	data processing, thermal management, embedded firmware.	TRL 4
	19E51A0201	ANDE SAI VENKATA SOWMYA		SDG 13 – Climate Action		
	19E51A0215	M VAISHNAVI				
6	18E51A0214	MOHAMMAD NAYAB AHMED	Generation of Electricity Using Pedaling Technology at HITAM	SDG 7 – Affordable and Clean Energy	Power electronics, dynamic load handling, energy storage interfacing.	TRL 4
	18E51A0201	BATTU ABHISHEK		SDG 12 – Responsible Consumption and Production		
	19E55A0215	HASANABADA SANJAY		SDG 13 – Climate Action		
	19E55A0233	SANGAM UDAYKANTH				

Table 2.7.1 Engineering Complex Projects Mapping with SDGs and classification based on TRL

Design Thinking						
I-II Electrical Electronics Engineering & Mechanical Engineering						
PBL						
2023-2024						
BATCH	ROLL NUMBER	NAME OF THE STUDENT	Project Title	SDG	Complexity Elements	TRL
1	23E51A0207	Manik Manohar	Speech Impairment Project In Village For Physically Disabled People	SDG 10	Real-time processing, Assistive Tech, Low-power design	3
	23E51A0306	Surapuraju Yuvaraju				
	23E51A0214	Vasamsetty Yogeshwar				
	23E51A0305	Shaik Aamir				
	23E51A0304	Mohammed Amaan				
2	23E51A0203	Erukala Vamshi	Automatic Turn on Rice Cooker	SDG 7	Automation, Safety, Embedded Systems	4
	23E51A0204	Gunji Poojitha				
	23E51A0208	Nimmala Pravalika				
	23E51A0209	Paluru Naga Babu				
	23E51A0216	Vemula Ashritha				

3	23E51A0202	Chinnabathini Teja	Water Pollution in Rural Villages: Challenges and Impacts on Community Health and Environment Blockage of roads during rainy season	SDG 6	Remote Sensing, Communication, Environmental Monitoring	3
	23E51A0205	Jonnakuti Teja Sumanth				
	23E51A0210	Ramagiri Chandra Sai Charan				
	23E51A0303	Gadde Poorna Chandra				
4	23E51A0201	Bolle Ravi Teja	Mitigating Flood Impacts: Enhancing Resilience and Access in Villages Rainwater Blockage: Water Treatment Technologies for Clean Drinking Water	SDG 13	IoT Networks, Water Treatment, Real-time Alerts	3
	23E51A0212	Samala Pranav Kumar				
	23E51A0301	Bipul Kumar Yadav				
	23E51A0302	Bolleda Ruthikesh Reddy				
	23E51A0215	Veda Eshwar Reddy Anugu				
5	23E51A0206	Koppula Praneeth	Road Safety Initiative: Preventing Two-Wheeler Accidents and Safeguarding Livelihoods in village:Smart Safety Helmet	SDG 3	Real-time sensing, Safety alerts, Communication	3
	23E51A0213	Vaka Akhil				
	23E51A0211	Ramala Vamshi Prakash				
	22E51A0303	Challapuram Vinay Kumar Reddy				
	22E51A0305	Kummari Amarnath				

Table 2.7.2. Engineering Complex Projects for first year Mapping with SDGs.

2.8 Steps Taken for Enhancing Industry Institute Partnerships (15)

Total Marks 15.00

Institute Marks : 15.00

We always encourage and involve industry experts in delivery of few courses and has become an integral part of the academic process, where professionals from the industry are invited to co-deliver specific modules of few courses, especially in emerging and areas leading to employability like Python programming and Drone Technologies. This collaboration enables students to gain real-time insights into current industry practices, tools, and methodologies. Emphasizing experiential learning, the approach incorporates live case studies, problem-solving sessions, and interactive workshops.

n parallel, we have partnered with industries to establish cutting-edge facilities which provide students with hands-on experience using the latest echnologies and tools employed in the field. The SSDC (Students Skill Development Center) serves as collaborative spaces where students and aculty work closely with industry professionals on live projects, thereby fostering innovation, enhancing technical competence, and accelerating skill levelopment in alignment with industry expectations.

Industry Expert Engagement:

Industry professionals are invited to co-deliver specific modules of core and elective courses.

Topics include emerging areas such as Python programming and Drone Technologies

Benefits:

→ Students gain insights into current industry practices, tools, and methodologies.

→ Hands-on experience is emphasized through live case studies, problem-solving sessions,

and interactive workshops.

Outcomes:

- Enhanced technical expertise and hands-on experience in state-of-the-art technologies.
- Exposure to research-driven environments, fostering innovation and creativity.
- Improved employability and global competitiveness in core and interdisciplinary domains.
- Strengthened collaborations with premier institutes, enriching the academic and research ecosystem

MOUs: Typical list of MOUs in the Department of EEE as shown in Table 2.8.1

S.No	Name of the Company	Year of Signing MOU	Duration	Activities under each MOU	Frequency of Interaction with Company
1	HIEE Empowering Engineering private limited	1/10/2023	5 Years	Skill Development, Certification programs, outcome based training, Placement and related services	Once in a Year
2	IIITH	3/17/2023	2 Years	Skill Development, Certification programs, outcome based training, Placement and related services internship	Once in a Year
3	Adwiteya Technologies	4/29/2023	3 Years	Training programs in Emerging Technologies, Innovations	Once in a Year

4	Robomonk Technologies	15/02/2024	3	Training programs in PCB, Robotrics, IOT, Drones	Once in a Year

Table 2.8.1. List of MOUs the Department of EEE

Partial delivery of courses by Industry Persons

A.Y. 2023-24

S. No	Course	Year / Sem	External Faculty Name	Qualification	Organisation Name	Designation	No. of Hrs
1	Analytical Reasoning	III	Mr. Narasimha Mikkilineni	MTech, PGDHRM, E-MBA	LACE Academy	Stanford Certified Design Thinking & Problem Solving Expert	32
2	Python Programming	I/II	Ms. Sandhya-	M Tech with PHD Pursuing	Talentio	Technical Head & Co-Founder	48
3	Constitution of India (COI)	II/II	Aymen Mohammed-	LLM, PhD,	Nalsar University	Teaching Assistant,	32
4	Measuring Instruments	III-II	Aravind Varrier	M. Tech	Free Lancer	-	48
5	Quantitative Aptitude	III-II	Mr. Narasimha Mikkilineni	MTech, PGDHRM, E-MBA	LACE Academy	Stanford Certified Design Thinking & Problem Solving Expert	32

Table 2.8.2. Partial delivery of courses by Industry persons for A.Y. 2023-24

A.Y 2022-23

S.No	Course	Year / Sem	External Faculty Name	Qualification	Organisation Name	Designation	No. of Hrs
1	Analytical Reasoning	III	Mr. Narasimha Mikkilineni	MTech, PGDHRM, E-MBA	LACE Academy	Stanford Certified Design Thinking & Problem Solving Expert	32
2	Python Programming	I/II	Ms. Sandhya-	M Tech with PHD Pursuing	Talentio	Technical Head & Co-Founder	48
3	Constitution of India (COI)	II/II	Aymen Mohammed-	LLM, PhD,	Nalsar University	Teaching Assistant,	32
4	Quantitative Aptitude	III-II	Mr. Narasimha Mikkilineni	MTech, PGDHRM, E-MBA	LACE Academy	Stanford Certified Design Thinking & Problem Solving Expert	32

Table 2.8.2. Partial delivery of courses by Industry persons for A.Y. 2022-23

Industry Interaction through Industrial Visits

S.No	Date	Semester	Industry Interacted	Remarks
A.Y. 2022-23				
1	10/02/2023	II	33/11KV Substation	
2	28/12/2022		HBL	

S.No	Date	Semester	Industry Interacted	Remarks
A.Y. 2023-24				

1	15/06/2024	IV	CII-IGBC	
2	04/04/2024	IV & VI	NRSC	
3	27/03/2024	IV &VI	Singur Hydro Power Plant	
4	15/09/2023	III & V	BHEL	

S.No	**Date**	**Semester**	**Industry Interacted**	**Remarks**
A.Y. 2024-25				
1	0208/2024	VII	Olectra	
2	15/06/2024	III	CII-IGBC	

Table 2.8.3. Industry Exposure for students through Industrial Visits

Industry Interaction and Impact analysis:

S.No	**Industry interaction**	**Impact Analysis**
1	SRC Embedded solutions	Provided training to the students based AMD trainer kits and AI. Now students are willing to do the projects based on this field.
2	VLSI Prof	The VLSI training program significantly enhanced students technical and professional competencies in semiconductor design.
3	Cranes Varsity Pvt. Ltd	specialized training program conducted in **embedded systems and RTOS** to equip the students with practical skills aligned with industry standards. Students able to work confidently in this embedded environment.
4	IIIT Hyderabad	This collaborative learning experience not only enriched their academic journey but also equipped them with practical skills and insights to tackle real-world challenges in the realms of technology and communication.

Table 2.8.4. Impact Analysis after the interaction in the Industry

Industry offered short-term programs/training

A.Y. 2023-24

Sl. No	Name of the capability enhancement program	Date of implementation (DD-MM-YYYY)	Number of students enrolled	Name of the agencies/consultants involved with contact details (if any)
1	Company Specific Training - Aptitude and Reasoning for IV-I students of 2020-24 Batch	7th Aug - 12th Aug 2023	52	LACE Academy
2	Need Based Training - TCS NQT for IV-I students of 2020-24 Batch	4th April - 23rd April 2024	52	Talentio and Santosh
3	Aptitude and Reasoning Training for III-I students of 2021-25 Batch	20th Nov - 25th Nov 2023	33	LACE Academy
4	Aptitude and Reasoning Training for III-II students of 2021-25 Batch	26th Feb - 2nd Mar 2024	33	LACE Academy
5	Aptitude and Reasoning Training for II-I students of 2022-26 Batch	20th Nov 2023 - 31st Jan 2024	66	LACE Academy
6	Aptitude and Reasoning Training for II-II students of 2022-26 Batch	3rd June- 8th Jun 2024	66	Santhosh Kumar Ananta
7	Aptitude and Reasoning Training for I-II students of 2023-27 Batch	12th Feb - 3rd June 2024	16	LACE Academy
8	Company Specific Training Technical for IV-I students of 2020-24 Batch	14th Aug - 20th Sep 2023	52	Talentio
9	Full Stack Development using Python, DSA, OOPS Technical Training for III-I students of 2021-25 Batch	28 Nov 2023 - 09 Dec 2023	33	Talentio
10	Problem Solving on HackerRank/LeetCode, DSA Training for III-II students of 2021-25 Batch	26th Feb - 5th Mar 2024	33	Talentio

11	Problem Solving with Python and p5.js Training for II-II students of 2022-26 Batch	3rd June-11th Jun 2024	66	Talentio
12	Mock Interview for IV-I students of 2020-24 Batch	17th Feb 2024	52	Mr. Eshwar Babu, Manager Software Engineer, Optum Global Solutions(United Health Group)
13	Mock Interview for IV-I students of 2020-24 Batch	27th Feb 2024	52	Mr. Rahil Hussain, Associate Software Engineer, Silicon Labs

Table 2.8.5 Industry offered short-term programs/training for the A.Y. 2023-24

Overall Trainings

Sl. No	**Name of the capability enhancement program**	**Date of implementation (DD-MM-YYYY)**	**Number of students enrolled**	**Name of the agencies/consultants involved with contact details (if any)**
1	Aptitude and Reasoning Training for IV-I students of 2019-23 Batch	01 Sep - 17 Sep 2022	58	Face Prep and Talentio
2	Aptitude and Reasoning Training for III-I students of 2020-24 Batch	17 Oct 2022 - 5 Dec 2022	52	Santhosh Kumar Ananta
3	Aptitude and Reasoning Training for III-II students of 2020-24 Batch	17 Apr 2023 - 23 Jun 2023	52	LACE Academy
4	Aptitude and Reasoning Training for II-I students of 2021-25 Batch	06 Dec 2022 - 27 Jan 2023	33	Santhosh Kumar Ananta
5	Aptitude and Reasoning Training for II-II students of 2021-25 Batch	14 Jun 2023 - 18 Jul 2023	33	LACE Academy
6	Aptitude and Reasoning Training for I-II students of 2022-26 Batch	01 May 2023 - 31 Jul 2023	66	LACE Academy

7	Python Training for IV-I students of 2019-23 Batch	01 Sep - 17 Sep 2022	58	Talentio
8	High CTC Java Training for IV-I students of 2019-23 Batch	06 Dec 2022 - 22 Dec 2022	58	Talentio
9	Java Training for Goldman Sachs for III-I students of 2020-24 Batch	23 Sep 2022 - 09 Oct 2022	33	Talentio
10	Programming in C Training for III-I students of 2020-24 Batch	17 Oct 2022 - 5 Dec 2022	33	Shravan Kumar Manthri
11	Python Full Stack Training for III-II students of 2020-24 Batch	17 Apr 2023 - 23 Jun 2023	33	K. Krishna
12	Python Training for II-I students of 2021-25 Batch	06 Dec 2022 - 27 Jan 2023	66	K. Krishna
13	Python Full Stack Training for II-II students of 2021-25 Batch	14 Jun 2023 - 18 Jul 2023	66	K. Krishna
14	Sessions on Building Self Confidence for III-II students of 2020-24 Batch	05 Jun 2023 - 21 Jun 2023	66	Supriya Gahlot
15	IELTS Training for III-II students of 2020-24 Batch	29 Mar 2023 - 11 Aug 2023	66	Nithan Mala

Table 2.8.6. Overall Trainings given to Students

3 OUTCOME-BASED ASSESSMENT (120)

Total Marks 120.00

3.1 Evaluation of Continuous Assessment: Assignments, Unit Tests, Mid-Term, etc. (10)

Total Marks 10.00

Institute Marks : 10.00

The assessment methodology for theory courses is meticulously structured to ensure continuous and comprehensive evaluation of students learning outcomes. The total evaluation as per HR21 Regulation is for **100 marks**, with **30 marks allotted for internal assessment** and **70 marks for external assessment**. This process is designed to align with the Course Outcomes (COs), facilitate constructive alignment with Program Outcomes (POs), and promote academic improvement throughout the semester.

Continuous Internal Evaluation: Each student undergoes **two midterm evaluations** (Mid 1 and Mid 2), and each midterm carries **30 marks**. Each mid examination is carried out for 30 marks consisting of Subjective paper for 15 marks as Part-I and Presentations, Group Discussions, Quiz, PBL etc. for 10 marks as Part-II and 5 Marks for assignment. The final CIE Marks can be calculated by taking 80% weightage from best of the two mid examinations and 20% weightage from the least scored mid examination marks in each subject.

The first mid-term examination shall be conducted for the first 50% of the syllabus, and the second mid-term examination shall be conducted for the remaining 50% of the syllabus.

As part of the Continuous Internal Evaluation (CIE) system a structured **question bank** is developed for the **CIE-A component**, which is the theory examination carrying 15 marks in each midterm. The question bank is meticulously prepared by course instructors in alignment with the **Course Outcomes (COs)** and mapped with appropriate **Bloom's Taxonomy levels** to ensure coverage of various cognitive domains such as understanding, application, and analysis. The questions are categorized based on difficulty levels and distributed uniformly across the syllabus. Each question is tagged with its corresponding CO and PO to ensure constructive alignment and outcome-based assessment.

Once the question bank is prepared by the faculty group, it is submitted to the **Course Coordinator** for review. The Course Coordinator ensures that the questions are relevant, clearly stated, and aligned with the intended course outcomes. After review, any necessary revisions are made, and the finalized version of the question bank is then submitted to the **Examination Cell** through the Program Head or the designated departmental representative.This process ensures standardization and fairness in the evaluation while enabling transparent measurement of student learning aligned with the program objectives.

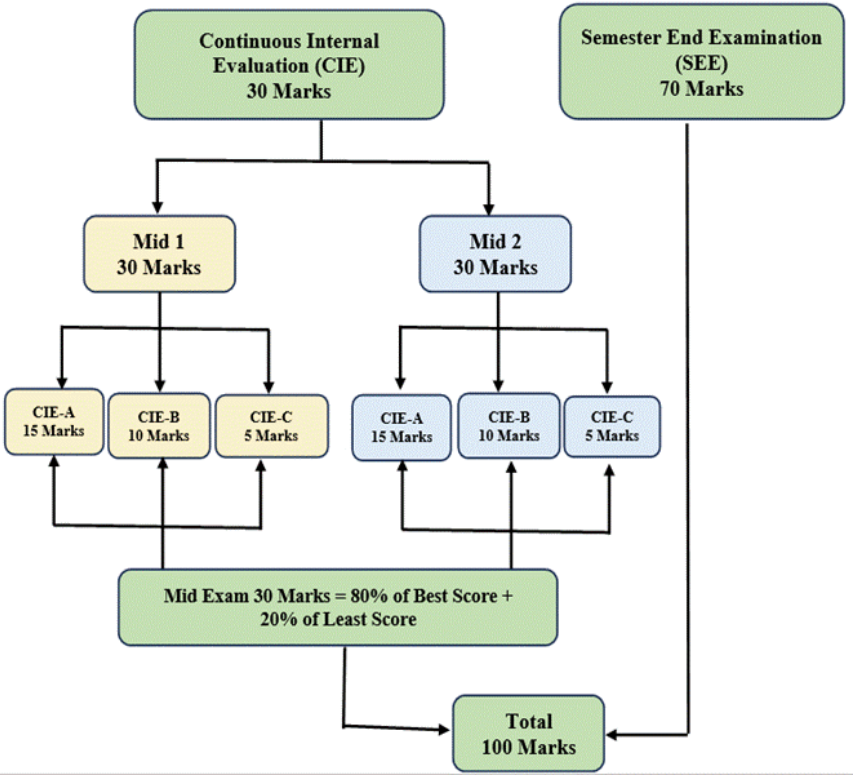
HR21 (30M)	HR22 (40M)	HR24 (40M)
Subjective Paper-15M	Subjective Paper-25	Subjective Paper-25M
Activity Based Assessment-10M	Activity Based Assessment-10M	Activity Based Assessment-10M
Assignments-5M	Assignments-5M	Assignments-5M

• First assignment should be submitted before the commencement of the first mid-term examinations, and the second assignment should be submitted before the commencement of the second mid-term examinations. The assignments shall be specified / given by the concerned subject teacher.

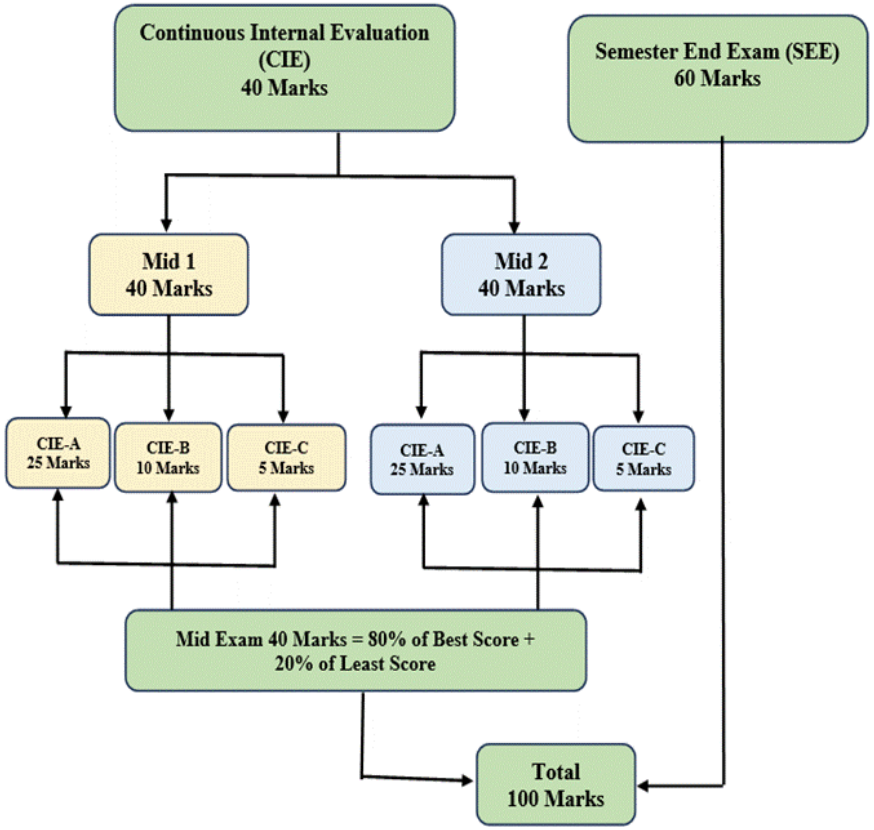
Laboratory Course Assessments:

- For practical subjects, there shall be a Continuous Internal Evaluation (CIE) during the Semester for 30 internal marks and 70 marks for Semester End Examination (SEE).
- Continuous Internal Evaluation (CIE): Out of the 30 marks, 20 marks are allocated for day-to-day work evaluation and the remaining 10 marks for midterm examinations.
- There shall be two mid-term examinations of 10 marks each conducted by the concerned laboratory teacher for a duration of 90 minutes and final CIE marks are calculated by taking 80% weightage from best of the two mid examinations and 20% weightage from the least scored mid examination marks in each practical subject and these are added to the marks obtained in day to day work evaluation.

HR21


Continuous Internal Evaluation (CIE) 30 Marks
Semester End Examination (SEE) 70 Marks
Mid 1 30 Marks
Mid 2 30 Marks
CIE-A 15 Marks
CIE-B 10 Marks
CIE-C 5 Marks
CIE-A 15 Marks
CIE-B 10 Marks
CIE-C 5 Marks
Mid Exam 30 Marks = 80% of Best Score + 20% of Least Score
Total 100 Marks

HR22 & HR24:



CIE - A Sample Question paper (15 Marks):

images **HYDERABAD INSTITUTE OF TECHNOLOGY & MANAGEMENT** **(AUTONOMOUS)** **Gowdavelli, -Medchal Dist. – 501 401**	
CONTINUOUS INTERNAL EVALUATION MID-II Exam	**EVEN Semester : 2024-25**

Faculty In-Charge : S V Sathyanarayana		IV Yr. II Sem / Branch			EEE
Subject Name : SMART GRID TECHNOLOGIES		**Date : 12-05-2025**			**Time : 1 Hour**
Q. No	**PART-A (1 Mark Question) 1 x 5 = 5**	**Marks**	**Bloom's Level**	**COs**	**PO/PSOs**
1	Define the function of relays in smart grid protection systems.	1	2	3	PO1,PSO1
2	Mention two challenges in protecting smart DC grids.	1	3	3	PO1,2, PSO1
3	What are the typical control strategies used in DC microgrids?	1	3	3	PO1, PSO1
4	Define an AC-DC hybrid microgrid.	1	2	3	PO1, PSO1
5	Define virtual inertia in the context of smart grid systems.	1	2	4	PO1, PSO1
Q. No	**PART-B (5 Mark Question)** **Answer Any TWO Questions 2 x 5 = 10**	**Marks**	**Bloom's Level**	**COs**	**PO/PSOs**
6	Explain the evolution of smart grid protection from Smart Grid Protection-I to Smart Grid Protection-IV. What are the key improvements across these stages?	5	4	3	PO1,2, PSO1
7	Explain the energy management system (EMS) in AC-DC hybrid microgrids. How does it optimize performance?	5	4	3	PO1,2, PSO1
8	Discuss the placement and importance of Phasor Measurement Units (PMUs) in monitoring and controlling smart grids.	5	4	4	PO1,2, PSO1

CIE-B Assessment Component (10 Marks):

To ensure continuous and holistic assessment of students understanding and engagement, the following components are integrated into the internal evaluation framework, collectively accounting for 10 marks:

- **Presentations:** Students deliver individual or group presentations on assigned topics relevant to the course curriculum, promoting communication skills and conceptual clarity.
- **Group Discussions:** Regularly conducted to foster collaborative learning, critical thinking, and articulation of ideas among students on subject-

related or interdisciplinary themes.

- **Quiz:** Periodic quizzes are administered to assess conceptual understanding, retention, and application of knowledge in a time-bound manner.
- **Open Book Examinations:** These assessments encourage students to develop analytical and problem-solving skills by applying concepts in novel or complex scenarios, with access to textbooks and reference materials.
- **Project-Based Learning (PBL):** Students engage in mini-projects or problem-solving activities, focusing on real-world applications and interdisciplinary knowledge, enhancing experiential learning.

CIE-C Assignment (5 Marks):

HYDERABAD INSTITUTE OF TECHNOLOGY & MANAGEMENT (AUTONOMOUS) **Gowdavelli, -Medchal Dist. – 501 401**					
CONTINUOUS INTERNAL EVALUATION - ASSIGNMENT		**EVEN Semester : 2024-25**			
Faculty In-Charge : S V Sathyanarayana		**IV Yr. II Sem / Branch**			EEE
Subject Name : SMART GRID TECHNOLOGIES		**Date : 05-02-2025**			**Due Date : 10-02-2025**
Q. No	**Answer below Questions (2x 2. 5 = 5 Marks)**	**Marks**	**Bloom's Level**	**COs**	**POs**
1	Describe the modeling of energy storage devices in a smart grid environment. How do these models help in grid operation and planning?	2.5	4	3	1,2
2	Describe the types of faults in DC grids and the protection mechanisms that can be used to mitigate them.	2.5	4	3	1,2

3.2 Evaluation of the Semester End Exam (SEE) Question Paper (10)

Total Marks 10.00

Institute Marks : 10.00

The process of setting SEE (Semester End Examination) papers and their evaluation is carried out with a strong emphasis on maintaining transparency, quality, and alignment with Course Outcomes (COs) and Program Outcomes/Specific Outcomes (POs/PSOs). Question papers are designed using a standardized blueprint that ensures coverage of all COs at appropriate Bloom's Taxonomy levels, promoting constructive alignment between learning objectives and assessments. Each question is mapped to specific COs and POs/PSOs, and reviewed by subject experts and internal moderators to ensure clarity, relevance, and academic rigor. Evaluation is carried out using a detailed scheme of valuation to maintain uniformity and fairness. As part

of our commitment to transparency, a **script view option** is provided to students, allowing them to review their evaluated answer scripts and seek clarifications if needed. All related documentation—including question paper blueprint, CO-PO mapping matrix, answer key, scheme of evaluation, sample scripts, and moderation records—is maintained in the course file as evidence of systematic assessment practices.

Semester End Examinations:

The duration of SEE is 3 hours. The details of the question paper pattern are as follows: • The end semester examinations will be conducted for 70 marks consisting of two parts viz. **i) Part- A for 20 marks, ii) Part - B for 50 marks**. • Part-A is compulsory, which consists of ten questions (two from each unit) carrying 2 marks each.

Part-B consists of five questions (numbered from 11 to 15) carrying 10 marks each. One question from each unit (may contain sub-questions) with internal choice.

Process for Preparing External Exam Question Paper Setting:

Controller of Examinations (CoE) will prepare the list of experts for various courses from the identified institutions along with the internal experts.

- The Controller of examination will share the Question paper template, Syllabus copy and Blooms Taxonomy along with the guidelines to the external experts for preparing the Question papers.
- For one course 4 sets of Question papers will be collected from different experts from the panel.
- Concerned internal subject faculty will be called for moderation of the paper 2 hours prior to the exam schedule for moderation of the paper if any.
- The Subject faculty will prepare the key and share to the Additional Controller of Examinations.
- Out of the 4 sets one set will be selected by Controller of examination.
- That set will be considered for conducting the exam on the said day.

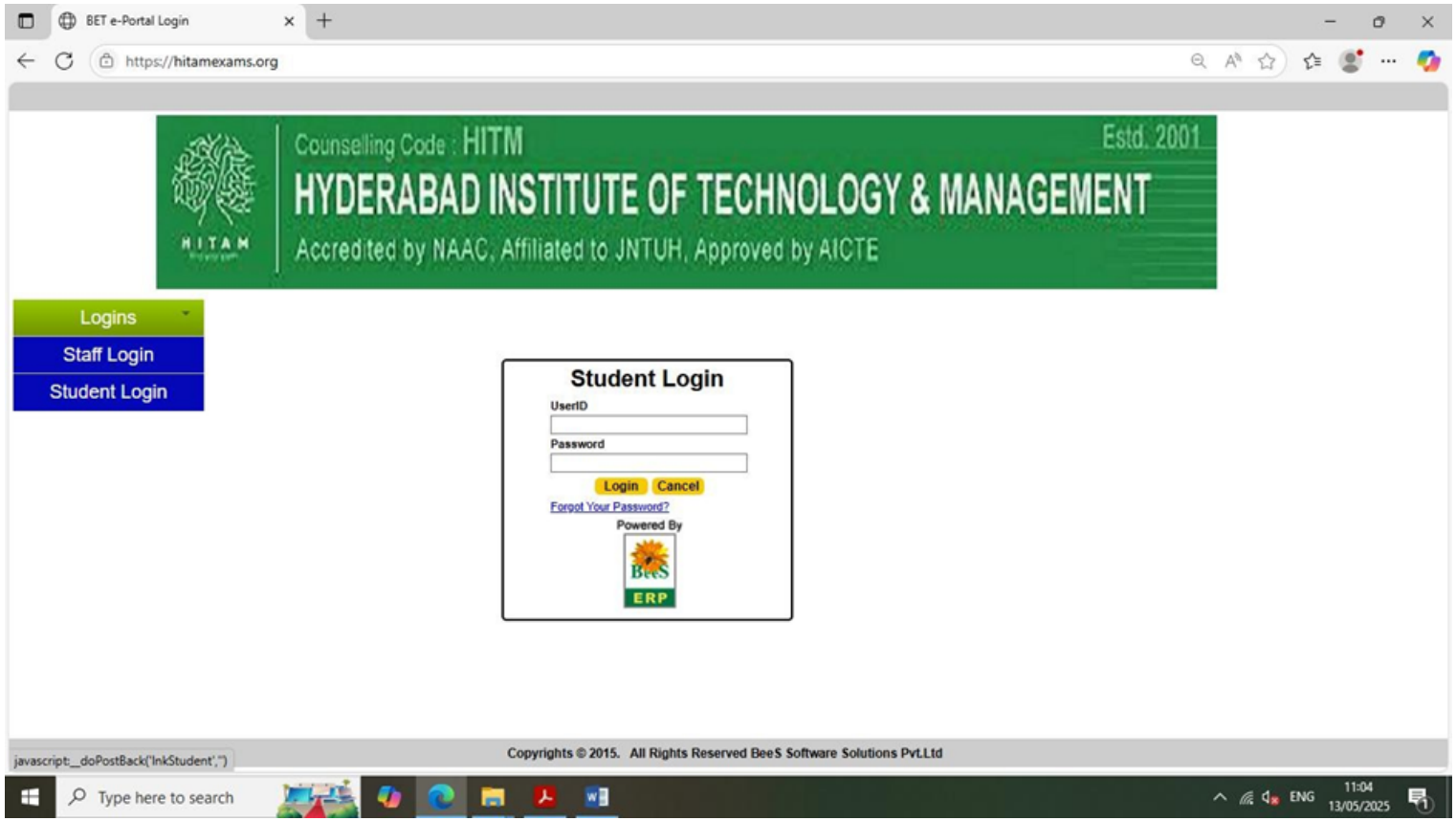
Evaluation of the SEE answer scripts:

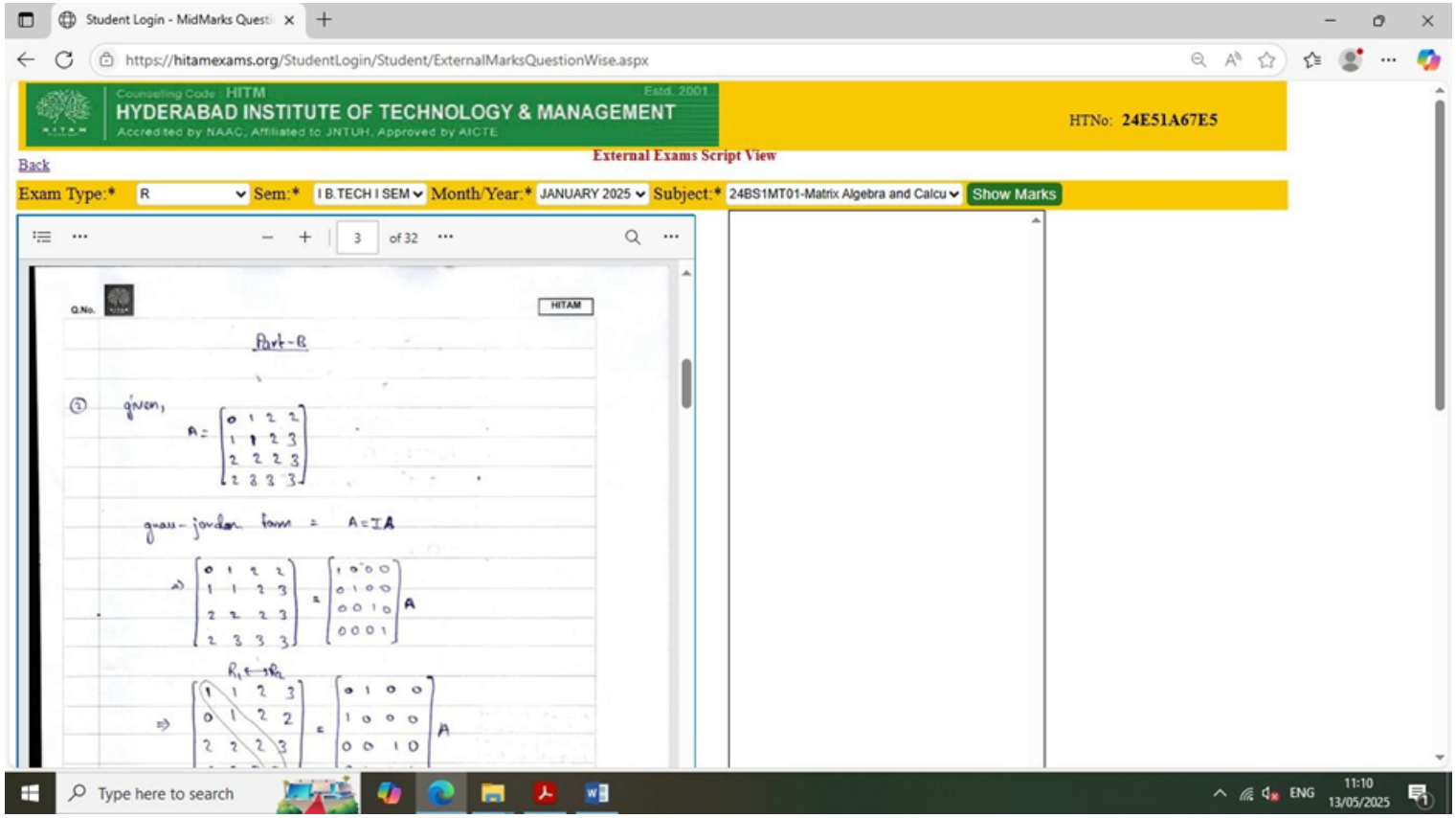
- The CoE will select the subject expert for each course from the panel and then earmark them for doing the evaluation of the answer scripts.
- All the SEE answer scripts are digitalized and uploaded onto the server for carryout out the digital evaluation by internal and external subject experts.
- Examiners should keep their appointment strictly confidential. This is a confidential assignment and he/she must maintain strict confidentiality.
- The evaluator shall access digital bundle scripts by using his/her login credentials provided by Controller of Examinations
- The evaluator shall value a maximum of 80 answer scripts per day- 40 scripts in each session by spending at least 3 to 4 hours per session. The Examiners should follow scrupulously the (Detailed Key) scheme of valuation, in awarding marks, and have to evaluate the answer scripts uniformly.
- The evaluator should evaluate all the questions answered by the student up to the last page of the booklet.The marks awarded for each question should be entered in the respective box given in marks awarding table.
- If any evaluator suspects the answer scripts for any reason (i.e. suspected case of Malpractice etc.) that should be brought to the notice of the controller of examinations.
- If any evaluator notices that all answers in any answer book let have been struck off, the evaluator may award only zero for such answer book.
- Avoid erratic valuation such as allotting zero marks where the candidate deserves more marks and / or not valuing some questions.
- After complete valuation the evaluators should finalize bundle and generate marks reports and same should be sent to Controller of Examinations

concerned.

- All the evaluators are requested to submit their filled in remuneration form to the ACE- valuation and collect the remuneration from examination cell office.
- They will complete the valuation in online mode.
- After completion of each valuation Scrutiny will be done to check marks are allotted for all the questions or not.
- All the answer scripts scrutiny process has been carried out after evaluation of the answer scripts before finalizing the secured marks.
- Double valuation is followed for evaluating answer scripts of end semester examinations. The following procedure is followed for scrutiny process of answer scripts.
- Internal evaluators are identified well in advance for the scrutiny of answer scripts.
- Subjects will be allotted to the evaluators with briefing of the procedure to be carried out for scrutiny, they will be provided a computer centre with all relevant documents.
- After scrutiny they will be handing over all the scrutiny remarks report to ACE-2.
- ACE-2 will further verify and send the scrutiny remarks to the concerned valuator for rectification.

Transparency of post evaluation process :





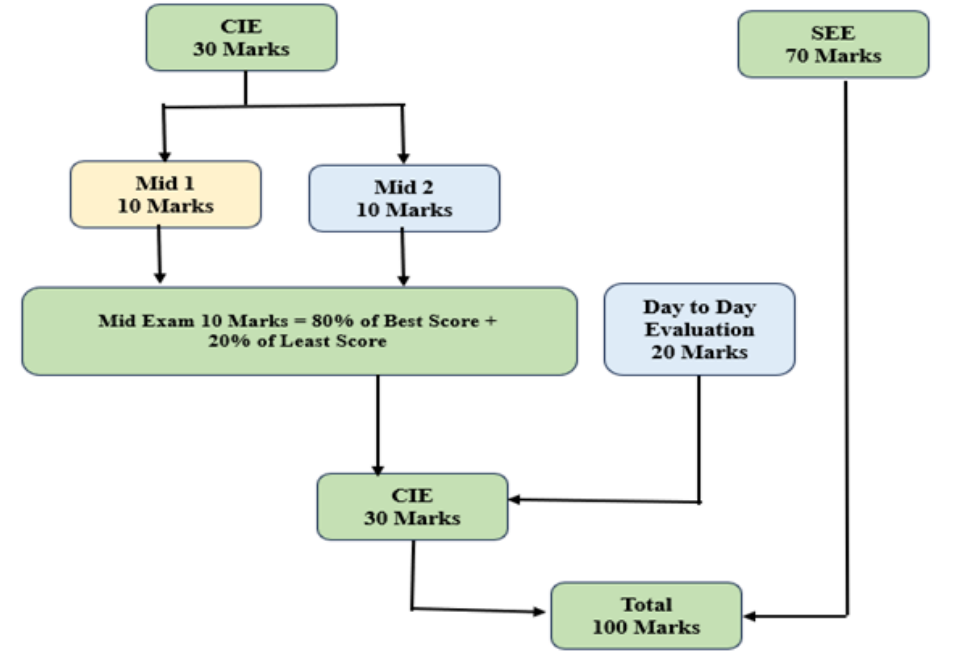
3.3 Evaluation of Laboratory Work and Workshop (Continuous and SEE) (10)

Total Marks 10.00

Institute Marks : 10.00

The curriculum for the laboratory is designed to ensure effective attainment of the desired learning objectives and course outcomes.

For practical subjects, there shall be a Continuous Internal Evaluation (CIE) during the Semester for 30 internal marks and 70 marks for Semester End Examination (SEE).



Continuous Internal Evaluation (CIE): Out of the 30 marks, 20 marks are allocated for day-to-day work evaluation and the remaining 10 marks for midterm examinations.

There shall be two mid-term examinations of **10 marks** each conducted by the concerned laboratory teacher for a duration of 90 minutes and final CIE marks are calculated by taking 80% weightage from best of the two mid examinations and 20% weightage from the least scored mid examination marks in each practical subject and these are added to the marks obtained in day to day work evaluation.

DAY TO DAY EVALUATION

Criteria	**Excellent (5 Marks)**	**Good (3–4 Marks)**	**Needs Improvement (1–2 Marks)**
Observation(5Marks)	Actively engaged, follows instructions, attentive throughout	Generally attentive, minor distractions or prompting needed	Often distracted, uninterested, or needs constant guidance

Record Book (5Marks)	All entries complete, neat, well-organized, accurate	Most entries complete, legible, minor errors	Incomplete, untidy, or contains major errors
Experiment Execution and Team collaboration (5Marks)	Performs steps accurately and shows clear understanding among team members	Performs with minor help, small errors	Needs major help or makes critical mistakes
Viva Voce (5Marks)	Answers confidently with clear, accurate understanding	Answers most questions correctly, some hesitation or errors	Poor or incorrect answers, lack of understanding

HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AUTONOMOUS)

II B .Tech II Sem (HR21) Regular A.Y. 2022-23

Branch : EEE						
Name Of the Lab		Control systems				
EXPERIMENT-1		DATY TO DAY EVALUATION				
S.No	H.T NO:	Attendance(5)	Observation (5)	Record(5)	Viva(5)	Total Marks (20 M)
1	21E51A0202	4	5	5	5	19
2	21E51A0203	5	5	5	4	19
3	21E51A0204	4	5	5	4	18
4	21E51A0205	5	5	5	4	19
5	21E51A0207	3	4	4	4	15
6	21E51A0208	ABSENT				
7	21E51A0209	3	5	5	4	17
8	21E51A0211	4	5	5	5	19
9	21E51A0212	4	5	5	5	19
10	21E51A0213	4	5	5	5	19
11	21E51A0214	4	5	5	5	19
12	21E51A0215	ABSENT				
13	21E51A0216	4	4	5	4	17
14	21E51A0217	4	4	5	4	17
15	22E55A0201	4	5	5	4	18
16	22E55A0202	4	5	5	5	19
17	22E55A0203	4	4	4	4	16
18	22E55A0204	4	5	5	4	18
19	22E55A0205	4	5	5	4	18
20	22E55A0206	4	4	5	4	17
21	22E55A0207	4	4	5	4	17
22	22E55A0208	4	5	5	5	19
23	22E55A0209	4	5	5	4	18
24	22E55A0210	4	5	5	5	19
25	22E55A0211	4	5	5	5	19
26	22E55A0212	ABSENT				
27	22E55A0213	4	5	5	5	19
28	22E55A0214	4	5	5	4	18
29	22E55A0215	5	5	5	5	20
30	22E55A0216	4	5	5	5	19
31	22E55A0217	4	5	5	5	19
32	22E55A0218	5	5	5	5	20
33	22E55A0219	5	5	5	5	20
34	22E55A0220	4	4	5	4	17
35	22E55A0221	5	5	5	5	20
36	22E55A0222	5	5	5	5	20

Lab I/C

HOD

Semester End Examination (SEE): The SEE for practical subject / course in two batches per section shall be conducted at the end of the semester with duration of 3 hours by one internal and one external examiner appointed by the Head of the Institution as per the recommendation of the concerned Head of the Department.

SEE EVALUATION RUBRICS

Criteria	Excellent	Good	Needs Improvement
Design / Code (Theory) (20 Marks)	Answers are accurate, complete, and demonstrate strong understanding of design principles and coding logic. Clear, well-organized, and precise. — 15-20 marks	Answers are mostly correct with minor errors or omissions; reasoning mostly clear. — 10-14 marks	Answers are incomplete, unclear, or contain significant errors in logic or design. — 0-9 marks
Execution (15 Marks)	Demonstrates flawless implementation of the written solution; follows correct procedures; error-free operation. — 13- 15 marks	Implementation is mostly correct with minor issues; follows procedures with minimal errors. — 8-12 marks	Execution is incorrect, incomplete, or fails to follow procedures. — 0-7 marks
Output / Result (15 Marks)	Produces accurate and consistent output/results that fully match expected outcomes. — 13- 15 marks	Output is mostly accurate; minor inconsistencies present but overall acceptable. —8-12 marks	Output is incorrect, inconsistent, or irrelevant to the problem statement. — 0-7 marks
Viva Voce (20 Marks)	Shows thorough understanding of concepts; answers confidently and clearly; responds correctly to all questions. — 15-20 marks	Shows adequate understanding; answers most questions satisfactorily with minor hesitations. — 10-15 marks	Lacks clarity or understanding; unable to answer majority of questions accurately. — 0-10 marks

3.4 Evaluation of Industrial Training/ Internship (Continuous and SEE) (10)

Total Marks 10.00

Institute Marks : 10.00

The Summer Internship shall be registered by the student in consultation with the course coordinator upon completion of the II, IV, and VI semesters. The internship is to be undertaken during the subsequent summer vacation period.

Students are required to submit a detailed report of the internship and make a formal presentation before a departmental academic committee during the III, V, and VII semesters respectively.

The evaluation of each internship submission will carry a total of **100 marks** and will be conducted by a committee comprising the **Head of the Department**, the **respective supervisor**, and **two senior faculty members** from the department.

Rubrics for Evaluation of Internship:

Criteria	**Excellent (90%-100%)**	**Good (60% - 90%)**	**Needs Improvement (40% to 60%)**	**Max Marks**
Understanding of Background and Topic (10 Marks)	Demonstrates clear and deep understanding of the topic with relevant context and background.	Shows general understanding with minor gaps.	Limited or unclear understanding of the topic background.	10
Specific Project Goals (5 Marks)	Goals are well-defined, measurable, and aligned with the topic.	Goals are defined but may lack clarity or completeness.	Goals are vague or not clearly linked to the project.	5
Literature Survey (5 Marks)	Comprehensive review of relevant literature with critical insights.	Covers key literature with basic understanding.	Inadequate or poorly referenced literature.	5
Project Planning (10 Marks)	Well-structured plan with timelines, task allocation, and milestones.	Adequate planning with some clarity and structure.	Poorly planned or lacking clear structure.	10
5. Presentation Skills (10 Marks)	Confident, clear, engaging, and well-paced presentation with effective visuals.	Satisfactory delivery with minor issues in clarity or engagement.	Poorly delivered presentation lacking structure or clarity.	10
6. Question and Answer (10 Marks)	Responds confidently and accurately with in-depth understanding.	Responds adequately with minor errors or hesitation.	Unable to answer effectively or lacks conceptual clarity.	10

Criteria	Max Marks	Description	Mapped PO(s)
Understanding Background and Topic	10	Clarity of domain knowledge and relevance of the topic selected.	PO1 (Engineering Knowledge), PO2 (Problem Analysis)
Specific Project Goals	5	Definition of clear, achievable, and measurable project objectives.	PO3 (Design/Development of Solutions), PO6 (Engineer and Society)
Literature Survey	5	Review and understanding of existing work relevant to the topic.	PO2 (Problem Analysis), PO4 (Conduct Investigations)
Project Planning	10	Logical sequencing of tasks, use of tools, and time management.	PO5 (Modern Tool Usage), PO11 (Project Management and Finance)
Presentation Skills	10	Structured delivery, clarity of speech, visuals, and communication effectiveness.	PO10 (Communication)
Question and Answer	10	Ability to defend work, justify decisions, and respond confidently to queries.	PO2 (Problem Analysis), PO10 (Communication)

HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT

DEPARTMENT OF EEE

ACADEMIC INTERNSHIP EVALUATION FORM

III B.TECH-I SEMESTER (2023-2024)

Batch No: 01 Review: 02.

TITLE: Transformers Manufacturing.

Candidate Details

S.N O	ROLL NO	CANDIDATE NAME	SUPERVISOR
1	21E51A0202	A. Vamshi	Dr. O. P. Suresh
2	21E51A0213	M. Bhargavi	
3	22E55A0205	Ch. Rajesh	
4			
5			

Subject Matter	Marks (50M) Batch Members				
	1	2	3	4	5
Understanding background and Topic(10M)	7	7	10		
Specific Project Goals(5M)	4	4	5		
Literature survey (5M)	4	4	5		
Project Planning(10M)	8	8	10		
Presentation skills (10M)	8	8	10		
Question and Answer (10M)	8	8	10		
TOTAL(50M)	39	39	50		

COMMENTS :

O. P. Suresh
SUPERVISOR

HOD

INTERNSHIP COOD

3.5 Evaluation of Projects (20)

Total Marks 20.00

Institute Marks : 20.00

- Student(s) shall start the Project Work during the VII Semester (IV-B. Tech–I–Semester) as per the Regulations and under supervison of the Project Guide / Project Supervisor assigned by the Head of the Department. The topics for Mini Project, Summer Internship, Project Stage – I and Technical seminar shall be different from one another.
- The Project Work shall be carried out in two stages: Project-I (Stage – I) during VII Semester (IV-B. Tech.–I–Semester), and Project-II (Stage – II) during VIII Semester (IV-B. Tech–II–Semester), and the student has to prepare two independent Project Work Reports – one each during each stage.
- First Report shall include the Project Work carried out under Stage – I, and the Second Report (Final Report) shall include the Project Work carried out under Stage – I and Stage – II put together. Stage – I and Stage – II of the Project Work shall be evaluated for 100 marks each.
- Out of the total 100 marks allotted for each stage of the Project Work, 30 marks shall be for the Continuous Internal Evaluation (CIE), and 70 marks shall be for the End Semester Viva-voce Examination (SEE).
- The marks earned under CIE for both the stages of the Project shall be awarded by the Project Guide / Supervisor (based on the continuous evaluation of student's performance during the two Project Work stages); and the marks earned under SEE shall be awarded by the Project Viva-voce Committee / Board (based on the work carried out, report prepared and the presentation made by the student at the time of Viva-voce Examination).
- For the Project Stage - I, the Viva-voce shall be conducted at the end of the VII Semester, before the commencement of the semester End Examinations, by the Department Evaluation Committee comprising of the Head of the Department or One Senior Faculty member and Supervisor and the Project Stage – II Viva-voce shall be conducted by the Committee comprising of an External Examiner appointed by the Head of the Institution, Head of the Department and Project Supervisor at the end of the VIII Semester, before the commencement of the semester End Examinations.
- If a student does not appear (or fails) for any of the two Viva-voce examinations at the scheduled times as specified above, he may be permitted to reappear for Project Stage - I and/or Project Stage - II Viva-voce examinations, as and when they are scheduled again in that semester; if he fails in such 'one reappearance' evaluation also, he has to reappear for the same in the next subsequent semester(s), as and when they are scheduled, as supplementary candidate.
- Marks will be awarded to indicate the performance of the student in Project work based on the percentage of marks obtained in Continuous Internal Evaluation plus Semester End Examination, both taken together and corresponding letter grades shall be given.
- As a measure of the student's performance, a 10-point Absolute Grading System using the following letter grades (UGC Guidelines) and corresponding percentage of marks shall be followed.

% of Marks Secured (Class Intervals)	**Letter Grade (UGC Guidelines)**	**Grade Points**
90% and above (≥ 90%, ≤ 100%)	O (Outstanding)	10
Below 90% but not less than 80% (≥ 80%, < 90%)	A^+ (Excellent)	9

Below 80% but not less than 70% (≥ 70%, < 80%)	A (Very Good)	8
Below 70% but not less than 60% (≥ 60%, < 70%)	B^+ (Good)	7
Below 60% but not less than 50% (≥ 50%, < 60%)	B (Above Average)	6
Below 50% but not less than 40% (≥ 40%, < 50%)	C (Average)	5
Below 40% (< 40%)	F (Fail)	0
Absent	Ab	0

A structured rubric-based assessment was developed and implemented for evaluating student performance in Project work (Reviews). This rubric evaluates multiple cognitive and professional competencies in accordance with the targeted Program Outcomes (POs) and Program Specific Outcomes (PSOs).

PROJECT WORK REVIEW1 RUBRICS :

Criteria	**Excellent (6 marks)**	**Good (4-5 marks)**	**Needs Improvement (2-3 marks)**
Scope and Relevance (6 MARKS)	* Clearly defines the Problem and its significance. * Reviews a comprehensive range of relevant and up-to-date literature.	* Defines the research topic. * Reviews relevant literature, but may be limited in scope or outdated. * Shows some understanding of the field.	* Attempts to define the research topic. * Reviews some literature, but may not be directly relevant or current. * Limited understanding of the field.
Analysis and Synthesis (6 MARKS)	* Critically analyzes and synthesizes the reviewed literature. * Identifies key themes, trends, and gaps in research.	* Analyzes the reviewed literature. * Identifies some key themes and gaps in research. * Shows some ability to compare and contrast different perspectives.	* Attempts to analyze the reviewed literature. * May identify basic themes but lacks synthesis. * Limited ability

			to compare and contrast different perspectives.
Critical Evaluation (6 MARKS)	* Critically evaluates the strengths and weaknesses of the reviewed literature. * Identifies potential biases and limitations of different studies.	* Evaluates the reviewed literature. * Identifies some strengths and weaknesses of different studies. * Shows some ability to assess the credibility of sources.	* Attempts to evaluate the reviewed literature. * May identify basic strengths and weaknesses but lacks critical evaluation. * Limited ability to assess the credibility of sources.
Citation and Referencing (6 MARKS)	All sources are properly cited in the text and in a reference list.	* Uses a referencing style, but may have some inconsistencies. * Most sources are properly cited.	* Attempts to use a referencing style, but may be inconsistent or inaccurate. * Some sources may be missing citations.
Organization and Presentation (6 MARKS)	* Clear and logical organization. * Well-written and easy to understand. * Free of grammatical errors and typos.	* Generally well-organized. * Clear writing with few errors.	* Somewhat disorganized or unclear. * Writing may contain some errors.

Mapping of Rubrics with PO/PSO:

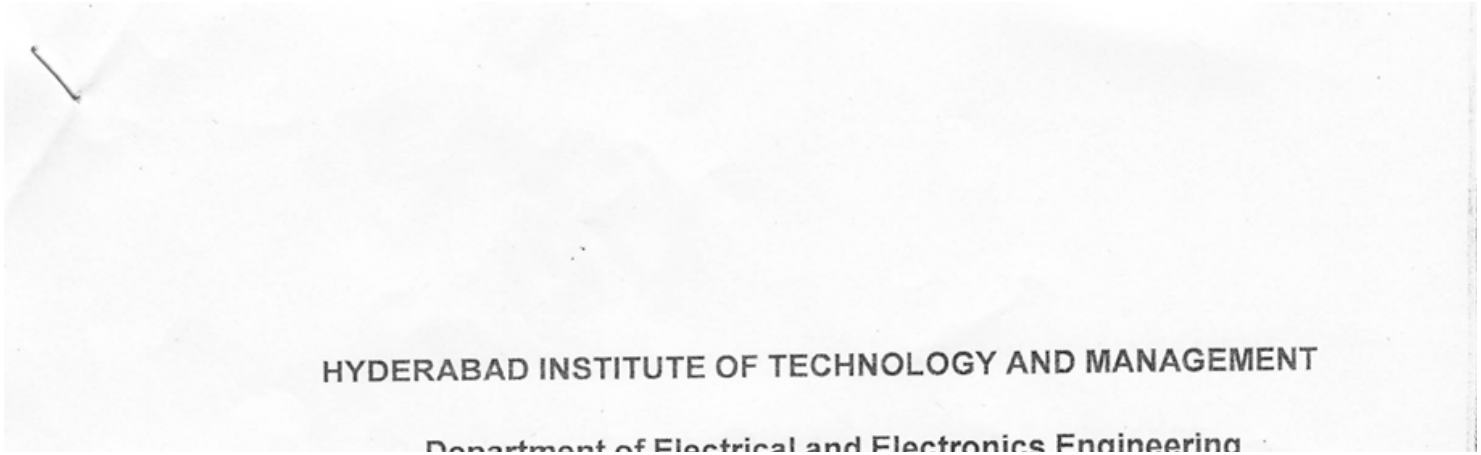
Rubric Criteria	Marks	Description	Linked POs/PSOs
Scope and Relevance	6	Assesses the ability to identify the research problem and review relevant, up-to-date literature.	PO1 (Engineering Knowledge), PO2 (Problem Analysis), PSO1

Analysis and Synthesis	6	Evaluates critical thinking, theme identification, and synthesis of literature.	PO2, PO4 (Conduct Investigations), PSO1,PSO2
Critical Evaluation	6	Assesses judgment in evaluating strengths, weaknesses, biases, and limitations in studies.	PO2, PO4, PO9 (Individual and Team Work), PSO1
Citation and Referencing	6	Checks for academic integrity and use of proper referencing standards.	PO8 (Ethics), PO10 , (Communication),PSO1,PSO2
Organization and Presentation	6	Evaluates clarity, coherence, grammar, and overall quality of presentation.	PO10, PO12 (Lifelong Learning)

Evidence of Student Assessment Through Rubrics:

- Individual student evaluation sheets, filled out by faculty evaluators during Reviews, are maintained in respective project files.
- Scores for each criterion are recorded along with qualitative feedback where applicable.
- Assessment outcomes are used to provide constructive feedback and guide students toward improvement in further project stages.

In line with the outcome-based education, a comprehensive rubric has been designed to assess students performance in Review 2 of Project Work. This rubric ensures structured evaluation, focusing on technical and managerial competencies while aligning with targeted Program Outcomes (POs) and Program Specific Outcomes (PSOs).



Department of Electrical and Electronics Engineering

PROJECT STAGE-II Review Sheet (2024-25)

Review No : I

Date : 08/02/2025

Batch No : 1

Title Of Project : V2V charging with integration of solar panel

Name Of The Guide: Dr. O. P. Sneesh

S.No	Roll No	Scope and Relevance (6 Marks)	Analysis and Synthesis (6 MARKS)	Critical Evaluation (6 MARKS)	Citation and Referencing (6 MARKS)	Organization and Presentation (6 MARKS)	Signature
1	22ESSAD215	6	6	6	5	6	
2	22ESSAD205	6	6	6	5	6	Rajesh
3	22ESSAD214	6	4	5	5	4	Pranay
4	21ESSAD217	6	5	6	5	4	

Comments :

S.No	Comments
1	need to have more literature survey to get concept of V2V

PRC Member | Internal Supervisor | Project Coordinator | HOD

PROJECT WORK REVIEW2 RUBRICS :

Criteria	Excellent (6 marks)	Good (4-5 marks)	Needs Improvement (2-3 marks)
Understanding of the Project (6 marks)	Demonstrates a clear and comprehensive understanding of the project objectives, scope, and technical challenges.	Has a good grasp of the project goals and can explain the key technical aspects.	Shows a basic understanding of the project but may lack clarity on specific technical details.
Project Methodology (6 marks)	Clearly outlines the chosen methodology for research, design, implementation, and testing. Explains the rationale behind the approach and justifies its suitability for the project.	Describes a well-defined methodology but may lack detailed explanation for specific steps.	Presents a general approach but lacks details or may not be well-suited for the project.
Progress on Work (6 marks)	Significant progress has been made on all project aspects (design, simulation, construction, etc.) as planned. Meets or exceeds expected milestones.	Demonstrates steady progress on the project with some completed tasks according to the plan.	Limited progress on the project. May be falling behind schedule.
	Demonstrates a strong understanding of relevant electrical engineering concepts and principles applied	Shows a good understanding of technical concepts	Limited knowledge of technical concepts applied to the project.

Technical Content (6marks)	to the project. Uses appropriate technical language and terminology.	but may have minor inaccuracies.	May exhibit significant errors.
Project Management (6 marks)	Effectively manages project timelines, resources, and budget. Identifies and mitigates potential risks. Demonstrates strong communication skills for project updates.	Shows a good effort in managing the project but may lack detailed planning or communication.	Limited project management skills. Potential for delays or exceeding budget. Poor communication regarding project progress.

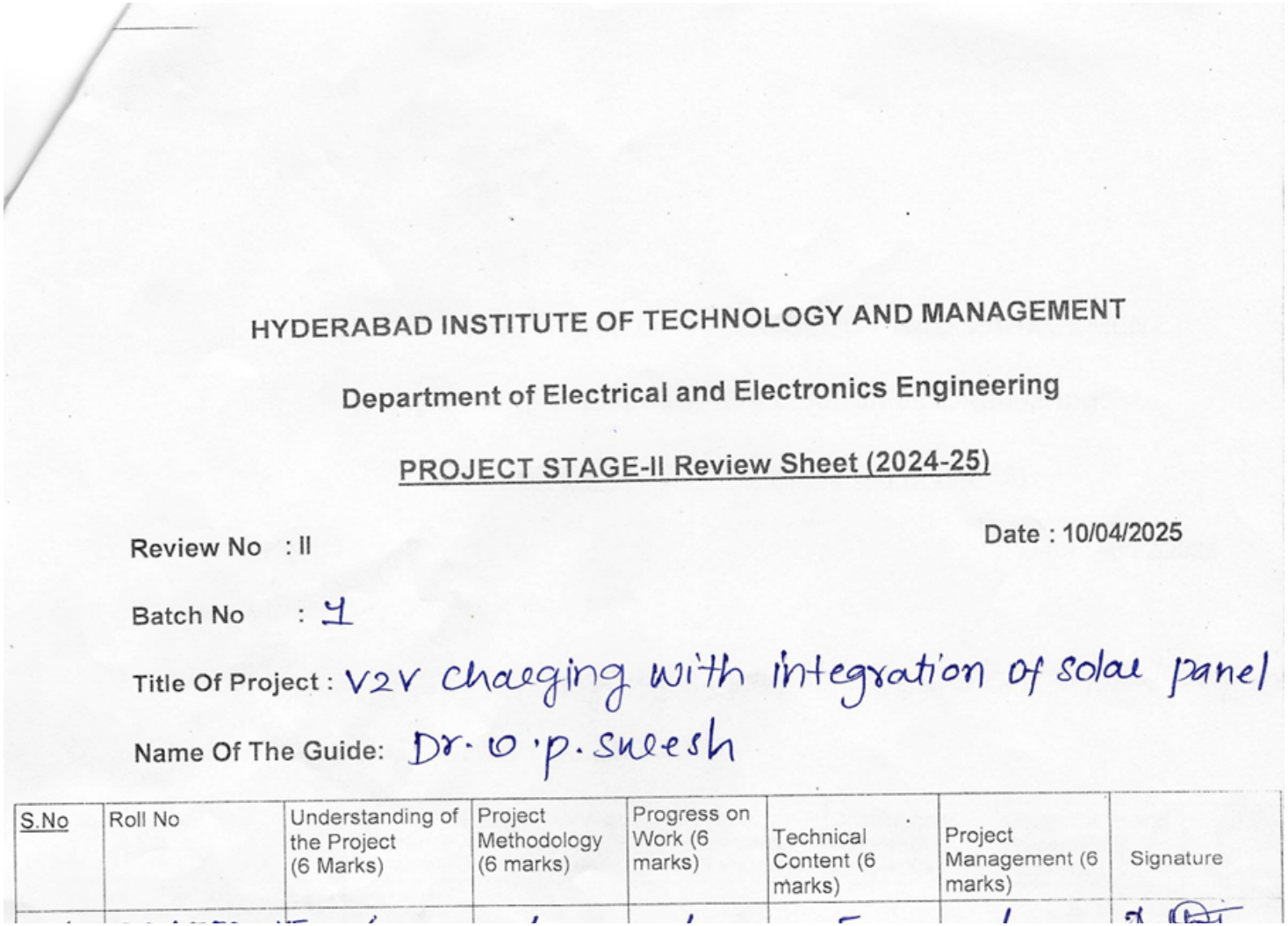
Mapping of Rubrics with PO/PSO:

Rubric Criteria	**Marks**	**Description**	**Linked POs/PSOs**
Understanding of the Project	6	Evaluates depth of understanding of project objectives, scope, and technical challenges.	PO1 (Engineering Knowledge), PO2 (Problem Analysis)
Project Methodology	6	Assesses clarity, rationale, and appropriateness of the chosen approach.	PO3 (Design/Development), PO4 (Investigation), PSO1
Progress on Work	6	Measures advancement in design, simulation, and construction as per milestones.	PO11 (Project Management), PSO1,PSO2
Technical Content	6	Examines the use of core engineering concepts and terminology.	PO1, PO5 (Modern Tool Usage), PSO1,PSO2
Project Management	6		

			Reviews planning, timeline, budget control, and communication efficiency.	PO9 (Individual and Team Work), PO10 (Communication), PO11

Evidence of Student Assessment Through Rubrics:

- Faculty evaluators conduct individual and team assessments using the rubric sheet.
- Evaluation records, scoring breakdowns, and reviewer comments are documented and stored in course files.
- These assessments are used to provide developmental feedback to students and to guide improvements in the subsequent project phases.



HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT

Department of Electrical and Electronics Engineering

PROJECT STAGE-II Review Sheet (2024-25)

Review No : II

Date : 10/04/2025

Batch No : 4

Title Of Project : V2V charging with integration of solar panel

Name Of The Guide: Dr. O.P. Suresh

S.No	Roll No	Understanding of the Project (6 Marks)	Project Methodology (6 marks)	Progress on Work (6 marks)	Technical Content (6 marks)	Project Management (6 marks)	Signature

1	22ES5A0215	6	6	6	5	6	[illegible]
2	22ES5A0205	6	6	6	4	5	Rajesh
3	22ES5A0214	6	6	6	4	4	Pranay
4	21ES1A0217	6	6	6	3	4	[illegible]

Comments :

S.No	Comments
1	Good works done and prototype also in working condition.

PRC Member Supervisor Project Coordinator HOD

3.6 Evidence of Addressing Sustainable Development Goals (SDG) (10)

Total Marks 10.00

Institute Marks : 10.00

As part of our commitment to Outcome-Based Education (OBE) and global sustainability efforts, the department actively promotes integration of the United Nations Sustainable Development Goals (SDGs) into various academic and co-curricular activities, including student projects, research, and community initiatives.

To instill environmental and social responsibility among students, the following actions are undertaken:

Project Work and Research:

Students are encouraged to work on course and capstone projects that directly contribute to selected SDGs such as affordable and clean energy (SDG 7), industry, innovation and infrastructure (SDG 9), sustainable cities (SDG 11), and climate action (SDG 13). These projects often address local and global environmental challenges with practical and sustainable solutions.

Student Clubs and Co-curricular Activities:

A key initiative in promoting sustainability is the active functioning of the Go Green Club. The clubs primary aim is to foster environmental sustainability and raise awareness about eco-friendly practices among students. It encourages participation in activities that reduce carbon footprint, conserve natural resources, and promote green living. Events such as plantation drives, waste segregation campaigns, energy audits, and clean-up programs are organized regularly to support these goals.

Affiliation with IGBC:

Strengthening our commitment to sustainability, our institution is also a member of the Indian Green Building Council (IGBC). This association enables access to national-level green building practices, seminars, and certifications that benefit both faculty and students in adopting environmentally responsible design and development practices.

Academic Year	Activity/Event Name	Organizing Body	Date	Brief Description	Linked SDG(s)	Outcome/Impact
2022–2023	Awareness session on Energy Conservation Day	EEE +IIC	14 Dec 2022	Awareness session on the importance of energy efficiency and conservation methods	SDG 7 (Affordable and Clean Energy)	Enhanced understanding of energy saving methods and green energy importance
2023–2024	Awareness on Pollution	IIC + Student Clubs	2 Dec 2023	Seminar on air and water pollution, its effects, and mitigation measures	SDG 3 (Good Health), SDG 13 (Climate Action)	Increased awareness about pollution effects and strategies for environmental protection
2023–2024	Awareness session on Energy Conservation Day	EEE +IIC	14 Dec 2023	Awareness session on the importance of energy	SDG 7 (Affordable and Clean Energy)	Enhanced understanding of energy saving methods and green energy importance

				efficiency and conservation methods		
2023–2024	Green Building Congress Conference – Chennai	IGBC	Nov 2023	Participation in a national-level conference to explore green technologies	SDG 9 (Industry Innovation), SDG 11 (Sustainable Cities)	Exposure to industry experts and innovative green building practices
2023–2024	Tree Plantation Drive (Campus-wide)	IGBC + NSS	5 June 2023	Plantation drive on campus in celebration of World Environment Day	SDG 15 (Life on Land), SDG 13 (Climate Action)	Improved green cover and greater student involvement in biodiversity protection
2023–2024	National Poster Presentation	IGBC, HPBM	23/01/2024 -29/01/2024	One student selected and participated in a national-level poster competition on sustainability	SDG 13 (Climate Action), SDG 15 (Life on Land)	National-level exposure to sustainable development themes and green initiatives
2023–2024	IGBC Sustainable Practices Field Visit	IGBC Student Chapter	14/06/2024	Field visit to observe sustainable practices in water, waste, and energy management	SDG 6 (Clean Water), SDG 12 (Responsible Consumption), SDG 13 (Climate Action)	Practical understanding of sustainable practices through real-world implementations
2024–2025	Tree Plantation Drive	IGBC + NSS	5 June 2025	Annual tree plantation drive to continue the green initiative on campus	SDG 15 (Life on Land)	Reinforced eco-awareness and active participation in

						campus biodiversity efforts

Sustainability-focused Competitions and Outreach:

Students actively participate in hackathons, innovation contests, and interdisciplinary events centered around sustainable development themes. These activities foster innovation while addressing key environmental and societal issues.

A curated list of student projects has been mapped to relevant Sustainable Development Goals (SDGs), showcasing their alignment with global priorities such as clean energy, sustainable cities, responsible consumption, and climate action—reflecting the department's commitment to fostering socially and environmentally responsible engineering solutions.

3.7 Attainment of Course Outcomes (25) **Total Marks 25.00**

3.7.1. Describe the Assessment Tools and Processes Used to Gather the Data for the Evaluation of Course Outcome (5) Institute Marks : 5.00

Course Outcome (CO) Attainment:

The assessment of the Course Outcomes attainment for each course is carried out through assessment consist of Continuous Internal Assessments-CIA including the Quiz, Assignments and Semester End Examinations-SEE. Each question in mid/semester end/assignment/quiz is tagged to the corresponding CO. The attainment of each CO is based on the marks scored for the assessment questions based on those Cos.

1. Mid Examinations (CIA)

This type of performance assessment is carried out during the examination sessions which are held twice a semester. Each and every exam is focused in attaining the relevant course outcomes.

2. Semester End Examination (SEE)

Semester End Examination is a metric for assessing whether all the COs are attained. Examination is more focused on attainment of course outcomes and program outcomes using a descriptive exam.

3. Rubrics for Laboratory and Project Assessments.

Rubrics are formulated for the assessment of Laboratory, Mini Project, Major projects, Seminar, and Internship courses. The attainment of Course Outcomes of all courses with respect to set attainment levels is recorded.

The expected target level of course outcomes is set in the range of 50% based on the cognitive levels of the students by the course coordinator at the beginning of the semester. The performance of the students in the examinations during the semester in each course is used to compute the level of attainment of the COs. The questions of each examination are tagged to the course outcomes by the course coordinator.

Course Outcomes – Assessment Process

The Mid Assessment papers are framed in accordance with course outcomes and the results are analyzed to evaluate the attainments of the mapped course outcomes.

- The analysis is interpreted to find the level of attainment of COs and compared with predefined targets.
- The average of results of CO attainment of all the courses in a semester mapping to a particular PO is compared with pre-defined target of PO.

Program Outcomes and Program Specific Outcomes are mapped to Course Outcomes. A performance criterion is set for all the COs.

Target: Fixed based on previous 3 years pass percentage – 50%

Levels Assigned:

Level 1: 50% of students achieving a set attainment level of 50%

Level 2: 55% of students achieving a set attainment level of 50%

Level 3: 60% of students achieving a set attainment level of 50%

Weightage for CIE & SEE: 50% for CIE and 50% for SEE

Process:

1) Enter the marks of the students as per CO wise how we enter in our award sheets given by exam branch into excel sheet for Internal and External

Internal marks include: Mid1, Quiz1, Assignment 1, Mid2, Quiz2, Assignment2

2) Find the number of students attempted CO1, CO2, CO3, CO4

3) Find the number of students getting more than 50% marks for each CO

4) CO assessment = No. of students scored more than 50% marks/No. of students attempted respective CO

5) "Threshold based attainment" can be obtained through percentage weightage for each CO.

6) Step 1 to 5 is used for Internal Assessments and Attainments.

7) Similarly, external Assessments and attainments are obtained using the same process.

8) Enter SEE marks in the excel sheet and find out the average marks

9) CO assessment for external = Average of Marks/Total Marks, We call this as "Average based attainment"

10) Calculate Number of students scoring more than 50% marks. Calculate "Threshold based attainment" by dividing Number of students scoring more than 50% marks/ Total number of students attempted the exam

11) Both percentages of CIE and SEE. Take 50% weightage for both and calculate average for each CO

3.7.2 Record the Attainment of Course Outcomes of all Courses with Respect to Set Attainment Levels (20)

Institute Marks : 20.00

As part of the academic quality assurance process, course outcome (CO) attainment levels for each course are set at the beginning of the academic semester consider the course outcome and the curriculum mapping. These levels are established based on the expected outcomes from the students after deliver of the course by the concerned faculty. The attainment of COs is measured through both Continuous Internal Examinations (CIE) and the Semester End Examination (SEE). CIE includes various assessment components such as mid-term exams, assignments, quizzes, lab work, and

project-based evaluations, all carefully mapped to specific COs. The SEE evaluates students' comprehensive understanding of the course and is also aligned with COs. The entire process, including mapping, evaluation metrics, attainment calculations, and action plans for non-attainment, is documented and maintained in the course file for academic reviews.

The following table presents the attainment levels of Course Outcomes (COs) for all courses of the 2020–2024 batch, evaluated against the predefined target attainment levels.

Code/Course	CO 1	C0 2	CO 3	CO 4	Avera ge
CH102BS/Chemistry	0.5	0.5	0.6		0.5
EE103ES/Basic Electrical Engineering	1.0	0.7	1.5	1.5	1.2
EE105HS/English	0.3	0.6	0.6	0.5	0.5
CH106BS/Engineering Chemistry Lab	0.8	0.8	0.8	0.8	0.8
EN107HS/English language Communication Skills Lab	3.0	3.0	3.0	3.0	3.0
ME105ES/Engineering Workshop	3.0	3.0	3.0	3.0	3.0
EE108ES/Basic Electrical Engineering Lab	3.0	3.0	3.0	3.0	3.0
MA201BS/Mathematics-II	2.3	2.3	2.5	2.0	2.3
AP202BS/APPLIED PHYSICS	0.8	0.6	0.9	0.9	0.8
CS203ES/PROGRAMMING FOR PROBLEM SOLVING	1.0	1.0	1.0	1.0	1.0
ME204ES/Engineering Graphics	0.3	0.3	0.5	0.5	0.4
AP205BS/APPLIED PHYSICS LAB	3.0	3.0	3.0	3.0	3.0
CS206ES/PROGRAMMING FOR PROBLEM SOLVING LAB	3.0	3.0	3.0	3.0	3.0
EE305PC/Electromagnetic Fields	1.5	1.5	1.5	1.5	1.5
EE304PC/Electrical Machines-I	2.2	2.2	2.2	2.2	2.2
EE306PC/Electrical Machines Lab-I	3.0	3.0	3.0	3.0	3.0
EE301ES/Engineering Mechanics	3.0	3.0	3.0	3.0	3.0
E308PC/Electrical Circuits lab	3.0	3.0	3.0		3.0

MC309/Gender Sensitization Lab	3.0	3.0	3.0	3.0	3.0
EE302PC/Electrical Circuits Analysis	1.5	1.5	1.5	1.5	1.5
EE303PC/Analog Electronics	3.0	3.0	3.0	3.0	3.0
EE307PC/Analog Electronics Lab	3.0	3.0	3.0	3.0	3.0
MA401BS/Laplace Transforms, Numerical Methods & Complex Variables	3.0	3.0	3.0	3.0	3.0
EE402PC/Electrical Machines-II	1.0	1.0	1.5	1.5	1.3
EE404PC/Control Systems	1.1	1.1	0.9	0.9	1.0
EE405PC/POWER SYSTEMS-I	1.5	1.5	1.5	1.0	1.4
EE406PC/Digital Electronics Lab	3.0	3.0	3.0	3.0	3.0
EE407PC/Electrical Machines-II lab	3.0	3.0	3.0	3.0	3.0
EE408PC/Control Systems Lab	3.0	3.0	3.0	3.0	3.0
EE403PC/Digital Electronics	1.5	1.5	1.5	1.5	1.5
EE502PE/Power Systems-II	0.5	0.8	0.8	0.8	0.7
EE503PE/Measurements and Instrumentation	0.7	0.7	0.0	0.8	0.5
EE501PE/Power Electronics	0.8	0.8	0.8	0.8	0.8
EE507PC/Measurements & Instrumentation Lab	3.0	3.0	3.0	3.0	3.0
EE511PE/Computer Architecture	0.8	0.6	0.8	0.8	0.7
EE506PC/Power Electronics Lab	3.0	3.0	3.0	3.0	3.0
SM504MS/Business Economics and Financial Analysis	0.8	0.8	0.8	0.8	0.8
EN508HS/Advanced Communication Skills Lab	3.0	3.0	3.0	3.0	3.0
EE505PC/Power System Simulation Lab	3.0	3.0	3.0		3.0
MC510/Intellectual Property Rights	3.0				3.0
EE604PC/Power System Operation & Control	3.0	3.0	3.0	3.0	3.0

EE612PE/Power Semiconductor Drives	1.5	1.3	1.5	1.2	1.4
EC600OE/Fundamentals of Internet of things	3.0	3.0	3.0	2.3	2.8
EE601PC/Signals and Systems	1.5	1.5	1.2	1.5	1.4
EE602PC/Microprocessor and Microcontrollers	1.5	1.1	1.5	1.5	1.4
EE606PC/Microprocessor and Microcontrollers Lab	3.0	3.0	3.0	3.0	3.0
EE603PC/Power System Protection	1.3	1.3	1.3	1.3	1.3
EE607PC/Signals and Systems Lab	3.0	3.0	3.0	3.0	3.0
EE605PC/Power Systems Lab	3.0	3.0	3.0		3.0
EE703PC/Seminar	3.0	3.0	3.0	3.0	3.0
MT701AE/Principles of Enterpreneurship	3.0	3.0	3.0	3.0	3.0
EE713PE/Electrical and Hybrid Vehicles	0.7	0.7	0.7	0.7	0.7
SM701MS/Fundamentals of Management for Engineers	2.8	2.8	3.0	3.0	2.9
EE701PC/Electrical & Electronics Design Lab	3.0	3.0	3.0	3.0	3.0
EE702PC/Industrial Oriented Mini Project/Summer InternshipEE	3.0	3.0	3.0	3.0	3.0
EE704PC/Project Stage-I	3.0	3.0	3.0	3.0	3.0
EE723PE/Industrial Electrical Systems	1.5	1.5	1.5	1.5	1.5
EE811PE/POWER QUALITY & FACTS	3.0	3.0	3.0	3.0	3.0
EE822PE/ELECTRICAL DISTRIBUTION SYSTEMS	1.5	1.5	1.5	1.5	1.5
EE801PC/PROJECT STAGE-II	3.0	3.0	3.0	3.0	3.0
ME800OE/NON CONVENTIONAL SOURCES OF ENERGY	1.5	1.5	1.5	1.5	1.5

3.8 Attainment of Program Outcomes and Program Specific Outcomes (25)

Total Marks 25.00

Institute Marks : 25.00

PO Attainment

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
MA101BS/Ma	0.1											
CH102BS/Ch	1.1	0.6										
EE103ES/Bas	1	1.2			0.6							
EE105HS/Eng									0.8	1		
CH106BS/En	1.5	0.6										
EN107HS/En									2.4	3		
ME105ES/En	3	1.7	1.4						1.2			1.2
EE108ES/Bas	2.4	1.8		3								
MA201BS/Ma	2.3											
AP202BS/AP	0.8											
CS203ES/PR			1	0.6								
ME204ES/En	0.3	0.2	0.2	0.3	0.3	0.3	0.2		0.2	0.1	0.2	
AP205BS/AP	3											
CS206ES/PR			3	2								
EE305PC/Ele	1.3	1.1										
EE304PC/Ele	1.3	1.4										
EE301ES/Eng	3	2.4		1.4	3							
EE306PC/Ele	2.1	1.8				1.2						
EE308PC/Ele	2.2	1.8	3		1.8							
MC309/Genc		3		3	3							
EE302PC/Ele	1.1	1			0.9							

EE303PC/An	3	1.5	1.5									
EE307PC/An	1.8	1.8	1.8	1.2							1.2	
MA401BS/La	3											
EE402PC/Ele	1.2	0.8										
EE404PC/Co	1.0	0.6			0.4							
EE405PC/PC	1.4	1.4										
EE406PC/Dig	3	1.8	2.2		2.4			3		1.8		
EE407PC/Ele	2.7	2.7			2.6							
EE408PC/Co	3	1.2	1.2									
EE403PC/Dig	0.9	0.8										
EE502PE/Pov	1.2	1.2			1.2							
EE503PE/Me	0.9	0.7										
EE501PE/Pov	0.3	0.5										
EE507PC/Me	2.4	2.6										
EE511PE/Cor	1.4				1.2							
EE506PC/Po	2.4	2.6	2.2	2.4	3							
SM504MS/Bu										0.3		0.8
EN508HS/Ad									1.8	3		
EE505PC/Po	3	3			3							
MC510/Intelle	1.2				1.2						1.2	
EE604PC/Po	2.7	2.7			1.8							
EE612PE/Pov	1.1	0.9										
EC600OE/Fu	2.8	2	3	3	2.8							
EE601PC/Sig	1.4											
EE602PC/Mic	1.1	0.8	0.9	0.8	0.7							
EE606PC/Mic	2.4		3		3							

EE603PC/Po	0.8	0.8			0.8							
EE607PC/Sig	1.6	1.8	2.6	3	1.2	1.4						
EE605PC/Po	3	1.6		2.6	1.6	1.4						
MT701AE/Pri											1.8	
EE713PE/Ele	1.4	1.4										
SM701MS/Fu									1.6	2.3	1.8	
EE701PC/Ele		3										
EE723PE/Ind	1.2	1.2			0.9							
EE811PE/PO	1.5	1.5			1.2							
EE822PE/ELI	1.4	1.4			0.9							
ME800OE/NC	0.8	0.9	0.6									
EE704PC/Pro	3	3	3	3	3	3	3	3	3	3	3	3
EE801PC/PR	3	3	3	3	3	3	3	3	3	3	3	3
EE703PC/Sei	3	3						2	3	3		2
EE702PC/Ind	3	3	3	3	3				3	3	3	

PO Attainment Indirect

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Program Exit	2.7	2.8	2.6	2.7	2.8	2.8	2.7	2.7	2.8	2.8	2.7	2.9

PO Attainment Level

> Note: The Institution can fix the weightage of the indirect attainment maximum up to 20%.

Define the Weightage for Indirect Attainment: 20.00

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Direct Attainment	1.84	1.64	2.03	2.15	1.80	1.72	2.07	2.75	2.0	2.14	1.9	2.0
InDirect Attainment	2.7	2.8	2.6	2.7	2.8	2.8	2.7	2.7	2.8	2.8	2.7	2.9
Overall Attainment	2.01	1.87	2.14	2.26	2	1.94	2.20	2.74	2.16	2.27	2.06	2.18

PSO Attainment

Course	PSO1	PSO2
MA101BSMathematics	0.1	
CH102BSChemistry	0.9	
EE103ESBasicElectrica	1	1
EE105HSEnglish	0.8	
CH106BSEngineeringC	1.2	
EN107HSEnglishlangua	2.4	
ME105ESEngineeringV	3	1.8
EE108ESBasicElectrica	3	1.8
MA201BSMathematics	1.8	
AP202BSAPPLIEDPHY	0.6	
CS203ESPROGRAMM	0.8	
ME204ESEngineeringG	0.2	
AP205BSAPPLIEDPHY	2.4	
CS206ESPROGRAMM	2.3	
EE305PCElectromagne	1.5	0.9
EE304PCElectricalMac	2.4	
EE306PCElectricalMac	3	1.8
EE301ESEngineeringM	2.4	
E308PCElectricalCircui	3	2.6
MC309GenderSensitiza	2.4	
EE302PCElectricalCirc	1.5	0.9
EE303PCAnalogElectro	3	1.8
EE307PCAnalogElectro	3	1.8
MA401BSLaplaceTrans	2.4	
EE402PCElectricalMac	1.2	1

EE404PCControlSyster	0.9	0.8
EE405PCPOWERSYST	1	0.6
EE406PCDigitalElectro	3	1.8
EE407PCElectricalMac	3	1.8
EE408PCControlSyster	3	2.4
EE403PCDigitalElectro	1.5	0.9
EE502PEPowerSystem	0.9	0.6
EE503PEMeasurement	1	0.8
EE501PEPowerElectro	1.5	1.2
EE507PCMeasurement	3	1.8
EE511PEComputerArc	1.1	
EE506PCPowerElectro	2.7	2.2
SM504MSBusinessEc	1.2	
EN508HSAdvancedCo	2.4	
EE505PCPowerSystem	3	1.8
MC510IntellectualProp	1.8	
EE604PCPowerSystem	3	1.8
EE612PEPowerSemicc	1.4	0.9
EC600OEFundamental	2.2	
EE601PCSignalsandSy	1.4	0.9
EE602PCMicroprocess	1.4	0.9
EE606PCMicroprocess	3	1.8
EE603PCPowerSystem	1.3	1.3
EE607PCSignalsandSy	3	1.8
EE605PCPowerSystem	3	1.8
EE703PCSeminar	3	2.4
MT701AEPrinciplesofE	2.4	
EE713PEElectricalandI	1.4	0.9

SM701MSFundamenta	1.1	
EE701PCElectricalElec	3	1.8
EE702PCIndustrialOrie	3	2.1
EE704PCProjectStagel	3	1.8
EE723PEIndustrialElec	1.2	1.2
EE811PEPOWERQUAL	3	2.4
EE822PEELECTRICAL	1.5	0.9
EE801PCPROJECTST/	3	1.8
ME800OENONCONVE	1.5	0.9

PSO Attainment Indirect

Survey	PSO1	PSO2
Program Exit Survey	2.5	2.8

PSO Attainment Level

Course	PSO1	PSO2
Direct Attainment	2.00	1.49
InDirect Attainment	2.5	2.8
Overall Attainment	2.1	1.75

4 STUDENTS' PERFORMANCE (120)

Total Marks 80.92

:

Table No. 4A: 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	2024-25 (CAY)	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)	2020-21 (CAYm4)	2019-20 (CAYm5)	2018-19 (CAYm6)

headings, wherever applicable)							
N=Sanctioned intake of the program (as per AICTE /Competent authority)	30	30	60	60	60	60	60
N1=Total no. of students admitted in the 1st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program	30	16	34	17	22	27	24
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	18	36	22	36	31	36
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	1	0	0	0	0	0	0
Total number of students							

admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	31	34	70	39	58	58	60

Table No. 4B: Admission details for the program through multiple entry and exit points.

	Item (No. of students admitted/exited through multiple entry and exit points) in the respective batch	**2024-25 (CAY)**	**2023-24 (CAYm1)**	**2022-23 (CAYm2)**	**2021-22 (CAYm3)**	**2020-21 (LYG)**	**2019-20 (LYGm1)**	**2018-19 (LYGm2)**
N52=No. of students admitted in 2nd year via multiple entry and exit points in same batch	N52=No. of students admitted in 2nd year via multiple entry and exit points in same batch	0	0	0	0	0	0	0
N53=No. of students admitted in 3rd year via multiple entry and exit points in same batch	N53=No. of students admitted in 3rd year via multiple entry and exit points in same batch	0	0	0	0	0	0	0
N54=No. of students admitted in 4th year via multiple entry and exit points in same batch	N54=No. of students admitted in 4th year via multiple entry and exit points in same batch	0	0	0	0	0	0	0
N5=N52+N53+N54	N5=N52+N53+N54	0	0	0	0	0	0	0
N61=No. of students exits after 1st year via multiple entry and exit points in same batch	N61=No. of students exits after 1st year via multiple entry and exit points in same batch	0	0	0	0	0	0	0
N62=No. of students exit after 2nd year via multiple entry and exit points	N62=No. of students exit after 2nd year via multiple entry and exit points	0	0	0	0	0	0	0
N63=No. of students exit after 3rd year via multiple entry and exit points in same batch	N63=No. of students exit after 3rd year via multiple entry and exit points in same batch	0	0	0	0	0	0	0
N6=N61+N62+N63	N6=N61+N62+N63	0	0	0	0	0	0	0

Table No. 4C: No. of students graduated within the stipulated period of the program.

Year of entry	Total no. of students (N1 + N2 + N3+ N4 + N5 - N6 as defined above)	Number of students who have successfully graduated in stipulated period of study) [Total of with Backlog + without Backlog]			
		I year	II year	III year	IV year
2024-25 (CAY)	31				
2023-24 (CAYm1)	34	13			
2022-23 (CAYm2)	70	31	66		
2021-22 (CAYm3)	39	14	36	35	
2020-21 (LYG)	58	21	56	52	52
2019-20 (LYGm1)	58	27	58	56	56
2018-19 (LYGm2)	60	20	56	56	56

4.1 Enrolment Ratio (20)

Total Marks 14.00

Institute Marks : 14.00

Get Details from Table 4.1

Table No.4.1.1: 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]
2024-25 (CAY)	30	30	1	103.33
2023-24 (CAYm1)	30	16	0	53.33
2022-23 (CAYm2)	60	34	0	56.67

Average [(ER1 + ER2 + ER3) / 3] = 71.11 ≡ 14.00

Assessment : 14.00

4.2 Success Rate of the Students in the Stipulated Period of the Program (15)

Total Marks 8.70

Institute Marks : 8.70

Table No.4.2.1: The success rate in the stipulated period of a program.

Item	(2020-21) LYG	(2019-20) LYGm1	(2018-19) 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).	96.00	91.00	96.00
B=No. of students who graduated from the program in the stipulated course duration	52.00	56.00	56.00
Success Rate (SR)= (B/A) * 100	54.17	61.54	58.33

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 58.01

SR Points : 8.70

Note *: If the value of A in Table No. 4.2.1 is less than the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2), then the value of A in Table No. 4.2.1 should be the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2).

4.3 Academic Performance of the First-Year Students of the Program (10) **Total Marks 5.08**

Institute Marks : 5.08

Table No.4.3.1: Academic Performance of the First-Year Students of the Program.

Academic Performance	**CAYm1(2023-24)**	**CAYm2(2022-23)**	**CAYm3 (2021-22)**
X=(Mean of 1st year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 1st year/10)	5.14	6.06	6.70
Y=Total no. of successful students	13.00	31.00	14.00
Z=Total no. of students appeared in the examination	16.00	34.00	17.00
API [X*(Y/Z)]	4.18	5.53	5.52

Average API[(AP1+AP2+AP3)/3] : 5.08

Assessment = Average API : 5.08

4.4 Academic Performance of the Second Year Students of the Program (10) **Total Marks 6.87**

Institute Marks : 6.87

Table No.4.4.1: Academic Performance of the Second Year Students of the Program.

Academic Performance	**CAYm1 (2023-24)**	**CAYm2 (2022-23)**	**CAYm3 (2021-22)**
X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2rd year/10)	6.64	7.60	6.60
Y=Total no. of successful students	66.00	36.00	56.00
Z=Total no. of students appeared in the examination	67.00	36.00	57.00

API [X * (Y/Z)]	6.54	7.60	6.48

Average API [(AP1 + AP2 + AP3)/3] : 6.87

Assessment [AverageAPI] : 6.87

4.5 Academic Performance of the Third Year Students of the Program (10)

Total Marks 6.50

Institute Marks : 6.50

Table No.4.5.1: Academic Performance of the Third Year Students of the Program

Academic Performance	**CAYm1 (2023-24)**	**CAYm2 (2022-23)**	**CAYm3 (2021-22)**
X=(Mean of 3rd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 3rd year/10)	7.80	6.80	5.80
Y=Total no. of successful students	35.00	52.00	56.00
Z=Total no. of students appeared in the examination	36.00	56.00	58.00
API [X*(Y/Z)]:	7.58	6.31	5.60

Average API [(AP1 + AP2 + AP3)/3] : 6.50

Assessment [1.5 * AverageAPI] : 6.50

4.6 Placement, Higher Studies and Entrepreneurship (30)

Total Marks 14.77

Institute Marks : 14.77

Table No. 4.6.1: Placement, higher studies, and entrepreneurship details.

Item	**LYG (2020-21)**	**LYGm1(2019-20)**	**LYGm2(2018-19)**
FS*=Total no. of final year students	96.00	91.00	96.00
X=No. of students placed	41.00	48.00	45.00
Y=No. of students admitted to higher studies	3.00	2.00	0.00
Z= No. of students taking up entrepreneurship	0.00	0.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	45.83	54.95	46.88

Average Placement Index = (P_1 + P_2 + P_3)/3: 49.22

Placement Index Points: 14.77

4.7 Professional Activities (25) **Total Marks 25.00**

4.7.1 Professional Societies/ Bodies, Chapters, Clubs, and Professional Engineering Events Organized (5) Institute Marks : 5.00

Table No. 4.7.1.1: List of active professional societies/bodies/chapters/clubs.

S.No	Name of the Professional Societies/Bodies, Chapters, Clubs
1	Institution of Electronics and Telecommunication Engineers (IETE) Student Chapter
2	Institute of Electrical and Electronics Engineers (IEEE) Student Chapter
3	IEEE- Women in Engineering Affinity group
4	IEEE- Communications Society
5	Indo Universal Collaboration for Engineering Education- Engineers without borders (IUCEE- EWB)
6	Indian Green Building Council
7	Grand Challenge Scholars Program

Table No. 4.7.1.2: List of events/programs organized.
(CAYm1) 2023-24

S.No	Name of the Professional Societies/Bodies, Chapters, Clubs	Name of the Event	National/International level	Date of Event (DD/MM/YYYY)
1	Institution of Electronics and Telecommunication Engineers (IETE) Student Chapter	Technical Talk on Recent trend on AI in Electronics antum Computing	National	18/10/2023
2	Institution of Electronics and Telecommunication Engineers (IETE) Student Chapter	Technical talk on Quantum Computing	National	25/11/2023
3	Institution of Electronics and Telecommunication Engineers (IETE) Student Chapter	Industrial visit(Singur Power Plant)	National	27/03/2024
4	Institution of Electronics and Telecommunication Engineers (IETE) Student Chapter	Industrial visit(Power Tech Transformer)	National	04/04/2024
5	Institution of Electronics and Telecommunication Engineers (IETE) Student Chapter	Industrial visit(Smrithi Industries)	National	30/03/2024
6	Institute of Electrical and Electronics Engineers (IEEE) Student Chapter	Work shop(Internet Of Things)	National	10/01/2024
7	Institute of Electrical and Electronics Engineers (IEEE) Student Chapter	Workshop on Optimizing Industrial processes: A hands-on SCADA workshop	National	31/05/2024
8	Indian Green Building Council	A work shop on waste management	National	20/03/2024
9	Indian Green Building Council	Student Visit to IGBC center	National	15/06/2024

10	Grand Challenges Scholars Program	Graduation day 2024	National	06/07/2024
11	Institute of Electrical and Electronics Engineers (IEEE) Student Chapter	National Energy Coservation Day	National	14/12/2023

(CAYm2) 2022-23

S.No	Name of the Professional Societies/Bodies, Chapters, Clubs	Name of the Event	National/International level	Date of Event (DD/MM/YYYY)
1	Institute of Electrical and Electronics Engineers (IEEE) Student Chapter	Two Days workshop (Real Time Applications of Sensors with IOT)	National	31/03/2023
2	Institute of Electrical and Electronics Engineers (IEEE) Student Chapter	Session on Design thinking	National	01/02/2023
3	Institute of Electrical and Electronics Engineers (IEEE) Student Chapter	webinar On micro Electronics	National	12/02/2022
4	Institute of Electrical and Electronics Engineers (IEEE) Student Chapter	Inauguration Of IEEE Robotics	National	02/08/2022
5	Indo Universal Collaboration for Engineering Education- Engineers without borders (IUCEE- EWB)	Quantum Energy Industry	National	25/11/2022
6	Indo Universal Collaboration for Engineering Education- Engineers without borders (IUCEE- EWB)	Field/Exposure visit to pre	National	28/10/2022
7	IEEE-Women in EngineeringAffinity Group	Workshop on "Entreprenership"	National	23/09/2022
8	Grand Challenges Scholars Program	Graduation day	National	09/06/2023
9	Institute of Electrical and Electronics Engineers (IEEE) Student Chapter	National Energy Conservation Day	National	14/12/2022

(CAYm3) 2021-22

S.No	Name of the Professional Societies/Bodies, Chapters, Clubs	Name of the Event	National/International level	Date of Event (DD/MM/YYYY)
1	Institute of Electrical and Electronics Engineers (IEEE) Student Chapter	A 3-Day workshop on Electric Vehicle Power Train and Battery Management System	National	16/06/2022
2	Institute of Electrical and Electronics Engineers (IEEE) Student Chapter	Overview on Industrial Automation with PLC & SCADA	National	30/11/2021
3	Institute of Electrical and Electronics Engineers (IEEE) Student Chapter	A Hands-on Session on PLC Programming & SCADA	National	28/12/2021
4	Institute of Electrical and Electronics Engineers (IEEE) Student Chapter	Women's day	National	08/03/2022

5	Institute of Electrical and Electronics Engineers (IEEE) Student Chapter	Exposure Visit to MakersSpace,Design Centers	National	17/11/2021
6	Indo Universal Collaboration for Engineering Education-Engineers without borders (IUCEE- EWB)	NSIC Industry Visit	National	29/09/2021
7	Indo Universal Collaboration for Engineering Education-Engineers without borders (IUCEE- EWB)	Natyional Education day	National	11/11/2021
8	IEEE-Women in Engineering Affinity group	Work shop on Design thinking,Critical Thinking and Innovation Design	National	20/02/2022
9	Grand Challenges Scholars Program	Multidisplinary Problem Solving Certification Program	National	26/03/2022
10	Institute of Electrical and Electronics Engineers (IEEE) Student Chapter	National Energy Conservation Day	National	14/12/2021

4.7.2 Student's Participations in Professional Events (10)

Institute Marks : 10.00

Table No. 4.7.2.1: List of students participated in professional events.
(CAYm1) 2023-24

S.No	Name of the Student	Name of the Event	State /State /National/International level	Date of Event (DD/MM/YYYY)	Name of Award
1	Manik Manohar	HackWave Hackathon	NATIONAL	09/11/2024	Participation
2	V Yogeshwar	Electroverse 2024	NATIONAL	03/05/2024	Participation
3	V.Vasavi Priya	Electroverse 2024	NATIONAL	03/05/2024	2nd Prize
4	D.Srinivas	Electroverse 2024	NATIONAL	03/05/2024	2nd Prize
5	K.DeviPriya	Electroverse 2024	NATIONAL	03/05/2024	2nd Prize
6	V.Harsha	Electroverse 2024	NATIONAL	03/05/2024	2nd Prize
7	Vanaja	Electroverse 2024	NATIONAL	03/05/2024	Participation
8	Nashmitha	Electroverse 2024	NATIONAL	03/05/2024	Participation
9	Anusha	Electroverse 2024	NATIONAL	03/05/2024	Participation
10	Manasa	Electroverse 2024	NATIONAL	03/05/2024	Participation
11	Umesh chandra	Electroverse 2024	NATIONAL	03/05/2024	Participation
12	K.Vivek	Electroverse 2024	NATIONAL	03/05/2024	Participation
13	G.SaiBharath	Electroverse 2024	NATIONAL	03/05/2024	Participation
14	B.Aravind	Electroverse 2024	NATIONAL	03/05/2024	Participation
15	B.Dinesh	Electroverse 2024	NATIONAL	03/05/2024	Participation

16	Harsha Vardhan	Electroverse 2024	NATIONAL	03/05/2024	Participation
17	G.Arthi	Electroverse 2024	NATIONAL	03/05/2024	Participation
18	K.Sathwika	Electroverse 2024	NATIONAL	03/05/2024	Participation
19	Shaik Abdul Adil	Electroverse 2024	NATIONAL	03/05/2024	Participation
20	L.Suman	Electroverse 2024	NATIONAL	03/05/2024	Participation
21	G.poojitha	Electroverse 2024	NATIONAL	03/05/2024	Participation
22	Pravalika	Electroverse 2024	NATIONAL	03/05/2024	Participation
23	Nagababu	Electroverse 2024	NATIONAL	03/05/2024	Participation
24	B.Ramya	Electroverse 2024	NATIONAL	03/05/2024	Participation
25	G.sainaveen	Electroverse 2024	NATIONAL	03/05/2024	Participation
26	J Ruchitha	Electroverse 2024	NATIONAL	03/05/2024	Participation
27	K Avinash	Electroverse 2024	NATIONAL	03/05/2024	Participation
28	Lakshmi Prasanna	EPICTHON	NATIONAL	18/12/2023	Participation
29	Siddu	EPICTHON	NATIONAL	18/12/2023	Participation
30	Tejaswini	EPICTHON	NATIONAL	18/12/2023	Participation
31	K Swathi	EPICTHON	NATIONAL	18/12/2023	Participation
32	V.Mahesh	EPICTHON	NATIONAL	18/12/2023	Participation
33	B.RaviTeja	EPICTHON	NATIONAL	18/12/2023	Participation
34	V.Ashritha	IUCEE Avishkar Manthan	NATIONAL	01/03/2024	Participation
35	K.Malleswari	Women Hackathon	NATIONAL	07/03/2024	Participation
36	P.Anudeepthi	Women Hackathon	NATIONAL	07/03/2024	Participation
37	A.Anand	Novathon	NATIONAL	23/06/2024	Participation
38	S.Karthik	Novathon	NATIONAL	23/06/2024	Participation

(CAYm2) 2022-23

S.No	Name of the Student	Name of the Event	State /National/International level	Date of Event (DD/MM/YYYY)	Name of Award
1	Sai Preetham	VALOROUS2K23	NATIONAL	14/03/2023	1st Prize
2	K. Sai Preetham	MAHOTSAV and EXPO UNNATI	NATIONAL	17/03/2023	Participation

3	Divya Sree	VALOROUS2K23	NATIONAL	14/03/2023	1st Prize
4	A.Vamshi	Project Expo	NATIONAL	07/04/2023	Participation
5	MD Imran	Project Expo	NATIONAL	07/04/2023	Participation
6	M.Kailash	Project Expo	NATIONAL	07/04/2023	Participation
7	G.Sindhu Sagar	Project Expo	NATIONAL	07/04/2023	Participation
8	N.Gayathri	Project Expo	NATIONAL	07/04/2023	Participation
9	Ch.Maha Lakshmi	Project Expo	NATIONAL	07/04/2023	Participation
10	R.Mahesh	Hack your path 4.0	NATIONAL	19/12/2022	Participation
11	R.Rohith	Hack your path 4.0	NATIONAL	19/12/2022	Participation
12	R.Sandeep	Hack your path 4.0	NATIONAL	19/12/2022	Participation
13	V.Vasavi Priya	Hack your path 4.0	NATIONAL	19/12/2022	Participation
14	D.Srinivas	Hack your path 4.0	NATIONAL	19/12/2022	Participation
15	K.DeviPriya	Hack your path 4.0	NATIONAL	19/12/2022	Participation

(CAYm3) 2021-22

S.No	Name of the Student	Name of the Event	State /National/International level	Date of Event (DD/MM/YYYY)	Name of Award
1	Yakkanti Raja Shekar Reddy	Technophilla-22	National	30/03/2022	Participation
2	Choudhary Aman Kumar	Technophilla-22	National	30/03/2022	Participation
3	D.Anil Sai	Promethean 2k22	National	12/10/2022	3rd Prize
4	B.Vishwanth	Project Expo-Consortium-2022	National	24/11/2022	2nd Prize
5	A.K Choudary	Model Expo Avishkarana-2K22	National	14/02/2022	1st Prize
6	N.Pranay	Model Expo Avishkarana-2K22	National	14/02/2022	1st Prize
7	Atchyutanna Venu Gopal	Project Expo- RUEDO-2022	National	26/03/2022	Participation
8	S. Aishwarya	Technophilla-22	National	30/03/2022	Participation
9	AMAN KUMAR CHOUDHARY	Project Expo-Consortium	National	24/11/2022	Participation
10	M.UDAY KIRAN	Project Expo-Consortium	National	24/11/2022	Participation
11	SAI PREETHAM	National level Technical Symposium, Promethean 2k22	National	12/10/2022	Participation

12	ANIL SAI	National level Technical Symposium, Promethean 2k22	National	12/10/2022	3rd Prize
13	P. AKASH	National level Technical Symposium, Promethean 2k22	National	12/10/2022	Participation
14	VISHWANTH	National level Technical Symposium, Promethean 2k22	National	12/10/2022	Participation
15	G.ARTHI	National level Technical Symposium, Promethean 2k22	National	12/10/2022	Participation
16	Mohammad Nayab Ahmed	Technophilla-22	National	30/03/2022	Participation
17	Battu Abhishek	Technophilla-22	National	30/03/2022	Participation
18	Sangam Udaykanth	Technophilla-22	National	30/03/2022	Participation
19	Hasanabada Sanjay	Technophilla-22	National	30/03/2022	Participation
20	Yarra Bhanu Prakash	Technophilla-22	National	30/03/2022	Participation
21	Sama Hemanth	Technophilla-22	National	30/03/2022	Participation
22	Kollu Vijay Kumar	Technophilla-22	National	30/03/2022	Participation
23	N. Pranay	Technophilla-22	National	30/03/2022	Participation
24	D. Anil Sai	Technophilla-22	National	30/03/2022	Participation
25	M.Soumith	Promethean 2k22	National	12/10/2022	Participation
26	Sk. Abdul Adil	Promethean 2k22	National	12/10/2022	Participation
27	Vamsi Krishna V	Promethean 2k22	National	12/10/2022	Participation
28	Manasa	Project Expo-Consortium-2022	National	24/11/2022	Participation
29	Sai Akanaksha V	Project Expo-Consortium-2022	National	24/11/2022	Participation
30	Anil Sai. D	Project Expo-Consortium-2022	National	24/11/2022	Participation
31	Prem Kumar S	Project Expo- RUEDO-2022	National	26/03/2022	Participation
32	Gundam Dhanunjay	Project Expo- RUEDO-2022	National	26/03/2022	Participation
33	Chaurasia Ajay Kumar	Project Expo- RUEDO-2022	National	26/03/2022	Participation
34	A. Srihari	Project Expo- RUEDO-2022	National	26/03/2022	Participation
35	Sandeep B	Technophilla-22	National	30/03/2022	Participation
36	Nikhil	Technophilla-22	National	30/03/2022	Participation

37	Srujana	Technophilla-22	National	30/03/2022	Participation
38	PRANAY N	Project Expo-Consortium	National	24/11/2022	Participation
39	B.PRAVEEN	Project Expo-Consortium	National	24/11/2022	Participation
40	J. HARSHITH	Promethean 2k22	National	12/10/2022	Participation
41	MAYUK	Promethean 2k22	National	12/10/2022	Participation
42	KARTHIK	Promethean 2k22	National	12/10/2022	Participation
43	SOUMITH	Promethean 2k22	National	12/10/2022	Participation
44	VAMSI KRISHNA	Promethean 2k22	National	12/10/2022	Participation
45	SHAIK ABDUL ADIL	Promethean 2k22	National	12/10/2022	Participation
46	ESHWAR VALMIKI	Promethean 2k22	National	12/10/2022	Participation
47	KRISHNA KANTH	Promethean 2k22	National	12/10/2022	Participation
48	VAMSI KRISHNA Ch	Promethean 2k22	National	12/10/2022	Participation
49	MANASA.M	Promethean 2k22	National	12/10/2022	Participation
50	SAI AKANAKSHA	Promethean 2k22	National	12/10/2022	Participation
51	SANDEEP KUMAR	Promethean 2k22	National	12/10/2022	Participation
52	SHIVA SAI G	Promethean 2k22	National	12/10/2022	Participation
53	G. MAHESH	Promethean 2k22	National	12/10/2022	Participation
54	SATHWIKA K	Promethean 2k22	National	12/10/2022	Participation

4.7.3 Publication of Journals, Magazines, Newsletters, etc. in the Department (5)

Institute Marks : 5.00

Table No. 4.7.3.1: List of students involved in publication of journals, magazines, and newsletters, etc. in the Department.
(CAYm1) 2023-24

S.No	Name of the Journal, Magazine, Newsletter	Name of the Editor	Name of the Student	Semester	No. of Issues	Hard copy/Soft copy
1	Newsletter (Volume -16)	Mrs U. Divya	Ms.V.Vasavi	6	4	Yes
2	Newsletter (Volume -17)	Mrs U. Divya	Mr.D.Srinivas varma	6	4	Yes
3	Newsletter (Volume -18)	Mrs U. Divya	Ms.V.Vasavi	7	4	Yes
4	Magazines	MsK.Devi priya	Mr.Manoj	7	2	Yes

(CAYm2) 2022-23

S.No	Name of the Journal, Magazine, Newsletter	Name of the Editor	Name of the Student	Semester	No. of Issues	Hard copy/Soft copy
1	Newsletter (Volume -13)	Mrs U. Divya	Ms Roshini	6	4	Yes
2	Newsletter (Volume -14)	Mrs U. Divya	Mr. Aman	6	4	Yes
3	Newsletter (Volume -15)	Mrs U. Divya	Ms sinduja	7	4	Yes
4	Magazines	Ms M.Katyayani	Mr Sai Preetham	7	2	Yes

(CAYm3) 2021-22

S.No	Name of the Journal, Magazine, Newsletter	Name of the Editor	Name of the Student	Semester	No. of Issues	Hard copy/Soft copy
1	Newsletter (Volume -10)	Mrs U. Divya	Ms. B.Harini	6	4	Yes
2	Newsletter (Volume -11)	Mrs U. Divya	MrS,prem kumar	6	4	Yes
3	Newsletter (Volume -12)	Mrs U. Divya	MsR.Srujana	7	4	Yes
4	Magazines	MsB.Sindhuja	Mr S.Aishiwarya	7	2	Yes

4.7.4 Student Publications (5)

Institute Marks : 5.00

Table No. 4.7.4.1: List of student publications.
(CAYm1) 2023-24

S.No	Name of the Student	Semester	Name of the Publisher	Name of the Journal/ Conference, etc.	Volume No.	Issue No.	Name of the Award if any
1	Y.Nithya	8	The Department of Mathematics at Naresuan University in Thailand	Journal of Nonlinear Analysis and Optimization	15	1	Published
2	G.Shiva sai	8	The Department of Mathematics at Naresuan University in Thailand	Journal of Nonlinear Analysis	15	1	Published
3	A Narotham	8	The Department of Mathematics at Naresuan University in Thailand	Journal of Nonlinear Analysis and Optimization	15	1	Published
4	G Mahesh	8	The Department of Mathematics at Naresuan University in Thailand	Journal of Nonlinear Analysis and Optimization	15	1	Published
5	K Srikanth	8	The Department of Mathematics at Naresuan University in Thailand	Journal of Nonlinear Analysis and Optimization	15	1	Published
6	A Karthikeya	8	The Department of Mathematics at Naresuan University in Thailand	Journal of Nonlinear Analysis and Optimization	15	1	Published
7	S Uday Krishna	8	The Department of Mathematics at Naresuan University in Thailand	Journal of Nonlinear Analysis and Optimization	15	1	Published

8	G Rahul	8	The Department of Mathematics at Naresuan University in Thailand	Journal of Nonlinear Analysis and Optimization	15	1	Published
9	D Mohan	8	Industrial Engineering journal	Industrial Engineering journal	53	2	Published
10	A Naveen	8	Industrial Engineering journal	Industrial Engineering journal	53	2	Published
11	M Koteshwar Reddy	8	Industrial Engineering journal	Industrial Engineering journal	53	2	Published
12	D Sai vamsi	8	Industrial Engineering journal	Industrial Engineering journal	53	2	Published
13	R Nikhil raj	8	Industrial Engineering journal	Industrial Engineering journal	53	2	Published
14	A Durga rao	8	Industrial Engineering journal	Industrial Engineering journal	53	2	Published
15	S Hukesh	8	Industrial Engineering journal	Industrial Engineering journal	53	2	Published
16	B Chiranjeevi rao	8	Industrial Engineering journal	Industrial Engineering journal	53	2	Published
17	G Shyamlal	8	The Department of Mathematics at Naresuan University in Thailand	Journal of Nonlinear Analysis and Optimization	15	1	Published
18	G Vijay	8	The Department of Mathematics at Naresuan University in Thailand	Journal of Nonlinear Analysis and Optimization	15	1	Published
19	L Sandeep	8	The Department of Mathematics at Naresuan University in Thailand	Journal of Nonlinear Analysis and Optimization	15	1	Published
20	P Nagarjuna	8	The Department of Mathematics at Naresuan University in Thailand	Journal of Nonlinear Analysis and Optimization	15	1	Published
21	A Durga rao	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented
22	B Chiranjeevi rao	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented
23	R Nikhil raj	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented
24	S Hukesh	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented
25	G Vijay	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented
26	P Nagarjuna	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented

27	G Shyamlal	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented
28	L Sandeep	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented
29	G Arthi	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented
30	K Sathwika	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented
31	L Suman	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented
32	Shaik Abdul Adil	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented
33	B Ramya	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented
34	K Avinash	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented
35	J Ruchita	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented
36	G Sai Naveen	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented
37	P Hema Bindu	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented
38	K.Anand	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented
39	N Srujith Kumar	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented
40	V Sujith	8	2nd International Conference on “Sustainable Green Energy Technologies	2nd International Conference on “Sustainable Green Energy Technologies	2	1	Presented
41	B Durgesh	8	International Research Journal on Advanced Engineering Hub	International Research Journal on Advanced Engineering Hub	2	6	Published
42	T Avinash	8	International Research Journal on Advanced Engineering Hub	International Research Journal on Advanced Engineering Hub	2	6	Published
43	E.Nithin Teja	8	International Research Journal on Advanced Engineering Hub	International Research Journal on Advanced Engineering Hub	2	6	Published

44	U.Gnanender	8	International Research Journal on Advanced Engineering Hub	International Research Journal on Advanced Engineering Hub	2	6	Published
45	K. Sai preetham	8	International Journal Of Innovative Research In Technology	International Journal Of Innovative Research In Technology	10	2	Published
46	K Mayuk	8	International Journal Of Innovative Research In Technology	International Journal Of Innovative Research In Technology	10	2	Published
47	A Karthik	8	International Journal Of Innovative Research In Technology	International Journal Of Innovative Research In Technology	10	2	Published
48	J Harshith	8	International Journal Of Innovative Research In Technology	International Journal Of Innovative Research In Technology	10	2	Published
49	M Divya sri	8	International Journal Of Innovative Research In Technology	International Journal Of Innovative Research In Technology	10	2	Published
50	V Vasavi Priya	8	International Journal on Recent and Innovation Trends in Computing and Communication	International Journal on Recent and Innovation Trends in Computing and Communication	11	9	Published
51	D Srinivas Varma	8	International Journal on Recent and Innovation Trends in Computing and Communication	International Journal on Recent and Innovation Trends in Computing and Communication	11	9	Published
52	V Harsha Vardhan Reddy	8	International Journal on Recent and Innovation Trends in Computing and Communication	International Journal on Recent and Innovation Trends in Computing and Communication	11	9	Published
53	K Devi Priya	8	International Journal on Recent and Innovation Trends in Computing and Communication	International Journal on Recent and Innovation Trends in Computing and Communication	11	9	Published

(CAYm2) 2022-23

S.No	Name of the Student	Semester	Name of the Publisher	Name of the Journal/ Conference, etc.	Volume No.	Issue No.	Name of the Award if any
1	Bobbili Roshini	8	Institute of Electrical and Electronics Engineers	3rd International conference on Artificial Intelligence and Signal Processing	3	1	Presented
2	Pokalkar Akash	8	Institute of Electrical and Electronics Engineers	3rd International conference on Artificial Intelligence and Signal Processing	3	1	Presented
3	Middapaka Bharath	8	Institute of Electrical and Electronics Engineers	3rd International conference on Artificial Intelligence and Signal Processing	3	1	Presented
4	Mogili Sai Nikhil	8	Institute of Electrical and Electronics Engineers	3rd International conference on Artificial Intelligence and Signal Processing	3	1	Presented
5	M. Manasa	8	Institute of Electrical and Electronics Engineers	3rd International conference on Artificial Intelligence and Signal Processing	3	1	Presented

6	B. Vishwanth	8	Institute of Electrical and Electronics Engineers	3rd International conference on Artificial Intelligence and Signal Processing	3	1	Presented
7	V. Akanksha	8	Institute of Electrical and Electronics Engineers	3rd International conference on Artificial Intelligence and Signal Processing	3	1	Presented
8	D.Anil Sai	8	Institute of Electrical and Electronics Engineers	3rd International conference on Artificial Intelligence and Signal Processing	3	1	Presented
9	Shay Adithya Kumar	8	IndoSpace Publications Ltd	International Journal of Scientific Research in Engineering and Management (	7	6	Published
10	Y. Dinesh Kumar Reddy	8	IndoSpace Publications Ltd	International Journal of Scientific Research in Engineering and Management (	7	6	Published
11	S.Anurag Reddy	8	IndoSpace Publications Ltd	International Journal of Scientific Research in Engineering and Management (	7	6	Published
12	N.Uday Kiran	8	IndoSpace Publications Ltd	International Journal of Scientific Research in Engineering and Management	7	6	Published
13	G. Kranthi Sairam	8	IndoSpace Publications Ltd	International Journal of Scientific Research in Engineering and Management	7	6	Published
14	Ganesh	8	IndoSpace Publications Ltd	International Journal of Scientific Research in Engineering and Management	7	6	Published
15	Govind	8	IndoSpace Publications Ltd	International Journal of Scientific Research in Engineering and Management	7	6	Published
16	V. Sairam Reddy	8	IndoSpace Publications Ltd	International Journal of Scientific Research in Engineering and Management	7	6	Published
17	Aman Kumar Choudhary	8	International Journal Of Innovative Research In Technology	International Journal Of Innovative Research In Technology	10	1	Presented
18	B. Praveen	8	International Journal Of Innovative Research In Technology	International Journal Of Innovative Research In Technology	10	1	Presented
19	K.Sravan	8	International Journal Of Innovative Research In Technology	International Journal Of Innovative Research In Technology	10	1	Presented
20	P.Manoj	8	International Journal Of Innovative Research In Technology	International Journal Of Innovative Research In Technology	10	1	Presented
21	Nalla Pranay	8	International Journal Of Innovative Research In Technology	International Journal Of Innovative Research In Technology	10	1	Presented
22	S. Sai Vaibhav Raju	8	IndoSpace Publications Ltd	IndoSpace Publications Ltd	7	6	Presented

23	K. Vamshi Krishna	8	IndoSpace Publications Ltd	IndoSpace Publications Ltd	7	6	Presented
24	M. Soumith	8	IndoSpace Publications Ltd	IndoSpace Publications Ltd	7	6	Presented
25	Zubair Khan	8	IndoSpace Publications Ltd	IndoSpace Publications Ltd	7	6	Presented
26	G.Shiva sai	8	5th International Conference on “Smart Modernistic in Electronics and Communication	5th International Conference on “Smart Modernistic in Electronics and Communication	5	1	Published
27	A.Narotham	7	5th International Conference on "Smart Modernistic in Electronics and Communication	5th International Conference on "Smart Modernistic in Electronics and Communication	5	1	Published
28	Mahesh	7	5th International Conference on "Smart Modernistic in Electronics and Communication	5th International Conference on "Smart Modernistic in Electronics and Communication	5	1	Published
29	Y.Nithya	7	5th International Conference on "Smart Modernistic in Electronics and Communication	5th International Conference on "Smart Modernistic in Electronics and Communication	5	1	Published
30	A.Karthikeya	7	5th International Conference on "Smart Modernistic in Electronics and Communication	5th International Conference on "Smart Modernistic in Electronics and Communication	5	1	Published
31	G.Rahul	7	5th International Conference on "Smart Modernistic in Electronics and Communication	5th International Conference on "Smart Modernistic in Electronics and Communication	5	1	Published
32	Uday krishna	7	5th International Conference on "Smart Modernistic in Electronics and Communication	5th International Conference on "Smart Modernistic in Electronics and Communication	5	1	Published
33	K.Srikanth	7	5th International Conference on "Smart Modernistic in Electronics and Communication	5th International Conference on "Smart Modernistic in Electronics and Communication	5	1	Published
34	E. Chakra Harish	7	International Journal of Scientific Research in Engineering and Management	International Journal of Scientific Research in Engineering and Management	7	6	Presented
35	L. Sindhu Sri	7	International Journal of Scientific Research in Engineering and Management	International Journal of Scientific Research in Engineering and Management	7	6	Presented
36	P. Sai Kiran	7	International Journal of Scientific Research in Engineering and Management	International Journal of Scientific Research in Engineering and Management	7	6	Presented
37	B. Sangamesh	7	International Journal of Scientific Research in Engineering and Management	International Journal of Scientific Research in Engineering and Management	7	6	Presented

(CAYm3) 2021-22

S.No	Name of the Student	Semester	Name of the Publisher	Name of the Journal/ Conference, etc.	Volume No.	Issue No.	Name of the Award if any

1	Mohammad Nayab Ahmed	8	Kavikulaguru Kalidas Sanskrit University	Shodhsamhita: Journal of Fundamental & Comparative Research	8	1	Published
2	Battu Abhishek	8	Kavikulaguru Kalidas Sanskrit University	Shodhsamhita: Journal of Fundamental & Comparative Research	8	1	Published
3	Hasanabada Sanjay	8	Kavikulaguru Kalidas Sanskrit University	Shodhsamhita: Journal of Fundamental & Comparative Research	8	1	Published
4	Sangam Udaykanth	8	Kavikulaguru Kalidas Sanskrit University	Shodhsamhita: Journal of Fundamental & Comparative Research	8	1	Published
5	Sirikonda Aishwarya	8	Kavikulaguru Kalidas Sanskrit University	Shodhsamhita: Journal of Fundamental & Comparative Research	8	1	Published
6	Vonteddu Nikhil Reddy	8	Kavikulaguru Kalidas Sanskrit University	Shodhsamhita: Journal of Fundamental & Comparative Research	8	1	Published
7	Bhukya Sandeep Rupireddy	8	Kavikulaguru Kalidas Sanskrit University	Shodhsamhita: Journal of Fundamental & Comparative Research	8	1	Published
8	Srujana	8	Kavikulaguru Kalidas Sanskrit University	Shodhsamhita: Journal of Fundamental & Comparative Research	8	1	Published
9	Sirikonda Aishwarya	8	MSJ Publication	Mukt Shabd Journal	11	6	Published
10	Vonteddu Nikhil Reddy	8	MSJ Publication	Mukt Shabd Journal	11	6	Published
11	BhukyaSandeep Rupireddy	8	MSJ Publication	Mukt Shabd Journal	11	6	Published
12	Srujana	8	MSJ Publication	Mukt Shabd Journal	11	6	Published
13	Goolla Shilpa	8	MSJ Publication	Mukt Shabd Journal	11	6	Published
14	Kadala Sathish	8	MSJ Publication	Mukt Shabd Journal	11	6	Published
15	Kalidindi Nivas	8	MSJ Publication	Mukt Shabd Journal	11	6	Published
16	Machha Sai Charan	8	MSJ Publication	Mukt Shabd Journal	11	6	Published
17	Gadudhula Akhil	8	MSJ Publication	Mukt Shabd Journal	11	6	Published
18	Ramesh vadla	8	MSJ Publication	Mukt Shabd Journal	11	6	Published
19	Bandela Keerthana	8	MSJ Publication	Mukt Shabd Journal	11	6	Published
20	Aishwarya Sannapuri	8	MSJ Publication	Mukt Shabd Journal	11	6	Published
21	M.Avanthika	8	MSJ Publication	Mukt Shabd Journal	10	7	Published
22	sheebi Kumari	8	MSJ Publication	Mukt Shabd Journal	10	7	Published

23	Soanker Sai Navyasri	8	MSJ Publication	Mukt Shabd Journal	10	7	Published
24	G.Gyana Teja	8	MSJ Publication	Mukt Shabd Journal	10	7	Published
25	P.Sathya Prakash	8	MSJ Publication	Mukt Shabd Journal	10	7	Published

5 FACULTY INFORMATION (100)

Total Marks 91.71

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Sr.No	Name of the Faculty	PAN No.	APAAR faculty ID*(if any)	Highest degree	University	Area of Specialization	Date of Joining in this Institution	Experience in years in current institute	Designation at Time Joining in this Institution	Present Designation	The date on which Designated as Professor/ Associate Professor if any	Nature of Association (Regular/ Contract/ Ad hoc)	Currently Associated (Y/N)	In case of NO, Date of Leaving	IS HOD?
1	Dr. Pedda Suresh Ogeti	AAIPO5338H	NA	Ph.D	NIT Rourkela	Power Electronics	20/11/2017	7.4	Professor	Professor		Regular	Yes		Yes
2	Suresh Kanaparthi	ASJPK0591P	NA	M.E/M.Tech	JNTU Hyderabad	Power Electronics	20/07/2006	18.8	Assistant Professor	Assistant Professor		Regular	Yes		No
3	Dr. Madduluri Chiranjivi	BFBPM6949D	NA	Ph.D	Acharya Nagarjuna University	Power Systems	06/03/2018	7.1	Assistant Professor	Associate Professor	06/05/2023	Regular	Yes		No
4	Salva V Satyanarayana	CYCPS7293F	NA	M.E/M.Tech	JNTU Kakinada	Power Systems-High Voltage Engineering	01/12/2017	7.4	Assistant Professor	Assistant Professor		Regular	Yes		No
5	Pillalamarri Madhavi	CRMPP2211B	NA	M.E/M.Tech	JNTU Hyderabad	Power Electronics	21/12/2016	8.3	Assistant Professor	Assistant Professor		Regular	Yes		No
6	Mallarapu Siddartha	FKWPS7706C	NA	M.E/M.Tech	JNTU Hyderabad	Power Electronics	10/07/2017	7.8	Assistant Professor	Assistant Professor		Regular	Yes		No
7	Thirlangi Sirisha	BBHPT7039P	NA	M.E/M.Tech	JNTU Kakinada	Power Electronics	18/06/2018	6.9	Assistant Professor	Assistant Professor		Regular	Yes		No
8	U Divya	ABTPU4982D	NA	M.E/M.Tech	JNTU Anantapur	Power Electronics	06/12/2021	3.4	Assistant Professor	Assistant Professor		Regular	Yes		No
9	M Rani	CNQPM0870D	NA	M.E/M.Tech	JNTU Hyderabad	Power Electronics	14/06/2021	3.9	Assistant Professor	Assistant Professor		Regular	Yes		No

10	Raviteja Madala	BJUPM3174J	NA	M.E/M.Tech	JNTU Kakinada	Power Electronics and Electrical Drives	13/12/2021	3.3	Assistant Professor	Assistant Professor		Regular	Yes		No
11	Ravi Naragani	ASHPN9504B	NA	M.E/M.Tech	JNTU Kakinada	Power Electronics	09/07/2010	14.9	Assistant Professor	Assistant Professor		Regular	Yes		No
12	Ch Rajasri	BDQPC3266C	NA	M.E/M.Tech	JNTU Hyderabad	Power Systems	06/07/2019	5.9	Assistant Professor	Assistant Professor		Regular	Yes		No
13	D Hari Krishna	AGZPD0499F	NA	M.E/M.Tech	IIT Chennai	Communication Systems	03/05/2024	0.11	Assistant Professor	Assistant Professor		Regular	Yes		No
14	Swathi Lakshmi Chundi	ANZPC9833B	NA	M.E/M.Tech	JNTU Hyderabad	Power Systems	08/07/2020	4.9	Assistant Professor	Assistant Professor		Regular	Yes		No

5.1 Student-Faculty Ratio (SFR) (30)

Total Marks 30.00

Institute Marks : 30

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)).

UG

No. of UG(Engineering) programs in Department including allied departments/clusters(UGn): 1

Electrical and Electronics Engineering						
Year of Study	**CAY**		**CAYm1**		**CAYm2**	
	(2024-25)		**(2023-24)**		**(2022-23)**	
	Sanction Intake	**Actual admitted through lateral entry students**	**Sanction Intake**	**Actual admitted through lateral entry students**	**Sanction Intake**	**Actual admitted through lateral entry students**
2nd Year	30	3	60	6	60	6
3rd Year	60	6	60	6	60	6
4th Year	60	6	60	6	60	6
Sub-Total	**150**	**15**	**180**	**18**	**180**	**18**
Total	**165**		**198**		**198**	

Grand Total	165	198	198

PG

No. of PG Programs in the Department 0

Grand Total			

SFR

No. of UG Programs in the Department 1

No. of PG Programs in the Department 0

Electrical and Electronics Engineering

Description	**CAY(2024-25)**	**CAYm1 (2023-24)**	**CAYm2 (2022-23)**
UG1.B	33	66	66
UG1.C	66	66	66
UG1.D	66	66	66
UG1: Electrical and Electronics Engineering	**165**	**198**	**198**
DS=Total no. of students in all UG and PG programs in the Department	165	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=** 165	**S2=** 198	**S3=** 198
DF=Total no. of faculty members in the Department	14	13	13

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=** 14	**F2=** 13	**F3=** 13
FF=The faculty members in F who have a 100% teaching load in the first-year courses	0	0	0
Student Faculty Ratio (SFR)=S/(F-FF)	**SFR1= 11.79**	**SFR2= 15.23**	**SFR3= 15.23**
Average SFR for 3 years	**SFR= 14.08**		

Average SFR for three assessment years : 14.08

Assessment SFR : 30

5.2 Faculty Qualification (25)

Total Marks 18.38

Institute Marks : 18.38

Year	**X**	**Y**	**RF**	**FQ = 2.5 x [(10X + 4Y) / RF)]**
2024-25(CAY)	2	12	8.00	21.25
2023-24(CAYm1)	2	11	9.00	17.78
2022-23(CAYm2)	1	12	9.00	16.11

Average Assessment : 18.38

5.3 Faculty Cadre Proportion (25)

Total Marks 25.00

Institute Marks : 25.00

Year	**Professors**		**Associate Professors**		**Assistant Professors**	
	Required F1	**Available**	**Required F2**	**Available**	**Required F3**	**Available**
CAY(2024-25)	1.00	1.00	1.00	1.00	5.00	12.00
CAYm1(2023-24)	1.00	1.00	2.00	1.00	6.00	11.00
CAYm2(2022-23)	1.00	1.00	2.00	0.00	6.00	12.00
Average Numbers	1.00	1.00	1.67	0.67	5.67	11.67

Cadre Ratio Marks [(AF1 / RF1) + [(AF2 / RF2) * 0.6] + [(AF3 / RF3) * 0.4]] * 12.5 : 25.00

5.4 Visiting/Adjunct/Emeritus Faculty etc. (10)

Total Marks 9.00

Institute Marks : 9.00

Table No. 5.4.1: List of visiting/adjunct faculty/professor of practice and their teaching and practical loads.

(CAYm1) 2023-24

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr. Sreedhar Madichetty	Assoc Professor	Mahindra University	Eletric Hybrid Vehicles	3.00
2	Dr. O Sobhana	Assistant Professor	VNRVJIET	Power Systems-III	4.00
3	Pothineni Chaitanya	General manager	Jhonsons Lifts	Fundamentals of Management for Engineers	3.00
4	Narasinha Mikkilineni	Trainer	LACE Academy	Analytical Reasoning	32.00
5	Mohammad Aymon	Asst. Professor	NALSAR University	Constitution of India	9.00
6	Narasinha Mikkilineni	Trainer	LACE Academy	Quantitative Aptitude	30.00

(CAYm2) 2022-23

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr. Nagaraju	Assoc. Prof	VNRVJIET	Matrix Algebra and Calculas	11.00
2	Sindhura , Syurya, Dhanusha	Trainer	Talentio	Phython Programming	20.00
3	Narasinha Mikkilineni	Trainer	LACE Academy	Analytical Reasoning	30.00
4	Narasinha Mikkilineni	Trainer	LACE Academy	Quantitative Aptitude	30.00

(CAYm3) 2021-22

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	D Rajesh Reddy	Scientist	ISRO	Real time applications in Electrical Engineering using SCADA	5.00
2	Mr Husain	Assistant Professor	BVRIT	Signals & Systems	28.00
3	Mr Husain	Assistant Professor	BVRIT	Control Systems	25.00

5.5 Faculty Retention (10)

Total Marks 9.33

Institute Marks : 9.33

Description	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)
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 5.1 of SAR; (RF=S/20).	9	9	10
AF=The no. of available faculty members in the Department including allied Departments	13	13	13
A= The no. of faculty members at the current institute with less than 1 year of experience (A in AF)	0	0	3
B= The no. of faculty members at the current institute with more than 1 year and less than 2 years of experience (B in AF)	0	0	1
C= The no. of faculty members at the current institute with more than 2 years and less than 3 years of experience (C in AF)	0	0	1
D= The no. of faculty members at the current institute with more than 3 years and less than 4 years of experience (D in AF)	3	3	1
E= The no. of faculty members at the current institute with more than 4 years of experience (E in AF)	10	10	7
FR=(((A*0) +(B*1)+(C*2)+(D*3)+(E*4))/RF) *2.50 (points limited to 10)	10	10	8

Average : 9.33

Assessment Marks : 9.33

6 FACULTY CONTRIBUTIONS (120)

Total Marks 103.00

6.1 Professional Development Activities (60)

Total Marks 60.00

6.1.1 Memberships in Profession Societies at National/International Levels (5)

Institute Marks : 5.00

Table No. 6.1.1.1: List of faculty members and their memberships.

S.No	Name of the Faculty	Name of the Professional Society /Body at National and International Level	Name of the Grade/ Level/Position
1	Dr. Pedda Suresh Ogeti	The Institution of Electronics and Telecommunication Engineers (IETE)	Life Member
2	Dr. Pedda Suresh Ogeti	The Indian Society for Technical Education (ISTE)	Life Member
3	Mr. Suresh Kanaparthi	The Institution of Electronics and Telecommunication Engineers (IETE)	Life Member
4	Mr. Suresh Kanaparthi	The Indian Society for Technical Education (ISTE)	Life Member
5	Dr. Madduluri Chiranjivi	The Institution of Electronics and Telecommunication Engineers (IETE)	Life Member
6	Dr. Madduluri Chiranjivi	The Indian Society for Technical Education (ISTE)	Life Member
7	Dr. Madduluri Chiranjivi	International Association of Engineers (IAENG)	Life Member
8	Dr. Madduluri Chiranjivi	Institute of Electrical and Electronics Engineers (IEEE)	Member

9	Mr. Salva V Satyanarayana	The Indian Society for Technical Education (ISTE)	Life Member
10	Mr. Salva V Satyanarayana	Institute of Electrical and Electronics Engineers (IEEE)	Member
11	Mr. Salva V Satyanarayana	International Association of Engineers (IAENG)	Member
12	Ms. Pillalamarri Madhavi	The Indian Society for Technical Education (ISTE)	Life Member
13	Mr. Mallarapu Siddartha	The Indian Society for Technical Education (ISTE)	Life Member
14	Mrs. Thirlangi Sirisha	Institute For Educational Research and Publication (IFERP)	Member
15	Mrs. Thirlangi Sirisha	International Association of Engineers (IAENG)	Member
16	Mrs. Thirlangi Sirisha	The International Association of Electrical, Electronic and Energy Engineering (IAEEEE)	Member
17	Mrs. U Divya	Institute For Educational Research and Publication (IFERP)	Member
18	Mrs. U Divya	International Association of Engineers (IAENG)	Member
19	Mrs. U Divya	The International Association of Electrical, Electronic and Energy Engineering (IAEEEE)	Member
20	Mrs. M. Rani	Institute For Educational Research and Publication (IFERP)	Member
21	Mrs. M. Rani	International Association of Engineers (IAENG)	Member
22	Mrs. M. Rani	The International Association of Electrical, Electronic and Energy Engineering (IAEEEE)	Member
23	Mr. Raviteja Madala	Institute For Educational Research and Publication (IFERP)	Member
24	Mr. Raviteja Madala	International Association of Engineers (IAENG)	Member
25	Mr. Raviteja Madala	The International Association of Electrical, Electronic and Energy Engineering (IAEEEE)	Member
26	Mr. Ravi Naragani	The Indian Society for Technical Education (ISTE)	Member
27	Mr. D Hari Krishna	Institute of Electrical and Electronics Engineers (IEEE)	Member

6.1.2 Faculty as Resource Persons or Participants in STTPs/FDPs (10)

Institute Marks : 5.00

6.1.2.1 Faculty as Resource Persons in STTPs/FDPs (5)

Table No. 6.1.2.1: List of faculty members as resource person in STTP/FDP events.
(CAYm1) 2023-24

S.No	Name of the Faculty as Resource Person	Name of the STTP/FDP	Date (DD/MM/YYYY)	Location	Organized by
1	Dr. Pedda Suresh Ogeti	APPLICATIONS OF SOLAR TECHNOLOGIES IN AGRICULTURE AND ALLIED SECTORS	13/02/2024	Hyderabad Institute of Technology and Management, Hyderabad	National Institute for Micro,Small & Medium Enterprises, Institution's Innovation Council, HITAM-EDC

2	Mr. Suresh Kanaparthi	APPLICATIONS OF SOLAR TECHNOLOGIES IN AGRICULTURE AND ALLIED SECTORS	14/02/2024	Hyderabad Institute of Technology and Management, Hyderabad	National Institute for Micro,Small & Medium Enterprises, Institution's Innovation Council, HITAM-EDC
3	Mr. Salva V Satyanarayana	APPLICATIONS OF SOLAR TECHNOLOGIES IN AGRICULTURE AND ALLIED SECTORS	15/02/2024	Hyderabad Institute of Technology and Management, Hyderabad	National Institute for Micro,Small & Medium Enterprises, Institution's Innovation Council, HITAM-EDC
4	Ms. Pillalamarri Madhavi	APPLICATIONS OF SOLAR TECHNOLOGIES IN AGRICULTURE AND ALLIED SECTORS	15/02/2024	Hyderabad Institute of Technology and Management, Hyderabad	National Institute for Micro,Small & Medium Enterprises, Institution's Innovation Council, HITAM-EDC
5	Dr. Pedda Suresh Ogeti	HVDC (High Voltage Direct Current)	25/11/2023	Mallreddy Engineering College and Management Sciences, Hyderabad	Mallreddy Engineering College and Management Sciences, Hyderabad
6	Dr. Madduluri Chiranjivi	FDP on Quality improvement	12/09/2023	Shetty College, Gulbarga	Shetty College
7	Mr. Suresh Kanaparthi	FDP on Quality improvement	12/09/2023	Shetty College, Gulbarga	Shetty College
8	Dr. Pedda Suresh Ogeti	Recent Trends in Sustainable Energy Systems and Smart Grids	23/03/2024	Basavakalyan Engineering College, Kouiyal	Basavakalyan Engineering College
9	Mr. Salva V Satyanarayana	Recent Trends in Sustainable Energy Systems and Smart Grids	23/03/2024	Basavakalyan Engineering College, Kouiyal	Basavakalyan Engineering College

(CAYm2) 2022-23

S.No	Name of the Faculty as Resource Person	Name of the STTP/FDP	Date (DD/MM/YYYY)	Location	Organized by
1	Dr. Pedda Suresh Ogeti	Skill Development program (Upskill along the path to career glory)	04/02/2023	Hyderabad	EEE Department-HITAM
2	Dr. Pedda Suresh Ogeti	Skill Development program (Upskill along the path to career glory)	08/02/2023	Hyderabad	EEE Department-HITAM
3	Dr. Pedda Suresh Ogeti	Skill Development program (Upskill along the path to career glory)	01/03/2023	Hyderabad	EEE Department-HITAM
4	Dr. Pedda Suresh Ogeti	Advancement of power electronics applications with RES	25/10/2022	Mallareddy Eng college and Management science, Hyderabad	EEE Department-MREM
5	Dr. Madduluri Chiranjivi	Modern Trends in Electrical Machine Design and operation	01/06/2023	Mallareddy Eng college and Management science, Hyderabad	EEE Department-MREM
6	Mr. Suresh Kanaparthi	Workshop on Course outcomes and attainment process	23/03/2023	Shetty College, Gulbarga	Shetty College

7	Mr. Salva V Satyanarayana	Robotics and Automation: Design, Control, and Communication	10/05/2023	Basavakalyan Engineering College, Kouiyal	Basavakalyan Engineering College

(CAYm3) 2021-22

S.No	Name of the Faculty as Resource Person	Name of the STTP/FDP	Date (DD/MM/YYYY)	Location	Organized by
1	Dr. Pedda Suresh Ogeti	Modern Power Electronic Converters	04/10/2021	Hyderabad	EEE Department-MREM
2	Dr. Madduluri Chiranjivi	Multidisciplinary Approaches in Renewable Energy and Power Management Systems	11/02/2022	Shetty College, Gulbarga	Shetty College
3	Mr. Suresh Kanaparthi	Multidisciplinary Approaches in Renewable Energy and Power Management Systems	11/02/2022	Shetty College, Gulbarga	Shetty College
4	Dr. Pedda Suresh Ogeti	Emerging Trends in Electric Vehicles: Power Systems, Control, and Connectivity	11/08/2021	Basavakalyan Engineering College, Kouiyal	Basavakalyan Engineering College
5	Ms. Pillalamarri Madhavi	Emerging Trends in Electric Vehicles: Power Systems, Control, and Connectivity	11/08/2021	Basavakalyan Engineering College, Kouiyal	Basavakalyan Engineering College

6.1.2.2 Faculty Members' Participation in STTPs/FDPs (5)

Institute Marks : 5.00

Name of the faculty	Max 5 Per Faculty		
	2023-24(CAYm1)	2022-23(CAYm2)	2021-22(CAYm3)
Dr. Pedda Suresh Ogeti	5.00	5.00	5.00
Mr. Suresh Kanaparthi	5.00	5.00	5.00
Dr. Madduluri Chiranjivi	5.00	5.00	5.00
Mr. Salva V Satyanarayana	5.00	5.00	5.00
Ms. Pillalamarri Madhavi	5.00	5.00	5.00
Mr. Mallarapu Siddartha	5.00	5.00	5.00
Mrs. Thirlangi Sirisha	5.00	5.00	5.00
Mrs. U Divya	5.00	5.00	5.00

Mrs. M. Rani	5.00	5.00	5.00
Mr. Raviteja Madala	5.00	5.00	5.00
Mr. Ravi Naragani	5.00	5.00	5.00
Mrs. Ch.Rajasri	5.00	5.00	5.00
Mr. D Hari Krishna	5.00	0.00	0.00
Mrs. Swathi Lakshmi Chundi	5.00	5.00	5.00
Sum	70.00	65.00	65.00
RDF = Number of faculty required to comply with the 20:1 student - faculty ratio in the Department alone, as per section 5.1 of SAR(RDF= DS / 20).	8.25	9.90	9.90
Assessment Points (AP)= (Sum/(0.5* RDF)) (Points limited to 5 for each assessment year)	5.00	5.00	5.00

Average assessment over 3 years: 5.00

6.1.3 Faculty Contribution in Development of SWAYAM MOOCs and other E-Content (5)

Institute Marks : 5.00

Table No. 6.1.3.1: List of faculty members developed MOOC course for the past 3 years.

S.No	Name of the Faculty	Name of the Course Developed and available online on Swayam platform by your Department faculty
1	Dr. Pedda Suresh Ogeti	Power Electronics Topic Name: Simulation of full wave rectifier using MATLAB E-Resource: https://www.youtube.com/watch?v=CvfasBESeiM
2	Mr. Suresh Kanaparthi	Electrical Machines Topic Name: Principle of Generator E-Resource: https://www.youtube.com/watch?v=lFVmhIEVouo
3	Dr. Madduluri Chiranjivi	Control Systems Topic Name: State Space Analysis E-Resource: https://www.youtube.com/watch?v=Sq5UqqCc64I
4	Mr. Salava V Satyanarayana	Electrical Machines Topic Name: DC Generator E-Resource: https://www.youtube.com/watch?v=RgGXLlIJasc
5	Dr. Pedda Suresh Ogeti	Basic Electrical Engineering, Nodal Analysis, https://youtu.be/5droWIRdGmc?si=YiEmAhG0nbb1vxa0
6	Dr. Pedda Suresh Ogeti	HVDC Transmission, VDCOL, https://youtu.be/pY29v6vX5kw?si=nBKGwRQnVPhgZ6W-
7	P. Madhavi	Measuring Instruments

6.1.4 Faculty Certification of MOOCs through SWAYAM, etc. (10)

Institute Marks : 10.00

Table No. 6.1.4.1: List of faculty members obtained certification of MOOCs for the past 3 years.

S.No	Name of the Faculty	Name of Course Passed	Course Offered by (agency)	Grade obtained if any
1	Mr. Suresh Kanaparthi	Introduction to IOT	NPTEL	75%
2	Mr. Suresh Kanaparthi	Cloud Computing	NPTEL	70%
3	Dr. Madduluri Chiranjivi	Introduction to IOT	NPTEL	71%
4	Dr. Madduluri Chiranjivi	Cloud Computing	NPTEL	66%
5	Mr. Salva V Satyanarayana	Cloud Computing	NPTEL	72%
6	Mr. Salva V Satyanarayana	Introduction To Industry 4.0 And Industrial Internet Of Things	NPTEL	75%
7	Mr. Salva V Satyanarayana	Introduction To IOT	NPTEL	83%
8	Mr. Salva V Satyanarayana	Data Science for Engineers	NPTEL	56%
9	Mr. Salva V Satyanarayana	Stress Management	NPTEL	65%
10	Mr. Salva V Satyanarayana	Electric Vehicles - Part 1	NPTEL	49%
11	Ms. Pillalamarri Madhavi	Cloud Computing	NPTEL	69%
12	Ms. Pillalamarri Madhavi	Introduction To Industry 4.0 And Industrial Internet Of Things	NPTEL	71%
13	Ms. Pillalamarri Madhavi	Introduction To IOT	NPTEL	79%
14	Ms. Pillalamarri Madhavi	Data Analytics with Python	NPTEL	57%
15	Ms. Pillalamarri Madhavi	Electric Vehicles - Part 1	NPTEL	50%
16	Mr. Mallarapu Siddartha	Introduction To IOT	NPTEL	55%
17	Mrs. U Divya	Introduction To IOT	NPTEL	80%
18	Mrs. M. Rani	Smart Grid: Basics to Advanced Technologies	NPTEL	42%

6.1.5 FDP/STTP Organized by the Department (10)

Institute Marks : 10.00

Table No. 6.1.5.1: List of FDPs/STPs organized by Department for the past 3 years.
(CAYm1) 2023-24

S.No	Name of the Program	Date of the Program(DD/MM/YYYY)	Duration	Name of the Speaker & Designation and Organization	No. of People Attended
1	FDP on Recent Trends on Electric Vehicles	29/02/2024	5 Days	Dr. D.Sreenivasa Rao Assoc Prof, Dept of EEE, NIT Warangal	42

2	STTP on Innovations in Drone Technology	11/09/2023	13 Days	Mr. Madam, Managing Director, HIEE Institution	45
3	PDP Green campus Initiatives for Higher Educational Institutions	26/06/2023	3 Days	Dr. E.S.M Suresh, Academic coordinator, NITTR	36

(CAYm2) 2022-23

S.No	Name of the Program	Date of the Program(DD/MM/YYYY)	Duration	Name of the Speaker & Designation and Organization	No. of People Attended
1	Recent Developments in Renewable energy Technologies	28/07/2022	5 Days	Dr. RAVIKUMAR BHIMASINGU IIT Hyderabad	38
2	Battery Management Systems for EVs and Renewable Storage	07/02/2023	5 Days	Dr. D.Sreenivasa Rao Assoc Prof, Dept of EEE, NIT Warangal	41

(CAYm3) 2021-22

S.No	Name of the Program	Date of the Program(DD/MM/YYYY)	Duration	Name of the Speaker & Designation and Organization	No. of People Attended
1	Technological Advances in Power Switching Converters for Renewable Energy Sources	13/12/2021	5 Days	Dr. Subbarami Reddy Prof BVRIT, NARSAPUR	48
2	5 Days FDP on Applied IOT	21/07/2021	5 days	Mr. Shanker Rao, Research and Development , Elegant Embedded	184

6.1.6 Faculty Support in Student Innovative Projects (10)

Institute Marks : 10.00

Table No. 6.1.6.1: List of faculty members involved in student innovative projects.
(CAYm1) 2023-24

S.No	Name of the Faculty	Name of the Event	Date of the Event(DD/MM/YYYY)	Place of Event	Website Link if any
1	Mr. Salva V Satyanarayana	Electroverse (A National level Technical Symposium)	03/05/2024	Vardhaman college of engineering, Hyderabad	NA
2	Mrs. Thirlangi Sirisha	Electroverse (A National level Technical Symposium)	03/05/2024	Vardhaman college of engineering, Hyderabad	NA

3	Mrs. U Divya	Electroverse (A National level Technical Symposium)	03/05/2024	Vardhaman college of engineering, Hyderabad	NA
4	Mrs. M. Rani	Electroverse (A National level Technical Symposium)	03/05/2024	Vardhaman college of engineering, Hyderabad	NA
5	Mr. Salva V Satyanarayana	Solar vaccum cleaner robot	2023-24	Institution's Innovation Council Moe's Innovation cell	https://www.youtube.com/watch?v=ykYqW2gOGMI&feature=youtu.be
6	Dr. Pedda Suresh Ogeti	SOLAR WIRELESS ELECTRIC VEHICLE CHARGING SYSTEM	2023-24	Institution's Innovation Council Moe's Innovation cell	https://drive.google.com/file/d/1DYrqWgGLCgiVJ0WxXYIZ_xGPkQ77EIKG/view?usp=sharing
7	Mr. Salva V Satyanarayana	From Foggy to focussed	2023-24	Institution's Innovation Council Moe's Innovation cell	https://www.youtube.com/shorts/cplxXqADs5Y?si=R5pKaXK5Ylc-BmkW
8	Ms. Pillalamarri Madhavi	IOT AND SENSOR-DRIVEN AUTOMATION IN STREAMLINED LAB	2023-24	Institution's Innovation Council Moe's Innovation cell	https://drive.google.com/file/d/1G_Uv2rQiy-c0AXNbVqIVAsCZ1pjmexmA/view?usp=drivesdk
9	Mr. Salva V Satyanarayana	LIFE GUARDIAN – ENHANCING HEALTH AWARENESS THROUGH SENSOR FUSION	2023-24	Institution's Innovation Council Moe's Innovation cell	https://www.instagram.com/reel/C8cPlGyPqGQ/?igsh=dWoyaWlseWtoOW5h
10	Mr. Salva V Satyanarayana	CRUISING WITH CONFIDENCE: ELECTRIC TRICYCLE FOR EMPOWERED HANDICAPPED TRAVEL	2023-24	Institution's Innovation Council Moe's Innovation cell	https://www.youtube.com/watch?feature=shared&v=R3zwYjvXYT4
11	Dr. Madduluri Chiranjivi	Automatic bus information announcement and display system using raspberry pi	2023-24	Institution's Innovation Council Moe's Innovation cell	https://www.youtube.com/watch?v=5K8ojgh4XXQ&feature=youtu.be

12	Dr. Madduluri Chiranjivi	Voice-Controlled Lights Using Text-to-Speech Technology	2023-24	Institution's Innovation Council Moe's Innovation cell	https://drive.google.com/file/d/1N5NbOCQnbJ6xDxrhxv9NR5gxJJ80o94l/view?usp=drivesdk

(CAYm2) 2022-23

S.No	Name of the Faculty	Name of the Event	Date of the Event(DD/MM/YYYY)	Place of Event	Website Link if any
1	Ms. Pillalamarri Madhavi	LOAD AUTOMATION USING NODE-MCU	2022-23	Institution's Innovation Council Moe's Innovation cell	https://drive.google.com/file/d/1G_Uv2rQiy-c0AXNbVqIVAsCZ1pjmexmA/view?usp=drivesdk
2	Dr. Madduluri Chiranjivi	Design of Fuzzy Logic controller for Solar PV fed BLDC Motor with Zeta Converter for Precision Contr	2022-23	Institution's Innovation Council Moe's Innovation cell	https://drive.google.com/file/d/1BZ2hyBbX4IOU7E0bL4sFeb9mIspXcMEH/view
3	Mrs. U Divya	WIRELESSS ELECTRIC VEHICLE CHARGING SYSTEM USING SOLAR AND WIND HYBRID MODEL	2022-23	Institution's Innovation Council Moe's Innovation cell	https://www.kapwing.com/videos/648af5fd4341f70011e122ec
4	Mr. Salva V Satyanarayana	IOT BASED COLLEGE BUS TRACKING AND MONITORING SYSTEM	2022-23	Institution's Innovation Council Moe's Innovation cell	https://www.youtube.com/watch?v=FxeZ6EUAu4E
5	Mr. Suresh Kanaparthi	IoT Based Control of Water Heater	2022-23	Institution's Innovation Council Moe's Innovation cell	https://www.youtube.com/watch?v=PA-4F1kPfVk
6	Mr. Mallarapu Siddartha	IoT Based Air Quality Monitoring System	2022-23	Institution's Innovation Council Moe's Innovation cell	https://www.youtube.com/shorts/pb71wKfw3g8
7	Mrs. M. Rani	IOT ENABLED SMART ATTENDANCE AND DOOR LOCK	2022-23	Institution's Innovation Council Moe's Innovation cell	https://www.youtube.com/watch?v=VmnupL4Zsnw

(CAYm3) 2021-22

S.No	Name of the Faculty	Name of the Event	Date of the Event(DD/MM/YYYY)	Place of Event	Website Link if any
1	Mr. Mallarapu Siddartha	Alcohol detector using Aurdino	2021-22	Institution's Innovation Council Moe's Innovation cell	https://drive.google.com/file/d/1lZjaUk08VDetg-MXJSUM6Md_cAE7qGms/view?usp=drivesdk
2	Mr. Suresh Kanaparthi	DC motor speed and direction control using arduino	2021-22	Institution's Innovation Council Moe's Innovation cell	https://www.youtube.com/shorts/DH4h5IsKnC8?feature=share
3	Ms. Pillalamarri Madhavi	AUTOMATIC PET FEEDER	2021-22	Institution's Innovation Council Moe's Innovation cell	https://www.youtube.com/shorts/MKADN-kUYRM
4	Dr. Madduluri Chiranjivi	Obstacles Avoiding Vaccum cleaner	2021-22	Institution's Innovation Council Moe's Innovation cell	https://drive.google.com/file/d/1ruXvZmXImP2jv5hZf7qf9nXjiqt1-Syr/view?usp=drivesdk
5	Dr. Pedda Suresh Ogeti	Controlling of DC Motor Speed Using Programmable Logic Controller	2021-22	Institution's Innovation Council Moe's Innovation cell	https://drive.google.com/drive/u/0/folders/1JU2add4054WqP61WEo3kTBHZO9o8LtGInnovation
6	Mrs. M. Rani	Generation of Electricity using Pedalling Technology	2021-22	Institution's Innovation Council Moe's Innovation cell	https://drive.google.com/drive/u/0/folders/1JU2add4054WqP61WEo3kTBHZO9o8LtGInnovation

7	Mrs. U Divya	Arduino Home Automation	2021-22	Institution's Innovation Council Moe's Innovation cell	https://www.youtube.com/watch?v=1kFsbBM0Ym4
8	Ms. Pillalamarri Madhavi	Inductance meter	2021-22	Institution's Innovation Council Moe's Innovation cell	https://www.youtube.com/watch?v=T7A2yhSw_vk&feature=youtu.be
9	Mr. Salva V Satyanarayana	Smart Dustbin	2021-22	Institution's Innovation Council Moe's Innovation cell	https://www.youtube.com/watch?v=sluFCJ-RIXM
10	Mr. Salva V Satyanarayana	Smart Hand Wash Dispenser Using IOT and Dashboard	2021-22	Institution's Innovation Council Moe's Innovation cell	https://drive.google.com/drive/folders/1TNbpSZ3jFBQZOKZNbXIWwQQWlPmGi7MK?usp=sharing

6.1.7 Faculty Internship/Training/Collaboration with Industry (10)

Institute Marks : 10.00

Table No. 6.1.7.1: Faculty internship/training/collaboration details.

S.No	Name of the Faculty	Name of the Internship/ Training/ Collaboration	Name of the Company & Place	Duration	Outcomes of Internship/ Training/ Collaboration
1	Dr. Pedda Suresh Ogeti	Internship on Drone Technology	HIEE Empowering Engineers Pvt Ltd,	17 Days	Student did the project on Drone
2	Dr. Pedda Suresh Ogeti	Problem Based Learning (PBL) Training	Aalborg University, Denmark	12 Months	Implementing Multi-Disciplinary Projects and Paper Publications in peer Reviewed Journals
3	Mr. Suresh Kanaparthi	Problem Based Learning (PBL) Training	Aalborg University, Denmark	12 Months	Implementing Multi-Disciplinary Projects and Paper Publications in peer Reviewed Journals

4	Dr. Madduluri Chiranjivi	Problem Based Learning (PBL) Training	Aalborg University, Denmark	12 Months	Implementing Multi-Disciplinary Projects and Paper Publications in peer Reviewed Journals
5	Dr. Madduluri Chiranjivi	IIEECP	IUCEE	6 months	Implementing the different Pedagogies
6	Mr. Salva V Satyanarayana	Problem Based Learning (PBL) Training	Aalborg University, Denmark	12 Months	Implementing Multi-Disciplinary Projects and Paper Publications in peer Reviewed Journals
7	Ms. Pillalamarri Madhavi	Problem Based Learning (PBL) Training	Aalborg University, Denmark	12 Months	Implementing Multi-Disciplinary Projects and Paper Publications in peer Reviewed Journals
8	Ms. Pillalamarri Madhavi	IIEECP	IUCEE	6 months	Implementing the different Pedagogies
9	Mrs. Thirlangi Sirisha	Problem Based Learning (PBL) Training	Aalborg University, Denmark	12 Months	Implementing Multi-Disciplinary Projects and Paper Publications in peer Reviewed Journals
10	Mrs. Thirlangi Sirisha	IIEECP	IUCEE	6 months	Implementing the different Pedagogies
11	Mrs. U Divya	Internship programme on Internet of Things	CITD, Balanagar, Hyderabad	13 Days	Involved in student's projects and designed prototype
12	Mrs. U Divya	Problem Based Learning (PBL) Training	Aalborg University, Denmark	12 Months	Implementing Multi-Disciplinary Projects and Paper Publications in peer Reviewed Journals
13	Mrs. U Divya	IIEECP	IUCEE	6 months	Implementing the different Pedagogies
14	Mrs. M. Rani	Internship programme on Internet of Things	CITD, Balanagar, Hyderabad	13 Days	Involved in student's projects and designed prototype
15	Mr. Salva V Satyanarayana	IGBC Accredited Faculty Training	IGBC	12 Days	Gain Knowledge on Green building environment

6.2 Research and Development Activities (60) **Total Marks 43.00**

6.2.1 Academic Research (10) Institute Marks : 10.00

Table No. 6.2.1.1: Faculty publication details.

S.No.	Item	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)
1	No. of peer reviewed journal papers published	16	11	7
2	No. of peer reviewed conference papers published	17	14	6

3	No. of books/book chapters published	2	0	0

6.2.2 Ph.D. Student Details (5)

Institute Marks : 5.00

Table No. 6.2.2.1: Ph.D. details.

S.No.	Item	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)
1	No. of students enrolled for Ph.D. in the Department	0	0	0
2	No. of Ph.D. students graduated in the Department	0	0	0

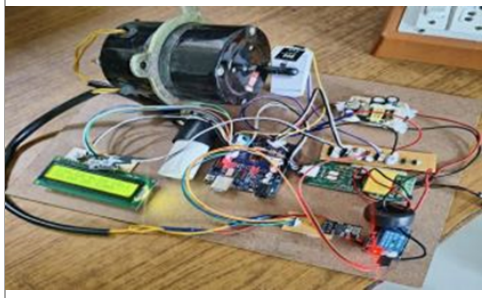
6.2.3 Development Activities (10)

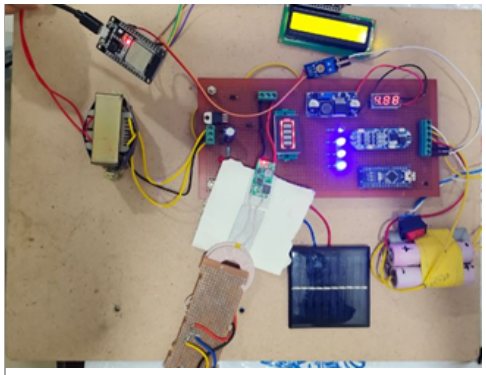
Institute Marks : 10.00

S.N.	Name of the Authors	Patent Details		
		Title of the Patent	Application No.	Date of Application/Publication
CAY (2024-25)				
1	Suresh.Kanaparthi	IOT BASED COAL MINE SAFETY MONITORING AND ALERTING SYSTEM	202441050594 A	07-05-2024
2	Suresh.Kanaparthi Dr.M.Chiranjivi Dr.O.P.Suresh .M.Siddartha	IOT BASED Automatic watering system for Efficient Water Management	202441086586 A	22-11-2024
CAYm1 (2023-24)				
1	Mr. K. Suresh Dr. M. Chiranjivi Dr M. Rajeshwar Mr. M. Siddartha Mr. G. Chandrashekar Mrs M. Rani	Palm Print Authentication system for Biometric Applications	202441009534	03-08-2024

	Mr. M. Ravi Teja			
2	Dr. M. Chiranjivi	SWETCHA-A WOMEN SAFETY APPLICATION WITH IOT DEVICE	202341089606	01-12-2024
3	Mrs.U.Divya	SMART RAIL GUARD: AN INTELLIGENT RAILWAY GATE CONTROL SYSTEM	202441011981	03-08-2024
4	Salava V Satyanarayana Dr.O.P.Suresh P.Madhavi T.Sirisha Santosh Naik Dr.S.Arvind	AN ELECTRIC TRICYCLE FOR EMPOWERED HANDICAPPED TRAVEL	202441040699	31-05-2024
5	T. Sirisha	MACHINE LEARNING FOR THE IDENTIFICATION OF BONE DEFORMITIES	202441044780 A	21-06-2024
CAYm2 (2022-23)				
1	M. Chiranjivi	Renewable Energy based EV Charging System with Hybrid Support Functionality	22604/2022-CO/L	02-11-2022
2	Dr OP Suresh	Certificate of Registration for a UK Design Design number: 6280923 Grant date: 18 May 2023 Registration date: 08 May 2023		
CAYm2 (2021-22)				
1	M.Chiranjivi	The smart Energy grid management system	2021102822	28-07-2021
2	Salava V Satyanarayana	MINI ELECTRIC SCOOTER	202241006899	25/02/2022

S.N.	Name of the Faculty	Name of the working model/Prototype
		Title:

1	Dr.O.P Suresh	Design, Development, and Performance Evaluation of a Self-Charging Solar Powered medical assistance Unmanned Aerial Vehicle (UAV) 
2	K.Suresh	Title: SMART MONITORING AND CONROL OF SINGLE PHASE INDUCTION MOTOR 
		Title: V2V CHARGING WITH INTEGRATION OF SOLAR PANEL

3	Dr.O.P Suresh	
4	Dr. M.Chiranjivi	Title: REAL TIME BUS ARRIVAL AND ALERT SYSTEM USING RASPBERRY PI 
5	S.V Sthyanarayana	Title: SMART ELECTRIC TRICYCLE FOR DIFFERENTLY- ABLED MOBILITY

		
6	P.Madhavi	Title: SOLAR VACCUM CLEANER ROBOT 
7	M.Siddartha	Title: Design and Implementation of a Solar and Dynamo-Powered Hybrid Energy System for E-Bike

6.2.4 Sponsored Research Project (15)

Institute Marks :

2023-24 (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

2022-23 (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

2021-22 (CAYm3)

						Amount(Lacs)

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	i.e. 15,25,000=15.25

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

Note*:

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

6.2.5 Consultancy Work (15)

Institute Marks : 15

2023-24 (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. Madduluri Chiranjivi	Mr. Salava V Satyanarayana	Electrical & Electronics Engineering	Electric Motor Cycle with Liquid Cooled battery	Apsuja Infratech	2 Years	5.25
Dr. Rajeshwar Goud	Ms. Pillalamarri Madhavi	Electronics and Communications Engineering & Electrical and Electronics Engineering	Growth of Algae: Novel Methodology Improve Traditional Aqua -Farming Using Emerging Technologies	Technumen Systems Private Limited	2 Years	5.00
						Amount received (Rs.):10.25

2022-23 (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. Pedda Suresh Ogeti	Dr. Devika SV, Ms. Pillalamarri Madhavi	Electrical and Electronics Engineering and Electronics and communication Engineering	Multi Function Electric Bycle	Technumen Systems Private Limited	18 Months	5.96
Dr M. Chiranjivi	Mr. Salava V Satyanarayana, Mrs. Bindu Madhavi	Electrical and Electronics Engineering and Electronics and communication Engineering	Cruising with confidence: Electric Tricycle for empowered Handicapped Travel	Collaborate Solutions Private Limited	18 Months	6.05
						Amount received (Rs.):12.01

2021-22 (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. Pedda Suresh Ogeti	Mr. K. Suresh	Electrical & Electronics Engineering	Mini E-Scooter	Shigna industries corp.	5 Months	1.25
						Amount received (Rs.):1.25

Total amount (Lacs) received for the past 3 years: 23.51

Note*:

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

6.2.6 Institution Seed Money or Internal Research Grant to its Faculty for Research Work(5)

Institute Marks : 1.00

6.2.6 A Amount received (3)

2023-24 (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
Ms. Pillalamarri Madhavi	Growth of Algae: Novel Methodology Improve Traditional Aqua - Farming Using Emerging Technologies	1 Year	1.50	1.30	Enhanced Algal Cultivation Efficiency
			Amount received (Rs.): 1.50		

2022-23 (CAYm2)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Dr. OP Suresh	Smart E-Multi Function Electric Byclewith Enhanced Functions	9 Months	0.90	0.80	Prototype Development with Smart Enhancements
			Amount received (Rs.): 0.90		

2021-22 (CAYm3)

				Amount	

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Dr. Pedda Suresh Ogeti	Adaptive Electric Bicycle with Integrated Smart Features	3 Months	0.50	0.50	Multi-Functional Design Prototype Developed
			Amount received (Rs.): 0.50		

Total amount (Lacs) received for the past 3 years : 2.90

6.2.6 B Amount utilized (2)

Institute Marks : 2.00

S.No	Year	Project Tittle	Seed Money	Purpose of seed money
1	2023-24	• **AICTE Ministry of Education** • **Growth of Algae: Novel Methodology Improve Traditional Aqua -Farming Using Emerging Technologies** • **Vertical Farming /Hydroponics for Urban spaces Based on Soilless farming**	1,30,000/-	• **Growth Chambers or Racks** • **Nutrient Solution Tanks** • **Climate Control Units (Humidity, temperature)** • **system setup and maintenance**
2	2022-23	• **Multi-Function Electric Bycle** • **Cruising with confidence: Electric Tricycle for empowered Handicapped Travel**	80,000/-	• **Bicycle Frame** • **BLDC Hub Motor** • **Display Unit (LCD/LED for speed, charge, etc.)**
3	2021-22	• **Electric Bike** • AICTE Ministry of Education Funded Project • Development of Eco-Friendly and Cost-Effective Electric Bike for Urban Commute	50,000/-	• Procurement of BLDC Motor and Lithium-ion Battery • Design and Fabrication of Chassis and Drive Mechanism • Motor Controller and Charging Unit • Testing and

				Evaluation Setup
		Total Amount	2,60,000/-	

7 FACILITIES AND TECHNICAL SUPPORT (100)

Total Marks 100.00

7.1 Adequate and well equipped laboratories, and technical manpower (40)

Total Marks 40.00

Institute Marks : 40.00

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 Mach	5	DC Shunt Mot	16 HOURS	Mr. S. Sivaraj	Lab Instructor	DIPLOMA in El
2	Electrical Circu	5	DC Power Sup	20 HOURS	MS. Keerthana	Lab Instructor	DIPLOMA in El
3	Electrical Mach	5	Single Phase T	16 HOURS	Mr.P.Praveen	Lab Instructor	I.T.I in Electrica
4	Instrumentatio	5	SynchroTransn	16 HOURS	Mr.G.Vijay	Lab Instructor	DIPLOMA in El
5	Power Electror	5	MOSFET & IGE	18 HOURS	Mr.K.Anand	Lab Instructor	DIPLOMA in El
6	Electrical simul	5	Servo motor	24 HOURS	Mr.G.Shyamlal	Lab Instructor	DIPLOMA in El

7.2 Additional Facilities Created for Improving the Quality of Learning Experience in Laboratories (20)

Total Marks 20.00

Institute Marks : 20.00

Sr. No	Name of the Facility	Details	Purpose for creating facility	Utilization	Relevance to POs/PSOs
1	Virtual labs	Facility provided with access to Virtual Labs developed by Ministry of education along with dedicated computers and internet connectivity https://www.vlab.co.in/broad-area-electrical-engineering	Acquiring skills through practice and simulations that help reinforce theoretical knowledge through interactive, hands-on learning.	10 HOURS	PO5
2	Arduino Prototyping Facility	Multiple Arduino boards and accessories are made available for students to build small prototypes	To promote hands-on learning and encourage project-based experimentation with embedded system	8 HOURS	PO3, PO4, PO5, PSO2

3	PCB Models for Demonstration	Various PCB models designed and fabricated by students are available for demonstration purposes	To provide visual and practical understanding of circuit design, layout, and PCB fabrication designing	12 HOURS	PO2, PO3, PO5, PSO2
4	Electrical Vehicle Models	Two electric vehicle Prototypes (Electric Bicycle & Tricycle)	To demonstrate practical applications of electrical machines, battery management, and drive systems	10 HOURS	PO3, PO4, PO5, PO7, PSO2
5	E-CAD Software	Licensed solid work software installed on systems	To equip students with industry-relevant design skills and exposure to CAD tools	8 HOURS	PO2, PO4 PSO2

7.3 Maintenance of laboratories and overall ambiance (10)

Total Marks 10.00

Institute Marks : 10.00

Before commencement of the semester, the audit committee will inspect the department laboratories and submit a report to the department. The Head of the Department (HOD) will then forward the lab requirements to the principal. Upon receiving approval from the principal, the department will proceed with the purchase of the required components

Maintenance of Laboratories

- Informative notice boards containing safety, Do's & Don'ts are maintained.
- Well trained technical staff are available for maintenance
- As per the requirements minor repairs are carried out by the technical staff.
- Major repairs are outsourced as per the institutional policy.
- Student's login is maintained in all laboratories.
- Department maintains a stock register of equipment purchased.
- Teaching faculty and technical staff are in-charge of the overall functioning / maintaining of each lab.
- First aid kits are available in all laboratories.
- Fire extinguishers are available on all floors.

Overall Ambiance

- Department has full-fledged State of Labs UG courses as per curriculum requirements.
- All Labs have good Ventilation.
- Racks are available in each Lab for students to place their belongings
- Each Lab is equipped with white board

- Each Lab is equipped with Projectors aid the teaching process.
- Lab manuals are prepared and are available in soft and hardcopy.
- All Labs are well furnished.
- Lab assessments are done as per the lab rubrics.

Vision, Mission and Program Outcome are very well displayed in the Lab

7.4 Safety measures in laboratories (10) **Total Marks 10.00**

Institute Marks : 10.00

Sr. No	Laboratory Name	Safety Measures
1	Electrical Machines-I Lab	Inspect electrical equipment for damage before use. Avoid Metal Tools Near Live Parts Maintain a clean & organized laboratory. MCBs are available to control power fluctuations • Specific Safety rules for Students displayed First aid box & fire extinguisher are kept in the laboratory Safety Mats
2	Electrical Circuits Lab	Proper Earthing and Grounding Maintain a clean & organized laboratory. Use only low-voltage DC power supplies for breadboard circuits. • Checking components for correct ratings before use. Specific Safety rules for Students displayed. First aid box & fire extinguisher are kept in the laboratory MCBs are available to control power fluctuations
3	Electrical Machines -II Lab	Inspect electrical equipment for damage before use. Avoid Metal Tools Near Live Parts. Maintain a clean & organized laboratory. • MCBs are available to control power fluctuations Specific Safety rules for Students displayed First aid box & fire extinguisher are kept in the laboratory. Safety Mats
4	Control Systems -Lab	Inspect electrical equipment for damage before use. Maintain a clean & organized laboratory. MCBs are available to control power fluctuations. Use of Low-Voltage Power Supplies. Proper Grounding of Equipment. Specific Safety rules for Students displayed. First aid box & fire extinguisher are kept in the laboratory.
5	Measurements & instrumentation -Lab	Use of Calibrated Instruments Only. Avoid Overloading Measuring Devices. Insulated Probes and Cables. Dry Hands and Work Area. Avoid Short Circuits in Test Circuits. Specific Safety rules for Students displayed. First aid box & fire extinguisher are kept in the laboratory. Inspect electrical equipment for damage before use. Maintain a clean & organized laboratory. MCBs are available to control power fluctuations
		First aid box & fire extinguisher are kept in the laboratory. Maintain a clean & organized laboratory. Use surge protectors and UPS for all machines. Avoid overloading power outlets. Maintain good

6	Power systems simulation Lab	ventilation to prevent overheating. Restrict use of external USBs unless scanned.
7	Basic Electrical and Electronics Engineering lab	Understand Equipment Ratings Before Use Use Low Voltage for Experiments Proper Insulation of Wires and Cables Use Breadboards and PCB Kits Correctly Check Power Supply Output Before Connection Specific Safety rules for Students displayed. First aid box & fire extinguisher are kept in the laboratory. Inspect electrical equipment for damage before use. Maintain a clean & organized laboratory. MCBs are available to control power fluctuations.
8	Power systems Lab	MCBs are available to control power fluctuations Operate Equipment Within Rated Limits No Direct Contact with Live Terminals Clear Indication of High Voltage Areas Avoid Metallic Accessories (rings, watches) Specific Safety rules for Students displayed. First aid box & fire extinguisher are kept in the laboratory. Inspect electrical equipment for damage before use. Maintain a clean & organized laboratory. Safety Mats.
9	Electrical and Electronics Design Lab	Operate Only Low-Voltage Circuits Avoid Overcurrent Conditions Clean Workstation Regularly Specific Safety rules for Students displayed. First aid box & fire extinguisher are kept in the laboratory. Inspect electrical equipment for damage before use. Maintain a clean & organized laboratory. MCBs are available to control power fluctuations
10	DOING ENGINEERING-I & II LABORATORY	Specific Safety rules for Students displayed. First aid box & fire extinguisher are kept in the laboratory. Inspect electrical equipment for damage before use. Maintain a clean & organized laboratory.
11	Power Electronics Lab	Make sure all circuit components are rated for the Expected voltage/current. Never exceed the voltage/current ratings of components like MOSFETs, IGBTs, capacitors, etc Use fuse protection or circuit breakers for experimental setups. Use banana plugs, binding posts, and proper connectors—avoid loose wires Specific Safety rules for Students displayed. First aid box & fire extinguisher are kept in the laboratory. Inspect electrical equipment for damage before use.

7.5 Project laboratory/research laboratory /centre of excellence (20)

Total Marks 20.00

Institute Marks : 20.00

S. No	Name of the Laboratory
1	Project lab /Student Skill Development Center
2	Center for Renewable Energy

1.

1. **Project lab /Student Skill Development Center (SSDC)**

Objectives:

- Equip students with practical skills in emerging technologies like Arduino, PLC programming and python to close the industry-academia gap
- Emphasize critical thinking, Problem-solving and lifelong learning through a curriculum aligned with current industry needs in electrical and electronics engineering.

Value addition to students:

- Internships in core domain
- Enhanced career opportunities

Outcomes:

- Exposure to core technologies
- Certification
- Paper publications
- Patents

Major Achievements:

- 3 patents were published
- 27 students along faculty published in Peer reviewed journals
- 5 students completed research internships at IIIT Hyderabad (2023-2024)
- Hitam team won 1st prize in national CODE &WIRE-Arduino competition, Hyderabad.
- 240 students certified in industrial automation with PLC (online/offline).

Figure: Projects developed by students in SSDC

Table: Activities under Student Skill Development Center

S. No	Name of the Activity	Title
1	Student paper Publications	No. of Publication:27
2	Industry innovation cell	No. of Projects Uploaded:40
3	Project expo	No. of awards received:2

2. Center for Renewable energy:

The Department of Electrical and Electronics Engineering established a Center for Renewable energy in 2022 established to address the growing need for clean, sustainable, and affordable energy solutions.

Objectives: To conduct advanced research in solar, wind, biomass, and other renewable energy sources, encouraging innovation in clean energy technologies.

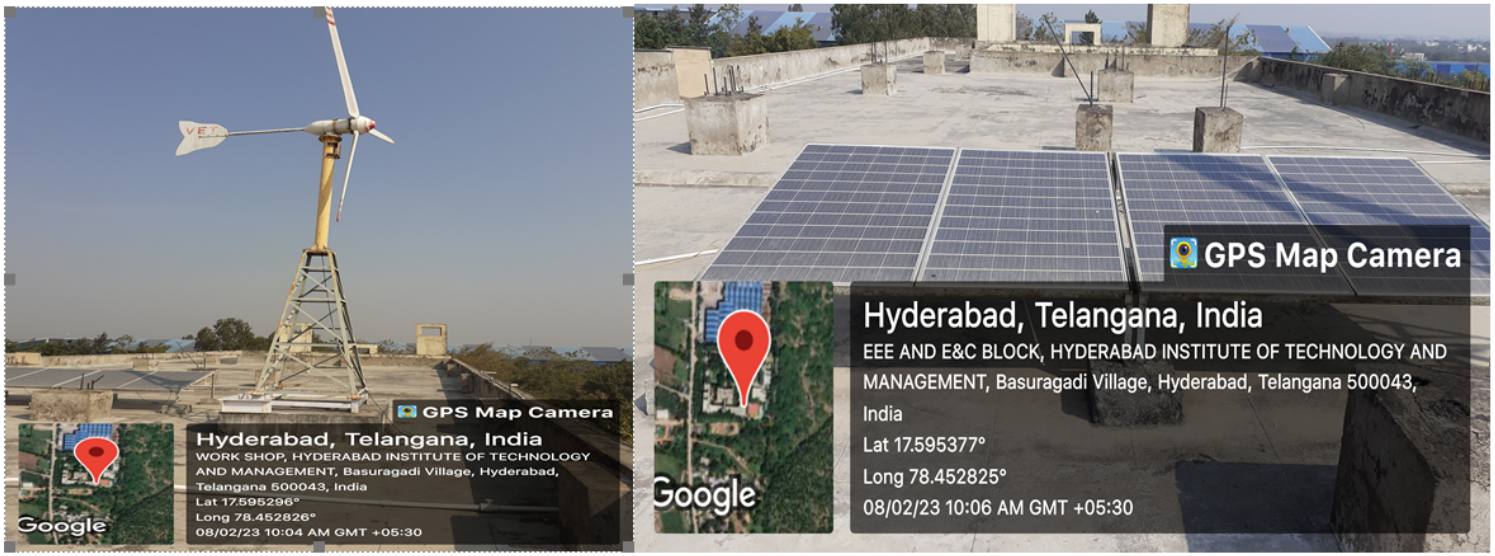


Figure: Establishment of windmill and solar power

Figure: Sample certificate on “Advanced Electric Vehicle Technology”

Outcomes:

- Enhanced Research Output
- Skill Development and Employability
- Increased Student Participation in Competitions and Projects
- Sustainability Awareness and Impact

Recognition: The project titled “A novel construction of renewable energy resources micro grid compensated by D-facts and power consumers security using pre-postpaid energy meter with GSM technique” is funded by Department of Science and Technology worth 38.1 Lakhs.

Table: Activities conducted under centre in the year 2024-25:

S. No	Name of the Activity	Details of the activity
1	Workshop	Advanced Electric Vehicle Technology
2	Faculty Development Program	Sustainable practices-Green building and Energy Management
3	Student projects	Sustainable energy solutions using solar panel and micro turbine
4	Student projects	V2V charging for Electric Vehicle
5	Student projects	IOT based smart lab for energy prediction and automation

6	Student projects	IOT Based Smart Battery Monitoring System with Fault Analysis and Battery Life Prediction for Electric Vehicles
7	Student projects	Wireless solar mobile charger
8	Student projects	Design and Implementation of a Solar and Dynamo-Powered Hybrid Energy System for E-Bike
9	Student projects	Sustainable Energy Solution Using Solar Panel and Micro Turbine
10	Student projects	Design, Development, and Performance Evaluation of a Self-Charging Solar-Powered medical assistance Unmanned Aerial Vehicle (UAV)

- 10 Papers published under Centre for Renewable Energy

8 CONTINUOUS IMPROVEMENT (80)

Total Marks 80.00

8.1 Actions taken based on the results of evaluation of each of the COs, POs & PSOs (40)

Total Marks 40.00

8.1.1 Actions Taken Based on the Results of Evaluation of the COs Attainment (20)

Institute Marks : 20.00

		2019-2023				2020-2024			
Course Code/Course Name	**Course Outcomes**	**Target**	**Attainment**	**Reasons towards Attainment / Non Attainment**	**Actionable Items**	**Target**	**Attainment**	**Reasons towards Attainment / Non Attainment**	**Remarks**
				Students may lack conceptual clarity on equivalent	Conduct more simulation-based labs using tools				

EE402PC/Electrical Machines-II	CO1	1.5	1	circuits and phasor diagrams, which are foundational. Limited practice with real-world loading scenarios may have contributed.	like MATLAB/Simulink; include more real-life transformer case studies in tutorials. Introduce formative assessments to monitor understanding.	1.5	1	Students faced challenges in understandin g the construction and functions of each part	Encourage the students to visual experience of each part
	CO2	1.5	1.1	Difficulty in visualizing the working principles and torque-speed characteristics; insufficient hands-on experience with motor testing.	Introduce interactive animations/simulat ions; plan industrial visits or virtual lab activities. Conduct mini-projects on load testing of motors to reinforce concepts.	1.5	1	Students faced challenges in understandin g the operation of Induction motor and how the principles applied, affecting overall performance in this outcome.	Providing Animation videos how it is operating
	CO3	1.5	0.9	Lower exposure to single-phase and special machines in lab settings; students tend to prioritize major machines over auxiliary ones.	Increase lab sessions focusing on single-phase and special machines. Integrate flipped classroom strategies with short video lectures and quizzes. Add application-oriented assignments.	1.5	1.5	Target Attained	Laboratory sessions were integrated with theoretical topics to bridge the gap between concept and application, enhancing the practical understanding of electrical machine operations.

	CO4	1.5	0.8	Students struggle with interpreting test data and efficiency analysis, especially using indirect methods. Lack of repeated practice affects confidence.	Include peer-assisted learning sessions and problem-solving workshops on efficiency calculations. Provide structured worksheets on Hopkinson's and Swinburne's tests. Use past exam question analysis.	1.5	1.5	Target Attained.	Concepts were reinforced through problem-solving sessions, lab-based demonstrations, and application-based teaching techniques to strengthen student understanding
	CO1	1.5	1.9	Target Attained.	Hands-on experiments involving control system components and trainer kits allowed students to apply theoretical knowledge in practical settings, reinforcing their learning and enhancing retention	1.5	1.1	Students faced challenges in understandin g how to apply different types of control system strategies to electrical engineering domains	Conducting sessions focusing on foundational concepts of eletrical system applications.
	CO2	1.5	1.4	Minor difficulties in applying stability criteria (e.g., Routh-Hurwitz) and interpreting time response specs.	Conduct extra practice sessions on stability analysis techniques,Use visual tools like step-response plots and pole-zero maps.,Implement	1.5	1.1	Students faced challenges in calculating time domain and frequency domain specifications for assessing system performance , affecting overall	Include more practice problems in the class related to applying time domain and frequency domain for system performance

EE404PC/Control Systems					interactive quizzes after teaching key concepts.			performance in this outcome.	
	CO3	1.5	1.3	Students may struggle with plotting and interpreting Bode/Nyquist diagrams, and connecting them to system behavior.	Introduce graphical simulation tools (e.g., MATLAB Control Toolbox),Provide step-by-step solved examples and group assignments on frequency domain analysis,Include lab-based activities to correlate theory with practice.	1.5	0.9	Students may struggle with transfer function derivation, block diagram reduction, and Laplace transforms, especially if their mathematical foundation is weak.	Conduct basic math revision sessions (Laplace, differential equations).Use graphical tools and block diagram animation to enhance understanding.Include step-by-step problem-solving sessions and low-stakes concept quizzes.
	CO4	1.5	1.8	Target Attained.	Software like MATLAB and Simulink was used in labs and tutorials to simulate control system behavior, enabling students to visualize and analyze system responses and improve conceptual understanding	1.5	0.9	Difficulty in interpreting system responses, understanding stability concepts, and working with Bode/Nyquist plots. Students may also lack experience using tools like MATLAB.	Provide visual demonstrations of time and frequency responses using MATLAB/Simulink.Assign group tasks involving stability analysis using Routh-Hurwitz and root locus methods.
									Students demonstrated the ability to identify and describe the

EE405PC/Power Systems-I	CO1	1.5	3	Target Attained.	Teaching was reinforced with case studies, site visit videos, and real-world scenarios to provide contextual understanding. Regular quizzes and conceptual questions ensured students retained core concepts effectively	1.5	1.5	Target Attained.	key components of power generation, transmission, and distribution systems. Conceptual understanding was reinforced through lectures, schematic analyses, and application-based discussions, ensuring strong foundational knowledge
	CO2	1.5	3	Target Attained.	Visual aids, line diagrams, and system modeling tools were used extensively in lectures and labs. Students were engaged through assignments and objective-type assessments targeting system-level understanding	1.5	1.5	Target Attained.	Students successfully applied theoretical models to calculate transmission line parameters and assess performance under various loading conditions. Regular practice on short, medium, and long transmission line models contributed to the attainment of this outcome
	CO3	1.5	3	Target Attained.	practice worksheets helped students build computational skills and confidence, contributing to consistently high performance in	1.5	1.5	Target Attained.	Students were able to perform symmetrical fault analysis using per-unit systems and Thevenin equivalents. The use of problem-solving sessions and relevant

					both internal and external evaluations				assignments helped solidify understanding and application of fault analysis techniques
	CO4	1.5	3	Target Attained.	Case-based questions and scenario analysis in exams helped assess critical thinking and decision-making skills in power system planning	1.5	1.4	Students may have difficulty understandin g line inductance, capacitance, and their calculations in different configurations .	Encourage use of virtual labs and Introduce simulation tools like MATLAB SIMULINK for distribution system modeling to enhance conceptual clarity.
	CO1	1.5	1	Students may have weak foundational understanding or misconceptions about core concepts, possibly due to abstract or math-heavy content.	Reinforce fundamental concepts through conceptual videos and analogies,Provide additional solved examples and encourage group discussions,	1.5	1.3	Students Should get the practical knowledge on different measuring instruments	Lab Demonstrations to get more exposure on a all Measuring Instruments
	CO2	1.5	1	Students might find it challenging to apply theoretical knowledge to problem-solving or case-based questions.	Implement case-based learning and real-world application problems,Conduct weekly practice sessions with emphasis on application-based questions.Offer remedial classes or one-on-one doubt clarification.	1.5	1.3	After getting the practical , they have to identify the instruments	Conducting Students Seminars to get more knowledge and also identification of instruments

EE503PE/Measurements and Instrumentation	CO3	1.5	0.9	Conceptual difficulty in connecting multiple topics or poor interpretation of graphical/simulation data may contribute to low performance.	Use interactive simulations (e.g., MATLAB, Proteus) to demonstrate dynamic concepts,Encourage peer teaching and collaborative group assignments.	1.5	0	After getting knowledge on Electrical Instruments , they should know different non electrical quantities	PPT and Posters Presentations by Students to get knowledge on various transducers
	CO4	1.5	1	Students may not be able to synthesize their knowledge effectively during assessments or project-based tasks.	Integrate reflective activities (e.g., learning journals, concept maps), Increase formative feedback opportunities and use rubrics for clarity.	1.5	1.5	Target Attained.	Students demonstrated a clear understanding of measurement system components, classification of instruments, and the significance of static and dynamic characteristics. Teaching strategies included real-life examples and block diagram-based explanations, supporting conceptual clarity
	CO1	1.5	1.5	Target Attained.	Students were able to identify and explain the working principles, characteristics, and selection criteria of power semiconductor devices such as SCR, IGBT, and MOSFET. The attainment was achieved through concept-based	1.5	1.5	Target Attained.	Students were able to explain the construction, working, and applications of PMMC, moving iron, digital voltmeters, and multimeters. Performance in problem-solving tasks and quizzes reflected their ability

					teaching, device comparison activities, and application discussions				to distinguish between instrument types and their usage in various scenarios
EE612PE/Power Semiconductor Drives	CO2	1.5	1.5	Target Attained.	Students effectively analyzed single-phase and three-phase controlled rectifiers used in DC motor drives. Analytical skills were demonstrated in solving numerical problems and interpreting performance characteristics of drive systems under different firing angles and load conditions	1.5	1.3	Students may have difficulty applying firing angle control, deriving output voltage expressions, and understandin g load effect on performance.	Use step-by-step derivation sessions for average/RMS output voltages.Assign practice problems on different load conditions.
	CO3	1.5	1.5	Target Attained.	Students attained the expected competence in understanding V/f control, vector control, and slip power recovery methods. Simulations and case studies on induction and synchronous motor drives enhanced their understanding of	1.5	1.5	Target Attained.	Students successfully analyzed the selection and application of transducers for displacement, pressure, temperature, and other physical quantities. Emphasis on real-time data acquisition and signal conditioning circuits supported their ability to evaluate

					drive behavior under dynamic conditions				measurement systems in practical contexts
	CO4	1.5	1.5	Target Attained.	Students successfully evaluated the application of DC-DC choppers and various inverter configurations for speed control of DC and AC motors. Practical exposure through simulations and waveform analysis enabled students to meet this learning outcome	1.5	1.2	Students may struggle with speed control techniques, vector control, or converter–motor interaction due to conceptual and mathematical complexity.	Conduct simulation-based learning modules (MATLAB/Simulink) focused on AC/DC motor control.Organize lab experiments on speed-torque characteristics and drive parameter tuning.
	CO1	1.5	1.3	Students may find it challenging to visualize fault scenarios and understand protection coordination logic, particularly the distinction between different protection mechanisms.	Introduce case studies of real-world protection failures to enhance conceptual clarity.Conduct interactive class discussions around protection settings and relay coordination.	1.5	1.3	Students may find it challenging to differentiate among protection techniques (e.g., differential, distance, and overcurrent) and their specific applications.	Conduct visual demonstrations and diagrams to compare protection schemes.Use case studies of system faults and failures to relate concepts to real-life situations.Include weekly concept quizzes and fault condition flowcharts.
				Difficulty in correlating relay types with their characteristics and applications. Students may	Use relay coordination graphs and numerical relays in labs to demonstrate grading,Provide			Complexity in understandin g arc extinction methods, relay classification,	Use videos or simulations showing internal working of circuit breakers.Conduct lab sessions or virtual labs demonstrating relay

EE603PC/Power System Protection	CO2	1.5	1.3	struggle with time-current characteristics, relay settings, and zone protection concepts.	practice assignments involving real-life relay setting problems.	1.5	1.3	and coordination between primary and backup protection.	settings and trip curves.Provide worksheet exercises on relay coordination and TCC (Time Current Characteristics) plots.
	CO3	1.5	1.5	Target Attained.	Reinforce concepts through fault location exercises and relay coordination challenges in lab sessions	1.5	1.3	Students may not fully grasp digital relay logic, algorithms, and their differences from conventional relays due to limited exposure.	Invite guest lectures from industry professionals on latest protection trends.Assign mini-projects on static relay logic or microprocessor-based protection systems.
	CO4	1.5	1.5	Target Attained	Maintain learning outcomes by organizing model demonstrations or animations of breaker operations. Use practical data from grid disturbances to help students connect theory with real-world protection system behavior.	1.5	1.3	Students may struggle with interpreting fault data, CT/PT ratios, and relay settings under different system configurations .	Provide data sheets and actual relay setting examples.Conduct team-based activities where students simulate faults and propose protection solutions.
				Students may find it difficult to grasp the system-level overview, especially with the integration of mechanical	Use block diagram walkthroughs and animated videos to explain EV/HEV architecture,Cond			Minor confusion in differentiating series, parallel, and	Use animated diagrams and videos showing power flow in

EE713PE/Electrical and Hybrid Vehicles	CO1	1.5	1.2	and electrical subsystems. Lack of prior exposure to vehicle dynamics may also contribute.	uct introductory quizzes to reinforce architecture fundamentals.	1.5	1.4	series-parallel configurations ; insufficient real-world exposure to architecture.	different configurations.Assi gn student presentations on EV architecture.
	CO2	1.5	1.2	Complex interaction between motors, inverters, and controllers can be overwhelming. Insufficient lab access to EV drive systems may be a factor.	Introduce MATLAB/Simulink-based drive system simulations.Provid e tutorials on DC/AC motor control in EV applications.	1.5	1.4	Limited familiarity with drive-train components and control strategies; difficulty linking converters with different motor types.	Organize virtual lab demos of propulsion systems.Include tutorials with block diagram-based system design problems.
	CO3	1.5	0	Likely due to lack of course coverage, no practical exposure to battery technologies, and unfamiliarity with energy management techniques.	Conduct hands-on sessions or simulations on SOC (State of Charge) and SOH (State of Health) estimation. Assign mini-projects on comparing different EV battery chemistries.	1.5	1.4	Complexity in understandin g SOC, SOH algorithms, and battery thermal management. Lack of practical exposure to battery packs.	Provide hands-on training or videos on BMS operation.Use real EV battery data for SOC/SOH estimation exercises.Assign mini-projects comparing different battery chemistries.
	CO4	1.5	0	Students may not have been exposed to performance testing methodologies or simulation-based evaluation techniques.	Provide project-based learning tasks to evaluate energy efficiency and drive cycles. Include assignments that	1.5	1.4	Students may face difficulty applying standard drive cycles and	Introduce case-based tasks using EV test data.Provide Simulink models for

				Possibly no assessment or insufficient instructional time for this outcome.	analyze real-world EV specs using data sheets and simulation outputs.			interpreting simulation results	vehicle performance testing.
	CO1	1.5	1.4	Slight difficulty in interpreting long transmission line equations and surge impedance loading.	Conduct interactive tutorials focusing on short, medium, and long line modeling. Offer problem-solving sessions with real-world scenarios.	1.5	1	Students may find it difficult to differentiate between short, medium, and long line models, and may struggle with parameters like surge impedance and regulation.	Assign application-oriented numerical problems involving line parameters.Include comparison charts and interactive quizzes to reinforce differences.
	CO2	1.5	1.2	Students may struggle with fault classification, symmetrical component methods, and sequence networks.	Include step-by-step illustrations on fault analysis techniques.Assign homework and mini-projects on system protection and fault studies.	1.5	1.5	Target Attained.	To ensure consistent performance, students were exposed to practical scenarios in economic scheduling and load forecasting. Tutorials emphasized constraint handling in ELD problems, while MATLAB-based demonstrations and case studies improved their ability to model

									real-time load dispatch. The link between optimization and sustainability was also highlighted to improve depth
EE502PE/Power Systems-II	CO3	1.5	1.3	Concepts such as swing equation, equal area criterion, and stability limits may be abstract and math-heavy.	Conduct simulation-based experiments (e.g., rotor angle stability).Use animations to demonstrate transient and steady-state stability.Solve graphical problems on equal area criterion in guided sessions.	1.5	1.5	Target Attained.	The target was maintained through concept-based teaching using visual aids, swing curve plotting, and real-world grid instability scenarios. Numerical problem-solving on the swing equation and equal area criterion helped solidify understanding of transient and steady-state stability. Interactive classroom discussions and previous year GATE-style questions reinforced concept clarity
				Minor errors in applying Gauss-	Provide structured problem-solving worksheets on				Consistency was achieved by incorporating recent blackout case studies, contingency analysis exercises, and discussions on SCADA and EMS. Problem-solving

	CO4	1.5	1.4	Seidel/Newton-Raphson methods or misinterpreting bus classification.	load flow analysis.Encourage code-based load flow solution exercises using MATLAB/Python.	1.5	1.5	Target Attained.	tasks on power system reliability indices and simple state estimation methods strengthened technical understanding. Students were also encouraged to review IEEE papers for emerging trends in smart grid security
	CO1	1.5	3	Target Attained.	High attainment was maintained through concept-focused teaching using circuit simulations, real-time circuit demos, and continuous reinforcement of Ohm's and Kirchhoff's laws in problem-solving sessions. Frequent quizzes and step-by-step derivation methods strengthened analytical skills	1.5	1	Students may struggle with the application of circuit laws in AC systems due to weak mathematical foundations and poor conceptual clarity in phasors and impedance.	Conduct remedial sessions on basic circuit laws with real-life analogies.Provide additional practice worksheets with step-by-step problem-solving strategies.
					Attainment was sustained by emphasizing practical applications of power factor improvement in daily life and			Lack of hands-on experience and poor conceptual connection between	Arrange lab demonstrations with working

EE103ES/Basic Electrical Engineering	CO2	1.5	2.8	Target Attained.	industries. Use of phasor diagrams, waveform analysis, and lab-based reinforcement helped in connecting theoretical knowledge to real-world power systems.	1.5	0.7	theory and machine operation. Students may not understand the role of electromagnetism and constructional details.	models of machines.Organize tutorials with real-world applications of machines (e.g., motors in fans, pumps).
	CO3	1.5	3	Target Attained.	Consistent performance was ensured through simplified machine models, cut-section views, and multimedia content showing generator and motor operations. Integration of working principles with hands-on exposure during lab sessions helped deepen understanding	1.5	1.5	Target Attained	To maintain high performance, students were regularly engaged in interactive problem-solving using circuit-building software (e.g., Multisim, LTSpice) and hands-on tasks with resistive and reactive elements. Regular peer discussions and conceptual quizzes fostered deeper learning and recall of foundational laws.
	CO4	1.5	3	Target Attained.	Attainment was maintained by incorporating safety demonstrations, real-world wiring layouts, and case discussions on short circuits and grounding techniques. Practical sessions	1.5	1.5	Target Attained.	Workshops and mini-projects on household AC circuit design and power factor correction exposed students to real-world relevance. Weekly formative assessments on phasor algebra and

					on wiring, fuses, and earthing improved relevance and retention of safety concepts				RLC circuit analysis reinforced concepts and helped address misconceptions early
	CO1	1.5	0.8	Students may struggle with the electromagnetic induction principle, constructional parts, and types of excitations. Limited exposure to actual machine components can cause confusion.	Use Animation videos and virtual lab demonstrations of DC generators.Provide comparison tables for types of excitation with practical examples.	1.5	2.4	Target Attained.	Improved attainment was achieved by integrating hands-on transformer testing in the lab and performing open-circuit and short-circuit tests. Simulation tools and visual aids (such as core construction videos and phasor diagrams) helped deepen understanding of transformer behavior under various loads
	CO2	1.5	0.9	Difficulty in interpreting open-circuit and load characteristics; mathematical errors in applying the EMF equation.	Conduct problem-solving tutorials with guided steps for EMF and circuit analysis.Use graph plotting exercises and lab experiments to correlate theory and curves.	1.5	2.4	Target Attained.	Performance was enhanced through analytical assignments involving efficiency, torque-speed characteristics, and load tests. Students used tabulated test results and performance graphs to interpret practical behavior. Continuous focus on linking theory with lab observations

EE304PC/Electrical Machines-I									contributed to deeper understanding
	CO3	1.5	1	Students may find it challenging to relate construction with operating principle (back EMF, torque production).	Use motor operation animations and live lab demos.Organize group discussions to reinforce physical principles.	1.5	2.4	Target Attained.	Consistent improvement was supported by encouraging students to use equivalent circuit models to solve numerical problems and validate them with practical lab results. Emphasis on model-based learning and comparison with nameplate data fostered application-oriented thinking
	CO4	1.5	0.5	Major difficulties in torque-speed equations, characteristics, and speed control methods. Possibly due to lack of sufficient problem practice or inadequate visualization.	Use MATLAB/Simulink simulations to illustrate speed-torque curves.Implement step-by-step worksheets and comparison charts on speed control methods.	1.5	2.4	Target Attained.	Improvement was driven by integrating transformer equivalent circuit analysis with experimental validation in labs. Students used oscilloscope-based waveform monitoring, load testing, and simulation of fault conditions to better interpret results. Higher-order questions involving efficiency and

									voltage regulation boosted analytical ability

8.1.2 Actions Taken Based on the Results of Evaluation of the POs/PSOs Attainment (20)

Institute Marks : 20.00

POs Attainment Levels and Actions for improvement – CAY (20-24)

PO's	Target Level	Attainment Level	Observations
PO.1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems			
PO1	2.0	2.01	Target Attained
Action Taken: To further enhance students application of engineering knowledge, the following measures were implemented: • Integration of industry-based case studies in subjects like Power Systems and Control Systems to connect theory with practical scenarios. • Sessions on MATLAB/Simulink and PLC were conducted to provide hands-on experience in modeling electrical networks and dynamic systems. • Mini-projects on renewable energy systems were introduced to encourage real-world problem-solving using core engineering principles.			
PO.2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.			
			1. Students demonstrated basic conceptual understanding across foundational subjects like Basic

PO2	2.0	1.87	Electrical Engineering (EE103ES) and Chemistry (CH102BS), but struggled to apply first principles for modeling and solving complex engineering problems in advanced subjects. In courses such as Electrical Circuits Analysis (EE302PC) and Electromagnetic Fields (EE305PC), students faced difficulty in formulating mathematical models and justifying analytical steps. 2.In application-oriented subjects like Electrical Machines (EE304PC, EE402PC) and Power Systems (EE405PC, EE502PE), students had challenges breaking down multi-stage problems, analyzing system behavior, and drawing conclusions grounded in physical principles. Labs and simulations were often used mechanically without critical validation of theoretical results.
Action Taken: 1. Conducted focused tutorials and bridge sessions in Electrical Circuits Analysis, Electromagnetic Fields, and Control Systems to strengthen students' ability to derive and apply equations from first principles. 2. In lab-based courses (e.g., Power Systems Lab, Machines Lab, Control Systems Lab), students were required to solve problems analytically and validate results using simulation tools like MATLAB, and Simulink. 3. case-study tasks were introduced in electives like Hybrid Vehicles, Power Semiconductor Drives, and Power Quality to enhance research interpretation and analytical modeling skills.			
PO.3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for public health and safety, and the cultural, societal, and environmental considerations.			

PO3	2.0	2.14	Target Attained

Action Taken: To further promote innovative design and development skills among students:

- Problem-based learning (PBL) was integrated into courses like Power Electronics and Electrical Machines, requiring students to propose system-level solutions to real-world problems.
- Capstone projects were guided to address challenges in public health and sustainable energy, such as designing low-cost Health monitoring Systems and energy-efficient rural electrification models.
- Participation in hackathons and national-level project expos was encouraged, with students mentored to design solutions considering safety, societal, and environmental impacts.

PO.4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis, and interpretation of data, and synthesis of the information to provide valid conclusions

PO4	2.0	2.26	Target Attained

Action Taken: To enhance students' investigative and analytical skills:

- Research methodology sessions were conducted as part of the project and seminar courses to improve experimental design, data analysis, and interpretation capabilities.
- Final-year students were encouraged to use IoT-based data acquisition systems and MATLAB/Excel-based analysis for accurate experimentation and validation.

PO.5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO5	2.0	2	Target Attained

Action Taken: To further improve proficiency in modern tools and techniques:

- **Hands-on training sessions** were organized on simulation software such

as **PLC, MATLAB/Simulink,** and **AutoCAD Electrical** to enhance modeling and analysis capabilities. • **Virtual labs** and **online toolkits** were integrated into laboratory courses, enabling remote experimentation and familiarization with industry-relevant tools. • Students were encouraged to use **Python and IoT platforms** (like Arduino and NodeMCU) for predictive modeling in smart grid and automation projects.			
PO.6. The engineer and society: Apply to reason informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.			
PO6	2.0	1.93	1. Although the PO6 attainment (1.93) was close to the target (2.0), analysis revealed certain gaps in the students ability to explicitly connect engineering decisions with societal, safety, legal, and ethical considerations. In Engineering Graphics (ME204ES), students focused more on technical drawing accuracy than on interpreting design implications related to safety, manufacturability, or environmental standards. 2. In Electrical Machines Lab-I (EE306PC) and Power Systems Lab (EE605PC), students conducted experiments correctly but did not consistently reflect on the societal or safety implications of machine operation, insulation standards, or power reliability—particularly in real-world or rural/urban contexts. Discussions around equipment failures, safety precautions, or societal impact of blackout scenarios were limited. 3. In Signals and Systems Lab (EE607PC), although students applied signal processing concepts effectively, they were less exposed to applications that address societal

			issues such as healthcare monitoring, communication systems in disaster management, or public safety technologies. The ethical and legal aspects of signal manipulation, data handling, or health-related signal processing were not deeply explored.

Action Taken:

- To enhance PO6 attainment, contextual and societal relevance was embedded into lab-based learning across courses. In Electrical Machines Lab-I (EE306PC) and Power Systems Lab (EE605PC), lab manuals were updated to include reflective questions on safety standards, societal impact, and legal compliance, encouraging students to consider the real-world implications of electrical equipment and system failures.
- A mandatory "Societal Relevance" section was added to lab reports, prompting students to connect technical work with public safety and infrastructure reliability. In Signals and Systems Lab (EE607PC), experiments were linked to applications in healthcare, emergency communication, and assistive technologies, highlighting ethical and cultural considerations in signal processing.
- Additionally, mini safety modules covering BIS/IEC standards, accident case studies, and the legal responsibilities of engineers were introduced during lab sessions. In Engineering Graphics (ME204ES), students engaged in design tasks that required evaluating alternatives based on safety, accessibility, and environmental considerations, reinforcing the broader impact of engineering designs on society.

PO.7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO7	2.0	2.19	Target Attained

Action Taken: To reinforce the importance of sustainability in engineering practice:

- Students were involved in projects focused on renewable energy, such as

solar-powered irrigation systems and low-emission electric vehicles developed using repurposed components.
- Guest lectures and awareness sessions on environmental regulations, energy conservation techniques, and green building concepts were organized in collaboration with industry experts.
- Participation in eco-focused competitions and community outreach programs, such as energy audits in rural areas and awareness drives on sustainable energy use, was encouraged.

PO.8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO8	2.0	2.74	Target Attained

Action Taken: To further instill professional ethics and responsibilities among students:

- Ethics modules were embedded into project work and seminars, requiring students to discuss ethical dilemmas and societal implications of their proposed solutions.
- Workshops and role-play sessions on topics like intellectual property rights (IPR), plagiarism, safety compliance, and IEEE code of ethics were conducted.
- A plagiarism checking mechanism (using tools like Drillbit) was implemented for project reports and technical documentation to promote academic integrity.

PO.9. Individual and teamwork: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO9	2.0	2.16	Target Attained

Action Taken: To further strengthen students' teamwork and leadership abilities:

- Students were assigned role-based responsibilities in laboratory and design mini-projects to encourage collaborative learning.
- Interdisciplinary projects were introduced involving collaboration with departments like Computer Science and Mechanical Engineering.
- Soft skills and team-building workshops were conducted as part of

personality development programs to enhance interpersonal and communication skills.
- Final-year project groups were evaluated based on team dynamics and individual contributions, with reflective logs introduced to assess team learning and leadership experiences.

PO.10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions

PO10	2.0	2.27	Target Attained

Action Taken: To further enhance students' technical and professional communication skills:

- Technical presentation sessions were conducted within seminars and project reviews, where students presented their work to faculty and peer audiences, improving clarity and confidence.
- Workshops on technical report writing and design documentation standards (such as IEEE format, lab report structure) were organized.
- Students were encouraged to participate in paper presentations, poster competitions, and department-level symposiums to practice public speaking and written communication.

PO.11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO11	2.0	2.05	Target Attained

Action Taken: To improve students' awareness of project planning and financial management:

- Mini-projects and final-year projects included mandatory components for budget estimation, resource allocation, and project timeline planning using tools like Gantt charts.
- Workshops on project management principles (covering basics of cost

estimation, scheduling, and risk assessment) were conducted using case studies from the electrical industry.
- Students were encouraged to act as project leads and maintain expense logs, reinforcing accountability and financial decision-making.

PO.12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

PO12	2.0	2.17	Target Attained

Action Taken: To promote self-directed and continuous learning habits among students:

- Students were encouraged to complete NPTEL/SWAYAM certification courses in emerging areas like Smart Grids.
- Department library resources and online databases were made more accessible to support independent exploration.
- Faculty mentors regularly guided students on career pathways, higher education opportunities, and the importance of staying updated with technological trends through journals, webinars, and short courses.

POs Attainment Levels and Actions for improvement – CAY (19-23)

PO's	**Target Level**	**Attainment Level**	**Observations**
PO.1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems			
PO1	1.8	1.8	Target Attained

Action Taken: To further enhance students application of engineering knowledge, the following measures were implemented:

- Sessions on MATLAB/Simulink and PLC were conducted to provide hands-on experience in modeling electrical networks and dynamic systems.

PO.2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

			1.Students demonstrated basic conceptual knowledge across analytical and lab-based subjects like Electrical Circuits Analysis,
PO2	1.8	1.7	Electromagnetic Fields, and Electrical Machines, but faced difficulty in formulating and solving non-standard or complex problems using first principles. 2.In courses like Power Electronics, Control Systems, and Power System Protection, many relied on memorized procedures rather than systematic problem breakdown and analytical reasoning. Additionally, limited exposure to technical literature in electives like Electrical and Hybrid Vehicles and Industrial Electrical Systems hindered their ability to review research-based models or justify engineering decisions.

1.Open-ended, multi-step problems requiring derivation, validation, and assumption justification were introduced in tutorials and assignments across core subjects. Lab assessments in Control Systems and Power Systems were enhanced to include analytical-simulation comparisons and reflection tasks.

2. Research literature review components were added to electives to develop modeling and evaluation skills. Faculty workshops were conducted to align assessments with PO2, focusing on first-principle applications and logical reasoning in problem-solving.

PO.3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for public health and safety, and the cultural, societal, and environmental considerations.

PO3	1.8	1.8	Target Attained

Action Taken: To further promote innovative design and development skills among students:

- Capstone projects were guided to address challenges in public health and sustainable energy, such as designing low-cost Health monitoring Systems and energy-efficient rural electrification models.

PO.4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis, and interpretation of data, and synthesis of the information to provide valid conclusions

PO4	1.8	1.9	Target Attained

Action Taken: To enhance students' investigative and analytical skills:

Final-year students were encouraged to use MATLAB/Excel-based analysis for accurate experimentation and validation.

PO.5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO5	1.8	1.9	Target Attained

Action Taken: To further improve proficiency in modern tools and techniques:

- Students were encouraged to use **IoT platforms** (like Arduino and NodeMCU) for predictive modeling in automation projects.

PO.6. The engineer and society: Apply to reason informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO6	1.8	1.8	Target Attained

Action Taken: To further strengthen students' understanding of societal responsibilities and the role of engineers:

- Students were engaged in community-based projects, such as designing solar-powered lighting systems for rural areas and basic electrical safety audits for local schools and public facilities.
- Awareness sessions on electrical safety regulations, energy conservation, and public utility design were conducted in collaboration with government and utility representatives.
- Participation in social outreach activities, like organizing energy awareness drives and electrical safety workshops in villages, was promoted.

PO.7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO7	1.8	1.7	Students displayed limited awareness of how engineering designs and electrical machines impact environmental and societal sustainability. In Engineering Graphics (ME204ES), focus remained primarily on technical drawing accuracy, with minimal emphasis on eco-friendly materials, design for energy efficiency, or sustainable manufacturing. Similarly, in Electrical Machines Lab-I (EE306PC), while students performed experiments correctly, they lacked reflection on energy losses, machine efficiency, or environmental considerations related to electrical energy consumption and equipment lifecycle.

To promote environmental consciousness, design assignments in ME204ES were modified to include sustainability-based tasks, such as selecting materials with lower environmental impact and considering energy-efficient design alternatives. In EE306PC, lab reports were revised to include a section on environmental implications, where students analyzed the energy efficiency, losses, and sustainability aspects of the machines studied. Additionally, short awareness sessions were conducted on topics like green engineering practices and energy-efficient technologies to instill sustainable thinking in engineering solutions.

PO.8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO8	1.8	2.7	Target Attained

Action Taken: To further instill professional ethics and responsibilities among students:

- Ethics modules were embedded into project work and seminars, requiring students to discuss ethical dilemmas and societal implications of their proposed solutions.

PO.9. Individual and teamwork: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO9	1.8	2.1	Target Attained

Action Taken: To further strengthen students' teamwork and leadership abilities:

- Soft skills and team-building workshops were conducted as part of personality development programs to enhance interpersonal and communication skills.
- Final-year project groups were evaluated based on team dynamics and individual contributions, with reflective logs introduced to assess team learning and leadership experiences.

PO.10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions

PO10	1.8	2.4	Target Attained

Action Taken: To further enhance students' technical and professional communication skills:

- Technical seminar sessions were conducted within seminars and project reviews, where students presented their work to faculty and peer

audiences, improving clarity and confidence.

PO.11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO11	1.8	2	Target Attained

Action Taken: To improve students' awareness of project planning and financial management:

- Students were encouraged to act as project leads and maintain expense logs, reinforcing accountability and financial decision-making.
- Students took up leadership roles in technical events and workshops, gaining experience in managing logistics, finance, and team coordination in a real-world setting.

PO.12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

PO12	1.8	1.68	In ME105ES (Engineering Workshop), students effectively performed hands-on tasks such as fitting, welding, and carpentry, but showed limited initiative in exploring beyond the given procedures or connecting workshop skills to broader technological advancements. Most students followed step-by-step instructions without independently researching newer tools, automation trends (like CNC, 3D printing), or the evolution of manufacturing technologies. This indicated a gap in cultivating curiosity and readiness for continuous, self-driven learning in a changing technological landscape.

To promote independent and life-long learning, students were encouraged to explore modern fabrication techniques, such as CNC machining, additive manufacturing, and laser cutting, through supplementary videos and demonstrations. Reflection tasks were added to lab reports, prompting students to relate traditional workshop practices to current industry technologies. Additionally, short assignments on emerging trends in manufacturing and

material processing were introduced, and students were guided to access online learning platforms (like NPTEL, Coursera) to develop a habit of self-learning beyond the curriculum.

8.2 Academic Audit and actions taken thereof during the period of Assessment (15)

Total Marks 15.00

Institute Marks : 15.00

Audit Visits by Regulatory Bodies

In order to ensure effective teaching learning process and timely redressal of actions, identified so as to ensure that continuous improvement in terms of implementing and attaining Outcome Based Education. As part of that, regularly we have academic audits through internal and external agencies.

External Audit: As part of external agency, the affiliated university JNTUH conducts Academic Audit every year in the form of Fact Finding Committee (FFC) which helps us to identify the deviations if any in terms of Academic Infrastructure and Faculty which helps us to ensure proper standards above the minimal requirements are maintained. At the national level AICTE will also conduct audit through online or offline to ensure the other ends of guidelines are maintained.

Internal Audit: At the Institute level, we maintain internal Academic audit team comprised of

Department Academic Committee (DAC)-(2022-2023):

S. No	Member	Designation
1	Dr.O.P.Suresh	HOD
2	Mr.K.Suresh	Faculty
3	Mr.S.V.Satyanarayana	Faculty
4	Dr.M.Chiranjivi	Faculty
5	Ms. Katyayani	III EEE Student
6	Ms.B.Sindhuja	IV EEE Student

Department Academic Committee (DAC)-(2023-2024):

S. No	Member	Designation
1	Dr.O.P.Suresh	HOD
2	Mr.K.Suresh	Faculty
3	Mr.S.V.Satyanarayana	Faculty
4	Dr. M. Chiranjivi	Faculty
5	Ms. Maha Lakshmi	III EEE Student
6	Mr. Srinivas Varma	IV EEE Student

Department Academic Committee (DAC) (2024-2025):

S. No	Member	Designation
1	Dr.O.P.Suresh	HOD
2	Mr.K.Suresh	Faculty
3	Mr.S.V.Satyanarayana	Faculty
4	Dr. M. Chiranjivi	Faculty
5	Mr. Raghu Ram	III EEE Student
6	Ms. Maha Lakshmi	IV EEE Student

Academic audit reviews the academic and activity calendar prepared before commencement of each Academic year. This teak monitors the curriculum delivery by the faculty, implementation of OBE and students support for continuous improvements in the learning. The committee also evaluates the course delivery, syllabus coverage, OBE implementation of course level projects or PBL and the readiness and availability of equipment in the Laboratories.

The above audits will always help the department to identify the issues and challenges in the curriculum delivery, infrastructure support. So as to act and timely address to ensure the quality of teaching and learning.

8.3 Improvement in Faculty Qualification/Contribution (15)

Total Marks 15.00

Institute Marks : 15.00

Academic Performance	CAYm1 (2023-24)	CAYm2 (2022-23)	CAYm3 (2021-22)
No. of faculty members with Ph.D. degree	2.00	2.00	1.00
No. of publications in peer reviewed journals	16.00	11.00	7.00
No. of publications in conferences	17.00	14.00	6.00

8.4 Improvement in Academic Performance (10)

Total Marks 10.00

Institute Marks : 10.00

Academic Performance	CAYm1 (2023-24)	CAYm2 (2022-23)	CAYm3 (2021-22)
Academic Performance Index (API) of the First-Year Students in the Program (Refer to section 4.3)	4.18	5.53	5.52
Academic Performance Index (API) of the Second-Year Students in the Program (Refer to section 4.4)	6.54	7.60	6.48
Academic Performance Index (API) of the Third-Year Students in the Program (Refer to section 4.5)	7.58	6.31	5.60

9 STUDENT SUPPORT AND GOVERNANCE (120)

Total Marks 117.00

9.1 First Year Student-Faculty Ratio (FYSFR) (5)

Total Marks 2.00

Institute Marks : 2.00

Please provide First year faculty information considering load

Name of the faculty member	PAN No.	Qualification	From Engineering Courses	Date of Receiving Highest Degree	Area of Specialization	Designation	Date of joining	Currently Associated (Yes / No)	Nature Of Association (Regular / Contract)	Date Of leaving(In case Currently Associated is 'No')
Dr. Lavanya Na	AGIPG7816Q	Ph.D	No	27/12/2023	Chemistry	Associate Professor	06/02/2017	Yes	Regular	
Dr. Shradha Bi	AYXPB9009K	Ph.D	No	16/08/2015	Chemistry	Associate Professor	16/04/2021	Yes	Regular	
Mr.N.Venkata F	AMZPN3712D	M.Sc	No	10/12/2010	Chemistry	Assistant Professor	23/12/2021	Yes	Regular	
Mrs.Vijaya Lak	BYPPM4268N	M.Sc	No	28/04/2013	Chemistry	Assistant Professor	10/07/2024	Yes	Regular	

Mrs.Y. Aruna	BMKPA2918Q	M.Sc	No	01/06/2012	Chemistry	Assistant Professor	02/12/2013	No	Regular	06/06/2025
Dr. Ashalatha	AFZPD7535B	Ph.D	No	27/01/2007	English	Professor	04/01/2023	Yes	Regular	
Mr. Bivash Mar	EMCPM7005M	MA	No	20/09/2020	English	Assistant Professor	14/07/2022	Yes	Regular	
Mr. Dipti Ranja	ABXPL6183D	MA	No	18/12/2001	English	Assistant Professor	04/07/2022	Yes	Regular	
Dr. Rajya Laksh	ASMPB3994N	Ph.D	No	17/08/2021	English	Associate Professor	01/10/2021	No	Regular	31/01/2024
Ms. Roshni Kur	EHKPK5536A	MA	No	22/02/2019	English	Assistant Professor	18/07/2024	Yes	Regular	
Mr. Meghnath (	BTNPC2043L	MA	No	20/09/2021	English	Assistant Professor	20/02/2024	Yes	Regular	
Ms. Kiranmai S	JMAPK6603L	MA	No	01/05/2020	English	Assistant Professor	15/04/2024	Yes	Regular	
Mrs. Sreta Patr	BBXPP6496C	MA	No	29/06/2007	English	Assistant Professor	12/12/2022	Yes	Regular	
Mrs. G. Vanaja	AMZPG9185F	MA	No	05/04/2004	English	Associate Professor	08/10/2014	Yes	Regular	
Mrs. A. Sreesh	BEWPA3692D	MBA	No	12/03/2016	Management	Assistant Professor	10/02/2020	Yes	Regular	
Mr.S.M. Hussa	DFFPS3684H	MBA	No	01/04/2009	Management	Assistant Professor	12/04/2019	Yes	Regular	
Mrs.M. Sujatha	AZWPK6548G	MBA	No	01/09/2004	Management	Assistant Professor	07/06/2021	No	Regular	26/07/2024
Col.P V R Subr	APMPS0054B	MBA	No	18/04/2021	Management	Assistant Professor	01/08/2024	Yes	Regular	
Dr. Sheela Sing	AOEPT7860B	Ph.D	No	07/06/2024	Management	Associate Professor	01/08/2024	Yes	Regular	
Dr.K. Sandeep	BFVPK4902A	Ph.D	No	07/08/2019	Mathematics	Associate Professor	10/02/2020	Yes	Regular	
Dr.M. Naga Pav	CMZPM4902L	Ph.D	No	25/11/2024	Mathematics	Assistant Professor	05/03/2018	Yes	Regular	
						Associate				

Mr.B. Uppalaia	AEVPU4615E	M.Sc	No	25/05/2005	Mathematics	Professor	25/09/2014	Yes	Regular	
Dr.P. Jaikanth \	BFJPY7274R	Ph.D	No	02/09/2020	Mathematics	Associate Professor	10/08/2023	No	Regular	25/09/2024
Mr.S. Shiva Ku	IPDPK3796B	M.Sc	No	10/12/2022	Mathematics	Assistant Professor	01/08/2024	Yes	Regular	
Dr. Uma Mahes	AAUPU0920F	Ph.D	No	09/02/2025	Mathematics	Associate Professor	22/07/2024	Yes	Regular	
Ms. Sakhina Kl	CHQPK3296P	M.Sc	No	16/08/2016	Mathematics	Assistant Professor	31/08/2024	Yes	Regular	
Mrs.A. Srilatha	ARFPA0009B	M.Sc	No	01/05/2018	Mathematics	Assistant Professor	18/07/2016	No	Regular	09/06/2025
Dr.R. Uma Mah	AKVPR1258C	Ph.D	No	18/02/2024	Physics	Associate Professor	08/01/2011	Yes	Regular	
Dr.T. Rambabu	AQZPT5974F	Ph.D	No	30/08/2024	Physics	Associate Professor	06/08/2012	Yes	Regular	
Dr.A. Srinivasa	ATEPA3351R	Ph.D	No	01/11/2011	Physics	Professor	17/09/2019	No	Regular	31/05/2023
Dr. Bivash Dola	BRIPD5397P	Ph.D	No	15/12/2020	Physics	Assistant Professor	01/06/2023	No	Regular	30/09/2024
Dr.G. Jagga Ra	BURPG3774R	Ph.D	No	09/08/2015	Physics	Associate Professor	08/07/2024	Yes	Regular	
Dr.M. Prasad	ATSPM1948C	Ph.D	No	27/10/2022	Physics	Associate Professor	05/08/2024	Yes	Regular	
Mr.M. Pradeep	DFJPM2924A	M.Sc	No	01/06/2014	Physics	Assistant Professor	21/04/2022	No	Regular	31/05/2025
Dr.S. Arvind	AQHPS8867L	Ph.D	Yes	21/09/2013	AdhocNetworks	Professor	06/06/2019	Yes	Regular	
Mr.K. David raj	AUOPK9274C	M.Tech	Yes	28/04/2011	CSE	Associate Professor	11/11/2022	Yes	Regular	
Mr. Dharmendr	ASIPR2143M	M.Tech	Yes	31/08/2010	CSE	Associate Professor	31/03/2022	Yes	Regular	
Mrs.S. Mamath	DKYPS6843A	M.Tech	Yes	29/11/2014	CSE	Assistant Professor	24/07/2024	Yes	Regular	
Mr.P. Santosh	BEXPP8033A	M.Tech	Yes	24/05/2012	Electronics andCommunications	Assistant Professor	25/06/2018	Yes	Regular	

Mr.P. Kondalra	BPXPP2309R	M.Tech	Yes	05/04/2012	EmbeddedSystems	Assistant Professor	25/06/2018	Yes	Regular	
Mr.S.N.S. Sant	CFCPS1269C	M.Tech	Yes	05/05/2018	Engineering Design	Assistant Professor	16/10/2017	Yes	Regular	
Mr. Santhosh M	ALZPN5003A	M.Tech	Yes	04/08/2016	Machine Design and Dynamics	Assistant Professor	29/08/2020	Yes	Regular	
Dr. Motilal Laka	ADDPL3342C	Ph.D	Yes	10/10/2023	Material Science	Associate Professor	12/08/2024	Yes	Regular	
Mr.M. Siddarth	FKWPS7706C	M.Tech	Yes	21/04/2017	Power Electronics	Assistant Professor	10/07/2017	Yes	Regular	
Mrs.T. Sirisha	BBHPT7039P	M.Tech	Yes	31/05/2017	Power Electronics	Assistant Professor	18/06/2018	Yes	Regular	
Dr. Padmaja Pu	AVWPP7442G	Ph.D	Yes	26/11/2016	SoftwareEngineering	Professor	01/03/2022	Yes	Regular	
Mr.PVN Sai Ch	AKOPC4412E	M.Tech	Yes	10/03/2012	Thermal Engineering	Assistant Professor	24/08/2015	Yes	Regular	
Mrs.D.Udaya	BLLPD1502K	MA	No	29/06/2007	Management	Assistant Professor	27/06/2007	Yes	Regular	

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
2022-23(CAYm2)	540	27	20	10	67
2023-24(CAYm1)	600	30	22	11	66
2024-25(CAY)	720	36	30	13	74
				Average Percentage	68.85

9.2 Mentoring system (5)

Total Marks 5.00

Institute Marks : 5.00

Mentoring System at HITAM: Implementation and Practice

At HITAM, mentoring is a structured and campus-wide initiative designed to holistically support students through their academic journey, personal development, and career planning. Recognizing that every student is unique, our mentoring program helps in meaningful one-on-one interactions between faculty and students to build trust, guide academic progress, and nurture essential life skills.

To ensure the effectiveness of this initiative, HITAM offers a **Mentor Training Program** grounded in emotional intelligence and self-awareness. One such tool used in our training involves a self-assessment of traits like empathy, emotional regulation, time management, and social skills. Through this reflective process, mentors gain insights into their behavioural tendencies and communication styles, allowing them to better connect with and support their mentees.

Mentoring towards:

- Professional guidance & Career oriented
- Coursework-specific
- Emotional & Psychological
- All-round development

Each faculty mentor is assigned approximately 20 students, enabling close and continuous guidance throughout the academic year. To ensure consistency and meaningful interaction, mentoring sessions are conducted weekly during the designated Mentoring Hour. These sessions are scheduled as part of the academic timetable, encouraging in-person engagement that fosters stronger mentor-mentee relationships. This structured approach ensures that students receive timely academic, personal and career-related support in a proactive and supportive environment.

Each mentor takes care of the following activities towards their mentees:

- Academic performance and attendance tracking
- IDP (Individual Development Plan) creation and regular review
- Exposure to opportunities like clubs, certifications, entrepreneurship, and internships
- Exposure to opportunities like State / Central Government / AICTE / UGC Schemes, Scholarship provisions by various bodies
- Career goal-setting and employability readiness

Peer Mentoring: A Peer mentoring model is in place, where seniors including the Student Self Governance (SSG) team provides support in transitioning them to adopt the college life and towards academics and personal development.

Roles and Responsibilities: The role of student mentor is both rewarding and responsible. It takes empathy, patience, and a dedication to your mentees success and well-being. Furthermore, the specific roles may vary based on the goals and objectives of the mentoring programme.

- Help mentees understand course content and concepts, develop good study skills, time management abilities and academic goals
- Set a good example of a role model by exhibiting good behaviour, grooming, accountability, strong work ethic and demonstrate a commitment to academic and personal development.
- Maintain consistent communication with mentees in order to monitor their progress and well-being by being friendly and available to answer inquiries as well as address issues.
- Have the ability to suspend judgement, not to have prejudices and be willing to make time for any of the mentee’s requirements.
- Assist mentees in determining their short-term and long-term academic / personal goals and develop action plans to attain their objectives and help the mentee in making annual action plan i.e. IDP: Individual Development Plan).
- Inform mentees about extracurricular activities, clubs, competitions and organizations that may be of interest to them, aligning with Career aspiration /IDP.
- Provide advice on career exploration, internships, and job search strategies to help mentees in developing their networking and professional communication abilities.
- Take part in mentor training programmes and workshops to improve mentoring skills to stay informed on campus policies, resources, and updates.

- Track mentee development, keep records of mentoring sessions, goals, and progress.
- Educate the mentees about higher studies opportunities in India and abroad eligibility criterion and its process.
- Respect mentee's worth and human dignity with reference to cultural, individual and role differences based on age, gender, ethnicity, culture, national origin, religion, disability, language and socioeconomic status.

The formal mentoring process culminates at the conclusion of the final year of study at the institution. It is anticipated that there would be comprehensive development of the mentee and the demonstration of significant effectiveness of the mentor. The formal mentoring process is closed through a feedback mechanism assessing the participant's experience with the mentoring programme. Informal mentorship is not restricted and hence may continue in accordance with the preferences and understanding of the mentor and the mentee.

Mentoring Process:

The mentoring system at HITAM follows a structured and systematic process to ensure continuous student support and development:

1. **Assignment of Mentees to Mentors**
   At the beginning of each academic year (during the first week), students are assigned to faculty mentors to initiate personalized mentoring.
2. **Maintenance of IDP and SPF Data**
   During the first four weeks, mentors collect and record data related to each students Individual Development Plan (IDP) and Student Profile Form (SPF) to understand their academic and personal background.
3. **Formal Mentor-Mentee Interactions**
   Scheduled weekly mentoring sessions are conducted during designated hours to promote consistent communication and engagement between mentors and mentees.
4. **Identification of Improvement Areas**
   Mentors identify key areas where students require improvement and take note of necessary interventions. Weekly updates are shared with the respective Heads of Department (HODs).
5. **Referrals for Additional Support**
   If required, students are referred to counsellor for further support. Updates regarding these referrals are sent bi-weekly to the Program Office.
6. **Documentation and ERP Updates**
   Mentee information is documented and regularly updated in the ERP system on a weekly basis to ensure transparency and tracking.
7. **Parent Interaction and Feedback**
   Mentors interact with parents twice per semester to discuss the progress and well-being of the students, collecting valuable feedback.
8. **Monthly Mentoring Reports**
   A comprehensive mentoring report summarizing the progress, interventions, and outcomes is submitted to the Program Office every month.

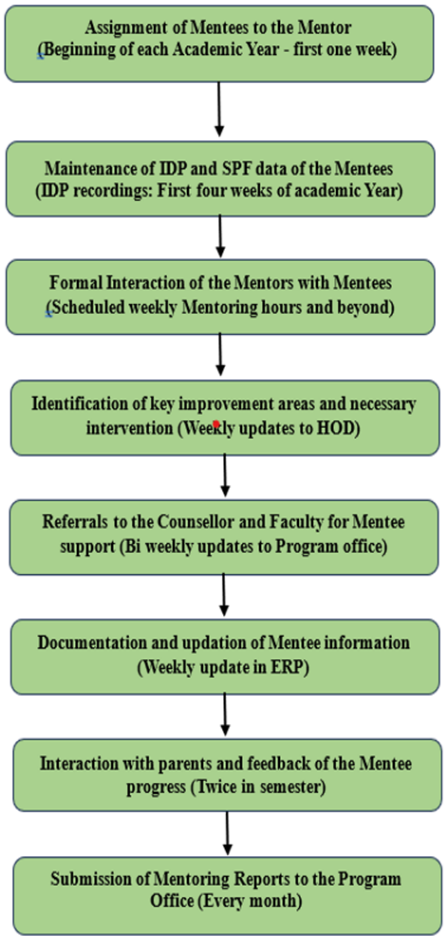


Figure 9.2.1: Flow chart of Mentoring process

HITAM Counsellor:

Dr. Ashalatha, Counsellor at HITAM is an accomplished educationist with 26 years of expertise in English Language and Literature, Guidance, Counselling, Educational Technology, and Handling in Student Psychological issues. With double Doctorates in English and Education, shes guided numerous research projects, contributed to various institutions as Principal, HoD, Coordinator, Resource Person, Research Supervisor and University Nominee. Active in academic and technical administration, shes published and presented 92 papers and promotes comprehensive learning practices, yoga, wellness initiatives as well as environmental conservation.

Figure 9.2.2: Dr. Ashalatha, Student Counsellor at HITAM

Mentoring Aptitude Tests Analysis

The mentoring aptitude tests are given to

- Evaluate the ability to communicate, listen and express appropriate communication channels.
- Analyze intrapersonal and interpersonal skills necessary for guiding the Mentees.
- Assess the personality type and stress type to ensure the Mentor's ability to adapt to any situation and support the Mentees.
- Measure emotional intelligence for understanding and responding to the needs of the Mentees.

Outcomes

- Identify faculty members with strong mentoring potential, support continuous development through FDPs / Mentor certifications and foster a dynamic academic environment.
- Analyze and orient the Mentors to transfer knowledge effectively, provide constructive feedback and monitor the learning of the Mentees.
- Ensure confidentiality in mentoring and handle the information sensitively.
- Assess the areas where improvement is needed for helping the Mentors to get suitably trained.

Score Card

Table 9.2.1: Personality Type Assessment

Score	Type	Indicators
100-150	**A**	High Stress Type - ambitious, aggressive, competitive, intolerant, determined, unfriendly, multitasking, impatient, energetic, motivated, dominant, stubborn, hasty, impatient, goal-oriented, stressed, pessimistic, workaholic, risk-taking, anxious, hostile, rigid, proactive, confident, passionate
76-99	**AB**	Medium Stress Type - Intelligent, aloof, unpredictable, quiet, sensitive, meticulous, outgoing, independent, self-centered, gentle, empathetic, caring, understanding, dependable, sociable, adaptable, rational, composed, adaptable, indecisive, accurate, logical, skeptical, organized, detached
		Low Stress Type - peaceful, relaxed, stress free, procrastinating, flexible, stable, even-tempered, less competitive, adaptable, laid back, collaborative patient, calm,

30-75	**B**	enthusiastic, spontaneous, inspiring, optimistic, balanced, strong, philosophical, expressive, good at listening, assertive, confident, creative

Table 9.2.2: Mentoring Readiness

Score	Mentoring Readiness
70 -75	V. Good
60 -70	Good
50 - 60	Satisfactory
26 - 49	Average
1 - 25	Not Satisfactory

Table 9.2.3: Emotional Quotient

A=1 Mark B=2 Marks

Score	EQ
25-40	EQ Dominant
1-25	IQ Dominant

Rubrics for the test:

The following test is designed to give an idea to assess the behaviour type. Read each statement carefully and then circle the number corresponding to the category of behaviour that best fits you.

1 = never, 2 = seldom, 3 = sometimes, 4 = usually, 5 = always

When you finish, add up all the circled numbers.

Table 9.2.4: Rubrics for the test

1.	I become angry or irritated whenever I have to stand in line for more than 15 minutes.	1 2 3 4 5
2.	I handle more than one problem at a time.	1 2 3 4 5
3.	It’s hard finding time to relax and let myself go during the day.	1 2 3 4 5
4.	I become irritated or annoyed when someone is speaking too slowly.	1 2 3 4 5
5.	I try hard to win at sports and games.	1 2 3 4 5
6.	When I lose at sports or games, I get angry at myself or others.	1 2 3 4 5

7.	I have trouble doing special things for myself.	1	2	3	4	5
8.	I work much better under pressure or when meeting deadlines.	1	2	3	4	5
9.	I find myself looking at my watch whenever I am sitting around or not doing something active.	1	2	3	4	5
10.	I bring work home with me.	1	2	3	4	5
11.	I feel energized and exhilarated after being in a pressure situation.	1	2	3	4	5
12.	I feel like I need to take charge of a group in order to get things moving.	1	2	3	4	5
13.	I find myself eating rapidly in order to get back to work.	1	2	3	4	5
14.	I do things quickly regardless of whether I have time or not.	1	2	3	4	5
15.	I interrupt what people are saying when I think they are wrong.	1	2	3	4	5
16.	I'm flexible and rigid when it comes to changes at work or at home.	1	2	3	4	5
17.	I become jittery and need to move whenever I'm trying to relax.	1	2	3	4	5
18.	I find myself eating faster than the people I'm eating with.	1	2	3	4	5
19.	At work, I need to perform more than one task at a time in order to feel productive.	1	2	3	4	5
20.	I find myself being very picky and looking at small details.	1	2	3	4	5
21.	I take less vacation time than I'm entitled to.	1	2	3	4	5
22.	I become annoyed at people who don't work as hard as I do.	1	2	3	4	5
23.	I find that there aren't enough things to do during the day.	1	2	3	4	5
24.	I spend a good deal of my time thinking about my work.	1	2	3	4	5

25.	I get bored very easily.	1 2 3 4 5
26.	I'm active on weekends either working or doing projects.	1 2 3 4 5
27.	I get into arguments with people who don't think my way.	1 2 3 4 5
28.	I have trouble rolling with the punches whenever problems arise.	1 2 3 4 5
29.	I interrupt someone's conversation in order to speed things up.	1 2 3 4 5
30.	I take everything I do seriously.	1 2 3 4 5

Total =

Table 9.2.5: Sample Faculty score card:

S. No.	Name of the Employee	Designation	Personality Type	Stress Type	Mentoring Aptitude	IQ Dominant / EQ Dominant
1	Mr. K. Suresh	Associate Professor	B	Low	Satisfactory	Moderately EQ Dominant
2	Mr. S. V. Satyanarayana	Asst. Professor	AB	Medium	Good	Highly EQ Dominant
3	Ms. P. Madhavi	Asst. Professor	B	Low	Good	Highly EQ Dominant
4	Mr. M. Siddhartha	Asst. Professor	AB	Medium	Good	Moderately EQ Dominant
5	Dr. M Chiranjivi	Asso. Professor	AB	Medium	Good	Highly EQ Dominant
6	Mrs T Sirisha	Asst. Professor	AB	Medium	Good	Moderately EQ Dominant
7	Mrs M Rani	Asst. Professor	AB	Medium	Satisfactory	Moderately EQ Dominant
8	Mrs. U Divya	Asst. Professor	AB	Medium	Good	Moderately EQ Dominant

9	Mr.P.Praveen	Teaching Assistant	A	High	V. Good	Moderately EQ Dominant
10	Mr.S.Siva Raj	Teaching Assistant	A	High	V. Good	Moderately EQ Dominant
11	Mr.P.Anjaiah	Teaching Assistant	A	High	V. Good	Average EQ Dominant / Moderately IQ Dominant
12	Mr.G.Singaiah	Asso. Professor	A	High	Good	Moderately EQ Dominant
13	Mr.P.V.N.Sai Chandu	Asso. Professor	B	Low	Good	Moderately EQ Dominant
14	Mr. Santhosh Madeva Naik	Asso. Professor	B	Low	V. Good	Highly EQ Dominant
15	Mr.P.Praveen	Asst. Professor	B	Low	Good	Highly EQ Dominant
16	Mrs.N Krishnaveni	Asst. Professor	AB	Medium	Good	Highly EQ Dominant
17	Mr.Chetla Venu Gopal	Asst. Professor	B	Low	Good	Moderately EQ Dominant
18	MVA Ramakrishna	Asso. Professor	AB	Medium	V. Good	Highly EQ Dominant
19	Dr..S.V.Devika	Professor	A	High	Good	Moderately EQ Dominant
20	Mrs.K.Bindhu madhavi	Asso. Professor	AB	Medium	Good	Highly EQ Dominant
21	Mr.P.Kondalrao	Asst. Professor	AB	Medium	Good	Highly EQ Dominant
22	Mr.P.Santosh	Asst. Professor	AB	Medium	Good	Highly EQ Dominant
23	Dr. J.Rajeshwar Goud	Asso. Professor	A	High	Good	Highly EQ Dominant
24	Mr. Jagadeesh Chandra Prasad	Asso. Professor	AB	Medium	Good	Moderately EQ Dominant
25	Ms.Tejaswi V		AB	Medium	Good	

		Asst. Professor				Moderately EQ Dominant
26	Mrs M Rani	Asst. Professor	AB	Medium	Good	Highly EQ Dominant
27	Mr K Akhil	Lab.Asst.	AB	Medium	Good	Moderately EQ Dominant
28	Dr K Satish Kumar	Professor	AB	Medium	Good	Moderately EQ Dominant
29	Dr Omprakash	Asst. Professor	B	Low	Good	Highly EQ Dominant
30	Mr. T Naveen Kumar	Teaching Assistant	B	Low	V. Good	Average EQ Dominant / Moderately IQ Dominant
31	Mr G Venkatesh	Teaching Assistant	AB	Medium	Good	Moderately EQ Dominant
32	Mr. Vednidhi Tiwari	Teaching Assistant	AB	Medium	Satisfactory	Moderately EQ Dominant
33	Mr. T Venkanna Babu	Asst. Professor	AB	Medium	Good	Moderately EQ Dominant
34	Dr T Satish Kumar	Professor	AB	Medium	Good	Moderately EQ Dominant
35	Dr.Padmaja Pulicherla	Professor	B	Low	Good	Highly EQ Dominant
36	Mr.B.Surendra Reddy	Asso. Professor	AB	Medium	Good	Highly EQ Dominant
37	Mr.T.Raghavendra Gupta	Asso. Professor	AB	Medium	Good	Highly EQ Dominant
38	Mrs.K.Veena	Asst. Professor	AB	Medium	Good	Highly EQ Dominant
39	Mrs. M Devi	Lab.Asst.	AB	Medium	Satisfactory	Moderately EQ Dominant
40	Mrs. Zeenath jaha Begum	Asst. Professor	AB	Medium	Satisfactory	Moderately EQ Dominant
41	Mrs P Bhargavi		B	Low		

		Asst. Professor			Satisfactory	Moderately EQ Dominant
42	Mr Jeevan Babu	Asst. Professor	B	Low	Average	Average EQ Dominant / Moderately IQ Dominant
43	Mrs. K Sunitha	Asst. Professor	AB	Medium	Good	Moderately EQ Dominant
44	Dr.M.Rajeshwar	Asso. Professor	AB	Medium	Average	Moderately EQ Dominant
45	Mrs. P Swathy	Asso. Professor	AB	Medium	V. Good	Highly EQ Dominant
46	Mr.Vadla Navakishore	Asso. Professor	B	Low	Satisfactory	Average EQ Dominant / Moderately IQ Dominant
47	Ms.Chatragadda Shanthi priya	Asst. Professor	A	High	Good	Moderately EQ Dominant
48	Mr.Bhaskar Das	Asso. Professor	AB	Medium	Satisfactory	Moderately EQ Dominant
49	Ms.Chintolla Surekha	Asst. Professor	B	Low	Good	Moderately EQ Dominant
50	Mrs P Ila Chandana	Asso. Professor	AB	Medium	Satisfactory	Moderately EQ Dominant
51	Dr. M V A Naidu	Asso. Professor	AB	Medium	Good	Moderately EQ Dominant
52	Mr.Sahik. Meer Subhani Ali	Asst. Professor	B	Low	Satisfactory	Moderately EQ Dominant
53	Mr.Thambi Joseph	Asst. Professor	B	Low	Good	Highly EQ Dominant
54	Mr David Raju	Asst. Professor	AB	Medium	V. Good	Highly EQ Dominant
55	Mrs. G Aparna	Asso. Professor	AB	Medium	V. Good	Highly EQ Dominant
56	Mr. N Shiva Kumar	Asst. Professor	AB	Medium	V. Good	Highly EQ Dominant

57	Mrs P Ramana	Asst. Professor	AB	Medium	Good	Moderately EQ Dominant
58	Mr. P Tharun	Teaching Assistant	AB	Medium	Satisfactory	Moderately EQ Dominant
59	Mrs. B Aruna Kumari	Asst. Professor	AB	Medium	V. Good	Moderately EQ Dominant
60	Mrs. Rohini Jadhav	Asst. Professor	AB	Medium	V. Good	Highly EQ Dominant
61	Mr. D Manikanta	Asst. Professor	AB	Medium	V. Good	Highly EQ Dominant
62	Dr. Srinivas Mekala	Asst. Professor	AB	Medium	Satisfactory	Moderately EQ Dominant
63	Mr. Periaswamy	Asst. Professor	AB	Medium	Good	Moderately EQ Dominant
64	Ms. Richa Tiwari	Asst. Professor	AB	Medium	Satisfactory	Moderately EQ Dominant
65	Mr. S N Murthy	Asst. Professor	B	Low	V. Good	Highly EQ Dominant
66	Ms. Ch Meghana	Asst. Professor	AB	Medium	V. Good	Highly EQ Dominant
67	Dr.K.Sandeep Kumar	Asso. Professor	AB	Medium	V. Good	Highly EQ Dominant
68	Mr.R.Uma Maheshwar Singh	Asso. Professor	B	Low	Good	Highly EQ Dominant
69	Mr.T.Rambabu	Asso. Professor	AB	Medium	Good	Highly EQ Dominant
70	Mr.B.Uppalaiah	Asso. Professor	AB	Medium	Satisfactory	Moderately EQ Dominant
71	Mrs.A.Srilatha	Asst. Professor	AB	Medium	Good	Moderately EQ Dominant
72	Mrs. Lavanya Nagamalla	Asso. Professor	AB	Medium	Good	Moderately EQ Dominant
73	Dr.Shradha Binani	Asso. Professor	A	High	Satisfactory	Moderately EQ Dominant

74	Mrs.K.Mallesh Sujatha	Asst. Professor	AB	Medium	Satisfactory	Moderately EQ Dominant
75	Dr.B.K.Rajya lakshmi	Asst. Professor	A	High	Good	Highly EQ Dominant
76	Mr.N.Venkata Rajendra kumar	Asso. Professor	B	Medium	V. Good	Highly EQ Dominant
77	Mrs.A.Usha	Lab Asst	AB	Medium	Good	Moderately EQ Dominant
78	Mr. M Pradeep Kumar	Asso. Professor	B	Low	Good	Highly EQ Dominant
79	Mr. Bivash Mandal	Asst. Professor	AB	Medium	Satisfactory	Moderately EQ Dominant
80	Mrs G Vanaja	Asso. Professor	AB	Medium	Average	Average EQ Dominant / Moderately IQ Dominant
81	Dr. Bivash Dolai	Asst. Professor	AB	Medium	Good	Highly EQ Dominant
82	Dr Jaikanth Yadav	Asst. Professor	AB	Medium	Satisfactory	Moderately EQ Dominant
83	Ms A Srunjana	Asst. Professor	AB	Medium	Good	Moderately EQ Dominant

Faculty Mentoring Test Result Analysis for above table:

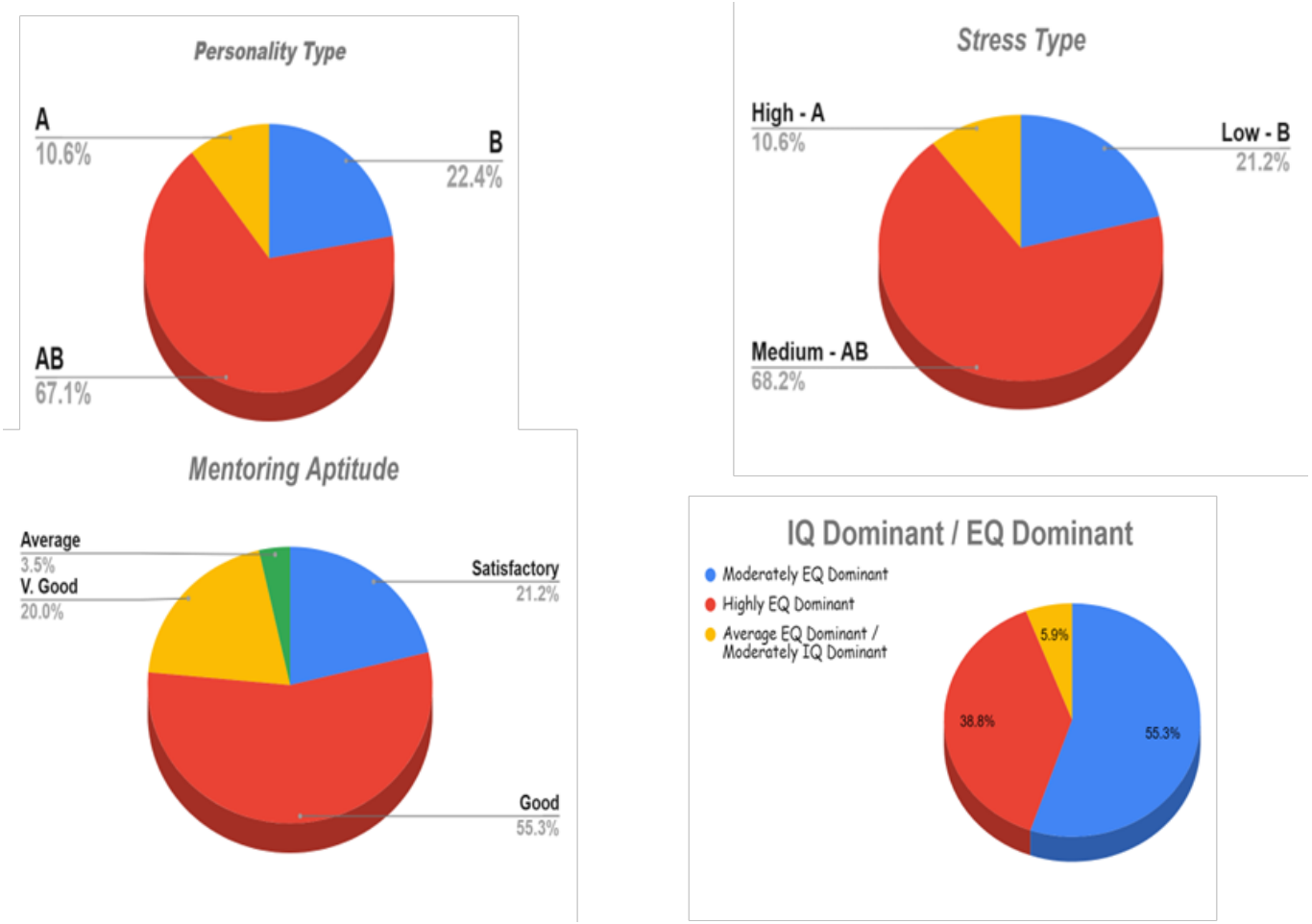


Figure 9.2.3: Faculty Mentoring test result analysis

Outcome: HITAM has significantly contributed to the overall well-being and success of students. Through regular one-on-one interactions and timely interventions, many students have received valuable academic guidance, emotional support, and career counseling. The dedicated mentoring hour has become a safe space for students to express concerns and seek advice.

9.3 Feedback Analysis (10) — Total Marks 10.00

9.3.1 Feedback on Teaching and Learning Process and Corrective Measures Taken, if any (5)

Institute Marks : 5.00

At HITAM, a robust multi-layered feedback mechanism is in place to ensure continuous improvement in teaching quality and student satisfaction.

Frequency of Feedback: Twice in a semester

1.ERP-Based Student Feedback

Student feedback is collected online via the ERP system once every semester. This feedback covers a detailed evaluation of each faculty member based on clearly defined teaching and mentoring parameters. After the feedback window closes:

- A summary report is generated and shared with the respective Heads of Departments.
- The Principal and HODs jointly review the data and recommend corrective or enhancement measures wherever necessary.
- Action plans are discussed with faculty to ensure accountability and progress.

2.CRC (Class Representative Council) Feedback

The principal personally conducts fortnightly feedback sessions with CRC members representing all academic programs and years.

- This platform enables students to raise academic and administrative concerns in real time.
- Based on the feedback received, prompt actions are initiated, and progress is tracked by the academic office.

Sample reports with Rubrics:

Faculty Performance Evaluation Format:

Feedback is collected through a structured form twice a year for each semester, evaluating faculty across multiple teaching dimensions.

Rubrics for Faculty Feedback evaluation:

1: Has the faculty covered entire Syllabus as per lesson Plan?

2: Has the faculty covered relevant topics beyond syllabus?

3: Rate Effectiveness of faculty in terms of technical content/course content

4: Rate Effectiveness of faculty in terms of Communication skills

5: Rate Effectiveness of faculty in terms of Use of teaching aids

6: Were you comfortable with the Pace on which contents were covered

7: Was the faculty able to Motivation and inspiration for students to learn

8: Did the faculty Support for the development of Student skill (Practical demonstration, Hands on training)

9: Clarity of expectations of students

10: Does the faculty provide Feedback provided on Students progress

11: Is the faculty Willing to offer help and advice to students beyond class hours

Table 2.3.1: Sample Faculty Feedback Evaluation Summary

S.No	Name of the Faculty	Subject Taught	1	2	3	4	5	6	7	8	9	10	11	Overall Percentage	Result

1	Dr. K. Sandeep	"Statistical And Mathematical Foundations"	93	89	91	91	90	91	88	88	90	88	88	90	Excellent
2	Dr. M Rajeshwar	"Object Oriented Programming Using Java"	86	83	87	87	85	84	85	84	84	83	84	85	Very Good
3	Mr. Jagadeesh Chandra prasad R	Microwave And Optical Communications Lab	89	88	84	89	88	89	89	86	86	86	86	87	Very Good
4	Ms. CH. Meghana	Introduction To Artificial Intelligence	69	68	67	70	72	71	70	69	67	71	72	70	Average
5	Mr. CH. Nagababu	Digital Signal Processing	70	60	55	60	55	48	30	35	55	35	55	50	Poor
6	Mr. Bhaskar Das	Data Structures And Algorithms*	97	95	95	93	92	92	94	91	90	88	90	92	Excellent
7	Mr. S. Shiva Kumar	Statistical And Mathematical Foundations	89	84	87	85	86	86	87	85	86	85	84	86	Very Good
8	Ms. Krishna Jyothi	Database Management Systems	87	86	86	85	84	84	85	85	83	82	85	85	Very Good
9	Mr. M Joseph	Database Management Systems	88	87	87	86	86	86	84	87	84	84	85	86	Very Good
10	Mr. Rohini Jadav	Software Engineering	76	75	74	74	73	75	75	75	75	75	74	75	Good
11	Ms. Sure Mamatha	Data Mining And Data Analytics	70	71	72	74	68	73	70	71	70	71	70	71	Good

- **Performance Ratings:**

- **Excellent**: ≥ 90%
- **Very Good**: 80% – 89%
- **Good**: 70% – 79%
- **Average**: 60% – 69%
- **Poor**: < 60%

Sample Action Taken Report:

Based on the comprehensive student feedback collected across 11 parameters, HITAM has taken the following actions to ensure continuous enhancement in teaching quality and student satisfaction:

1. **Poor Feedback:**
    - **Faculty Identified:** Mr. CH. Nagababu (Digital Signal Processing)
    - **Action Taken:** The faculty member was initially counselled and provided support to improve. Despite multiple efforts, there was no visible progress. As a result, the course was reassigned to another competent faculty member to ensure better delivery and learning outcomes.
2. **Average Feedback:**
    - **Faculty Identified:** Ms. CH. Meghana (Introduction to Artificial Intelligence)
    - **Action Taken:** To strengthen course delivery, an adjunct faculty was assigned to support teaching. The primary faculty was guided to enhance classroom engagement and subject clarity through structured mentorship.
3. **Good Feedback:**
    - **Faculty Identified:** Mr. Rohini Jadav and Ms. Sure Mamatha
    - **Action Taken:** These faculty members were advised to pursue continuous improvement through Faculty Development Programs (FDPs), NPTEL courses, and internal pedagogical workshops to elevate their teaching effectiveness.
4. **Very Good Feedback:**
    - Faculty in this category were appreciated for their consistent performance and were encouraged to continue their development through advanced training and by mentoring peers.
5. **Excellent Feedback:**
    - **Faculty Identified:** Dr. K. Sandeep and Mr. Bhaskar Das
    - **Action Taken:** These faculty members were recognized in the faculty meetings to motivate others to follow the best practices and the initiations carried out by them.

At HITAM, feedback on campus facilities is collected systematically through the ERP system and through CRC meetings every semester to ensure continuous improvement in infrastructure, amenities, and student services. The feedback process allows students to share their experiences regarding classrooms, laboratories, library resources, hostel facilities, transportation, and other campus utilities. This structured approach helps in identifying key areas that need enhancement, ensuring that the institution provides an optimal learning environment.

Table 9.3.2: ERP Feedback

S. No	Activity	2024-25	2023-24	2022-23	Grade
1	Library	66%	63%	62%	Good
2	Canteen	72%	71%	73%	Good
3	Hostel	72%	71%	73%	Good
4	Transport	79%	75%	72%	Very Good
5	Dispensary	78%	81%	79%	Very Good
6	Laboratories	73%	71%	75%	Very Good
7	Conduct of Examinations	79%	78%	77%	Very Good
8	Discipline	82%	79%	78%	Very Good
9	Office	73%	71%	72%	Good

Table 9.3.3: CRC Feedback

S. No	Activity	2024-25	2023-24	2022-23	Grade
1	Sports	75%	74%	75%	Very Good
2	Classrooms	77%	77%	76%	Very Good
3	Common Rooms	81%	80%	79%	Very Good
4	Internet and Wi-fi	85%	75%	76%	Very Good
5	Drinking water facility	74%	71%	74%	Good

Action Taken Report:

Once the feedback is collected, it is summarized and analyzed to identify recurring concerns and suggestions. Students also play an active role in various committees, where they provide real-time observations and recommendations based on their experiences. These committees serve as a crucial link between students and administration, ensuring that concerns are addressed proactively. The summarized feedback is then reviewed by the relevant authorities, and an action plan is formulated to resolve identified issues.

1. Library (Good – Avg. 64%)

Action Taken: Library operating hours were extended from 5:00 PM to 6:00 PM to provide students with more access for study and research.

2. Canteen (Good – Avg. 72%)

Action Taken: The canteen vendor was replaced based on quality and hygiene feedback. A revised and diversified menu was introduced. New food options such as a Chinese stall and a bakery corner were added to enhance variety and student satisfaction.

3. Hostel Facilities (Good – Avg. 72%)

Action Taken: Regular monitoring and inspection schedules were implemented to maintain cleanliness and ensure timely maintenance. Hostel wardens were made more accountable with routine reporting.

4. Transport (Very Good – Avg. 75%)

Action Taken: Two additional transport routes were added to cater to more students. Bus timings were restructured based on student needs and punctuality was monitored.

5. Dispensary (Very Good – Avg. 79%)

Action Taken: No immediate changes required. The facility continues to function efficiently with regular supply checks and availability of medical staff.

6. Laboratories (Very Good – Avg. 73%)

Action Taken: A modernization drive was initiated in multiple labs, where outdated equipment was replaced or upgraded with industry-relevant tools and instruments.

7. Conduct of Examinations (Very Good – Avg. 78%)

Action Taken: Midterm examinations were transitioned to online evaluation. Script view access was provided to students post-assessment to enhance transparency and self-review.

8. Discipline (Very Good – Avg. 80%)

Action Taken: Sniffer dogs were deployed occasionally to detect drugs or harmful items on campus. A dress code policy was enforced. Lady gatekeepers were stationed at entry. Senior faculty members were assigned regular discipline rounds to ensure order and compliance.

9. Office Services (Good – Avg. 72%)

Action Taken: Additional administrative staff were recruited under the Program Office. The office is now more responsive to student attendance tracking and parent communication.

Corrective actions are implemented based on the severity and feasibility of the suggestions. Common actions taken include upgrading lab equipment, improving internet connectivity, enhancing hostel facilities, addressing maintenance concerns, and optimizing classroom infrastructure. The progress of these corrective measures is monitored during the assessment period, and necessary follow-ups are conducted to ensure their effectiveness.

9.4 Training and Placement Support (10) **Total Marks 10.00**

Institute Marks : 10.00

The Career Development Centre (CDC) at the Hyderabad Institute of Technology and Management (HITAM) supports the students in shaping and managing their careers by building key ingredients required for a student to be a complete professional. The Centre will focus on building life skills or employability skills through various training programs and an extensive industry connect program ensuring an all-round development. These skills not only improve the chances of placements for students but also help in developing professional attributes for continuing and growing in the job. These are the skills, attitudes and actions that enable professionals to get along with their fellow workers, reporting managers/ supervisors and to take informed decisions at crucial times.

CDC-MAJOR FUNCTIONS:

The major functions of the Career Development Centre involve:

- Planning and organizing campus as well as off-campus selection activities.
- Inviting specialists to address students on self-enhancement, confidence building, etc.
- Conducting Individual Development Programme on regular basis to the students of first year to final year course of all branches. This deals with soft skill development, Personality Development, etc.
- Organizing Aptitude Tests to students
- Conducting GDs, Mock Interviews, etc., to prepare the students to face interviews.
- Coordinating for Industrial Visits and vacation In-plant Training in industries for students from 2nd year onwards

Campus placements:

The training and placement division of CDC critically reviews the training programs and update based on the market strategy. The training cell initiates, evaluates and processes different training programs in the Institute. Some successful initiatives of the training cell are Industry Linkage - periodic visits to relevant industries. Every training program is effectively designed to prepare the students to face the different categories of industries while appearing for the placement drives.

Career Assurance Program (CAP):

HITAM offers CAP a unique education that caters not only to outgoing batches but to the entire student community from first year as well. Training need analysis is done to categorize the individual requirements of each student. The students are then trained for exponential growth by overcoming their mistakes and through practical application of the knowledge they have gained.

Online Assessments:

The CDC will conduct online assessments for all students on regular basis. These assessments will be measuring students‟ abilities on numerical ability, logical reasoning, data interpretation and problem solving on one hand and on the other side it measures Academic knowledge thereby helping organizations reach the right candidates and helping students identify development areas much in advance.

Profile Discussion and Personalized Counseling:

Each student at the campus goes through a personalized profile discussion, assessment and counseling session with the expert counselors. This enables the student to assess his strengths, weaknesses and improvement areas well in time before he begins his journey as a professional.

Career Development Plan:

The CDC counselor and student will jointly work towards creating an action plan focused on improvement of his identified areas of development. The same plan will be having clear milestones against specific actions the student needs to take. The actions could be self-driven, activities which the CDC has planned as a part of the calendar or could also be training programs he undertakes online.

HR Conclave:

CDC organizes regular Annual meet with HR’s from various industries to bring awareness to the students about the current Market scenario, trends, technologies and required skill sets. It also serves as a networking forum for all prominent industry connections.

CDC Team: HITAM has separate Department towards conduction of Training and Placement activities. The team consists of: Dean Careers supported by Assistant Dean Careers, Head CDC and office assistants.

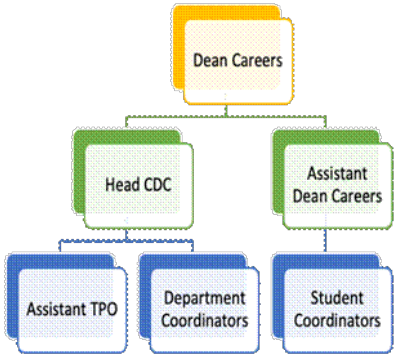


Figure 9.4.1: CDC Team

Table 9.4.1: CSD Team details:

S. No	Designation	Name of the staff
1	Dean Careers	Col. Pavan
2	Head CDC	Mr. Harsha
3	Assistant Dean Careers	Mr. Deepti
4	Assistant Training and Placement Officer (TPO)	Mr. Hari
5	Department Coordinators	ECE: Mr. Venkanna Babu
		EEE: Mr. Siddhartha
		Mech: Ms. Shyamala
		CSE: Dr. T. Satish
		CSD: Mr. Bobby
		CSM: Mr. Manikanta
6	Student Coordinator	Mr. Karthik, Student of AIML Student Dean CDC, SSG.

Responsibilities of Dean Careers:

1. Strategic Planning: Develop and implement long-term strategies for student career development aligned with institutional goals.
2. Student Development Programs: Coordinate soft skills training, resume writing, interview preparation, and personality development workshops.

3. Industry Collaboration: Build and maintain partnerships with industries, corporates, startups, and government organizations.
4. Internships & Placements: Oversee summer internships, industrial training, and final placements for students.
5. Corporate Relations: Host corporate talks, guest lectures, industry panels, and career fairs.
6. Skill Gap Analysis: Assess skill deficiencies and arrange bridging programs or workshops.
7. Tracking Alumni Success: Monitor alumni career trajectories to improve institutional offerings and engagement.
8. Placement Analytics: Maintain and analyze placement data, student profiles, recruiter feedback, and market trends.

Responsibilities of HEAD CDC:

The Head of the Career Development Centre plays a crucial role in ensuring students are career-ready and aligned with industry expectations. The responsibilities span four major domains, each essential to creating a robust and inclusive placement ecosystem.

1. Educate Students Accordingly

- **Recent Job Trends**: Continuously monitor industry trends, emerging job roles, and skills in demand to ensure students are prepared for the future workforce.
- **Career Awareness**: Conduct sessions, workshops, and one-on-one guidance to educate students on diverse career paths and industry expectations.
- **Skill Mapping**: Help students align their academic and technical skills with market needs through relevant certifications and training.

2. Execute Hiring Events

- **Network with Employers**: Build and sustain relationships with recruiters, industry leaders, and HR professionals to facilitate hiring opportunities.
- **Organize Placement Drives**: Plan and manage campus recruitment events, job fairs, and virtual hiring sessions.
- **Coordinate Industry Engagements**: Facilitate guest lectures, panel discussions, and mentorship programs to enhance industry exposure.

3. Promote High CTC Placements

- **Screen Potential Students**: Identify and groom high-performing students suitable for high-package placements.
- **Exclusive Training Programs**: Organize specialized training for students aiming at product-based companies or premium recruiters.
- **Pre-Placement Support**: Provide mock interviews, aptitude tests, and resume-building support tailored to top-tier companies.

4. Ensure Equal Opportunity

- **Placement Policy**: Design, implement, and enforce a transparent placement policy that ensures fairness and accountability.
- **Inclusive Opportunities**: Create a level playing field for all students, regardless of academic background, by identifying suitable roles and companies.
- **Support & Guidance**: Extend support to underperforming or non-placed students through re-skilling and internship opportunities.

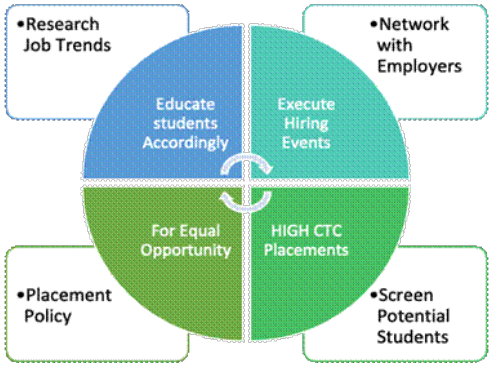


Figure 9.4.2: Responsibilities of CDC

Responsibilities of Assistant TPO

Assistant Training and Placement Officer

1. Assist in conducting CDC training and assessment programs
    1. Prepare the training and assessment time table
    2. Venue confirmation and preparedness
    3. Coordinate with CDC coordinators for students' participation and attendance
    4. Collect feedback from students
2. Assist in placement
    1. Coordinate campus recruitment activities
    2. Researching companies
    3. Create posters on drive information
    4. Making arrangements for pre-placement talks, tests, and interviews
3. Students connect
    1. Regular interactions on training, assessments, career opportunities, resume building, professional development, and placements
4. Alumni connect
    1. Build and maintain relationships with alumni for industry interactions, internships, mock interviews, placements, and job referrals.
5. Record keeping
    1. Maintain records of all CDC activities
6. Collect Offer Letters, Acceptance Letters and On-boarding Proof
7. Maintain a departmental level placement calendar and keep the students informed.
8. Review the Shortlisted Students
9. Creating awareness among the students about the training calendar and curriculum.

Responsibilities of Department Coordinators:

1. Inform the students about placement drives from time to time.
2. Ensure Students Registration and participation for Placement Drives
3. Following up with Shortlisted Students and ensuring their presence on the day of the drive
4. To present on the Day of Placement Drives for their department.
5. Support in designing the Training Calendar & Curriculum by providing the required information to CDC
6. Coordinate in conducting the training by making arrangements for the required classrooms and labs
7. Ensuring all students access to training materials (physical or online)
8. Inform the students on the Assessment Schedule.
9. Collect proof of Internship Completion Certificate and submit to CDC
10. Maintain Departmental Level Training, Internship, Project, and Placement Records

Table 9.4.2: Capacity building and Skills Enhancement Initiatives taken by the CDC (Batch 2019-23)

S. No	**Name of the capability Enhancement Program**	**Number of students Enrolled**
1	Aptitude and Reasoning	1800

2	Python Programming Training	1393
3	Programming in C	485
4	Java Programming	55
5	Seminar on Self Confidence & Attitude for Future Entrepreneurs	180
6	Awareness session on District Industrial Centre for New Beginners in Business	220
7	Seminar on Business Opportunities & Marketing Strategies	80
8	A session on Human Values, Anti-raging, Womens Safety, and Cyber-crimes	380
9	IELTS Training for III-II students of 2020-24 Batch	33

Table 9.4.3: Capacity building and Skills Enhancement Initiatives taken by the Institution (Batch 2020-24)

S. No	**Name of the capability Enhancement Program**	**Number of students Enrolled**
1	Aptitude and Reasoning Training	1800
2	TCS NQT Training	313
3	Full Stack Development using Python, DSA, OOPS Technical Training	528
4	Problem Solving on Hacker Rank/Leet Code, DSA Training	528
5	Problem Solving with Python and p5.js Training	587
6	Mock Interviews	34

Table 9.4.4: Capacity building and Skills Enhancement Initiatives taken by the Institution (Batch 2021-25)

S. No	**Name of the capability Enhancement Program**	**Number of students Enrolled**
1	Career Awareness Session and Collecting Career Aspirations for II-I 2023-27 Batch	626

2	AON Co Cubes Y-1 Assessment for 2021-25 Batch	448
3	Company Specific Trainings for IV-I (2021-25 Batch)	502
4	Mock GDs and Mock Interviews for IV-I of 2021-25 Batch	35
5	Career Enablement Programme for III-I 2022-26 Batch	585

Table 9.4.5: Impact Analysis: IV year

Year	Total No of Students	Placements	Higher Studies
2022-23	332	211	20
2023-24	472	284	23
2024-25	504	110 and ongoing	-

9.5 Start-up and Entrepreneurship Activities (5)

Total Marks 5.00

Institute Marks : 5.00

HITAM has established an incubation center to promote entrepreneurship among its students and faculty. This center serves as a platform to nurture innovative ideas and transform them into successful startups. It provides aspiring entrepreneurs with essential resources, guidance, and mentorship to develop their business ventures from ideation to execution.

Innovation at HITAM: Nurturing Future-Ready Engineers

At Hyderabad Institute of Technology and Management (HITAM), innovation is not an add-on—it is embedded in the very fabric of the institution. HITAM believes in "Doing Engineering rather than just Studying Engineering", fostering a culture where students are encouraged to ideate, experiment, and create from the very beginning of their academic journey.

1. Foundation Through Design Thinking (First-Year Initiation):

The innovation journey at HITAM begins from the first year with a mandatory course on Design Thinking. This course enables students to:

- Understand problem-solving in a human-centric manner.
- Work on real-world community-based or industry-driven problems.
- Develop empathy, ideation, prototyping, and testing skills early on.

2. Structured Innovation Ecosystem – From 'Xplore' to 'Innovations':

HITAM has a well-structured progression of innovation-focused programs:

- **Xplore:** A platform where First year students start exploring emerging technologies and develop POC (Proof of Concept) models.
- **Innovations:** Second and Third-year students work in multidisciplinary teams to develop impactful projects, often aligned with SDGs and industry relevance. It is not limited to years, anyone interested are welcome to implement their innovations.
- Students participate in national-level competitions, hackathons, and innovation challenges, gaining recognition and real-world exposure.

3. Multidisciplinary Innovation and Incubation Support:

- The Incubation Center at HITAM acts as a launchpad for entrepreneurial ideas and supports multidisciplinary student projects.
- Students from various departments collaborate and receive mentorship, prototyping support, and access to funding opportunities.
- Partnerships with industries and research organizations strengthen the pipeline from idea to market-ready product.

4. Ministry of Education's Innovation Cell (MIC):

- HITAM has an active MIC Cell, aligned with the Ministry of Educations Innovation Cell.
- Regular activities like IPR workshops, entrepreneurship boot camps, and ideation contests are conducted under this initiative.

- HITAM received a prestigious 4-Star Rating from MIC, one of the highest in the state of Telangana, for its excellence in:
    - Innovation ecosystem creation
    - Promotion of IPR (Intellectual Property Rights)
    - Entrepreneurial education and student startups

Table 9.5.1: List of Activities

S. No	Activity	Year
1	Workshop on "Entrepreneurship and Innovation" as Career Opportunity	2024
2	Problem Solving and Ideation Workshop	2024
3	Poster Presentation of Ideas/PoC & linkage with Innovation Ambassadors/Experts for Mentorship Support.	2024
4	Session on Entrepreneurship	2024

5	Workshop on Design Thinking, Critical thinking and Innovation Design	2024
6	Innovation & Entrepreneurship Outreach Program in Schools/Community Workshop on Entrepreneurship Skill, Attitude and Behavior Development	2024
7	Session on Achieving Problem-Solution Fit and Product-Market Fit	2024
8	Exposure Visit to Pre-incubation units such as Ideas Lab, Fab lab, Makers Space, Design Centers, City MSME clusters, workshops etc.	2024
9	Inter/Intra Institutional Innovation Competition/Challenge/Hackathon and Reward Best Innovations.	2024
10	Workshop on Prototype/Process Design and Development.	2024
11	Session/ Workshop on Business Model Canvas (BMC)	2024
12	Field/Exposure Visit to Incubation Unit/Patent Facilitation Centre/Technology Transfer Centre such as Atal Incubation Centre etc.	2024
13	Session on “How to plan for Start-up and legal & Ethical Steps”	2024
14	Workshop on Intellectual Property Rights (IPRs) and IP management for start up	2024
15	Mentoring Event: Demo Day/Exhibition/Poster Presentation of Business Plans & linkage with Innovation Ambassadors/Experts for Mentorship Support.	2024
16	Entrepreneurship	2024
17	Session on Innovation/Prototype Validation – Converting Innovation into a Start-up or Session on Achieving “Value Proposition Fit” & “Business Fit”	2024

18	Session on Accelerators/Incubation - Opportunities for Students & Faculties - Early-Stage Entrepreneurs	2024
19	Innovation & Entrepreneurship Outreach Program in Schools/Community	2024
20	Organize an Inter/Intra Institutional Start-up Competition and Reward Best Start-ups.	2024
21	Mentoring Event: Demo Day/Exhibition/Poster Presentation of Start-Ups & Linkage with Innovation Ambassadors/Experts for Mentorship Support.	2024
22	Entrepreneurship session-1	2024
23	Entrepreneurship session-2	2024
24	Innovation & Entrepreneurship Activity - St. Anthonys High School, Sanga Reddy	2024
25	Innovation & Entrepreneurship Activity - St. Peters School, Sanga Reddy	2024
26	Innovation & Entrepreneurship Activity - Zilla Parishad High School, Miyapur	2024
27	YUKTI Innovation-Idea Prototype details submission	2024
28	YUKTI Innovation - Startup	2024

5. Holistic Development through Innovation:

Innovation at HITAM is not limited to labs or competitions. It permeates through:

- Curriculum design with project-based learning (PBL) components.
- Community-based innovation through Unnat Bharat Abhiyan.
- Encouraging students to take ownership of their learning and contribute to sustainable development.

Outcomes:

6 Startup has been established by the students till now.

Table 9.5.2: List of Startups in our college

S. No	Name of Venture/Startup	DPIIT/Start up India Registration No.	Year of recognition by DPIIT/startup India
1	Eunoia Innovations Private Limited	DIPP93755	2022
2	Kephi Innovations Private Limited	DIPP95484	2022
3	Hicet Sustainable Solutions Private Limited	DIPP114672	2022
4	One Gear Technologies Private Limited	DIPP95527	2022
5	Veenero Sustainable Solutions Private Limited	DIPP140637	2023
6	Asthra Technologies	DIPP145563	2023

1. **Eunoia Innovations Private Limited:** Aqua Skimmer is an unmanned boat powered by artificial intelligence that cleans and collects floating trash on board. To float, the device is made up of two split hulls called catamaran. The inlet is equipped with a mechanical arm that collects the captured trash. The devices camera assists in detecting trash and capturing it in the collecting waste basket attached to the catamarans. It is powered by solar energy, which provides a renewable source of energy while also extending the device.
2. **Kephi Innovations Private Limited:** The Startup is working on the Eco-Friendly and Nature based Water treatment Solutions and Carbon Emission Neutralizers. This startup provides solutions that are used to treat the water naturally with Eco-friendly byproducts and helps to reduce global carbon emissions using carbon neutralizers. Their products serve businesses ranging from farmers to power plant corporations.
3. **HICET Sustainable Solutions Private Limited:** They have done digitization of Archery Scores. In Archery, for distance calculation from center it will do and according to that it will automatically calculate the score.
4. **One Gear Technologies Private Limited:** HOPPER is an electric vehicle created byOne Gear Technologies Private Limited. It is customer centric and is budget friendly. It will be placed at a correct price so that everyone can afford it.
5. **Veenero Sustainable Solutions Private Limited**
   Focuses on water conservation, renewable energy, and sustainable agriculture technologies. Develops scalable solutions for rural and urban ecological challenges. Promotes student-driven research aligned with the UN SDGs.
6. **ASTHRA TECHNOLOGIES**
   Works on AI, robotics, and embedded systems to create next-gen tech products. Encourages a research-oriented mindset among students in cutting-edge domains. Aims to position HITAM as a hub for deep-tech innovation.

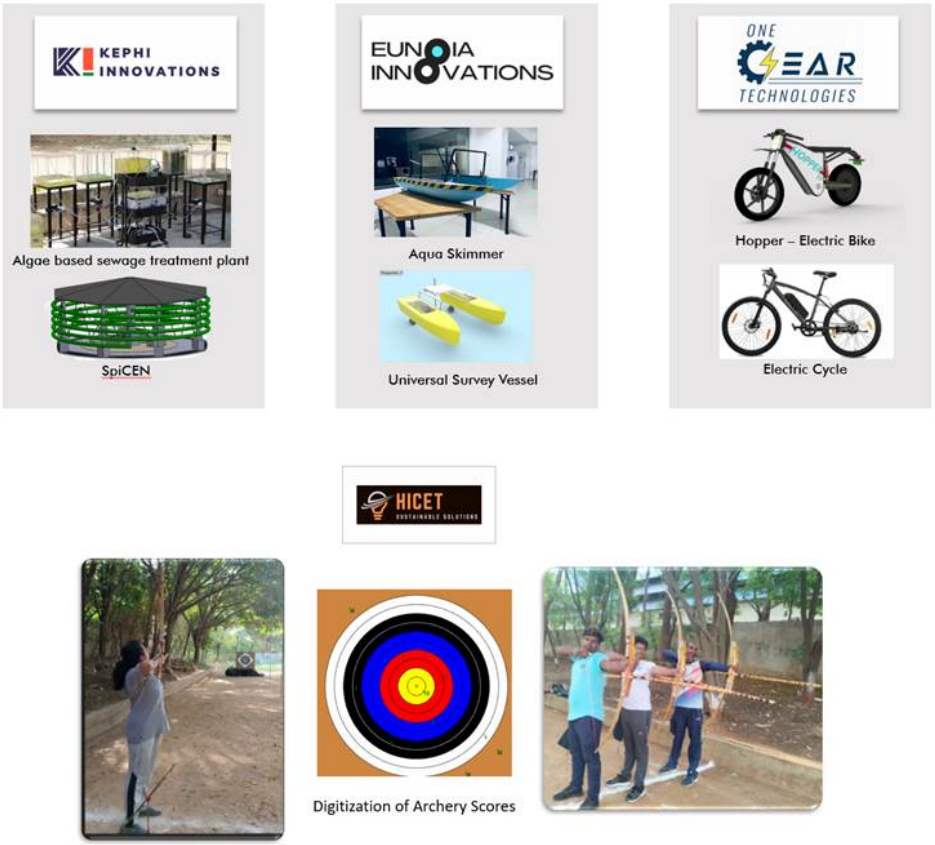


Figure 9.5.1: Startups

Recognitions to Startups:

Eunoia Innovations Private Limited

1. Received VC funding of ₹25,00,000 under the NIDHI-SSS scheme (ISB D-Labs) in December 2023, marking a significant milestone in its entrepreneurial journey.
2. AICTE Ministry of Education funded Rs. 6,00,000 Grant-in-Aid under the scheme of Grant Support to Innovations, MIC for the year 2023-24
3. Ministry of Housing and Urban Affairs under Amrut 2.0, this startup received Rs. 20,00,000 funding in the year 2022
4. Ministry of Housing and Urban Affairs under Amrut 4.0, this startup received Rs. 20,00,000 funding in the year 2022

9.6.1 Availability of the Institutional Strategic Plan and its Effective Implementation and Monitoring (10)

Institute Marks : 10.00

Institute Vision:

To be a role model technological university of national repute that imparts research-based multi-disciplinary competencies in students to enable their career aspirations and contribute to the society.

Institute Mission:

1. Build students' competencies through HITAM's 'Doing Engineering' approach with relevant curriculum, pedagogy and assessment.
2. Collaborate with industry and institutions for capacity building in research, innovation and real time knowledge.
3. Develop employability skills for emerging trends and societal needs
4. Excel by adopting NEP 2020 and improving Accreditations & national rankings.

Strategic Plan

Table 9.6.1: SWOT Analysis of Hyderabad Institute of Technology and Management HITAM

STRENGTHS	WEAKNESSES
• Visionary leadership • Value-driven organizational culture • One of the first US LEED Silver-rated Green buildings in India • Committed and loyal teaching and non-teaching workforce • Innovative Teaching methods • Experimentative and quick to adapt to Change • Proactive global-best learning practices (Doing Engineering, PBL, EPICS etc.) • Excellent Campus ambience, digital resources and learning spaces	• Limited brand visibility and market presence • Lack of strong operational level leadership • Limited surrounding land blocking campus expansion • Limited Industry / Corporate Connect • Research center
OPPORTUNITIES	**THREATS**

• Conducive Regulatory environment • Partnership opportunities for international collaborations • Open horizons to attract students across India • High demographic dividend • Scope for scaling to Deemed-to-be University • Strategic partnership with Industries and corporates • Scope to attract best talent and students • Engage with Industry-relevant Hybrid courses • Evolve a Unique global HEI model	• Volatility in Higher Education landscape creating tougher competition • Disruptive and ever evolving technologies • Top colleges may attract greater number of students due to Enhanced GER (Graduate Enrolment Ratio) thus affecting quality and quantity of admissions in HITAM as per NEP guidelines • Non-availability of quality faculty in the market • Job market disruptions affecting student Employability

Strategic Objectives Identified:

The purpose of this strategic plan is to outline a roadmap for HITAM to become a role model technological university. To achieve our objective of becoming a technological university, we will focus on the following key goals:

Table 9.6.2: Strategic Objectives

Objectives	**Description**	**Key Performance Indicators (KPI)**
Enhancing Academic Quality	HITAM will introduce new and innovative pedagogical methods, emphasizing hands-on learning and project-based learning, to enhance the academic quality of its programs. HITAM will also invest in faculty development and recruitment to attract the best talent and expertise to the institution.	● Number of faculty with PhD degrees or other relevant qualifications ● Student-faculty ratio ● Number of academic publications and citations ● Feedback from students and faculty on teaching effectiveness

		● Number of patents filed and granted
Strengthening Research and Innovation	HITAM will promote a culture of research and innovation, focusing on cutting-edge technologies and interdisciplinary collaboration. It will create an ecosystem that supports research and innovation, and encourages students and faculty to pursue new ideas and projects.	● Amount of research funding obtained from external sources ● Number of research projects undertaken ● Number of industry partnerships for research collaborations ● Number of patents filed and granted ● Number of publications and citations
Building Industry Partnerships	HITAM will establish strategic partnerships with leading industries in India and abroad to provide its students with opportunities to work on industry-led projects and internships. These partnerships will also provide access to the latest technologies and industry insights.	● Number of industry partnerships established ● Amount of funding obtained from industry partners ● Number of industry-led projects undertaken by students ● Number of students placed in industry through these partnerships
Partnerships with International Universities	HITAM will establish collaborations and partnerships with leading international universities to offer exchange programs, joint research projects, and faculty exchange programs. These partnerships will provide students and faculty with exposure to global best practices and diverse perspectives.	● Number of international collaborations and partnerships established ● Number of students and faculty participating in exchange programs / immersions ● Number of joint research projects undertaken with international partners
	HITAM will invest in state-of-the-art	● Number of new buildings constructed or renovated ● Amount of funds invested in infrastructure improvements

Strengthening of Infrastructure	infrastructure, including labs, workshops, and research facilities, to support hands-on learning and research activities. HITAM will also upgrade our campus facilities, to provide students with a world-class learning environment.	● Availability and adequacy of classrooms, labs, libraries, and other facilities ● Feedback from students and faculty on the quality of infrastructure ● Reduction in maintenance and repair backlog
Focus on Student Placements	HITAM will develop strong ties with industry partners to ensure high-quality placements for our students. HITAM will offer career development services, including mentorship and training programs, to prepare students for successful careers in the technology industry. We will work closely with leading companies and organizations to provide internship opportunities, conduct placement drives, and offer career guidance and counseling. Through these efforts, we will ensure that our students are well-prepared to meet the needs of the industry and contribute to the growth and development of the country.	● Number of students placed in leading companies and organizations ● Starting salaries of graduates ● Feedback from employers on the quality of our graduates ● Alumni engagement and support for placement activities
Quality of Admissions	HITAM will focus on recruiting the most talented and motivated students, with a commitment to diversity and inclusion. HITAM will also offer scholarships and financial aid to deserving students to ensure equal access to education.	● Average score and cut-off rank of admitted students in entrance exams ● Diversity of the student body in terms of gender, socio-economic background, and geographic location ● Retention and graduation rates of admitted students ● Feedback from students and faculty on the quality of admitted students

Accreditations and Rankings	HITAM will work towards achieving NAAC A++ in the next cycle, and increase the departmental scores in the next NBA renewal. HITAM will enter into the rankings of ARIIA and NIRF.	● Accreditation status obtained for different programs ● Rank obtained in national and international rankings ● Feedback from stakeholders on the quality and reputation of our institution

The strategic plan was reviewed and refined in the year 2024 to be inline with the situation.

To measure our progress towards achieving these goals, we will continuously track performance metrics, and progress towards becoming a technological university.

9.6.2 Governing Body, Administrative Setup, Functions of Various Bodies, Service Rules, Recruitment procedures and Promotion Policies (10) Institute Marks : 10.00

We have a structured organization framework to cater to the needs as per the requirements of Statutory and Non-Statutory administrative committees.

Various bodies like the Governing Body, Academic Council, Academic Committee, Advisory Committee, and IQAC exist in the institution to formulate guidelines and monitor the functioning of the institution from time to time.

The Governing body in general meets once in a semester to review and take decisions on the policy matters of the institute. This body takes decisions related to the financial, administrative and quality measures to be taken up and takes measures to ensure the effective functioning of the institution. mission of the institute.

To support effective Governance, the college has set up various Statutory and Non-Statutory committees like: Academic Council. Grievance committee, IQAC, Anti Ragging, Disciplinary, Women empowerment cell, Internal complaints, Admin Committee, Board of Studies (BoS), Finance Committee.

HODs are responsible for the functioning of the Department as per the laid down policies of the college. To provide policy framework and direction for the functioning of the institution, various committees play a vital role. These committees help the administration to evaluate, monitor and recommend in respect of various matters leading to progress of the institution as per its quality policy.

Service rules, procedures, recruitment, promotional policies have been formulated as per the guidelines of competent authorities like affiliating university, AICTE and UGC and are approved by the governing body. These rules are disseminated to all the faculty members of HITAM at the time of joining and they can refer to the same from HR. The service rules are linked to the additional information.

Recruitment and Promotion Policies: The recruitment of teaching and administrative staff is done through publication in both online and offline. All the applicants are interviewed by the Selection Committee. The faculty undergo a demo to assess their teaching proficiency.

The Selection Committee makes recommendations based on the requirement of the faculty specialized in certain courses and technologies so that the Institution has a balanced and efficient teaching body. The promotions are performance based.

All HODs initiate Performance Reports once in an academic year under the Performance Management System, which are processed through the Director and Principal to the management for award of increments, incentives and promotions based on their merit and demonstrated performance.

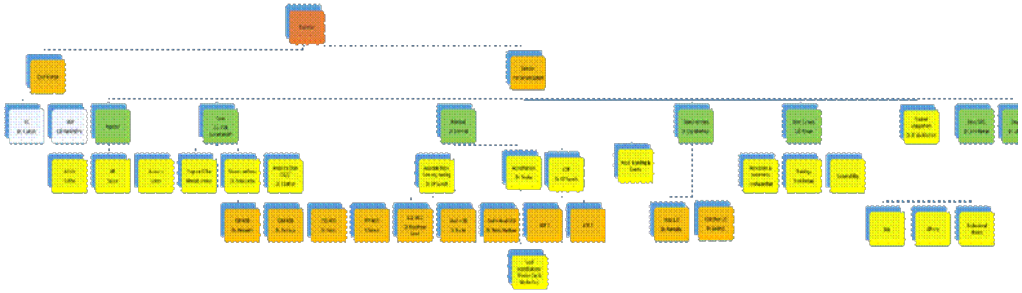


Figure 9.6.1: Organogram

Organogram: https://hitam.org/wp-content/uploads/2025/03/Oronogram.pdf (https://hitam.org/wp-content/uploads/2025/03/Oronogram.pdf)

Governing Body:

The following are the Governing Body members of the College:

Table 9.6.3: Governing Body members

S. No	Position	Name	Affiliation	Constituted by
1	Chairman	Prof. Sanjay Dhande	Former Director IIT Kanpur	Nominated by Society
2	Member	Prof. Satyanshu Kumar Upadhyay	Professor of Statistics, Banaras Hindu University	Nominated by UGC
3	Member	Dr. Ravinder Reddy	Professor of Maths, JNTUH	Nominated by JNTUH
4	Member	Dr. Ashok Shettar	Vice Chancellor, KLETECH	Educationist
5	Member	Dr. Gopalkrishna Joshi	Vice Chancellor, MIT Vishwa Prayag	Educationist
6	Member	Dr. Mallikarjuna Babu	Vice Chancellor, Galgotia University	Educationist
7	Member	Brig. P. Ganesham	President, Pallesrujana	Nominee by Society
8	Member	Nirmala Sambamoorthy	Director, Ascent Leadership & Mgmt. Consultants Pvt. Ltd.	Nominee by Society
9	Member	Mr. Tirupathi Reddy	Hon. Chairman, HITAM	Nominated by Society (Society Member)

10	Member	Dr. V. Surender Rao	Secretary, Royal Education Society	Nominated by Society (Society Member)
11	Member	Sri. Prashanth Arutla	Founder Chairman, HITAM	Nominated by Society (Society Member)
12	Member	Mrs. Susheela Devi	Founder Arutla Foundation	Nominated by Society (Society Member)
13	Member	Mr. Sameer Nagpal	Co-founder, One bac Technologies	Industrialist Nominated by Principal
14	Member	Nominee of AICTE	AICTE	Nominee of AICTE
15	Member	Smt. Sujatha K	Principal, SDDGWTTI	Nominee of State Government
16	Member	Dr. M. Rajeshwar	Associate Professor, HITAM	Assoc. Prof. Nominee by Principal
17	Member	Mr. Surendra Bandi	Associate Professor, HITAM	Assoc. Prof. Nominee by Principal
18	Member	Mr. Vinay Singh	Manager, Cocubes	Alumni Nominated by Principal
19	Member	Ms. Krupali	Tech Manager, TCS	Alumni Nominated by Principal
20	Member Secretary	Dr. S. Arvind	Professor	Principal (Ex-Officio)

Functions:

1. Lay down service conditions, emoluments, traveling allowances for the teaching and non-teaching staff.
2. Lay down procedure for selection/ recruitment of teaching or nonteaching staff and to appoint the same.
3. Regulate and enforce discipline among members of teaching and non-teaching staff in accordance with the rules/ procedures laid down in this regard.
4. Invest any money belonging to the college in stocks, funds, shares or securities as it shall from time to time, think fit or in the purchase hire/rental of immovable property.
5. Transfer of any movable or immovable property
6. Fix the fee structure and other charges payable by the students based on the recommendation of academic council, subject to the approval of the finance committee.
7. Entertain, adjudicate upon and if thought fit constitute a committee for advice to redress the grievances of the members of staff and the students
8. Delegate administrative and financial powers to the principal and other functionaries for smooth functioning.
9. Accept endowments for specific purpose.

10. Approve new Programmes of study leading to degrees and / or diplomas.
11. Approve annual report of the college.
12. Approve the foreign trips/tours/assignments/ research paper readings of the employees.
13. Perform such other function and create committees as may be necessary and deemed fit for the proper development and fulfillment of the objectives for which the college was established and for national concern.

Academic Council:

Table 9.6.4: Academic Council Members

S. No	Name	Designation	Category
1	Dr. S. Arvind	Principal, HITAM	Chairman
2	Dr. T. Satish Kumar	HoD CSE	Member
3	Dr. J. Rajeshwar Goud	HoD ECE	Member
4	Dr. Ruchir Srivastava	HoD Mech	Member
5	Dr. O.P. Suresh	HoD EEE	Member
6	Dr. P. Padmaja	HoD CSE-AI & ML	Member
7	Dr. M.V.A. Naidu	HoD CSE-DS	Member
8	Dr. K. Sandeep	HoD Maths	Member
9	Dr. Lavanya	HoD Chemistry	Member
10	Dr. Ashalatha	HoD English	Member
11	Dr. Rambabu T	HoD Physics	Member
12	Col. P.V.R. Subramaniam	HoD MBA	Member
13	Dr. Devika SV	Professor of ECE	Member
14	Mr. Surendra Bandi	Assoc. Professor of CSE	Member
15	Dr. B. Lokeswara Rao	Professor of ECE	Member
16	Mr. K. Suresh	Assoc. Professor of EEE	Member
17	Dr. Gopalkrishna Joshi	Vice Chancellor, SVKP University	Academic Expert
18	Dr. Mallikarjuna Babu	Vice Chancellor, Galgotia University	Academic Expert

19	Dr. Pratap Reddy	Professor of ECE, JNTUH Hyderabad	Academic Expert
20	Dr. Vijaya Sekhar Reddy	Professor and Dean School of CSE, UPES Dehradun	Academic Expert
21	Dr. P. Ravi Reddy	Director Technical Dept, MEIL, Hyd.	Industry Expert
22	Dr. C. D. Naidu	Principal VNRVJIET, Hyderabad	Academic Expert
23	Dr. A. Jayashree	Professor of Chemistry, JNTUH	University Nominee
24	Dr. M. T. Naik	Professor of MECH, JNTUH	University Nominee
25	Dr. G. V. Narsimha Reddy	Professor of CIV & Principal JNTUH	University Nominee
26	Dr. O.P.Suresh	Professor of EEE & CoE	Member Secretary

The Academic Council is the principal academic body of the Institute and shall, in addition to all other powers and duties vested in it, has to perform duties without prejudice to the generality of functions mentioned. The following are the powers of the Academic Council:

1. Scrutinize and approve the proposals with or without modification of the Board of Studies with regard to courses of study, academic regulations, curricula, syllabi and modifications thereof, instructional and evaluation arrangements, methods, procedures relevant thereto etc., provided that where the Academic Council differs on any proposal, it will have the right to return the matter for reconsideration to the Board of Studies concerned or reject it, after giving reasons to do so.
2. Make regulations for admission of students to different programmes of study.
3. Make regulations for sports, extra-curricular activities, and proper maintenance and functioning of the playgrounds and hostels.
4. Recommend to the Governing Body proposals for new programmes of study.
5. Recommend to the Governing Body about scholarships, studentships, fellowships, prizes and medals, and to frame regulations for the award of the same.
6. Advise the Governing Body on suggestions pertaining to academic affairs.
7. Perform such other functions as may be assigned by the Governing Body.
8. Suggest measures for departmental co-ordination.
9. Take periodical review of the activities of the Departments and make recommendations if any for improving the standards of instruction.
10. Recommend required teaching posts to the Governing Body.

BOARD OF STUDIES: STRUCTURE AND FUNCTIONS

The College will strictly adhere to the guidelines prescribed by all the statutory bodies such as UGC, AICTE, JNTUH and TSCHE for developing and restructuring the curricula. The Board of Studies are responsible to frame scheme of instruction, course structure and syllabi. It is proposed to revise the syllabi once in every three years or as and when required. The syllabi will be implemented by the Departments concerned and add-on courses will be conducted to meet the needs of the industry. Details of the syllabi shall be made available with the Departments, Central Library, College website, and to the students.

The Board of Studies shall be primarily responsible for the following:

- Prepare syllabi and various courses, keeping in view, the objectives of the college, interest of the Stakeholders and national requirement for consideration and approval of the Academic Council.
- Suggest methodologies for innovative teaching/learning and evaluation techniques.
- Suggest panel of names to the Academic Council for appointment of examiners.
- Coordinate research, teaching, extension and other academic activities.

Table 9.6.5: Board of Studies Structure

S.No	BoS – Member	Designation	Affiliation
1	Dr. OP Suresh	Chairman	HoD – EEE
2	Mr. K.Suresh	Member	Assoc Professor
3	Mr. S.V.Satyanarayana	Member	Asst Professor
4	Dr.M.Chiranjivi	Member	Assoc Professor
5	Dr. E. Vidya Sagar	Member (nominated by the Academic Council.)	Professor, OU
6	Dr. Ravikumar Bhimasingu	Member (nominated by the Academic Council.)	Professor, IIT Hyd
7	Dr. Lokeshwara Reddy	Subject Expert Nominated by AC	Professor, CVR College, Hyderabad
8	Dr. S. Tara Kalyani	JNTUH Nominee	Sr. Prof. of EEE, JNTUH UCESTH
9	Dr. G Sanath Kumar	Industry Expert	Senior Electrical Inspector, Intertek India Pvt. Ltd.
10	Mr. G Shiva Raj	Alumni	Infosys as senior systems Engineer.

Finance Committee:

Table 9.6.6: Finance Committee members

S.No.	**Committee Members**	**Designation**
1	Dr. S. Arvind	Principal
2	Col. A.V. Subramaniam	Registrar
3	Mr. U. Ravi Kiran	Chartered Accountant

4	Mr.P. Veerabadra Rao	External Member
5	Mr.M. Rajesh	External Member
6	Mr.A. Srinivas	Financial Consultant
7	Mr.G. Ravi	Administrative Officer
8	Mrs.D. Udaya	Sr.Accountant

The Finance Committee shall have the following responsibilities:

i. The annual accounts and financial estimates of the Institute shall be placed before the Finance Committee for consideration and thereafter submitted to the Governing Body together with the comments of the Finance Committee for approval.

ii. The Finance Committee shall fix limits of the total recurring expenditure and the total non-recurring expenditure of the year based on the income and resources of the Institute. No expenditure shall be incurred by the Institute in excess to the limits so fixed.

iii. No expenditure other than that provided for in the budget shall be incurred by the Institute without the approval of the Finance Committee.

iv. Recommend to the Governing Body the creation of all types of posts.

v. Provide the financial estimates with respect to the building and other infrastructural facilities that have been planned on the basis of the recommendations of Academic Council.

Internal Quality Assurance Center (IQAC)

The following members constitute the Internal Quality Assurance Center (IQAC) of the College.

Table 9.6.7: Internal Quality Assurance Center (IQAC) Members

S.No	**Name**	**Designation**
1	Mr.Prashanth Arutla	Management
2	Dr. S. Arvind	Principal
3	Dr.C.Sunil Kumar	Dean IQAC
4	Dr.B.Lokeswara Rao	Dean R&D
5	Dr.A.Chandramouli	Dean Freshman Engg.
6	Dr. S.V.Devika	Faculty
7	Dr.M V A Naidu	Faculty
8	Dr.T.Satish kumar	Faculty
9	Dr. M.Rajeshwar	Faculty
10	Dr. O.P Suresh	Faculty

11	Dr. J. Rajeshwar Goud	Faculty
12	Dr. R.Umamaheswara Singh	Faculty
13	Dr. K.Bindu Madhavi	Faculty
14	Dr.Ruchir Shrivastav	Faculty
15	Dr.P.Padmaja	Faculty
16	Dr.T.Rambabu	Faculty
17	Dr.N.Lavanya	Faculty
18	Mr. Surendra Bandi	IQAC Coordinator

Functions:

- Development and application of quality benchmarks / parameters for various academic and administrative activities of the College.
- Facilitate a learner-centric environment conducive for quality education and faculty maturation and adopt the required mechanism for participatory teaching and learning process.
- Arrangement for feedback responses from students, parents and other stakeholders on quality-related processes.
- Dissemination of information on various quality parameters of higher education.
- Organization of inter and intra-institutional workshops, seminars on quality related themes and their promotion.
- Documentation of various programmes / activities of the College, leading to quality improvement.
- Acting as a nodal agency of the college for coordinating quality-related activities, including adoption and dissemination of good practices.
- Development and maintenance of institutional database through MIS/ERP for the purpose of maintaining / enhancing the institutional quality.
- Development of the Annual Quality Assurance Report (AQAR) of the College based on the quality parameters/assessment criteria.

Academic Committee

Table 9.6.8: the Academic Committee members

S.No.	**Committee Members**	**Designation**
1	Dr. S. Arvind (Committee Chairman)	Principal
2	Dr. R. Uma Maheswara Singh (Committee Convenor)	Asst Dean Academics

3	Col. A.V. Subramaniam	Registrar
4	Dr. B. Lokeswara Rao	Dean Freshman Engg.
5	Dr. O. P. Suresh	Controller of Exams & HOD - EEE
6	Dr. Ruchir Srivastava	HOD - MECH
7	Dr. G. Rajeshwar Goud	HOD- ECE
8	Dr. T. Satish Kumar	HOD -CSE
9	Dr. Padmaja	HOD -CSM
10	Dr. M. V. A. Naidu	HOD - DS
11	Dr. Lavanya	HOD- H&S-1
12	Dr. Rambabu	HOD- H&S-2
13	Dr. Sandeep	BoS Chairman
14	Dr. S. V. Devika	BoS Chairman
15	Based on agenda concerned leadership member will be invited.	

Functions:

- Recommend and review curriculum structures for all programs in line with statutory bodies (AICTE/UGC/University norms).
- Ensure inclusion of industry-relevant and employability-enhancing subjects.
- Prepare and monitor the academic calendar including schedules for internal assessments, co-curricular activities, and final exams.
- Analyze student performance data (e.g., results, attendance, backlogs) and recommend remedial measures.
- Propose strategies for improving academic outcomes and learning levels.
- Suggest faculty training needs and recommend FDPs, workshops, and higher education opportunities.
- Encourage research and publication activities among faculty.
- Recommend policies and practices for academic quality improvement.
- Assist in preparing documentation for NAAC, NBA, and other accreditations.
- Promote the use of ICT tools, blended learning, and outcome-based education methodologies.
- Encourage project-based learning and student research work.
- Plan and execute internal academic audits of departments.
- Ensure compliance with institutional academic standards.

- Suggest improvements in assessment methods, question paper patterns, and evaluation systems.
- Recommend policies for student mentoring, academic counselling, and bridge courses for slow learners.
- Collect and analyze feedback from students and stakeholders for curriculum and teaching improvements.

Admin Committee

Table 9.6.9: Admin Committee members

S.No.	Committee Members	Designation
1	Dr. S. Arvind (Committee Chairman)	Principal
2	Mrs. Meezab Unnisa (Committee Coordinator)	Head Operations
3	Col. A.V. Subramaniam	Registrar
4	Dr. B. Lokeswara Rao	Dean Freshman Engg.
5	Mr. B. Surendra	Assoc.Dean Institutional Affairs
6	Dr. M. Rajeshwar	Asst.Dean
7	Dr. S.V. Devika	Assoc.Dean Accreditation
8	Dr. Ashalatha	Student counsellor

Anti-Ragging & Disciplinary Committee

Table 9.6.10: Anti-Ragging Committee composition

S.No.	Committee Members	Designation
1	Dr. S. Arvind (Committee Chairman)	Principal
2	Col. A.V. Subramaniam (Committee Convenor)	Registrar
3	Dr. B. Lokeswara Rao	Dean Freshman
4	Dr. O. P. Suresh	HOD- EEE & Controller of Examinations
5	Dr. G. Rajeshwar Goud	HOD- ECE
6	Dr. P. Padmaja	HOD -CSM
7	Dr. M. V. A. Naidu	HOD - DS
8	Dr. T. Satish Kumar	HOD -CSE

9	Mr. Ravi Gurram	Admin Officer
10	Mr. A. Rajkumar	Physical Director
11	Om Kumar Gupta	Student Nominee
12	Palak Guleria	Student Nominee
13	Bipul Kumar Yadav	Student Nominee
14	Paluru Naga Babu	Student Nominee
15	Hari Kishan Singh Prasad	Student Nominee

Table 9.6.11: Disciplinary Committee composition

S.No.	**Committee Members**	**Designation**
1	Dr. S. Arvind (Committee Chairman)	Principal
2	Col. P. V. Subramanyam (Committee Convenor)	Dean
3	Col. A.V. Subramaniam	Registrar
4	Dr. Rajeshwar M	Asst. Dean
5	Mr. Ravi Gurram (Invitee)	Admin Officer
6	Mrs. Meezab Unnisa	Head Operations
7	Dr. Ashalatha	Wellness counsellor
8	Respective HOD & mentor	Invitees
9	Ishita	Student Nominee
10	Heramba Sai	Student Nominee
11	Sai Bhargav	Student Nominee

Functions:

The Initiatives of the college to curb the menace of ragging are as follows:

- Preparing, distributing and publicizing about anti-ragging through materials such as posters, brochures, circulars etc.
- Displaying posters and putting up notices at all the designated places in the college.
- Obtaining affidavits, undertaking forms from all the students and their parents.
- Sensitizing all the stake holders with the help of media.
- Organizing ‘Anti – Ragging awareness campaigns’.

- Initiating measures for girls' security such as appointing women faculty as counselors.
- Ensuring'Alcohol and Smoking Free Zone' in the campus.
- Making 'Orientation Programmes' mandatory for every department.
- Establishing 'Mentoring and Counseling Cells' at institutional level.
- Seeking a pledge by all the students to make the campus a 'Ragging Free Zone'.

Hyderabad Institute of Technology and Management, in compliance with the regulations, directives and act, has decided to constitute an 'Anti-Ragging Committee' at the college level and 'Anti Ragging Squads' at the department level for overseeing the effective implementation of the provisions to curb ragging of any form in its campus with immediate effect.

Monitoring mechanism:

a) Anti-ragging Committee:

1. 'Anti-Ragging Committee' is headed by the Head of the Institution, and it consists of representatives of civil and police administration, local media, Non Government Organizations involved in youth activities, representatives of faculty members, parents, students belonging to the freshers' category as well as senior students and non-teaching staff.
2. It shall be the duty of the 'Anti-Ragging Committee' to ensure compliance with the provisions of these regulations as well as the provisions of any law for the time being in force concerning ragging, and also to monitor and oversee the performance of the 'Anti-Ragging Squad' in preventing of ragging in the institution.

b) Anti-Ragging Squad:

1. 'Anti-Ragging Squad' is nominated by the Head of the Institution having representation of faculty and staff members for maintaining vigil, oversight and patrolling functions. It shall remain mobile, alert and active at all times.
2. It shall be the duty of the 'Anti-Ragging Squad' to be called upon to make surprise raids on hostels, and other places vulnerable to incidents and having the potential for ragging and shall be empowered to inspect such places.
3. It shall also be the duty of the 'Anti-Ragging Squad' to conduct an on-the-spot enquiry into any incidents of ragging referred to it by the Head of the Institution or any member of the faculty or any member of the staff or any student or any parent or guardian or any employee of a service provider or by any other person, as the case may be; and the enquiry report along with recommendations shall be submitted to the authority observing a fair and transparent procedure and the principles of natural justice and after giving adequate opportunity to the student or students accused of ragging and other witnesses to place before it the facts, documents and views concerning the incidents of ragging, and considerations such other relevant information as may be required.

c) Mentoring / Counseling Cell:

In order to promote the objectives of the regulations for curbing the menace of ragging and also to instill confidence in fresher's and students to ensure the practice of human values, rights, and dignity, the college has constituted a 'Mentoring / Counseling Cell'. It consists of faculty members as 'Mentors / Counselors'. Each mentor guides ten students to take care of academic as well as personal problems. Students have a one-period slot designated for this purpose in addition to meeting the mentor / counselor as and when needed for guidance.

d) Punishments:

Depending upon the nature and gravity of the offence as established, the possible punishments for those found guilty of ragging at the institution level shall be as per clause 9 of 'UGC Regulations' as indicated above.

Grievances & Redressal Cell

Grievances Redressal Cell' is formed in order to establish healthy working atmosphere and to uphold the dignity of the college by ensuring strife free atmosphere in the college and to promote cordial student to student relationship, Student to teacher relationship and staff to staff relations etc. This cell also helps staff, students and parents to record their complaints and solve their problems related to academics, resources and personal grievances.

Woman harassment complaints will be handled by WOMEN'S PROTECTION CELL as per the Government guide lines.

'Suggestion / complaint Boxes' have been installed at different places in the college campus in which the students/staff, who want to remain anonymous, put in writing their grievances and their suggestions for improving the academics/administration in the college. Students, parents and staff can lodge complaint of any kind including ragging complaint. The person concerned can personally approach and write / e-mail to any member of the Cell.

Table 9.6.12: Students Grievance Redressal Committee

S.No.	Committee Members	Designation
1	Dr. S. Arvind (Committee Chairman)	Principal
2	Dr. D. Ashalatha (Committee Convenor)	Wellness counsellor
3	Dr. S. V. Hemanth	CSE CooD
4	Dr. M. Rajeshwar	Asst.Dean
5	Mr. P. Kondala Rao	ECE- Dept. Cood
6	Mr. Surendra Bandi	Assoc. Dean- Education
7	Respective HOD & mentor	Invitees
8	Pravallika Sayyapparaju	Student Nominee
9	Saumya S	Student Nominee
10	Maanik Manohar	Student Nominee

Table 9.6.13: Staff Grievance Redressal Committee

S.No.	Committee Members	Designation
1	Dr. S. Arvind (Committee Chairman)	Principal
2	Dr. R. Uma Maheswara Singh (Committee Convenor)	Asst Dean Academics
3	Mr. Bhaskar Das	Lead accreditation
4	Mrs. Meezab Unnisa	Head Operations

5	Mr. B. Surendra Bandi	Assoc.Dean Institutional affairs
6	Mrs. Sailaja	HR Operations

Functions:

- A ’Grievance Redressal Committee’ is formed to look into the complaints from the aggrieved.
- ‘Suggestion/ Compliant Box’ are provided at office of Principal for students and staff to lodge their complaints/ suggestions.
- Enquire into the complaints received from the aggrieved students/staff about any incident including ragging.
- Recommend to the Principal, the penalty to be imposed, action to be taken and corrective measures to be formulated.
- Forward the report of grievance committee to Principal for further action
- Take the corrective measures and record in the register.

Internal Complaint Committee / Women Empowerment Committee

In view of the increasing number of girl students in the campus, ‘Women Grievance Redressal Cell’ makes every effort to ensure that the girls feel at home. The cell resolves common problems of girl students and also takes up individual cases of sexual harassment, if any. Ragging in the hostels is totally disallowed, and any involvement in this respect is punishable. The following are the constituents’ faculty members and students of the ‘Women Empowerment Committee’:

Table 9.6.14: Women Empowerment Committee Members List

S.No.	Committee Members	Designation
1	Dr. S. Arvind (Committee Chairman)	Principal
2	Mrs. Vanaja (Committee Convener)	H&S- Faculty
3	Mrs. Moshe Rani	ECE - Faculty
4	Mr. M. V. A. Ramakrishna	Mech-Faculty
5	Dr. Aparna	ET- Faculty
6	Dr. S. V. Hemanth	CSE CooD
7	Mrs. Sailaja	HR Operations
8	Dr. Devika	Assoc. Dean-Accreditations
9	Hrushita	Student Nominee
10	Architha Reddy	Student Nominee

Functions

- Ensure safety of the women staff and students.

- Provide counseling on interaction with opposite gender.
- Promote decent code of conduct among the staff and the students.
- Create awareness of socio-cultural, political and biological complexities of the issue.
- Enhance the understanding of the other gender.
- Enquire into complaints received from the aggrieved students including ragging or from staff of the college.
- Recommend to the Principal for necessary action like penalty to be imposed, suspension, rustication etc. The Principal upon receipt of the report from the committee shall, after giving an opportunity of being heard to the person complained against and with the recommendation of the 'Grievance Redressal Committee' takes necessary action.

Library Committee

The Library Committee monitors the Library activities of the College. The following are the members of the Committee:

Table 9.6.15: Members List of Library Committee

S.No.	Committee Members	Designation
1	Dr. S. Arvind (Committee Chairman)	Principal
2	Dr. T. Satish Kumar (Committee Convenor)	CSE HOD
3	Mr. P. Santosh	ECE - Faculty
4	Dr. Aparna	ET- Faculty
5	Mr. S. V. Satyanarayana	EEE-Faculty
6	Dr. N. Lavanaya	H&S- HOD
7	Dr. Ruchir Srivastav	Mech-Faculty
8	Mr. P. Narayana Rao	Librarian
9	Mr. E. Ramesh	Librarian
10	Neeharika	Student Nominee
11	Varsha	Student Nominee
12	Sriya	Student Nominee

Functions:

1. Guide the Librarian in formulating general library policies and regulations.
2. Provide for proper documentation services and updating the Library collection.
3. Work towards modernization and improvement of Library and documentation Services.

4. Formulate policies and procedures for efficient use of Library resources.
5. Review Library readership dept-wise and adopt measures to enhance readership.
6. Prepare budget and proposals for the development of the Library.
7. Recommend to the authorities the fees and other charges for Library.
8. Seek feedback on Library functions from readers.
9. Submit the annual report on the functioning of the library.
10. Take measures to increase the membership of the Library.

Transport Committee:

The 'Transport Committee' plans and recommends to the 'Transport Manager' the facilities required for organizing transport to faculty, staff and students. The Committee submits a report to the Principal every six months regarding the adequacy and quality of maintenance of the facility being provided.

Table 9.6.16: Members List of Transport Committee

S.No.	Committee Members	Designation
1	1. Col. Subramaniam (Committee Chairman)	Registrar
2	2. Ravi Gurram (Committee Convenor)	Admin Officer
3	3. Mr. Raj Kumar	Physical Director
4	4. Mrs. Moshe Rani	ECE-Faculty
5	5. Mrs. Vanaja	H&S Faculty
6	6. Mr. U. Murlidhar	Mech - Lab Asst
7	7. Mr. Siddhartha	EEE-Faculty
8	8. Mr. Chiranjeevi	COOD - EEE
9	9. Mrs. Sailaja	HR
10	10. Mr. S. Durga Rao	Mech - Lab Asst
11	11. Mr. Pradeep (Physics)	Physics-Faculty
12	12. Mr. S. Srikanth	H&S Lab asst.
13	K Vinay	Student Nominee
14	Om Kumar Gupta	Student Nominee
15	Satvika Reddy	Student Nominee

Functions:

- Maintain all the buses, mini transport and other vehicles of the college.
- Manage all the transport staff and schedule of operations of all the buses and other vehicles with the approval of Principal.
- Handle all the statutory bodies, obtaining/renewal of licenses, special permissions and other related matters with the approval of Principal.
- Handle all student complaints and indiscipline in the college buses.
- Conduct meeting monthly or as and when required and submit report to the Principal.

Hostel Committee

The 'Hostel Committee' plans the infrastructure facilities required for providing hostel facility for girls and boys separately. The hostels are effectively managed through Warden and Staff.

Table 9.6.17: Members List of Hostel Committee

S.No.	Committee Members	Designation
1	Col. Subramaniam (Committee Chairman)	Registrar
2	Mr. Ravi Gurram (Committee Convenor)	Admin Officer
3	Mrs. Meezab Unnisa	Head Operations
4	Mr. G Shyam Sundar	PO
5	Mr. Abhinesh	EA & HR
6	Mr. Meghnath	H&S-Faculty
7	Mr. D. Manikanta	CSE-Faculty
8	Mrs. Roshni	H&S - Faculty
9	Ms. Meghana	ET -Faculty
10	K. Vinay	Student Nominee
11	V Sai Krishna	Student Nominee
12	D. Sneha	Student Nominee
13	V. Roopa Sai Reddy	Student Nominee

Functions:

- The 'Hostel Committee' shall discuss and make recommendations regarding:
    a. Admissions;
    b. Discipline of resident students;

c. Maintenance and development of the hostel; and

d. Any other matter pertaining to the ambience of the hostel.

- Receive complaints from students regarding facilities and amenities from time to time and forward it to Principal.
- Submit a monthly report to the Principal on matters relating to the adequacy and quality of maintenance of the following facilities: Protected drinking water, kitchen, dining halls, newspapers, telephones, restrooms, fans, lights and power.

Canteen Committee

Table 9.6.18: Members List of Canteen Committee

S.No.	Committee Members	Designation
1	1. Dr. S. Arvind (Committee Chairman)	Principal
2	2. Dr. Hemanth (Committee Convenor)	CSE- Cood
3	3. Mr. Navakishore	ET- Faculty
4	4. Mr. Ravi Gurram	Admin.Officer
5	5. Mr. S. V. Satyanarayana	EEE-Faculty
6	6. Mr. Ashok	System Admin
7	7.Mrs. Roshni	H&S - Faculty
8	8. Mr. Bobby Simon	ET-Faculty
9	9. Dr. T. Sathish	HOD -CSE
10	K. Vinay	Student Nominee
11	Gourishetti HARSITH	Student Nominee
12	Vivekananda Sastry	Student Nominee

Functions:

- Supervise the day-to-day functioning of the college canteen to ensure smooth and hygienic operations.
- Conduct regular inspections to ensure cleanliness, quality of raw materials, and safe food handling practices are maintained.
- Collect feedback from students and staff regarding food quality, pricing, variety, and service, and recommend improvements.
- Suggest nutritious, affordable, and diverse menu options and periodically review food pricing in consultation with the vendor.
- Act as a bridge between the canteen vendor and the institution for any issues related to supply, performance, or grievances.
- Ensure proper waste disposal and promote eco-friendly practices like avoiding single-use plastics and using biodegradable packaging.

- Assess and recommend improvements in canteen infrastructure such as seating, ventilation, lighting, water supply, and sanitation.
- Ensure that the canteen complies with FSSAI guidelines and other applicable food safety and health regulations.
- Maintain records of inspections, vendor agreements, complaints, resolutions, and submit periodic reports to the Principal.

Sports Committee

The Purpose of organizing physical education, sports and games activities is to create an environment that stimulates selected movement and experiences resulting in desirable responses that contribute to the optimal development of the individuals potentialities in all the phases of life.

Table 9.6.19: Sports and Games Committee of the College.

S.No.	Committee Members	Designation
1	Dr. K. Satish Reddy (Committee Chairman)	Asst. dean IIIC
2	Mr. SNS Santosh (Committee Convenor)	Mech-Faculty
3	Dr. T. Rambabu	HOD H&S (ET)
4	Meezab Unnisa	Head Operations
5	Mr. Siddhartha	EEE-Faculty
6	Dr. Lavanya	HOD -H&S (non ET)
7	Mr. G. Shyam Sundar	Protocol officer
8	Mr.P.Santosh	ECE-Faculty
9	Mr. Khaleemuddin	Mech - Lab Asst
10	Mr. A. Rajkumar (Cood)	Physical Director
11	K. Lazar	Student Nominee
12	Thangalapelly Mukesh	Student Nominee
13	K. Rakshitha	Student Nominee

Functions:

- Prepare sports calendar and an action plan to implement the same.
- Suggest methods which encourage students and faculty to utilize sports and games facilities available in the college.
- Take up the responsibility of preparing the budget estimate, requirement of infrastructure and equipment, maintaining the equipment and play fields.
- Selection of teams to represent the college in inter-collegiate tournaments and also the intra-mural tournaments.
- Prepare the details of attendance exemption to be given to the students representing college in various sports and games.

- Increase the cordial relations between students and faculty by organizing exhibition games between the teams of students and faculty wherever possible.
- Ensure the availability of all sports equipment at all times and if needed the new items to be procured.
- Maintain every record of the purchase i.e. quotation, purchase order, bills and stock register.
- Be in touch with the captains for any kind of developmental activities.
- Any issue deemed fit to be brought to the notice of the Principal.
- The convener may also co-opt one student member from each UG & PG Courses and one girl student.

Student Welfare Committee

Table 9.6.20: Members List of Student Welfare Committee

S.No.	Committee Members	Designation
1	Dr. S. Arvind (Committee Chairman)	Principal
2	Mrs. Meezab Unnisa (Committee convenor)	Head Operations
3	Dr. T. Sathish Kumar	CSE-HOD
4	Dr. Satish K	Asst. Dean IIIC
5	Dr. K. Bindu Madhavi	Lead SE
6	Mr. K. Suresh	Asst.Controller of Examinations
7	Dr. D. Ashalatha	Student counsellor
8	Ms Akhila	Overseas education Counsellor
9	Ishita	Student Nominee
10	Mohammad Amaan	Student Nominee
11	G. Shayanidhi Reddy	Student Nominee

Functions:

- Suggest various extracurricular activities to be organized during the academic year.
- Suggest various improvements for the existing student chapters such as ISTE, IETE, IEEE, CSI, SAEINDIA and ASSE and Art of Living.
- Prepare proposals for conducting State and National Level events in extracurricular activities.
- Coordinate all the events and festivals of the college as per schedule and procedures.
- Prepare a data base of highly talented students in different activities and motivate them to participate in the events within and outside the college.

- Organize the cultural events under the supervision of cultural coordinator who in turn can identify in-charge staff members as cultural and technical event in- charges.
- Mobilize the resources like audio-visual equipment, stage management material, costumes, presentation materials, stage decoration items etc.
- Maintain the photo album, video and audio recording of all the events organized at the college.
- Maintain all the files, bills, reports, records and documents pertaining to every event organized in the college and submit to the Principal.
- The Cultural Coordinator, if he so desires, may form subcommittees as mentioned below for the event management.
    - Stage In-charge - audio-visual equipment, stage management material, etc.
    - Finance in-charge – maintain all the files, bills, reports, records and documentation pertaining to every event organized in the college.
    - Audio & Video in-charge –maintain the photo album, video and audio recording of all the events organized in the college.
    - Hospitality in-charge for transportation, refreshments, reception, presentations and gifts.

Staff Welfare Committee

Table 9.6.21: Members List of Staff Welfare Committee

S.No.	Committee Members	Designation
1	Dr. S. Arvind (Committee Chairman)	Principal
2	Mrs. Meezab Unnisa (Committee convenor)	Head Operations
3	Dr. T. Sathish Kumar	CSE-HOD
4	Dr Devika	Assoc.Dean Accreditation
5	Mr. Harsha Vardhan	Head CDC
6	Dr. UM Singh	Asst. Dean- academics
7	Dr. Lokeswara Rao	Dean Freshman Engg.
8	Dr. M. Rajeshwar	Asst.Dean
9	Mr. S. N. S. Santosh	Mech-Faculty

Functions:

- Assess and recommend initiatives related to health, well-being, and professional satisfaction of teaching and non-teaching staff.

- Suggest and coordinate programs such as yoga sessions, health check-ups, stress management workshops, and recreational activities.
- Propose schemes for professional growth including faculty development programs, training sessions, and orientation workshops.
- Recommend improvements in staff facilities such as staff rooms, cafeteria, transport, and medical aid.
- Organize appreciation events for long-serving or outstanding staff members (e.g., Teachers' Day, Retirement Functions, Awards, etc.)
- Collect and address staff grievances confidentially, and coordinate with the grievance redressal cell where necessary.
- Promote a positive, inclusive, and collaborative working environment through communication and feedback sessions.
- Help implement institutional welfare schemes like loans, insurance, and leave encashment benefits.
- Keep documentation of all welfare activities, feedback collected, budgets used, and submit regular reports to the Principal.

SC/ST Welfare Committee

Table 9.6.22: Members List of Staff Welfare Committee

S.No.	Committee Members	Designation
1	1. Dr. S. Arvind (Committee Chairman)	Principal
2	2. Mrs. Moshe Rani (Committee Convenor)	ECE - Faculty
3	3.Mrs. C. Surekha	ET-Faculty
4	4. Ms. Pranathi Aryan	CSE- Faculty
5	5. Mr. M. Siddhartha	EEE - Faculty
6	6. Mr. Pradeep Kumar	H&S - Faculty
7	7. Mr. T. Joseph	ET- FAculty
8	Rathla Rahul	Student Nominee
9	Gudepu Chandu	Student Nominee
10	Koninti Likith	Student Nominee
11	B.William Carry Sunny	Student Nominee

Functions:

- Plan and promote activities for the academic, social, and financial upliftment of SC/ST students and staff.
- Ensure proper implementation of reservation policies in admissions, recruitment, and promotions as per government guidelines.

- Organize seminars, workshops, and awareness programs on rights, opportunities, and schemes available for SC/ST communities.
- Identify and support SC/ST students needing academic, financial, or emotional assistance. Facilitate scholarship applications and follow-up.
- Provide a platform for SC/ST students and staff to address complaints related to caste-based discrimination or harassment.
- Liaise with national/state-level social welfare departments for implementing relevant welfare schemes and grants.
- Motivate SC/ST students to actively participate in curricular and extracurricular activities.
- Keep proper records of SC/ST students and staff, their participation in welfare programs, grievances, and resolutions.
- Prepare and submit reports to the Principal and higher authorities regarding committee activities, outcomes, and compliance with statutory requirements.

Sustainability & Eco-Wellness Committee

Table 9.6.23: Members List of Sustainability & Eco-Wellness Committee

S.No.	Committee Members	Designation
1	1. Col. Subramaniam(Committee Chairman)	Registrar
2	2. Mr. Ravi Gurram (Committee Convenor)	Admin officer
3	3. Dr. Chiranjeevi	COOD - EEE
4	4. Mr. P Praveen	MECH Faculty
5	5. Mr. P Kondala Rao	COOD - ECE
6	6. Mr. T. Raghavendra Gupta	CSE- Faculty
7	Gnanitha	Student Nominee
8	Hari Kishan Singh	Student Nominee
9	Shraddha Koti	Student Nominee

Functions:

1. Policy & Planning

- Formulate and implement eco-friendly policies for sustainable campus operations.
- Promote a culture of environmental responsibility among students and staff.

2. Sanitation & Hygiene

- Ensure cleanliness and hygiene standards are maintained across the campus including classrooms, hostels, toilets, and common areas.

- Conduct awareness programs on personal hygiene, waste segregation, and cleanliness.
- Periodically audit sanitation practices and report to the management.

3. Energy Management

- Monitor energy consumption and promote the use of energy-efficient appliances and practices.
- Recommend and support installation of renewable energy systems like solar panels.
- Conduct energy audits and implement conservation strategies.

4. Greenery & Plantation

- Plan and maintain green cover on campus by planting trees, maintaining lawns, and nurturing gardens.
- Conduct plantation drives involving students and staff.
- Collaborate with horticulturists to ensure scientific maintenance of green areas.

5. Waste Management

- Implement solid and liquid waste segregation, recycling, and disposal systems.
- Promote use of reusable, recyclable, and biodegradable materials.
- Ensure proper handling of e-waste and hazardous waste (if any).

6. Water Conservation & Management

- Monitor water usage and promote conservation techniques such as rainwater harvesting and drip irrigation.
- Ensure proper maintenance of water supply systems and water quality testing.
- Prevent water wastage and promote reuse and recycling of water where applicable.

7. Awareness & Engagement

- Organize workshops, awareness campaigns, exhibitions, and competitions on sustainability topics.
- Encourage student clubs and NSS/NCC units to participate in green initiatives.

8. Monitoring & Reporting

- Maintain records of all sustainability initiatives, audits, and improvements.
- Submit annual reports to the Principal/Management with recommendations and outcomes.
- Coordinate with external bodies (like Pollution Control Boards, Municipalities, NGOs) for expert support and collaboration.

9. Infrastructure Recommendations

- Suggest eco-friendly infrastructure developments (e.g., green buildings, eco-toilets, LED lighting).
- Ensure campus infrastructure projects comply with environmental regulations and green building norms.

Hyderabad Institute of Technology and Management (HITAM) is committed to fostering transparency, accessibility, and effective communication with all its stakeholders. To ensure that all policies, rules, processes, and governance documents are easily accessible, we have adopted a comprehensive dissemination strategy through website and ERP.

Availability of Policies, Rules, and Processes

At HITAM, all key institutional policies, academic regulations, administrative rules, processes, and guidelines related to faculty, students, and financial powers are uploaded and made available on the official institutional website. These include: Academics and Non-Academics include only functioning policies

- Academic and Examination Regulations
- Administrative and Service Rules for Faculty and Staff
- Student Code of Conduct and Discipline Guidelines
- Research, Consultancy, and Innovation Policies
- Financial Delegation and Approval Processes
- Grievance Redressal and Anti-Ragging Policies

Table 9.6.24: List of policies

S. No	List of Policies	Link
1	Regulations	https://hitam.org/wp-content/uploads/2025/04/HR21-Regulations.pdf (https://hitam.org/wp-content/uploads/2025/04/HR21-Regulations.pdf)
2	Syllabus	https://hitam.org/electronics-and-communication-engineering/ (https://hitam.org/electronics-and-communication-engineering/)
3	Academic Calendars	https://hitam.org/wp-content/uploads/2025/03/Academic-Calendar-24-25.pdf (https://hitam.org/wp-content/uploads/2025/03/Academic-Calendar-24-25.pdf)
4	Internship Policy	https://drive.google.com/file/d/1M2knIwJbaLleUDupuD5EAjx7pPh-4Iji/view?usp=sharing (https://drive.google.com/file/d/1M2knIwJbaLleUDupuD5EAjx7pPh-4Iji/view?usp=sharing)
5	Attendance Policy	https://drive.google.com/file/d/1XEw2b989exjCkmEJUNUoTrz__-40Bubk/view?usp=sharing (https://drive.google.com/file/d/1XEw2b989exjCkmEJUNUoTrz__-40Bubk/view?usp=sharing)

6	Timetable policy	https://drive.google.com/file/d/1-iX7twDXo7RsXlgK7_XgHML79XhXkFDM/view?usp=sharing (https://drive.google.com/file/d/1-iX7twDXo7RsXlgK7_XgHML79XhXkFDM/view?usp=sharing)
7	Examination Regulations (Calendar, Evaluation Guide, Do's and Don'ts)	https://drive.google.com/file/d/1UwJT_nCTDJGl4uyO6hn9oG6gAbKsqu8L/view?usp=sharing (https://drive.google.com/file/d/1UwJT_nCTDJGl4uyO6hn9oG6gAbKsqu8L/view?usp=sharing)
8	Code of conduct	https://hitam.org/accreditations/ (https://hitam.org/accreditations/)
9	R&D Policy	https://drive.google.com/file/d/1EKAL2lhq8I4wOtXwx2R6A9jYU_NhpEzq/view?usp=sharing (https://drive.google.com/file/d/1EKAL2lhq8I4wOtXwx2R6A9jYU_NhpEzq/view?usp=sharing)
10	Service rules	https://drive.google.com/file/d/1BpyyS6BBC9cce_ItEqTIUj58rUxEQVah/view?usp=sharing (https://drive.google.com/file/d/1BpyyS6BBC9cce_ItEqTIUj58rUxEQVah/view?usp=sharing)
11	Financial policy	https://drive.google.com/file/d/1BpyyS6BBC9cce_ItEqTIUj58rUxEQVah/view?usp=sharing (https://drive.google.com/file/d/1BpyyS6BBC9cce_ItEqTIUj58rUxEQVah/view?usp=sharing)

Stakeholder Awareness and Dissemination Mechanisms

HITAM has established multiple channels to ensure that all stakeholders are well-informed about institutional policies, governance processes, and operational guidelines. These include:

- Regular Notifications and Circulars sent through official emails, WhatsApp groups, and displayed on campus notice boards.
- Faculty Orientation Programs to familiarize new and existing faculty with institutional policies and processes.
- Student Induction Programs at the beginning of every academic year, where students are informed about academic regulations, examination policies, grievance redressal mechanisms, and campus conduct expectations.
- Faculty Access via ERP, allowing seamless retrieval of institutional documents directly from the ERP platform.
- Periodic HR Sessions to update all stakeholders about policy changes, new processes, or governance reforms.

9.7 Budget Allocation, Utilization, and Public Accounting at Institute Level (12) **Total Marks 12.00**

:

Total Income at Institute level: For CFY,CFYm1,CFYm2 & CFYm3
CFY : (Current Financial Year),
CFYm1 : (Current Financial Year minus 1),
CFYm2 : (Current Financial Year minus 2) and
CFYm3 : (Current Financial Year minus 3)

Table 1 - CFY 2024-2025

Total Income 317251798				Actual expenditure(till…):	Total No. Of Students	Expenditure per student
Fee	Govt.	Grants	Other sources(specify)			
308819907	551470	6850598	1029823	334000199	2521	132487.19

Table 2 - CFYm1 2023-2024

Total Income 267820665				Actual expenditure(till…):	Total No. Of Students	Expenditure per student
Fee	Govt.	Grants	Other sources(specify)			
260117525	307559	6195866	1199715	260161308	2278	114206.02

Table 3 - CFYm2 2022-2023

Total Income 234849842				Actual expenditure(till…):	Total No. Of Students	Expenditure per student
Fee	Govt.	Grants	Other sources(specify)			
229119234	138730	5027923	563955	228459889	1895	120559.31

Table 4 - CFYm3 2021-2022

Total Income 185490234				Actual expenditure(till…):	Total No. Of Students	Expenditure per student
Fee	Govt.	Grants	Other sources(specify)			
183498018	256831	1296000	439385	180202222	1739	103624.05

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	130000(	1366287	380000(	4076998	200000(	220545(	450000(	4734225
Library	700000	452723	120000(	1365752	100000(	113613(	100000(	959710
Laboratory equipment	280000(	3086525	800000(	8749441	450000(	492964(	550000(	5576837
Teaching and non-teaching sta	155000(	1563128	150000(	1462478	113000(	112295(	750000(	7484982
Outreach Programs	500000	477434	100000(	1175039	300000	298885	500000	335748
R&D	800000	504700	150000(	1341214	500000	502582	155000(	164450(
Training, Placement and Indust	450000(	4889355	350000(	3450861	250000(	2395655	300000(	3834576
SDGs	220000(	2117622	200000(	2363732	500000	613062	150000(	1530944
Entrepreneurship	500000	488816	500000	500000	100000(	1256784	100000(	705555
Others, specify	0	0	0	0	0	0	0	0
Total	**297000000**	**304958797**	**205700000**	**205963888**	**125300000**	**125633577**	**134050000**	**136779947**

9.8 Program Specific Budget Allocation, Utilization (8) **Total Marks 8.00**

:

Total Income at Institute level: For CFY,CFYm1,CFYm2 & CFYm3
CFY: (Current Financial Year),
CFYm1 : (Current Financial Year minus 1),
CFYm2 : (Current Financial Year minus 2) and

CFYm3 : (Current Financial Year minus 3)

Table 1 :: CFY 2024-2025

Total Budget 1260000		Actual expenditure (till…): 1089876		Total No. Of Students 143
Demanded	Actual Allocated	Actual Expenditure	% Spent	Expenditure per student
1400000	1260000	1089876	86.50	7621.51

Table 2 :: CFYm1 2023-2024

Total Budget 1760000		Actual expenditure (till…): 1642054		Total No. Of Students 167
Demanded	Actual Allocated	Actual Expenditure	% Spent	Expenditure per student
2000000	1760000	1642054	93.30	9832.66

Table 3 :: CFYm2 2022-2023

Total Budget 1355000		Actual expenditure (till…): 1241984		Total No. Of Students 155
Demanded	Actual Allocated	Actual Expenditure	% Spent	Expenditure per student
1500000	1355000	1241984	91.66	8012.8

Table 4 :: CFYm3 2021-2022

Total Budget 1405000		Actual expenditure (till…): 1283454		Total No. Of Students 176
Demanded	Actual Allocated	Actual Expenditure	% Spent	Expenditure per student
1500000	1405000	1283454	91.35	7292.35

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	200000	130288	700000	656236	350000	320253	350000	331305
Software	150000	116634	50000	43720	100000	74119	150000	114842

SDGs	200000	169410	200000	189099	50000	49045	150000	122476
Support for faculty developmer	250000	242020	400000	369632	600000	566708	300000	276505
R & D	50000	40376	100000	107297	50000	40207	150000	131560
Industrial Training, Industry exp	400000	391148	300000	276070	200000	191652	300000	306766
Miscellaneous Expenses	10000	0	10000	0	5000	0	5000	0
Total	**1260000**	**1089876**	**1760000**	**1642054**	**1355000**	**1241984**	**1405000**	**1283454**

9.9 Quality of Learning Resources (Hard/Soft) (5)

Total Marks 5.00

Institute Marks : 5.00

The library at HITAM consists of state-of-art facilities to cater to the needs of the students and faculties such as reading space, seating capacity spread over a built up area of 4000 sft. The Library is supported by 40, 865 physical volumes towards 4987 titles, 10,664 e-books, 36 print journals, nearly more than 900 e journals and 500 rare books. Self-improvement books have been provided to faculty and Leadership that supports the professional development of staff.

A dedicated staff helps the students find the necessary titles. The books are indexed, categorized according to programs and subjects and arranged alphabetically. The software contains details about the author's name, title and publishing house. Upon an inquiry, the librarian searches in the software and helps the students locate the book. The library follows the book bank scheme. With this, the students are able to borrow books for the entire length of a semester so as to help them study. All books are bar coded and a reference ID is given. The issues and returns are also digitized. The college library follows set norms of the competent authorities. First Library in Telangana having NDLI (National Digital Library of India) Club in association with IIT Kharagpur. HITAM has been awarded as best performer in Telangana state from NDLI and in top 10 NDLI clubs securing 2^{nd} position in the country.

List of resources in the Library:

Library Management System (LMS):

HITAMs Library Management System is a digital platform used to manage library operations efficiently. It handles the cataloging, circulation (issue/return), member management, and inventory control of books and other resources. This system allows both students and staff to search for and reserve books, track due dates, and manage their library usage online.

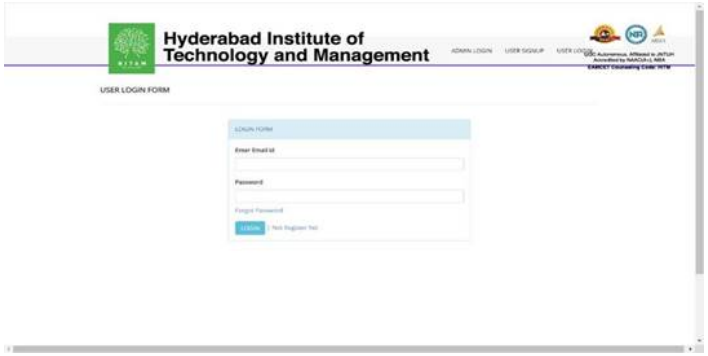


Figure 9.9.1: HITAM LMS

Online Public Access Catalog (OPAC):

Online Public Access Catalog (OPAC) is a digital catalog that allows users to search the entire library collection at HITAM. Through OPAC, students and faculty can check the availability of books, journals, and other materials by using keywords such as title, author, or subject. It enhances transparency and ease of access to library resources.

Developing Library Network (DelNet):

DelNet is a resource-sharing platform that provides access to a vast network of libraries across India and abroad. HITAM users can access millions of books, articles, and research papers not physically available in the library through interlibrary loan and document delivery services. It is particularly helpful for academic and research-related purposes.

Figure 9.9.2: DelNet Membership

National Digital Library of India (NDLI):

HITAM is **the first library in Telangana** to establish an **NDLI Club** in association with **IIT Kharagpur**. The club promotes the use of the National Digital Library, which hosts a repository of academic content including books, articles, videos, and simulations from multiple disciplines. Through the club, HITAM conducts reading activities, quizzes, and awareness programs to enhance digital learning.

Figure 9.9.3: Certificate of Appreciation from NDLI

Information and Library Network (INFLIBNET):

INFLIBNET is a government-funded initiative that supports access to scholarly and research materials. HITAM faculty and students use INFLIBNET for research projects and academic work. It provides free access to open-source journals, theses, dissertations, e-books, and bibliographic databases, making it a vital tool for research and higher learning.

Digital Library:

HITAM's Digital Library is equipped with 20 computer systems, offering students access to a wide range of online journals, e-resources, and educational databases. It provides a quiet and technology-enabled environment where students can work on research, explore digital content, and watch academic lectures.

Figure 9.9.4: Digital Library

NPTEL Lectures:

HITAM is a recognized NPTEL Local Chapter, which means students have access to high-quality video lectures created by IITs and IISc under the National Programme on Technology Enhanced Learning (NPTEL). These lectures are available in the library and can be used by students to supplement their classroom learning and prepare for competitive exams.

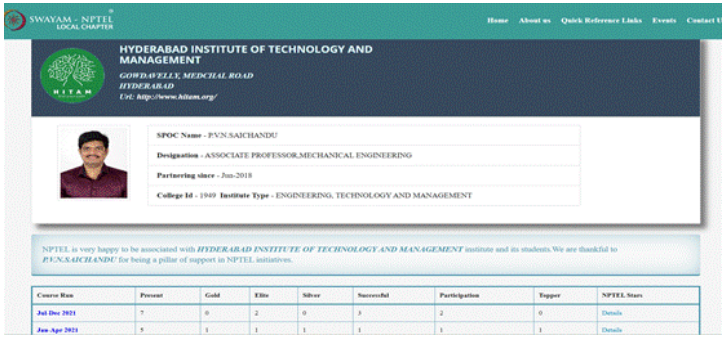


Figure 9.9.5: NPTEL Local chapter in the website

YouTube Channel – eLearn_HITAM:

HITAM runs an official YouTube channel called eLearn_HITAM, where faculty upload teaching videos, technical content, project demonstrations, and subject tutorials. This platform supports blended learning and helps students revise or learn at their own pace outside the classroom.

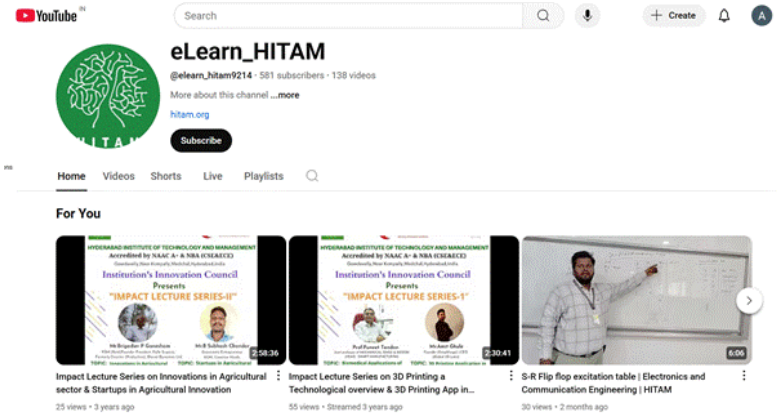


Figure 9.9.6: HITAM You Tube Channel

Table 9.9.1: List of resources available in the library

Library resources	If yes, details of membershi	Link to the relevant document

	ps/ subscriptio ns	
Books	998	https://drive.google.com/file/d/1OQmCB3PiYB-3czFdADmOejDLADbOLDx2/view?usp=sharing (https://drive.google.com/file/d/1OQmCB3PiYB-3czFdADmOejDLADbOLDx2/view?usp=sharing)
Journals	50	https://drive.google.com/file/d/1xF0HVx62-ZUHoEXyAUwIyV4_zTAg-kyB/view?usp=sharing (https://drive.google.com/file/d/1xF0HVx62-ZUHoEXyAUwIyV4_zTAg-kyB/view?usp=sharing)
e – journals	DELNET	https://drive.google.com/file/d/1m1AUD3yROMVte8dTimKOMNjsijZ97bQP/view?usp=sharing (https://drive.google.com/file/d/1m1AUD3yROMVte8dTimKOMNjsijZ97bQP/view?usp=sharing)
e-books	10667 e-booksThrough DELNET	http://www.e-booksdirectory.com/
e-ShodhSindhu	Free membership	https://ndl.iitkgp.ac.in/
Shodhganga	Free membership	https://discovery1.delnet.in/
Databases	DELNET, NDLI, NPTEL Drill Bit	https://drive.google.com/drive/folders/1Z40afsJqBQLki_16Y277t0zRyxtQUOu3?usp=sharing (https://drive.google.com/drive/folders/1Z40afsJqBQLki_16Y277t0zRyxtQUOu3?usp=sharing)
Local and / or Remote access to e-resources (Specify)	DELNET (IP based) NDLI (Remote based)	https://drive.google.com/drive/folders/1Z40afsJqBQLki_16Y277t0zRyxtQUOu3?usp=sharing (https://drive.google.com/drive/folders/1Z40afsJqBQLki_16Y277t0zRyxtQUOu3?usp=sharing)
You Tube	eLearn_HITAM	https://www.youtube.com/@elearn_hitam9214

Campus-Wide Computing Resources:

HITAM is committed to maintaining cutting-edge IT facilities to enhance the learning experience for students. Our Wi-Fi infrastructure is regularly updated to ensure a seamless and high-speed internet connection, currently boasting an impressive speed of 550 Mbps. As part of our commitment to staying technologically current, we prioritize the annual update and purchase of computers. This ensures that students have access to the latest technology, creating an environment conducive to learning and innovation.

IT Policy Overview: The Institute has an IT policy covering major areas such as Wi-Fi, cyber security, and software upgrades, which are updated as per institutional needs. HITAM continuously upgrades IT facilities in compliance with regulatory norms and industry requirements. The institution provides 3 to 5% of the annual budget for IT upgrades, which are audited regularly to ensure transparency and accountability.

Wi-Fi and Network Infrastructure:

Bandwidth of internet connection in the Institution:

Hyderabad Institute of Technology and Management (HITAM) ensures uninterrupted internet connectivity through high-speed leased lines and bandwidth services. HITAM is offering total internet capacity of 550 Mbps, which includes:

- 100 Mbps Internet Leased Line from D-Atum Vilcom Private Limited.
- 50 Mbps Internet Leased Line from D-Atum Vilcom Private Limited.
- 200 Mbps Bandwidth from Neolog Online Services Private Limited, Hyderabad.
- 200 Mbps Bandwidth from KP Internet Services, Hyderabad from March 2024 to June 2024

Table 9.9.2: Contracted Services from July 2023 to June 2024, ensuring reliable and efficient internet access across the campus for academic and administrative needs.

S. No	Description	Name of the Company	Duration
1	100 Mbps Internet Leased line	D-Atum Vilcom Private Limited	July 2023 – March 2024
2	50 Mbps Internet Leased line	D-Atum Vilcom Private Limited	July 2023 – March 2024
3	200 MBPs Bandwidth	Neolog Online Services Private Limited, Hyderabad	July 2023 – March 2024
4	200 MBPs Bandwidth	KP Internet Services	April 2024 – June 2024
5	200 Mbps Internet Leased line	D-Atum Vilcom Private Limited	April 2024 – June 2024

At HITAM, were committed to using technology to improve teaching and learning. Here are some ways weve done that over the past 5 years:

1. YouTube Channel (HITAM_eLearn): We have a YouTube channel where students can watch recorded lectures anytime. This makes it easy for them to review the material whenever they need to.
2. MOODLE LMS Portal: Our Learning Management System (LMS) gives students access to digital content like lecture slides and videos. They can stay updated with class materials even outside of the classroom.
3. Online Certifications: We encourage students and faculty to take online courses and get certified through platforms like SWAYAM and NPTEL. This helps them expand their knowledge and skills in specific areas.
4. Guest Lectures and Workshops: We organize guest lectures and workshops, both online and offline, where students can learn from experts and industry professionals. These events offer different learning experiences to suit everyones preferences.
5. Delnet and Online Library Resources: HITAM is affiliated with Delnet, providing students with access to a vast array of online library resources. This includes e-books, journals, and other academic materials, enriching their learning experience beyond traditional textbooks.
6. Online Journals Access: Our students have access to online journals through various databases, allowing them to stay updated with the latest research and developments in their fields of study.

E-governance Initiatives:

1. Administration: ERP Software

HITAM uses a centralized ERP (Enterprise Resource Planning) system to streamline administrative operations including faculty data management, attendance, schedules, circulars, leave management, and departmental coordination. It ensures transparency, efficiency, and quick decision-making across all administrative levels.

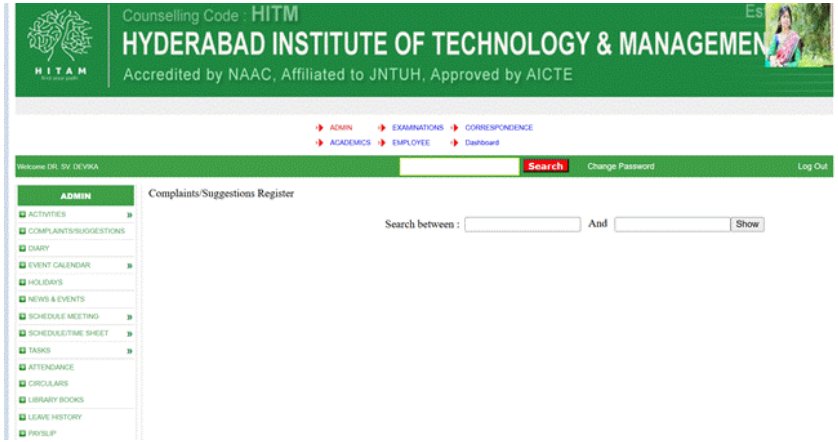


Figure 9.10.1: ERP software for administration

2. Finance: ERP and Tally

The **Finance Department** utilizes both **ERP** and **Tally** software:

- **ERP** manages fee collection, payroll processing, budgeting, and financial reporting.
- **Tally** is used for accounting purposes such as maintaining ledgers, balance sheets, and audit compliance, ensuring accurate and real-time financial tracking.

3. Examinations: The BEES (Board of Examination & Evaluation System) software is used for managing all academic assessments.

Figure 9.10.2: Bees software & ERP Software

4. Library: LMS, ERP, DelNet

- **LMS (Library Management System):** Manages book circulation, cataloging, and inventory.
- **ERP:** Integrates library data with student records for seamless access and usage tracking.
- **DelNet:** Provides access to inter-library services and a large repository of research materials.

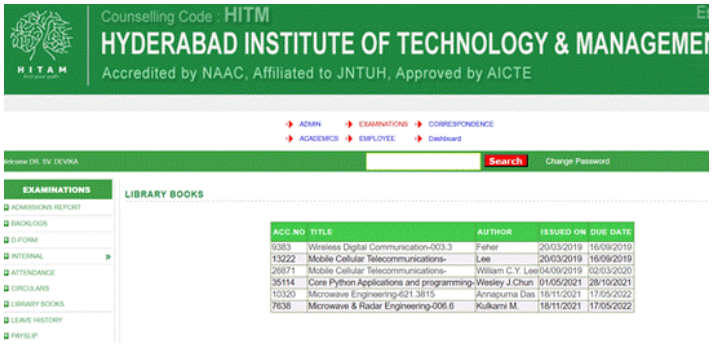


Figure 9.10.3: Library Management System

5. Alumni Portal:

The Alumni Portal connects HITAM with its graduates. It supports: Networking and mentorship opportunities, Alumni registration and profiles, Event updates and participation, Placement and internship support, Feedback and engagement with the institution for knowledge sharing and collaboration.

Figure 9.10.4: Alumni portal

6. Grievances cell:

HITAM maintains a transparent and accessible grievance redressal system. It allows students, faculty, and staff to submit complaints or suggestions online through a structured form. The grievance cell reviews and resolves issues related to academics, facilities, faculty behavior, or other concerns within a defined timeframe.

Table 9.10.1: Committee composition

S. No	Name of the Faculty	Designation
1	Dr. Arvind S (Committee Chairman)	Principal
2	Col. PVR Subramanyam (Committee Convenor)	Registrar
3	Mrs. Bindu Madhavi	Lead Student Engagement
4	Dr. M. Rajeshwar	Assistant Dean
5	Dr. D. Ashalatha	Student counsellor
6	Mr. Surendra Bandi	Assoc. Dean Education
7	Mr. Bhavith	Student Registrar

7. MOODLE:

HITAM (Hyderabad Institute of Technology and Management) uses Moodle, an open-source Learning Management System (LMS), as its official digital platform for teaching, learning, and assessment. Moodle serves as a virtual classroom that complements offline teaching, ensuring continuous academic engagement.

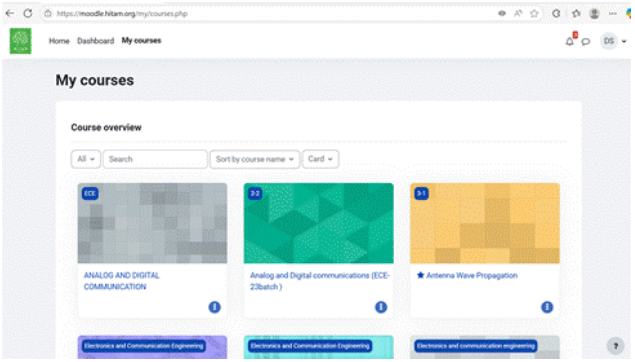


Figure 9.10.5: Moodle Software

8. Zoom:

Zoom at HITAM supports flexible, remote, and hybrid learning models, enhancing accessibility and real-time engagement across various stakeholders.

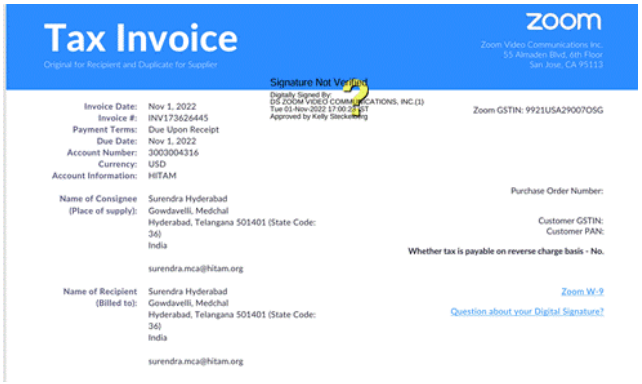


Figure 9.10.6: Zoom invoice

9. IONCUDOS:

Intelligent Outcome-based Course Design and Outcome-based System) is an advanced academic management platform implemented at HITAM to strengthen Outcome-Based Education (OBE) practices.

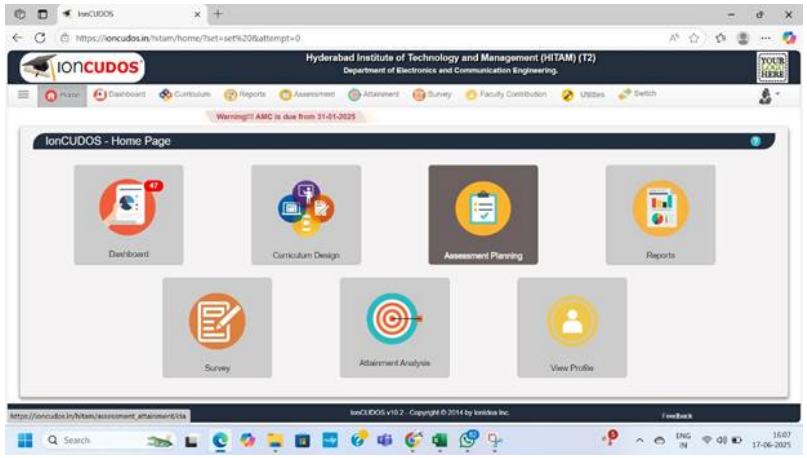


Figure 9.10.7: Ioncudos tool for outcome based education

9.11 Initiatives and Implementation of Sustainable Development Goals (SDGs) (10)

Total Marks 10.00

Institute Marks : 10.00

Sustainable practices in academic and learning management:

HITAM is the first Educational Green Building Institution in the country awarded with '*Silver rating'* by the US Green Building Council. Being the Green Building Institute, always emphasizes on implementation of Sustainable Development Goals.

Table 9.11.1: How HITAM is contributing to SDG Goals

SDG	Goal Title	Contribution of HITAM
1	No Poverty	Helping Students to achieve scholarships, financial aid, For-a-cause Activities and NSS activities.
2	Zero Hunger	Promote Agri-tech projects and smart farming.
3	Good Health and Well-being	Run blood donation camps, and research in the medical informatics field.
4	Quality Education	Provide inclusive, quality technical education with updated curriculum aligned to industry needs.
5	Gender Equality	Ensure gender parity in admissions, support women in STEM, run women empowerment cells and awareness campaigns.

6	Clean Water and Sanitation	Innovate water purification, rainwater harvesting systems
7	Affordable and Clean Energy	Promote research in solar, wind, and bioenergy; install renewable energy sources on campus;
8	Decent Work and Economic Growth	Facilitate internships, placements, entrepreneurship cells, and skill-based training to improve employability.
9	Industry, Innovation, and Infrastructure	Run innovation labs, incubation centers, and work on community infrastructure development projects. Collaborate with MSMEs and startups.
10	Reduced Inequalities	Promote inclusive policies for differently-abled and economically weaker students;
11	Sustainable Cities and Communities	Projects on smart city solutions, traffic management systems, green buildings, and urban planning.
12	Responsible Consumption and Production	Conduct workshops on waste reduction, promote reuse/recycle practices on campus, and support eco-friendly startups.
13	Climate Action	Integrate Environmental Science in the curriculum, using minimum numbers of ACs.
14	Life Below Water	Research on water pollution control
15	Life on Land	Tree plantation drives and sustainability audits of the campus.
16	Peace, Justice, and Strong Institutions	Promote ethics in engineering, anti-ragging policies, student grievance redressal systems, and leadership programs.
17	Partnerships for the Goals	Collaborate with government bodies, NGOs, industries, and international universities to advance SDG-based initiatives.

The orientation and spacing of the buildings in the complex have been designed in a manner that minimizes interclass interference. Fly ash brick construction with cavity walls has been used for better thermal insulation. 85 % of the areas are day lit. This has been achieved by optimizing window sizes. Reused furniture is chosen for Classroom and other administrative areas. Passive Downdraft Evaporative Cooling (PDEC) system has been specially designed and adopted for space

conditioning of the entire building. HITAM believes that nurturing nature is the best way to promote environmental sustainability with the adoption of eco-friendly methods.

Plastic items are strictly not allowed in the campus and signages are displayed at conspicuous places. Intranet and ERP systems are in use for all day-to-day activities of office, department including parent teacher interaction, assignments and performance appraisal. Thus, the usage of paper on campus is minimized. All communication to departments, resources and students is made through mails and other electronic media to spread awareness about the same.

Campus has around 450 species of plants including herbs, shrubs and big shady trees. This provides home to flora and creates a heaven for the nesting birds. HITAM campus is a noteworthy example of creating environmentally responsive passive habitants. The design of the project is woven around principles of climatic design which were practiced centuries back in regions which were hot and dry during summer and warm and humid during monsoon. Blended with passively ventilated comfortable indoors and well shaded outdoors, the institute has been celebrating nature to enhance the experience of technical learning. The institute is located on the outskirts of Hyderabad in the Gowdavelli village area which is about 20 km from the city. The summer months in this region are predominantly hot and dry while monsoons are warm and humid. This adverse climatic condition of the region was surely a challenge for the design team. The architecture of this building is a unique modern adaptation of traditional climatic design strategies that were prevalent in building designs of this region. Passive climate control measures like shading, optimum orientation, optimized day lighting, courtyard planning, cross and stack ventilation and evaporative cooling has been integrated intelligently in the design, thus enabling the project to achieve considerable thermal comfort even during peak summer afternoons.

During 2019, Indian Green Building Council (IGBC) has awarded “Best Practicing Green Building in India” to HITAM for practicing all facets of Green Building norms.

Figure 9.11.1: Battery operated vehicles designed by HITAM students under Skill Development Centre

Figure 9.11.2: No plastic boards in the Campus

Solid waste management:

Inspired by Swachh Bharat Mission, Twin-Bin system is being used in the Institute to segregate recyclable and biodegradable waste. The institution takes all measures required to ensure that the campus is free of plastic items and other wastes that harm the environment. Segregation of waste from the dustbins is done in other strategic locations, thus maintaining the Campus and keeping it clean and green. Professional contractors collect the recyclable waste and biodegradable waste. Chemical and hazardous waste from laboratories is disposed of as per MSDS. This waste is collected and disposed through a certified third party.

E-Waste Management:

All Electronic waste CPU's, Hard disks, Laboratory Equipment scrap is sent to the market either for repair or returned to the suppliers for disposal as per the manufacturer 's policy.

Liquid Waste Management:

At our campus, we treat wastewater through Sedimentation. The Sewage water from the entire campus is received through the underground pipelines. The treated water is used as natural organic compost for gardening.

Sewage Treatment Plant (STP) of 5000 L/day capacity is in use in the Institution campus. The treated water is used for flushing and gardening purpose.

Hyderabad Institute of Technology and Management (HITAM) is committed to comprehensive water conservation practices, ensuring a sustainable and responsible approach to water management within the institution. The following facilities and initiatives exemplify HITAMs dedication to water conservation:

1. **Rainwater Harvesting:** HITAM has implemented an efficient rainwater harvesting system that collects and stores rainwater for various purposes. This eco-friendly practice helps replenish groundwater and reduces the reliance on external water sources.

2. **Bore well/Open Well Recharge:** The institution has established borewell and open well recharge systems, enabling the replenishment of groundwater levels. This sustainable approach supports the conservation of water resources and ensures a consistent water supply for various needs within the campus.

3. **Construction of Tanks and Bunds:** HITAM has strategically constructed tanks and bunds to capture and store water. This infrastructure not only aids in preventing soil erosion but also serves as storage for rainwater, contributing to the overall water availability on campus.

4. **Wastewater Recycling:** The institution actively engages in wastewater recycling initiatives, treating and repurposing wastewater for non-potable purposes. This practice minimizes water wastage and promotes a circular and sustainable use of water resources within the campus.

5. **Maintenance of Water Bodies and Distribution System:** HITAM places significant emphasis on the maintenance of existing water bodies and the distribution system within the campus. Regular upkeep ensures the efficient flow and utilization of water, preventing leaks and optimizing water distribution for various needs.

Figure 9.11.3: a) Rain Water harvesting b) Borewells

Figure 9.11.4: Water tanks

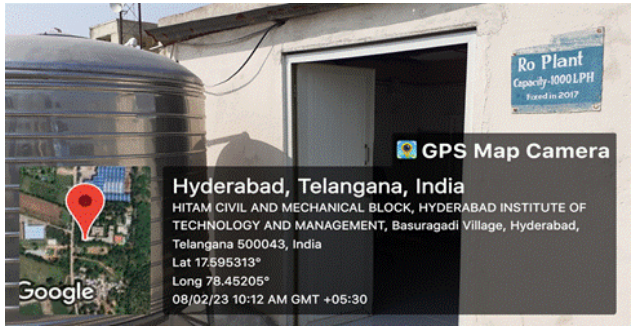


Figure 9.11.5: RO plant

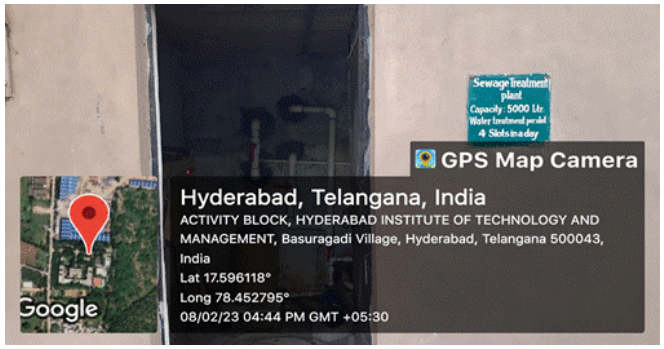


Figure 9.11.6: Sewage Treatment plant

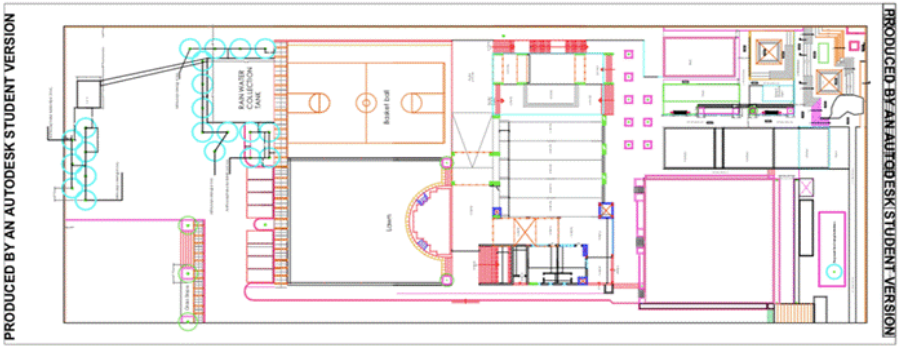


Figure 9.11.7: Water Distribution chart

9.12 Innovative Educational Initiatives and Implementation (5)

Total Marks 5.00

Institute Marks : 5.00

1. Student Mobility and Academic Bank of Credits (ABC):

- HITAM is registered with the *Academic Bank of Credits* portal under UGC, enabling students to accumulate and redeem academic credits across institutions.
- Credit transfer for MOOCs offered through NPTEL, SWAYAM, and Coursera is actively facilitated.
- Students are encouraged to undertake internships, research projects, and entrepreneurship activities at national and international levels, supported through MoUs with industries and foreign universities.
- Flexible curriculum structure and the Choice-Based Credit System (CBCS) allow students to take interdisciplinary electives and fast-track their degrees.

2. Holistic Education and Human Values:

- Courses such as Universal Human Values (UHV), , and Environmental Science are integrated into the curriculum.
- Regular activities under NSS and Unnat Bharat Abhiyan promote community engagement, empathy, and ethical leadership.
- Yoga, meditation, and wellness sessions are held to promote mental well-being.

3. Multidisciplinary/Interdisciplinary Curriculum:

- The curriculum allows students to choose open electives across departments (CSE, ECE, EEE, Mech), supporting a multidisciplinary learning path.
- A *Multidisciplinary Makerspace* has been established where students from diverse backgrounds collaboratively build projects.
- Interdisciplinary hackathons and innovation challenges are conducted regularly to promote collaborative problem-solving.

4. Indian Knowledge System (IKS) and Indian Languages:

- Elements of Indian Knowledge System are introduced through orientation programs, workshops, and guest lectures.
- Programs such as *"Bharatiya Vijnana Parampara"* introduce students to ancient Indian scientific traditions.
- Efforts have been made to encourage teaching-learning in Indian languages by offering select tutorials and content in Telugu and Hindi, especially for rural-background students.

5. Inclusivity and Equity Policies:

- HITAM provides need-based scholarships and fee waivers for economically weaker students.
- A dedicated *Equal Opportunity Cell* ensures non-discrimination and equitable treatment of students from all backgrounds.
- The campus infrastructure is made accessible for physically challenged students (ramps, lifts, disabled-friendly restrooms).
- Support systems like peer mentoring, bridge courses, and special academic counseling are in place.

6. Support for Economically, Socially, and Physically Challenged Students:

- Reserved scholarships, mentorship support, and academic monitoring are provided.
- Tie-ups with NGOs and government agencies ensure extended support.
- Regular sensitization workshops are held to create an inclusive campus environment.

7. Action Plan for Slow Learners:

- Academic performance is tracked through continuous assessments.
- An Early Intervention Program identifies slow learners and assigns faculty mentors.
- Remedial and tutorial classes are scheduled outside regular hours.
- Personalized learning plans and regular parent communication are implemented.
- Usage of digital tools like Learning Management Systems (Moodle) and recorded lectures aid asynchronous learning.

9.13 Faculty Performance Appraisal and Development System (FPADS (10)

Total Marks 10.00

Institute Marks : 10.00

Faculty performance evaluation sheet used at HITAM to assess faculty contributions in research, teaching, student engagement, and institutional development. It tracks research activities such as paper presentations, publications, patent filings, and project proposals while also evaluating teaching effectiveness through student attendance, pass percentage, and feedback. Faculty involvement in innovative teaching methods, student research guidance, mini/major projects, and workshops is also documented. Additionally, it records participation in institutional and departmental events, guest lectures, industry visits, administrative roles, and professional achievements, including awards and recognitions. This structured evaluation helps in faculty appraisals, promotions, and overall academic excellence. This process is done once a year based on the given parameters.

Table 9.13.1: Rubrics for Performance Metric system at HITAM

S. No	Parameters
1	Paper Presentations/year (Conference) Conference paper in Scopus index/ UGC
2	Paper Publications/year (Q1, Q2, Q3 category of Journals only)
3	Guest lecture delivered/ year in the other institutions
4	Avg Students Attendance
5	Pass % (Highest of last 3years) 70% or higher of the last 3 yrs. whichever is high
6	Innovative Teaching
7	PBL teaching

8	Student feedback (As per ERP) each subject individual scores to be considered
9	Student Paper/Poster Presentation (Applicable only to 1st year students)
10	Student paper publications (Applicable for 2nd, 3rd & 4th year students)
11	Guide Mini/major projects by all Departments except H&S. Micro/course projects by H&S Dept.
12	Conduct of Workshop /FDP/Seminars/ Conferences (Convenor & coordinator)
13	Industry Visit (Relevant industry)
14	Patent
15	publishing/editing of Articles/ Chapter in Books
16	Awards/Competitions won by faculty
17	Institutional/Dept Events/year (Event convenor/Coordinator/Committee in charges)
18	Administrative works/Role
19	Submission of project proposals to funding agencies

The performance varies from Professor, Associate Professor and Assistant Professor based on the experience.

PMS sample evaluation sheet of a faculty: https://drive.google.com/file/d/1izySB_qjvUQdJS2fNx1d9lnmOoYD8ssl/view?usp=sharing (https://drive.google.com/file/d/1izySB_qjvUQdJS2fNx1d9lnmOoYD8ssl/view?usp=sharing)

9.14 Outreach Activities (5)

Total Marks 5.00

Institute Marks : 5.00

Hyderabad Institute of Technology and Management (HITAM) integrates social responsibility and civic engagement into its core educational practices. Through participation in national missions, NGO collaborations, student-led clubs, and structured social internships, HITAM nurtures a sense of service, leadership, and empathy among students.

1. Unnat Bharat Abhiyan (UBA): Rural Empowerment through Innovation

HITAM is an active participant in the Unnat Bharat Abhiyan (UBA), an initiative of the Ministry of Education, Government of India.

- The institute has adopted 4 villages:

1. Gowdavelli – Medchal District
2. Hakkimpet – Medak District
3. Kazhipet – Medak District
4. Kolanupaka - Yadari Bhuvanagiri District

- Through regular village visits, problem identification surveys, and solution implementation, HITAM focuses on:
    - Sanitation and waste management
    - Digital literacy and education
    - Sustainable agriculture practices
    - Solar energy and water conservation
    - Health and hygiene awareness programs

Students and faculty members work collaboratively with villagers to propose **technological and awareness-based solutions** aligned with sustainable development goals.

2. NGO Collaborations: Learning Through Community Engagement

HITAM encourages student involvement with external organizations to strengthen real-world social engagement. Key NGO collaborations include:

- **Sahaya**: Focuses on educational outreach for underprivileged children through volunteer teaching, donation drives, and book distributions.
- **For a Cause**: Involves students in urban social campaigns, health awareness events, and mental wellness initiatives.
- **Arutla Foundation**: Engages students in rural and community development efforts, including youth support, healthcare outreach, and women's empowerment programs.

3. NCC and NSS: Building Responsible Citizens

- **National Cadet Corps (NCC):** HITAM supports a dedicated NCC unit to develop qualities of discipline, leadership, and patriotism. Students participate in:
    - National integration camps
    - Road safety awareness
    - Clean India and Fit India campaigns

- **National Service Scheme (NSS)**: NSS volunteers at HITAM engage in:
    - Swachh Bharat drives
    - Voter awareness and blood donation camp
    - Literacy programs in nearby village
    - Tree plantation and environmental protection activities

4. XPLORE (Experiential Platform for Learning & Outreach in Real time Engineering)

Objectives of the Practice:

•To empower the students to apply engineering knowledge on the real time problems while meeting academic learning goals and contribute to society

•Apply domain knowledge to the design of community-based projects.

•Identify and acquire new knowledge as a part of the problem solving / design process.

•Design products on multidisciplinary concepts and an appreciation for the contributions from individuals from multiple disciplines.

•Build a role that their discipline can play in social contexts.

•Provide significant service to the community while learning; gain an understanding of the role that engineering (and their discipline) can play in society.

- **Engineering Projects in Community Service (EPICS)**

HITAM has been an EPICS Member College since 2016. HITAM has adapted the EPICS program from Purdue University, USA. Students from multiple disciplines have registered. Every semester students are identifying problems from the community and solving their problems by providing engineering solutions.

- **Unnat Bharat Abhiyan (UBA)**

HITAM is a Participating Institution of UBA from 2018. Under UBA HITAM Adopted Seven villages, conducted household surveys and took up technological interventions for improving life in rural areas. Got funding for 3 projects under Unnat Bharat Abhiyan (UBA) - Ministry of Education (MOE). Students will work on Technological intervention in the villages.

- **Engineers Without Borders Student Chapter (EWB)**

EWB-HITAM was established as a non-profitable chapter on 17th AUG 2019. HITAM believes in practical implementation is required for every engineer to solve community-oriented problems. The Design Process is followed for identifying of problems its consists of the following phases: Project Identification, Specification Development, Conceptual Design, Detailed Design.

Annexure I

(A) PROGRAM OUTCOME (POs)

Engineering Graduates will be able to:

PO1: Engineering Knowledge: Apply knowledge of mathematics, natural science,computing, engineering fundamentals and an engineering specialization as specified in WK1 to WK4 respectively to develop to the solution of complex engineering problems.

PO2: Problem Analysis: Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions with consideration for sustainable development. (WK1 to WK4)

PO3: Design/Development of Solutions: Design creative solutions for complex engineering problems and design/develop systems/components/processes to meet identified needs with consideration for the public health and safety, whole-life cost, net zero carbon, culture, society and environment as required. (WK5)

PO4: Conduct Investigations of Complex Problems: Conduct investigations of complex engineering problems using research-based knowledge including design of experiments, modelling, analysis & interpretation of data to provide valid conclusions. (WK8).

PO5: Engineering Tool Usage: Create, select and apply appropriate techniques, resources and modern engineering & IT tools, including prediction and modelling recognizing their limitations to solve complex

engineering problems. (WK2 and WK6)

PO6: The Engineer and The World: Analyze and evaluate societal and environmental aspects while solving complex engineering problems for its impact on sustainability with reference to economy, health, safety, legal framework, culture and environment. (WK1, WK5, and WK7).

PO7: Ethics: Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national & international laws. (WK9)

PO8: Individual and Collaborative Team work: Function effectively as an individual, and as a member or leader in diverse/multi-disciplinary teams.

PO9: Communication: Communicate effectively and inclusively within the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations considering cultural, language, and learning differences

PO10: Project Management and Finance: Apply knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, and to manage projects and in multidisciplinary environments.

PO11: Life-Long Learning: Recognize the need for, and have the preparation and ability for i) independent and life-long learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change. (WK8)

(B) PROGRAM SPECIFIC OUTCOME (PSOs)
Program should specify 2-4 program specific outcomes.

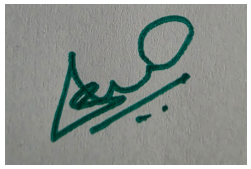
PSO1	Analyze, Model, Test and provide engineering solutions in the areas related to electric drives, control and power systems.
PSO2	Apply fundamentals of electrical engineering to simulate and develop electrical and electronic systems using MATLAB, PSPICE tools

Declaration

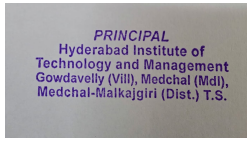
The head of the institution needs to make a declaration as per the format given -

- I undertake that, the institution is well aware about the provisions in the NBA's accreditation manual concerned for this application, rules, regulations, notifications and NBA expert visit guidelines inforce as on date and the institutes hall fully abide by them.
- It is submitted that information provided in this Self Assessment Report is factually correct.
- I understand and agree that an appropriate disciplinary action against the Institute willbe initiated by the NBA. In case, any false statement/information is observed during pre-visit, visit, postvisit and subsequent to grant of accreditation.

Head of the Institute
Name : Dr. S. ARVIND
Designation : PRINCIPAL
Signature :



Seal of The Institution :



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