Hyderabad Institute of Technology and Management

SELF ASSESSMENT REPORT(TIER - I) FOR Computer Science and 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	
○ State Government	☐ Any Other(Please Specify)
○ Government Aided	
◉ Self financing	

5 Name and Address of Affiliating University(if any)

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

KUKATPALLY,

HYDERABAD - 500085

TELANGANA-INDIA

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
Computer Science and Engineering	UG	2001	2014	60	Yes	240	Granted accreditation for 3 years for the period (specify period)	2019	2025		4

Sanctioned Intake for Last Five Years for the Computer Science and Engineering	
Academic Year	**Sanctioned Intake**
2024-25	240
2023-24	180
2022-23	120
2021-22	120
2020-21	120
2019-20	120

Electronics and Communication Engineering	UG	2001	2001	60	Yes	60	Granted accreditation for 3 years for the period (specify period)	2019	2025	0	4

Sanctioned Intake for Last Five Years for the Electronics and Communication Engineering	
Academic Year	**Sanctioned Intake**
2024-25	60
2023-24	60
2022-23	60
2021-22	60
2020-21	60
2019-20	120

							Granted accreditation for 3 years for the period				

Mechanical Engineering	UG	2002	2002	60	Yes	30	(specify period)	2022	2025	0	4

Sanctioned Intake for Last Five Years for the Mechanical Engineering	
Academic Year	**Sanctioned Intake**
2024-25	30
2023-24	30
2022-23	60
2021-22	60
2020-21	60
2019-20	120

Electrical and Electronics Engineering	UG	2001	2001	60	Yes	30	Granted accreditation for 3 years for the period (specify period)	2022	2025	0	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

Computer Science and Engineering (Artificial Intelligence & Machine Learning)	UG	2020	2020	60	Yes	180	Not eligible for accreditation	--	--	0	4

Sanctioned Intake for Last Five Years for the Computer Science and Engineering (Artificial Intelligence & Machine Learning)	
Academic Year	**Sanctioned Intake**
2024-25	180
2023-24	120
2022-23	60
2021-22	60
2020-21	60
2019-20	0

Computer Science and Engineering (Data Science)	UG	2020	2020	60	Yes	180	Not eligible for accreditation	--	--	0	4

Sanctioned Intake for Last Five Years for the Computer Science and Engineering (Data Science)	
Academic Year	**Sanctioned Intake**
2024-25	180

2023-24	180
2022-23	60
2021-22	60
2020-21	60
2019-20	0

Computer Science and Engineering (Cyber Security)	UG	2020	2020	60	Yes	0	Not eligible for accreditation	--	--	0	4

Sanctioned Intake for Last Five Years for the Computer Science and Engineering (Cyber Security)

Academic Year	Sanctioned Intake
2024-25	0
2023-24	0
2022-23	60
2021-22	60
2020-21	60
2019-20	0

Computer Science and Engineering (Internet of Things)	UG	2020	2020	60	Yes	0	Not eligible for accreditation	--	--	0	4

Sanctioned Intake for Last Five Years for the Computer Science and Engineering (Internet of Things)

Academic Year	Sanctioned Intake
2024-25	0
2023-24	0
2022-23	60
2021-22	60
2020-21	60
2019-20	0

8 Programs to be considered for Accreditation vide this application:

S No	Level	Discipline	Program
1	Under Graduate	Engineering & Technology	Computer Science and Engineering

Table No. A8.2

S No	Name of the Department	Name of the Program	Name of Allied Departments/Cluster	Name of Allied Program
1	Computer Science and Engineering	Computer Science and Engineering	Computer Science and Engineering (Artificial Intelligence and Machine Learning)	Computer Science and Engineering (Artificial Intelligence & Machine Learning)
2	Computer Science and Engineering	Computer Science and Engineering	Computer Science and Engineering (Cyber Security)	Computer Science and Engineering (Cyber Security)

3	Computer Science and Engineering	Computer Science and Engineering	Computer Science and Engineering (Data Science)	Computer Science and Engineering (Data Science)
4	Computer Science and Engineering	Computer Science and Engineering	Computer Science and Engineering (Internet of Things)	Computer Science and Engineering (Internet of Things)

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	Computer Science & Engineering	2	3	21	26	2	2	22	26	2	2	19	23
2	Computer Science and Engineering allied departments	2	3	27	32	3	3	29	35	2	1	28	31

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	Computer Science and Engineering	460	393	393
2	Computer Science and Engineering (Allied Departments)	1318	1180	916

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:

- Build students competencies through HITAMs Doing Engineering approach with relevant curriculum, pedagogy, and assessment.

- Collaborate with industry and institutions for capacity building in research, innovation, and real-time knowledge.
- Develop employability skills for emerging trends and societal needs.
- 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.Siddapuram Arvind
Designation	Prof of CSE and Principal
Mobile No.	9573714385
Email ID	principal@hitam.org

NBA Coordinator, If Designated	
Name	Dr.S.V.Devika
Designation	Prof and Associate Dean Accre
Mobile No.	9000448835
Email ID	associate.deanaccreditation@h

PART B: Criteria Summary

Critera No.	Criteria	Total Marks	Institute Marks
1	OUTCOME-BASED CURRICULUM	120	119.00
2	OUTCOME-BASED TEACHING LEARNING	120	116.00
3	OUTCOME-BASED ASSESSMENT	120	119.00
4	STUDENTS' PERFORMANCE	120	98.74
5	FACULTY INFORMATION	100	66.85
6	FACULTY CONTRIBUTIONS	120	96.35
7	FACILITIES AND TECHNICAL SUPPORT	100	100.00
8	CONTINUOUS IMPROVEMENT	80	77.00
9	STUDENT SUPPORT AND GOVERNANCE	120	117.00
	Total	**1000**	**910**

Part B : Criteria Summary

1 OUTCOME-BASED CURRICULUM (120)

Total Marks 119.00

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	• Build students competencies through HITAMs Doing Engineering approach with relevant curriculum, pedagogy, and assessment. • Collaborate with industry and institutions for capacity building in research, innovation, and real-time knowledge. • Develop employability skills for emerging trends and societal needs. • Excel by adopting NEP 2020 and improving accreditations & national rankings.
Vision of the Department	To be a competent department of Computer Science and Engineering, committed to nurturing critical thinking, innovation and multidisciplinary knowledge in students to drive technological progress and contribute meaningfully to society.

Mission of the Department

Mission No.	Mission Statements
M1	To build a strong academic foundation in computer science and engineering, complemented by practical learning that enhances analytical thinking, creativity, and effective problem-solving skills.
M2	To equip students with emerging tools and technologies while cultivate ethical values, teamwork, communication, and leadership to prepare them for successful professional careers.
M3	To promote multidisciplinary research and innovation that empowers students to develop responsible, impactful technological solutions addressing societal and global challenges.

1.1.2 State PEOs of the Program (5)

Institute Marks : 5.00

PEO No.	Program Educational Objectives Statements
PEO1	Build careers in software roles such as development, testing, DevOps, data analytics, and cybersecurity by utilizing core engineering and programming skills.
PEO2	Pursue higher education or research in computing and allied fields through a strong academic foundation and a passion for learning.
PEO3	Initiate or contribute to entrepreneurial and innovation-driven ventures with leadership, ethics, and a focus on 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 shows the process for brief understanding.

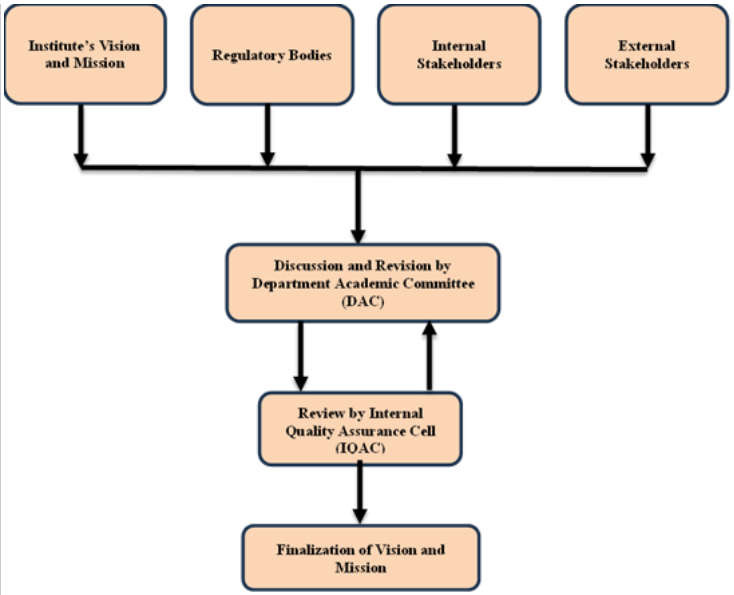


Figure 1: Process Flowchart of Framing Vision and Mission

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 Computer Science and Engineering (CSE) 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 2 shows the process of framing PEOs of CSE Program.

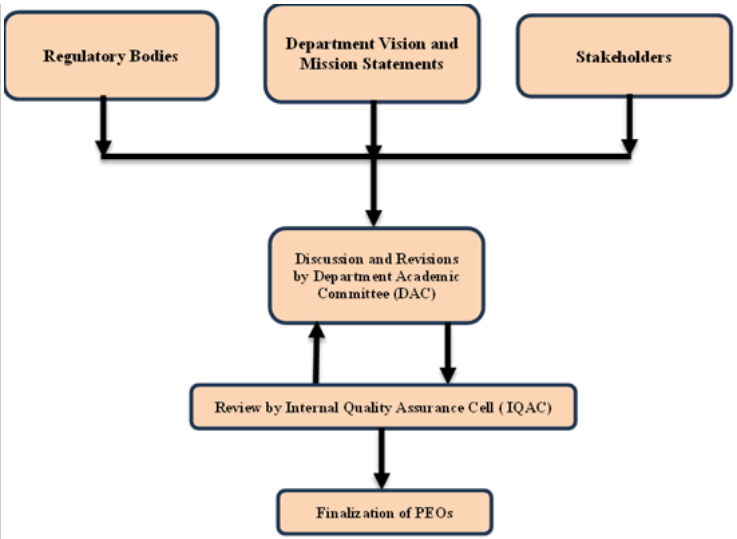


Figure 2: Process framework for framing PEOs

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 - Department of CSE page	https://hitam.org/computer-science-and-engineering/ (https://hitam.org/computer-science-and-engineering/)
2	Departmental Faculty Room	The Vision, Mission and PEOs of the department are displayed in the faculty room noticeboards.
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	Department Notice Board	The Vision, Mission and PEOs of the department are displayed in the department notice boards
6	Departmental Documents	Printed and attached in the files related to various documents in the department
7	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.
8	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
Build careers in software roles such as development, testing, DevOps, data analytics, and cybersecurity by utilizing core engineering and programming skills.	3	2	-
Pursue higher education or research in computing and allied fields through a strong academic foundation and a passion for learning.	3	-	2
Initiate or contribute to entrepreneurial and innovation-driven ventures with leadership, ethics, and a focus on societal needs.	-	3	2

Justification for Mapping

PEO1

Build careers in software roles such as development, testing, DevOps, data analytics, and cybersecurity by applying core engineering and programming skills.

Mission Element	Keywords	Mapping Strength	Justification
M1	Academic foundation, analytical thinking, problem-solving	3	Core engineering and programming skills essential for software roles are directly supported by M1's emphasis on foundational knowledge and problem-solving ability.
M2	Emerging tools, ethics, teamwork, communication, leadership	2	Exposure to tools and collaborative skills complements software career readiness, but this is a secondary alignment.
M3	Multidisciplinary research, innovation, societal impact	–	PEO1 has minimal emphasis on research or societal innovation; thus, not mapped.

PEO2

Pursue higher education or research in computing and allied fields through a strong academic foundation and a passion for learning.

Mission Element	Keywords	Mapping Strength	Justification

M1	Academic foundation, analytical thinking, problem-solving	3	A strong academic base and analytical skills are critical enablers for higher studies and research, fully aligning with M1.
M2	Emerging tools, ethics, teamwork, communication, leadership	–	PEO2 does not emphasize tools or teamwork; hence not mapped.
M3	Multidisciplinary research, innovation, societal impact	2	PEO2 aligns moderately with M3 as it encourages students to take up research, which may lead to interdisciplinary and impactful outcomes.

PEO3

Initiate or contribute to entrepreneurial and innovation-driven ventures with leadership, ethics, and a focus on societal needs.

Mission Element	Keywords	Mapping Strength	Justification
M1	Academic foundation, analytical thinking, problem-solving	–	While foundational skills are useful, PEO3 does not directly build on this, so it is not mapped.
M2	Emerging tools, ethics, teamwork, communication, leadership	3	Leadership, ethics, and communication are core to this PEO and are directly supported by M2.
M3	Multidisciplinary research, innovation, societal impact	2	PEO3s focus on societal needs and innovation moderately aligns with M3's emphasis on impact-driven research and innovation.

1.2 Curriculum Structure and Features (30) **Total Marks 29.00**

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

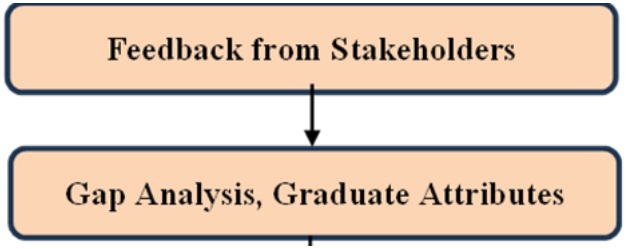
The curriculum development or revision process begins with a Gap Analysis that considers existing course offerings considering expected Graduate Attributes, industry requirements, emerging technologies and accreditation standards such as those from NBA. This step identifies the gaps in the current curriculum 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.This process has been depicted in the following Figure 3 for ease of understanding.



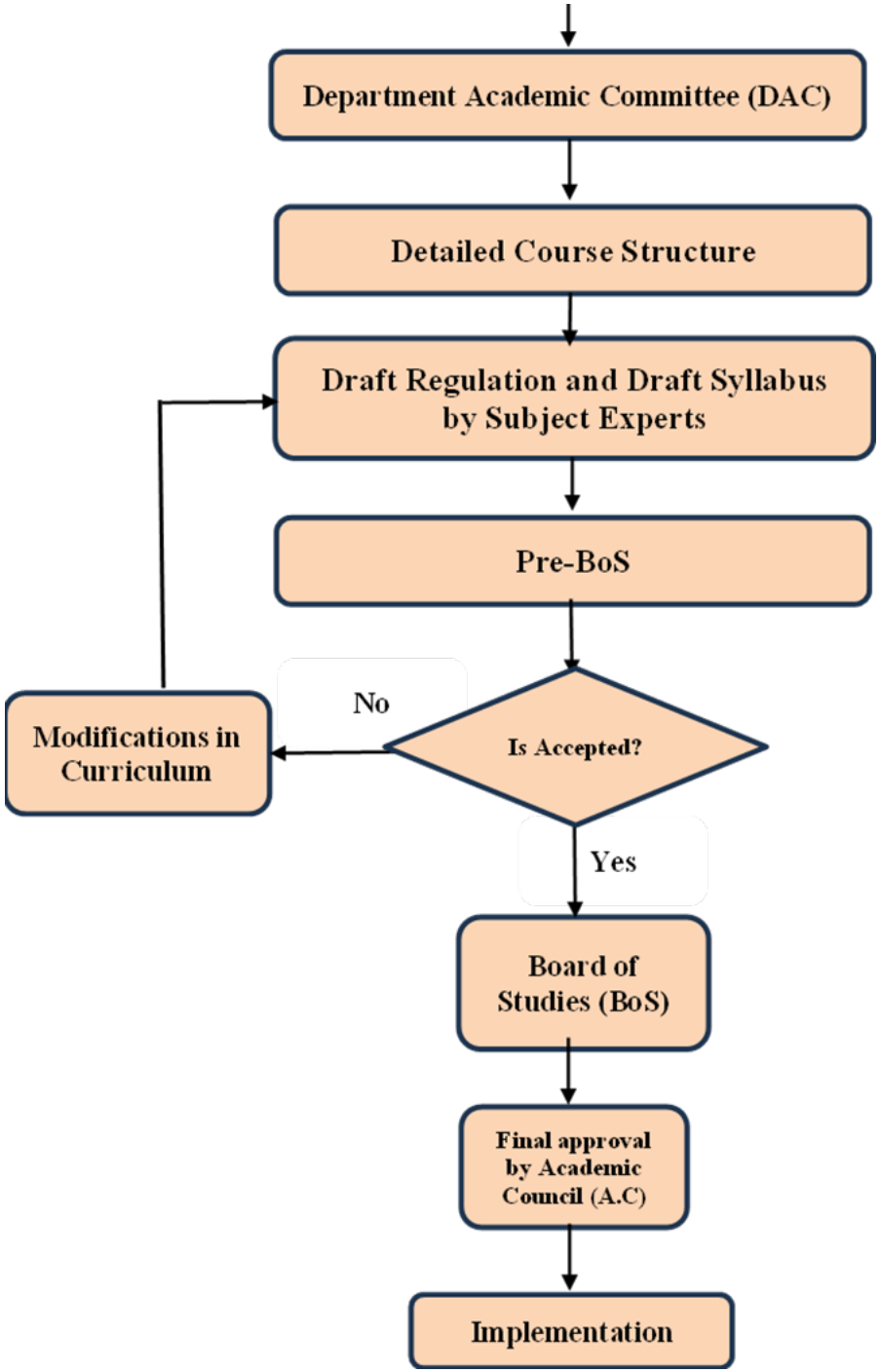

Department Academic Committee (DAC)
Detailed Course Structure
Draft Regulation and Draft Syllabus by Subject Experts
Pre-BoS
Is Accepted?
No
Modifications in Curriculum
Yes
Board of Studies (BoS)
Final approval by Academic Council (A.C)
Implementation

Figure 3: Process flowchart for developing/revising curriculum

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 Calculus	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	6.88	176.00	11.00
Basic Engineering	15	384.00	24.00
Humanities and Social Sc	5	128.00	8.00
Program Core	43.75	1120.00	70.00
Program Electives	11.25	288.00	18.00
Open Electives	7.5	192.00	12.00
Project(s)	8.13	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 : 4.00

CSE 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.

1. Unnat Bharat Abhiyan (UBA): Connecting Classroom with Community

Through participation in Unnat Bharat Abhiyan, We have adopted nearby villages and engages faculty and students in identifying local challenges during field visits. These interactions offer firsthand exposure to real-world problems, allowing students to explore technological and social interventions through interdisciplinary collaboration. The insights gained are translated into project-based learning, embedding relevance and responsibility into the academic journey. This helped us creating a multidisciplinary approach for our students.

2. APAAR and Academic Bank of Credits (ABC): Flexible and Connected Learning

To facilitate student mobility and academic flexibility, we implemented the APAAR ID system and enabled credit recording in alignment with the Academic Bank of Credits (ABC). Awareness sessions, detailed demonstrations and faculty mentoring helped students complete their registration. These systems enhance student autonomy and support diverse learning pathways, encouraging participation in courses beyond traditional disciplinary boundaries.

3. Indian Knowledge Systems (IKS): Enriching the Curriculum with Cultural Insight

HITAM has introduced the Indian Knowledge Systems (IKS) course into the undergraduate curriculum to offer students a broader perspective on knowledge traditions. With themes spanning mathematics, metallurgy, architecture, linguistic and environmental practices, IKS encourages interdisciplinary thinking and critical reflection. Faculty are encouraged to use experiential pedagogies such as case studies, mini-projects, and reflective assignments. A dedicated library section supports further inquiry into indigenous knowledge systems.

4. Grand Challenges Scholars Program (GCSP): Integrated Learning for Global Impact

As the first institution in Telangana recognized under the GCSP, HITAM integrates five key dimensions into the student experience: research, entrepreneurship, global exposure, interdisciplinary learning and service. Students engage in long-term projects that require combining technical knowledge with an understanding of economic, social and environmental factors. The program supports holistic development and prepares students to address contemporary challenges with creativity and purpose. This helps students in enhancing their employability skills as well.

5. Aalborg-Inspired PBL Model: Faculty Empowerment for Pedagogical Change

To strengthen PBL practices, HITAM draws on the globally recognized Aalborg model of PBL, adapted to suit local needs. Faculty members receive structured training to implement PBL effectively, focusing on facilitation, problem design and reflective assessment. This has led to a gradual shift in the teaching-learning culture from instruction-led delivery to facilitated exploration and problem-solving.

HITAM has made Problem-Based Learning (PBL) a core instructional approach across its engineering programs. Students work in small teams to solve complex, real-world problems by integrating knowledge from multiple subjects. This model inculcates self-directed learning, critical thinking and collaboration, while enhancing students' ability to apply classroom knowledge to practical contexts. PBL is systematically embedded in course design, instructional methods and assessment patterns across all years of study.

6. EPICS: Engineering for Social Impact

Through Engineering Projects in Community Service (EPICS), HITAM offers students an opportunity to work on interdisciplinary, socially relevant projects. Teams of students design solutions for challenges in areas like sanitation, education, healthcare, and sustainability. EPICS reinforces the importance of empathetic engineering, while also building skills in project management, teamwork and ethical decision-making. All the students from CSE program takes the Design Thinking course which is built with collaboration of EPICS at Purdue.

These educational strategies help CSE program on preparing students to thrive in real-world environments. Through initiatives like UBA, APAAR, IKS, GCSP, PBL, and EPICS, the department integrates experiential and interdisciplinary learning into its curriculum and pedagogy. These efforts reflect our commitment to producing engineers who are technically proficient, socially responsible, globally aware and capable of innovating for meaningful impact.

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

1.3.1 POs and PSOs (5) :

PSO1	To use mathematical methodologies to crack problem using suitable mathematical analysis, data structure and suitable algorithm
PSO2	To grasp the software development lifecycle and methodologies of software systems.
PSO3	To interpret the fundamental concepts and methodology of computer systems.

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

PO:

PO Number	List of Courses

PO1	Matrix Algebra and Calculus (21BS1MT01) Applied Physics (21BS1PH01) Basic Electrical and Electronics Engineering (21ES1EE01) Business Economics and Financial Analysis (21HS1MB01) Basic Electrical and Electronics Engineering-Lab (21ES1EE02) Applied Physics Lab (21BS1PH02) Engineering Projects in Community Services (21AC1ME02) Advanced Calculus for Engineers (21BS2MT02) Engineering Chemistry (21BS2CH01) Engineering Graphics (21ES2ME01) Problem Solving using C (21ES2CS01) Engineering Chemistry-Lab (21BS2CH02) Engineering Prototyping-Lab (21ES2ME02) Problem Solving using C-Lab (21ES1CS02) Probability and Statistics (21BS3MT04) Python Programming (21ES3CS03) Data Structures using C (21PC3CS01) Discrete Mathematics (21PC3CS02) Database Management Systems (21PC3CS03) Python Programming Lab (21ES3CS04) Data Structures using C-Lab (21PC3CS04) Database Management Systems Lab (21PC3CS05) Internship-1 (21PR3IN01) Computer Organization and Architecture (21PC4CS06) Design and Analysis of Algorithms (21PC4CS07) Formal Languages and Automata Theory (21PC4CS08) Object Oriented Programming using Java (21PC4CS09) Software Engineering (21PC4CS10) Object Oriented Programming using Java Lab (21PC4CS11) Software Engineering Lab (21PC4CS12) Doing Engineering-1 (21PR4CS01) Operating Systems (21PC5CS13) Computer Networks (21PC5CS14) Compiler Design (21PC5CS15) Open Elective - 1 (Introduction to AI) (22OE5CS01) Operating Systems & Computer Networks Lab (21PC5CS16) Compiler Design Lab (21PC5CS17) Advanced English Communication Skills-Lab (21HS5EG05) Evaluation of Internship-2 (21PR5IN02) Doing Engineering-2 (21PR5CS02) Analytical Reasoning (21MC5HS03) Statistical Programming using R (21ES6CS05) Cloud Computing (21PC6CS18) Machine Learning (21PC6CM03) Professional Elective - II (Big Data Analytics) (21PE6CD21) Open Elective - II (Fundamental of Digital Electronics) (21OE6EC02) R Programming Lab (21ES6CS06) Machine Learning-Lab (21PC6CM04) Cloud Computing Lab (21PC6CS21) Quantitative Aptitude (21MC6HS04) Cryptography and Network Security (21PC7CC01) Professional Elective - III (Advanced Algorithms) (21MC3HS01) Professional Elective - IV (Natural Language Processing) (21PE7CS44) Cryptography and Network Security- Lab (21PC7CC02) Natural Language Processing- Lab (21PC7CM10) Doing Engineering-3 (MINI PROJ/Internship) (21PR7IN03) Project Stage-I (21PR7PS01) Professional Elective - V (Social Media Analysis) (21PE8CS05) Professional Elective - VI (Human Computer Interaction) (21PE8CS06) Open Elective - IV (21OE8CS04) Project Stage-II (21PR8PS02)
PO2	Matrix Algebra and Calculus (21BS1MT01) Applied Physics (21BS1PH01) Basic Electrical and Electronics Engineering (21ES1EE01) Business Economics and Financial Analysis (21HS1MB01) Basic Electrical and Electronics Engineering-Lab (21ES1EE02) Applied Physics Lab (21BS1PH02) Engineering Projects in Community Services (21AC1ME02) Advanced Calculus for Engineers (21BS2MT02) Engineering Graphics (21ES2ME01) Problem Solving using C (21ES2CS01) Engineering Chemistry-Lab (21BS2CH02) Engineering Prototyping-Lab (21ES2ME02) Problem Solving using C-Lab (21ES1CS02) Probability and Statistics (21BS3MT04) Data Structures using C (21PC3CS01) Discrete Mathematics (21PC3CS02) Database Management Systems (21PC3CS03) Python Programming Lab (21ES3CS04) Data Structures using C-Lab (21PC3CS04) Database Management Systems Lab (21PC3CS05) Internship-1 (21PR3IN01) Computer Organization and Architecture (21PC4CS06) Design and Analysis of Algorithms (21PC4CS07) Formal Languages and Automata Theory (21PC4CS08) Object Oriented Programming using Java (21PC4CS09) Software Engineering (21PC4CS10) Object Oriented Programming using Java Lab (21PC4CS11) Software Engineering Lab (21PC4CS12) Doing Engineering-1 (21PR4CS01) Operating Systems (21PC5CS13) Computer Networks (21PC5CS14) Compiler Design (21PC5CS15) Professional Elective - I (Data Mining) Open Elective - 1 (Introduction to AI) (22OE5CS01) Operating Systems & Computer Networks Lab (21PC5CS16) Compiler Design Lab (21PC5CS17) Advanced English Communication Skills-Lab (21HS5EG05) Evaluation of Internship-2 (21PR5IN02) Doing Engineering-2 (21PR5CS02) Analytical Reasoning (21MC5HS03) Statistical Programming using R (21ES6CS05) Cloud Computing (21PC6CS18) Machine Learning (21PC6CM03) Professional Elective - II (Big Data Analytics) (21PE6CD21) Open Elective - II (Fundamental of Digital Electronics) (21OE6EC02) R Programming Lab (21ES6CS06) Machine Learning-Lab (21PC6CM04) Cloud Computing Lab (21PC6CS21) Quantitative Aptitude (21MC6HS04) Cryptography and Network Security (21PC7CC01) Professional Elective - III (Advanced Algorithms) (21MC3HS01) Professional Elective - IV (Natural Language Processing) (21PE7CS44) Cryptography and Network Security- Lab (21PC7CC02) Natural Language Processing- Lab (21PC7CM10) Doing Engineering-3 (MINI PROJ/Internship) (21PR7IN03) Project Stage-I (21PR7PS01) Professional Elective - V (Social Media Analysis) (21PE8CS05) Professional Elective - VI (Human Computer Interaction) (21PE8CS06) Open Elective - IV (21OE8CS04) Project Stage-II (21PR8PS02)
PO3	Engineering Projects in Community Services (21AC1ME02) Engineering Chemistry (21BS2CH01) Engineering Prototyping-Lab (21ES2ME02) Problem Solving using C-Lab (21ES1CS02) Python Programming (21ES3CS03) Python Programming Lab (21ES3CS04) Database Management Systems Lab (21PC3CS05) Design and Analysis of Algorithms (21PC4CS07) Object Oriented Programming using Java (21PC4CS09) Software Engineering (21PC4CS10) Object Oriented Programming using Java Lab (21PC4CS11) Software Engineering Lab (21PC4CS12) Doing Engineering-1 (21PR4CS01) Computer Networks (21PC5CS14) Compiler Design (21PC5CS15) Professional Elective - I (Data Mining) Open Elective - 1 (Introduction to AI) (22OE5CS01) Operating Systems & Computer Networks Lab (21PC5CS16) Compiler Design Lab (21PC5CS17) Advanced English Communication Skills-Lab (21HS5EG05) Cloud Computing (21PC6CS18) Machine Learning (21PC6CM03) Open Elective - II (Fundamental of Digital Electronics) (21OE6EC02) R Programming Lab (21ES6CS06) Machine Learning-Lab (21PC6CM04) Cloud Computing Lab (21PC6CS21) Professional Elective - III (Advanced Algorithms) (21MC3HS01) Professional Elective - IV (Natural Language Processing) (21PE7CS44) Cryptography and Network Security- Lab (21PC7CC02) Natural Language Processing- Lab (21PC7CM10) Doing Engineering-3 (MINI PROJ/Internship) (21PR7IN03) Project Stage-I (21PR7PS01) Professional Elective - VI (Human Computer Interaction) (21PE8CS06) Open Elective - IV (21OE8CS04) Project Stage-II (21PR8PS02)
PO4	Engineering Chemistry (21BS2CH01) Advanced English Communication Skills-Lab (21HS5EG05) Open Elective - IV (21OE8CS04) Project Stage-II (21PR8PS02)
PO5	

	Problem Solving using C (21ES2CS01) Engineering Prototyping-Lab (21ES2ME02) Problem Solving using C-Lab (21ES1CS02) Data Structures using C (21PC3CS01) Database Management Systems (21PC3CS03) Python Programming Lab (21ES3CS04) Data Structures using C-Lab (21PC3CS04) Database Management Systems Lab (21PC3CS05) Internship-1 (21PR3IN01) Object Oriented Programming using Java (21PC4CS09) Object Oriented Programming using Java Lab (21PC4CS11) Software Engineering Lab (21PC4CS12) Doing Engineering-1 (21PR4CS01) Compiler Design (21PC5CS15) Professional Elective - I (Data Mining) Open Elective - 1 (Introduction to AI) (22OE5CS01) Operating Systems & Computer Networks Lab (21PC5CS16) Compiler Design Lab (21PC5CS17) Advanced English Communication Skills-Lab (21HS5EG05) Statistical Programming using R (21ES6CS05) Cloud Computing (21PC6CS18) Professional Elective - II (Big Data Analytics) (21PE6CD21) Open Elective - II (Fundamental of Digital Electronics) (21OE6EC02) R Programming Lab (21ES6CS06) Machine Learning-Lab (21PC6CM04) Cloud Computing Lab (21PC6CS21) Professional Elective - IV (Natural Language Processing) (21PE7CS44) Cryptography and Network Security- Lab (21PC7CC02) Natural Language Processing- Lab (21PC7CM10) Doing Engineering-3 (MINI PROJ/Internship) (21PR7IN03) Project Stage-I (21PR7PS01) Professional Elective - V (Social Media Analysis) (21PE8CS05) Open Elective - IV (21OE8CS04) Project Stage-II (21PR8PS02)
PO6	Engineering Projects in Community Services (21AC1ME02) Engineering Chemistry (21BS2CH01) Environmental Science (21MC2HS02) Social and Health Consciousness (21AC2HS01) Universal Human Values (21MC3HS01) English for Employability (21HS4EG03) English for Employability-Lab (21HS4EG04) Operating Systems (21PC5CS13) Advanced English Communication Skills-Lab (21HS5EG05) Cloud Computing (21PC6CS18) Cryptography and Network Security (21PC7CC01) Project Stage-I (21PR7PS01) Professional Elective - VI (Human Computer Interaction) (21PE8CS06) Open Elective - IV (21OE8CS04) Project Stage-II (21PR8PS02)
PO7	Engineering Projects in Community Services (21AC1ME02) Engineering Chemistry (21BS2CH01) Social and Health Consciousness (21AC2HS01) Universal Human Values (21MC3HS01) English for Employability (21HS4EG03) English for Employability-Lab (21HS4EG04) Operating Systems (21PC5CS13) Advanced English Communication Skills-Lab (21HS5EG05) Cloud Computing (21PC6CS18) Cryptography and Network Security (21PC7CC01) Professional Elective - VI (Human Computer Interaction) (21PE8CS06) Open Elective - IV (21OE8CS04) Project Stage-II (21PR8PS02)
PO8	English (21HS1EG01) Business Economics and Financial Analysis (21HS1MB01) English Language Communication Skills-Lab (21HS1EG02) Engineering Projects in Community Services (21AC1ME02) English for Employability (21HS4EG03) English for Employability-Lab (21HS4EG04) Advanced English Communication Skills-Lab (21HS5EG05) Analytical Reasoning (21MC5HS03) Fundamentals of Engineering Management (21HS6MB02) Doing Engineering-3 (MINI PROJ/Internship) (21PR7IN03) Open Elective - IV (21OE8CS04) Project Stage-II (21PR8PS02) Foreign Languages (German/French/Spanish) (21AC8HS02)
PO9	English (21HS1EG01) English Language Communication Skills-Lab (21HS1EG02) Engineering Projects in Community Services (21AC1ME02) English for Employability (21HS4EG03) English for Employability-Lab (21HS4EG04) Advanced English Communication Skills-Lab (21HS5EG05) Analytical Reasoning (21MC5HS03) Fundamentals of Engineering Management (21HS6MB02) Doing Engineering-3 (MINI PROJ/Internship) (21PR7IN03) Project Stage-I (21PR7PS01) Open Elective - IV (21OE8CS04) Project Stage-II (21PR8PS02) Foreign Languages (German/French/Spanish) (21AC8HS02)
PO10	Engineering Projects in Community Services (21AC1ME02) Software Engineering (21PC4CS10) Software Engineering Lab (21PC4CS12) Advanced English Communication Skills-Lab (21HS5EG05) Analytical Reasoning (21MC5HS03) Fundamentals of Engineering Management (21HS6MB02) Doing Engineering-3 (MINI PROJ/Internship) (21PR7IN03) Project Stage-I (21PR7PS01) Open Elective - IV (21OE8CS04) Project Stage-II (21PR8PS02)
PO11	Business Economics and Financial Analysis (21HS1MB01) Social and Health Consciousness (21AC2HS01) Python Programming (21ES3CS03) Python Programming Lab (21ES3CS04) Universal Human Values (21MC3HS01) English for Employability (21HS4EG03) Software Engineering (21PC4CS10) English for Employability-Lab (21HS4EG04) Software Engineering Lab (21PC4CS12) Advanced English Communication Skills-Lab (21HS5EG05) Evaluation of Internship-2 (21PR5IN02) Doing Engineering-2 (21PR5CS02) Analytical Reasoning (21MC5HS03) Statistical Programming using R (21ES6CS05) Fundamentals of Engineering Management (21HS6MB02) Doing Engineering-3 (MINI PROJ/Internship) (21PR7IN03) Project Stage-I (21PR7PS01) Intellectual Property Rights (21MC7HS06) Open Elective - IV (21OE8CS04) Project Stage-II (21PR8PS02) Constitution of India (21MC8HS05)

PSO:

PO Number	List of Courses

PSO1	Matrix Algebra and Calculus (21BS1MT01) Applied Physics (21BS1PH01) Basic Electrical and Electronics Engineering (21ES1EE01) Basic Electrical and Electronics Engineering-Lab (21ES1EE02) Applied Physics Lab (21BS1PH02) Engineering Projects in Community Services (21AC1ME02) Advanced Calculus for Engineers (21BS2MT02) Engineering Graphics (21ES2ME01) Problem Solving using C (21ES2CS01) Engineering Chemistry-Lab (21BS2CH02) Engineering Prototyping-Lab (21ES2ME02) Problem Solving using C-Lab (21ES1CS02) Probability and Statistics (21BS3MT04) Data Structures using C (21PC3CS01) Discrete Mathematics (21PC3CS02) Database Management Systems (21PC3CS03) Python Programming Lab (21ES3CS04) Data Structures using C-Lab (21PC3CS04) Database Management Systems Lab (21PC3CS05) Computer Organization and Architecture (21PC4CS06) Design and Analysis of Algorithms (21PC4CS07) Formal Languages and Automata Theory (21PC4CS08) Object Oriented Programming using Java Lab (21PC4CS11) Software Engineering Lab (21PC4CS12) Doing Engineering-1 (21PR4CS01) Computer Networks (21PC5CS14) Compiler Design (21PC5CS15) Open Elective - 1 (Introduction to AI) (22OE5CS01) Operating Systems & Computer Networks Lab (21PC5CS16) Compiler Design Lab (21PC5CS17) Analytical Reasoning (21MC5HS03) Statistical Programming using R (21ES6CS05) Professional Elective - II (Big Data Analytics) (21PE6CD21) Open Elective - II (Fundamental of Digital Electronics) (21OE6EC02) R Programming Lab (21ES6CS06) Quantitative Aptitude (21MC6HS04) Professional Elective - III (Advanced Algorithms) (21MC3HS01) Professional Elective - IV (Natural Language Processing) (21PE7CS44) Open Elective - III (21OE7CS03) Doing Engineering-3 (MINI PROJ/Internship) (21PR7IN03) Project Stage-I (21PR7PS01) Open Elective - IV (21OE8CS04) Project Stage-II (21PR8PS02)
PSO2	Applied Physics (21BS1PH01) Basic Electrical and Electronics Engineering (21ES1EE01) Basic Electrical and Electronics Engineering-Lab (21ES1EE02) Applied Physics Lab (21BS1PH02) Engineering Chemistry (21BS2CH01) Engineering Chemistry-Lab (21BS2CH02) Engineering Prototyping-Lab (21ES2ME02) Database Management Systems (21PC3CS03) Database Management Systems Lab (21PC3CS05) Internship-1 (21PR3IN01) Computer Organization and Architecture (21PC4CS06) Object Oriented Programming using Java Lab (21PC4CS11) Software Engineering Lab (21PC4CS12) Doing Engineering-1 (21PR4CS01) Operating Systems (21PC5CS13) Computer Networks (21PC5CS14) Operating Systems & Computer Networks Lab (21PC5CS16) Compiler Design Lab (21PC5CS17) Cloud Computing (21PC6CS18) Open Elective - II (Fundamental of Digital Electronics) (21OE6EC02) Cloud Computing Lab (21PC6CS21) Cryptography and Network Security (21PC7CC01) Open Elective - III (21OE7CS03) Cryptography and Network Security- Lab (21PC7CC02) Doing Engineering-3 (MINI PROJ/Internship) (21PR7IN03) Open Elective - IV (21OE8CS04) Project Stage-II (21PR8PS02)
PSO3	Engineering Projects in Community Services (21AC1ME02) Problem Solving using C (21ES2CS01) Engineering Prototyping-Lab (21ES2ME02) Problem Solving using C-Lab (21ES1CS02) Python Programming (21ES3CS03) Database Management Systems (21PC3CS03) Python Programming Lab (21ES3CS04) Data Structures using C-Lab (21PC3CS04) Database Management Systems Lab (21PC3CS05) Internship-1 (21PR3IN01) Object Oriented Programming using Java (21PC4CS09) Software Engineering (21PC4CS10) English for Employability-Lab (21HS4EG04) Object Oriented Programming using Java Lab (21PC4CS11) Software Engineering Lab (21PC4CS12) Doing Engineering-1 (21PR4CS01) Compiler Design (21PC5CS15) Professional Elective - I (Data Mining) Open Elective - 1 (Introduction to AI) (22OE5CS01) Operating Systems & Computer Networks Lab (21PC5CS16) Compiler Design Lab (21PC5CS17) Evaluation of Internship-2 (21PR5IN02) Doing Engineering-2 (21PR5CS02) Analytical Reasoning (21MC5HS03) Statistical Programming using R (21ES6CS05) Cloud Computing (21PC6CS18) Machine Learning (21PC6CM03) Professional Elective - II (Big Data Analytics) (21PE6CD21) R Programming Lab (21ES6CS06) Machine Learning-Lab (21PC6CM04) Cloud Computing Lab (21PC6CS21) Professional Elective - IV (Natural Language Processing) (21PE7CS44) Open Elective - III (21OE7CS03) Natural Language Processing- Lab (21PC7CM10) Doing Engineering-3 (MINI PROJ/Internship) (21PR7IN03) Project Stage-I (21PR7PS01) Professional Elective - V (Social Media Analysis) (21PE8CS05) Professional Elective - VI (Human Computer Interaction) (21PE8CS06) Open Elective - IV (21OE8CS04) Project Stage-II (21PR8PS02)

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 :** 3	**C4 :** 3

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

Course Code :	**21ES2CS01**	**Semester :**	**2**

Course Outcome	Statements
21ES2CS01.1	Write algorithms and draw flowcharts for solving problems
21ES2CS01.2	Code and test a given logic in C programming language
21ES2CS01.3	Use arrays, pointers, strings, and structures to write C programs
21ES2CS01.4	Solve searching and sorting problems

Course Code :	21ES3CS03	Semester :	3

Course Outcome	Statements
21ES3CS03.1	Understand operators, precedence of operators, and associativity while evaluating expressions in program statements
21ES3CS03.2	Visualize the capabilities of procedural and object-oriented programming in Python and demonstrate the same in real-world scenarios
21ES3CS03.3	Demonstrate indexing and slicing mechanisms for extracting a portion of data in a sequence
21ES3CS03.4	Extend the knowledge of Python programming to build a successful career in software development

Course Code :	21PC3CS01	Semester :	3

Course Outcome	Statements
21PC3CS01.1	Identify the concepts of data structures in relevant applications
21PC3CS01.2	Apply the concept of data structures to new situations
21PC3CS01.3	Apply graph traversal techniques to solve map-related problems
21PC3CS01.4	Analyze the best sorting technique pertaining to the area applied

Course Code :	21PC3CS03	Semester :	3

Course Outcome	Statements
21PC3CS03.1	Describe fundamentals of DBMS, database design, and normal forms
21PC3CS03.2	Design SQL commands and queries for retrieval and management of data
21PC3CS03.3	Summarize database storage structures and access techniques
21PC3CS03.4	Understand basics of transaction processing and concurrency control

Course Code :	21PC4CS09	Semester :	4

Course Outcome	Statements
21PC4CS09.1	Solve the given problem using OOPs technique
21PC4CS09.2	Explain the concept of packages and interfaces
21PC4CS09.3	Implement multithreading and exception handling in Java
21PC4CS09.4	Develop GUI-based applications using Applet, AWT, Event Handling, and Swing

Course Code :	21PC4CS07	Semester :	4

Course Outcome	Statements
21PC4CS07.1	Describe computational solutions to well-known problems like searching and sorting
21PC4CS07.2	Estimate the computational complexity of different algorithms
21PC4CS07.3	Apply different design methods for development of algorithms to realistic problems through greedy, dynamic programming, and backtracking
21PC4CS07.4	Devise an algorithm using appropriate design strategies for problem solving

Course Code :	21PC5CS13	Semester :	5

Course Outcome	Statements
21PC5CS13.1	Understand the structure of operating systems and the basic architectural components involved in their design
21PC5CS13.2	Apply various resource management techniques used in operating systems
21PC5CS13.3	Analyze synchronization problems and implement suitable techniques to resolve them
21PC5CS13.4	Interpret methods for deadlock detection, prevention, and recovery in operating systems

Course Code :	21PC5CS14	Semester :	5

Course Outcome	Statements
21PC5CS14.1	Understand the basic concepts and technologies used in computer networks
21PC5CS14.2	Describe the functions of each layer in the OSI and TCP/IP reference models
21PC5CS14.3	Apply subnetting techniques and analyze routing mechanisms
21PC5CS14.4	Identify and explain essential protocols in computer networks and their application in network design and implementation

Course Code :	21PC6CS18	Semester :	6

Course Outcome	Statements
21PC6CS18.1	Describe the principles of parallel and distributed computing and the evolution of cloud computing from existing technologies
21PC6CS18.2	Implement various virtualization technologies and service-oriented architecture systems
21PC6CS18.3	Analyze issues related to resource provisioning and security governance in cloud environments
21PC6CS18.4	Choose appropriate cloud technologies for implementing different types of applications

Course Code :	21PC7CC01	Semester :	7

Course Outcome	Statements
21PC7CC01.1	Apply foundational concepts in digital security and measures to protect devices from threats
21PC7CC01.2	Explain access control mechanisms and methods to secure servers
21PC7CC01.3	Understand network fundamentals and basic security concepts of network protocols
21PC7CC01.4	Analyze various types of cyber-attacks and examine data privacy issues along with preventive measures

1.4.2 Course Articulation Matrix (15)

1 . course name : C221ES2CS01

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C221ES2CS01	Write algori	2	2	-	-	-	-	-	-	-	-	-
C221ES2CS01	Code and t	3	-	-	-	2	-	-	-	-	-	-
C221ES2CS01	Use arrays,	3	-	-	-	2	-	-	-	-	-	-
C221ES2CS01	Solve searc	-	2	-	-	3	-	-	-	-	-	-
Average		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2 . course name : C221ES3CS03

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C221ES3CS03	Understanc	3	-	-	-	-	-	-	-	-	-	-
C221ES3CS03	Visualize th	2	-	2	-	-	-	-	-	-	-	-
C221ES3CS03	Demonstrat	3	-	-	-	-	-	-	-	-	-	-
C221ES3CS03	Extend the	-	-	-	-	-	-	-	-	-	-	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 : C221PC3CS01

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C221PC3CS0	Identify the	3	2	-	-	-	-	-	-	-	-	-
C221PC3CS0	Apply the c	2	3	-	-	-	-	-	-	-	-	-
C221PC3CS0	Apply grapl	-	3	-	-	-	-	-	-	-	-	-

C221PC3CS0	Analyze the	-	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 : C221PC3CS03

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C221PC3CS0	Describe fu	3	-	-	-	-	-	-	-	-	-	-
C221PC3CS0	Design SQl	3	2	-	-	-	-	-	-	-	-	-
C221PC3CS0	Summarize	3	-	-	-	-	-	-	-	-	-	-
C221PC3CS0	Understanc	3	-	-	-	-	-	-	-	-	-	-
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 : C321PC4CS09

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C321PC4CS0	Solve the g	3	3	-	-	-	-	-	-	-	-	-
C321PC4CS0	Explain the	3	-	-	-	-	-	-	-	-	-	-
C321PC4CS0	Implement	-	-	-	-	3	-	-	-	-	-	-
C321PC4CS0	Develop Gl	-	-	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**

6 . course name : C321PC4CS07

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C321PC4CS0	Describe cc	3	2	-	-	-	-	-	-	-	-	-
C321PC4CS0	Estimate th	3	3	-	-	-	-	-	-	-	-	-
C321PC4CS0	Apply differ	3	3	3	-	-	-	-	-	-	-	-
C321PC4CS0	Devise an a	3	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**

7 . course name : C321PC5CS13

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C321PC5CS1	Understanc	3	-	-	-	-	-	-	-	-	-	-
C321PC5CS1	Apply vario	-	3	-	-	-	-	-	-	-	-	-

C321PC5CS1:	Analyze syr	-	3	-	-	-	-	-	-	-	-	-
C321PC5CS1:	Interpret m	-	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 : C421PC5CS14

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C421PC5CS1-	Understanc	3	-	-	-	-	-	-	-	-	-	-
C421PC5CS1-	Describe th	3	2	-	-	-	-	-	-	-	-	-
C421PC5CS1-	Apply subn	3	3	-	-	-	-	-	-	-	-	-
C421PC5CS1-	Identify anc	3	2	3	-	-	-	-	-	-	-	-
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 : C421PC6CS18

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C421PC6CS1-	Describe th	3	-	-	-	-	-	-	-	-	-	-
C421PC6CS1-	Implement	-	-	3	-	2	-	-	-	-	-	-
C421PC6CS1-	Analyze iss	-	-	-	-	-	2	2	-	-	-	-
C421PC6CS1-	Choose apı	-	-	3	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 : C421PC7CC01

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C421PC7CC0-	Apply foun	3	-	-	-	-	-	2	-	-	-	-
C421PC7CC0-	Explain acc	-	2	-	-	-	2	3	-	-	-	-
C421PC7CC0-	Understanc	3	-	-	-	-	-	-	-	-	-	-
C421PC7CC0-	Analyze var	3	-	-	-	2	3	-	-	-	-	-
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 : C221ES2CS01

Course	PSO1	PSO2	PSO3

C221ES2CS01	3	-	-
C221ES2CS01	-	-	3
C221ES2CS01	-	-	3
C221ES2CS01	-	-	3
Average	**0.00**	**0.00**	**0.00**

2 . Course Name : C221ES3CS03

Course	PSO1	PSO2	PSO3
C221ES3CS03	-	-	3
C221ES3CS03	-	-	3
C221ES3CS03	-	-	2
C221ES3CS03	-	-	3
Average	**0.00**	**0.00**	**0.00**

3 . Course Name : C221PC3CS01

Course	PSO1	PSO2	PSO3
C221PC3CS01	3	-	-
C221PC3CS01	3	-	-
C221PC3CS01	2	-	-
C221PC3CS01	3	-	-
Average	**0.00**	**0.00**	**0.00**

4 . Course Name : C221PC3CS03

Course	PSO1	PSO2	PSO3
C221PC3CS03	3	-	-
C221PC3CS03	-	3	3
C221PC3CS03	2	3	-
C221PC3CS03	2	3	-
Average	**0.00**	**0.00**	**0.00**

5 . Course Name : C321PC4CS09

Course	PSO1	PSO2	PSO3
C321PC4CS0	-	-	3
C321PC4CS0	-	-	3
C321PC4CS0	-	-	3
C321PC4CS0	-	-	3
Average	**0.00**	**0.00**	**0.00**

6 . Course Name : C321PC4CS07

Course	PSO1	PSO2	PSO3
C321PC4CS0	3	-	-
C321PC4CS0	3	-	-
C321PC4CS0	3	-	-
C321PC4CS0	3	-	-
Average	**0.00**	**0.00**	**0.00**

7 . Course Name : C321PC5CS13

Course	PSO1	PSO2	PSO3
C321PC5CS1	-	3	-
C321PC5CS1	-	3	-
C321PC5CS1	-	3	-
C321PC5CS1	-	3	-
Average	**0.00**	**0.00**	**0.00**

8 . Course Name : C421PC5CS14

Course	PSO1	PSO2	PSO3
C421PC5CS1	3	3	-
C421PC5CS1	3	3	-
C421PC5CS1	3	3	-
C421PC5CS1	3	3	-
Average	**0.00**	**0.00**	**0.00**

9 . Course Name : C421PC6CS18

Course	PSO1	PSO2	PSO3
C421PC6CS18	-	3	-
C421PC6CS18	-	3	-
C421PC6CS18	-	3	-
C421PC6CS18	-	-	3
Average	**0.00**	**0.00**	**0.00**

10 . Course Name : C421PC7CC01

Course	PSO1	PSO2	PSO3
C421PC7CC01	-	3	-
C421PC7CC01	3	-	-
C421PC7CC01	3	-	-
C421PC7CC01	3	-	-
Average	**0.00**	**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	1.5	0	0	0	0	0	0	0	0	0
21BS1PH01	3	0.5	0	0	0	0	0	0	0	0	0
21ES1EE01	3	2	0	0	0	0	0	0	0	0	0
21HS1EG01	0	0	0	0	0	0	0	1	3	0	0
21HS1MB01	0.75	1.25	0	0	0	0	0	0	0.5	0	2.75
21ES1EE02	3	2.25	0	0	0	0	0	0	0	0	0
21HS1EG02	0	0	0	0	0	0	0	1	2.75	0	0
21BS1PH02	3	0.75	0	0	0	0	0	0	0	0	0
21AC1ME02	0.75	1.25	1.5	0	0	0.5	0.75	0.75	0.75	0.5	0
21BS2MT02	3	1	0	0	0	0	0	0	0	0	0

21BS2CH01	2.5	0	0.5	0.5	0	0.5	0.5	0	0	0	0
21ES2ME01	3	2	0	0	0	0	0	0	0	0	0
21ES2CS01	2.25	1	0	1.75	0	0	0	0	0	0	0
21BS2CH02	3	2.25	0	0	0	0	0	0	0	0	0
21ES2ME02	3	1.25	0.75	0	2.5	0	0	0	0	0	0
21ES1CS02	3	2.25	0.75	0	1.25	0	0	0	0	0	0
21MC2HS02	0	0	0	0	0	3	0	0	0	0	0
21AC2HS01	0	0	0	0	0	3	0.75	0	0	0	1
21BS3MT04	3	2	0	0	0	0	0	0	0	0	0
21ES3CS03	2	0	0.5	0	0	0	0	0	0	0	0.75
21PC3CS01	1.25	2.75	0	0	1	0	0	0	0	0	0
21PC3CS02	3	1.25	0	0	0	0	0	0	0	0	0
21PC3CS03	3	1	0	0	0.75	0	0	0	0	0	0
21ES3CS04	2.25	1	0.75	0	0.5	0	0	0	0	0	0.75
21PC3CS04	3	2.25	0	0	2.25	0	0	0	0	0	0
21PC3CS05	3	2	1.5	0	2.25	0	0	0	0	0	0
21PR3IN01	3	1.5	0	0	2	0	0	0	0	0	0
21MC3HS01	0	0	0	0	0	1.5	3	0	0	0	1
21HS4EG03	0	0	0	0	0	0.5	0.75	0.5	2.25	0	0.5
21PC4CS06	3	1	0	0	0	0	0	0	0	0	0
21HS4EG04	0	0	0	0	0	0.5	0.75	0.5	0.25	0	0.5
21PC4CS11	3	1	1.5	0	2.25	0	0	0	0	0	0
21PC4CS12	3	1.8	1.8	0	2.2	0	0	0	0	0.6	0.6
21PR4CS01	3	1.75	1.5	0	2.25	0	0	0	0	0	0
21PC5CS13	0.6	1.6	0	0	0	0.4	0.6	0	0	0	0
21PC5CS14	3	1.75	0.75	0	0	0	0	0	0	0	0
21PC5CS15	3	2.5	1.5	0	0.75	0	0	0	0	0	0
21PC5CS16	3	2	0.75	0	1.25	0	0	0	0	0	0
21PC5CS17	3	2.25	2.25	0	2.25	0	0	0	0	0	0
21HS5EG05	0	0	0	0	0	0	0	2.75	2.75	0	2
21PR5IN02	1.5	1	0	0	0	0	0	0	0	0	2.5
21PR5CS02	1.5	1	0	0	0	0	0	0	0	0	2.5

21MC5HS03	0.75	0.75	0	0	0	0	0	0.75	0.75	0.5	0.5
21ES6CS05	3	2	0	0	1.5	0	0	0	0	0	0.5
21HS6MB02	0	0	0	0	0	0	0	1.7	2	1.7	0.7
21PC6CS18	0.75	1.5	1.5	0	1	0.5	0.5	0	0	0	0
21PC6CM03	0.75	2.25	0.75	0	0	0	0	0	0	0	0
21ES6CS06	3	1.75	0.5	0	2.25	0	0	0	0	0	0
21PC6CM04	3	2.75	1.25	0	3	0	0	0	0	0	0
21PC6CS21	3	1.75	0.75	0	1.75	0	0	0	0	0	0
21MC6HS04	3	2	0	0	0	0	0	0	0	0	0
21PC7CC01	1.5	1.25	0	0	0	1	2	0	0	0	0
21PC7CC02	1	1.7	1	0	3	0	0	0	0	0	0
21PC7CM10	0.75	2.25	0.75	0	1.5	0	0	0	0	0	0
21PR7IN03	1.5	0.5	0.75	0	0.75	0	0	0.75	1.25	1	0.5
21PR7PS01	2.5	1.75	1.75	0	1.5	0.5	0	0	1.25	1.75	2
21MC7HS06	0	0	0	0	0	0	3	0	0	0	3
21PR8PS02	1.5	1.25	2	0.75	1.5	0.75	0.75	0.75	0.75	2.25	2.5

Course Code	PSO1	PSO2	PSO3
21AC1ME02	1	0	2.75
21AC2HS01	0	0	0
21BS1MT01	3	0	0
21BS1PH01	2.75	2.25	0
21BS1PH02	2.5	2.5	0
21BS2CH01	0	2.75	0
21BS2MT02	3	0	0
21BS3MT04	3	0	0
21ES1CS02	2.25	0	3
21ES1EE01	2.5	3	0
21ES1EE02	2.5	3	0
21ES2CS01	0.25	0	2.25
21ES2ME01	2.25	0	0
21ES3CS03	0	0	2.75
21ES3CS04	1.5	0	3

21ES6CS05	2.25	0	3
21ES6CS06	0.75	0	3
21HS1EG01	0	0	0
21HS1EG02	0	0	0
21HS1MB01	0	0	0
21HS4EG03	0	0	0
21HS4EG04	0	0	0
21HS5EG05	0	0	0
21HS6MB02	0	0	0
21MC2HS02	0	0	0
21MC3HS01	0	0	0
21MC5HS03	0.75	0	0.5
21MC6HS04	3	0	0
21MC7HS06	0	0	0
21PC3CS01	2.75	0	0
21PC3CS02	3	0	0
21PC3CS03	1.75	2.25	0.75
21PC3CS04	3	0	3
21PC4CS06	2.75	3	0
21PC4CS11	1.5	1.5	0
21PC4CS12	0.6	1.2	0
21PC5CS13	0	2.8	0
21PC5CS14	3	3	0
21PC5CS15	3	0	3
21PC5CS16	2.25	2.25	3
21PC5CS17	2.75	0.75	3
21PC6CM04	0	0	3
21PC6CS18	0	2.25	1.5
21PC6CS21	0	3	3
21PC7CC01	0	3	0
21PC7CC02	0	3	0
21PC7CM10	0	0	3

21PR3IN01	0	3	2.25
21PR4CS01	3	3	0
21PR5CS02	0	0	3
21PR5IN02	0	0	3
21PR7IN03	0.75	0.75	3
21PR7PS01	2	0	3
21PR8PS02	1.5	1.5	3

2 OUTCOME-BASED TEACHING LEARNING (120)

Total Marks 116.00

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

Total Marks 20.00

Institute Marks : 20.00

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

The Department of Computer Science and 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

- 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.

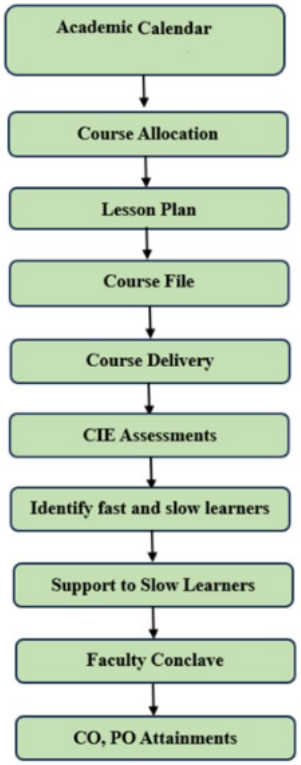


Figure.2.1. Teaching Learning Process Flowchart

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.

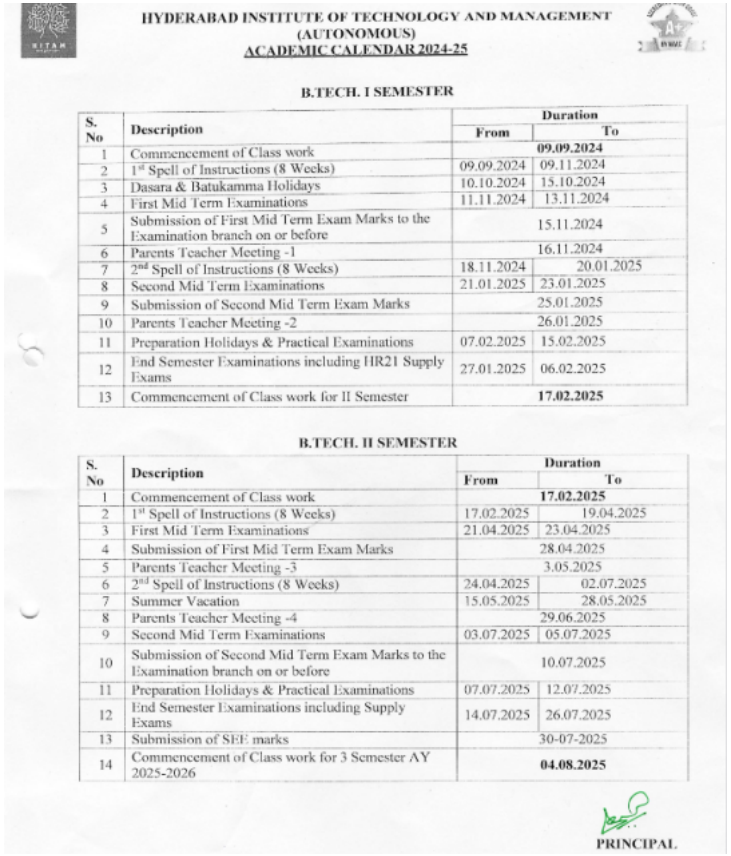
A. **Structured Academic Planning:**

The Department of Computer Science and Engineering ensures 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.

Academic Calendar web link:

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)

Academic Calendar for the A.Y 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.2.2. Academic Calendar for Academic year 2024-25

A. **Innovative Pedagogical Initiatives:**

The pedagogical approaches adopted by the department play a crucial role in effective content delivery and are tailored to suit the needs of different student groups. A structured process is followed at the department level for course allocation and workload distribution. Courses are assigned at the beginning of each semester, taking into account the faculty members' preferences and areas of expertise. Once assigned, faculty members prepare comprehensive course files, including instructional schedules, tutorial and assignment questions, quiz materials, concept videos, and ICT(Information and Communication Technology) integration plans for the respective courses.

Faculty members use various pedagogical methods for effective teaching learning process. The following figure illustrates some of the pedagogical initiatives which are followed in the department.

The pedagogical initiatives are as follows: ·

i. Classroom Instruction ·

ii. Laboratory Instructions

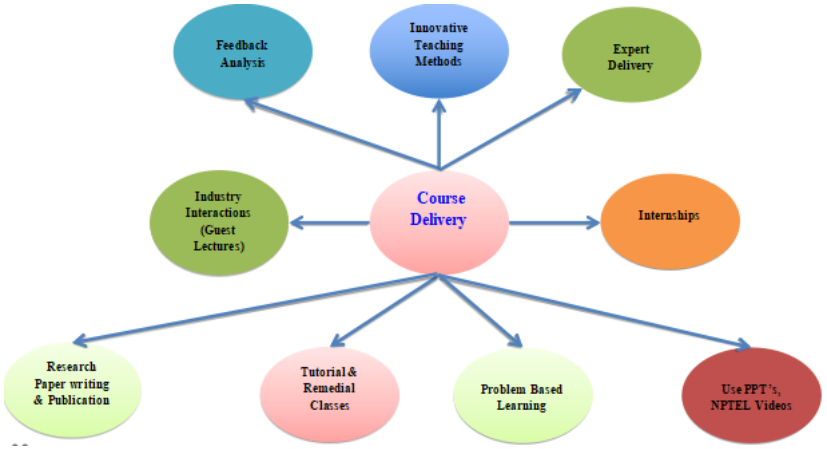


Figure.2.3. Course Delivery

For an effective teaching we adopted various pedagogical approaches:

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

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.

I. Classroom Instructions:

Faculty members use this delivery method for delivering the content of all the courses. This mode enables direct interaction between the teacher and the student, allows the student to ask questions, clarify doubts. Quality of teaching is a very important factor for quality learning.

The following aspects are considered to ensure a good quality classroom teaching:

- Chalk and Talk
- ICT enabled classrooms (Interactive Whiteboards, Educational Videos,Game-Based Learning Apps,Interactive Quizzes and Polls,Online Resources,assessment tools) for effective learning.
- Virtual mode of delivery during pandemic situations
- lActive learning

Students are encouraged to participate in groups to discuss about topics from and beyond the courses. Basically, this activity helps them to improve their professional skills, team work, and leadership skills along with communication skills. In addition to day-to-day teaching method,guest lectures and workshops are conducted to aid the conventional instruction of the courses and help the students to interact with industry people to enhance the knowledge on current trends which helps the students to do the Internships and major projects in industries. The main theme of organizing these events is to impart contents beyond the syllabus where both theory and practical sessions are conducted.

Sample pedagogical approaches we conducted in class room:

Name of the Activity: Think Pair Share

Course: Data Analytics

Name Of Topic: Types of Data Analytics

Year /Branch: 3rd Year CSE

Date of conduction: 12 Nov 2022

Think-Pair-Share (TPS) is a collaborative learning strategy where students first individually consider a question or problem, then discuss their thoughts with a partner, and finally share their ideas with the larger group.

Objective:
To deepen student understanding of the four main types of data analytics - **Descriptive, Diagnostic, Predictive, and Prescriptive**—through collaborative and reflective engagement using the **Think-Pair-Share** strategy.

Context:
The concept of "Types of Data Analytics" can often seem abstract and overlapping for students unless they are able to contextualize and compare them. The Think-Pair-Share method was adopted to promote **critical thinking**, **peer interaction**, and **concept clarification** in a structured, learner-centered environment.

Implementation Process:

1. **Think (Individual Reflection – 3 to 5 Minutes):**
    - o Each student was given a prompt such as:
      "Think of a real-world example where data is used to describe, analyze reasons, predict future events, or recommend actions."
    - o Students were asked to reflect silently and **write down brief definitions or examples** of each type of analytics based on their prior knowledge or intuition.
    - o This step promoted **individual accountability** and activated prior understanding.
2. **Pair (Collaborative Discussion – 5 to 7 Minutes):**
    - o Students were paired with a classmate to **compare their reflections**.
    - o Each pair discussed their interpretation of:
        - § **Descriptive Analytics:** What happened?
        - § **Diagnostic Analytics:** Why did it happen?
        - § **Predictive Analytics:** What is likely to happen?
        - § **Prescriptive Analytics:** What should be done?
    - o Through discussion, misconceptions were challenged, and examples were enriched.
    - o This allowed for **peer teaching** and **knowledge construction** through dialogue.
3. **Share (Class-wide Synthesis – 10 to 15 Minutes):**
    - o Each pair was invited to **share one type of analytics with a relevant example** with the whole class.
    - o As different examples emerged (e.g., sales dashboards, customer churn analysis, stock price prediction, traffic navigation), the instructor **facilitated clarification and comparison**.
    - o A **table/chart was drawn on the board** summarizing definitions, applications, and distinctions among the four types.
    - o Real-time feedback and reinforcement were given to validate learning or address confusion.

Observed Outcomes:

- · Students demonstrated **better conceptual clarity**, especially in differentiating Diagnostic and Predictive analytics, which often confuse learners.
- · The sharing phase brought in **diverse examples** from domains like healthcare, e-commerce, sports, and education, helping in **interdisciplinary understanding**.
- · Shy or hesitant students were more comfortable contributing in pairs, leading to **higher participation rates**.
- · The **collaborative learning atmosphere** reduced cognitive load and made abstract concepts more tangible.
- · The method reinforced the **progressive nature** of analytics types—from observation to insight to foresight to action.

Photographs for evidence:

Name of the Activity: Group Activity followed by Presentation

Course: Data Analytics

Name Of Topic: Object Segmentation, Tree Building/Decision Tree, Supervised and Unsupervised Learning, Over-under-exact fitting, Pruning

Year/Branch: 3rd Year CSE

Date of conduction: 02 Jan 2023

Objective of the Activity:

To promote collaborative learning and enhance conceptual understanding of advanced topics in data analytics through peer teaching, team-based discussions, and critical engagement with learning materials.

Methodology:

1. **Group Formation:**
    - o The class was divided into **five groups**, with **approximately 8 students** in each group.
    - o Each group was assigned **one specific topic** from the list above.
2. **Resource Sharing:**
    - o Curated **learning materials** (videos, PDF's, and textbook references) were shared with the students in advance.
    - o Students were encouraged to study the content **individually** before engaging in team planning.

1. **Team Collaboration and Planning:**
    - o Each group worked together to:
        - Clarify and strengthen individual understanding.
        - Divide subtopics or concepts among members.
        - Plan and prepare a **coherent team presentation**.
    - o Emphasis was placed on **teamwork, clarity of delivery and relevance of examples**.
2. **Group Presentations:**
    - o Each group presented their topic to the class.
    - o Presentations included a mix of explanations, examples, and where applicable, **visuals or flowcharts** (especially for decision tree concepts).

3. **Audience Engagement:**

o During and after each presentation, I posed **follow-up questions to the audience** to check understanding.

o Peers were encouraged to ask clarifying questions, thereby creating a **dialogic learning environment**.

4. **Post-Activity Survey:**

o A short **feedback survey** was conducted at the end of the session.

o Students were asked to rate:

- Their **own understanding of the topic** before and after the activity.
- The **effectiveness of peer presentations**.
- Their experience of working in a team.

Outcomes Observed:

· **Increased Conceptual Clarity:** Students displayed improved understanding of abstract concepts like over fitting and pruning, which were previously found challenging.

· **Peer Learning Impact:** Students reported that hearing explanations from peers, in relatable terms, helped reinforce their learning.

· **Communication Skills:** Students got an opportunity to present in front of peers, enhancing their **public speaking and presentation skills**.

· **Teamwork and Ownership:** Group members took ownership of their learning and supported each other through discussions and shared preparation.

· **Engaged Classroom Environment:** Active participation and questioning led to a **highly interactive session**.

Reflections and Suggestions:

· Some students proposed the idea of disseminating exemplary slides or structural templates for forthcoming group presentations.

· A few students expressed a desire to include **mini-application demos** or case-based examples to better link theory to practice.

· Overall, students rated this format as highly beneficial for **active learning and team collaboration**.

Photographs for Evidence:

Here's a basic rubric for student Activities with a total of **5 marks**, formatted as a table:

Criteria	Excellent (5)	Good (4)	Satisfactory (3)	Needs Improvement (2)	Poor (1)
Content	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	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	Well-designed, clear, and relevant slides/visuals hat enhance understanding	Good visuals but minor issues with clarity or relevance	Basic visuals, somewhat helpful but lacki ng impact	Poorly designed visuals, difficult to follow	No visuals or irrelevant visuals
Q&A Handling	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

Table 2.1.1. Rubrics for Student Activities

II. Laboratory Instructions:

Laboratory instruction aids classroom instruction by giving practical knowledge to the students about topics they have learnt in theory. Students will get exposure with equipment in laboratory and analytical thinking will be enhanced in solving complex engineering problems. The snapshots of conduction of electrical machines and control systems laboratory in conventional and virtual mode respectively.

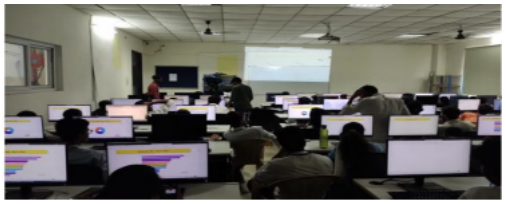


Figure.2.4. Laboratory - Delivery Methods

Activity Based Learning / Self Learning:

i. **Course Level Projects (CLP) :** the purpose of the CLP is

- To apply theoretical knowledge to practical or real-world problems.
- To encourage teamwork, critical thinking, and problem-solving.
- To promote research, innovation, and documentation skills

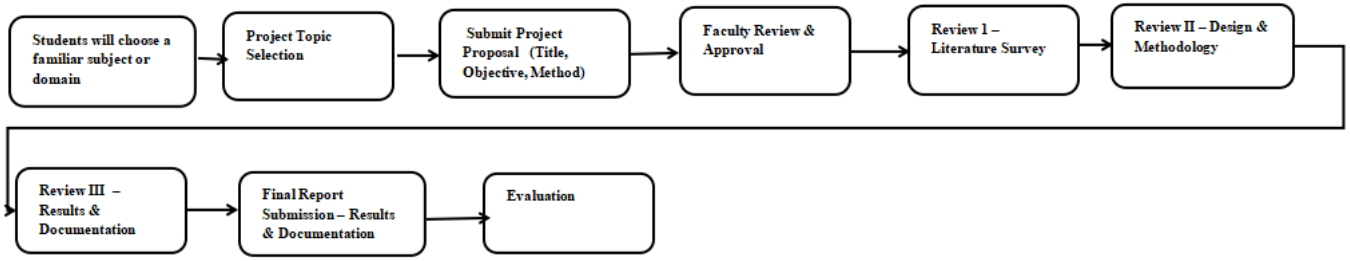


Figure.2.5. CLP Process

- These course-level projects span diverse domains such as Machine Learning, Natural Language Processing (NLP), Internet of Things (IoT), and Data Visualization. The objective is to provide students with hands-on experience in designing and analyzing real-world applications. Projects include predictive models for house pricing, loan approval, and fake news detection; recommendation systems for movies and books; and NLP applications like text summarization. IoT-based projects focus on monitoring air quality and agriculture, while R programming is used for data scraping, visualization, and dashboard development. Additional projects cover speech emotion recognition, sonar-based classification, reinforcement learning (self-driving car simulation), waste management, and e-commerce for refurbished products. Students present their methodologies, challenges, and outcomes, enhancing their problem-solving abilities and preparing them for industry by integrating theoretical concepts with practical implementation.

  33 projects were submitted based on the above domains.

  Sample Problem statement: Loan approval processes in banks are vital for profitability, yet identifying reliable borrowers is challenging, leading to errors and delays. Manual evaluations often fail to distinguish genuine applicants from potential defaulters, impacting financial health and inconveniencing applicants.To address this, we intend to develop a genuine loan applicant prediction powered by machine learning, specifically a Support Vector Machine (SVM), for predicting loan outcomes. This solution automates evaluation, enabling swift identification of eligible candidates. By inputting applicant data, banks can receive instant predictions, reducing processing time and biases. This benefits both banks and applicants by streamlining approval processes and enhancing decision-making accuracy.

A Course Level Project Report
On

WASTE MANAGEMENT SYSTEM USING MACHINE LEARNING

In partial fulfilment of the requirements for the award of

BACHELOR OF TECHNOLOGY

in

Computer science and engineering

CH. LAKSHMI NIKITHA(21E51A0517)

E. RANADEESH (21E51A0528)

C. MANOJ KUMAR (22E55A0504)

D. VAISHNAVI (21E51A0524)

Under the guidance of

T. Raghavendra Gupta

Associate Professor

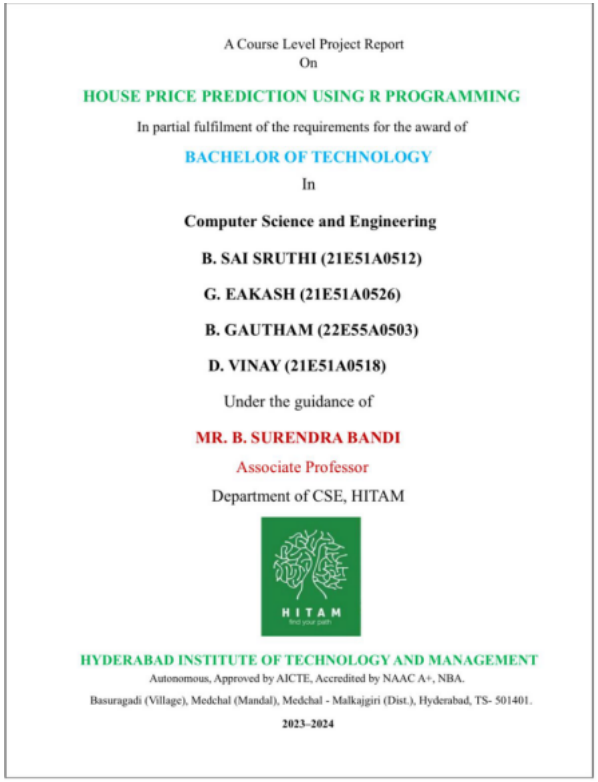
Department of CSE, HITAM

HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT

Autonomous, Approved by AICTE, Accredited by NAAC A+, NBA.

Basuragadi (Village), Medchal (Mandal), Medchal - Malkajgiri (Dist.), Hyderabad, TS- 501401.

2023–2024



A Course Level Project Report
On

HOUSE PRICE PREDICTION USING R PROGRAMMING

In partial fulfilment of the requirements for the award of

BACHELOR OF TECHNOLOGY

In

Computer Science and Engineering

B. SAI SRUTHI (21E51A0512)

G. EAKASH (21E51A0526)

B. GAUTHAM (22E55A0503)

D. VINAY (21E51A0518)

Under the guidance of

MR. B. SURENDRA BANDI

Associate Professor

Department of CSE, HITAM

HITAM

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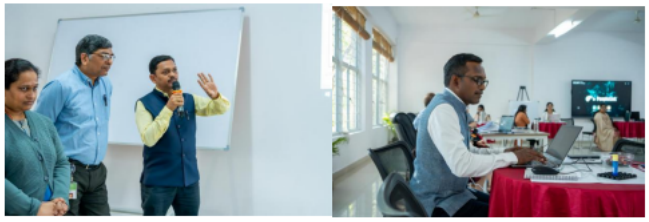
Basuragadi (Village), Medchal (Mandal), Medchal - Malkajgiri (Dist.), Hyderabad, TS- 501401.

2023–2024

Figure.2.6. Project report sample copy

- **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 CSE Students. This approach enhances experiential learning and prepares students for practical applications in their careers.



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 CSE students. We were successful in implementing it. The student Learning Outcomes were achieved. The head of the team Prof. Xiang yun du appreciated and posted in her Linked in.

Fig 2.7. Prof. Xian Yundu, Head PBL from Aalborg University

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:

Require support of another faculty.

Number of Students Participated: 64

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 students interests and suggestions for effective implementation for further semesters.

i. **Research Paper Writing:** This pedagogy is designed to develop students research aptitude and technical writing skills. The goal is to encourage exploration of new ideas, critical thinking, and scholarly contributions to the academic community. Students begin by selecting a research topic, conducting a literature review, and formulating their study. Faculty mentors guide them in structuring their paper and improving content quality. Upon completion, the papers submitted to conferences or journals, providing students with an opportunity to showcase their work beyond the classroom.

- Apart for these all 21 PBL projects are converted into papers and got published in UGC journal

iii. **Leadership Development:** HITAM cultivates leadership through structured activities:

Student Clubs and Chapters:

a) IEEE Student Chapter, IETE Forum, and IGBC Student Chapter

b) Toastmasters Club: Develops public speaking and leadership skills. Roles like Toastmaster of the Day, Timer, Evaluator, and President are assigned to students. Example: *Akshitha Thakur* rose to become Area Director.

c) TEDxHITAM : A flagship event that is entirely student-led, helping participants develop communication and organizational skills.

d) NGO's: NGO's Sahaya, For a Cause, Arutla foundation established by HITAM students

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

f) Grand Challengers Scholor Program (GCSP):GCSP is a prestigious initiative aligned with the National Academy of Engineerings (NAE) vision to prepare students to tackle pressing global issues through interdisciplinary approaches.

g) Student Self Governance (SSG):SSG promotes student leadership by allowing students to take ownership of campus activities, events, and decision-making

h) Affinity Clubs: HITAM offers a dynamic student life through its 13 prominent Affinity Clubs, which nurture a range of interests and talents among students (Toastmasters Club, Photography Club, Cultural Club,Yoga Club, Dance Club, Comedy Club, Coding Club, Art & Craft Club, Sports Club, Boxing Club, Wellness Club, Google Developer Student Club and NCC & NSS).

C. Quality of Classroom teaching:

For Quality classroom teaching faculty uses ICT facilities involving the integration of information and communication technology tools to support the teaching and learning process. This includes the use of projectors, smart boards, computers, and WiFi devices to present subject content. Spacious classrooms provided with natural air circulation through green building initiatives. Faculty use digital resources such as presentations, videos, simulations, and learning management systems to explain concepts and provide additional reference materials. ICT tools also support 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.

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
- **Cycle 2:** Completed after Mid-Term

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. 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.

Rubrics for Day to Evaluation:

<table>
<tr><td colspan="5">CIE (30M)</td><td rowspan="3">SEE (70M)</td></tr>
<tr><td colspan="4">Day to Day Evaluation (20M)</td><td rowspan="2">TEST (10M)</td></tr>
<tr><td>Observation (5M)</td><td>Record (5M)</td><td>Experiment Execution(5M)</td><td>Viva (5M)</td></tr>
</table>

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	Performes 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 2.1.2 Rubrics for Day to Day Evaluation in Laboratory

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—based on key academic 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).

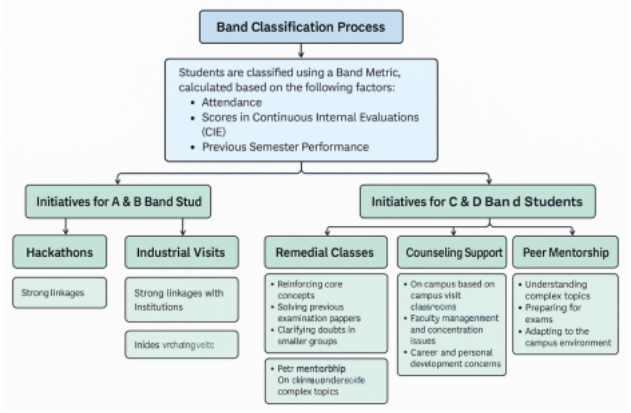


Figure.2.8.Student Progression Framework

Band Classification Process:

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

- Attendance
- Scores in Continuous Internal Evaluations (CIE)
- Current CGPA
- Active Backlogs

Attendance contribute towards the Band Metric

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

CIE contribute towards the Band Metric:

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

Backlogs contribute towards the Band Metric:

No.of Active Backlogs	Contribution Towards Band Score
More than 5	0
4	5
3	10
2	20
1	30
0	

Initiatives for A & B Band Students: HITAM provides value-added opportunities for students in the A and B categories:

1) 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 A and B band students to apply theoretical knowledge to industry-relevant challenges. Mentorship, labs, and software access are provided to support student participation in national and international hackathons.

2) Industrial Visits: HITAM has built strong linkages with reputed organizations such as Olectra, NRSC, T-Hub, BHEL, CITD, HBL, CII-IGBC, and others. Students in A and B bands 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.

1) Toastmasters Club

2) TEDxHITAM

3) Grand Challengers Scholar Program (GCSP)

4) Student Self Governance (SSG): SSG allows students can be faculty, Student HOD and improving leadership qualities by allowing students to take ownership of campus activities, events, and decision-making.

Initiatives for C & D Band Students: Recognizing the academic and personal challenges faced by students in C and D categories, HITAM 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 engage in 1:1 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:** Peer students and 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

Sample Hackathons conducted by HITAM:

2.2

Industry Visits:

Sample counseling to the student by counselor/mentor:

2.2 Quality of Student Capstone Project (25)	Total Marks 22.00
	Institute Marks : 22.00

2.2 **Quality of Student Capstone Project (25):**

The primary aim of conducting the projects for the students is to inculcate and apply the knowledge gained through Theory and Lab based learning to provide solutions to real world problems. The students are encouraged to undertake a quality project which addresses the engineering, industrial, environmental, and societal needs.

The projects are divided into different major groups depending on the availability of the specialization of the faculty. The projects more or less allotted to the entire faculty on a uniform basis. To ensure the quality of project development, Professors are allowed to supervise up to 3 to4 projects; Associate Professors are allowed to supervise up to 5to 6 projects and Assistant Professor up to 2 to 3 projects.

Rubric for Approving Project Abstracts:

Criteria	Excellent – 5	Very Good – 4	Good – 2	Poor – 1
Problem Significance	Problem is highly relevant and significant to the domain; well explained.	Problem is relevant; significance is stated with some clarity.	Problem mentioned but not clearly justified or domain relevance weak.	Problem is vague or missing.

Purpose & Objectives	Purpose is clear and aligns fully with course/project outcomes.	Purpose is mostly clear; objectives broadly align with course goals.	Purpose is unclear or partially aligns with outcomes.	No clear purpose or objectives stated.
Methodological Approach	Detailed and logical approach/methodology proposed; shows technical understanding.	Adequate methods proposed with logical flow.	Some methods mentioned, but not coherent or technically sound.	No clear methods or incorrect technical approach.
Innovation / Novelty	Idea is novel, creative, or addresses an existing issue in a new way.	Idea has some originality or useful application.	Idea is somewhat common or lacks innovation.	Copy-paste topic; lacks originality or effort.
Feasibility	Clearly feasible within course duration; tools/resources well-identified.	Mostly feasible with some clarity on timeline/tools.	Feasibility not clearly assessed; missing timeline or vague resources.	Unrealistic or vague plan without feasibility evidence.
Expected Outcomes	Specific, measurable, and realistic outcomes described.	Outcomes described but slightly general.	Outcomes mentioned but not measurable or realistic.	No outcomes mentioned or unrealistic.
Relevance to Course Outcomes	Strong and direct alignment with COs/POs; clearly mentioned.	General alignment with COs; mostly relevant.	Weak connection to course outcomes.	No visible link to COs or academic relevance.
Literature/Background Work	Demonstrates good awareness of related work or existing solutions.	Some related work reviewed.	Little background research evident.	No references or context provided.
Language & Presentation	Professionally written, clear and error-free.	Minor grammatical errors; mostly clear.	Multiple errors but understandable.	Poor grammar; abstract hard to follow.

Table 2.1.3 Rubrics for Approving Project Abstracts

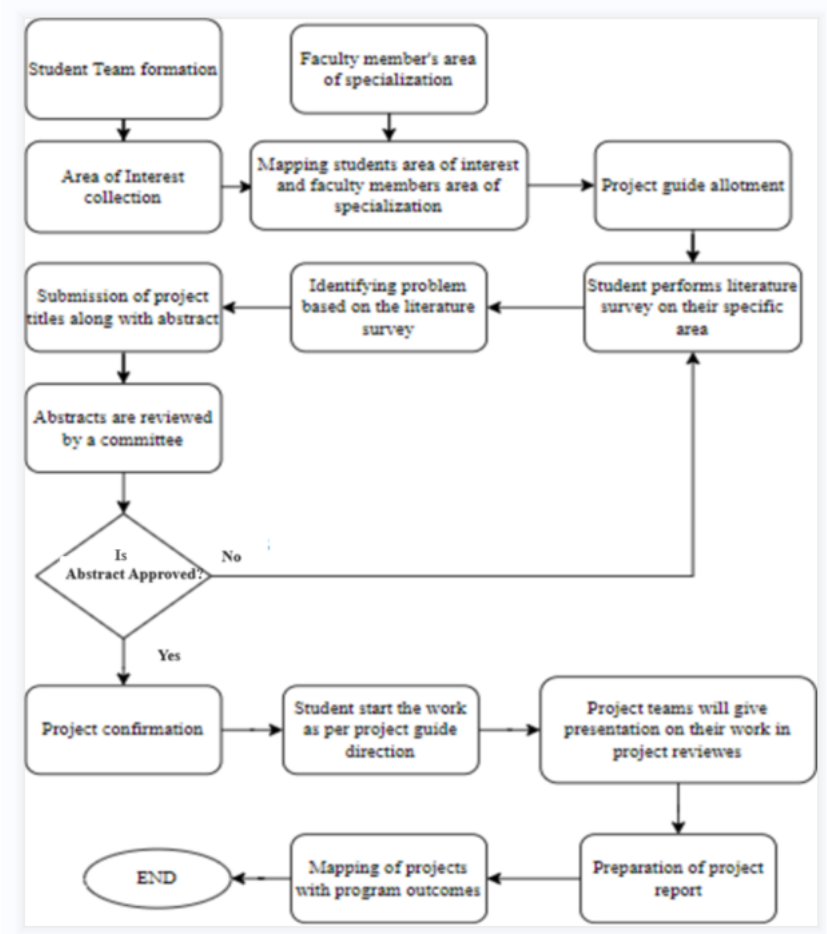


Figure.2.9.Identification of the projects and allocation methodology to faculty

Faculty Specialization:

SNo	Faculty Name	Designation	Specialization
1	Dr.S.Arvind	Professor	WSN
2	Dr. T Satish Kumar	Associate Professor	Cloud, Networks, IOT
3	Dr.Padmaja.Pulicherla	Professor	Software Reliability Engineering
4	Dr M V A Naidu	Associate Professor	Data Science
5	Dr. M.Rajeshwar	Associate Professor	Deep learning
6	Dr G Aparna	Associate Professor	Deep learning

7	Mr. B Surendra	Associate Professor	Data Analytics
8	Mr.T Raghavendra Gupta	Associate Professor	Machine Learning & AI
9	Mr.S V Hemanth	Associate Professor	Image processing and deep learning
10	K.RaviKumar	Associate Professor	Cloud computing and Networks
11	Mr.Dharmendra K Roy	Associate Professor	Machine learning and IoT Security
12	K veena	Asst.Professor	Data Analytics
13	Mrs.K.Krishna jyothi	Asst.Professor	AI and Coud Computing
14	Mrs. C Surekha	Asst.Professor	Machine learning
15	Mr. Periyaswamy	Associate Professor	ML and DL
17	Mr D Manikantha	Asst.Professor	Artificial Intellgience
18	Mr.Shaik. Meer Subhani Ali	Asst.Professor	Artificial Intellgience
19	Mr.Thambi Joseph	Asst.Professor	Networking
21	Mr. Nethani Shivakumar	Asst.Professor	Network Security
22	Mr.Bhaskar Das	Asst.Professor	Neural Network and Deep Learning
23	Mr.V Navakishor	Asst.Professor	Machine learning
24	Ms.Richa Tiwari	Asst.Professor	Data Analytics
25	Ms.CH. MEGHANA	Asst.Professor	Artificial Intelligence
26	Ms.P Ramana	Asst.Professor	Data Mining and Data Analytics
27	Mr.Bobby K Simon	Asst.Professor	Full Stack web Development
28	Mr.G Chandra Shaker	Asst.Professor	cyber security

Implementation process:

The project implementation process is structured into three phases:

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.

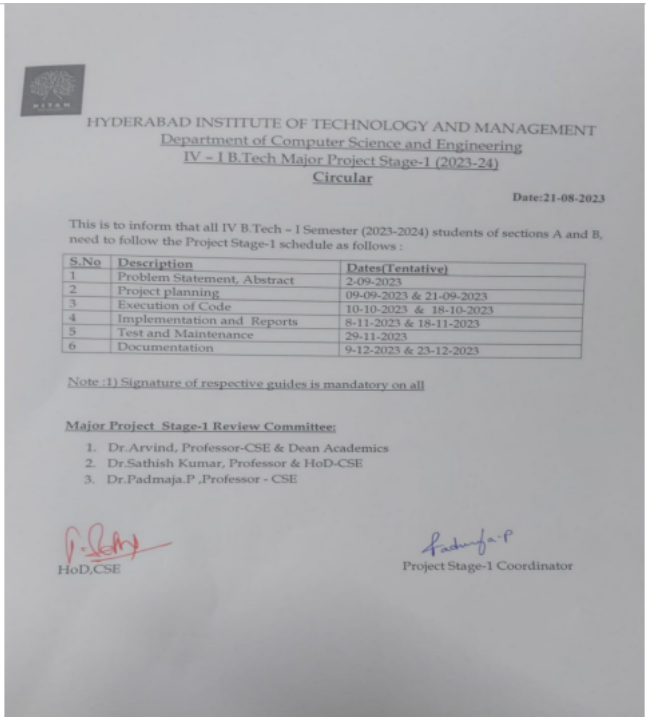
The final review serves as the comprehensive evaluation of the completed project. At this stage, the PRC assesses the overall quality of the work, implementation of the proposed solution, technical innovation, and effectiveness in addressing the problem statement.

After the final review, students prepare a detailed report following the sample template shared by the Project Coordinator. This report 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.

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.

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.



HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT
Department of Computer Science and Engineering
IV – I B.Tech Major Project Stage-1 (2023-24)
Circular

Date:21-08-2023

This is to inform that all IV B.Tech – I Semester (2023-2024) students of sections A and B, need to follow the Project Stage-1 schedule as follows :

S.No	Description	Dates(Tentative)
1	Problem Statement, Abstract	2-09-2023
2	Project planning	09-09-2023 & 21-09-2023
3	Execution of Code	10-10-2023 & 18-10-2023
4	Implementation and Reports	8-11-2023 & 18-11-2023
5	Test and Maintenance	29-11-2023
6	Documentation	9-12-2023 & 23-12-2023

Note :1) Signature of respective guides is mandatory on all

Major Project Stage-1 Review Committee:

1. Dr.Arvind, Professor-CSE & Dean Academics
2. Dr.Sathish Kumar, Professor & HoD-CSE
3. Dr.Padmaja.P ,Professor - CSE

HoD,CSE

Project Stage-1 Coordinator

HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

PROJECT STAGE - II REVIEW - I EVALUATION FORM

IV B. Tech - II Semester

Criteria	**Excellent (6 Marks)**	**Good (4–5 Marks)**	**Needs Improvement (0–3 Marks)**
Scope and Relevance (Technical/SDG)	Clearly defines the problem, significance, and reviews comprehensive and updated literature.	Defines topic and reviews relevant, but limited or outdated literature.	Attempts definition; literature review is insufficient or outdated.
Analysis and Synthesis	Critically analyzes themes, trends, gaps; synthesizes insights.	Analyzes themes and gaps; compares perspectives to some extent.	Attempts analysis with limited synthesis or comparison.
Critical Evaluation	Evaluates strengths, weaknesses, biases, limitations of literature.	Identifies some strengths and weaknesses; evaluates credibility moderately.	Basic evaluation; lacks critical assessment of sources.
Citation and Referencing	All sources correctly cited in-text and in reference list.	Some inconsistencies in citation, but most sources cited correctly.	Inconsistent or incorrect citation; some sources not cited.
Organization and Presentation	Logically structured, clear, free of grammar errors.	Generally organized and clear with few language errors.	Disorganized or unclear; contains multiple grammar issues.

HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

PROJECT STAGE - II REVIEW - II EVALUATION FORM

IV B. Tech - II Semester (2024-25)

Criteria	Excellent (6 Marks)	Good (4–5 Marks)	Average (2–3 Marks)	Poor (0–1 Marks)
Understanding of the Project	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 key technical aspects.	Shows a basic understanding but lacks clarity on some technical details.	Limited understanding of goals and challenges.
Project Methodology	Clearly outlines chosen methodology for research, design, implementation, and testing with strong justification.	Describes a well-defined methodology but may lack detailed justification.	General approach presented but lacks clarity or suitability.	Methodology is unclear or poorly defined.
Progress on Work	Significant progress made across all aspects, meeting or exceeding milestones.	Steady progress with some tasks completed as planned.	Limited progress; may be falling behind schedule.	Minimal or no progress on project tasks.
Technical Content	Strong understanding of relevant concepts; uses appropriate technical language accurately.	Good understanding with minor inaccuracies.	Limited knowledge with noticeable errors.	Weak technical understanding; major conceptual gaps.
Project Management	Effectively manages time, resources, and risks; communicates updates clearly.	Good management with some planning and communication gaps.	Limited skills; potential delays or resource issues; poor communication.	No clear plan or communication; disorganized.

HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

PROJECT STAGE - II REVIEW - III EVALUATION FORM

IV B. Tech - II Semester (2024-25)

Criteria	Excellent (5 Marks)	Good (3–4 Marks)	Satisfactory (1–2 Marks)
Project Completion	All objectives fully met; output is complete, functional, and of high quality.	Most objectives achieved; output is functional with minor gaps.	Partial completion; key components missing or non-functional.
Innovation & Creativity	Highly innovative solution or creative approach; exceeds standard expectations.	Shows some original thinking or enhancements over basic solutions.	Conventional approach with limited or no innovation.
Technical Execution	Strong implementation with appropriate tools, minimal errors, and adherence to standards.	Mostly accurate implementation with minor technical issues.	Basic implementation with noticeable technical flaws or inefficiencies.
Documentation	Well-structured, detailed documentation covering all phases (design, implementation, testing, outcomes).	Adequate documentation; minor sections missing or lacking detail.	Poor or incomplete documentation; lacks clarity or important content.
Presentation & Demo	Clear, confident presentation; smooth demo showing all functionalities effectively.	Presentation is understandable; demo mostly works with minor glitches.	Basic or unclear presentation; demo is weak or partially working.
Teamwork / Individual Effort	Excellent collaboration and equal contribution / strong and balanced individual effort.	Good contribution and coordination; some uneven effort.	Poor coordination or unequal effort / difficulties in managing all project aspects.

Table 2.1.4 Rubrics Project Evaluation

Evaluation of Project work:

Student(s) shall start the Project Work during the VII Semester (IV-B. Tech–I–Semester) as per the instructions of the Project Guide / Project Supervisor assigned by the Head of the Department. The topics for Mini Project, Summer Internship, Project Stage – I shall be different from one another.

a) 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.

b) The project Stage-1 work shall be evaluated for 100 marks for end-semester evaluation by PRC. The project Stage-2 work shall be evaluated for 100 marks out of which 30 marks for internal evaluation and 70 marks for end-semester evaluation. The project work shall be somewhat innovative in nature, exploring the research bent of mind of the student.

Criteria to select Best project in PROJECT EXPO

Project expo is organized to display the proto types/ simulation to the Experts from Industry and academia. The Experts suggest the participants about the scope of the project for patent/start-up.

Date: _____

Assessment Sheet, 10 Marks for each point

S. No	Parameters
1	Presentation Skills (On the basis of communication, Way of Explanation, Confidence Level)
2	Innovation (On the basis of level of innovation in the project as compared to the existing system)
3	Execution (On the basis of working condition of the presented model)
4	Application (On the basis of usefulness of the project to the society)
5	Technical Skills (On the basis of application of engineering techniques to make the model)
	Total Marks – 50

Department of Computer Science and Engineering

Batch No.	Presentation Skills(10)	Innovation (10)	Execution (10)	Application (10)	Technical Skills(10)	Total (50)

Projects Classification, Implementation, Justification PO/PSOs Addressed

Batch	Roll no.s	Names	Major PROJECT TITLE	Classification	PO/PSO Addressed	Justification
1	20E51A0502	Abhishek Kant Sinha	Social media and misleading information -TRL 4	Machine Learning/ AI	PO1, PO2, PO3, PO7, PSO1	Helps combat fake news and misinformation spread online.
	20E51A0504	Anwesha Sathua				
	20E51A0518	Drishti Kumari				
	20E51A0517	Shyam Kumar				
2	20E51A0505	A.Sathwika	Beyond Breath- Analysing cough sounds to predict lung infection - TRL 5	Machine Learning/ AI	PO1, PO3, PO4, PO7, PSO2	Aids in early disease detection and remote healthcare monitoring.
	20E51A0513	Ch SaiDeepthi				
	20E51A0515	D.Poojitha				
	20E51A0532	K.Pravalika				

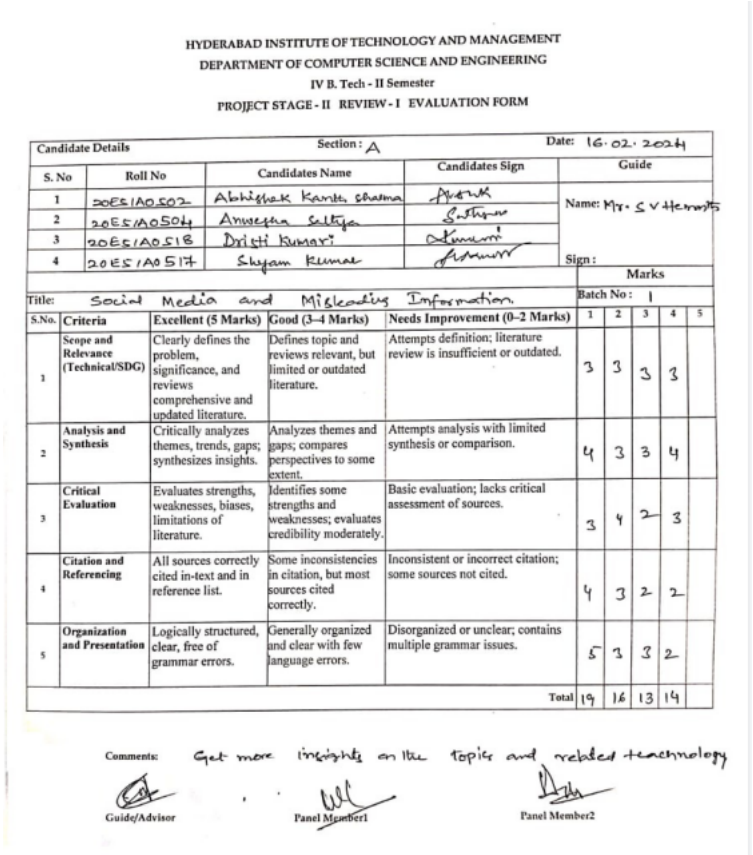
3	20E51A0510	B.Samanvi Reddy	career guidence-TRL 4	Application	PO2, PO5, PO6, PSO1	Helps users make informed career decisions.
	20E51A0538	K.N.Sravanthi				
	20E51A0529	J.Dhanusha				
	20E51A0506	A.Yuva Sree				
4	20E51A0534	k.Deepak	Real time vehicle collision detection using Machine Learning-TRL 5	Machine Learning/ AI	PO1, PO3, PO4, PO7, PSO2	Enhances road safety by detecting and preventing collisions.
	20E51A0507	B.Raju				
	20E51A0571	S.Surya teja				
	20E51A0579	V.Yamalaiah				
5	20E51A0531	K.Jagadeesh	Lightweight network for real time face verification using deep learning techniques-TRL 5	Machine Learning/ AI	PO1, PO3, PO5, PO7, PSO2	Improves security in authentication systems.
	20E51A0516	D.Gopichand				
	20E51A0509	B.Dhanush Yadav				
	20E51A0520	E.Mahalakshmi				
6	20E51A0511	B. Monika Lakshmi	Eye controlled virtual mouse -TRL 4	Application	PO2, PO3, PO4, PO6, PSO1	Enhances accessibility for users with disabilities.
	20E51A0512	B. Rohini				
	21E55A0506	D. Swetha				
	21E55A0517	T. Praveen				
7	20E51A0519	D.HARI KRISHNA	Crop Disease Detection using Deep Learning-TRL 5	Machine Learning/ AI	PO1, PO3, PO4, PO7, PSO2	Helps farmers take timely action to protect crops.
	20E51A0526	SURENDER				
	21E55A0501	SIDHARTH				
	21E55A0507	ANEESH				
8	20E51A0521	G.Eshwar	FarmIN - Supply Chain Management -TRL 4	Application	PO1, PO2, PO5, PO6, PSO1	Improves transparency and efficiency in the agricultural supply chain.
	20E51A0523	G.Uday				
	20E51A0524	G.Rohith				
	20E51A0525	G.Rajesh				
9	21E55A0510	L Chandra Mahesh	SEGMENTATION METHOD FOR TUMUOR DETECTION IN MRI IMAGES-TRL 5	Machine Learning/ AI	PO1, PO3, PO4, PO7, PSO2	Aids in early and accurate diagnosis of tumors.
	21E55A0505	B Sai kiran				
	20E51A0527	G Maniker Reddy				
10	20E51A0533	K.Shamala	Hand Gesture Recognition System Using Mediapipe-TRL 5	AI-based (Computer Vision & Hand Tracking)	PO1, PO3, PO5, PO6, PSO2	Gesture-based systems provide an intuitive way of interacting with devices without physical touch.
	20E51A0530	K.Akshaya				
	21E55A0508	K.Nitin				
	21E55A0502	B.Sravani				

11	20E51A0501	Abhed Chainani	Intellidev-TRL 4	Application	PO1, PO2, PO5, PO6, PSO1	Enhances software development efficiency.
	20E51A0503	A Krishna Kartheek				
	20E51A0514	C Anantha Sai Praneeth				
	20E51A0535	Kaustubh S				
12	21E55A0503	B Nagababu	Advance Lane and Vehicle Detection -TRL 5	Machine Learning/ AI	PO1, PO3, PO4, PO7, PSO2	Improves road safety and autonomous vehicle navigation.
	21E55A0509	K Ajay				
	20E51A0536	K Sita Ram				
13	20E51A0539	K.Supriya	Fake News Detector in Live Websites Using Text Vectoring and Neural Networks-TRL 5	Machine Learning/ AI	PO1, PO2, PO4, PO7, PSO1	Helps in reducing misinformation and increasing media reliability.

Batch	Roll no.s	Names	Major PROJECT TITLE	Classification	PO/PSO Addressed	Justification
1	20E51A0564	P. Tejaswini	Smart Travel :Your ultimate itinerary companion-TRL 4	Application	PO2, PO5, PO6, PSO1	Enhances travel planning efficiency and user experience.
	20E51A0560	P. Umesh Chandra				
	20E51A0578	T. Jyothi				
	20E51A0544	M. Deeksha				
2	20E51A0572	Sanam Venkata Manasa	Hosting a web application on Aws cloud platform -TRL5	Cloud	PO3, PO5, PO6, PO12, PSO2	Ensures scalability, security, and remote accessibility.
	20E51A0567	Reddy Sahithya				
	20E51A0583	Mahalaxmi Sai				
	20E51A0545	Tejarani				
3	20E51A0547	Mohd Abdul Lateef	Medical Prescription Optical Character Recognition-TRL 5	Machine Learning/ AI	PO1, PO3, PO4, PO7, PSO2	Improves accuracy in prescription handling and reduces human errors.
	20E51A0546	Mohd Abdul Mufasil				
	20E51A0548	M Ganesh				
	20E51A0549	M Pavan Kumar				
4	20E51A0552	Nara Adhitya Raj	Paperless medical history application-TRL 4	Application	PO1, PO2, PO6, PSO1	Enhances accessibility and security of medical records.
	20E51A0550	Myakala Sai Sudhir				
	21E55A0513	P Abhishek				
	20E51A0582	Vantakala Pooja				
5	20E51A0551	Naga Tanusri Nukala	PROTO: A Cutomized Assistant to optimise Personal Tasks-TRL 4	Machine Learning/ AI	PO2, PO3, PO5, PO6, PSO2	Automates task management and improves user productivity.
	20E51A0568	R Rishikesh Reddy				
	20E51A0553	Neha B				
	20E51A0581	V Sandeep Kumar Yadav				
	20E51A0562	Prakash Saw				

6	20E51A0556	Nithul KC	Text Hidingg Using LSB-TRL 4	Application	PO1, PO3, PO6, PO12, PSO1	Provides a secure method for confidential communication and data hiding.
	20E51A0554	Nehal Kumar Singh				
	20E51A0573	Srikar Reddy				
7	20E51A0555	N Aditya Srinivas	Blockchain Based System For Handling Academic Records-TRL 4	Application	PO1, PO6, PO7, PO12, PSO1	Ensures transparency, security, and tamper-proof elections.
	20E51A0584	vineela varshini kunchala				
	21E55A0514	Shiva Charan Reddy Kallem				
	21E55A0519	vemulapalli soma shekar rao				
8	20E51A0577	Syed Zoya Mehak	lost and found-TRL 4	Application	PO2, PO5, PO6, PSO1	Helps users recover lost items and connect with finders efficiently.
	20E51A0580	V . Vinod Chandra				
	20E51A0557	P. Sai Samraat				
	21E55A0512	M.Soumya				
9	20E51A0558	P . Sharath chandra	Medicine and Alternative Medicine Recommendation SystemTRL 5	Machine Learning/ AI	PO1, PO2, PO4, PO7, PSO2	Improves accuracy in prescription handling and reduces human errors.
	20E51A0559	P . Rushith Kumar				
	20E51A0561	P . Rohith reddy				
	20E51A0576	S . Dhanush				
10	20E51A0575	S Sneha Reddy	Twitter Bot detection using URL features and learning automata TRL 5	Machine Learning/ AI	PO1, PO3, PO4, PO7, PSO2	Enhances online security by detecting malicious bot activities and preventing misinformation spread.
	20E51A0574	Shinde Vinayak Rao Patil				
	20E51A0569	R Nithin				
	20E51A0528	G Keerthi				
11	20E51A0571	S Sai Surya Teja	REAL TIME VEHICLE COLLISION DETECTION USING BOUNDING BOX WITH ALERT SYSTEMTRL 5	Machine Learning/ AI	PO1, PO3, PO4, PO7, PSO2	Reduces traffic congestion and improves urban mobility.
	20E51A0579	V Yamalaiah				
	20E51A0507	B Raju				
	20E51A0534	K Deepak				
12	20E51A0585	Yarlagadda Ravitreyini Chowdary	Project Orchestrator-TRL4	Application	PO2, PO5, PO6, PO12, PSO1	Enhances productivity and efficient management of software development projects.
	21E55A0511	M.Naresh				
	21E55A0515	Srimanthula Shivachary				
	21E55A0516	Swarna Neeraj				
	20E51A0543	M.sravanth				Helps in monitoring and

13	20E51A0566	R.dhanush	Water Quality Prediction-TRL 5	Machine Learning/ AI	PO1, PO3, PO4, PO7, PSO2	improving water quality for public health and environmental safety.
14	19E51A0588 19E51A0531 19E51A05B0	Anand Vardhan E Balaraj T Shivaji	Malicious Web Content Detection Using Machine Learning-TRL 5	Machine Learning/ AI	PO1, PO3, PO4, PO7, PSO2	Protects users from phishing, malware, and fraudulent websites.



HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
IV B. Tech - II Semester
PROJECT STAGE - II REVIEW - I EVALUATION FORM

Candidate Details — Section: A — Date: 16.02.2024

S. No	Roll No	Candidates Name	Candidates Sign	Guide
1	20ES1A0502	Abhishek Kanth Sharma		Name: Mr. S V Hemanth
2	20ES1A0504	Anugna Sattya		
3	20ES1A0518	Drishti Kumari		
4	20ES1A0517	Shyam Kumar		Sign:

Title: Social Media and Misleading Information. — Batch No: 1

S.No.	Criteria	Excellent (5 Marks)	Good (3–4 Marks)	Needs Improvement (0–2 Marks)	Marks 1	2	3	4	5
1	Scope and Relevance (Technical/SDG)	Clearly defines the problem, significance, and reviews comprehensive and updated literature.	Defines topic and reviews relevant, but limited or outdated literature.	Attempts definition; literature review is insufficient or outdated.	3	3	3	3	
2	Analysis and Synthesis	Critically analyzes themes, trends, gaps; synthesizes insights.	Analyzes themes and gaps; compares perspectives to some extent.	Attempts analysis with limited synthesis or comparison.	4	3	3	4	
3	Critical Evaluation	Evaluates strengths, weaknesses, biases, limitations of literature.	Identifies some strengths and weaknesses; evaluates credibility moderately.	Basic evaluation; lacks critical assessment of sources.	3	4	2	3	
4	Citation and Referencing	All sources correctly cited in-text and in reference list.	Some inconsistencies in citation, but most sources cited correctly.	Inconsistent or incorrect citation; some sources not cited.	4	3	2	2	
5	Organization and Presentation	Logically structured, clear, free of grammar errors.	Generally organized and clear with few language errors.	Disorganized or unclear; contains multiple grammar issues.	5	3	3	2	
				Total	19	16	13	14	

Comments: Get more insights on the topics and related technology

Guide/Advisor — Panel Member1 — Panel Member2

2.3 Internship/Industrial Training (10) — **Total Marks 10.00**

Institute Marks : 10.00

2.3 Internship/Industrial Training (10):

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 that 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.

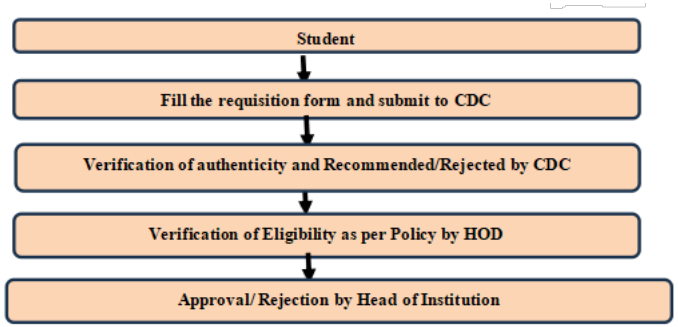


Figure 2.10. Internship process

Some of the companies where our Students did Internship as listed below

S.No	Name of Company	Company Logo
1	IIIT HYDERABAD	
2	Next 24 Tech Technology and services	
3	Web Stack Academy Emertxe	
4	Digital Bhem	
5	Niper-Hyderabad	
6	Palle Technologies	
7	Tisya Software Solutions Pvt Ltd	
8	Truecomet edutech pvt Ltd(Cynohub)	
9	Mentorness	
10	Exelr	

11	Moxiehawk Pvt Ltd	
12	Hanodale	
13	GIC	
14	SHEOPAL'S PVT LTD	
15	Uynite Technology Solutions	
16	EI Systems	
17	Global Technologies	
18	Vault of Codes	
19	Numetry	
20	Plausibility Solutions	
21	Devskill Hub	
22	Q Spiders	

1	20E51A0502	Abhishek Kant Sinha	Metaverse Technology	PO1, PO2, PO5, PO12	PSO1, PSO2
2	20E51A0504	Anwesha Sathua	Voice Morphing	PO1, PO2, PO3,	PSO1, PSO2

				PO5, PO12	
3	20E51A0518	Drishti Kumari	Forecasting Traffic Flow Using Data Analytics	PO1, PO2, PO3, PO5, PO12	PSO1, PSO2
4	20E51A0517	Shyam Kumar	Google Glass	PO1, PO2, PO3, PO5, PO12	PSO1, PSO2
5	20E51A0505	A. Sathwika	Power BI - Empowering Data Driven Decision Making	PO1, PO2, PO5, PO12	PSO1, PSO2
6	20E51A0513	Ch SaiDeepthi	Revolutionizing Cross-Platform App Development With Flutter	PO1, PO2, PO3, PO5	PSO1
7	20E51A0515	D. Poojitha	Sixth Sense Technology	PO1, PO2, PO3, PO5, PO12	PSO2

8	20E51A0532	K. Pravalika	Drone4Parcel5G	PO1, PO2, PO3, PO5, PO12	PSO1, PSO2
9	20E51A0510	B. Samanvi Reddy	I-Twin Limitless Pendrive Technology	PO1, PO2, PO5	PSO1
10	20E51A0538	K.N. Sravanthi	Datafication In Education: Leveraging Big Data For Personalized Learning	PO1, PO2, PO5, PO12	PSO2
11	20E51A0529	J.Dhanusha	Demystifying Docker: A Comprehensive Exploration Of Essential Devops Tool	PO1, PO2, PO5, PO12	PSO1
12	20E51A0506	A.Yuva Sree	Enhancing Security And Accuracy With Multibiometric Data Fusion	PO1, PO2, PO3, PO5	PSO1, PSO2
13	20E51A0534	k.Deepak	Digital Scent Technology	PO1, PO2, PO5	PSO2
14	20E51A0507	B.Raju	Blue Eye Technology	PO1, PO2, PO3, PO5	PSO2

15	20E51A0571	S.Surya teja	Smart Authentication	PO1, PO2, PO5	PSO1
16	20E51A0579	V.Yamalaiah	Fiber Space Laser Communication	PO1, PO2, PO5	PSO2
17	20E51A0531	K.Jagadeesh	Machine Eyes (Image Processing And CV)	PO1, PO2, PO3, PO5	PSO2
18	20E51A0516	D.Gopichand	Handwritten Digit Recognition Using Neural Networks	PO1, PO2, PO3, PO5	PSO2
19	20E51A0509	B.Dhanush Yadav	IoMT With AI For Early Disease Detection	PO1, PO2, PO3, PO5, PO12	PSO2
20	20E51A0520	E.Mahalakshmi	Edge Computing	PO1, PO2, PO5	PSO2
21	20E51A0511	B. Monika Lakshmi	Gi-Fi Technology	PO1, PO2, PO5	PSO2
22	20E51A0512	B. Rohini	3G-Vs-Wifi Interferometric Modulator (Imod)	PO1, PO2, PO5	PSO2

23	21E55A0506	D. Swetha	Firewalls	PO1, PO2, PO5, PO12	PSO1
24	21E55A0517	T. Praveen	Network Computing	PO1, PO2, PO3, PO5	PSO2
25	20E51A0519	D. Hari Krishna	Enhancing Reality	PO1, PO2, PO5, PO12	PSO2
26	20E51A0526	Surender	Metamorphic Malware	PO1, PO2, PO5	PSO1
27	21E55A0501	Sidharth	Smart Voting System	PO1, PO2, PO3, PO5	PSO2
28	21E55A0507	Aneesh	Neuralink	PO1, PO2, PO3, PO5	PSO2
29	20E51A0521	G. Eshwar	Evolution of 4G and 5G	PO1, PO2, PO5	PSO2

30	20E51A0523	G. Uday	Firebase	PO1, PO2, PO3, PO5	PSO1
31	20E51A0524	G. Rohith	Rainfall Prediction	PO1, PO2, PO3, PO5	PSO2
32	20E51A0525	G. Rajesh	E-Mail Spam Detection	PO1, PO2, PO3, PO5	PSO1
33	21E55A0510	L. Chandra Mahesh	Wireless Patient Monitoring System	PO1, PO2, PO3, PO5	PSO2
34	21E55A0504	B. Sandeep	Hybrid Electric Vehicles	PO1, PO2, PO5	PSO2
35	21E55A0505	B. Sai Kiran	Solid Waste Management	PO1, PO2, PO5	PSO2
36	20E51A0527	G. Maniker Reddy	Chatbot For Business Organisation	PO1, PO2, PO3, PO5	PSO1
37		K. Shamala	Crypto Watermarking	PO1, PO2,	

	20E51A0533			PO3, PO5	PSO1, PSO2
38	20E51A0530	K. Akshaya	5 Pen PC Technology	PO1, PO2, PO5	PSO1
39	21E55A0508	K. Nitin	Li-Fi Technology	PO1, PO2, PO5	PSO2
40	21E55A0502	B. Sravani	Mobile Computing	PO1, PO2, PO5	PSO1
41	20E51A0501	Abhed Chainani	Zero Knowledge Proofs	PO1, PO2, PO5	PSO1
42	20E51A0503	A. Krishna Kartheek	Gaussian Splatting	PO1, PO2, PO3, PO5	PSO2
43	20E51A0514	C. Anantha Sai Praneeth	Post Quantum Cryptography	PO1, PO2, PO5	PSO1
44	20E51A0535	Kaustubh S	Computer Aided Surgery	PO1, PO2, PO3, PO5	PSO2
45	21E55A0503	B. Nagababu	React JS	PO1, PO2,	PSO1

				PO3, PO5	
46	21E55A0509	K. Ajay	Splunk	PO1, PO2, PO5	PSO1
47	20E51A0539	K. Supriya	Digital Signature Authentication (Cryptography)	PO1, PO2, PO5	PSO1
48	20E51A0540	L. Geethika	Analysis Of Emphasis Words In Spoken Summarisation	PO1, PO2, PO3, PO5	PSO1
49	20E51A0542	M. Ram Sai Sathwik	Augmented Reality And Virtual Reality	PO1, PO2, PO3, PO5	PSO2
50	20E51A0564	P. Tejaswini	Air Powered Cars	PO1, PO2, PO5	PSO2
51	20E51A0560	P. Umesh Chandra	Data Driven Agriculture	PO1, PO2, PO3, PO5	PSO2
52	20E51A0578	T. Jyothi	Brain Computer Interfaces	PO1, PO2, PO3, PO5	PSO2
				PO1, PO2	

53	20E51A0572	Sanam Venkata Manasa	The Role Of Big Data In Business Transformation	, PO5 , PO12	PSO1, PSO2
54	20E51A0567	Reddy Sahithya	Green Computing	PO1 , PO2 , PO5	PSO2
55	20E51A0583	Mahalakshmi Sai	Smart Note Taker	PO1 , PO2 , PO3 , PO5	PSO2
56	20E51A0545	Tejarani	Night Vision Technology	PO1 , PO2 , PO5	PSO2
57	20E51A0547	Mohd Abdul Lateef	5G Wireless Technology	PO1 , PO2 , PO5	PSO2
58	20E51A0546	Mohd Abdul Mufasil	Near Field Communication	PO1 , PO2 , PO5	PSO2
59	20E51A0548	M. Ganesh	Big Data And Distributed Computing	PO1 , PO2 , PO3 , PO5	PSO1, PSO2
60	20E51A0549	M. Pavan Kumar	Advancement Collaborative Filtering For Enhanced Recommender	PO1 , PO2 , PO3 , PO5	PSO1, PSO2

61	20E51A0552	Nara Adhitya Raj	Unravelling Web3: A Blockchain Perspective	PO1, PO2, PO5	PSO2
62	20E51A0550	Myakala Sai Sudhir	Ethical Hacking	PO1, PO2, PO5	PSO1
63	21E55A0513	P. Abhishek	Nano Technology	PO1, PO2, PO5	PSO2
64	20E51A0582	Vantakala Pooja	Holographic Memory	PO1, PO2, PO5	PSO2
65	20E51A0551	Naga Tanusri Nukala	Web Crawlers: Mapping The Digital World	PO1, PO2, PO3, PO5	PSO1
66	20E51A0568	R. Rishikesh Reddy	Goal Line Technology	PO1, PO2, PO3, PO5	PSO2
67	20E51A0553	Neha B	Wearable Sensor Technology In IoT	PO1, PO2, PO3, PO5	PSO2
68	20E51A0581	V. Sandeep Kumar Yadav	Image Compression DJJ	PO1, PO2, PO3, PO5	PSO2

69	20E51A0562	Prakash Saw	Satellite Based Internet	PO1, PO2, PO5	PSO2
70	20E51A0554	Nehal Kumar Singh	Privacy Enhancing Technology	PO1, PO2, PO5	PSO1
71	20E51A0573	Srikar Reddy	Message Queuing Telemetry Transport	PO1, PO2, PO3, PO5	PSO1
72	20E51A0555	Nimmagadda A. Srinivas	Data Scraping	PO1, PO2, PO5	PSO1
73	20E51A0584	Vineela Varshini	Digital Preservation	PO1, PO2, PO5	PSO2
74	21E55A0514	Shiva Charan Reddy	Quantum Computing	PO1, PO2, PO5	PSO2
75	21E55A0519	Soma Shekar Rao	Cognitive Computing	PO1, PO2, PO5	PSO2
76	20E51A0577	Syed Zoya Mehak	Bi-Directional Long Short Term Memory	PO1, PO2, PO3, PO5	PSO2
				PO1, PO2,	

77	20E51A0580	V. Vinod Chandra	Generative Artificial Intelligence	PO3, PO5	PSO2
78	20E51A0557	P. Sai Samraat	Mixed Reality	PO1, PO2, PO3, PO5	PSO2
79	21E55A0512	M. Soumya	Predictive Analysis In Big Data	PO1, PO2, PO3, PO5, PO12	PSO1, PSO2
80	20E51A0558	P. Sharath Chandra	Database Security Issues, Challenges	PO1, PO2, PO5	PSO1
81	20E51A0559	P. Rushith Kumar	Biometric Authentication Technology	PO1, PO2, PO5	PSO1
82	20E51A0561	P. Rohith Reddy	Intelligent RAM	PO1, PO2, PO5	PSO2
83	20E51A0576	S. Dhanush	Auto Pilot Technology	PO1, PO2, PO3, PO5	PSO2
84	20E51A0575	S. Sneha Reddy	Contactless Control: Touchless Touchscreen Tech	PO1, PO2, PO5	PSO2

85	20E51A0574	Shinde Vinayak Rao Patil	AI-Powered CCTV Analytics: Enhancing Security & Surveillance	PO1, PO2, PO3, PO5	PSO2
86	20E51A0569	R. Nithin	Wireless Charging	PO1, PO2, PO5	PSO2
87	20E51A0528	G. Keerthi	Skinput Technology	PO1, PO2, PO3, PO5	PSO2
88	20E51A0571	S. Sai Surya Teja	Mobile Phone Cloning	PO1, PO2, PO5	PSO1
89	20E51A0579	V. Yamalaiah	Screenless Display	PO1, PO2, PO5	PSO2
90	20E51A0507	B. Raju	Blue Eye Technology	PO1, PO2, PO3, PO5	PSO2
91	20E51A0534	K. Deepak	Digital Scent Technology	PO1, PO2, PO5	PSO2
92	20E51A0585	Yarlagadda R. Chowdary	Bioinformatics	PO1, PO2,	PSO2

				PO3, PO5	
93	21E55A0511	M. Naresh	SDN and NFV	PO1, PO2, PO3, PO5	PSO2
94	21E55A0515	Srimanthula Shivachary	Li-Fi Technology	PO1, PO2, PO5	PSO2
95	21E55A0516	Swarna Neeraj	Grid Computing	PO1, PO2, PO5	PSO2
96	20E51A0543	M. Sravanth	Data Mining In Search Engine Analytics	PO1, PO2, PO3, PO5	PSO1, PSO2

Table 2.1.5. List of Companies our Students under gone Internship

Sample Internship Offer letter

Aadya Informatics Pvt. Ltd.

Offer Letter Date: 27/02/2024

Dear Kaustubh Shakelli,

We are offering you an internship position within the IT department at our Hyderbad office. You shall bear the title of a Software Engineer Intern during this internship.

This internship commences on the 1st of March 2024 and is going to last for a period of four months thenceforth. Your compensation is going to be Rs.10000/per month. An internship position does not entitle you to any company benefits.

During the course of your internship, you might have access to confidential information and trade secrets of Aadya Informatics Pvt Ltd. By signing this offer, you agree to keep such information confidential and abstain from using it for personal gains or divulging it to any external entities. At the end of your internship, you also agree to return any equipment, documents or other company property issued to you by Aadya Informatics Pvt Ltd. Your acceptance of this offer shows your acknowledgement of the fact that this is not an offer for full-time employment and it does not guarantee a job offer upon completion.

Welcome on Board!

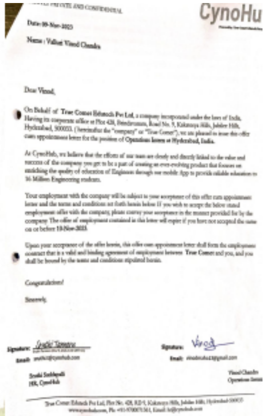
Please feel free to contact me if there are any further questions.

Regards,

Meghana Pyata
HR- Manager
Email: hr@aadyainfo.com

I, Kaustubh Shakelli accept the above offer and shall begin the internship position on 1st March 2024.

Kaustubh Shakelli
27th February , 2024



CynoHu

Date: 09-Nov-2023

Name : Valluri Vinod Chandra

Dear Vinod,

Congratulations!

Sincerely,

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 HOD & Internship coordinator.

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.

S NO	ROLL NO	NAME OF THE STUDENT	PLACED COMPANY
1	20E51A0501	ABHED CHAINANI	PIE INFOCOMM
2	20E51A0502	ABHISHEK KANT SINHA	DEXTERITY
3	20E51A0504	ANWESHA SATHUA	NUMETRY
4	20E51A0509	BEEMANABOINA DHANUSH	TECHNOLOGICS GLOBAL
5	20E51A0514	CHOWTIPALLI ANANTHA SAI PRANEETH	GLOBAL QUEST
6	20E51A0517	Dommati shyam Kumar	Hanodale Solutions Private Limited
7	20E51A0518	DRISHTI KUMARI	PENTAGON SPACE
8	20E51A0519	DURGAM HARI KRISHNA	DEXTERITY
9	20E51A0519	DURGAM HARI KRISHNA	PALLE TECHNOLOGIES
10	20E51A0520	EEMANI MAHA LAKSHMI	Q SPIDERS
11	20E51A0523	GEDAM UDAY KUMAR	NUMETRY
12	20E51A0528	GUVVA KEERTHI	RINEX
13	20E51A0529	JANNU VENKATA DHANUSHA	RINEX
14	20E51A0531	KADALI JAGADESH	ZEMOSO LABS
15	20E51A0531	KADALI JAGADESH	Q SPIDERS
16	20E51A0533	KAILE SHAMALA	PALLE TECHNOLOGIES
17	20E51A0538	KOLUSU NAGA SRAVANTHI	CORIZO
18	20E51A0538	Kolusu Naga Sravanthi	Hanodale Solutions Private Limited
19	20E51A0540	LAKKONDA GEETHIKA	PIE INFOCOMM
20	20E51A0547	MOHD ABDUL LATEEF	iMatiz Technologies
21	20E51A0550	MYAKALA SAI SUDHIR	PALLE TECHNOLOGIES
22	20E51A0551	NAGA TANUSRI NUKALA	FUTURE MARKETS INSIGHTS
23	20E51A0552	NARA ADITHYA RAJ	ZEMOSO LABS
24	20E51A0552	NARA ADITHYA RAJ	PALLE TECHNOLOGIES
25	20E51A0553	NEHA B	ZEMOSO LABS
26	20E51A0553	NEHA B	PALLE TECHNOLOGIES
27	20E51A0554	NEHAL KUMAR SINGH	DEXTERITY
28	20E51A0555	NIMMAGADDA ADITYA SRINIVAS	PIE INFOCOMM
29	20E51A0555	NIMMAGADDA ADITYA SRINIVAS	GLOBAL QUEST
30	20E51A0567	REDDY SAHITYA	Q SPIDERS
31	20E51A0572	SANAM VENKATA MANASA	PALLE TECHNOLOGIES
32	20E51A0574	SHINDE VINAYAK RAO PATIL	PLAUSIBILITY SOLUTIONS
33	20E51A0575	Siramgari Sneha Reddy	Hanodale Solutions Private Limited

34	20E51A0577	SYED ZOYA MEHAK	DEXTERITY
35	20E51A0577	SYED ZOYA MEHAK	Q SPIDERS
36	20E51A0580	VALLURI VINOD CHANDRA	ZEMOSO LABS
37	20E51A0580	VALLURI VINOD CHANDRA	NUMETRY
38	20E51A0581	VANGURI SANDEEP KUMAR YADAV	PALLE TECHNOLOGIES
39	20E51A0584	VINEELA VARSHINI KUNCHALA	EXCEL R
40	21E55A0503	BEJAWADA NAGABABU	PALLE TECHNOLOGIES
41	21E55A0512	MANJETI SOUMYA	Q SPIDERS
42	21E55A0513	P ABHISHEK	NUMETRY
43	21E55A0515	SRIMANTHULA SHIVA CHARY	DEXTERITY
44	21E55A0515	SRIMANTHULA SHIVA CHARY	Hanodale Solutions Private Limited
45	21E55A0519	VEMULAPALLI SOMA SHEKAR RAO	GLOBAL QUEST

Table 2.1.6 Mapping of Students Internship with the placement

1. **Enhanced Employability**

Internships have significantly contributed to students' placement readiness. Real-world exposure through hands-on training at companies like IIIT Hyderabad, Vault of Codes,Q Spiders, Excel R, Nipper and EI Systems has provided:

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

Out of 87/101 students, over 86% secured internships**,** and more than 75% of those were successfully placed after internship**.** This indicates a strong correlation between internship exposure and placement success.

2. **Alignment with Industry Demands**

Students who interned at technologically advanced organizations (e.g., IIIT Hyderabad, Vault of Codes,Excel R, EI Systems, Nipper and Q Spiders) had higher placement rates and joined companies that use **emerging technologies like AI/ML, IoT, and Cloud**.

3. **Industry Networking & Pre-placement Offers (PPO)**

Several internship providers (e.g., PIE INFOCOMM, ZEMOSO LABS, NUMETRY) turned into placement opportunities. These cases underline the importance of:

- Performance during internship.
- Engagement and soft skills.

Measures for Enhancing Internship-to-Placement Conversion

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

- Partner with industries working in **AI/ML, IoT, Automation, Cyber security, Cloud Computing and Deep Learning.**
- 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., C, Full Stack on Java, Machine Learning, Big Data Analytcs, Power BI, Cloud Computing and Python Programming).
- Introduce **boot camps on latest technologies** like:
    - o Python
    - o Java Full stack
    - o Artificial Intelligence
    - o Full Stack Web development

3. **Certification and Micro-Credentials**

· Make certifications in **Python, AI, ML and Cloud Computing** mandatory or elective.

· Promote platforms like **Coursera, NPTEL** 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 9.00

Institute Marks : 9.00

2.4 Seminar and Mini/Micro Projects (10)

a. Students select topics related to current technologies, social issues, or their area of interest with support from faculty mentors.

b. 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.

c. 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.

SNo	H.T No	Names	Technical Seminar	PO	PSO
1	20E51A0502	Abhishek Kant Sinha	Metaverse Technology	PO 1,4, 10	PSO1
2	20E51A0504	Anwesha Sathua	Voice Morphing	PO 1,4, 10	PSO1
3	20E51A0518	Drishti Kumari	Forecasting Traffic Flow Using Data Analytics	PO 1,4, 10	PSO1
4	20E51A0517	Shyam Kumar	Google Glass	PO 1,4, 10	PSO1
5	20E51A0505	A.Sathwika	Power Bi-Empowering Data Driven Decision Making	PO 1,4, 10	PSO1

6	20E51A0513	Ch SaiDeepthi	Revolutionizing Cross-Platform App Development With Flutter	PO 1,4, 10	PSO1
7	20E51A0515	D.Poojitha	Sixth Sense Technology	PO 1,4, 10	PSO1
8	20E51A0532	K.Pravalika	Drone4Parcel5G	PO 1,4, 10	PSO1
9	20E51A0510	B.Samanvi Reddy	I-Twin Limitless Pendrive Technology	PO 1,4, 10	PSO1
10	20E51A0538	K.N.Sravanthi	Datafication In Education: Leveraging Big Data For Personalized Learning	PO 1,4, 10	PSO1
11	20E51A0529	J.Dhanusha	Demystifying Docker: A Comprehensive Exploration Of Essential Devops Tool	PO 1,4, 10	PSO1
12	20E51A0506	A.Yuva Sree	Enhancing Security And Accuracy With Multibiometric Data Fusion	PO 1,4, 10	PSO1
13	20E51A0534	k.Deepak	Digital Scent Technology	PO 1,4, 10	PSO1
14	20E51A0507	B.Raju	Blue Eye Technology	PO 1,4, 10	PSO1
15	20E51A0571	S.Surya teja	Smart Authentication	PO 1,4, 10	PSO1
16	20E51A0579	V.Yamalaiah	Fiber Space Laser Communication	PO 1,4, 10	PSO1
17	20E51A0531	K.Jagadeesh	Machine Eyes(Image Processing And Cv)	PO 1,4, 10	PSO1
18	20E51A0516	D.Gopichand	Handwritten Digit Recognition Using Neural Networks	PO 1,4, 10	PSO1
19	20E51A0509	B.Dhanush Yadav	Iomt With Ai For Early Disease Detection	PO 1,4, 10	PSO1
20	20E51A0520	E.Mahalakshmi	Edge Computing	PO 1,4, 10	PSO1
21	20E51A0511	B. Monika Lakshmi	Gi-Fi Technology	PO 1,4, 10	PSO1
22	20E51A0512	B. Rohini	3G-Vs-Wifi Interferometric Modulator (Imod)	PO 1,4, 10	PSO1
23	21E55A0506	D. Swetha	Firewalls	PO 1,4, 10	PSO1
24	21E55A0517	T. Praveen	Network Computing	PO 1,4, 10	PSO1
25	20E51A0519	D.HARI KRISHNA	Enhancing Reality	PO 1,4, 10	PSO1
26	20E51A0526	SURENDER	Metamorphic Malware	PO 1,4, 10	PSO1
27	21E55A0501	SIDHARTH	Smart Voting System	PO 1,4, 10	PSO1
28	21E55A0507	ANEESH	Neuralink	PO 1,4, 10	PSO1
29	20E51A0521	G.Eshwar	Evolution Of 4G And 5G	PO 1,4, 10	PSO1
30	20E51A0523	G.Uday	Firebase	PO 1,4, 10	PSO1
31	20E51A0524	G.Rohith	Rainfall Prediction	PO 1,4, 10	PSO1
32	20E51A0525	G.Rajesh	E-Mail Spam Detection	PO 1,4, 10	PSO1
33	21E55A0510	L Chandra Mahesh	Wireless Patient Monitoring System	PO 1,4, 10	PSO1
34	21E55A0504	B Sandeep	Hybrid Electric Vehicles	PO 1,4, 10	PSO1
35	21E55A0505	B Sai kiran	Solid Waste Management	PO 1,4, 10	PSO1
36	20E51A0527	G Maniker Reddy	Chatbot For Business Organisation	PO 1,4, 10	PSO1
37	20E51A0533	K.Shamala	Crypto Watermarking	PO 1,4, 10	PSO1
39	20E51A0530	K.Akshaya	5 Pen Pc Technology	PO 1,4, 10	PSO1
40	21E55A0508	K.Nitin	Li Fi Technology	PO 1,4, 10	PSO1
41	21E55A0502	B.Sravani	Mobile Computing	PO 1,4, 10	PSO1
42	20E51A0501	Abhed Chainani	Zero Knowledge Proofs	PO 1,4, 10	PSO1
43	20E51A0503	A Krishna Kartheek	Gaussian Splatting	PO 1,4, 10	PSO1
44	20E51A0514	C Anantha Sai Praneeth	Post Quantum Cryptography	PO 1,4, 10	PSO1

45	20E51A0535	Kaustubh S	Computer Aided Surgery	PO 1,4, 10	PSO1
46	21E55A0503	B Nagababu	React Js	PO 1,4, 10	PSO1
48	21E55A0509	K Ajay	Splunk	PO 1,4, 10	PSO1
40	20E51A0536	K Sita Ram	Un Real Engine 5s	PO 1,4, 10	PSO1
50	20E51A0539	K.Supriya	Digital Signature Authentication(Cryptography)	PO 1,4, 10	PSO1
51	20E51A0540	L.Geethika	Analysis Of Emphasis Words In Spoken Summarisation And Keyword Extraction	PO 1,4, 10	PSO1
52	20E51A0542	M.Ram Sai Sathwik Chowdary	Augmented Reality And Virtual Reality	PO 1,4, 10	PSO1
53	20E51A0564	P. Tejaswini	Air Powered Cars	PO 1,4, 10	PSO1
54	20E51A0560	P. Umesh Chandra	Data Driven Agriculture	PO 1,4, 10	PSO1
55	20E51A0578	T. Jyothi	Brain Computer Interfaces	PO 1,4, 10	PSO1
56	20E51A0544	M. Deeksha	Smart Cards	PO 1,4, 10	PSO1
57	20E51A0572	Sanam Venkata Manasa	The Role Of Big Data In Business Transformation.	PO 1,4, 10	PSO1
58	20E51A0567	Reddy Sahithya	Green Computing	PO 1,4, 10	PSO1
59	20E51A0583	Mahalakshmi Sai	Smart Note Taker	PO 1,4,10	PSO1
60	20E51A0545	Tejarani	Night Vision Technology	PO 1,4,10	PSO1
61	20E51A0547	Mohd Abdul Lateef	5G Wireless Technology	PO 1,4, 10	PSO1
62	20E51A0546	Mohd Abdul Mufasil	Near Field Communication	PO 1,4, 10	PSO1
63	20E51A0548	M Ganesh	Big Data And Distributed Computing	PO 1,4, 10	PSO1
64	20E51A0549	M Pavan Kumar	Advancement Collaborative Filtering For Enhanced Recommendations System	PO 1,4, 10	PSO1
65	20E51A0552	Nara Adhitya Raj	Unravelling Web3:A Blockchain Perspective	PO 1,4, 10	PSO1
66	20E51A0550	Myakala Sai Sudhir	Ethical Hacking	PO 1,4, 10	PSO1
67	21E55A0513	P Abhishek	Nano Technology	PO 1,4, 10	PSO1
68	20E51A0582	Vantakala Pooja	Holographic Memory	PO 1,4, 10	PSO1
69	20E51A0551	Naga Tanusri Nukala	Web Crawlers: Mapping The Digital World	PO 1,4, 10	PSO1
70	20E51A0568	R Rishikesh Reddy	Goal Line Technology	PO 1,4, 10	PSO1
71	20E51A0553	Neha B	Wearable Sensor Technology In Iot	PO 1,4, 10	PSO1
72	20E51A0581	V Sandeep Kumar Yadav	Image Compression Djj	PO 1,4, 10	PSO1
73	20E51A0562	Prakash Saw	Satellite Based Internet	PO 1,4, 10	PSO1
74	20E51A0554	Nehal Kumar Singh	Privacy Enhancing Technology	PO 1,4, 10	PSO1
75	20E51A0573	Srikar Reddy	Message Queuing Telemetry Transport	PO 1,4, 10	PSO1
76	20E51A0555	NIMMAGADDA ADITYA SRINIVAS	Data Scraping	PO 1,4, 10	PSO1
77	20E51A0584	vineela varshini kunchala	Digital Preservation	PO 1,4, 10	PSO1
78	21E55A0514	Shiva Charan Reddy Kallem	Quantum Computing	PO 1,4, 10	PSO1
79	21E55A0519	vemulapalli soma shekar rao	Cognitive Computing	PO 1,4, 10	PSO1
80	20E51A0577	Syed Zoya Mehak	Bi Directional Long Short Term Memory	PO 1,4, 10	PSO1
81	20E51A0580	V . Vinod Chandra	Generative Artificial Intelligence	PO 1,4, 10	PSO1
82	20E51A0557	P. Sai Samraat	Mixed Reality	PO 1,4, 10	PSO1
83	21E55A0512	M.Soumya	Predictive Analysis In Big Data		

				PO 1,4, 10	PSO1
84	20E51A0558	P . Sharath chandra	Database Security Issues, Challenges	PO 1,4, 10	PSO1
85	20E51A0559	P . Rushith Kumar	Biometric Authentication Technology	PO 1,4, 10	PSO1
86	20E51A0561	P . Rohith reddy	Intelligent Ram	PO 1,4, 10	PSO1
87	20E51A0576	S . Dhanush	Auto Poilet Technology	PO 1,4, 10	PSO1
88	20E51A0575	S Sneha Reddy	Contactless Control: Touchless Touchscreen Tech	PO 1,4, 10	PSO1
89	20E51A0574	Shinde Vinayak Rao Patil	Ai-Powered Cctv Analytics: Enhancing Security And Surveillance	PO 1,4, 10	PSO1
90	20E51A0569	R Nithin	Wireless Charging	PO 1,4, 10	PSO1
91	20E51A0528	G Keerthi	Skinput Technology	PO 1,4, 10	PSO1
92	20E51A0571	S Sai Surya Teja	Mobile Phone Cloning	PO 1,4, 10	PSO1
93	20E51A0579	V Yamalaiah	Screenless Display	PO 1,4, 10	PSO1
94	20E51A0507	B Raju	Blue Eye Technology	PO 1,4, 10	PSO1
95	20E51A0534	K.Deepak	Digital Scent Technology	PO 1,4, 10	PSO1
96	20E51A0585	Yarlagadda Ravitreyini Chowdary	Bioinformatics	PO 1,4, 10	PSO1
97	21E55A0511	M.Naresh	Sdn And Nfv	PO 1,4, 10	PSO1
98	21E55A0515	Srimanthula Shivachary	Li-Fi Technology	PO 1,4, 10	PSO1
99	21E55A0516	Swarna Neeraj	Grid Computing	PO 1,4, 10	PSO1
100	20E51A0543	M.sravanth	Data Mining In Search Engine Analytics	PO 1,4, 10	PSO1

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.

Hyderabad Institute of Technology and Management										
Department of CSE										
SEMINAR 2023-2024				**Panel Members Marks**						
S.NO (http://s.no/)	**H.T No**	**NAME OF THE STUDENT**	**Attair(5)**	**Introduction(5)**	**Content (10)**	**Slides Design (5)**	**Presentation (5)**	**Querries (10)**	**Total (40)**	**Signature**
1										

Mini/Micro Project :

Mini and micro projects at Department of Computer Science and Engineering 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 Problem-Based Learning (PBL) initiatives, promoting experiential learning and interdisciplinary problem-solving skills.

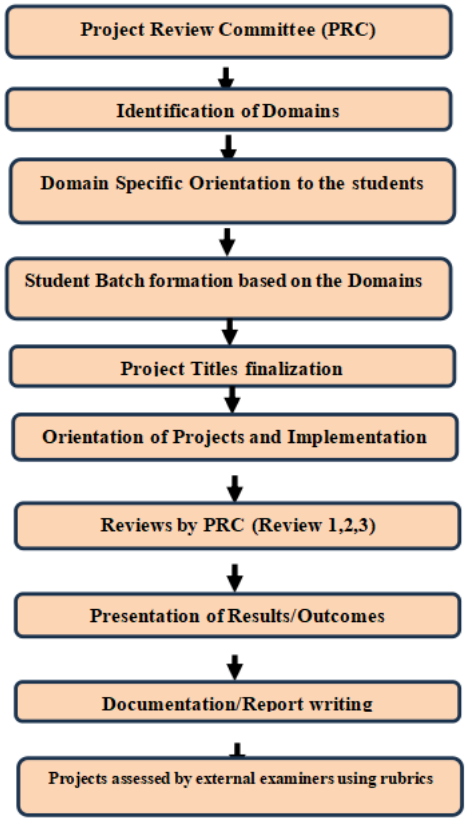


Figure.2.11.Identification of the projects and allocation methodology to faculty

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

Ensuring the quality of mini projects at Department of Computer Science and Engineering 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 students 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 report following the sample template shared by the Project Coordinator. This report is submitted to their respective guides for thorough verification and feedback. Once approved, students proceed with printing and formally submit their final thesis.

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.

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, 20 marks shall be awarded by the project supervisor (based on the continuous evaluation of student's performance throughout the project work period), and the other 10 marks shall be awarded by a Departmental 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.

MINI PROJECTS AY:2022-23 :

HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT

Department of Computer Science And Engineering

MINI PROJECTS(AY:2022-23)

S. No	H.T No	Student Name	Approved Title By PRC	PO	PSO
1	20E51A0502	Abhishek Kant Sinha	PREDICT CLIMATE CHANGES	PO1, 3,5, 10,11	PSO1,3
	20E51A0504	Anwesha Sathua			
	20E51A0518	Drishti Kumari			
	20E51A0517	Shyam Kumar			
2	20E51A0505	A.Sathwika	MECHANISM OF ELASTIC CLOUD BALANCING	PO1, 3,5, 10,11	PSO1,3
	20E51A0513	Ch SaiDeepthi			
	20E51A0515	D.Poojitha			
	20E51A0532	K.Pravalika			
3	20E51A0510	B.Samanvi Reddy	FARMLOGS	PO1, 3,5, 10,11	PSO1,3
	20E51A0538	K.N.Sravanthi			
	20E51A0529	J.Dhanusha			
	20E51A0506	A.Yuva Sree			
4	20E51A0534	k.Deepak	TRAFFIC PREDICTION FOR INTELLIGENT TRANSPORTATION SYSTEM USING MACHINE LEARNING	PO1, 3,5, 10,11	PSO1,3
	20E51A0507	B.Raju			
	20E51A0571	S.Surya teja			
	20E51A0579	V.Yamalaiah			
5	20E51A0531	K.Jagadeesh	FACE RECOGNITION WITH LIVE DETECTION AND EXCEL INTEGRATION	PO1, 3,5, 10,11	PSO1,3
	20E51A0516	D.Gopichand			
	20E51A0509	B.Dhanush Yadav			
	20E51A0520	E.Mahalakshmi			
6	20E51A0511	B. Monika Lakshmi	VIRTUAL MOUSE	PO1, 3,5,	PSO1,3
	20E51A0512	B. Rohini			

	21E55A0506	D. Swetha		10,11	
	21E55A0517	T. Praveen			
7	20E51A0519	D.HARI KRISHNA	WEED DETECTION USING DEEP LEARNING	PO1, 3,5, 10,11	PSO1,3
	20E51A0526	SURENDER			
	21E55A0501	SIDHARTH			
	21E55A0507	ANEESH			
8	20E51A0521	G.Eshwar	FARMIN	PO1, 3,5, 10,11	PSO1,3
	20E51A0523	G.Uday			
	20E51A0524	G.Rohith			
	20E51A0525	G.Rajesh			
9	21E55A0510	L Chandra Mahesh	KEYWORD SEARCH ACCESS CONTROL OVER CLOUD	PO1, 3,5, 10,11	PSO1,3
	21E55A0504	B Sandeep			
	21E55A0505	B Sai kiran			
	20E51A0527	G Maniker Reddy			
10	20E51A0533	K.Shamala	APPLIANCES REPAIR HUB	PO1, 3,5, 10,11	PSO1,3
	20E51A0530	K.Akshaya			
	21E55A0508	K.Nitin			
	21E55A0502	B.Sravani			
11	20E51A0501	Abhed Chainani	CHORD SAVANT	PO1, 3,5, 10,11	PSO1,3
	20E51A0503	A Krishna Kartheek			
	20E51A0514	C Anantha Sai Praneeth			
	20E51A0535	Kaustubh S			
12	21E55A0503	B Nagababu	VIRTUAL VOICE ASSISTANT	PO1, 3,5, 10,11	PSO1,3
	21E55A0509	K Ajay			
	20E51A0536	K Sita Ram			
13	20E51A0539	K.Supriya	SMOKE DETECTION USING IOT WITH "WHATSPP" INTEGRATION	PO1, 3,5, 10,11	PSO1,3
	20E51A0540	L.Geethika			
	20E51A0541	M.Sai Nath			
	20E51A0542	M.Ram Sai Sathwik Chowdary			

HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT

Department of Computer Science And Engineering

MINI PROJECTS(AY:2022-23)

S. No	H.T No	Student Name	Approved Title By PRC	PO	PSO
1	20E51A0564	P. Tejaswini	CLASSSIFYING HARMFUL COMMENTS: TOWARDS A SAFER ONLINE	PO1, 3,5, 10,11	PSO1,3
	20E51A0560	P. Umesh Chandra			

	20E51A0578	T. Jyothi	ENVIRONMENT		
	20E51A0544	M. Deeksha			
2	20E51A0572	Sanam Venkata Manasa	GEO CHECK WEB APPLICATION	PO1, 3,5, 10,11	PSO1,3
	20E51A0567	Reddy Sahithya			
	20E51A0583	Mahalaxmi Sai			
	20E51A0545	Tejarani			
3	20E51A0547	Mohd Abdul Lateef	TEXT FILE TRANSLATOR	PO1, 3,5, 10,11	PSO1,3
	20E51A0546	Mohd Abdul Mufasil			
	20E51A0548	M Ganesh			
	20E51A0549	M Pavan Kumar			
4	20E51A0552	Nara Adhitya Raj	PLACEMENT PORTAL	PO1, 3,5, 10,11	PSO1,3
	20E51A0550	Myakala Sai Sudhir			
	21E55A0513	P Abhishek			
	20E51A0582	Vantakala Pooja			
5	20E51A0551	Naga Tanusri Nukala	WAFER FAULT DETECTION	PO1, 3,5, 10,11	PSO1,3
	20E51A0568	R Rishikesh Reddy			
	20E51A0553	Neha B			
	20E51A0581	V Sandeep Kumar Yadav			
6	20E51A0562	Prakash Saw	TEXT RECOGNIZER AND TRANSLATOR	PO1, 3,5, 10,11	PSO1,3
	20E51A0556	Nithul KC			
	20E51A0554	Nehal Kumar Singh			
	20E51A0573	Srikar Reddy			
7	20E51A0555	NIMMAGADDA ADITYA SRINIVAS	TOMATO PLANT DISEASE CLASSIFICATION USING CNN	PO1, 3,5, 10,11	PSO1,3
	20E51A0584	vineela varshini kunchala			
	21E55A0514	Shiva Charan Reddy Kallem			
	21E55A0519	vemulapalli soma shekar rao			
8	20E51A0577	Syed Zoya Mehak	DEPRESSION DETECTION USING ML	PO1, 3,5, 10,11	PSO1,3
	20E51A0580	V . Vinod Chandra			
	20E51A0557	P. Sai Samraat			
	21E55A0512	M.Soumya			
9	20E51A0558	P . Sharath chandra	FRUITS AND VEGETABLES CLASSIFICATION CALORIES MEASUREMENT SYSTEM	PO1, 3,5, 10,11	PSO1,3
	20E51A0559	P . Rushith Kumar			
	20E51A0561	P . Rohith reddy			
	20E51A0576	S . Dhanush			
10	20E51A0575	S Sneha Reddy	HAND GUESTURE RECOGNITION SYSTEM FOR DEAF AND DUMB COMMUNICATION	PO1, 3,5, 10,11	PSO1,3
	20E51A0574	Shinde Vinayak Rao Patil			
	20E51A0569	R Nithin			
	20E51A0528	G Keerthi			

11	20E51A0571	S Sai Surya Teja	TRAFFIC PREDICTION FOR INTELLIGENT TRANSPORTATION SYSTEM USING MACHINE LEARNING	PO1, 3,5, 10,11	PSO1,3
	20E51A0579	V Yamalaiah			
	20E51A0507	B Raju			
	20E51A0534	K Deepak			
12	20E51A0585	Yarlagadda Ravitreyini Chowdary	SMART CHECKOUT USING RFID	PO1, 3,5, 10,11	PSO1,3
	21E55A0511	M.Naresh			
	21E55A0515	Srimanthula Shivachary			
	21E55A0516	Swarna Neeraj			
13	20E51A0543	M.sravanth	INTELIGENT TASK MANAGMENT	PO1, 3,5, 10,11	PSO1,3
	20E51A0566	R.dhanush			

2.5 Case Studies and Real-Life Examples (10)

Total Marks 10.00

Institute Marks : 10.00

2.5 Case Studies and Real-Life Examples

In the Department of Computer Science and Engineering, 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 work.

Key Features:

- Emphasis on explanation rather than problem-solving.
- Used for conceptual clarity and system understanding.

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.

Some of the Case Studies and Real Life Examples discussed in the courses are listed below

S.No	Name of the Course	Case Study/ Real life	Description of Case Study/Real Life Example	PO/PSO addressed	Type	complexity
1	Natural Language Processing	Hand Guesture Recognition System For Deaf And Dumb Communication- Case Study	This system is designed to bridge the communication gap for individuals who are deaf or mute by recognizing hand gestures and converting them into text or speech using computer vision and machine learning techniques. The system uses a camera to capture hand gestures, processes them using image recognition algorithms, and maps them to predefined words or phrases.	PO1, PO2, PO3, PO5, PO10	Application Development	Intermediate to Advanced
			This project focuses on using audio signal processing and machine learning to analyze cough sounds and detect patterns indicative of lung infections (like pneumonia, bronchitis, or even COVID-19). By			

2	Machine Learning	Beyond Breath- Analysing cough sounds to predict lung infection - Case Study	collecting cough samples and training models, the system can serve as an early diagnostic tool.	PO1, PO2, PO4, PO5, PO12	Healthcare Innovation	Advanced
3	Artificial Intelligence	Crop Disease Detection using Deep Learning - Case Study	This system aims to assist farmers by detecting crop diseases from images of leaves using deep learning models like CNNs (Convolutional Neural Networks). The system can identify diseases and suggest possible remedies, thus improving crop yield and reducing loss.	PO1, PO2, PO3, PO5, PO6	Agricultural Tech	Intermediate
4	Image Processing	Real Time Vehicle Collision Detection Using Bounding Box With Alert System- Case Study	This system uses computer vision techniques to monitor traffic in real-time, detect potential vehicle collisions by tracking object movements via bounding boxes, and generate alerts to prevent accidents. It can be integrated into smart traffic systems or autonomous vehicles.	PO1, PO2, PO3, PO5, PO6	Smart City	Advanced

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.

By using case studies and real-life examples in a planned and organized manner, HITAM supports students in gaining both academic knowledge and industry-related experience. These efforts reflect HITAM's approach of Learning by Doing, preparing engineers to make useful contributions to society and technology.

2.6 SWAYAM/NPTEL/MOOC/Self Learning (10)	**Total Marks 10.00**
	Institute Marks : 10.00

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

The Department of Computer Science and Engineering encourages the students in different self-learning and online platforms like SWAYAM, NPTEL, and other Massive Open Online Courses (MOOCs) 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 offered through these platforms are aligned with industry standards and best practices, allowing students to gain certifications that 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.

B. **Scope for Self Learning & facilities and its use:**

The digital library offers a diverse collection lecture note, video lectures, journals, etc. accessible to students. This resource aids students in understanding both theory and lab courses, facilitating in-depth knowledge acquisition within their program of study. Additionally, students can utilize the library to prepare tech-talks, concept videos, and literature reviews for their project work. The LMS login provides access to industrial interview video lectures, assisting students in job interviews. In academia also, the institute has been using the NPTEL courses very successfully for the past few years. The video lectures provided by NPTEL become a valuable source of self-learning for the learners. The video lectures for all courses provided by IITs are kept in the digital library and being utilized by the students and staff.

S.No	Number of Students Registered	Batch

1	106	2020-24			
Roll no	**Name**	**NPTEL Course Name**	**Duration**	**PO**	**PSO**
20E51A0547	Md Abdul Lateef	Introduction to Programming in C	Jan-Mar 2023	PO1,2,3,5,12	PSO1,2
20E51A0555	NIMMAGADDA ADITYA SRINIVAS	Computer Networks And Internet Protocol	Jan-Apr 2023	PO1, 2,3,6,8	PSO1,2
20E51A0585	Yarlagadda Ravitreyini Chowdary	Computer Networks And Internet Protocol	Jan-Apr 2023	PO1, 2,3,6,8	PSO1,2
20E51A0509	B Dhanush Reddy	Database Mangement System	Jan-Mar 2023	PO1,2,3,5,12	PSO1,2
20E51A0584	Vineela Varchini	Database Mangement System	Jan-Mar 2023	PO1,2,3,5,12	PSO1,2
19E51A0550	Kadali Nandini Devi	Foundation of Cloud IoT Edge ML	Jan-Apr 2023	PO5,8,11,12	PSO1,2
20E51A0530	K Akshaya	Computer Networks And Internet Protocol	Jan-Apr 2023	PO1, 2,3,6,8	PSO1,2
20E51A0553	Neha b	Computer Networks And Internet Protocol	Jan-Apr 2023	PO1, 2,3,6,8	PSO1,2
21E55A0519	Vemulapalli Soma shekar rao	Computer Networks And Internet Protocol	Jan-Apr 2023	PO1, 2,3,6,8	PSO1,2
21E55A0514	Shiva Charan Reddy Kallem	Computer Networks And Internet Protocol	Jan-Apr 2023	PO1, 2,3,6,8	PSO1,2
19e51a0572	Nadendla durga sri	Foundation of Cloud IoT Edge ML	Jan-Apr 2023	PO1,2,3,5,12	PSO1,2
19E51A05A5	siddantham venkat durga prasad	Foundation of Cloud IoT Edge ML	Jan-Apr 2023	PO1,2,3,5,12	PSO1,2
20E51A0551	Naga Tanusri Nukala	Computer Networks And Internet Protocol	Jan-Apr 2023	PO1, 2,3,6,8	PSO1,2
19E51A0581	PIDAMARTHI VINOD KUMAR	Foundation of Cloud IoT Edge ML	Jan-Apr 2023	PO1,2,3,5,12	PSO1,2
20E51A0520	Eemani Mahalakshmi	Foundation of Cloud IoT Edge ML	Jan-Apr 2023	PO1,2,3,5,12	PSO1,2
20E51A0519	Durgam Hari Krishna	Foundation of Cloud IoT Edge ML	Jan-Apr 2023	PO1,2,3,5,12	PSO1,2
20E51A0533	K Shamala	Foundation of Cloud IoT Edge ML	Feb-Apr 2023	PO1,2,3,5,12	PSO1,2
20E51A0531	K Jagadeesh	Yoga and Positive Psychology for Managing Career and Life	Feb-Apr 2023	PO6,7,8,9,12	PSO1,2
20E51A0501	Abhed	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0502	Abhishek Kanth Sinha	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0503	Krishna Karthik	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0505	A Sathwika	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0509	B Dhanush Yadav	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0510	B Samanvi Reddy	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0513	C Sai Deepthi	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0514	Sai Praneeth	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0517	Shyama Kumar	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0519	D Harikrishna	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0520	E Mahalakshmi	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0521	Eshwar	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0524	Rohith	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0525	G Rajesh	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2

20E51A0526	G Surender	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0527	G Manikar Reddy	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0528	G keerthi	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0530	K Akshaya	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0531	K Jagadeesh	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0532	K Pravalika	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0533	K Shyamala	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0534	K Deepak	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0535	Kausthabh	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0539	Supriya	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0541	Sainath Reddy	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0542	Ramsai Sathwik	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
21E55A0501	Siddharth A	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
21E55A0504	V Sandeep	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
21E55A0507	Aneesh	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
21E55A0509	K Ajay	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0578	T Jyothi Latha	Cloud Computing	Jan-Apr 2023	PO1,2,3,5,12	PSO1,2
20E51A0528	G Keerthi	Cloud Computing	Jan-Apr 2023	PO1,2,3,5,12	PSO1,2
20E51A0516	Dasari Gopichand	Cloud Computing	Jan-Apr 2023	PO1,2,3,5,12	PSO1,2
HITAM	Medidi teja rani	Cloud Computing	Jan-Apr 2023	PO1,2,3,5,12	PSO1,2
20E51A0544	MATAM DEEKSHA	Cloud Computing	Jan-Apr 2023	PO1,2,3,5,12	PSO1,2
20E51A0546	Md. Mufasil	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0547	Md. Lateef	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0550	Sai Sudheer	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0551	Naga Tanusri Nukala	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0552	N Adithya	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0553	Neha	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0555	N Aditya Srinivas	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0558	Sharath Chandra	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0568	Rishikesh Reddy	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0569	Nithin	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0572	Manasa	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0575	Sneha Reddy	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0577	Joya Mehak	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2

20E51A0578	Jyothi Latha	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0579	Yamalaiah	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0580	Vinod Chnadra	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0581	Sandeep Kumar	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0583	V mahalakshmi Sai	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0584	Vineela Varshini	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0585	Ravitreyini	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
21E55A0512	Soumya	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
21E55A0513	Abhishek	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
21E55A0519	Soma Shekar Rao	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E55A0514	Shiva Charan Reddy	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E55A0515	Shiva Chary	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E55A0516	S Neeraj	Cloud Computing	Jul-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0564	P Tejaswini	Google Cloud Computing Foundations	Aug-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0567	Reddy Sahithya	Google Cloud Computing Foundations	Aug-Oct 2023	PO1,2,3,5,12	PSO1,2
20E51A0550	Myakala Sai Sudhir	Ethical Hacking	Jan-Apr 2023	PO1,2,3,5,12	PSO1,2
20E51A0564	P Tejaswini	Cloud Computing	Jan-Apr 2023	PO1,2,3,5,12	PSO1,2
20E51A0567	Reddy Sahitya	Cloud Computing	Jan-Apr 2023	PO1,2,3,5,12	PSO1,2
19E51A0527	Deepak Varma	Deep Learning	Jan-Apr 2023	PO1,2,3,4,5	PSO1,2
20E51A0551	Naga Tanusri Nukala	Ethical Hacking	Jan-Apr 2023	PO1,2,3,5,12	PSO1,2
HITAM	Shinde Vinayak rao patil	Deep Learning	Jan-Apr 2023	PO1,2,3,4,5	PSO1,2
21E51A6702	Manish adoni	Cloud Computing	Jan-Apr 2023	PO5,8,11,12	PSO1,2
21E51A0596	Raghupathy Aditya Raj	Programming, Data Structures And Algorithms Using Python	Jul-Dec 2023	PO1,2,3,5,12	PSO1,2
21E51A0507	Banavath Vedasri	Design And Analysis Of Algorithms	Jul-Dec 2023	PO1,2,4,5,12	PSO1,2
21E51A0577	Nallapu Karthik	Python For Data Science	Jul-Dec 2023	PO1,2,3,5,12	PSO1,2
20E51A0516	Dasari Gopichand	Python For Data Science	Jul-Dec 2023	PO1,2,3,5,12	PSO1,2
20E51A0516	Dasari Gopichand	Programming, Data Structures And Algorithms Using Python	Jul-Dec 2023	PO1,2,3,5,12	PSO1,2
21E51A0585	Abhiram sharma	Python For Data Science	Jul-Dec 2023	PO1,2,3,5,12	PSO1,2
21E51A05A7	SHETTIPALLI VIVEK VARDAN	Python For Data Science	Jul-Dec 2023	PO1,2,3,5,12	PSO1,2
21E51A0570	Varsha Mittapally	Python For Data Science	Jul-Dec 2023	PO1,2,3,5,12	PSO1,2
21E51A05A2	uttejitha	Python For Data Science	Jul-Dec 2023	PO1,2,3,5,12	PSO1,2
22E51A0538	Nihithsrisatyavarma	Programming In Java	Jan-Apr 2024	PO1,2,3,5,12	PSO1,2
22E51A0561	kontham kranthi	Programming In Java	Jan-Apr 2024	PO1,2,3,5,12	PSO1,2
21E51A0526	Ghanta Eakash deege	Programming In Java	Jan-Apr 2024	PO1,2,3,5,12	PSO1,2

22E51A0523	Abraham Bommothi	Programming In Java	Jan-Apr 2024	PO1,2,3,5,12	PSO1,2
22E51A05B2	Shivam Tripathi	Programming In Java	Jan-Apr 2024	PO1,2,3,5,12	PSO1,2
21E51A0539	Gottapu Pavan	Programming In Java	Jan-Apr 2024	PO1,2,3,5,12	PSO1,2
21E51A0527	Ede Yashwanth Srikar	Programming In Java	Jan-Apr 2024	PO1,2,3,5,12	PSO1,2
22E51A05B0	Saumyadeep Pal	Programming In Java	Jan-Apr 2024	PO1,2,3,5,12	PSO1,2
21E51A0551	Nikitha K Appara pu	Programming In Java	Jan-Apr 2024	PO1,2,3,5,12	PSO1,2

H.T No	Name	Self Learning Course (Infosys Spring Board)	Duration (1 week)	PO	PSO
20E551A0523	G Uday Kumar	Google Cloud Computing			
22E551A0537	GODISELA RAJANANDINI	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0504	AKSHAYA GOTTIMUKKULA	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0595	POLISETTI HEMA SRI LAXMI	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0592	PATCHA NAMATHA PRIYA	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0547	JEEDIPALLI SRAVANI	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A05B2	SHIVAM TRIPATHI	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0536	GALI SHASHANK	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0511	ATHER HUSSAIN	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0508	ANANYA SAI CHERUVU	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0593	PATLOLLA SANJANA	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0529	D AJAY JAGADISH	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0596	PONDUGULA GEETHA REDDY	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A05C0	ULLIGADDA RAJESHWARI	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0509	ANEM KUSHI	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0571	MAMIDI DHANUSH REDDY	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A05B3	SHRUTI SREERAM	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0518	BHIMAVARAPU SHREE CHARAN REDDY	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0522	BOLLA GAYATHRI	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0544	GURPREET KAUR	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0507	ALWALA SATVIKA REDDY	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0589	P YAWAN KUMAR	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A05C7	VOTUKURI CHARISHMA	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0569	LAKSHMI NANDI	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0534	ERROLA SUMANTH RAJU	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3

22E51A0532	DISHA RATHOD	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0506	ALUPULA SAHITHYA	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0574	MANOJ ABHINENDHU	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0530	DARLA POORNAKALA	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0594	PEDDI PRANAY	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0533	DUMPALA SHIVANJALI	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A05A1	RAGATE SHIRISHA	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A05A2	RANGU VASANTHI	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0514	BANGARU NEHANJALI	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0555	KANNEPALLI RAJINI	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0505	AKUMARTHI NIVRUTHA KASU	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A05B4	SIDDAMMANAHALLI VISHWA PRIYA	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0592	PATCHA NAMATHA PRIYA	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A05B2	SHIVAM TRIPATHI	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0501	A NIKLESH REDDY	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0568	LAKIDEPALLY RAKESH	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0581	NALLAGONDA AMULYA	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0549	JULURI RUCHITHA	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0536	GALI SHASHANK	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0528	CHINTALA KRISHNA VAMSHI	Introduction to AI	2 September 2024	PO1,2,4,5	PSO3
22E51A0519	BHUPATHI SATPAKSHA	Cloud Computing	2023	PO1,2,3,5	PSO3
22E51A0580	NAGELLI AKSHITHA	Cloud Computing	2023	PO1,2,3,5	PSO3
22E51A0546	JAKKA MANASA	Cloud Computing	2023	PO1,2,3,5	PSO3
22E51A0502	AFSAR SAHA	Cloud Computing	2023	PO1,2,3,5	PSO3
22E51A05C5	VALLURI SRUJANA	Cloud Computing	2023	PO1,2,3,5	PSO3
22E51A05B5	SIDDI CHAITANYA	Cloud Computing	2023	PO1,2,3,5	PSO3
22E51A05C7	VOTUKURI CHARISHMA	Cloud Computing	2023	PO1,2,3,5	PSO3
22E51A05B3	SHRUTI SREERAM	Cloud Computing	2023	PO1,2,3,5	PSO3
22E51A0518	BHIMAVARAPU SHREE CHARAN REDDY	Cloud Computing	2023	PO1,2,3,5	PSO3
22E51A0566	KOTI JYOTHSNA	Cloud Computing	2023	PO1,2,3,5	PSO3
22E51A0562	KORIPOTI VARUNIKA	Cloud Computing	2023	PO1,2,3,5	PSO3
22E51A0540	GOPYA BOPPANA	Cloud Computing	2023	PO1,2,3,5	PSO3
22E51A05C2	V A SHRIYA	Cloud Computing	2023	PO1,2,3,5	PSO3
22E51A0590	PADALA KARTHIK	Cloud Computing	2023	PO1,2,3,5	PSO3

22E51A05B4	SIDDAMMANAHALLI VISHWA PRIYA	Cloud Computing	2023	PO1,2,3,5	PSO3
22E51A0514	BANGARU NEHANJALI	Cloud Computing	2023	PO1,2,3,5	PSO3
22E51A0542	GOURAVENI RAMYA	Cloud Computing	2023	PO1,2,3,5	PSO3
22E51A0536	GALI SHASHANK	Cloud Computing	2023	PO1,2,3,5	PSO3
22E51A0530	DARLA POORNAKALA	Cloud Computing	2023	PO1,2,3,5	PSO3
22E51A05B7	SUNKI REDDY AJAY REDDY	Cloud Computing	2023	PO1,2,3,5	PSO3
22E51A0599	PRIYANKA PRIYADARSHANI DAS	Big Data Analytics	20 Feb 2025	PO1,2,3,4,5	PSO3
22E51A0584	NITISH JHA	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A0596	PONDUGULA GEETHA REDDY	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A05B8	TANGELLAPALLI THARUN	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A0548	JULAKANTI MOKSHITH REDDY	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A0546	JAKKA MANASA	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A0567	KULKARNI VAISHNAVI	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A05B0	SAUMYADEEP PAL	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A0598	POTHARAJU ARAVIND	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A0530	DARLA POORNAKALA	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A05B5	SIDDI CHAITANYA	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A0572	MANDHULA SUBHAN	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A0562	KORIPOTI VARUNIKA	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A0590	PADALA KARTHIK	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A0597	POTHAGALLA REKHA	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A0530	DARLA POORNAKALA	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A0575	MD MOSARAF HOSSAIN	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A0530	DARLA POORNAKALA	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A0530	DARLA POORNAKALA	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A05A4	RAVULA SANJANA	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A0543	GUDIMELLA RAJASHEKAR	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A05C8	YEREDLA DEEPIKA	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A05A5	RAYE VENKATA SAI VARUN	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A05A0	PUPPALA JAYANTH	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A05C4	VALLE KAUSHIK	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
22E51A0525	CHAVA DINESH	Big Data Analytics	20 Feb 2025	PO1,2,4,5	PSO3
21E51A0507	BANAVATH VEDASRI	Cyber Security Essentials	2023	PO1,2,4,5	PSO3

21E51A0508	BANGARU VIGNESHWARI	Cyber Security Essentials	2023	PO1,2,4,5	PSO3
21E51A0509	BATTU MARCUS SASHANK	Cyber Security Essentials	2023	PO1,2,4,5	PSO3
21E51A0510	BEMMELIGI MOJESH	Cyber Security Essentials	2023	PO1,2,4,5	PSO3
21E51A0511	BOJJA AKHILA	Cyber Security Essentials	2023	PO1,2,4,5	PSO3
21E51A0512	BOLLA SAI SRUTHI	Cyber Security Essentials	2023	PO1,2,4,5	PSO3
21E51A0514	BUDDE RAKESH	Cyber Security Essentials	2023	PO1,2,4,5	PSO3
21E51A0516	CHINTHALA SAIKIRAN REDDY	Cyber Security Essentials	2023	PO1,2,4,5	PSO3
21E51A0517	CHOPPA LAKSHMI NIKITHA	Cyber Security Essentials	2023	PO1,2,3,6,8	PSO3
20E51A0507	BANDARI RAJU	Cyber Security	2023	PO1,2,3,6,8	PSO3
20E51A0509	BEEMANABOINA DHANUSH	Cyber Security	2023	PO1,2,3,6,8	PSO3
20E51A0510	BEERAM SAMANVI REDDY	Cyber Security	2023	PO1,2,3,6,8	PSO3
20E51A0511	BERAM MONIKA LAKSHMI	Cyber Security	2023	PO1,2,3,6,8	PSO3
20E51A0512	BHAMBREDODDI ROHINI	Cyber Security	2023	PO1,2,3,6,8	PSO3
20E51A0513	CHINTA SAI DEEPTHI	Cyber Security	2023	PO1,2,3,6,8	PSO3
20E51A0514	CHOWTIPALLI ANANTHA SAI PRANEETH	Cyber Security	2023	PO1,2,3,6,8	PSO3
20E51A0515	D POOJITHA	Cyber Security	2023	PO1,2,3,6,8	PSO3
20E51A0516	DASARI GOPICHAND	Cyber Security	2023	PO1,2,3,6,8	PSO3
20E51A0517	DOMMATI SHYAM KUMAR	Cyber Security	2023	PO1,2,3,6,8	PSO3
23E51A0506	AILNENI SREEMAN	RDBMS	Sept 2024	PO1,2,3,5,12	PSO3
23E51A0507	AMEENA TAHSEEN	RDBMS	Sept 2024	PO1,2,3,5,12	PSO3
23E51A0508	ANANTHULA USHA RANI	RDBMS	Sept 2024	PO1,2,3,5,12	PSO3
23E51A0509	ANAS SOFIYAAN QURESHI	RDBMS	Sept 2024	PO1,2,3,5,12	PSO3

23E51A0510	ANNAVARAPU VENKAT	RDBMS	Sept 2024	PO1,2,3,5,12	PSO3
23E51A0511	ANSUMAN PRUSTY	RDBMS	Sept 2024	PO1,2,3,5,12	PSO3
23E51A0512	APOORVA	RDBMS	Sept 2024	PO1,2,3,5,12	PSO3

Table 2.11. student's certifications through Swayam/NPTEL Courses

Sample NPTEL Certificates :

Sample Certificates of Self Learning:

2.7 Solving Complex Engineering Problems Incorporating Sustainability Goals (20)	**Total Marks 20.00**
	Institute Marks : 20.00

2.7 Solving Complex Engineering Problems Incorporating Sustainability Goals (20)

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

Implementation in Core Courses:

- Courses are designed to incorporate the use of modern tools, sustainable materials, and emerging technologies such as Machine Learning, Artificial Intelligence, Deep Learning, and Blockchain. These courses are further enhanced by integrating semester-long, hands-on projects to promote practical learning and application.
- Students identify real-life problems aligned with SDGs

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.
6. **Community and Stakeholder Involvement:**
    - Collaboration with local communities and industries ensures practical and scalable implementation.

Impact on POs/PSOs:

- **PO 1 (Engineering Knowledge):** Application of fundamental engineering concepts to solve real-world sustainability challenges.
- **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
- **PO 4 (Conduct Investigations of Complex Problems):** Researching and analyzing complex issues related to sustainability and engineering solutions.

Assessment Rubrics for Design Thinking:

Design Thinking Rubrics Review -1				
Assessment Parameter		**Good**	**Average**	**Poor**
Problem Identification (20 M)	Interaction with the Community (10 M)	Clear Documentation of Community interaction with visual proofs (10 M)	Clear Interaction with community with an appropriate document (5 M)	Oral representation of community interaction (no proof) (1 M)
	Problem identified (5 M)	Clearly addressing the problem by statistical representation of either human, educational, health or environmental community (5 M)	Mentioned without statistical representation. (3 M)	Does not mentioned the clear need of the community (1 M)
	Stakeholder Identification (5 M)	Clearly identifies a specific and real user or organization, by name, which can provide feedback/suggestion for the team and receive the project once completed. (5 M)	Mentioned the community but not a specific user who can provide suggestions or feedback over the project (3 M)	No clear details of community or specific user (1 M)
Specification Development (20 M)	Measurable requirements (5 M)	Clearly describes at least 5 measurable requirements depending on the project (5 M)	Less than 4 described specifications or the ones described are not measurable (3 M)	At least 2 specifications listed (1 M)
	Identification of existing solutions (5 M)	Identification of existing solutions addressing the similar problems with appropriate documentation (5 M)	Identification of existing solutions addressing the similar problems with no appropriate documentation.	No clear identification of existing solutions. 01 M)
	Gaps in existing solutions (5 M)	A clear explanation/ analysis of gaps with the documentation by using the appropriate case studies. (5 M)	A marginal explanation/ analysis of gaps by using the appropriate case studies. (3 M)	No appropriate case studies for justification of gaps. (0 M)
	Poster Presentation (Mandatorily) (5 M)	Creative poster presentation (5 M)	Good oral presentation (2 M)	Either Creative poster or good oral presentation (1M)

Design Thinking Rubrics Review -2				
Assessment Parameter		**Good**	**Average**	**Poor**
Design (40 M)	Prototype Design (20 M)	Prototype Design Using Decision Matrix (20 M)	Without Decision Matrix or only sketches done (10 M)	No Sketches (0 M)
	Design skills (20 M)	Providing proofs of number of Iterations covered (20 M)	Number of iterations without proofs (10 M)	Not covering number of Iteration directly jumping in to design (0 M)
Prototype Demonstration (20 M)	Prototype demonstration (10 M)	Prototype demonstration (10 M)	Without prototype demonstration only video presentation (5 M)	No video or prototype demonstration (0 M)
	Filed testing (10 M)	Efficiency and safety usability to community partner (10 M)	Not mentioned the safety and usability (5 M)	No safety and life span of prototype (0 M)

H.T No	Name	SDG Project	SDG Goals
20E51A0511	B. Monika Lakshmi	Eye controlled virtual mouse -TRL4	**SDG 3: Good Health and Well-being** – Supports people with motor disabilities by offering alternative interaction methods. **SDG 9: Industry, Innovation, and Infrastructure** – Promotes inclusive and innovative technology design. **SDG 10: Reduced Inequalities** – Provides access and usability to individuals with disabilities, promoting digital inclusion.
20E51A0512	B. Rohini		
21E55A0506	D. Swetha		
21E55A0517	T. Praveen		
21E55A0510	L Chandra Mahesh		**SDG 3: Good Health and Well-being** – Enhances early diagnosis and treatment planning through AI-assisted medical imaging.

21E55A0505	B Sai kiran	SEGMENTATION METHOD FOR TUMUOR DETECTION IN MRI IMAGES -TRL4	**SDG 9: Industry, Innovation, and Infrastructure** – Encourages innovation in the healthcare sector. **SDG 4: Quality Education** – Promotes research in advanced medical imaging and machine learning.	
20E51A0527	G Maniker Reddy			
20E51A0539	K.Supriya	Fake News Detector in Live Websites Using Text Vectoring and Neural Networks -TRL4	**SDG 16: Peace, Justice, and Strong Institutions** – Helps combat misinformation, promoting truth and transparency. **SDG 9: Industry, Innovation, and Infrastructure** – Innovates in the field of cybersecurity and digital communication. **SDG 4: Quality Education** – Encourages media literacy and responsible information dissemination.	
20E51A0540	L.Geethika			
20E51A0541	M.Sai Nath			
20E51A0542	M.Ram Sai Sathwik Chowdary			
20E51A0552	Nara Adhitya Raj	Paperless medical history application --TRL4	**SDG 3: Good Health and Well-being** – Facilitates efficient and accessible healthcare delivery through digitized records. **SDG 12: Responsible Consumption and Production** – Reduces paper usage, promoting eco-friendly practices. **SDG 9: Industry, Innovation, and Infrastructure** – Advances digital infrastructure in healthcare systems. .	
20E51A0550	Myakala Sai Sudhir			
21E55A0513	P Abhishek			
20E51A0582	Vantakala Pooja			
20E51A0551	Naga Tanusri Nukala	PROTO: A Cutomized Assistant to optimise Personal Tasks- -TRL4	**SDG 8: Decent Work and Economic Growth –** Improves productivity and work-life balance. **SDG 9: Industry, Innovation, and Infrastructure –** Showcases innovation in personal task management and AI applications. **SDG 3: Good Health and Well-being** – Supports mental well-being by helping manage time and reduce stress. .	
20E51A0568	R Rishikesh Reddy			
20E51A0553	Neha B			
20E51A0581	V Sandeep Kumar Yadav			
20E51A0585	Yarlagadda Ravitreyini Chowdary	Project Orchestrator --TRL4	**SDG 8: Decent Work and Economic Growth –** Enhances project management efficiency and team productivity. **SDG 4: Quality Education** – Can be adapted in academic settings to manage student projects effectively. **SDG 9: Industry, Innovation, and Infrastructure** – Encourages structured development and tech-based workflow management. .	
21E55A0511	M.Naresh			
21E55A0515	Srimanthula Shivachary			
21E55A0516	Swarna Neeraj			

Table 2.1.8 Engineering Complex Projects Mapping with SDGs and classification based on TRL

2.8 Steps Taken for Enhancing Industry Institute Partnerships (15) — **Total Marks 15.00**

Institute Marks : 15.00

2.8 Steps Taken for Enhancing Industry Institute Partnerships (15)

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 Non-Destructing Testing and solid works design analysis. 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. In parallel, we have partnered with industries to establish cutting-edge facilities which provide students with hands-on experience using the latest technologies and tools employed in the field. The SSDC (Students Skill Development Center) serves as collaborative spaces where students and faculty work closely with industry professionals on live projects, thereby fostering innovation, enhancing technical competence, and accelerating skill development 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.

HITAM has partnered with industries to establish state-of-the-art labs, including:

→ COE - IOT , COE - CS, COE - AR VR (in collaboration with industry partners).

1. It provides hands-on experience with the latest technologies and tools used in the industry.

2. Students and faculty collaborate with industry professionals on live projects, fostering innovation and skill development.

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

MOU with HITAM:

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 Years	Training programs in IOT	Once in a Year
5	TASK		1 Year	Skill Development, Certification programs, outcome based training, Placement and related services	Once in a Year

Table 2.1.9. Partial delivery of courses by Industry persons for A.Y. 2023-24

Partial delivery of courses by Industry Persons:

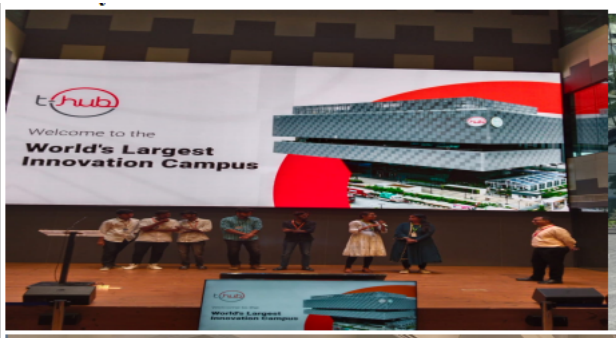
Academic Year 2022-2023, 2023-24 Industry offered short-term programs/training			
Name of the capability enhancement program	**Date of implementation**	**Number of students enrolled**	**Name of the agencies/consultants involved with contact**

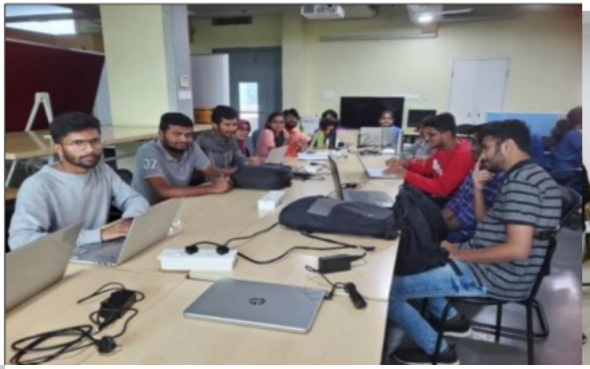
	(DD-MM-YYYY)		details (if any)
Aptitude and Reasoning Training for IV-I students of 2019-23 Batch	01 Sep 2022 - 17 Sep 2022	124	Face Prep (8428446198) and Talentio (8309315335)
Aptitude and Reasoning Training for III-I students of 2020-24 Batch	17 Oct 2022 - 5 Dec 2022	101	Santhosh Kumar Ananta (8985229915)
Induction Program	02 Nov 2022 To 12 Nov 2022	124	Science and Humanities Department, Hyderabad Institute of Technology and Management
Seminar on Self Confidence & Attitude for Future Entrepreneurs	10 Nov 2022 To 10 Nov 2022	101	EDC Cell, Hyderabad institute of Technology and Management
Awareness session on District Industrial Centre for New Beginners in Business	10 Nov 2022 To 10 Nov 2022	90	EDC Cell, Hyderabad institute of Technology and Management
Seminar on Business Opportunities & Marketing Strategies	10 Nov 2022 To 10 Nov 2022	90	EDC Cell, Hyderabad institute of Technology and Management
A session on Human Values, Anti-raging, Womens Safety, and Cyber-crimes	22 Nov 2022 To 22 Nov 2022	110	Science and Humanities Department, Hyderabad Institute of Technology and Management
Aptitude and Reasoning Training for II-I students of 2021-25 Batch	06 Dec 2022 - 27 Jan 2023	123	Santhosh Kumar Ananta (8985229915)
Python Training for II-I students of 2021-25 Batch	06 Dec 2022 - 27 Jan 2023	123	K. Krishna (7288996612)
Aptitude and Reasoning Training for III-II students of 2020-24 Batch	17 Apr 2023 - 23 Jun 2023	101	LACE Academy (9848144430)
Aptitude and Reasoning Training for I-II students of 2022-26 Batch	01 May 2023 - 31 Jul 2023	129	LACE Academy (9848144430)
Sessions on Building Self Confidence for III-II students of 2020-24 Batch	05 Jun 2023 - 21 Jun 2023	101	Supriya Gahlot (7289086338)
Aptitude and Reasoning Training for II-II students of 2021-25 Batch	14 Jun 2023 - 18 Jul 2023	123	LACE Academy (9848144430)
Front End Development Html5 & Css3	4th September 2024	90	TASK
Programming Essentials in Python & Django	27th August 2024	120	TASK
Programming Essentials in Python & Django	20th August 2024	90	TASK
Front End Development with JavaScript	27th August 2024	130	TASK
Front End Development with JavaScript	20th August 2024	90	TASK
Programming Essentials in Python & Django	30th July 2024	120	TASK
Front End Development with JavaScript	30th July 2024	90	TASK

Programming Essentials in Python & Django	22nd July 2024	130	TASK
Front End Development with JavaScript	22nd July 2024	90	TASK
Front End Development with JavaScript	20th August 2024	120	TASK
Database Programming with SQL	13th August 2024	90	TASK
Network Simulation - NS2	27th June 2024	130	TASK
Programming Skills C & Data Structures	14th March 2024	90	TASK
Front End Development Html5 & Css3	11th December 2023	120	TASK
Programming Essentials in Python & Django	19th September 2023	90	TASK
Java Fundamentals	19th September 2023	130	TASK
Programming Essentials in Python & Django	11th September 2023	90	TASK
Industry Visit	13 June 2024	120	T HUB
AWS Cloud Fundamentals	27th Nov 2023	90	Ashok IT Solutions
CCNA	4th Feb 2023	30	C-DAC, Hyderabad
CCNA	1st Oct 2023	30	C-DAC, Hyderabad
CCNA	19th Aug 2023	30	C-DAC, Hyderabad
IOT	Dec 2021	14	IIIT, Hyderabad
NLP	Nov 2022	14	IIIT, Hyderabad
IOT & NLP	Nov 2023	12	IIIT, Hyderabad
Cloud Computing	16th Sept 2022	14	Google Developers

Table 2.1.10. Partial delivery of courses by Industry persons

Industry Visits (T HUB, IIIT Hyderabad):


t-hub
Welcome to the
World's Largest
Innovation Campus


Industry Interaction and Impact analysis:

S.No	Industry interaction	Impact Analysis
1	Infosys SpringBoard	This academic program offers online training, qualifications, certifications and many more resources, completely free of cost.1st sem CSE students Completed C programming and 2nd sem Students completed python programming.
2	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.
3	TASK	TASK (Telangana Academy for Skill and Knowledge) program can have a significant impact on students, especially in terms of employability, industry readiness, and personal development.
4	C-DAC	Attending CCNA (Cisco Certified Network Associate) training at C-DAC, Hyderabad can have a strong and career-defining impact, especially for students and professionals interested in networking, cybersecurity, or IT infrastructure.

Table 2.1.11. Impact Analysis after the interaction in the Industry

Career counselling offered by the institution:	
Details of career counselling	**Number of students attended / participated**
Careers in Data Science by Jyotish Cherian, AVP, Wells Fargo	70
Skills Required to get into TCS by Pranab Kishore Padhy, Technical Lead, TCS	8
How to grab a Job in Google by Sanskriti Singh, Business Development Manager, Google	8
GECF Session on Higher Education	22
Bridging the Skill Gap between Industry and Academia by M Anurag Reddy, HR and Senior Techical Recruiter, Zen Technologies	76
How to get a gob in a top product based company with 20+LPA by Arindam Mukherjee, Former Sr Director of Product, Flipkart and Mohammad Yasir, Former VP of Engineering, Myntra	45
Career in Automotive Industry: Design and Safety by Ravi Kumar, Senior General Manager, ZF Group	70
User Experience Design by Sheetal Sohoni, Adjunct Assistant Professor, Milwaukee School of Engineering, USA	50
Entrepreneurship by Karthik Maharana, Entrepreneur, Dragonworks Photography	82
CSC - Importance of CS, Certifications, Job opportunities and Entreprenuership opportunities by Mr Srinvas and Ms Rama Patnaik, Senior Consultant Aviation, ISAC	59
How to build a powerful LinkedIn profile by Akash Tonasalli, Entrepreneur & Digital Marketing Expert	66
Start-Up : A Cautious Inspiration by Pawan Acharya, Business Consultant, Adapt Motors Private Limited	64
Orientation Session on Career in Defence	10
Importance of Market Research and Corporate Orientation by Ms Lakshmi, Director HR, MetrixLab	51
What it takes to get into a Microsoft by Sanchit Ranjan, Project Manager, Microsoft	32
Power of Networking by Krishna Sri Sai, Project Manager, NutriHub, IIMR	25
AVON Scholarship - SC & ST by Mr Prabhu, Global Tree	80
Supply Chain Management by Kedar Mukherjee, Manager, Program Management, Supply Chain, Amazon	18
The REEEnt Trend in VLSI and the Future of VLSI Systems by Mukesh Sukla, Senior Manager, Marquee Semiconductor Inc.	25
Working in the Tech Industry: Paycheques vs Work-Life Balance by Ankit Mishra, Product Manager, Revalize, Canada	10
Keys to get into a Big Brand by Samikshya Mishra, Application Developer, IBM	18
GECF Session on Higher Education	8
Role of Technology in Social Change by Aman Kumar, Manager - Digital Operations and Platform, Wipro Technologies	15
Life of a Full Stack Developer by Harsh Poddar, Software Engineer, Air Bus	20
Session on Building Self Confidence	72

Table 2.1.12. Number of students benefitted by guidance for competitive examinations and career counseling.

3 OUTCOME-BASED ASSESSMENT (120)

Total Marks 119.00

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.

R2H1 (30M)	HR22 (40M)	HR24 (40M)
Subjective Paper-15M	Subjective Paper-25M	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 Semeste 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.

For HR 21:

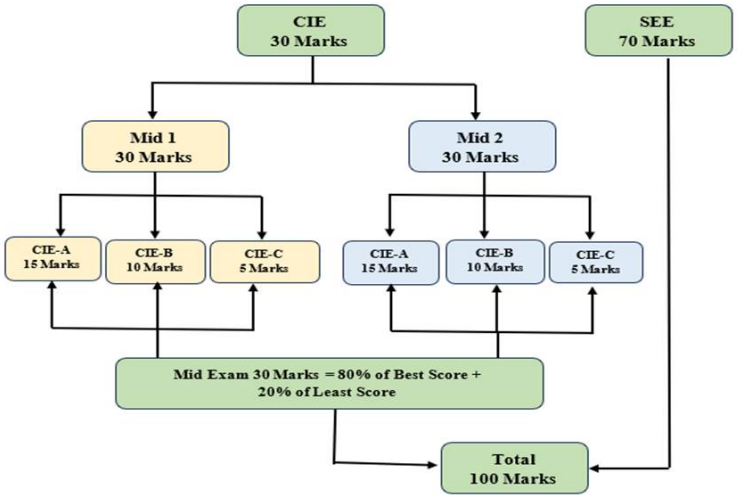


Figure 1: Distribution of Assessment Components as per HR 21 Guidelines

For HR 22 and 24

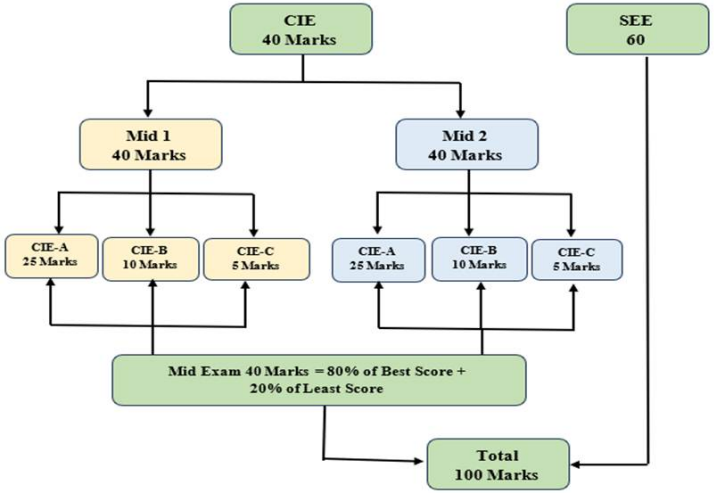


Figure 2: Distribution of Assessment Components as per HR 22 and HR 24 Guidelines

CIE- A Sample Question Paper (15 Marks)

HR 21

HYDERABAD INSTITUTE OF TECHNOLOGY & MANAGEMENT (AUTONOMOUS)					
Gowdavelli, -Medchal Dist. – 501 401					
CONTINUOUS INTERNAL EVALUATION MID-II Exam		ODD Semester : 2024-25			
Faculty In-Charge : Dr. T. Sathish Kumar		IV Yr. I Sem / Branch			CSE
Subject Name: Cyber Security Essentials		Date : 10-12-2024			Time : 1 Hour
Subject Code : 21OE7CC03					
Q. No	PART-A (1 Mark Question) 1 x 5 = 5	Marks	Bloom's Level	COs	POs
1	Identify common networking protocols used in business environments and state one application.	1	L1	CO3	PO1
2	List the key steps involved in an effective Operational Security (OpSec) process.	1	L2	CO4	PO4
3	Suggest any two strategies organizations use to respond to identified security threats.	1	L3	CO4	PO3, PO6
4	Differentiate between ethical hacking and malicious hacking.	1	L4	CO4	PO8
5	Explain how encryption helps ensure data security and privacy.	1	L2	CO4	PO2
Q. No	PART-B (5 Mark Question) Answer Any TWO Questions 2 x 5 = 10	Marks	Bloom's Level	COs	POs
6	Evaluate any three security protocols, analyzing their mechanisms for protecting data integrity and confidentiality, and discussing potential limitations or vulnerabilities.	5	L5	CO3	PO3, PO6
7	Explain the impact of integrating security practices into each phase of the Software Development Lifecycle (SDLC) and propose a framework that enhances collaboration between development and security teams.	5	L6	CO4	PO2, PO5
8	Examine the influence of compliance standards such as GDPR and HIPAA on organizational data privacy practices. Evaluate how these regulations drive changes in policy, technology adoption, and employee training.	5	L5	CO4	PO6, PO8

CIE- A Sample Question Paper (25 Marks)

HR 22

HYDERABAD INSTITUTE OF TECHNOLOGY & MANAGEMENT (AUTONOMOUS)		
Gowdavelli, -Medchal Dist. – 501 401		
CONTINUOUS INTERNAL EVALUATION MID-II Exam	**Even Semester : 2024-25**	
Faculty In-Charge: T Raghavendra Gupta	**III Yr. II Sem / Branch**	CSE
Subject Name: Big Data Analytics		**Time : 1½ Hour**

Subject Code: 22PC6CD09		**Date : 13-06-2025**			
Q. No	**PART-A (2 Mark Question) 2 x 5 = 10**	**Marks**	**Bloom's Level**	**COs**	**POs**
1	Define data serialization in the context of Hadoop.	2	L1	CO2	PO1
2	What is the default output format in MapReduce?	2	L1	CO2	PO1
3	List four differences between RDBMS and Hadoop.	2	L1	CO3	PO1
4	What is replication factor?	2	L1	CO3	PO1
5	What is the role of BigR in big data analytics?	2	L2	CO4	PO1
PART-B (5 Mark Question)					
Answer All Questions 3 x 5 = 15					
6	Discuss the role and structure of key-value pairs in the input and output of MapReduce jobs.	5	L3	CO2	PO1,3
	OR				
7	Compare and contrast Writable and Avro serialization frameworks in Hadoop.	5	L4	CO2	PO1,2,4
8	Describe the HDFS architecture in detail, including the role of each daemon.	5	L4	CO3	PO1,2,3
	OR				
9	Discuss the Hadoop MapReduce framework and its workflow with a suitable example.	5	L3	CO3	PO1,3
10	Explain supervised and unsupervised learning in detail with examples and applications.	5	L2	CO4	PO1,2
	OR				
11	Describe the collaborative filtering technique. How is it used in recommendation systems?	5	L4	CO4	PO1,2,4

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):

Q. No	**Question**	**Marks**	**BTL**	**CO**	**PO Mapping**
1	Explain the working of the CYK (Cocke–Younger–Kasami) Algorithm used for parsing strings in context-free languages written in Chomsky Normal Form (CNF).	2.5	L3	CO3	PO1, PO2

2	Design a Turing Machine that accepts all strings of the form... *(incomplete question)*	2.5	L4	CO4	PO1, PO2

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:

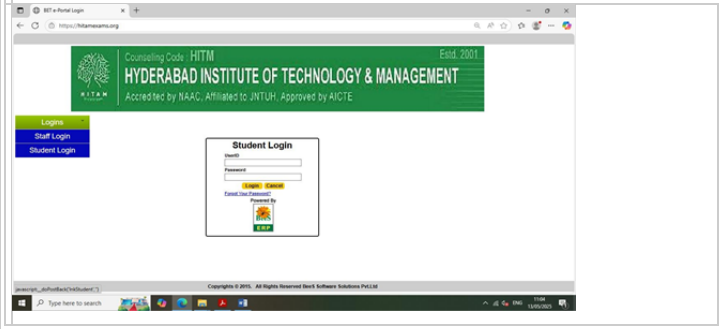
- Controller of Examinations (CoE) will prepare the list of experts for various courses from the identified institutions along with the internal experts.
- The Controller of examination will share the Question paper template, Syllabus copy and Blooms Taxonomy along with the guidelines to the external 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:



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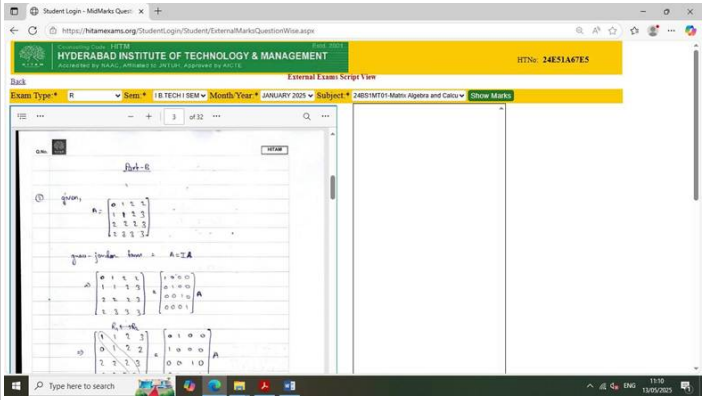
Click on student login

->Enter your credentials



3.3 Evaluation of Laboratory Work and Workshop (Continuous and SEE) (10)	Total Marks 9.00
	Institute Marks : 9.00

- 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).

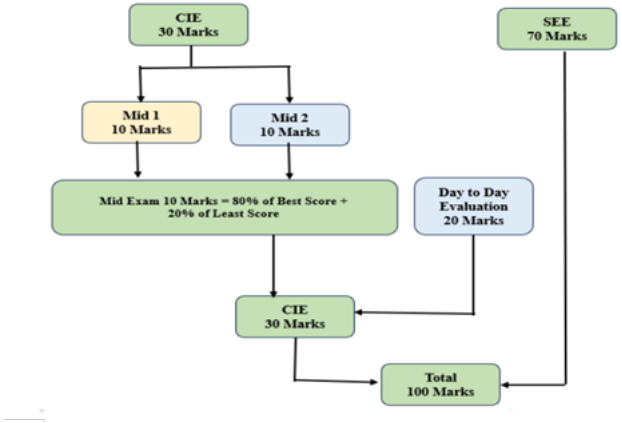


Figure 3.1 Lab Evaluation Process

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 RUBRIC :

Criteria	Excellent (5 Marks)	Good (3–4 Marks)	Needs Improvement (1–2 Marks)
Observation (5 Marks)	Actively engaged, follows instructions, attentive throughout	Generally attentive, minor distractions or prompting needed	Often distracted, uninterested, or needs constant guidance
Record Book (5 Marks)	All entries complete, neat, well-organized, accurate	Most entries complete, legible, minor errors	Incomplete, untidy, or contains major errors
Experiment Execution and Team collaboration (5 Marks)	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 (5 Marks)	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 (Code: E5)

DAY TO DAY EVALUATION SHEET

30-09-2024 Lab Name : AI Lab EXP No : 03

Sl No	Roll No	Observation 5M	Record Book 5M	Experiment Execution and Team collaboration 5M	Viva Voce 5M	Total 20M
1	21ES1A0542	5	5	3	4	17
2	22ES1A0501	4	4	3	5	16
3	22ES1A0502	3	3	5	5	16
4	22ES1A0503	3	5	4	5	17
5	22ES1A0504	5	5	4	3	17
6	22ES1A0505	3	5	3	3	14
7	22ES1A0506	5	5	4	3	17
8	22ES1A0507	4	4	5	4	17
9	22ES1A0508	4	4	4	3	15
10	22ES1A0509	5	3	5	3	16
11	22ES1A0510	3	4	3	3	13
12	22ES1A0511	4	4	3	5	16
13	22ES1A0512	5	4	3	3	15
14	22ES1A0513	4	5	5	5	19
15	22ES1A0514	4	5	4	3	16
16	22ES1A0515	4	4	3	4	15
17	22ES1A0517	3	4	4	4	15
18	22ES1A0518	4	5	5	3	17
19	22ES1A0519	3	5	3	3	14
20	22ES1A0520	5	5	5	5	20
21	22ES1A0521	5	3	5	4	17
22	22ES1A0522	5	4	5	3	17
23	22ES1A0523	5	3	4	3	15
24	22ES1A0524	4	5	5	3	17
25	22ES1A0525	4	3	3	3	13
26	22ES1A0526	3	3	5	5	16
27	22ES1A0528	3	4	3	5	15
28	22ES1A0529	4	5	4	4	17
29	22ES1A0530	4	4	5	5	18
30	22ES1A0531	5	3	4	5	17
31	22ES1A0532	4	5	5	3	17
32	22ES1A0533	5	5	4	4	18
33	22ES1A0535	3	4	4	3	14
34	22ES1A0536	5	5	5	4	19
35	22ES1A0537	5	4	5	4	18
36	22ES1A0538	4	4	3	5	16
37	22ES1A0540	3	5	4	3	15
38	22ES1A0541	5	4	4	5	18
39	22ES1A0542	4	3	4	4	15
40	22ES1A0543	5	4	3	4	16
41	22ES1A0544	3	3	5	4	15
42	22ES1A0545	3	4	5	4	16
43	22ES1A0546	3	5	3	5	16
44	22ES1A0547	3	5	3	3	14
45	22ES1A0548	5	4	4	4	17
46	22ES1A0549	5	4	5	3	17
47	22ES1A0551	5	5	4	4	18
48	22ES1A0552	5	5	5	3	18
49	22ES1A0553	5	4	4	3	16
50	22ES1A0554	3	4	4	3	14
51	22ES1A0555	3	5	5	4	17
52	22ES1A0556	5	3	5	5	18
53	22ES1A0557	4	4	4	4	16
54	22ES1A0558	4	4	5	4	17
55	22ES1A0559	4	5	4	4	17
56	22ES1A0560	5	3	4	5	17
57	22ES1A0561	3	5	3	5	16
58	22ES1A0562	3	4	5	3	15
59	22ES1A0564	5	4	4	4	17
60	23ES5A0501	4	4	3	3	14
61	23ES5A0502	5	5	4	4	18
62	23ES5A0503	4	4	4	4	16
63	23ES5A0504	3	4	5	4	16
64	23ES5A0505	3	5	3	4	15
65	23ES5A0506	5	4	5	4	18

Faculty Incharge

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.

Semester End Examination (SEE) Evaluation Rubric:

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. — **10-14 marks**	Lacks clarity or understanding; unable to answer majority of questions accurately. — **0-9 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 as per their course structure.

Once the internship is completed they will submit a report covering their learnings and will present the same during the regular reviews conducted by the department committee (consisting of the Head of the Department, the concerned supervisor, and two senior faculty members) as per the schedule. In general minimum two reviews will be conducted for 25 marks each, and the fianal presentation along with report evaluation will be assessed for 50 marks by a committee.

INTERNSHIP EVALUATION RUBRCIS:

Criteria	Excellent	Satisfactory	Needs Improvement
Understanding, Background, and Topic (5 Marks)	Demonstrates strong understanding; background is well-researched and topic is clearly defined. – 4-5M	Shows general understanding; background and topic are somewhat clear. -2-3M	Limited understanding; background or topic lacks clarity. – 0-1M

Specific Project Goals (3 Marks)	Goals are clearly stated, relevant, and achievable. - 3M	Goals are partially defined and somewhat relevant. - 2M	Goals are unclear or not aligned with the topic. - 0-1M
Literature Survey (2 Marks)	Thorough and relevant review of existing work. - 2M	Basic review with limited depth. - 1M	Little or no relevant literature covered. - 0M
Work Planning (5 Marks)	Detailed and logical plan with timeline and tasks. -4-5M	Basic plan with partial detail.- 2-3M	Poor or missing work plan. - 0-1M
Presentation Skills (5 Marks)	Clear, confident, engaging, with good use of visuals. - 4-5M	Understandable but with minor issues in clarity or delivery. - 2-3M	Poor delivery or difficult to understand. - 0-1M
Question and Answers (5 Marks)	Responds confidently and accurately to all questions. - 4-5M	Answers most questions reasonably well. - 2-3M	Struggles to answer questions or gives incorrect responses. - 0-1M

HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(Affiliated to JNTU, Hyderabad, TS)

Department of Computer Science and Engineering

Internship Evaluation Form (2024-25)

Project Title: Resume Builder Date: 05/01/24

Batch No: A-01

Candidate Details			
S. No	Roll. No	Candidate Name	Guide Name
1.	22E51A0502	Afsar Saha	Mr. D Roy
2.	22E51A0503	Akhilesh Yadav	
3.	22E51A0510	Ankit Kumar	
4.	22E51A0511	Altes Hussain	
5.			
6.			

Candidate Contribution and Performance							
Subject Matter	Marks						
	Batch Members						
	1	2	3	4	5	6
Understanding the background and Description of the project	4	4	3	3		
Modules Description	4	3	3	3		
Presentation skills, Project Planning	4	4	4	3		
Code Execution	4	4	4	3		
Question and Answers	4	4	4	3		
Total	20	19	18	15		
Comments						

Panel Member1 Panel member2 HoD

Rubric Criteria and PO/PSO Mapping:

Rubric Criteria	Marks	Linked POs/PSOs

Understanding, Background, and Topic	5	PO1 (Engineering Knowledge), PO2 (Problem Analysis), PSO1, PSO2
Specific Project Goals	3	PO2, PO3 (Design/Development of Solutions), PSO1, PSO2
Literature Survey	2	PO2, PO4, PSO1, PSO2
Work Planning	5	PO5 (Modern Tool Usage), PO11 (Project Management and Finance), PSO1, PSO2
Presentation Skills	5	PO10 (Communication)
Question and Answers	5	PO2, PO10, PO12 (Lifelong Learning)

3.5 Evaluation of Projects (20)	**Total Marks 20.00**
	Institute Marks : 20.00

- Student(s) shall start the Project Stage-1during the VII Semester (IV-B. Tech–I–Semester) as per the regulation and under the super vision of the Project Guide / Project Supervisor assigned by the Head of the Department. The topics for Mini Project, Summer Internship, Major Project 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 REVIEW 1 RUBRICS:

Review Evaluation Rubric:

Criteria	**Excellent (6 Marks)**	**Good (4–5 Marks)**	**Needs Improvement (0–3 Marks)**
Scope and Relevance (Technical/SDG)	Clearly defines the problem, significance, and reviews comprehensive and updated literature.	Defines topic and reviews relevant, but limited or outdated literature.	Attempts definition; literature review is insufficient or outdated.
Analysis and Synthesis	Critically analyzes themes, trends, gaps; synthesizes insights.	Analyzes themes and gaps; compares perspectives to some extent.	Attempts analysis with limited synthesis or comparison.
Critical Evaluation	Evaluates strengths, weaknesses, biases, limitations of literature.	Identifies some strengths and weaknesses; evaluates credibility moderately.	Basic evaluation; lacks critical assessment of sources.
Citation and Referencing	All sources correctly cited in-text and in reference list.	Some inconsistencies in citation, but most sources cited correctly.	Inconsistent or incorrect citation; some sources not cited.
Organization and Presentation	Logically structured, clear, free of grammar errors.	Generally organized and clear with few language errors.	Disorganized or unclear; contains multiple grammar issues.

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.

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).

PROJECT WORK REVIEWS 2 RUBRICS:

Criteria	Excellent (6 Marks)	Good (4–5 Marks)	Average (2–3 Marks)	Poor (0–1 Marks)
Understanding of the Project	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 key technical aspects.	Shows a basic understanding but lacks clarity on some technical details.	Limited understanding of goals and challenges.
Project Methodology	Clearly outlines chosen methodology for research, design, implementation, and testing with strong justification.	Describes a well-defined methodology but may lack detailed justification.	General approach presented but lacks clarity or suitability.	Methodology is unclear or poorly defined.
Progress on Work	Significant progress made across all aspects, meeting or exceeding milestones.	Steady progress with some tasks completed as planned.	Limited progress; may be falling behind schedule.	Minimal or no progress on project tasks.
Technical Content	Strong understanding of relevant concepts; uses appropriate technical language accurately.	Good understanding with minor inaccuracies.	Limited knowledge with noticeable errors.	Weak technical understanding; major conceptual gaps.
Project Management	Effectively manages time, resources, and risks; communicates updates clearly.	Good management with some planning and communication gaps.	Limited skills; potential delays or resource issues; poor communication.	No clear plan or communication; disorganized.

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), PSO1, PSO2
Project Methodology	6	Assesses clarity, rationale, and appropriateness of the chosen approach.	PO3 (Design/Development), PO4 (Investigation), PSO1, PSO2
Progression 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:

- 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.

A comprehensive rubric has been designed to assess students performance in Review 3 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).

PROJECT WORK REVIEWS 3 RUBRICS:

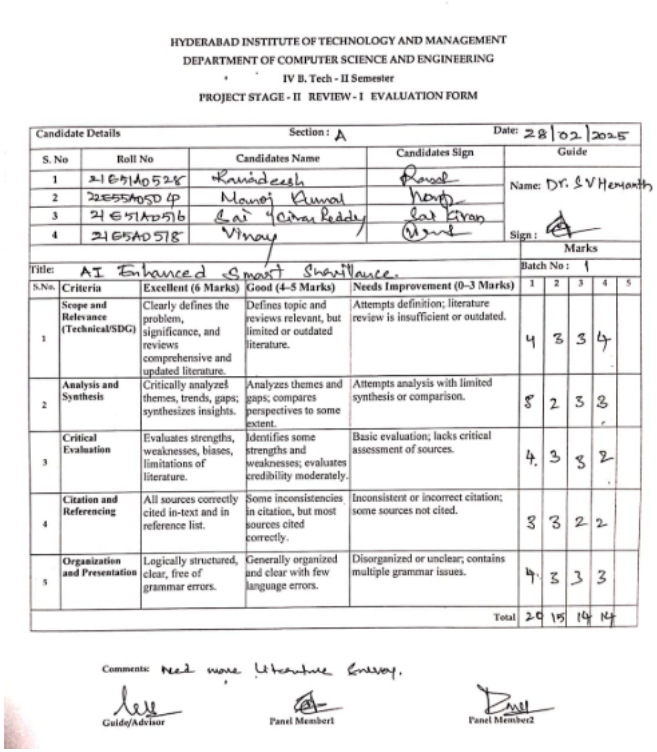
Criteria	Excellent (5 Marks)	Good (3–4 Marks)	Satisfactory (1–2 Marks)
Project Completion	All objectives fully met; output is complete, functional, and of high quality.	Most objectives achieved; output is functional with minor gaps.	Partial completion; key components missing or non-functional.
Innovation & Creativity	Highly innovative solution or creative approach; exceeds standard expectations.	Shows some original thinking or enhancements over basic solutions.	Conventional approach with limited or no innovation.
Technical Execution	Strong implementation with appropriate tools, minimal errors, and adherence to standards.	Mostly accurate implementation with minor technical issues.	Basic implementation with noticeable technical flaws or inefficiencies.
Documentation	Well-structured, detailed documentation covering all phases (design, implementation, testing, outcomes).	Adequate documentation; minor sections missing or lacking detail.	Poor or incomplete documentation; lacks clarity or important content.
Presentation & Demo	Clear, confident presentation; smooth demo showing all functionalities effectively.	Presentation is understandable; demo mostly works with minor glitches.	Basic or unclear presentation; demo is weak or partially working.
Teamwork / Individual Effort	Excellent collaboration and equal contribution / strong and balanced individual effort.	Good contribution and coordination; some uneven effort.	Poor coordination or unequal effort / difficulties in managing all project aspects.

Mapping of Rubrics with PO/PSO:

Criteria	Excellent (5 Marks)	Good (3–4 Marks)	Satisfactory (1–2 Marks)
1. Project Completion	All objectives fully met; output is complete, functional, and of high quality.	Most objectives achieved; output is functional with minor gaps.	Partial completion; key components missing or non-functional.
2. Innovation & Creativity	Highly innovative solution or creative approach; exceeds standard expectations.	Shows some original thinking or enhancements over basic solutions.	Conventional approach with limited or no innovation.
3. Technical Execution	Strong implementation using appropriate tools; minimal errors; follows best practices and standards.	Mostly accurate implementation; minor technical issues present.	Basic implementation with noticeable technical flaws or inefficiencies.
4. Documentation	Well-structured, detailed documentation covering design, implementation, testing, and outcomes.	Adequate documentation; minor sections are missing or lack detail.	Poor or incomplete documentation; lacks clarity or important phases.
5. Presentation & Demo	Clear, confident presentation; smooth live demo showing all functionalities.	Presentation is understandable; demo mostly works with minor glitches.	Basic or unclear presentation; demo is weak or only partially functional.
6. Teamwork / Individual Effort	Excellent collaboration and equal participation (team) / strong and balanced effort (individual).	Good contribution and coordination; minor imbalance in effort.	Poor coordination or uneven contributions; issues in managing tasks effectively.

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 COMPUTER SCIENCE AND ENGINEERING
IV B. Tech - II Semester
PROJECT STAGE - II REVIEW - I EVALUATION FORM

Candidate Details — Section: A — Date: 28/02/2025

S. No	Roll No	Candidates Name	Candidates Sign
1	21E51A0528	Ravindeesh	Ravi
2	22E55A05D4	Manoj Kumar	Manoj
3	21E51A0516	Sai Kiran Reddy	Sai Kiran
4	21E5A0518	Vinay	Vinay

Guide — Name: Dr. S V Hemanth — Sign:

Title: AI Enhanced Smart Surveillance.

Marks — Batch No: 1

S.No.	Criteria	Excellent (6 Marks)	Good (4-5 Marks)	Needs Improvement (0-3 Marks)	1	2	3	4	5
1	Scope and Relevance (Technical/SDG)	Clearly defines the problem, significance, and reviews comprehensive and updated literature.	Defines topic and reviews relevant, but limited or outdated literature.	Attempts definition; literature review is insufficient or outdated.	4	3	3	4	
2	Analysis and Synthesis	Critically analyzed themes, trends, gaps; synthesizes insights.	Analyzes themes and gaps; compares perspectives to some extent.	Attempts analysis with limited synthesis or comparison.	5	2	3	3	
3	Critical Evaluation	Evaluates strengths, weaknesses, biases, limitations of literature.	Identifies some strengths and weaknesses; evaluates credibility moderately.	Basic evaluation; lacks critical assessment of sources.	4	3	3	2	
4	Citation and Referencing	All sources correctly cited in-text and in reference list.	Some inconsistencies in citation, but most sources cited correctly.	Inconsistent or incorrect citation; some sources not cited.	3	3	2	2	
5	Organization and Presentation	Logically structured, clear, free of grammar errors.	Generally organized and clear with few language errors.	Disorganized or unclear; contains multiple grammar issues.	4	3	3	3	
				Total	20	15	14	14	

Comments: Need more literature survey.

Guide/Advisor — Panel Member1 — Panel Member2

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 encourages integration of United Nations Sustainable Development Goals (SDGs) into student activities, project work, and research initiatives.

To promote awareness and action on sustainability challenges, students are engaged through the following:

Project Work and Mini Projects:

Students undertake course projects and capstone projects aligned with specific SDGs such as clean energy (SDG 7), industry and innovation (SDG 9), sustainable cities (SDG 11), and climate action (SDG 13). These projects focus on real-world problems and propose feasible, innovative, and sustainable solutions.

Research and Internships:

Selected students are involved in research work and internships at reputed institutions like IIITH. that contribute to sustainability themes such as water conservation, smart grids, energy-efficient systems, waste management, and environmental monitoring using IoT.

Student Clubs and Activities:

Student-led initiatives and technical clubs organize awareness campaigns, sustainability workshops, clean-up drives, energy audits, and plantation activities promoting SDGs such as responsible consumption (SDG 12) and life on land (SDG 15).

A **portfolio of evidence** including project reports, photographs, posters, certificates, and documentation of student involvement is maintained. This integrated approach not only nurtures socially responsible graduates but also aligns institutional efforts with national and global development goals.

Sample Students Project works mapped to SDGs:

H.T No	Name	SDG Project	**TRL**	SDG Goals
20E51A0511	B. Monika Lakshmi	Eye controlled virtual mouse	TRL 5	SDG 3: Good Health and Well-being – Supports people with motor disabilities by offering alternative interaction methods. SDG 9: Industry, Innovation, and Infrastructure – Promotes inclusive and innovative technology design. SDG 10: Reduced Inequalities – Provides access and usability to individuals with disabilities, promoting digital inclusion.·
20E51A0512	B. Rohini			
21E55A0506	D. Swetha			
21E55A0517	T. Praveen			
21E55A0510	L Chandra Mahesh	SEGMENTATION METHOD FOR TUMOR DETECTION IN MRI IMAGES	TRL 5	SDG 3: Good Health and Well-being – Enhances early diagnosis and treatment planning through AI-assisted medical imaging. SDG 9: Industry, Innovation, and Infrastructure – Encourages innovation in the healthcare sector. SDG 4: Quality Education – Promotes research in advanced medical imaging and machine learning.
21E55A0505	B Sai kiran			
20E51A0527	G Maniker Reddy			
20E51A0539	K.Supriya	Fake News Detector in Live Websites Using Text Vectoring and Neural Networks	TRL 5	SDG 16: Peace, Justice, and Strong Institutions – Helps combat misinformation, promoting truth and transparency. SDG 9: Industry, Innovation, and Infrastructure – Innovates in the field of cybersecurity and digital communication.
20E51A0540	L.Geethika			
20E51A0541	M.Sai Nath			

20E51A0542	M.Ram Sai Sathwik Chowdary			SDG 4: Quality Education – Encourages media literacy and responsible information dissemination.
20E51A0552	Nara Adhitya Raj	Paperless medical history application	TRL 5	SDG 3: Good Health and Well-being – Facilitates efficient and accessible healthcare delivery through digitized records. SDG 12: Responsible Consumption and Production – Reduces paper usage, promoting eco-friendly practices. SDG 9: Industry, Innovation, and Infrastructure – Advances digital infrastructure in healthcare systems. .
20E51A0550	Myakala Sai Sudhir			
21E55A0513	P Abhishek			
20E51A0582	Vantakala Pooja			
20E51A0551	Naga Tanusri Nukala	PROTO: A Customized Assistant to optimise Personal Tasks	TRL 5	SDG 8: Decent Work and Economic Growth – Improves productivity and work-life balance. SDG 9: Industry, Innovation, and Infrastructure – Showcases innovation in personal task management and AI applications. SDG 3: Good Health and Well-being – Supports mental well-being by helping manage time and reduce stress. .
20E51A0568	R Rishikesh Reddy			
20E51A0553	Neha B			
20E51A0581	V Sandeep Kumar Yadav			
20E51A0585	Yarlagadda Ravitreyini Chowdary	Project Orchestrator	TRL 5	SDG 8: Decent Work and Economic Growth – Enhances project management efficiency and team productivity. SDG 4: Quality Education – Can be adapted in academic settings to manage student projects effectively. SDG 9: Industry, Innovation, and Infrastructure – Encourages structured development and tech-based workflow management. .
21E55A0511	M.Naresh			
21E55A0515	Srimanthula Shivachary			
21E55A0516	Swarna Neeraj			

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.

Course Attainments (2020-24)

Code/Course	CO1	CO2	CO3	CO4
BASIC ELECTRICAL ENGINEERING (EE103ES)	1.2	1.2	1.5	1.5
Basic Electrical Engineering Lab (EE108ES)	3	3	3	3
CHEMISTRY (CH102BS)	2.75	2.75	2.75	2.67
Engineering chemistry lab (CH106BS)	3	3	3	3
ENGLISH (EN105HS)	2	3	3	3
ENGLISH LANGUAGE AND COMMUNICATION SKILLS LAB (EN107HS)	3	3	3	3
MATHEMATICS1 (MA101BS)	1.5	1.5	2.25	2
Engineering Workshop (ME108ES)	3	3	3	3
APPLIED PHYSICS (AP202BS)	2.5	2	2.5	3
APPLIED PHYSICS LAB (AP205BS)	3	3	3	3
ENGINEERING GRAPHICS (ME204ES)	3	3	3	3
MATHEMATICS-II (MA201BS)	2.2	2.2	2.4	2.1

PROGRAMMING FOR PROBLEM SOLVING (CS203ES)	2.3	2.2	2.5	2.2
Programming for problem solving lab (CS206ES)	2.5	2.5	2.5	2.5
Analog and Digital Electronics (CS301ES)	2.2	1.8	1.5	2
Analog and Digital Electronics lab (CS306ES)	2.5	2.5	2.5	2.5
c++ Programming Lab (CS309PC)	3	3	3	3
Computer Organization and Architecture (CS304PC)	2	2	2	2
Computer Oriented Statistical Methods (MA303BS)	1.2	1.3	1.5	1.4
Data Structures (CS302PC)	1.5	1.5	1.5	1.5
Data Structures Lab (CS307PC)	3	3	3	3
IT Workshop Lab (CS308PC)	3	3	3	3
Object Oriented Programming using C++ (CS305PC)	1.7	1.7	1.9	1.9
Business Economics and Financial analysis (SM405MS)	0.75	0.75	0.75	0.75
Database Management System (CS404PC)	2.5	2.5	2.8	2.8
Database Management System Lab (CS407PC)	3	3	3	3
Discrete Mathematics (CS401PC)	2.7	2.7	3	3
Java Programming (CS405PC)	1.38	0.9	0.9	0.6
Java Programming Lab (CS408PC)	3	3	3	3
Operating System (CS403PC)	1.8	1.8	1.8	1.8

Operating System Lab (CS406PC)	3	3	3	3
Advanced Communication Skills Lab (EN508HS)	3	3	3	3
Computer Networks & Web Technologies Lab (CS506PC)	1.5	1.5	1.5	1.5
Computer Networks (CS503PC)	1.13	1.13	1.13	1.13
Natural Language processing (CS525PE2)	2.8			
Formal language and automata theory((CS501PC)	0.88	1.05	1	0
Software Engineering (CS502PC)	2.5	2.35	2.25	2.45
Software Engineering Lab (CS505PC)	3	3	3	3
Web Technologies (CS504PC)	1.38	1.5	1.5	1.5
Natural Language Processing (CS525PE2)	2.8			
Data analytics (CS513PE)	1.5	1.5	1.5	1.5
Compiler Design (CS602PC)	2.32	2.42	2.5	2.5
Compiler Design Lab (CS605PC)	3	3	3	3
Design And Analysis of Algorithms (CS603PC)	2.46	2.46	2.29	2.5
Fundamentals of IOT (op1)	3	3	3	3
MACHINE LEARNING (CS601PC)	2.6	3	2.8	2.7
Machine Learning Lab (CS604PC)	3	3	3	3
Software Testing Methodologies (CS615PE)	3	2.3	3	2.92
Software Testing Methodologies LAB (CS625PE)	3	3	3	3

Cloud Computing (CS714PE)	3	3	3	3
Project Stage-I (CS706PC)	3	3	3	3
Cryptography & Network Security (CS701PC)	3	3	3	3
Cryptography & Network Security LAB (CS703PC)	3	3	3	3
Data Mining (CS702PC)	3	3	3	3
Mini Project (CS704PC)	3	3	3	3
PRINCIPLES OF ENTREPRENEURSHIP (MT701OE)	2.38	2.38	2.5	2.5
Seminar (CS705PC)	3			
Software Process & Project Management (CS725PE)	3	3	3	3
Human Computer Interaction (CS814PE)	1.5	1.5	1.5	1.5
NON-CONVENTIONAL SOURCES OF ENERGY (ME800OE)	2.75	2.75	2.75	2.75
PROJECT STAGE -II (CS802PC)	3	3	3	3
Organizational Behavior (SM801MS)	2.5	2.5	2.5	2.38
Direct Attainment	**2.45**	**2.42**	**2.47**	**2.45**

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
BASIC ELEC	0.28	0.22	0.23		0.18					0.23		
Basic Electric	2.40	1.80		3.00								

CHEMISTRY	2.42	1.46										
Engineering c	3.00	1.20										
ENGLISH (EN									2.34	2.94		
ENGLISH LAI									1.80	3.00		
MATHEMATIC	0.96											
Engineering V	2.76		1.20		1.80	1.20		1.20		2.20		
APPLIED PH'	2.08											
APPLIED PH'	3.00											
ENGINEERIN	2.39	1.44	1.50	1.80	2.55	1.80	1.49		1.49	1.20	1.50	
MATHEMATIC	2.26											
PROGRAMM	1.66	1.63										
Programming	1.50	2.50	2.50	2.50								
Analog and D	0.54	0.64	0.44									
Analog and D	1.93	1.38		1.65								
c++ Program	1.80											
Computer Or	1.60	1.60	1.20									
Computer Or	1.38											
Data Structur	0.75	1.35	0.68	0.90								
Data Structur	3.00	1.80	1.80		2.40							
IT Workshop	1.20				2.20							
Object Orient		1.46	1.29	1.14								
Business Ecc											0.75	
Database Ma	2.35	2.50			2.50							
Database Ma	1.20				3.00							
Discrete Mat	1.71	2.86										
Java Progran	0.64	0.40	0.24	0.24	0.60							
Java Progran	2.10	1.40	1.20	1.20	1.20							
Operating Sy	1.32	1.32		0.94								
Operating Sy	3.00	1.80	1.20									
Advanced Cc									1.80	3.00		
Computer Ne	1.50	1.50	1.50	1.50	1.50			0.60	0.90	0.82	1.05	0.90
Computer Ne	0.68	0.79			0.57							

Natural Langı	2.88	1.73	1.73	2.88							2.88	
Formal langu	0.73	0.44	0.29									
Software Eng	2.42	1.41	2.35	1.25								
Software Eng		3.00		3.00	3.00							
Web Technol	1.47	1.47	1.47	0.88	1.47			0.59	0.88	0.59	0.88	0.88
Natural Langı	2.88	1.73	1.73	2.88	2.88						2.88	
Data analytic	0.90	1.50	0.90		0.60							
Compiler Des	2.44	2.44	2.44	2.44	2.20				1.22	1.46	1.46	2.44
Compiler Des	3.00	3.00	3.00	3.00	3.00	1.50			1.20	1.80	1.80	2.10
Design And A		2.29	2.47									
Fundamental	1.40	1.80	2.40	1.50								
MACHINE LE	2.18	1.88	2.82		3.00							
Machine Lea	1.20				3.00							
Software Test	2.82	2.82	2.82	2.82	2.82	2.82		1.69	1.69	2.82	2.82	
Software Test	2.25	2.25	1.80	2.10								
Cloud Compı	1.80	1.95										
Project Stage	3.00	1.20	1.80									
Cryptography	3.00	1.35	1.50				1.80	1.95				
Cryptography	1.95	3.00	2.70									
Data Mining (	3.00	1.80	1.20									
Mini Project (	3.00	1.80	2.40									
PRINCIPLES										1.09	1.46	1.23
Seminar (CS7	3.00		1.20									
Software Pro	2.10	2.70	1.95	2.60	1.65		1.40	1.20	1.35	1.50	2.25	1.20
Human Comp	1.50	1.50	1.50							1.05		
NON-CONVE	2.75	1.65										2.75
PROJECT ST	3.00	3.00	2.40	1.20	1.40	3.00	1.80	3.00	2.60	2.20	3.00	1.80
Organizationa	0.99								1.98		1.98	

PO Attainment Indirect

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
2020-24	2.60	2.50	2.60	2.50	2.50	2.70	2.50	2.50	2.60	2.60	2.40	2.60

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	1.98	1.75	1.65	1.88	1.98	2.06	1.62	1.46	1.60	1.73	1.90	1.66
InDirect Attainment	2.60	2.50	2.60	2.50	2.50	2.70	2.50	2.50	2.60	2.60	2.40	2.60
Overall Attainment	2.10	1.9	1.84	2.00	2.08	2.19	1.80	1.67	1.8	1.90	2	1.85

PSO Attainment

Course	PSO1	PSO2	PSO3
ComputerOrganization	1.20		1.47
ComputerNetworksWe	1.50	1.50	1.50
ComputerNetworksCS		0.68	
WebTechnologiesCS5(	1.47	1.47	1.47
DataanalyticsCS513PE	0.90		
CompilerDesignCS602	2.44	2.44	1.10
CompilerDesignLabCS	3.00	3.00	1.20
CryptographyNetwork		1.50	
MiniProjectCS704PC	1.20		
PROJECTSTAGEIICS8	3.00	2.40	2.40

PSO Attainment Indirect

Survey	PSO1	PSO2	PSO3
2020-24	2.60	2.50	2.60

PSO Attainment Level

Course	PSO1	PSO2	PSO3
Direct Attainment	1.84	1.86	1.52
InDirect Attainment	2.60	2.50	2.60
Overall Attainment	1.99	1.99	1.74

4 STUDENTS' PERFORMANCE (120)

Total Marks 98.74

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 headings, wherever applicable)	2024-25 (CAY)	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)	2020-21 (CAYm4)	2019-20 (CAYm5)	2018-19 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	240	180	120	120	120	120	120
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	240	180	120	120	85	120	120
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	18	10	12	19	10	12
N3=Separate division if any	0	2	0	0	0	0	0
N4=Total no. of students admitted in the 1st year via all supernumerary quotas	16	14	9	10	0	0	0

Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	256	214	139	142	104	130	132

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)	256				
2023-24 (CAYm1)	214	192			
2022-23 (CAYm2)	139	135	128		
2021-22 (CAYm3)	142	141	128	123	

2020-21 (LYG)	104	103	103	98	97
2019-20 (LYGm1)	130	130	130	124	119
2018-19 (LYGm2)	132	130	123	123	123

4.1 Enrolment Ratio (20) — **Total Marks 20.00**

Institute Marks : 20.00

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)	240	240	16	106.67
2023-24 (CAYm1)	180	180	14	107.78
2022-23 (CAYm2)	120	120	9	107.50

Average [(ER1 + ER2 + ER3) / 3] = 107.32 ≡ 100

Assessment : 20.00

4.2 Success Rate of the Students in the Stipulated Period of the Program (15) — **Total Marks 12.72**

Institute Marks : 12.72

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).	139.00	130.00	132.00
B=No. of students who graduated from the program in the stipulated course duration	97.00	119.00	123.00
Success Rate (SR)= (B/A) * 100	69.78	91.54	93.18

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 84.83

SR Points : 12.72

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 7.54**

Institute Marks : 7.54

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)
Mean of CGPA or mean percentage of all successful students(X)	6.21	6.80	7.10
Y=Total no. of successful students	192.00	135.00	141.00

Z=Total no. of students appeared in the examination	180.00	120.00	120.00
API [X*(Y/Z)]	6.62	7.65	8.34

Average API[(AP1+AP2+AP3)/3] : 7.54

Assessment = Average API : 7.54

4.4 Academic Performance of the Second Year Students of the Program (10) **Total Marks 5.89**

Institute Marks : 5.89

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)	7.16	7.01	6.50
Y=Total no. of successful students	128.00	128.00	103.00
Z=Total no. of students appeared in the examination	145.00	153.00	122.00
API [X * (Y/Z)]	6.32	5.86	5.49

Average API [(AP1 + AP2 + AP3)/3] : 5.89

Assessment [AverageAPI] : 5.89

4.5 Academic Performance of the Third Year Students of the Program (10) **Total Marks 6.57**

Institute Marks : 6.57

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)	7.48	6.84	6.30
Y=Total no. of successful students	123.00	98.00	124.00
Z=Total no. of students appeared in the examination	128.00	103.00	130.00
API [X*(Y/Z)]:	7.19	6.51	6.01

Average API [(AP1 + AP2 + AP3)/3] : 6.57

Assessment [1.5 * AverageAPI] : 6.57

4.6 Placement, Higher Studies and Entrepreneurship (30) **Total Marks 21.02**

Institute Marks : 21.02

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	139.00	130.00	132.00
X=No. of students placed	78.00	75.00	81.00
Y=No. of students admitted to higher studies	20.00	19.00	8.00
Z= No. of students taking up entrepreneurship	0.00	0.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	70.50	72.31	67.42

Average Placement Index = (P_1 + P_2 + P_3)/3: 70.08

Placement Index Points: 21.02

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	COMPUTER SOCIETY OF INDIA-CSI
2	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS- IEEE
3	INSTITUTE OF ELECTRONICS AND TELECOMMUNICATION ENGINEERS- IETE
4	INDO UNIVERSAL COLLABORATION FOR ENGINEERING EDUCATION-ENGINEERS WITHOUT BORDERS - EWB
5	GRAND CHALLENGES SCHOLARS PROGRAM - GCSP
6	TELANGANA ACADEMY FOR SKILL AND KNOWLEDGE - TASK

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	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS - IEEE	WORK SHOP (INTERNET OF THINGS)	NATIONAL	10/01/2024
2	TELANGANA ACADEMY FOR SKILL AND KNOWLEDGE - TASK	FRONT END DEVELOPMENT HTML5 & CSS 3	NATIONAL	07/12/2023
3	INSTITUTE OF ELECTRONICS AND TELECOMMUNICATION ENGINEERS- IETE	TALK ON RECENT TREND ON AI IN ELECTRONICS	NATIONAL	18/10/2023
4	COMPUTER SOCIETY OF INDIA-CSI	DATA VISUALIZATION USING POWER BI	NATIONAL	29/12/2023
5	COMPUTER SOCIETY OF INDIA-CSI	NATIONAL LEVEL HANDS-ON WORKSHOP ON AWS CLOUD FUNDAMENTALS	NATIONAL	28/11/2023
6	TELANGANA ACADEMY FOR SKILL AND KNOWLEDGE - TASK	NATIONAL LEVEL HANDS-ON TRAINING PROGRAM ON CYBERSECURITY	NATIONAL	09/10/2023

(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	TWO DAYS WORKSHOP (REAL TIME APPLICATIONS OF SENSORS WITH IOT)	NATIONAL	31/03/2023
2	TELANGANA ACADEMY FOR SKILL AND KNOWLEDGE - TASK	C & DATA STRUCTURE WORK SHOP	NATIONAL	14/03/2023
3	TELANGANA ACADEMY FOR SKILL AND KNOWLEDGE - TASK	DATA SCIENCE & ANALYTICS	NATIONAL	06/02/2023

(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	COMPUTER SOCIETY OF INDIA-CSI	NATIONAL WORKSHOP ON JAVA WITH ANDROID	NATIONAL	20/09/2021
2	COMPUTER SOCIETY OF INDIA-CSI	HITAM APTI MIND CONTEST	NATIONAL	08/01/2022
3	COMPUTER SOCIETY OF INDIA-CSI	MACHINE LEARNING FOR EXPLORATION AND PRODUCTION	NATIONAL	27/02/2022

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	RIYA CHAURASIYA	SMART INDIA HACKATHON	INTERNATIONAL	11/09/2023	NA
2	BANGARU NEHANJALI	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS - IEEE	NATIONAL	10/01/2024	NA
3	GALI SHASHANK	DATA VISUALIZATION USING POWER BI	NATIONAL	02/12/2023	NA
4	KORIPOTI VARUNIKA	TALK ON RECENT TREND ON AI IN ELECTRONICS	NATIONAL	18/10/2023	NA

(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	DEEPAK	MIT HACKATHON	INTERNATIONAL	02/02/2023	NA
2	N VAMSI KRISHNA	MIT HACKATHON	INTERNATIONAL	02/02/2023	NA
3	SAHITYA	MIT HACKATHON	INTERNATIONAL	02/02/2023	NA
4	CHAITRA	GDSC	INTERNATIONAL	02/02/2023	NA
5	SHARANYA	GDSC	INTERNATIONAL	02/02/2023	NA
6	UTTEJITHA	GDSC	INTERNATIONAL	02/02/2023	NA
7	RANADEESH	GDSC	INTERNATIONAL	02/02/2023	NA
8	NITHIN	MICROSOFT IMAGINE CUP 4.0	INTERNATIONAL	02/02/2023	NA
9	NEHA B	MICROSOFT IMAGINE CUP 4.0	INTERNATIONAL	02/02/2023	NA
10	SAI SUDHIR	MICROSOFT IMAGINE CUP 4.0	INTERNATIONAL	02/02/2023	NA
11	SHINDE	MICROSOFT IMAGINE CUP 4.0	INTERNATIONAL	02/02/2023	NA
12	SIRAMGARI SNEHA REDDY	MATLAB SIMULATION FOR ALGAE GROWTH PREDICITION	INTERNATIONAL	02/02/2023	NA
13	VINEELA	MATLAB SIMULATION FOR ALGAE GROWTH PREDICITION	INTERNATIONAL	02/02/2023	NA
14	YARLAGADDA RAVITREYINI CHOWDARY	MATLAB SIMULATION FOR ALGAE GROWTH PREDICITION	INTERNATIONAL	02/02/2023	NA

(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	SAI SIRISHA	PROJECT EXPO	NATIONAL	04/04/2023	NA
2	N. MAHESHWARI	PROJECT EXPO	NATIONAL	04/04/2023	NA
3	R. NITH EESH	PROJECT EXPO	NATIONAL	04/04/2023	NA
4	S. SONIYA	PROJECT EXPO	NATIONAL	04/04/2023	NA

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	Campus Talk	Dr. T. Sathish Kumar	Ishita Roy	6	3	Both
2	CSE News Letter	Mr. Dharmendra Roysh Kumar	K. Vinay Kumar	6	4	Both

(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	Campus Talk	Dr. T. Sathish Kumar	Ishita Roy	4	3	Both
2	CSE News Letter	Mr. Dharmendra Roy	Uday Kumar	5	4	Both

(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	Campus Talk	Mr. T R Gupta	Manvitha	6	1	Both
2	CSE News Letter	Mrs. K Veena	Manvitha	5	2	Both

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	ABHISHEK KANT SINHA, ANWESHA SATHUA, DRISHTI KUMARI, DOMMATI SHYAM KUMAR	7	IJCRT	IJCRT	11	12	Published
2	A.SATHWIKA CH SAIDEEPTHI D.POOJITHA K.PRAVALIKA	7	IJCRT	IJCRT	11	12	Published
3	B.SAMANVI REDDY K.N.SRAVANTHI J.DHANUSHA A.YUVA SREE	7	IJCRT	IJCRT	11	12	Published
4	K.DEEPAK B.RAJU S.SURYA TEJA V.YAMALAIAH	7	IJCRT	IJCRT	11	12	Published
5	K.JAGADEESH D.GOPICHAND B.DHANUSH YADAV E.MAHALAKSHMI	7	IJCRT	IJCRT	11	12	Published
6	B. MONIKA LAKSHMI B. ROHINI D. SWETHA T. PRAVEEN	7	IJCRT	IJCRT	11	12	Published
7	D.HARI KRISHNA SURENDER SIDHARTH ANEESH	7	IJCRT	IJCRT	11	12	Published

8	G.ESHWAR G.UDAY G.ROHITH G.RAJESH	7	IJCRT	IJCRT	11	12	Published
9	L CHANDRA MAHESH B SANDEEP B SAI KIRAN G MANIKER REDDY	7	IJCRT	IJCRT	11	12	Published
10	K.SHAMALA K.AKSHAYA K.NITIN B.SRAVANI	7	IJCRT	IJCRT	11	12	Published
11	ABHED CHAINANI A KRISHNA KARTHEEK C ANANTHA SAI PRANEETH KAUSTUBH S	7	IJCRT	IJCRT	11	12	Published
12	B NAGABABU K AJAY K SITA RAM	7	IJCRT	IJCRT	11	12	Published
13	K.SUPRIYA L.GEETHIKA M.SAI NATH M.RAM SAI SATHWIK CHOWDARY	7	IJCRT	IJCRT	11	12	Published
14	ABHISHEK KANT SINHA ANWESHA SATHUA DRISHTI KUMARI SHYAM KUMAR	8	IJETMS	IJETMS	8	3	Published
15	A.SATHWIKA CH SAIDEEPTHI D.POOJITHA K.PRAVALIKA	8	IJETMS	IJETMS	8	3	Published
16	B.SAMANVI REDDY K.N.SRAVANTHI J.DHANUSHA A.YUVA SREE	8	IJETMS	IJETMS	8	3	Published
17	K.DEEPAK B.RAJU S.SURYA TEJA V.YAMALAIAH	8	IJETMS	IJETMS	8	3	Published
18	K.JAGADEESH D.GOPICHAND B.DHANUSH YADAV E.MAHALAKSHMI	8	IJETMS	IJETMS	8	3	Published
19	B. MONIKA LAKSHMI B. ROHINI D. SWETHA T. PRAVEEN	8	IJETMS	IJETMS	8	3	Published
20	D.HARI KRISHNA SURENDER SIDHARTH ANEESH	8	IJETMS	IJETMS	8	3	Published
21	G.ESHWAR G.UDAY G.ROHITH G.RAJESH	8	IJETMS	IJETMS	8	3	Published
22	L CHANDRA MAHESH B SANDEEP B SAI KIRAN G MANIKER REDDY	8	IJETMS	IJETMS	8	3	Published
23	K.SHAMALA K.AKSHAYA K.NITIN B.SRAVANI	8	IJETMS	IJETMS	8	3	Published
24	ABHED CHAINANI A KRISHNA KARTHEEK C ANANTHA SAI PRANEETH KAUSTUBH S	8	IJETMS	IJETMS	8	3	Published
25	B NAGABABU K AJAY K SITA RAM	8	IJETMS	IJETMS	8	3	Published
26	K.SUPRIYA L.GEETHIKA M.SAI NATH M.RAM SAI SATHWIK CHOWDARY	8	IJETMS	IJETMS	8	3	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	S.SAI VARSHITHA, V.GNANA SUJITHA, G.NAVYA, P.AAKSHAY	8	IJSREM	IJSREM	7	4	Published
2	ILAPAVULURI ANUROOP , GRANDHI VARSHITH , S V HEMANTH , GOPI GITESH , DARNI SAHARSH PATEL	8	IJSREM	IJSREM	7	3	Published
3	M NANDHINI, A UPENDER	8	JOURNAL OF ENGINEERING SCIENCES	JOURNAL OF ENGINEERING SCIENCES	14	3	Published
4	AYMANALFAHID	8	IJISAE	IJISAE	3	4	Published
5	NEETI GOUTAM	8	IJSREM	IJSREM	7	3	Published
6	SHIVAKUMAR NETHANI ,DR. P. U. ANITHA, P. RAMANA	8	IJARSCT	IJARSCT	3	10	Published
7	PADALA RAVITEJA,RANGAMPET VIKAS,PEDDI AKASH,VELDHANDI SAI KRISHNA ,	8	JOURNAL OF ENGINEERING SCIENCES	JOURNAL OF ENGINEERING SCIENCES	3	4	Published
8	Y.LALITHA, N.VINEELA, S.AKASH, S.CHARAN DR.T.SATHISH KUMAR	8	IJSREM	IJSREM	7	4	Published

9	B. ASHWATH D. BHARATH	8	IJSREM	IJSREM	7	5	Published
10	S.PAVAN KUMAR MUDUNURI SRI SAI ROHITH VARMA S.RUPESH	8	IJSREM	IJSREM	7	4	Published
11	ANANYA GAIN, RUTH MANVITHA, ANSHUL GUPTA	8	IJIRT	IJIRT	9	10	Published
12	ANSHUL GUPTA ANANYA GAIN RUTH MANVITHA	8	IJIRT	IJIRT	3	4	Published
13	K. SHIVA SHANKAR K. SHILPA A. SATYA SINDHU B. SINDHUJA	8	IJIRT	IJIRT	7	4	Published
14	B.TARUN SATWIK REDDY G.AKSHAYA	8	IJIRT	IJIRT	9	4	Published
15	B.TARUN SATWIK REDDY G.AKSHAYA	8	IJIRT	IJIRT	7	5	Published
16	ANUDEEP ADERTHA NIHAL ADITYA	8	IJIRT	IJIRT	7	4	Published
17	ANJALI .CH G.KAVYA SRI B.THARUN K.VENU GOPAL	8	IJIRT	IJIRT	7	5	Published
18	SUSHMITHA ANTHAGIRIPALLY BIRUDHARAJU CHANDANA BANGARU SAMYUKTHA BADHANAKANTI PRASANNA	8	IJIRT	IJIRT	9	4	Published
19	DEEPAK VARMA A. NEHANSH	8	IJIRT	IJIRT	9	5	Published
20	GNAPIKA KOMARAGIRI KEERTHI KONDA MYTHILI REDDY B.ISHITHA REDDY	8	IJIRT	IJIRT	9	3	Published
21	KADALI NANDINI DEVI CH. TULASI M. BINDU P. MANASA	8	IJIRT	IJIRT	6	4	Published
22	GUMMADI PRAMOD REDDY KURA SAI NIKHIL ARIKOLA PRANAY KARAPE PRAVEEN	8	IJIRT	IJIRT	6	4	Published
23	GUNJI RAJESH VISHAL JAVVAJI HANEESHA AASHRITHA	8	IJIRT	IJIRT	9	10	Published
24	DARNI SAHARSH PATEL GRANDHI VARSHITH GOPI GITESH ILAPAVULURI ANUROOP	8	IJIRT	IJIRT	11	12	Published
25	D.V.S.PRAJIT C.SRIKANTH G.MAHESH B.SAI KEERTHI	8	IJIRT	IJIRT	11	12	Published
26	GOGINENI RAJA E.PRADEEP JARUPULA VISHAL K.SOWJANYA	8	IJIRT	IJIRT	11	12	Published
27	D.PRAVEEN KUMAR DEEPAK KORU KRISHNA CHAITANYA P.SAI SRINIVAS	8	IJIRT	IJIRT	11	12	Published
28	KALAKUNTLA RAJESH KUMAR DHATRIKA SAICHAND APPANA BHAARATHI CHANDRA GORIPARTHI MAHINDAR YADAV	8	IJIRT	IJIRT	11	12	Published
29	PARDHU CHARAN D.BHARATHREDDY B. YUVARAJ B.ASHWATH	8	IJIRT	IJIRT	11	12	Published

(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	KARUPARTHI JYOTHSNA , JAVVAJI RUCHITHA , ANUJAEEMNAI , DUMPALA AMULYA	8	IJETMS	IJETMS	6	4	Published
2	SAI SIRISHA, N. MAHESHWARI, R. NITH EESH, S. SONIYA	8	IJETMS	IJETMS	6	7	Published
3	NUKALA MAHESHWARI LINGAM BHARGAVI MOHAMMED KHAJA PASHA	8	IJETMS	IJETMS	6	7	Published
4	VEMALA.SHANTI SWAROOPA S ARAPALLI AGASTHYA SURYA VARMA SURAMPUDI SONIYA	8	IJETMS	IJETMS	6	7	Published
5	PANTA SAI SRUTHI PILLODI SHIVA RAJ PITHANI MADHURI	8	IJETMS	IJETMS	6	7	Published

6	PATLOORI SAMHITHA REDDY RANGAM NANDISH YADAV PINJARI HAMEED ALI	8	IJETMS	IJETMS	6	7	Published
7	NALLAPARAJU ANJANA KAMCHETTY RAVI KIRAN PALLI VASU NAIDU	8	IJETMS	IJETMS	6	7	Published
8	PONDURU VAISHNAVI REVURI RESHMA SRI RAGALLA SOWMYA	8	IJETMS	IJETMS	6	4	Published
9	PRAGYA KUMARI SEJAL CHENNA RANGU NITHEESH	8	IJETMS	IJETMS	6	4	Published
10	KOMAL SONI SHERI BAI ABHISHEK REDDY MOHAMMED ABDUL HAKEEM	8	IJETMS	IJETMS	6	4	Published
11	KALLEDA SNEHITHA KAMINENI CHINMAI GOUD LONKA SHIVA SHANKAR	8	IJETMS	IJETMS	6	5	Published
12	T KEERTHI RUVEDA SHAKEEL S DEEPIKA	8	IJETMS	IJETMS	6	4	Published
13	TARLADA SRISHANTHI T ANKUSH KUMAR SAI AKHEEL SURVE	8	IJETMS	IJETMS	6	5	Published
14	NIMMALA ALEKHYA NOOKATHOTI ABHISHEK SOMA ADITYA NANDA SAI	8	IJETMS	IJETMS	6	5	Published
15	TARUN SEN BEHERA M S LAKSH MOHAMMED TAHA KHAN	8	IJETMS	IJETMS	6	7	Published
16	NANDAMURI MOJI PRABHU NANDAN ANVESH KUMAR REDDY MADHURI SUMANTH	8	IJETMS	IJETMS	6	4	Published
17	V SHARAN MEKALA SRI RAM SHUBHAM YADAV	8	IJETMS	IJETMS	6	7	Published
18	T.A.PRANAV KUSUMA VARUN KUMAR RUTTALA NAGA VENKATA RADHA KRISHNA DINESH	8	IJETMS	IJETMS	6	7	Published
19	YERRAMSHETTY CHINNA RAMA MURTHY NAIDU NARAMBATLA MOHITHA BHARADWAJ SHARMA TARUN KUMAR REDDY VEERABHA	8	IJETMS	IJETMS	6	4	Published
20	SOORAJ YADAV KUMMARI RAJESH KUMAR REJETI SATISH KUMAR	8	IJETMS	IJETMS	6	7	Published
21	RAVURI GOPI CHAND SHIVAIAHGARI VIKAS GOUD SOGALA RAM PRASAD	8	IJETMS	IJETMS	6	7	Published
22	PIDUGU JOGESHWAR KATRU VINAYA SRAVAN JAYANTH CHOWDARY TUMMALA PANJALA NITHIN GOUD	8	IJETMS	IJETMS	6	5	Published

5 FACULTY INFORMATION (100)

Total Marks 66.85

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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. S. Arvind	AQHPS8867L	NA	Ph.D	NIMS	Adhoc Networks	06/06/2019	5.10	Professor	Professor		Regular	Yes		No
2	Dr. SV Hemanth	DGZPS5507Q	NA	Ph.D	KARE	Deep Learning	09/05/2022	2.11	Assistant Professor	Associate Professor	08/10/2022	Regular	Yes		Yes
3	Dr. Sathish Kumar	CCOPS0655M	NA	Ph.D	NIT Trichy	MANET	16/03/2022	3	Associate Professor	Associate Professor		Regular	Yes		No
4	Dr. M. Rajeshwar	AIGPM0795E	NA	Ph.D	Chitkara University	Machine Learning	29/10/2001	23.5	Assistant Professor	Associate Professor	02/12/2013	Regular	Yes		No

5	Dr. P. Padmaja	AVWPP7442G	NA	Ph.D	ANU	Software Engineering	01/03/2022	3.1	Professor	Professor		Regular	Yes		No
6	Dr M V A Naidu	BFFPM4799M	NA	Ph.D	PCU	Machine Learning and Deep Learning	06/06/2022	2.10	Assistant Professor	Assistant Professor		Regular	Yes		No
7	Mr. B. Surendra Reddy	AMNPB7470N	NA	M.E/M.Tech	JNTU Hyderabad	CSE	14/05/2009	15.11	Assistant Professor	Associate Professor	31/12/2013	Regular	Yes		No
8	Mr. T. Raghavendra Gupta	AEVPT5327G	NA	M.E/M.Tech	ANU	CSE	22/10/2010	14.5	Assistant Professor	Assistant Professor		Regular	Yes		No
9	Mr. G. Ravi	AKMPR5755P	NA	M.E/M.Tech	JNTU Hyderabad	CSE	27/07/2018	6.8	Assistant Professor	Assistant Professor		Regular	Yes		No
10	Mr. Dharmendra Kumar Roy	ASIPR2143M	NA	M.E/M.Tech	CSVTU	CSE	31/03/2022	3	Assistant Professor	Associate Professor	08/10/2022	Regular	Yes		No
11	Ms. K. Veena	CILPK8662D	NA	M.E/M.Tech	JNTU Kakinada	CSE	17/02/2021	4.1	Assistant Professor	Assistant Professor		Regular	Yes		No
12	Ms. Zeenath Jaha Begum	BNSPB6029C	NA	M.E/M.Tech	JNTU Hyderabad	CSE	21/04/2022	2.11	Assistant Professor	Assistant Professor		Regular	Yes		No
13	Ms. Jahanara Begum	CDBPB3920Q	NA	M.E/M.Tech	JNTU Hyderabad	CSE	01/07/2022	2.9	Assistant Professor	Assistant Professor		Regular	Yes		No
14	Mrs. A Devi	BWOPA8657C	NA	M.E/M.Tech	JNTU Hyderabad	CSE	01/01/2025	0.3	Assistant Professor	Assistant Professor		Regular	Yes		No
15	Mr. G. Chandra Shekhar	AQMPG1863D	NA	M.E/M.Tech	JNTU Hyderabad	CSE	11/07/2006	18.9	Assistant Professor	Assistant Professor		Regular	Yes		No
16	Mr. Vadla Navakishore	APIPV6336H	NA	M.E/M.Tech	JNTU Hyderabad	CSE	19/12/2016	8.3	Assistant Professor	Assistant Professor		Regular	Yes		No
17	Mr. Thambi Joseph	AOOPM5644J	NA	M.E/M.Tech	JNTU Hyderabad	CSE	04/12/2007	17.4	Assistant Professor	Assistant Professor		Regular	Yes		No
18	Mr. Madhu Guda	AXOPG9495J	NA	M.E/M.Tech	JNTU Hyderabad	CSE	31/05/2023	1.10	Assistant Professor	Assistant Professor		Regular	Yes		No
19	Mr. Shaik. Meer Subhani Ali	GBXPS7439M	NA	M.E/M.Tech	JNTU Kakinada	Software Engineering	23/12/2016	8.3	Assistant Professor	Assistant Professor		Regular	Yes		No
20	Mr. D. Mani Kanta	BDXPD9185N	NA	M.E/M.Tech	JNTU Hyderabad	CSE	11/11/2021	3.5	Assistant Professor	Assistant Professor		Regular	Yes		No
21	Mr. Periyaswamy	AVPPP8771P	NA	M.E/M.Tech	AU	CSE	31/07/2023	1.8	Assistant Professor	Assistant Professor		Regular	Yes		No
22	Mr. David Raju	AUOPK9274C	NA	M.E/M.Tech	JNTU Hyderabad	CSE	11/11/2022	2.5	Assistant Professor	Assistant Professor		Regular	Yes		No

23	Mr. K. Ravi Kumar	BOSPK1025C	NA	M.E/M.Tech	JNTU Hyderabad	CSE	31/03/2021	4	Assistant Professor	Assistant Professor		Regular	Yes		No
24	Ms. K. Krishna Jyothi	AVAPK0767D	NA	M.E/M.Tech	JNTU Hyderabad	CSE	22/07/2020	4.8	Assistant Professor	Assistant Professor		Regular	Yes		No
25	Mr. Bhaskar Das	AUGPD2548E	NA	M.E/M.Tech	Assam Univeristy	Information Technology	03/01/2022	3.3	Assistant Professor	Assistant Professor		Regular	Yes		No
26	Ms. C. Surekha	AMDPC9787F	NA	M.E/M.Tech	JNTU Hyderabad	CSE	14/03/2022	3.1	Assistant Professor	Assistant Professor		Regular	Yes		No
27	Ms. Richa Tiwari	BDNPT2477H	NA	M.E/M.Tech	CSVTU	CSE	16/04/2022	2.11	Assistant Professor	Assistant Professor		Regular	Yes		No

5.1 Student-Faculty Ratio (SFR) (30) **Total Marks 18.00**

Institute Marks : 18

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): 5

Computer Science and 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	180	18	120	11	120	11
3rd Year	120	11	120	11	120	11
4th Year	120	11	120	11	120	11

Sub-Total	**420**	**40**	**360**	**33**	**360**	**33**
Total	**460**		**393**		**393**	

Computer Science and Engineering (Internet of Things)						
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	0	0	60	6	60	6
3rd Year	60	6	60	6	60	3
4th Year	60	6	60	3	0	0
Sub-Total	**120**	**12**	**180**	**15**	**120**	**9**
Total	**132**		**195**		**129**	

Computer Science and Engineering (Data Science)						
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	180	18	60	6	60	6
3rd Year	60	6	60	6	60	6
4th Year	60	6	60	6	0	0
Sub-Total	**300**	**30**	**180**	**18**	**120**	**12**
Total	**330**		**198**		**132**	

Computer Science and Engineering (Cyber Security)						
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	0	0	60	6	60	6
3rd Year	60	6	60	6	60	6
4th Year	60	6	60	6	0	0
Sub-Total	**120**	**12**	**180**	**18**	**120**	**12**
Total	**132**		**198**		**132**	

Computer Science and Engineering (Artificial Intelligence & Machine Learning)

Year of Study	CAY (2024-25)		CAYm1 (2023-24)		CAYm2 (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	120	12	60	6	60	6
3rd Year	60	6	60	6	60	4
4th Year	60	6	60	4	0	0
Sub-Total	**240**	**24**	**180**	**16**	**120**	**10**
Total	**264**		**196**		**130**	

Grand Total	1318	1180	916

PG

No. of PG Programs in the Department 0

Grand Total			

SFR

No. of UG Programs in the Department 5

No. of PG Programs in the Department 0

Computer Science and EngineeringComputer Science and Engineering (Internet of Things)Computer Science and Engineering (Data Science)Computer Science and Engineering (Cyber Security)Computer Science and Engineering (Artificial Intelligence & Machine Learning)

Description	CAY(2024-25)	CAYm1 (2023-24)	CAYm2 (2022-23)
UG1.B	198	131	131
UG1.C	131	131	131
UG1.D	131	131	131
UG1: Computer Science and Engineering	**460**	**393**	**393**
UG2.B	0	66	66
UG2.C	66	66	63
UG2.D	66	63	0
UG2: Computer Science and Engineering (Internet of Things)	**132**	**195**	**129**
UG3.B	198	66	66
UG3.C	66	66	66
UG3.D	66	66	0
UG3: Computer Science and Engineering (Data Science)	**330**	**198**	**132**
UG4.B	0	66	66
UG4.C	66	66	66

UG4.D	66	66	0
UG4: Computer Science and Engineering (Cyber Security)	**132**	**198**	**132**
UG5.B	132	66	66
UG5.C	66	66	64
UG5.D	66	64	0
UG5: Computer Science and Engineering (Artificial Intelligence & Machine Learning)	**264**	**196**	**130**
DS=Total no. of students in all UG and PG programs in the Department	460	393	393
AS=Total no. of students of all UG and PG programs in allied departments	858	787	523
S=Total no. of students in the Department (DS) and allied departments (AS)	**S1=** 1318	**S2=** 1180	**S3=** 916
DF=Total no. of faculty members in the Department	26	26	23
AF= Total no. of faculty members in the allied Departments	32	35	31
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	**F1=** 58	**F2=** 61	**F3=** 54
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= 22.72**	**SFR2= 19.34**	**SFR3= 16.96**
Average SFR for 3 years	**SFR= 19.67**		

Average SFR for three assessment years : 19.67

Assessment SFR : 18

5.2 Faculty Qualification (25) **Total Marks 13.52**

Institute Marks : 13.52

Year	**X**	**Y**	**RF**	**FQ = 2.5 x [(10X + 4Y) / RF)]**
2024-25(CAY)	12	46	65.00	11.69
2023-24(CAYm1)	13	48	58.00	13.88
2022-23(CAYm2)	9	45	45.00	15.00

Average Assessment : 13.52

5.3 Faculty Cadre Proportion (25) **Total Marks 18.00**

Institute Marks : 18.00

Year	Professors		Associate Professors		Assistant Professors	
	Required F1	Available	Required F2	Available	Required F3	Available
CAY(2024-25)	7.00	4.00	14.00	6.00	43.00	48.00
CAYm1(2023-24)	6.00	5.00	13.00	5.00	39.00	51.00
CAYm2(2022-23)	5.00	4.00	10.00	3.00	30.00	47.00
Average Numbers	6.00	4.33	12.33	4.67	37.33	48.67

Cadre Ratio Marks [(AF1 / RF1) + [(AF2 / RF2) * 0.6] + [(AF3 / RF3) * 0.4]] * 12.5 : 18.00

5.4 Visiting/Adjunct/Emeritus Faculty etc. (10) **Total Marks 10.00**

Institute Marks : 10.00

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	Shanmukha Rao	Software Engineer	A- Envision technologies	Statistical Programming with R	54.00
2	Siva Kumar S	Software Engineer	A- Envision technologies	Probability & Statistics	54.00
3	Akash Gupta	Value Architect Consultant	Value Architect	Cloud Computing	52.00

(CAYm2) 2022-23

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Naveen Kumar	Software Engineer	XELPMOC	Natural Language Processing	52.00
2	Dr. Nagaraju	Associate Professor	VNR VJIET	Formal Languages & Automata Theory	54.00
3	Dr. Rajshekar	Associate Professor	VNR VJIET	Discrete Mathematics	52.00
4	M.R. NITANMALA	Certified IELTS, PTE & Spoken English Trainer	VDIEC GLOBAL CONNECT	Advanced Communications Skills	52.00

(CAYm3) 2021-22

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	M.R. NITANMALA	Certified IELTS, PTE & Spoken English Trainer	VDIEC GLOBAL CONNECT	Advanced Communications Skills Lab	52.00
2	Prof. Aruna Malapati	Professor	BITS PILANI	Natural Language Processing	54.00

5.5 Faculty Retention (10) **Total Marks 7.33**

Institute Marks : 7.33

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	59	45	33

and faculty requirements as per section 5.1 of SAR; (RF=S/20).			
AF=The no. of available faculty members in the Department including allied Departments	61	54	35
A= The no. of faculty members at the current institute with less than 1 year of experience (A in AF)	1	0	6
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)	4	0	3
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)	26	23	10
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)	12	12	6
E= The no. of faculty members at the current institute with more than 4 years of experience (E in AF)	18	19	10
FR=(((A*0) +(B*1)+(C*2)+(D*3)+(E*4))/RF) *2.50 (points limited to 10)	7	9	6

Average : 7.33

Assessment Marks : 7.33

6 FACULTY CONTRIBUTIONS (120)

Total Marks 96.35

6.1 Professional Development Activities (60)

Total Marks 59.35

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. M. Rajeshwar	Indian Society for Technical Education (ISTE)	Member
2	Mr. Thambi Joseph	Institute for Educational Research and Publication (IFERP)	Professional member
3	Mr. Surendra Bandi	Indian Society for Technical Education (ISTE)	Life Member
4	Mr. T Ragavendra Gupta	Indian Society for Technical Education (ISTE)	Member
5	Mr. Nava Kishore	Computer Society of India	Nominee Member
6	Mr. Shaik Meer Subhan Ali	Institute for Educational Research and Publication (IFERP)	Professional member
7	Dr. S Arvind	Indian Society for Technical Education (ISTE)	Member
8	Mrs. K Veena	International Association of Engineers (IAENG)	Member
9	Mrs.K Krishna Jyothi	Institute for Educational Research and Publication (IFERP)	Professional member
10	Mr. K. Ravi Kumar	Institute for Educational Research and Publication (IFERP)	Professional member
11	Mr. Manikantha	Institute for Educational Research and Publication (IFERP)	Professional member
12	Mr. Bhaskar Das	The Institution of Engineers (India)	Associate Member
13	Dr. Padmaja	International Association of Engineers (IAENG)	Member
14	Mrs. C Surekha	Institute for Educational Research and Publication (IFERP)	Professional member
15	Dr. T Sathish Kumar	International Association of Engineers (IAENG)	Member
16	Mr. Dharmendra Roy	Institute for Educational Research and Publication (IFERP)	Professional member
17	Mr. David Raju	Indian Society for Technical Education (ISTE)	Member

18	Ms. Richa Tiwari	Institute for Educational Research and Publication (IFERP)	Professional member
19	Mr. G Ravi	Confederation of Indian Industry (CII)	Member
20	Dr. SV Hemanth	Institute for Educational Research and Publication (IFERP)	Professional member
21	Dr M.V.A Naidu	Indian Society for Technical Education (ISTE)	Life Member
22	Mrs Jahanara Begum	Institute for Educational Research and Publication (IFERP)	Professional member
23	Mr. Periasamy	Institute for Educational Research and Publication (IFERP)	Professional member
24	Mrs. A Devi	Institute for Educational Research and Publication (IFERP)	Professional member
25	Dr. M. Rajeshwar	The Institution of Electronics and Telecommunication Engineers (IETE)	Member
26	Mr. Surendra Bandi	The Institution of Electronics and Telecommunication Engineers (IETE)	Fellow
27	Mr. T Ragavendra Gupta	The Institution of Electronics and Telecommunication Engineers (IETE)	Member
28	Dr. S Arvind	The Institution of Electronics and Telecommunication Engineers (IETE)	Member
29	Dr M.V.A Naidu	The Institution of Engineers (India)	Associate 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	Mr. T Raghavendra Gupta	Implementing Explainable AI: Techniques and Tools	18/12/2024	Roorkee	E&ICT Academy, IIT Roorkee
2	Mr. Surendra Bandi	Service-Learning: From Roots to Implementation	15/08/2024	Solapur	MIT- Vishwaprayag University
3	Dr. T Sathish Kumar	Embracing Resilience and Adaptability	12/09/2023	Ammapettai	J.J. College of Engineering and Technology
4	Dr. T Sathish Kumar	A day for your Career	18/07/2024	vedhalai	Raja College of Arts and Science

(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	Mr. T Raghavendra Gupta	Workshop on Machine Learning	24/03/2023	Kalaburagi	Shetty Institute of Technology
2	Dr.Arvind S	Accreditation awareness	12/05/2023	Basavakalyan	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	Mr. Bhaskar Das	Advance Topics in Java	07/02/2022	Ramgarh	Ramgarh Engineering College
2	Mr. Surendra Bandi	Service Learning in Higher education in Indian Context	26/02/2022	Belagavi	Jain College of Engineering,Belagavi

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

Institute Marks : 4.35

Name of the faculty	Max 5 Per Faculty		
	2023-24(CAYm1)	2022-23(CAYm2)	2021-22(CAYm3)
Dr. M Rajeshwar	3.00	5.00	0.00
Mr. G Chandrasekhar	5.00	0.00	0.00
Mr. Thambi Joseph	5.00	0.00	0.00
Mr. Surendra Bandi	5.00	5.00	5.00
Mr. T Ragavendra Gupta	5.00	5.00	0.00
Mr. Nava Kishore V	5.00	5.00	0.00
Mr. Shaik Meer Subhan Ali	5.00	0.00	0.00
Mr. G. Ravi	5.00	0.00	0.00
Dr. S Arvind	5.00	0.00	0.00
Mrs. Krishna Jyothi	5.00	5.00	0.00
Mrs. K Veena	5.00	5.00	5.00
Mr. K. Ravi Kumar	5.00	0.00	0.00
Mr. Manikantha	5.00	0.00	0.00
Mr. Bhaskar Das	5.00	5.00	5.00
Dr. Padmaja	5.00	5.00	5.00
Mrs. C Surekha	5.00	5.00	5.00
Dr. T Sathish Kumar	5.00	5.00	5.00
Mr. Dharmendra Roy	5.00	0.00	0.00
Ms. Richa Tiwari	5.00	0.00	0.00
Mrs. Zeenath Jaha Begham	5.00	0.00	0.00
Dr. SV Hemanth	5.00	5.00	0.00
Dr M.V.A Naidu	5.00	0.00	0.00
Mrs Jahanara Begum	5.00	0.00	0.00

Mr. David Raju	5.00	0.00	0.00
Mr. Madhu Guda	5.00	0.00	0.00
Mr. Periasamy	5.00	0.00	0.00
Mrs. A Devi	5.00	0.00	0.00
Sum	133.00	55.00	30.00
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).	23.00	19.65	19.65
Assessment Points (AP)= (Sum/(0.5* RDF)) (Points limited to 5 for each assessment year)	5.00	5.00	3.05

Average assessment over 3 years: 4.35

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	Mr.Bhaskar Das	Subject Name: Web technology ; E resource Link: https://www.youtube.com/watch?v=CxQMQl3a6co&list=PLTSLjdtQ_Nj0G6fKx3oKDOYqzE9ufsIXt
2	Mr.Bhaskar Das	Subject Name: Object oriented programming ; E resource Link: https://www.youtube.com/watch?v=dRFjhWrLK0g&list=PLTSLjdtQ_Nj3btQvLQ8mu1fg3tVvd0IDF
3	Dr. SV Hemanth	Subject name : Flipped Class Instruction ; E resource Link: https://www.youtube.com/@educatedman9012
4	Mr. T Ragavendra Gupta	Subject Name: Basis Of Networking ; E resource Link: https://www.youtube.com/watch?v=eGHzeJOwxEc&t=2s
5	Mr. T Ragavendra Gupta	Subject Name: Discrete Mathematics ; E resource Link: https://youtu.be/tRpwfleZvLk
6	Mrs. Krishna Jyothi	Subject: Introduction to ER Model ; E resource Link: https://youtu.be/qFJJTHmZZNY
7	Mr. Surendra Bandi	Subject: Software testing ; E resource Link: https://www.youtube.com/watch?v=8BzsFWVAb9A
8	Dr. T Sathish Kumar	Subject: Mobile Adhoc Network - Introduction ; E resource Link: https://www.youtube.com/watch?v=bCZj5yWGpto

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	Dr. M Rajeshwar	Introduction to Machine Learning	Swayam	80%
2	Mr. Surendra Bandi	Education for Sustainable Development	Swayam	73%
3	Mr. Surendra Bandi	Effective Engineering Teaching In Practice	Swayam	79%
4	Mr. Surendra Bandi	Accreditation and Outcome-Based Learning	Swayam	67%
5	Mr. Surendra Bandi	Introduction to Research	Swayam	66%

6	Mr. Surendra Bandi	Data Science for Engineers	Swayam	48%
7	Mr. Surendra Bandi	Intellectual Property Rights and Competition	Swayam	61%
8	Mr. Surendra Bandi	Ethics in Engineering Practice	Swayam	49%
9	Mr. Surendra Bandi	Software Testing	NPTEL	62%
10	Mr. T Ragavendra Gupta	The Joy of computing using python	Swayam	55%
11	Mr. T Ragavendra Gupta	Discrete Mathematics	Swayam	86%
12	Mr. T Ragavendra Gupta	Internet of Things	UGC-MMTTC	A+
13	Mr. T Ragavendra Gupta	Machine Learning and Data Science	UGC-MMTTC	A+
14	Mr. Nava Kishore V	Big Data Computing	Swayam	64%
15	Mr. Nava Kishore V	An Introduction to Artificial Intelligence	Swayam	89%
16	Mr. Shaik Meer Subhan Ali	Python for Data Science	Swayam	63%
17	Mrs. Krishna Jyothi	Programming in Java	Swayam	80%
18	Mrs. Krishna Jyothi	The Joy of computing using python	Swayam	71%
19	Mrs. Krishna Jyothi	Data Base Management System	Swayam	52%
20	Mrs. K Veena	Machine Learning and Data Science	UGC-MMTTC	A+
21	Mr Ravi Kumar	Ethical Hacking	Swayam	55%
22	Mr Ravi Kumar	Introduction to Internet of Things	NPTEL	69%
23	Mr. Bhaskar Das	Python For Data Science	Swayam	69%
24	Mr. Bhaskar Das	Introduction to Operating system	Swayam	49%
25	Mr. Bhaskar Das	Deep Learning	Swayam	62%
26	Mr. Bhaskar Das	Fundamental Algorithms: Design and Analysis	Swayam	77%
27	Mr. Bhaskar Das	Introduction to Graph Algorithm	Swayam	84%
28	Dr. Padmaja	Big Data Computing	Swayam	68%
29	Dr. Padmaja	Python for Data Science	Swayam	75%
30	Dr. Padmaja	Data Base Management System	Swayam	60%
31	Dr. Padmaja	Data Science for Engineers	Swayam	64%
32	Dr. Padmaja	Introduction to Machine Learning	Swayam	50%
33	Dr. Padmaja	Machine Learning and Data Science	UGC-MMTTC	A+
34	Mrs. C Surekha	Data Base Management System	Swayam	53%
35	Mrs. C Surekha	Introduction to machine learning	Swayam	60%
36	Mrs. C Surekha	Cloud computing	Swayam	86%
37	Mrs. C Surekha	Distributed systems	Swayam	90%
38	Mrs. C Surekha	Compiler design	Swayam	67%
39	Mrs. C Surekha	Data Science for engineers	Swayam	61%

40	Mrs. C Surekha	Introduction programming in C	Swayam	63%
41	Mr. Dharmendra Roy	Ethical Hacking	Swayam	57%
42	Mr. Dharmendra Roy	Foundation of Cloud IOT Edge ML	Swayam	73%
43	Dr. SV Hemanth	Programming in Python	Swayam	94%
44	Mr. Periasamy	Introduction to Internet of Things	Swayam	75%
45	Mr. Periasamy	Machine Learning and Deep Learning- Fundamentals and Applications	NPTEL	61%
46	Mr. Periasamy	Machine Learning and Data Science	UGC-MMTTC	A
47	Mr. Periasamy	Machine Learning and Data Science	UGC-MMTTC	A
48	Mr. Periasamy	Machine Learning and Data Science	UGC-MMTTC	A
49	Mr. Periasamy	Machine Learning and Data Science	UGC-MMTTC	A
50	Mr. Periasamy	Machine Learning and Data Science	UGC-MMTTC	A
51	Mr. Periasamy	Machine Learning and Data Science	UGC-MMTTC	A

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	National Level Hands-On Workshop on AWS Cloud Fundamentals	28/11/2023	6 Days	Mr. Mustafa Naik, DevOps Engineer & Freelancer	117
2	Mastering in Data Analysis with R: A Hands-On Workshop	21/12/2023	5 Days	Dr. M.Raghunadh Shanmukh Rao & Shiva , & Data Kaizen Solutions	117
3	Data Visualization using Power BI	29/12/2023	5 Day	Pantech E Learning	70

(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	New frontiers of IOT and ML for smart World	30/01/2023	11 Days	Dr. Prakash Kodali, Assistant professor & NIT Warangal.	60
2	Programming Skills C & Data Structures	14/03/2023	5 Days	Ms.Sowmya & Telangana Academy for Skill and Knowledge	124

(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	Machine Learning for Exploration and Production	27/02/2021	5 Days	Dr.Somya Goyal & Assistant professor, Manipal University	72
2	STP on R Programming	17/06/2021	5 Days	Ms. Saba, Data Analyst, Pantech E Learning	72
3	Data Visualization using Tableau	29/05/2020	5 Days	Mr. Venkateswarlu Y & Data Analytics Space	83
4	STP on JAVA with Android	20/09/2021	6 Days	Mr.Ganesh Nag & Ms. Sowmya Sri , Brain O Vision	121

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. Dharmendra Roy	Beyond Breath- Analysing cough sounds to predict lung infection	25/05/2024	HITAM	DOI:10.46647/ijetms.2024.v08i03.037
2	Dr. Padmaja	Crop Disease Detection using Deep Learning	25/05/2024	HITAM	NA
3	Dr. SV Hemanth	Segmentation Method For Tumor Detection in MRI images	25/05/2024	HITAM	NA
4	Dr.T.Sathish Kumar	Fake News Detector in Live Websites Using Text Vectoring and Neural Networks	25/05/2024	HITAM	NA
5	Mrs. K Veena	Malicious Web Content Detection Using Machine Learning	25/05/2024	HITAM	NA
6	Dr. SV Hemanth	Real time Vehicle Collision detection using Bounding Box with Alert System	25/05/2024	HITAM	NA

(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	Mr.Dharmendra Roy	Music Recommendation Based on Current Mood Using AI and ML	09/06/2023	HITAM	https://doi.org/10.21203/rs.3.rs-2719247/v1
2	Dr. T. Sathish Kumar	A New approach to Data Hiding in a Digital Image using pixel based Machine Learning algorithm	09/06/2023	HITAM	NA
3	Dr. S Arvind	Crop Recommendation System using Machine Learning models	09/06/2023	HITAM	NA
4	Mr. T. Raghavendra Gupta	Rainfall prediction app using Machine Learning	09/06/2023	HITAM	NA

(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	Dr. Padmaja	Air Quality Monitoring and Prediction through IOT Sensor Network data Using Machine Learning and Dee	01/07/2002	HITAM	https://ijsrem.com/download/air-quality-monitoring-and-prediction-through-iot-sensor-network-data-us
2	Mr. T. Raghavendra Gupta	JAARBOT	01/07/2002	HITAM	https://ijetms.in/Vol-6-issue-4/Vol-6-Issue-4-20.pdf
3	Mr. Dharmendra Roy	Detection of Phishing websites using Machine Learning	01/07/2002	HITAM	NA
4	Mrs. K.Veena	Driver Drowsiness Detection Using Machine Learning	01/07/2002	HITAM	https://www.ijaresm.com/driver-drowsinesdetection
5	Dr. S.Arvind	Centralized Institute Application	01/07/2002	HITAM	NA
6	Dr. T.Sathish Kumar	Blockchain Wallet	01/07/2002	HITAM	NA
7	Mr. K.Ravi Kumar	Credit Card Fraud Detection Using Machine Learning	01/07/2002	HITAM	NA
8	Mr. Surendra Bandi	Filtering Explicit From Video	01/07/2002	HITAM	NA

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. M Rajeshwar	IIEECP IUCEE International Engineering Education Certiificate Program	International Society for Engineering Pedgogy, Austria	2023-2024	Applied strategies to actively engage students in class
2	Mrs. Krishna Jyothi	IIEECP IUCEE International Engineering Education Certiificate Program	International Society for Engineering Pedgogy, Austria	2022	Used diverse pedagogies and tools like LMS, Edpuzzle, and Quizlet.
3	Mrs.K Veena	IIEECP IUCEE International Engineering Education Certiificate Program	International Society for Engineering Pedgogy, Austria	2022	Active and Collaborative Learning
4	Mrs. C Surekha	IIEECP IUCEE International Engineering Education Certiificate Program	International Society for Engineering Pedgogy, Austria	2024	Planned courses and used pedagogies like PSIS and flipped class
5	Dr. Sathish Kumar	IIEECP IUCEE International Engineering Education Certiificate Program	International Society for Engineering Pedgogy, Austria	2024	Improved teaching skills and promoted global exchange, enhancing student learning.
6	Mr. Dharmendra Roy	IIEECP IUCEE International Engineering Education Certiificate Program	International Society for Engineering Pedgogy, Austria	2024	Aligned teaching with outcome-based learning using COs and POs
7	Mr. Nava Kishore	IIEECP IUCEE International Engineering Education Certiificate Program	International Society for Engineering Pedgogy, Austria	2018	Understood CO-PO mapping, Bloom's-based assessments, and outcome-aligned teaching strategies.
8	Mr. Nava Kishore	PBL PEDAGOGICAL DEVELOPMENT CERTIFICATE PROGRAM	UCPBL, Aalborg University, Denmark	March 2025	Understood PBL and designed student-centered modules.
9	Dr. SV Hemanth	IIEECP IUCEE International Engineering Education Certiificate Program	International Society for Engineering Pedgogy, Austria	2024	Research-Integrated Teaching
10	Ms. Richa Tiwari	IIEECP IUCEE International Engineering Education Certiificate Program	International Society for Engineering Pedgogy, Austria	2024	Reflective and Responsive Teaching
11	Mr. Bhaskar Das	IIEECP IUCEE International Engineering Education Certiificate Program	International Society for Engineering Pedgogy, Austria	2024	Technology-Enhanced Learning
12	Mrs. Zeenath	IIEECP IUCEE International Engineering Education Certiificate Program	International Society for Engineering Pedgogy, Austria	2024	Improved teaching learning method
13	Mrs. Krishna Jyothi	PBL PEDAGOGICAL DEVELOPMENT CERTIFICATE PROGRAM	UCPBL, Aalborg University, Denmark	March 2025	Introduced course aligned problem statments in teaching
14	Dr. Sathish Kumar	PBL PEDAGOGICAL DEVELOPMENT CERTIFICATE PROGRAM	UCPBL, Aalborg University, Denmark	March 2025	Research-Integrated Teaching
15	Mr. Surendra Bandi	IIEECP IUCEE International Engineering Education Certiificate Program	International Society for Engineering Pedgogy, Austria	2015	Faculty trainings
16	Mr. T Ragavendra Gupta	IIEECP IUCEE International Engineering Education Certiificate Program	International Society for Engineering Pedgogy, Austria	2022-2023	Prototype Development & Innovation Focus
17	Mrs. K. Veena	PBL PEDAGOGICAL DEVELOPMENT CERTIFICATE PROGRAM	UCPBL, Aalborg University, Denmark	March 2025	Used problem statements with real world cases.
18	Mr. Shaik Meer Subhani Ali	IIEECP IUCEE International Engineering Education Certiificate Program	International Society for Engineering Pedgogy, Austria	2023-2024	Technology-Enhanced Learning
19	Dr. M Rajeshwar	PBL PEDAGOGICAL DEVELOPMENT CERTIFICATE PROGRAM	UCPBL, Aalborg University, Denmark	March 2025	Problem solving introduced

20	Mr. Surendra Bandi	PBL PEDAGOGICAL DEVELOPMENT CERTIFICATE PROGRAM	UCPBL, Aalborg University, Denmark	March 2025	Institutional strategy for PBL

6.2 Research and Development Activities (60) — **Total Marks 37.00**

6.2.1 Academic Research (10) — Institute Marks : 8.00

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	71	31	8
2	No. of peer reviewed conference papers published	19	18	12
3	No. of books/book chapters published	4	0	1

6.2.2 Ph.D. Student Details (5) — Institute Marks : 0.00

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

CAYm1 2023-24					
S. No	**Patent Application No.**	**Inventor/s Name**	**Title Of The Patent**	**Patent Filed Date**	**Patent Published Date / Granted Date**
1.	202341033110 A	Dr SV Hemanth	Machine Learning- Based Phishing Attack Detection	05-10-2023	23/06/2023
2.	202341000155 A	Dr.S.Arvind	Energy Efficient Process And Methods For 5G Networks	01-02-2023	01-06-2023

3.	202341057378 A	Mr. Kolluri David Raju	An Intrusion Detection System Based On "Machine Learning For Mobile Clouds With Diverse Client Networks	27/08/2023	09-09-2023
4.	202341036784	Dr.T.Sathish Kumar	Block chain Based method for reducing vehicle pollutant emissions	27-05-2023	01-09-2023
5.	202341036784	Mr. T. Raghavendra Gupta	Block chain Based method for reducing vehicle pollutant emissions	27-05-2023	01-09-2023

Patents for the year 2023-2024

CAYm2 2022-23					
S. No	**Patent Application No.**	**Inventor/s Name**	**Title Of The Patent**	**Patent Filed Date**	**Patent Published Date / Granted Date**
1.	202241048759	Mr. T. Raghavendra Gupta	An Artificially Intelligent Glove For Facile Communication Of Differently Abled	26-08-2022	16-09-2022
2.	202221053962	Mrs.K.Veena	Method And Apparatus For Face Recognition Using Artificial Intelligence	21-09-2022	30-09-2022
3.	202241066081	Dr. S V Hemanth	Improved Handling Of Electronic Messages With Attachments In	17-11-2022	23-12-2022

			The Cybersecurity System		
4.	202241071209	Dr.Padmaja.Pulicherla	Design Intelligent Smart Iot Driven Emotion Recognition System Using CNN	09-12-2022	16-12-2022
5.	202241071209	Dr.T.Sathish Kumar	Design Intelligent Smart Iot Driven Emotion Recognition System Using CNN	09-12-2022	16-12-2022
6.	202241071209	Mr. T.Raghavendra Gupta	Design Intelligent Smart Iot Driven Emotion Recognition System Using CNN	09-12-2022	16-12-2022
7.	202341029628	Dr T Sathish Kumar	An IOT based Archery scoring automation System	24-04-2023	05/05/2023

Patents for the year 2022-2023

6.2.4 Sponsored Research Project (15) Institute Marks : 0.00

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)

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

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
Mr. Bhaskar Das		CSE	AI Based Traffic Control System	Collaborate Solutions Private Limited	1 Year	1.50
Dr. Padmaja		CSE	Road Guard: AI-Powered Road Damage Detection and Reporting System	Technumen Systems Private Limited	1 Year	5.00
Dr. T. Satish Kumar		CSE	AYUV -Transforming Healthcare, One Byte at a Time.	Technumen Systems Private Limited	1 Year	2.79
Dr. Rajeshwar		CSE	Virtuza:Your Personalized Companion	Technumen Systems Private Limited	1 Year	3.50
						Amount received (Rs.):12.79

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. T. Satish Kumar		CSE	A database management software for the quality control tools.	Technumen Systems Private Limited	6 Months	4.25
Dr. P Padmaja		CSE	Design & Developmentof Website for Technuman	Technumen Systems Private Limited	2 Months	2.35
						Amount received (Rs.):6.60

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
Mr. T Raghavendra		CSE	Intrusion Detection for Smart Home Alarm Security	Darento Industries	8 months	6.50

Gupta			System			
						Amount received (Rs.):6.50

Total amount (Lacs) received for the past 3 years: 25.89

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)
6.2.6 A Amount received (3)

Institute Marks : 2.00

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
Dr. T. Satish Kumar	AYUV -Transforming Healthcare, One Byte at a Time.	1 Year	0.50	0.25	AI-enabled platform developed for real-time health monitoring
Dr. Rajeshwar	Virtuza:Your Personalized Companion	1 Year	0.70	0.50	Developed an AI-driven virtual assistant for personalized user interaction
Mr. Bhaskar Das	AI Based Traffic Control System	1 Year	0.30	0.20	AI system developed for real-time traffic optimization
Dr. Padmaja	Road Guard: AI-Powered Road Damage Detection and Reporting System	1 Year	0.80	0.50	AI system for automated road damage detection
			Amount received (Rs.): 2.30		

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. T. Satish Kumar	A database management software for the quality control tools.	6 Months	0.80	0.80	Developed database software for managing quality control tools
Dr. P Padmaja	Design & Developmentof Website for Technuman	2 Months	0.50	0.50	Designed and developed the Technuman website
			Amount received (Rs.): 1.30		

2021-22 (CAYm3)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Mr. T Raghavendra Gupta	Intrusion Detection for Smart Home Alarm Security System	8 months	0.40	0.40	Developed intrusion detection system for smart home security

			Amount received (Rs.): 0.40		

Total amount (Lacs) received for the past 3 years : 4.00

6.2.6 B Amount utilized (2) Institute Marks : 2.00

S.No.	Year	Project Title	Seed Money	Purpose of seed Money
1.	2023-24	AYUV - Transforming Healthcare, One Byte at a Time.	50,000/-	For purchasing IoT sensors and microcontrollers, developing the health monitoring interface, and testing real-time data acquisition.
2.	2023-24	Virtuza:Your Personalized Companion	70,000/-	For developing AI chatbot backend, UI/UX design, integrating voice/text APIs, and deploying the virtual assistant demo.
3.	2023-24	AI Based Traffic Control System	30,000/-	For simulation software tools, model training data, traffic scenario testing, and prototype validation.
4.	2023-24	Road Guard: AI-Powered Road Damage Detection and Reporting System	80,000/-	For image dataset collection, training computer vision models, mobile app development, and field testing.
5.	2022-23	A database management software for the quality control tools.	80,000/-	For database design and development, interface creation, testing with sample QC data, and validation reports.
6.	2022-23	Design & Developmentof Website for Technuman	50,000/-	For domain and hosting, front-end development tools, UI design, and deployment of a live website.
7.	2021	Intrusion Detection for Smart Home Alarm Security System	40,000/-	For motion sensors, microcontroller units, alarm module integration, and prototype testing in a controlled environment.

Seed Amount Utilization Summary

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	Programming f	33	Intel ® Corei3 ,	16 hours	Mr. Ashok	Programmer	MCSE
2	Design & Analy	33	Intel ® Corei3 ,	12 hours	Ms. Sushma	Programmer	B.Tech
3	Object-Oriente	33	Intel Corei3 ,4	16 hours	Mr. Murali	Programmer	PGDCA
4	Computer Netv	33	Intel Corei3,4G	12 hours	Mr. Sai Kiran	Progammer	B.Tech
5	Web Technolog	33	Intel ® Corei3 ,	12 hours	Mr. Bhanuprata	Programmer	B.Tech
6	Full Stack Web	33	Intel ® Corei3 ,	12 hours	Ms.Sushma	Programmer	B.Tech
7	Artificial Intellig	33	Intel Corei3, 4	12 hours	Mr. Ashok	Programmer	MCSE
8	Computer Visic	33	Intel Corei3,4G	16 hours	Mr. Sai Kiran	Programmer	B.Tech

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	Programming for problem solving – IIT Kanpur	C programming practice lab	Strengthen C programming skills and logic building	6 hrs	PO1, PO2, PO4, PSO3
2	Python Programming – Amrita	Python programming experiments	Hands-on Python coding and problem-solving	6 Hrs	PO1, PO2, PO5, PSO3
3	Data Structures – IIIT Hyderabad	Linked lists, stacks, queues, trees	Reinforce data structure operations with interactive tools	6 Hrs	PO1, PO2, PSO1
4	Java Programming – IIT Bombay	Java OOP, classes, inheritance	Introduce OOP principles with Java	6 Hrs	PO1, PO3, PSO1
5	Operating Systems Lab – IIT Roorkee	CPU scheduling, memory allocation, etc.	Visualize and simulate OS concepts	4 Hrs	PO1, PO2, PO3, PSO1, PSO2
6	Design & Analysis of Algorithms – IIITH	Sorting, graph algorithms, complexity	Improve algorithmic thinking and analysis	4 Hrs	PO1, PO2, PSO1
		Network protocols, topology	Teach communication protocols and		PO3, PO5,

7	Computer Networks – Amrita	design	simulation	6 Hrs	PSO2
8	Cryptography Lab – IIT Guwahati	Encryption algorithms, hash functions	Teach secure communication principles	4 Hrs	PO1, PO2, PSO1
9	Web Development – Amrita	HTML/CSS, JavaScript, PHP	Develop static and dynamic web applications	4 Hrs	PO1, PO5, PSO2
10	Software Engineering – IIT Kanpur	UML modeling, SDLC	Visualize software design practices	4 Hrs	PO4, PO9, PSO3
11	Full Stack Web Development – IIITH	Modern frontend/backend stacks	Build and deploy full stack applications	4 Hrs	PO3, PO5, PSO2
12	Artificial Intelligence – IIT Kharagpur	Search, planning, game AI	Implement AI algorithms and agents	6 Hrs	PO2, PO4, PSO1, PSO3
13	Big Data Analytics – IIT Delhi	Hadoop, MapReduce, Spark	Learn to manage and analyze large data sets	6 Hrs	PO2, PO4, PSO3
14	Computer Vision & Robotics – IIT Kharagpur	Visual processing and robot control	Simulate real-time computer vision systems	6 Hrs	PO2, PO3, PSO3

7.3 Maintenance of laboratories and overall ambiance (10) **Total Marks 10.00**

Institute Marks : 10.00

Laboratory Maintenance: All laboratories in the Computer Science and Engineering (CSE) department are well-equipped with advanced computing infrastructure. These facilities are maintained by dedicated and experienced technical staff. To ensure effective monitoring and upkeep, a Departmental Academic Committee. Each lab is assigned a faculty Lab In-charge, supported by lab programmers, responsible for the overall functioning and maintenance.

Maintenance Practices:

1. Pre-semester Maintenance: All systems and equipment are checked and updated before the start of every semester.

2. Lab Registers: A stock register and lab usage register are maintained for each lab, recording utilization and attendance.

3. Indents & Repairs: Lab In-charges maintain an indent book for procuring necessary components. Minor issues are resolved in-house; major issues are outsourced as per institutional procedures.

4. Display of Dos & Don'ts: Safety instructions and lab usage guidelines are prominently displayed.

5. Power Backup: All labs are supported by a dedicated 20 KVA UPS with backup batteries, ensuring uninterrupted operations.

6. Safety Equipment: Fire extinguishers and first-aid kits are available in every lab and on each floor.

7. Staff Allocation: One faculty member and one lab programmer are responsible for each lab.

8. Software Support: Lab programmers manage software installations and handle minor hardware/software issues.

9. Lab Program List: The list of experiments and programs is displayed in each lab for easy reference.

Policy:

All equipment is operated in accordance with the manufacturer's guidelines to ensure longevity and minimize repair costs.

Procedure:

1. Display safety protocols and operational guidelines.

2. Skilled technical staff is available for regular maintenance and support.

Overall Laboratory Ambiance:

The CSE department prioritizes a conducive learning environment in all its laboratories. The ambiance is designed to support academic excellence and hands-on learning.

Ambience Features:

1. Modern Equipment: Labs are equipped with state-of-the-art hardware and software tools that meet the requirements of UG

2. Qualified Faculty: All labs are supervised by trained and experienced faculty proficient in current technologies and tools.

3. Spacious Design: Labs are spacious with ergonomic furniture including chairs, benches, and storage cupboards for student belongings.

4. Learning Resources: Both hard and soft copies of lab manuals are made available for student reference.

5. Ventilation & Lighting: Each lab has separate entry/exit points, ample windows for ventilation, and natural lighting.

6. Project Lab: A dedicated project lab is provided for students to carry out their mini and major projects.

7. Teaching Aids: Each lab is equipped with a whiteboard, multimedia projector, internet connectivity, and necessary teaching aids.

8. Uninterrupted Power Supply: UPS-backed power systems ensure labs are functional during scheduled sessions without interruption.

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

Institute Marks : 10.00

Sr. No	Laboratory Name	Safety Measures
1	Programming Fundamentals Labs	1. Specific safety rules for students displayed. 2. First aid boxes & fire extinguishers are kept in the laboratory. 3. Periodical servicing of the lab equipments. 4. Maintain a clean & organized laboratory. 5. Avoid the use of cell phones. 6. Avoid the use of damaged equipment &provide needful equipment & components. 7. CC Cameras, UPS (DATA SAFETY), FIRE Extinguisher, Proper earthing, Well trained technical/supporting staff are provided.
2	Systems and Infrastructure Labs	1. Specific safety rules for students displayed. 2. First aid boxes & fire extinguishers are kept in the laboratory. 3. Periodical servicing of the lab equipments. 4. Maintain a clean & organized laboratory. 5. Avoid the use of cell phones. 6. Avoid the use of damaged equipment &provide needful equipment & components. 7. CC Cameras, UPS (DATA SAFETY), FIRE Extinguisher, Proper earthing, Well trained technical/supporting staff are provided.
3	Web and Software Development Labs	1. Specific safety rules for students displayed. 2. First aid boxes & fire extinguishers are kept in the laboratory. 3. Periodical servicing of the lab equipments. 4. Maintain a clean & organized laboratory. 5. Avoid the use of cell phones. 6. Avoid the use of damaged equipment &provide needful equipment & components. 7. CC Cameras, UPS (DATA SAFETY), FIRE Extinguisher, Proper earthing, Well trained technical/supporting staff are provided.
4	AI & Data-Driven Technologies Labs	1. Specific safety rules for students displayed. 2. First aid boxes & fire extinguishers are kept in the laboratory. 3. Periodical servicing of the lab equipments. 4. Maintain a clean & organized laboratory. 5. Avoid the use of cell phones. 6. Avoid the use of damaged equipment &provide needful equipment & components. 7. CC Cameras, UPS (DATA SAFETY), FIRE Extinguisher, Proper earthing, Well trained technical/supporting staff are provided.

7.5 Project laboratory/research laboratory /centre of excellence (20) **Total Marks 20.00**

Institute Marks : 20.00

Name of the Laboratory: Project and Innovation Lab

Students are encouraged to actively engage in Project Innovation Labs, which integrate both software and hardware tools to support creativity, rapid prototyping, testing, and applied research. These tools empower students to explore a wide spectrum of domains such as engineering, design, artificial intelligence, machine learning, augmented/virtual reality (AR/VR), software development, Internet of Things (IoT), robotics, and data analytics. The choice of tools and technologies is tailored to the specific focus and objectives of each lab.

In addition, participation in hackathons and skill development programs is highly encouraged, as these experiences significantly enrich the learning process. They help students develop practical skills, foster innovation, and better prepare them to tackle real-world challenges—ultimately enabling them to excel and stand out in their professional careers.

Table 7.5.1: List of Projects conducted in Project Lab

Batch	Roll no.s	Names	PROJECT TITLE

1	20E51A0564	P. Tejaswini	Smart Travel :Your ultimate itinerary companion-TRL 4
	20E51A0560	P. Umesh Chandra	
	20E51A0578	T. Jyothi	
	20E51A0544	M. Deeksha	
2	20E51A0572	Sanam Venkata Manasa	Hosting a web application on Aws cloud platform -TRL6
	20E51A0567	Reddy Sahithya	
	20E51A0583	Mahalaxmi Sai	
	20E51A0545	Tejarani	
3	20E51A0547	Mohd Abdul Lateef	Medical Prescription Optical Character Recognition-TRL 5
	20E51A0546	Mohd Abdul Mufasil	
	20E51A0548	M Ganesh	
	20E51A0549	M Pavan Kumar	
4	20E51A0552	Nara Adhitya Raj	Paperless medical history application-TRL 4
	20E51A0550	Myakala Sai Sudhir	
	21E55A0513	P Abhishek	
	20E51A0582	Vantakala Pooja	
5	20E51A0551	Naga Tanusri Nukala	PROTO: A Cutomized Assistant to optimise Personal Tasks-TRL 4
	20E51A0568	R Rishikesh Reddy	
	20E51A0553	Neha B	
	20E51A0581	V Sandeep Kumar Yadav	
6	20E51A0562	Prakash Saw	Text Hidingg Using LSB-TRL 4
	20E51A0556	Nithul KC	
	20E51A0554	Nehal Kumar Singh	

	20E51A0573	Srikar Reddy	
7	20E51A0555	N Aditya Srinivas	Blockchain Based System For Handling Academic Records-TRL 4
	20E51A0584	vineela varshini kunchala	
	21E55A0514	Shiva Charan Reddy Kallem	
	21E55A0519	vemulapalli soma shekar rao	
8	20E51A0577	Syed Zoya Mehak	lost and found-TRL 4
	20E51A0580	V . Vinod Chandra	
	20E51A0557	P. Sai Samraat	
	21E55A0512	M.Soumya	
9	20E51A0558	P . Sharath chandra	Medicine and Alternative Medicine Recommendation SystemTRL 5
	20E51A0559	P . Rushith Kumar	
	20E51A0561	P . Rohith reddy	
	20E51A0576	S . Dhanush	
10	20E51A0575	S Sneha Reddy	Twitter Bot detection using URL features and learning automata TRL 5
	20E51A0574	Shinde Vinayak Rao Patil	
	20E51A0569	R Nithin	
	20E51A0528	G Keerthi	
11	20E51A0571	S Sai Surya Teja	REAL TIME VEHICLE COLLISION DETECTION USING BOUNDING BOX WITH ALERT SYSTEMTRL 5
	20E51A0579	V Yamalaiah	
	20E51A0507	B Raju	
	20E51A0534	K Deepak	
	20E51A0585	Yarlagadda Ravitreyini Chowdary	Project Orchestrator-TRL4
	21E55A0511	M.Naresh	

12	21E55A0515	Srimanthula Shivachary	
	21E55A0516	Swarna Neeraj	
13	20E51A0543	M.sravanth	Water Quality Prediction-TRL 5
	20E51A0566	R.dhanush	
14	19E51A0588	Anand Vardhan	Malicious Web Content Detection Using Machine Learning-TRL 5
	19E51A0531	E Balaraj	
	19E51A05B0	T Shivaji	

Figure 7.5.1: Sample achivement

The Department of Computer Science and Engineering provides dedicated laboratories to support projects, research, and innovation. These specialized facilities encourage students and faculty to work on cutting-edge technologies, foster innovation, and facilitate collaboration with industry.

S.No	Name of the Laboratory
1	Center of Excellence in IOT
2	Project Lab

7.5.1.1. Center of Excellence in IOT:

The Department of Computer Science and Engineering established a Center of Excellence in IoT in 2017. This center provides opportunities for students interested in the embedded domain to carry out their projects each year.

Our institute has signed a Memorandum of Understanding (MoU) with IIIT Hyderabad, which offers internship opportunities for our students. Over the past three years, Computer Science and Engineering students have participated in internships ranging from 3 to 6 months at IIIT Hyderabad.

Objectives: To impart the students the necessary skills to fulfil the industrial needs

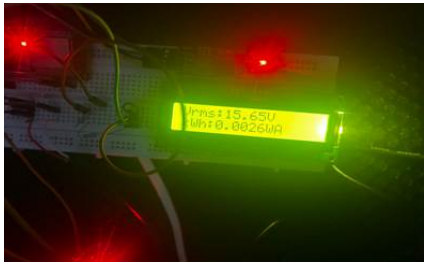
Expected outcomes:

- To develop prototypes out of the ideas.
- To win the National/International Wide competitions.
- To make the students work in teams.
- To guide the students in writing the research Papers.
- To publish patents.
- To organize certification programs for students.
- To conduct Workshops and make the students understand various advanced technologies in IOT.
- To make students ready for Industrial career.

Sample Projects under COE-IOT

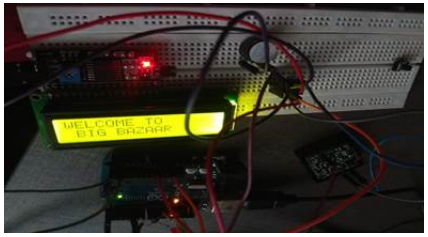
Home Automation using IOT:

The current and voltage values are checked and accordingly whenever there is excess usage of power then the power is cut

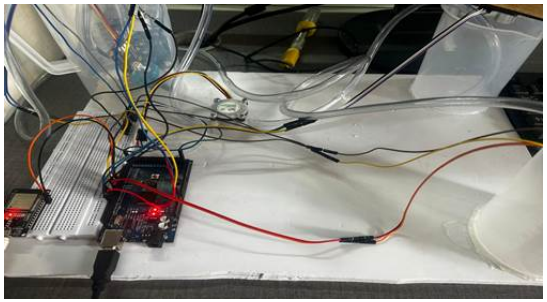


Smart Shopping Cart:

The billing of the items taken in the shopping mall will be scanned and added directly in the cart and the customer can do the payment using the QR generated in the cart display



Water Monitoring System: This project monitors the quality of water based on Ph Meter, Conductivity, it also checks the level of water in tank and accordingly it will release the water supply from main tank to sub tanks only if the water quality is good.



7.5.1.2. Research and Project lab:

The Project Laboratory is a dedicated, innovation-driven space that empowers students to translate theoretical concepts into practical applications. Designed to support both undergraduate and postgraduate students, the lab facilitates the execution of mini and major academic projects across diverse domains, including power electronics, embedded systems, renewable energy, and smart systems.

This dynamic environment fosters creativity, teamwork, and interdisciplinary collaboration, encouraging students to explore emerging technologies and develop industry-relevant solutions. Faculty members and technical staff provide continuous support and guidance, helping students effectively utilize equipment and tools. The Project Laboratory serves as a vital hub for applied learning, innovation, and industry-oriented development.

Objectives of the Project Laboratory:

- To provide a fully equipped, dedicated space for undergraduate and postgraduate students to design, develop, and implement innovative projects aligned with their academic curriculum.
- To enable students to apply theoretical knowledge to real-world problems, enhancing their technical proficiency and problem-solving capabilities.
- To promote research-driven projects that lead to academic publications and participation in technical competitions.
- To foster a creative and innovative mindset, encouraging the development of prototypes and proof-of-concept models in emerging technology areas.
- To support multidisciplinary collaboration, enabling students from various fields to work together and develop novel, integrated solutions.
- To nurture innovation by providing a platform for students to realize their ideas through hands-on prototype development.
- To enhance practical problem-solving skills through exposure to real-time challenges and cross-functional teamwork.
- To prepare students for industry roles by familiarizing them with modern tools, equipment, and hardware platforms used in current engineering practice**.**

8 CONTINUOUS IMPROVEMENT (80)

Total Marks 77.00

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

Total

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

Institute l

Course Code	Course Name	Course Outcome	2019-2023		Reasons towards Attainment / Non Attainment	Actionable Items	2020-24		Reasons towards Attainment / Non Attainment	Remarks
			Target	Attainment			Target	Attainment		
	Basic Electrical	CO1- To analyze and solve electrical circuits using network laws and theorems	1.5	3	The target for CO1 was successfully attained, indicating students demonstrated proficiency in applying network theorems (like KVL, KCL, Thevenin's, and Norton's) to solve electrical circuits. Assessment results reflected clear conceptual understanding and problem-solving ability.	Continued emphasis was given to chalk-and-talk explanations supported with circuit simulations in labs. Students were provided with practice problems from previous university papers.	1.5	1.2	Students faced difficulty in applying KVL, KCL, and network theorems to analyze circuits, as evident from low marks in related assessment questions. This suggests a gap in foundational understanding of circuit analysis.	Additional remedial clas conducted focusing on l laws and step-by-step a theorems. Simplified ha solved examples were s students.
		CO2- To understand and analyze basic electrical circuits	1.5	3	CO2 attainment was achieved, showing students could interpret and evaluate resistive, inductive, and capacitive networks. They showed competency in circuit response analysis under	Concepts were reinforced through frequent class tests, worksheets, and tutorial sessions. Lab experiments on basic electrical circuits helped students relate	1.5	1.2	Low attainment indicates students lacked clarity in understanding the behavior of RLC circuits under AC and DC excitation. Errors in circuit simplification and response	Weekly tutorial sessions on RLC circuit analysis introduced. More circuit numerical problems wer

EE103ES	Engineering				various conditions..	theory to practical implementation.			prediction were common.	class tests and assignm
		CO3- To study the working principles of electrical machines.	1.5	2.9	Students effectively understood the working principles of DC machines, transformers, and AC motors. Attainment indicates that teaching methods and lab demonstrations supported concept clarity.	Lectures were supported by physical demonstrations and models of machines. Real-time videos and industry examples were used to enhance student engagement and understanding.	1.5	1.5	Many students struggled to understand the working principles of electrical machines due to lack of hands-on exposure.	Plan to integrate more i lab experiments and a v simulator for deeper co visualization.
		CO4- To introduce components of low voltage electrical installations	1.5	2.8	The target for CO4 was met, suggesting that students acquired adequate knowledge of wiring systems, circuit breakers, fuses, and grounding practices.	Practical training sessions were held to introduce students to switchgear components and domestic wiring practices. Lab manuals were updated to include real-life installation case studies.application examples. Sustaining current practices for future batches.	1.5	1.5	Students showed poor understanding of low voltage components, possibly due to limited practical exposure and unfamiliarity with industrial installations.	Introduce field visit to a substation/local power f include practical exercis sessions.
EE108ES	Basic Electrical Engineering Lab	CO1 -Analyze a given network by applying various electrical laws and network theorems	1.5	3	Students successfully applied network laws such as KVL, KCL, and theorems like Thevenin's and Norton's in practical lab experiments. Error margins in experimental outcomes were minimal, showing good hands-on understanding.	Continued use of simulation tools like Multisim alongside physical experiments helped reinforce theory. Pre-lab instructions and sample circuits were retained for future batches.	1.5	3	Students successfully applied network laws such as KVL, KCL, and theorems like Thevenin's and Norton's in practical lab experiments. Error margins in experimental outcomes were minimal, showing good hands-on understanding.	Continued use of simula like Multisim alongside p experiments helped rein theory. Pre-lab instructi sample circuits were ret future batches.
		CO-2 Know the response of electrical circuits for different excitations	1.5	3	The students demonstrated accurate observation and interpretation of circuit responses under both AC and DC excitations. Oscilloscope handling and waveform analysis were satisfactory.	Emphasis was maintained on comparing theoretical and practical results using real-time measurement tools. Lab worksheets and reflection sheets were effective and will be continued.	1.5	3	The students demonstrated accurate observation and interpretation of circuit responses under both AC and DC excitations. Oscilloscope handling and waveform analysis were satisfactory.	Emphasis was maintain comparing theoretical a results using real-time measurement tools. Lat worksheets and reflecti were effective and will b
		CO-3 Calculate, measure and know the relation between basic electrical parameters	1.5	3	Attainment of CO3 shows that students understood and correctly measured voltage, current, resistance, and power, and could relate them through Ohm's and power laws.	Lab sessions included focused exercises on instrumentation and calibration. Checklists for measurement procedures were useful and will be continued.	1.5	3	Attainment of CO3 shows that students understood and correctly measured voltage, current, resistance, and power, and could relate them through Ohm's and power laws.	Lab sessions included f exercises on instrumen calibration. Checklists fo measurement procedur useful and will be contir
		CO-4 Analyze the performance characteristics of dc and ac electrical machines	1.5	3	Students were able to perform experiments on motors and transformers, plot characteristics (e.g., efficiency, torque-speed), and draw conclusions effectively.	Teaching methodology including demo sessions, use of cut-section models, and guided plotting helped students achieve this CO. These practices will be preserved in future lab schedules.	1.5	3	Students were able to perform experiments on motors and transformers, plot characteristics (e.g., efficiency, torque-speed), and draw conclusions effectively.	Teaching methodology i demo sessions, use of models, and guided plo students achieve this C practices will be preser lab schedules.
MA101BS	Mathematics 1	CO1- Analyze the solution of linear system of equations.	1.5	3	Students demonstrated a clear understanding of methods such as Gaussian elimination, matrix inversion, and Cramers rule. Assessment scores and assignment submissions were above the set target.	Teaching strategies involving step-by-step numerical examples and MATLAB-based demonstrations were effective and will be continued in future offerings.	1.5	1.5	Students were unable to systematically solve linear systems due to lack of clarity in matrix methods like Gaussian elimination and inverse technique. Conceptual understanding was weak, leading to computational errors in assessments.	Remedial classes were with a focus on concept and structured problem- Additional practice prob video tutorials were pro
		CO2- Find the eigen vales and eigen vectors and reduction of quadratic form to canonical form using orthogonal transformation	1.5	3	The target was attained, with students showing competence in eigenvalue computation and application of orthogonal transformations. Performance in problem-solving assignments was strong.	Continued use of worked examples, graph-based interpretations, and tutorial problem sets helped reinforce these concepts. These will remain part of the standard teaching plan.	1.5	1.5	Many students struggled with the abstract nature of eigenvalue problems and orthogonal transformations. Errors were common in step-by-step execution and interpretation.	Detailed worksheet-bas sessions were introduce examples and visual aid used to improve compre Tutorial hours were exte
									Students were able to distinguish	Weekly quizzes and cla

		CO3-Analyze the nature of sequence and series	1.5	2.8	Students were able to distinguish between convergence and divergence, apply standard tests (like ratio and root test), and interpret behavior of series accurately.	Weekly quizzes and class activities on infinite series enhanced conceptual clarity. These short assessments and interactive discussions will be retained.	1.5	2.3	between convergence and divergence, apply standard tests (like ratio and root test), and interpret behavior of series accurately.	on infinite series enhan conceptual clarity. Thes assessments and intera discussions will be retai
		CO4-Solve the applications on the mean value theorems	1.5	3	Students correctly applied Rolle's Theorem and both Lagrange's and Cauchy's Mean Value Theorems to real functions. Error-free application in exams indicated strong grasp of theoretical and practical aspects.	The approach of linking theorems with geometrical interpretations and physical examples (like velocity and slope) proved beneficial and will be continued.	1.5	2	Students correctly applied Rolle's Theorem and both Lagrange's and Cauchy's Mean Value Theorems to real functions. Error-free application in exams indicated strong grasp of theoretical and practical aspects.	The approach of linking with geometrical interpr physical examples (like slope) proved beneficia continued.
AP202BS	Applied Physics	CO1-Explain the fundamental concepts on quantum behavior of matter in its microstate.	1.5	2.8	Students demonstrated a strong understanding of key quantum concepts such as wave-particle duality, Heisenberg's uncertainty principle, and quantum tunneling. Assessment performance and feedback indicated clear conceptual clarity.	Continued use of simulations and visual aids to explain abstract quantum principles proved effective. These tools, along with problem-solving sessions, will be maintained in future offerings.	1.5	2.5	Target significantly exceeded. Students have demonstrated a strong grasp of quantum concepts	Continued use of visual and interactive quizzes conceptual clarity
		CO2-Determine the characteristics and properties of the material of semiconductor and optoelectronics.	1.5	2.8	Students successfully analyzed semiconductor properties such as band gap, carrier generation, and behavior of optoelectronic devices like LEDs and photodiodes. Lab reports and theory exams reflected high competency.	Theory was reinforced through practical lab demonstrations. Students were encouraged to correlate device characteristics with real-world applications. This method will continue.	1.5	2	Target significantly exceeded. Learners effectively understood semiconductor behavior and optoelectronic applications.	Hands-on lab sessions industry-relevant case s introduced.
		CO3-Explain the principle, working, and applications of lasers and optical fibers.	1.5	3	Learners clearly articulated the concepts of stimulated emission, types of lasers, and light transmission in optical fibers. Their ability to relate concepts to real-world use (e.g., communication, medicine) was commendable.	Visual content (animations, demo kits) and real-life applications enhanced interest and understanding. These strategies will be retained for future batches.	1.5	2.5	Target exceptionally exceeded. Excellent understanding of laser technology and optical communication.	Demonstrated laser kits models in practical clas
		CO4-Apply the properties of magnetic and dielectric materials in engineering applications.	1.5	3	Students demonstrated accurate application of concepts such as magnetic susceptibility, permeability, and dielectric behavior to engineering problems. Numerical accuracy and real-life correlations were well observed.	Practice problems were framed around engineering contexts, which helped improve application-level thinking. The same approach will be followed in upcoming terms.	1.5	3	Target exceptionally exceeded. Students effectively related theoretical knowledge to practical applications	Included experiments a
AP205BS	Applied Physics Lab	CO1 -Analyze the parameters of quality factor and time constant of a given lcr and rc circuits respectively.	1.5	3	Students successfully performed experiments to measure quality factor and time constant. They accurately plotted graphs and interpreted results with minimal errors.	Pre-lab discussions and simulation support improved student readiness. These practices will be continued to maintain concept clarity and procedural accuracy.	1.5	3	Target fully exceeded. Students efficie	Developed video tutoria
		CO-2-Design the equivalent circuit of semiconductor optoelectronics devices to study their v-i characteristics.	1.5	3	Students accurately designed and tested circuits for optoelectronic components like LEDs and photodiodes. V-I curves were correctly plotted and analyzed.	Lab manuals with circuit diagrams and pre-experiment briefing helped ensure correctness. These resources will be preserved and updated periodically.	1.5	3	Target fully exceeded. Students showe	Included troubleshootin
		CO-3-Apply the electromagnetism laws to determine the relationship between the current and magnetic field	1.5	3	Experimental setup using solenoids and magnetic sensors was properly handled. Students demonstrated understanding of magnetic field behavior and correlation with current.	Instructional videos and group experiments were effective in reinforcing electromagnetism concepts. These methods will continue in the lab routine.	1.5	3	Target fully exceeded. Students corre	Added comparative exp
		CO-4-Apply the concepts of optics for study the characteristics of laser and fiber optical devices.	1.5	3	Students showed accurate measurement and interpretation of laser beam divergence, optical power, and fiber transmission characteristics. Lab work met expected standards.	Use of real-time demonstrations and laser safety protocols enhanced student involvement. Structured observation tables ensured proper analysis, and this approach will be retained.	1.5	3	Target fully exceeded. Students demo	Introduced advanced o
									Students effectively recognized and	Emphasis on pattern re

MA201BS	Mathematics II	CO1- Identify whether the given differential equation of first order is exact or not	1.5	1.5	Students struggled to distinguish between exact and non-exact equations. Many failed to apply integrating factors or verify exactness correctly in assessments.	Remedial sessions were held with basic concept revision and step-by-step problem-solving. Additional solved examples and targeted practice sets were provided.	1.5	2.2	solved exact and non-exact differential equations. Most demonstrated a clear understanding of integrating factors and solution techniques.	and problem-type class during tutorials was hel worksheets and concep tests will continue in fut sessions.
		CO2- Apply the concept of differential equations in given engineering problem	1.5	1.5	Application-based problems were poorly attempted. Students showed difficulty in modeling physical systems like circuits and motion using differential equations.	Real-life engineering case studies were integrated into assignments. Class examples were made more relatable, and collaborative group problem-solving activities were introduced.	1.5	2.2	Students successfully applied differential equations to model and solve real-world engineering problems such as growth/decay, motion, and circuit behavior.	Engineering application were integrated into ass This real-world linkage increase interest and re will be maintained.
		CO3- Find the areas, volumes, centre of mass and gravity for cubes, sphere and rectangular parallelepiped by using multiple integrals	1.5	1.5	Low attainment was due to students' difficulty in setting up proper limits for multiple integrals and visualizing 3D regions. Many answers were incomplete or incorrect.	Visual learning through graphs and 3D models was introduced. Sketch-based questions and multiple-choice drills were added to improve spatial understanding and accuracy.	1.5	2.4	Students demonstrated proficiency in applying double and triple integrals to solve geometry-related problems. Their ability to visualize 3D regions was evident in their solutions.	Visual teaching aids an region sketches improv comprehension. These along with additional ge problem sets, will be ret
		CO4- Evaluate the line, surface and volume integrals and converting them from one to another	1.5	1.5	Concepts like Green's, Gauss' and Stokes' theorems were poorly understood. Students were confused in selecting correct forms of integrals and converting between them.	Vector calculus was taught with the help of simulations and animations. Frequent short quizzes and peer instruction were implemented to reinforce theorem application and conceptual clarity.	1.5	2.1	Students accurately used vector calculus concepts like Green's, Stokes', and Gauss' theorems. They confidently converted integrals and applied them in physical contexts.	Vector field simulations examples helped solidif understanding. These t remain part of future ins maintain strong perform
CS203ES	Programming for Problem Solving	CO1-Write algorithm & flow chart for the given problem.	1.5	3	Students demonstrated a strong understanding of problem-solving logic. Algorithms were well-structured, and flowcharts clearly represented logical steps.	Continued use of classroom discussions, real-life examples, and structured practice exercises proved effective and will be maintained.	1.5	2.3	Students demonstrated a strong understanding of problem-solving logic. Algorithms were well-structured, and flowcharts clearly represented logical steps.	Continued use of classr discussions, real-life ex structured practice exer proved effective and wil maintained.
		CO2-Ability to write structured programs using control structures and functions.	1.5	3	Students wrote well-structured programs using if-else, loops, and functions. Coding style, logic, and syntax usage were appropriate in assignments and lab evaluations.	Weekly lab sessions with hands-on tasks were successful. These will continue along with occasional peer reviews for code optimization and feedback.	1.5	2.2	Students wrote well-structured programs using if-else, loops, and functions. Coding style, logic, and syntax usage were appropriate in assignments and lab evaluations.	Weekly lab sessions wit tasks were successful. continue along with occ reviews for code optimiz feedback.
		CO3-Apply searching and sorting algorithms for the given list of elements	1.5	3	Students accurately implemented and analyzed basic searching and sorting algorithms. Program output and logic were mostly correct across evaluations.	Algorithm trace exercises and visual aids helped students solidify understanding. These practices will be retained in future batches.	1.5	2.5	Students accurately implemented and analyzed basic searching and sorting algorithms. Program output and logic were mostly correct across evaluations.	Algorithm trace exercise aids helped students so understanding. These p be retained in future bat
		CO4-To be able to perform input/output, status and positioning functions of files.	1.5	3	Students effectively demonstrated file operations in programs, including reading/writing and file status functions. File-handling mini-projects were completed successfully.	Lab activities involving real-time file-based applications (e.g., text processing, student records) were beneficial and will be continued.	1.5	2.2	Students effectively demonstrated file operations in programs, including reading/writing and file status functions. File-handling mini-projects were completed successfully.	Lab activities involving r based applications (e.g. processing, student rec beneficial and will be co
CS206ES	Programming for Problem	CO1-To create, edit, compile, run and debug programs	1.5	3	Students demonstrated proficiency in using IDEs and compilers. They were able to write and execute programs without syntax or runtime errors and showed confidence in debugging.	Lab sessions provided hands-on exposure to basic programming environments. Troubleshooting practice and guided exercises will continue as standard lab methodology.	1.5	2.5	Students demonstrated proficiency in using IDEs and compilers. They were able to write and execute programs without syntax or runtime errors and showed confidence in debugging.	Lab sessions provided h exposure to basic progr environments. Troubles practice and guided exe continue as standard la methodology.
		CO2-To analyze the various steps in program development.	1.5	3	Students clearly understood the programming workflow—problem understanding, algorithm writing, coding, and testing. Most followed structured steps in their lab submissions.	Emphasis on software development life cycle in lab orientation and consistent lab report structure supported this outcome. These practices will be retained.	1.5	2.5	Students clearly understood the programming workflow—problem understanding, algorithm writing, coding, and testing. Most followed structured steps in their lab submissions.	Emphasis on software d life cycle in lab orientati consistent lab report str supported this outcome practices will be retaine

	Solving Lab	CO3-To develop programs to solve basic problems by understanding basic concepts in c like operators, control statements etc.	1.5	3	Students applied C fundamentals accurately to solve problems involving arithmetic operations, loops, and conditionals. Output and logic were generally correct.	Frequent hands-on practice and mini-assessments helped reinforce concepts. Lab tasks will continue to include real-world logic-building exercises.	1.5	2.5	Students applied C fundamentals accurately to solve problems involving arithmetic operations, loops, and conditionals. Output and logic were generally correct.	Frequent hands-on prac mini-assessments helpe concepts. Lab tasks will include real-world logic- exercises.
		CO4-To develop modular, reusable and readable c programs using the concepts like functions, arrays etc.	1.5	3	Students successfully implemented modular programs using functions and arrays. Code readability, reusability, and structure improved significantly.	Code review sessions and the use of coding guidelines enhanced student performance. These instructional strategies will remain a part of lab pedagogy.	1.5	2.5	Students successfully implemented modular programs using functions and arrays. Code readability, reusability, and structure improved significantly.	Code review sessions a of coding guidelines enl student performance. T instructional strategies part of lab pedagogy.
CS301ES	Analog and Digital Electronics	CO1- To understand diode characteristics and applications	1.5	1.5	Students faced difficulty in understanding the V-I characteristics of diodes, especially Zener diodes and their application in clipping and rectifier circuits. Lab performance and theoretical assessments were below expectations.	Additional lab demonstrations and simulations (e.g., on Multisim) were conducted. Step-by-step analysis of diode circuits was introduced in tutorials to improve clarity.	1.5	2.2	Students showed clear understanding of PN junction and Zener diode behavior, and successfully analyzed clipping, clamping, and rectifier circuits. Performance in assignments and lab activities was strong.	The use of diode chara simulations and real-tim observations helped rei learning. These strategi continued in future instr
		CO2- To understand bipolar junction transistor and field effect transistors along with their characteristics	1.5	1.5	Students were unable to differentiate clearly between BJT and FET configurations. Input-output characteristic plotting and mode identification (CE, CB, CC) were weak in assessments.	Extra sessions were organized to explain transistor biasing and operation through practical examples and animations. Circuit construction tasks were simplified for better understanding.	1.5	1.8	Students were able to describe and analyze BJT and FET configurations, including CE, CB, CC modes. They interpreted input/output characteristics effectively.	Practical demonstration circuit-based problem s effective. Emphasis will lab-to-theory alignment component-level analys
		CO3- Analyze digital circuits and the operations of a digital system	1.5	1.5	Many students lacked foundational knowledge of logic gates and Boolean algebra. There were frequent errors in simplifying expressions and drawing logic circuits.	Weekly logic circuit drills and truth-table exercises were introduced. Concept reinforcement was supported through visual tools like Logisim and peer discussions.	1.5	1.5	Many students lacked foundational knowledge of logic gates and Boolean algebra. There were frequent errors in simplifying expressions and drawing logic circuits.	Weekly logic circuit drill table exercises were int Concept reinforcement supported through visua Logisim and peer discus
		CO4- Analyse combinational circuits by using standard combinations functions to build more complicated circuit	1.5	1.5	Students struggled to design and implement multiplexers, decoders, and adders. There was a lack of understanding in how to integrate basic blocks into larger digital systems.	Combinational circuit design was re-taught using block-diagram approaches. Simple hands-on design assignments and guided lab worksheets were included to improve design skills.	1.5	2	Students successfully designed multiplexers, decoders, encoders, and adders. Final project submissions showed the ability to combine components to form functional systems.	Students were guided th structured design tasks mini-projects involving r digital logic scenarios. T expanded in future offer
CS306ES	Analog and Digital Electronics lab	CO1-Analyze a given network by applying various electrical laws and network theorems	1.5	2.5	Students effectively applied KVL, KCL, Thevenin's and Norton's theorems in experimental setups. Most lab reports were accurate and conceptually sound.	Pre-lab discussions and problem-solving sessions were useful in preparing students. This approach will continue for future batches.	1.5	2.5	Students effectively applied KVL, KCL, Thevenin's and Norton's theorems in experimental setups. Most lab reports were accurate and conceptually sound.	Pre-lab discussions and solving sessions were u preparing students. This will continue for future b
		CO2-Know the response of electrical circuits for different excitations	1.5	2.5	Students successfully analyzed the behavior of RLC circuits under AC and DC excitation. Oscilloscope readings and interpretation were accurate.	Simulation tools and hands-on measurements helped reinforce theoretical concepts. These methods will remain part of lab practice	1.5	2.5	Students successfully analyzed the behavior of RLC circuits under AC and DC excitation. Oscilloscope readings and interpretation were accurate.	Simulation tools and ha measurements helped r theoretical concepts. Th methods will remain par practice
		CO3-Calculate, measure and know the relation between basic electrical parameters	1.5	2.5	Students were able to measure voltage, current, resistance, and power with precision and relate them using Ohm's and power laws.	Use of instrument demonstration and guided lab tasks improved student performance. Continued emphasis on accuracy and method will be maintained.	1.5	2.5	Students were able to measure voltage, current, resistance, and power with precision and relate them using Ohm's and power laws.	Use of instrument demo and guided lab tasks im student performance. C emphasis on accuracy a will be maintained.
		CO4-Analyze the performance			Students demonstrated good understanding in	Lab experiments were aligned with real-world applications, and visual aids like cut-			Students demonstrated good understanding in analyzing torque-	Lab experiments were a real-world applications,

		characteristics of dc and ac electrical machines	1.5	2.5	analyzing torque-speed characteristics, efficiency, and operational behavior of motors and generators.	section models enhanced understanding. These teaching tools will be retained.	1.5	2.5	speed characteristics, efficiency, and operational behavior of motors and generators.	aids like cut-section mo enhanced understandin teaching tools will be re
CS304PC	Computer Organization and Architecture	CO1- Understand the basic components and the design of cpu,alu and control unit,communication among various peripheral devices.	1.5	1.3	Students showed limited understanding of CPU architecture and data flow. Diagrams were often incorrect or incomplete, and communication protocols between peripherals were misunderstood.	Conducted remedial classes focused on CPU design and system architecture diagrams. Interactive videos and hardware simulation tools were introduced to visualize the architecture more clearly.	1.5	2	Students demonstrated strong understanding of CPU architecture, ALU functions, and how control units manage instruction execution. Diagrams and explanations in assessments were accurate.	Continued use of detail diagrams and animation teaching helped clarify i hardware structures. Th teaching methods will b maintained.
		CO2- Apply various algorithms to perform arithmetic operations on integers and floating point numbers.	1.5	1.3	Most students failed to implement Booth's, restoring, and floating-point operations correctly. Logical flow and binary computation errors were common.	Step-by-step tutorials and guided coding sessions were arranged. Additional assignments involving binary arithmetic practice were provided.	1.5	2	Students accurately implemented Booth's, restoring, and non-restoring division algorithms. The logic behind binary arithmetic and floating-point formats was well grasped.	Algorithm simulation tas step-by-step dry runs he improve clarity. Addition worksheets and live coc demonstrations will con support learning.
		CO3- Differentiate the types of memory and the throughput between normal processing and pipelining.	1.5	1.2	Students were unable to distinguish between memory types or explain cache performance and pipeline hazards. Misconceptions in throughput calculations were observed.	Extra sessions using memory hierarchy diagrams and throughput calculation examples were included. Visual aids and animated videos on pipelining concepts were incorporated.	1.5	2	Students correctly compared SRAM, DRAM, cache, and virtual memory. They also showed a good understanding of pipeline hazards and throughput calculation.	Conceptual clarity was through performance-ba problem-solving and dia explanations. Case-bas examples and quizzes retained.
		CO4- Analyze the interconnection structures and synchronization among connected structures in a multiprocessor system.	1.5	1.2	Students struggled to understand multiprocessor architectures, interconnection types, and synchronization issues. Exam answers were vague or lacked depth.	Concepts were retaught using case studies and simplified models. Class discussions and peer-explained diagrams were used to improve comprehension of multiprocessor systems.	1.5	2	Students were able to explain interconnection networks (like mesh, ring, crossbar) and synchronization techniques (locks, barriers). Answers in exams showed critical analysis.	Real-world multiprocess examples and visual mo students connect theory These examples and in problem discussions wil
MA303BS	Computer Oriented Statistical Methods	CO1- Apply the concepts of probability and distributions to some case studies	1.5	1.2	Students found it difficult to interpret real-world scenarios in terms of probability theory. Most case-based questions were answered incorrectly or with vague logic.	More real-life examples and datasets were integrated into classroom discussions. Students were guided step-by-step to model scenarios mathematically.	1.5	1.2	Students found it difficult to interpret real-world scenarios in terms of probability theory. Most case-based questions were answered incorrectly or with vague logic.	More real-life examples datasets were integrate classroom discussions. were guided step-by-ste scenarios mathematical
		CO2- Solve problems using some standard probability distributions	1.5	1.3	Students showed poor understanding of distributions like binomial and Poisson. They struggled with identifying the correct distribution and computing probabilities.	Conducted focused remedial sessions on discrete distributions with illustrative problems. Formula sheets and classification charts were provided for clarity.	1.5	1.3	Students showed poor understanding of distributions like binomial and Poisson. They struggled with identifying the correct distribution and computing probabilities.	Conducted focused rem sessions on discrete dis with illustrative problem sheets and classificatio were provided for clarity
		CO3- Apply some continuous probability distributions to case studies.	1.5	1.5	Most students failed to apply normal and exponential distributions in practical contexts. Graphical interpretation and area computation were weak.	Visualization tools (like histograms and bell curves) and statistical software (e.g., Excel/SPSS demonstrations) were introduced to build conceptual clarity.	1.5	1.5	Most students failed to apply normal and exponential distributions in practical contexts. Graphical interpretation and area computation were weak.	Visualization tools (like and bell curves) and sta software (e.g., Excel/SF demonstrations) were in build conceptual clarity.
		CO4- Apply tests of hypothesis for decision making.	1.5	1.4	Hypothesis testing steps (formulating H_0/H_1, choosing test statistics, interpreting p-values) were poorly followed. Students often skipped crucial steps or misunderstood conclusions.	Revision modules were created focusing solely on hypothesis testing. Students practiced structured problem-solving using Z-test, t-test, and chi-square test formats with guided feedback.	1.5	1.4	Hypothesis testing steps (formulating H_0/H_1, choosing test statistics, interpreting p-values) were poorly followed. Students often skipped crucial steps or misunderstood conclusions.	Revision modules were focusing solely on hypo testing. Students practic structured problem-solv test, t-test, and chi-squa formats with guided fee
		CO1- Explain the various data structures	1.5	1.5	Students showed limited understanding of fundamental data structures such as arrays, linked lists, stacks, queues, and trees. Many struggled to	Additional theory revision sessions and visual animations were introduced to improve conceptual clarity. Flashcards and quick-recall quizzes were used to reinforce	1.5	1.5	Students showed limited understanding of fundamental data structures such as arrays, linked lists, stacks, queues, and trees. Many struggled to explain structure	Additional theory revisio and visual animations w introduced to improve c clarity. Flashcards and quizzes were used to re

					explain structure behavior and use cases.	understanding.			behavior and use cases.	understanding.
CS302PC	Data Structures	CO2- Implement various algorithms to perform sorting and searching	1.5	0.8	Implementation errors were frequent in bubble, selection, and binary search algorithms. Many students lacked clarity on time complexity and failed to debug logic in lab programs.	Step-by-step dry-run exercises and logic-building worksheets were assigned. Pair programming and code walkthroughs were introduced during lab sessions.	1.5	1.5	Implementation errors were frequent in bubble, selection, and binary search algorithms. Many students lacked clarity on time complexity and failed to debug logic in lab programs.	Step-by-step dry-run ex logic-building workshee assigned. Pair program code walkthroughs were during lab sessions.
		CO3- Choose appropriate traversal method to find shortest distance	1.5	0.9	Students were unable to differentiate or correctly apply BFS, DFS, or Dijkstra's algorithm for traversal and shortest path problems. Graph-related logic was unclear.	Graph traversal techniques were taught through animated visualizations and example-based learning. Weekly practice problems and concept-check exercises were added.	1.5	1.5	Students were unable to differentiate or correctly apply BFS, DFS, or Dijkstra's algorithm for traversal and shortest path problems. Graph-related logic was unclear.	Graph traversal techniq taught through animate visualizations and exam learning. Weekly practic and concept-check exe added.
		CO4- Design programs using a variety of data structures	1.5	0.7	Students struggled with applying combinations of data structures to solve problems. Programs lacked modularity, reusability, and correctness.	Problem-solving templates and guided programming tasks were introduced. Mini-projects were simplified to encourage structured use of multiple data structures.	1.5	1.5	Students struggled with applying combinations of data structures to solve problems. Programs lacked modularity, reusability, and correctness.	Problem-solving templa guided programming ta introduced. Mini-project simplified to encourage use of multiple data stru
CS305PC	Object Oriented Programming using C++	CO1- Differentiate between object oriented programming and procedure oriented programming	1.5	1.2	Students were unable to clearly articulate the key differences such as abstraction, encapsulation, inheritance, and modularity. Conceptual confusion was observed in tests and class participation.	Additional theory sessions with visual diagrams and comparative charts were introduced. Short quizzes and group discussions helped reinforce differences between paradigms.	1.5	1.7	Students clearly understood the distinction between procedural and object-oriented paradigms, demonstrating familiarity with concepts like encapsulation, inheritance, and polymorphism	Comparison charts, rea analogies, and classroo discussions supported clarity. These teaching will continue to be used sessions.
		CO2-Apply the concepts of classes constructors ,overloading, templates to write programs	1.5	1.2	Students struggled to implement basic class structures. Syntax errors and misunderstanding of constructors and function overloading were common. Templates were rarely used correctly.	Extra lab sessions with guided programming exercises were conducted. Code examples and live demos were used to reinforce object-oriented features.	1.5	1.7	Students implemented C++ programs using classes, constructors, operator/function overloading, and templates. Syntax and structure were followed accurately.	Lab exercises and prog assignments were effec building strong coding h structured tasks will be for future batches.
		CO3-Apply the concepts of exceptional handling	1.5	1.2	Most students were unaware of exception handling syntax and logic. Programs lacked try-catch blocks and proper error handling mechanisms.	Exception handling concepts were retaught using real-life programming errors and structured lab tasks. Evaluation weightage was increased to stress its importance.	1.5	1.9	Students correctly used try-catch blocks and implemented custom exceptions to handle runtime errors. Most lab work reflected good understanding and proper usage.	Exception handling was through real-time use ca tasks involving file and operations reinforced its which will remain in the
		CO4-Develop applications for a range of problems using object-oriented programming techniques.	1.5	1	Students showed poor ability to integrate OOP concepts into practical applications. Programs lacked class reuse, inheritance, or modular design.	Capstone mini-projects were redesigned to guide students step-by-step through class hierarchies and reuse. Peer-review coding sessions were introduced for feedback and clarity.	1.5	1.9	Students successfully applied OOP principles (like inheritance, polymorphism, and modularity) to build practical applications. Project work showed code reusability and good design.	Mini-projects and lab ev were focused on applica oriented learning. Code feedback sessions play role in reinforcing good These will continue.
	Database	CO1-Describe fundamentals of dbms,database design and normal forms	1.5	1.5	Students had difficulty understanding data models and drawing ER diagrams. Many were unable to normalize schemas beyond 1NF. Conceptual gaps in database design were evident.	Conducted remedial sessions on ER modeling and normalization with simple case studies. Step-by-step normalization worksheets and in-class exercises were introduced.	1.5	2.5	Students demonstrated a solid understanding of data models, ER diagrams, relational schema, and normalization techniques (1NF to 3NF). Most students scored well in both theory and application-based assessments.	Conceptual clarity was through interactive whit examples and normaliz studies. These methods continue to be impleme
		CO2-Understand basics of transaction processing and concurrency control	1.5	1.2	Most students lacked clarity on ACID properties, locking mechanisms, and conflict serializability. Scheduling problems and concurrency control techniques were poorly attempted in assessments.	Introduced flowcharts and real-world transaction case examples. Weekly quizzes and peer discussions on transaction states and concurrency problems were added to	1.5	2.5	Students accurately explained transaction properties (ACID), and concurrency issues like deadlocks and locking protocols. Application of serializability and scheduling	Continued use of flowch real-life analogies for tra and locking mechanism students grasp abstract Case-based teaching w

CS404PC	Management System					reinforce learning.			concepts was also satisfactory.	part of the plan.
		CO3-Summarize database storage structures and access techniques	1.5	1.2	Students showed poor understanding of storage formats, indexing, and file organization. They were unable to distinguish between different indexing methods and their performance implications.	Supplemented lectures with visual animations and simplified illustrations of data storage mechanisms. Real-time demonstrations using database management tools were included.	1.5	2.8	Learners effectively identified storage methods, indexing techniques (B+, hash), and file organization strategies. They demonstrated understanding of performance aspects of data retrieval.	Classroom activities inc practical examples and access paths. Visual aic simplified diagrams will support this topic.
		CO4-Design sql commands and queries for retrieval and management of data	1.5	1.5	Students struggled with writing correct SQL queries, especially involving joins, nested queries, and aggregate functions. Errors in syntax and logic were frequent in lab evaluations.	Step-by-step SQL query-building exercises and interactive lab sessions were conducted. Online SQL practice platforms were integrated into weekly lab work. Focus was placed on problem decomposition and query logic.	1.5	2.8	Students wrote accurate SQL queries for data manipulation, aggregation, joins, and subqueries. Lab exercises and exams showed clear syntax usage and problem-solving ability.	Regular lab sessions ar writing assignments cor skill development. Cont on real-world dataset pr query debugging will be
CS401PC	Discrete Mathematics	CO1-Evaluate the notions of propositions, predicate formulae, rules of inference.	1.5	3	Students effectively demonstrated understanding of propositional and predicate logic, including truth tables, quantifiers, and rules of inference. Logical proofs were systematically structured in assessments.	Continued use of logic puzzles, Venn diagrams, and truth table exercises supported conceptual clarity. These strategies will be retained in future offerings.	1.5	2.7	Students effectively demonstrated understanding of propositional and predicate logic, including truth tables, quantifiers, and rules of inference. Logical proofs were systematically structured in assessments.	Continued use of logic p Venn diagrams, and tru exercises supported co clarity. These strategies retained in future offerir
		CO2-Describe various types of relations , sets and functions	1.5	3	Students accurately identified and classified relations and function types. Set operations and properties were well-applied in problems. Assignments and tests showed a strong grasp of foundational set theory.	Use of real-world analogies and visual aids (like Venn diagrams and mapping diagrams) helped comprehension. Reinforcement through concept-check quizzes will be continued.	1.5	2.7	Students accurately identified and classified relations and function types. Set operations and properties were well-applied in problems. Assignments and tests showed a strong grasp of foundational set theory.	Use of real-world analo visual aids (like Venn di mapping diagrams) help comprehension. Reinfo through concept-check be continued.
		CO3-ability to formalization and manipulate sequences and recurrence relations.	1.5	3	Students successfully formulated and solved recurrence relations using substitution and iteration methods. Concepts of sequences and mathematical induction were clearly applied.	Weekly practice problems, formula derivation exercises, and example-driven teaching helped maintain performance. These will be part of future teaching plans.	1.5	3	Students successfully formulated and solved recurrence relations using substitution and iteration methods. Concepts of sequences and mathematical induction were clearly applied.	Weekly practice probler derivation exercises, an driven teaching helped performance. These wil future teaching plans.
		CO4-Demonstrate different traversal methods for trees and graphs	1.5	3	Students demonstrated accurate application of BFS, DFS, inorder, preorder, and postorder traversals. Diagrammatic solutions and algorithm implementation were effectively handled.	Visual simulation tools and dry-run exercises were integrated into class and tutorials. Continued use of interactive tools and graph-based exercises will ensure continued attainment.	1.5	3	Students demonstrated accurate application of BFS, DFS, inorder, preorder, and postorder traversals. Diagrammatic solutions and algorithm implementation were effectively handled.	Visual simulation tools a exercises were integrat and tutorials. Continuec interactive tools and gra exercises will ensure co attainment.
CS405PC	Java Programming	CO1-Understand java features including platform independent,multi threading,security , object oriented and dynamic	1.5	1.4	Students demonstrated limited understanding of key Java features. Many struggled to distinguish between Java and other languages in terms of architecture and capabilities like multithreading or platform independence.	Basic concepts were revisited through simplified examples and comparative analysis with C++. Supplementary video content and real-world analogies were introduced to enhance conceptual clarity.	1.5	1.4	Students demonstrated limited understanding of key Java features. Many struggled to distinguish between Java and other languages in terms of architecture and capabilities like multithreading or platform independence.	Basic concepts were re through simplified exam comparative analysis w Supplementary video co real-world analogies we introduced to enhance c clarity.
		CO2-Apply OOP features to solve a given problem	1.5	1.5	Students found it difficult to apply object-oriented principles such as inheritance, polymorphism, and abstraction in program design. Code submissions were inconsistent and lacked structure.	Additional hands-on sessions focused on OOP design patterns and real-world problem-solving were organized. Small modular programs were introduced to build understanding step-by-step.	1.5	0.9	Students found it difficult to apply object-oriented principles such as inheritance, polymorphism, and abstraction in program design. Code submissions were inconsistent and lacked structure.	Additional hands-on ses focused on OOP desigr and real-world problem- were organized. Small r programs were introduc understanding step-by-s
									Many students failed to properly	Lab sessions were revis

		CO3-Develop gui application/applet and handle events in java	1.5	1.5	Many students failed to properly design GUI layouts or handle events. There was confusion in using AWT/Swing components and integrating event-driven code.	Lab sessions were revised to include step-by-step GUI creation with live demos. Drag-and-drop tools and GUI builders were introduced initially to ease understanding.	1.5	0.9	design GUI layouts or handle events. There was confusion in using AWT/Swing components and integrating event-driven code.	include step-by-step GU with live demos. Drag-a tools and GUI builders introduced initially to ea understanding.
		CO4-Understand packages, interfaces and collections in java	1.5	1.5	Students showed weak understanding of Java packages, interface usage, and collection frameworks. There were frequent syntax and logic errors in using List, Set, and Map collections.	Remedial lectures with focused examples and practice problems on packages and collections were provided. In-class coding activities emphasized modularity and interface implementation.	1.5	0.6	Students showed weak understanding of Java packages, interface usage, and collection frameworks. There were frequent syntax and logic errors in using List, Set, and Map collections.	Remedial lectures with examples and practice packages and collectio provided. In-class codin emphasized modularity interface implementatio
CS403PC	Operating System	CO1-Understand the structure of os and basic architectural component involved in os design.	1.5	1.5	Students showed difficulty in explaining OS architecture (kernel, shell, system calls) and how OS manages different hardware/software components. Diagrams were incomplete or incorrect.	Supplemented lectures with visual models and OS simulators. Case studies (like Linux architecture) and interactive flow diagrams were introduced to build conceptual clarity.	1.5	1.8	Students demonstrated strong understanding of operating system architecture, including kernel, shell, system calls, and layered models. Diagram-based questions and conceptual answers were well attempted.	Use of OS simulators, s architecture diagrams, studies (e.g., Linux, Wir proved effective. These will continue to be used
		CO2-Apply the various resource management techniques in os.	1.5	1.5	Resource management concepts like CPU scheduling, memory allocation, and disk management were not applied effectively. Students struggled with algorithm selection and analysis.	More problem-solving sessions were conducted for algorithms like FCFS, SJF, Round Robin, and paging techniques. Coding-based simulations and visual algorithm comparisons were introduced.	1.5	1.8	Students accurately applied CPU scheduling, memory management, and disk scheduling techniques. They were able to compare algorithms and explain trade-offs.	Practice problems and quizzes on scheduling techniques helped reinf learning. These activitie part of the teaching plan
		CO3-Able to understand synchronization problem & its various techniques to solve it.	1.5	1.2	Students lacked understanding of critical section problems and synchronization techniques like semaphores and monitors. Race conditions and solution logic were unclear.	Simplified examples and real-life analogies (e.g., producer-consumer problem) were used. Animated simulations and step-wise dry runs helped illustrate synchronization logic.	1.5	1.8	Students showed proficiency in solving synchronization problems using semaphores, monitors, and classical problems (e.g., producer-consumer, reader-writer).	Use of real-time scenar animations improved co clarity. These tools and driven teaching will be r
		CO4-Able to interpret deadlock detection,prevention and recovery.	1.5	1.3	Poor understanding of deadlock conditions (mutual exclusion, hold & wait, etc.) and detection algorithms like resource allocation graph and banker's algorithm was observed.	Hands-on exercises and tutorials were conducted on deadlock avoidance/prevention. Graphical representations and real-world system examples were used to reinforce concepts.	1.5	1.8	Students clearly understood deadlock concepts and applied appropriate detection and recovery strategies, including the banker's algorithm and resource allocation graphs.	Conceptual teaching wa strengthened with visua demonstrations and pra problems. Continued us simulations and applied will be followed in future
CS506PC	Computer Networks & Web Technologies Lab	CO1-Implement server side scripting with php language.	1.5	3	Students successfully wrote PHP scripts for form handling, file operations, and session management. Code was syntactically correct and functional.	Hands-on exercises and live coding demonstrations were highly effective. These methods will be retained in the upcoming batch.	1.5	1.5	Students faced issues with PHP syntax, server configuration, and session handling. Outputs were inconsistent and error-prone.	Conducted remedial se covering PHP basics. XAMPP/WAMP installat usage were re-demonst step-by-step walkthroug
		CO2-Code well formed/valid xml document.	1.5	3	Students demonstrated clear understanding of XML syntax, schema, and validation. Lab tasks involving structured data formats were completed accurately.	Lab tasks were supported by schema validation tools and real-time examples. These practices will continue.	1.5	1.5	Most students were unfamiliar with XML schema rules and tags. Validation errors were common and documents failed structural checks.	XML structure and valid concepts were retaught examples and XML edit Weekly practice tasks w
		CO3-Develop the dynamic pages using jsp, servlet and javascript	1.5	3	Students effectively developed client-server applications using servlets and JSP. Integration with JavaScript for interactivity was well demonstrated in practicals.	Weekly lab evaluations and mini-projects provided structure for steady progress. These formats will be preserved.	1.5	1.5	Students were unable to correctly configure servlet containers or integrate frontend (JavaScript) with backend logic. Output was incomplete or non-functional.	Setup guides for Tomca revised. Pre-lab tutorial sample projects were gi confidence. Code revie was added during lab h
		CO4-Course outcome	1.5	3	Students achieved the intended outcome as per lab objectives. Practical understanding and application were evident in final evaluations.	The teaching methodology and lab design were found effective. No changes required.	1.5	1.5	Students lacked clarity on expected outcomes due to undefined CO4 or broad interpretation. Assessment criteria were unclear.	The CO will be revised Rubrics will be aligned measurable skills and e shared with students in offerings.

CS503PC	Computer Networks	CO1-Identify the fundamentals of computer network technologies.	1.5	2.9	Students successfully identified and explained core networking concepts such as LAN, WAN, protocols, topologies, and transmission media.	Use of network simulation tools and real-life analogies (e.g., post office model) enhanced understanding. These teaching techniques will continue.	1.5	1.1	Students had difficulty identifying key network components and distinguishing between network types and devices. Basic terminology was unclear.	Additional introductory s using visual aids and re analogies were conduct Foundation-building mo added to bridge knowle
		CO2-Describe the roles of each layer in the osi and tcp/ip reference models.	1.5	2.9	Students demonstrated good clarity of the layered architecture and could map functionalities to correct layers across OSI and TCP/IP models.	Layer-by-layer visual breakdowns and role-play activities helped reinforce learning. These instructional methods will be retained.	1.5	1.1	Students confused the functions of each layer and failed to properly map protocols and devices to respective layers. Layer-based explanations were vague.	Layer-specific flashcard based class activities, a interactive diagrams we introduced to clarify cor Weekly review quizzes
		CO3-Apply subnetting and routing methods	1.5	3	Students showed proficiency in solving subnetting problems and explaining routing concepts like static and dynamic routing.	Practice problems, peer teaching, and real-time routing simulations (e.g., Cisco Packet Tracer) proved effective and will be continued.	1.5	1.1	Most students were unable to perform subnetting calculations or interpret routing tables. Concepts like CIDR and VLSM were poorly understood.	A focused subnetting w lab simulations using Ci Tracer were introduced. practice sheets and vid were shared.
		CO4-Analyze computer network protocols and how they are used in network design and implementation	1.5	3	Students effectively analyzed protocols like HTTP, FTP, TCP/IP, and DNS in relation to design and implementation. Project work and case studies reflected strong understanding.	Protocol analysis using tools like Wireshark and practical assignments on network design supported learning. These activities will be maintained.	1.5	1.1	Students struggled to analyze and compare protocols. Implementation-based questions were attempted superficially without logical connections.	Protocol analysis tools (Wireshark) and simplifie work were introduced. S were guided through rea scenarios step-by-step conceptual application.
CS501PC	Formal language and automata theory	CO1-Design finite automata for the given language	1.5	1.5	Students struggled with constructing DFA/NFA and made errors in transition diagrams and state minimization. Many were unable to differentiate between DFA and NFA.	Remedial sessions on automata fundamentals were conducted with visual simulations and interactive problem-solving. Weekly practice problems were introduced	1.5	1.5	Students struggled with constructing DFA/NFA and made errors in transition diagrams and state minimization. Many were unable to differentiate between DFA and NFA.	Remedial sessions on a fundamentals were con visual simulations and i problem-solving. Weekl problems were introduc
		CO2-Write regular expression for programming language constructs	1.5	2	Students demonstrated good skill in deriving regular expressions for lexical patterns and tokens. Most assessment answers were complete and accurate.	Real-world examples from lexical analyzers were introduced in teaching. Continued use of mini-exercises and practice sheets ensured strong understanding.	1.5	1	Students found it difficult to derive accurate regular expressions and often confused RE syntax with programming expressions.	Regular expression syn rules were re-taught usi examples from real-wor patterns. Short quizzes matching exercises wer introduced.
		CO3-Design context free grammars for formal languages	1.5	2.4	Students created CFGs for arithmetic expressions, palindromes, and nested structures. Derivation trees and ambiguity detection were handled well.	Use of derivation tree activities, hands-on grammar building, and stepwise teaching helped clarify complex grammar logic. These will be retained.	1.5	1	CFGs created by students were often ambiguous or incorrect. Understanding of derivation trees and language generation was weak.	Focused grammar-build were introduced. Additio assignments emphasize resolution and parse tre construction.
		CO4-Design turing machine and check for the decidability and undecidability of the language	1.5	3	Students demonstrated sound understanding of Turing machine construction and decision properties. Correct identification of decidable vs. undecidable problems was evident.	Teaching was supported by visual simulations and clear breakdowns of TM transitions and decision-making logic. These methods will continue.	1.5	0.8	Students were unable to design basic Turing Machines and showed confusion in classifying languages as decidable/undecidable.	Decidability concepts w reinforced using simplifi examples. TM simulatio guided examples were i lectures and tutorials.
		CO1-understand the basic software engineering methods and practices, and its applications.	1.5	1.5	Students had difficulty grasping key concepts such as SDLC phases, engineering principles, and model selection. Responses lacked clarity and structure.	Remedial sessions were conducted with visual aids and simplified comparisons of development models. Use of software project case studies was introduced to improve application.	1.5	2.5	Students demonstrated a clear understanding of software engineering principles, lifecycle models, and practical applications. Answers in exams and projects reflected theoretical and applied knowledge.	Continued focus on rea studies and lifecycle mo comparisons helped stu key concepts. These m be sustained.
		CO2-Ability to translate end-user requirements into system and software requirements and							Students successfully converted user	SRD-based assignment

CS502PC	Software Engineering	structure the requirements in a software requirements document (srd). implement software engineering layered technology and process-models.	1.5	1.5	Students struggled to distinguish between user-level and system-level requirements. SRDs were often incomplete or incorrectly formatted.	Templates for SRDs and step-by-step assignments were provided. Requirement elicitation was practiced through role-play and mock interviews.	1.5	2.3	needs into functional/non-functional requirements and documented them in structured SRDs. Knowledge of models like Waterfall, Agile, and Spiral was evident.	project simulations guid through each requireme Peer reviews and instru feedback supported skil development.
		CO3-Identify appropriate software architectures and patterns to carry out high level design of a system and be able to critically compare alternative choices.	1.5	1.4	Students failed to apply architectural concepts effectively and could not justify design decisions. Use of UML was inconsistent or inaccurate.	Refresher tutorials on architecture and design patterns were introduced. Design tasks were simplified and followed by structured walkthroughs and peer feedback.	1.5	2.2	Students effectively applied architectural patterns like MVC, layered, and client-server. They showed ability to justify choices based on system needs.	Design activities using U architecture diagrams w These visual tools and c comparison tasks will be future sessions.
		CO4-Implement project management including planning, scheduling, risk management, testing strategies for quality assurance.	1.5	1.5	Many students submitted incomplete or inconsistent project plans. Concepts like risk analysis and quality assurance were not applied correctly in mini-projects.	Project management basics were reinforced through practical sessions using real-world examples. Students were given step-by-step templates for planning, scheduling, and QA reporting.	1.5	2.4	Project planning artifacts like Gantt charts, risk tables, and test plans were accurately developed by students. QA techniques like unit and integration testing were applied in mini-projects.	Practical exposure throu projects and use of proj management tools (e.g. GanttProject) were effe will be continued and im industry-based example
CS504PC	Web Technologies	CO1-Interpret server side scripting with php language.	1.5	3	Students successfully developed server-side scripts using PHP to handle form data and perform backend operations. Practical evaluations showed strong performance.	Structured lab exercises and live coding sessions enhanced learning. These strategies will be retained and extended with more real-world scenarios.	1.5	1.4	Students struggled with PHP syntax, form handling, and server configuration. Scripts often failed or produced unexpected outputs.	A refresher module on P was introduced. Lab ma revised with working ex guided exercises. XAMI sessions were included
		CO-2-Write well formed/valid xml document.	1.5	2.8	Students created XML files adhering to syntax rules and validation constraints. Understanding of DTD and XML Schema was evident.	Practice assignments using XML editors and validators improved accuracy. These resources will be continued in future offerings.	1.5	1.5	Many XML files were structurally incorrect and failed validation. Students lacked clarity on tag nesting, DTD, and schema usage.	XML structure was taug time validators and visu Weekly exercises emph format correctness and techniques.
		CO-3-Develop dynamic web pages by using jsp,servlet, java script.	1.5	3	Students demonstrated the ability to combine Java backend with HTML/JavaScript frontend to create interactive and functional web pages.	Lab activities focusing on JSP/Servlet integration and event-driven scripting worked well. These components will remain core to lab sessions.	1.5	1.5	Integration issues between JSP, Servlets, and JavaScript were common. Students lacked understanding of request/response cycles and frontend-backend linkage.	Live coding sessions we introduced focusing on handling, session tracki interactive elements. Si servlet examples were labs.
		CO-4-Establish the connection between java application and database to insert, delete and modify the data in the table.	1.5	3	Students accurately implemented JDBC connectivity and CRUD operations with MySQL/Oracle databases. Projects reflected real-world integration.	JDBC demonstrations, step-by-step templates, and debugging sessions were effective. They will continue as a best practice in lab instruction.	1.5	1.5	JDBC implementation was error-prone, with incorrect queries and driver misconfiguration. Many failed to establish database connectivity	Step-by-step guidance demonstrations of datab connectivity (JDBC + M provided. Students were templates and troubleshi checklists.
CS602PC	Compiler	CO1-Demonstrate the ability to design a compiler, given a set of language features.	1.5	3	Students successfully demonstrated the phases of compiler design and mapped them to language features like syntax and semantics.	Conceptual clarity was achieved through phase-wise breakdown of compiler design. Assignments and case studies helped reinforce understanding. These practices will be continued.	1.5	2.3	Students successfully demonstrated the phases of compiler design and mapped them to language features like syntax and semantics.	Conceptual clarity was through phase-wise bre compiler design. Assign case studies helped rei understanding. These p be continued.
		CO2-Demonstrate the knowledge of pattern, tokens and regular expression for lexical	1.5	3	Students understood lexical elements well and used regular expressions effectively to define token patterns.	Classroom exercises using token recognition and expression construction were helpful. These techniques will continue with expanded practice sets.	1.5	2.4	Students understood lexical elements well and used regular expressions effectively to define token patterns.	Classroom exercises us recognition and express construction were helpfi techniques will continue

	Design	analysis.								expanded practice sets
		CO3-Acquire skills in using lex tool & yacc tool for devleoping a scanner and parser.	1.5	3	Students were able to implement simple lexical analyzers and syntax parsers using LEX/YACC, successfully demonstrating practical application.	Lab sessions included well-guided tool-based tasks and project-based assessments. Hands-on training with error tracing proved effective and will be retained.	1.5	2.5	Students were able to implement simple lexical analyzers and syntax parsers using LEX/YACC, successfully demonstrating practical application.	Lab sessions included v tool-based tasks and pr assessments. Hands-or with error tracing prove and will be retained.
		CO4-Design and implement ll and lr parsers	1.5	3	Students demonstrated the ability to construct parsing tables and implement LL and LR parsers correctly. Parsing conflict resolution was also well-understood.	Graphical parsing simulations and step-by-step table construction tutorials aided learning. These will remain a core part of parser design instruction.	1.5	2.5	Students demonstrated the ability to construct parsing tables and implement LL and LR parsers correctly. Parsing conflict resolution was also well-understood.	Graphical parsing simul step-by-step table cons tutorials aided learning. remain a core part of pa instruction.
CS603PC	Design And Analysis of Algorithms	CO1-Introduces the notations for analysis of the performance of algorithms	1.5	3	Students demonstrated strong understanding of Big O, Omega, and Theta notations, and correctly applied them in algorithm analysis.	Weekly quizzes and problem-solving sessions on asymptotic notation supported conceptual learning. These exercises will continue.	1.5	2.5	Students demonstrated strong understanding of Big O, Omega, and Theta notations, and correctly applied them in algorithm analysis.	Weekly quizzes and pro solving sessions on asy notation supported conc learning. These exercis continue.
		CO2-Describe computational solution to well known problems like searching, sorting etc	1.5	3	Students accurately implemented and explained standard algorithms like binary search, quicksort, mergesort, and heapsort.	Lab sessions with dry runs, trace tables, and coding assignments contributed to effective learning. These will be retained.	1.5	2.5	Students accurately implemented and explained standard algorithms like binary search, quicksort, mergesort, and heapsort.	Lab sessions with dry ru tables, and coding assig contributed to effective These will be retained.
		CO3-Ability to analyze worst-case and best-case running times of algorithms using asymptotic analysis	1.5	2.7	Most students successfully calculated and compared algorithm complexities using time-function analysis. Performance evaluations were consistent across test cases.	Emphasis on algorithm tracing and asymptotic comparison via peer exercises and tutorials proved effective. These strategies will be continued.	1.5	2.3	Most students successfully calculated and compared algorithm complexities using time-function analysis. Performance evaluations were consistent across test cases.	Emphasis on algorithm asymptotic comparison exercises and tutorials p effective. These strateg continued.
		CO4-Understand the np-hard and np-complete problems , computational complexity of different algorithms to design different algorithms using different approaches.	1.5	3	Students showed clear understanding of complexity classes, reducibility, and designed algorithms using greedy, divide-and-conquer, and dynamic programming techniques.	Concepts were reinforced using visual charts and simplified reductions. Practice with real-world problem modeling helped deepen understanding. These approaches will be preserved.	1.5	2.5	Students showed clear understanding of complexity classes, reducibility, and designed algorithms using greedy, divide-and-conquer, and dynamic programming techniques.	Concepts were reinforc visual charts and simpli reductions. Practice wit problem modeling helpe understanding. These a will be preserved.
CS601PC	MACHINE LEARNING	CO1-To gain the knowledge on basic concepts of machine learning	1.5	1.5	Students struggled to grasp basic ML terminology, categories (supervised, unsupervised), and model evaluation techniques.	Remedial lectures on ML basics using flowcharts and visual guides were introduced. More emphasis was placed on understanding core principles before coding.	1.5	2.6	Students demonstrated a strong understanding of ML fundamentals including supervised and unsupervised learning, model evaluation, and performance metrics.	Foundational concepts reinforced using case e algorithm visualizations teaching practices will b
		CO2-Ability to get the skill to apply machine learning techniques to address the real time problems in different areas	1.5	1.5	Students were unable to relate machine learning models to practical applications. Implementations lacked contextual understanding.	Simplified domain-specific problems were introduced. Coding labs emphasized end-to-end ML pipelines using real datasets with industry context.	1.5	3	Students applied classification, regression, and clustering techniques effectively to real-world datasets in domains like healthcare, finance, and social media.	Hands-on implementati datasets in Python and libraries like scikit-learn significantly. Real-world will continue to be used assignments.
		CO3-Apply the neural networks techniques and its usage in machine learning application.	1.5	1.5	Concepts of neural networks, backpropagation, and activation functions were unclear. Practical implementation using tools like Keras was incomplete or incorrect.	Interactive visual demos and simplified neural network building tutorials were included. More guided labs were provided to ensure hands-on familiarity	1.5	2.8	Students successfully built and trained basic neural networks using frameworks like TensorFlow/Keras and explained their applications in image and speech processing.	Conceptual teaching thr by-layer breakdown and implementation in Jupyt Notebooks proved effec be retained.
		CO4-Differentiate the different dimensionality reduction techniques	1.5	1.5	Students had difficulty explaining or applying PCA, LDA, and t-SNE. Mathematical background and visual interpretation were lacking.	Step-by-step PCA examples and dimensionality reduction visualizations were integrated. Practice with sklearn-based implementations was increased.	1.5	2.7	Students demonstrated clear understanding of PCA, LDA, and t-SNE. Application-based questions were handled with confidence and accuracy.	Visualizations of high-di data projections were u deepen understanding. practices will be continu and project work.

CS615PE	Software Testing Methodologies	CO1-To study the fundamental concepts of software testing which includes objectives, process, criteria, strategies, and methods.	1.5	1.5	Students lacked understanding of basic testing definitions and processes. Testing goals and strategies were confused or incomplete in responses.	Remedial lectures focused on testing lifecycle, objectives, and classifications using industry examples. Summary notes and diagrams were shared for easier recall.	1.5	3	Students demonstrated a sound understanding of the software testing lifecycle, goals, and various strategies such as verification and validation.	Teaching via SDLC-inte testing flowcharts and r examples helped solidif foundational understanc methods will continue.
		CO2-To discuss various software testing types and levels of testing like black and white box testing along with levels unit test, integration, regression, and system testing.	1.5	1.5	Students struggled to differentiate between testing levels and techniques. Responses lacked clarity on where and how each test is applied.	Hands-on demonstrations and scenario-based examples were introduced. Interactive flowcharts and decision trees helped link test type to application stage.	1.5	2.3	Students effectively distinguished between testing types and levels. They applied techniques like boundary value and condition testing in assessments and lab work.	Detailed case-based ex lab exercises covering a testing were successful remain part of the curric
		CO3-To learn the domain testing, path testing and logic based testing to explore the testing process easier.	1.5	1.5	Domain and path testing concepts were not applied correctly in practice. Students had trouble drawing control-flow graphs and deriving test paths.	Simplified problem sets and visual programming examples were used to improve path comprehension. Step-wise training on test case generation was added.	1.5	3	Students understood and applied domain and path testing techniques, using flowcharts and control-flow diagrams effectively to locate errors.	Practice with test-case tools and logic-flow exe helped strengthen comp These tools will be used extensively in labs.
		CO4-To learn the types of bugs, testing levels with which the student can very well identify a bug and correct as when it happens.	1.5	1.5	Bug classification and documentation were inconsistent. Students failed to trace bugs effectively or apply debugging tools correctly.	Debugging tools were reintroduced from scratch. Sample code with common bugs was used for live practice. Assignments included bug-report writing and correction tasks.	1.5	2.9	Students identified various bug types and traced them effectively using debugging tools. Bug classification and documentation were done correctly in reports.	Continued use of real b templates and hands-or identifying runtime and ensured good results. T approach will be retaine
CS725PE	Software Process & Project Management	CO1-Gain knowledge of software economics, phases in the life cycle of software development, project organization, project control and process instrumentation	1.5	1.5	Students showed confusion about lifecycle phases and cost estimation methods. Project control concepts and process metrics were poorly understood.	Visual lifecycle diagrams and cost modeling techniques were reintroduced. Real-world project case examples were added for contextual learning.	1.5	3	Students showed a clear understanding of software cost estimation, project phases, and lifecycle models. They answered theoretical and applied questions effectively.	Continued use of case s phase-wise lifecycle ma helped build strong con foundations. These met retained.
		CO2-Analyze the major and minor milestones, artifacts and metrics from management and technical perspective	1.5	1.5	Students struggled to distinguish between milestones and deliverables, and had trouble interpreting software metrics.	Hands-on assignments using milestone charts and metric evaluation sheets were added. Use of tracking tools was introduced during tutorials.	1.5	3	Students effectively identified milestones, deliverables, and measurement metrics. Project reports reflected an understanding of both process and product tracking.	Milestone tracking temp review checklists suppo learning. Continued use structured documentatic planned.
		CO3-Design and develop software product using conventional and modern principles of software project management.	1.5	1.5	Planning and scheduling were weak. Use of tools like PERT and Gantt charts was minimal or incorrect. Agile practices were not effectively applied.	Project planning was broken down into weekly exercises. Workshops were conducted on both traditional and agile tools, including basic usage of Trello and Git.	1.5	3	Students applied project planning, scheduling (Gantt charts, PERT), and quality assurance techniques using both traditional and agile approaches.	Group projects helped i concepts practically. Th enhanced with version c agile tools like Git and T upcoming sessions.
		CO4-Development of business organization and process organization	1.5	1.5	Students lacked understanding of how software processes align with business models and organizational roles. Flow of processes was unclear.	Business structure mapping and role-play exercises were conducted to clarify organizational workflows. Visual charts and role hierarchy templates were used.	1.5	3	Students understood how software processes integrate with business structures. Organizational roles and workflows were clearly described and applied.	Business case modelin organizational role-map activities helped bridge practice. These strategi continued.
		CO1-Summarize the importance of human computer interface with respect to screen appearance and	1.5	2.8	Students clearly explained UI principles such as consistency, feedback, and visual hierarchy. Responses reflected a strong understanding of screen aesthetics.	Concepts were reinforced through real interface evaluations and UI critique sessions. These practices will be retained.	1.5	1.5	Students failed to apply UI principles in design critiques. Screen layout discussions lacked detail and accuracy in concepts.	Refresher lessons on vi principles and real-worl were introduced. Stude well-known application i

		principles of user interface								
CS814PE	Human Computer Interaction	CO2-Design an appropriate draft layout considering both business requirements and human characteristics	1.5	2.8	Students designed layouts that met usability standards and business logic. Projects showed alignment with user psychology and task structure.	Hands-on wireframing tasks and persona-based design activities proved effective and will be continued.	1.5	1.5	Layout designs lacked alignment with user goals and business objectives. Ergonomic factors and user flow were not considered.	Sketching and wirefram Balsamiq/Figma were ir Design thinking activitie based scenarios were a
		CO3-Analyse various colour schemes and navigation guidelines in the windows environment.	1.5	3	Students demonstrated a good grasp of contrast, accessibility, and color psychology. Navigation structures were applied according to standard Windows UI guidelines.	Color theory exercises and heuristic evaluation checklists enhanced learning. More accessibility-based tasks will be added.	1.5	1.5	Students had difficulty applying contrast, readability, and color-blind-friendly design principles. Navigation hierarchy was inconsistent.	Color theory and naviga were taught using intera and contrast simulators exercises focused on U improvements.
		CO4-Evaluate universal designs of windows and screens for usage of diversified users	1.5	2.8	Students effectively applied universal design principles to ensure inclusivity for users with different needs. Interface evaluations showed attention to adaptability.	Integration of WCAG (Web Content Accessibility Guidelines) and case studies of inclusive design helped improve awareness. These will remain part of course delivery.	1.5	1.5	Students did not demonstrate understanding of accessibility standards. Most designs ignored inclusivity for elderly, visually impaired, or differently-abled users.	Universal design princip WCAG guidelines were with examples. Accessi tasks and inclusive desi workshops were condu

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

Institute I

Over the past two academic years, a continuous review of PO/PSO attainment revealed consistent gaps in most POs and PSOs exceeded the target levels, especially in core areas like Engineering Knowledge, Modern Tools, Communication, and Teamwork, due to project-based learning and strong industry linkage. However, Environment & Sustainability (PO7), Ethics (PO8), Lifelong Learning (PO12), and Advanced Tool Application (PSO3) fell short or just met targets. To address these gaps, curriculum interventions such as the introduction of Universal Human values, Mini-projects and PBL projects mapped to sustainable technologies were implemented. Pedagogical initiatives included Problem-Based Learning (PBL), tool-based learning and integration of simulation tools across core subjects.

Table 8.1.2.1: 2019-2023 Batch

PO/PSO	Target	Attained	Observation	Actionable Items
PO1 – Engineering Knowledge	1.8	2.02	Target achieved. Students demonstrated strong engineering fundamentals	Continuous reinforcement of core subjects through project-based learning.
PO2 – Problem Analysis	1.8	1.95	Slightly above target. Analytical skills need minor improvement	Weekly problem-solving sessions and case study-based assignments introduced.
PO3 – Design/Development of Solutions	1.8	1.95	Design and development skills met expectation but need enhancement.	Mini-projects integrated with core courses to strengthen design exposure
PO4 – Investigations of Complex Problems	1.8	1.98	Research and investigation skills improved, still marginally above target.	Research methodology workshops and student paper presentations encouraged
PO5 – Modern Tool Usage	1.8	2.14	Tools and technology usage well attained.	Continued integration of industry-relevant tools (e.g., MATLAB, Python)
PO6 – Engineer and Society	1.8	2.06	Ethical and societal awareness improved.	Seminars on ethics, value education sessions, and social impact projects conducted.
PO7 – Environment and Sustainability	1.8	1.42	Significantly below target. Environmental and sustainability awareness lacking.	Introduced a value-added course on Environmental Studies and green project themes.
PO8 – Ethics	1.8	2	Ethics and responsibility well addressed.	Retain activities like debates, case studies on professional ethics.
PO9 – Individual and Teamwork	1.8	2.05	Individual and team work outcomes exceeded.	More emphasis placed on group capstone projects and peer assessment.

PO10 – Communication	1.8	2.15	Communication skills attained strongly.	Technical writing, report presentations, and seminars emphasized.
PO11 – Project Management and Finance	1.8	1.81	Project management and finance knowledge just met the target.	Workshops on project costing, MS Project and budgeting were introduced.
PO12 – Lifelong Learning	1.8	1.78	Lifelong learning inclination slightly below target.	Motivational talks, alumni interaction, and self-paced learning tools promoted.
PSO1	1.8	1.98	Application of discipline knowledge to practical work well attained.	Maintained industry-linked lab activities and real-world project exposure.
PSO2	1.8	2.52	Highly achieved. Specialized skill development in chosen domains effective.	Industry certification courses and internships aligned with domain skills.
PSO3	1.8	2	Attained. Advanced tools and methodologies were well utilized.	Continued use of simulation and modeling tools in curriculum.

Table 8.1.2.1: 2020-2024 Batch

PO / PSO	Target	Attained	Observation	Action Plan
PO1 – Engineering Knowledge	1.8	2.11	Target exceeded; students have strong grasp on engineering fundamentals.	Continue problem-solving sessions and foundational concept reinforcement.
PO2 – Problem Analysis	1.8	1.9	Met the target; analytical and mathematical application slightly improved.	Maintain focus on analytical skill-building through applied problem-based learning.
PO3 – Design/Development of Solutions	1.8	1.84	Slightly above target; more exposure to design-based learning needed.	Encourage mini-projects and design sprints in core subjects.
PO4 – Investigations of Complex Problems	1.8	2.01	Well attained; students able to investigate and interpret problems.	Continue incorporating lab-based and case study-based investigations.
PO5 – Modern Tool Usage	1.8	2.08	Excellent use of modern tools and technologies.	Continue hands-on lab sessions and introduce more industry-aligned software tools.
PO6 – Engineer and Society	1.8	2.19	High awareness of societal, health, and legal responsibilities.	Retain seminars and outreach activities related to engineering and society.
PO7 – Environment and Sustainability	1.8	1.8	Just met the target; limited awareness in sustainability and environmental context.	Strengthen environmental engineering topics and organize green innovation workshops.
PO8 – Ethics	1.8	1.67	Below target; ethical practices and professional responsibility not fully internalized.	Introduced ethics module, case studies on real-world ethical dilemmas, and value education sessions.
PO9 – Individual and Teamwork	1.8	1.8	Met target; team dynamics and individual contribution are balanced.	Promote more peer-reviewed group projects and leadership role rotation.
PO10 – Communication	1.8	1.9	Above target; technical communication and presentation skills improving.	Continue seminars, technical paper writing, and presentation-based evaluations.
PO11 – Project Management and Finance	1.8	2	Well attained; project and financial management concepts understood.	Include budget planning and project management tools in final-year projects.
PO12 – Lifelong Learning	1.8	1.85	Just above target; lifelong learning ability developing gradually.	Promote MOOC certifications, tech talks, and alumni mentoring programs.
PSO1	1.8	1.99	Attained; core knowledge effectively applied in domain-specific contexts.	Continue skill-based labs, application-level assignments, and domain-oriented projects.
PSO2	1.8	1.98	Attained; students are competent in industry-specific problem solving.	Industry-based internships and guest lectures from professionals will be sustained.
PSO3	1.8	1.74	Below target; more focus needed on advanced tools and applications	Introduced value-added training programs on domain-specific tools and simulation platforms.

8.2 Academic Audit and actions taken thereof during the period of Assessment (15)	**Total Marks 15.00**
	Institute Marks : 15.00

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

Table: Department Audit Committee members

S. No	Name of the Faculty	Designation
1	Dr. T. Sathish Kumar	HOD & Assoc. Professor
2	Dr. S. V. Hemanth	Associate Professor
3	Mr. R Gupta	Associate Professor
4	Mr. Surendra	Assoc. Professor
5	Mr. Shinde Vinayak Rao	Student
6	Mr. Krishna Kartheek	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.

Sample Audit report:

Date of Meeting: 17th July 2023

Time: 10:00 AM – 12:30 PM

Venue: HOD Office, CSE Department

Department: Computer Science and Engineering (CSE)

Meeting Objective: Review of academic performance, faculty allotment, curriculum planning, and syllabus progress

Observations by the team:

·Reviewed subject allotment for upcoming semester; minor interchanges requested by faculty based on expertise.

·Discussed integration of emerging topics (AI, IoT, ML, and Cloud) into curriculum via open electives and projects.

·Noted syllabus backlog in subjects like OOPS & NLPdue to initial timetable issues.

·Mixed student feedback received—suggestion to increase interactive teaching and provide recorded sessions.

·Labs (Cloud, IOT) require equipment/software updates; proposal preparation initiated.

·Internal exam calendar aligned with university guidelines.

Table No. 8.2.2

S. No	Area	Action Plan	Responsible Faculty
1	Subject Allotment	Finalize inter-departmental subject swaps and confirm updated allocations	HOD + DAC Coordinator
2	Curriculum	Propose open electives in AI, ML, IoT ,Cloud for BoS consideration	Curriculum Committee
3	Syllabus Coverage	Schedule extra classes for CC, SE and FIOT to complete coverage	Subject Instructors
4	Lab Readiness	Prepare lab requirement proposal and initiate procurement for new kits	Lab In-charge
5	Student Feedback	Implement interactive quizzes and upload lecture videos for slow learners	All Faculty
6	CO-PO Mapping	Submit updated CO-PO attainment sheets to NBA coordinator	Course Coordinators

Outcome: Our department has consistently received "No Deficiency" remarks in all audits conducted by both JNTUH and AICTE till date, which is a testament to our sustained academic quality and administrative compliance.

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	6.00	6.00	5.00
No. of publications in peer reviewed journals	67.00	34.00	8.00

No. of publications in conferences	28.00	33.00	13.00

8.4 Improvement in Academic Performance (10) — **Total Marks 9.00**

Institute Marks : 9.00

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)	6.62	7.65	8.34
Academic Performance Index (API) of the Second-Year Students in the Program (Refer to section 4.4)	6.32	5.86	5.49
Academic Performance Index (API) of the Third-Year Students in the Program (Refer to section 4.5)	7.19	6.51	6.01

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 Ku	EHKPK5536A	MA	No	22/02/2019	English	Assistant Professor	18/07/2024	Yes	Regular	
						Assistant				

Mr. Meghnath (	BTNPC2043L	MA	No	20/09/2021	English	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 Pa	CMZPM4902L	Ph.D	No	25/11/2024	Mathematics	Assistant Professor	05/03/2018	Yes	Regular	
Mr.B. Uppalaia	AEVPU4615E	M.Sc	No	25/05/2005	Mathematics	Associate 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	08/07/2024	Yes	Regular	

						Professor				
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. Kondalrac	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 Lak	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.

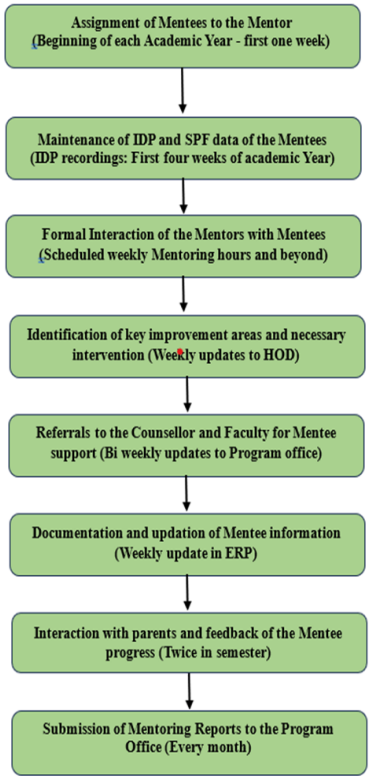


Figure 9.2.1: Flow chart of Mentoring process

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
30-75	**B**	Low Stress Type - peaceful, relaxed, stress free, procrastinating, flexible, stable, even-tempered, less competitive, adaptable, laid back, collaborative patient, calm, 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	Asst. Professor	AB	Medium	Good	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	Asst. Professor	B	Low	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:

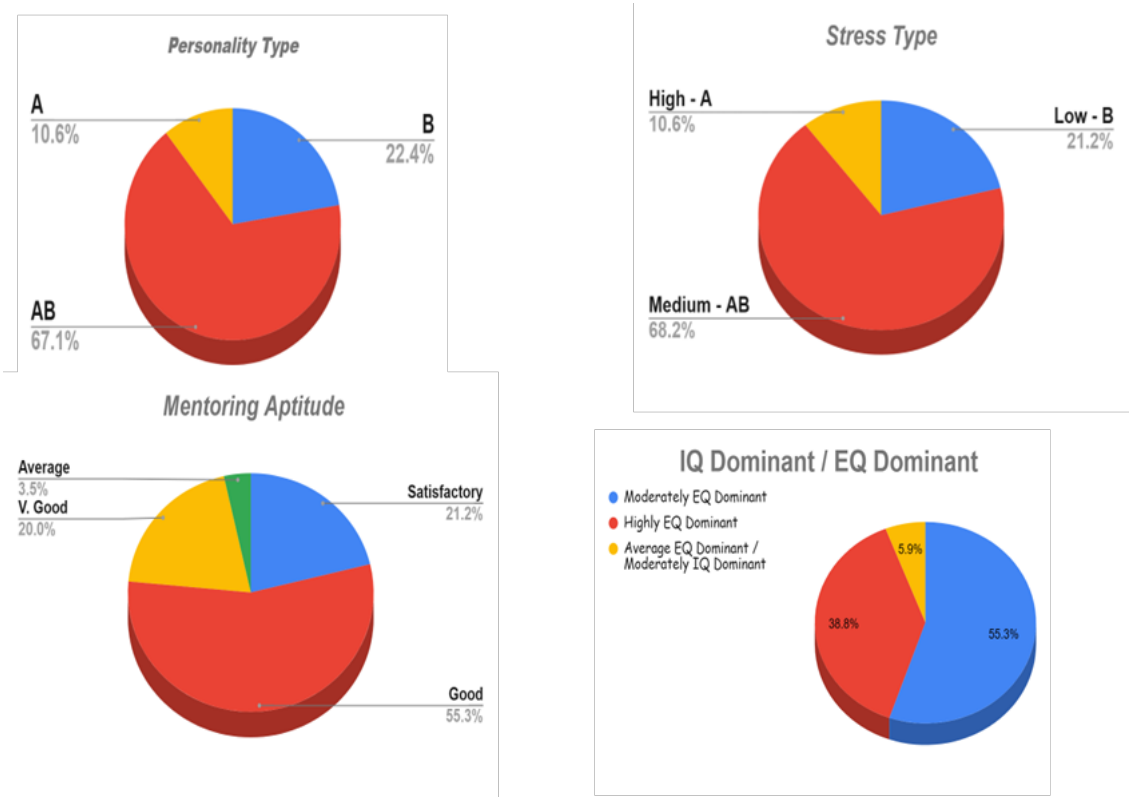


Figure 9.2.3: Faculty Mentoring test result analysis

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.

9.3.2 Feedback on Academic Facilities (5) | Institute Marks : 5.00

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.

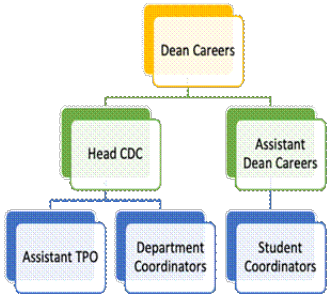


Figure 9.4.1: CDC Team

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.

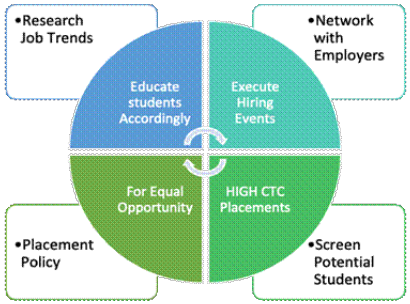


Figure 9.4.2: Responsibilities of CDC

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 Governance and Transparency (25)	**Total Marks 25.00**
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	• Limited brand visibility and market presence • Lack of strong operational level leadership • Limited surrounding land blocking campus expansion

to Change • Proactive global-best learning practices (Doing Engineering, PBL, EPICS etc.) • Excellent Campus ambience, digital resources and learning spaces	• 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
	HITAM will promote a culture of research and innovation, focusing on cutting-edge technologies and interdisciplinary	● Amount of research funding obtained from external sources ● Number of research projects undertaken

Strengthening Research and Innovation	collaboration. It will create an ecosystem that supports research and innovation, and encourages students and faculty to pursue new ideas and projects.	● 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
Strengthening of Infrastructure	HITAM will invest in state-of-the-art 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.	● Number of new buildings constructed or renovated ● Amount of funds invested in infrastructure improvements ● 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
	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	● Number of students placed in leading companies and

Focus on Student Placements	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.	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.

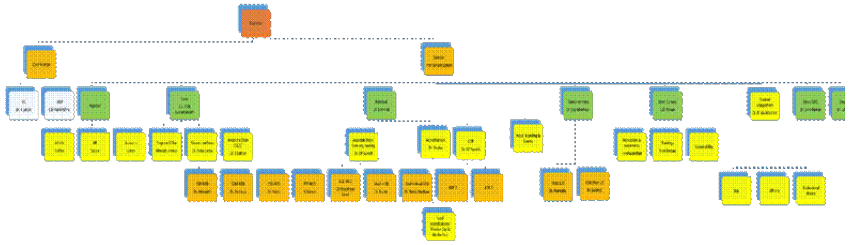


Figure 9.6.1: Organogram

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. R. Sridevi	Professor of CSE, 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	Mr. 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 for CSE

S.No	BoS – Member	Designation	Affiliation
1	Dr. T Sathish Kumar	Chairman	Professor, HITAM
2	Dr. S.Arvind	Member	Professor, HITAM
3	Dr. Padmaja Pulicherla	Member	Professor, HITAM
4	Mr. Surender Bandi	Member	Assoc Prof, HITAM
5	Mr. T Raghavendra Gupta	Member	Assoc Prof, HITAM
6	Mr. S V Hemanth	Member	Assoc Prof, HITAM
7	Dr. Krishna mohan	Member (nominated by the Academic Council)	Professor, IITH

8	Dr.R.V.B.Subramanyam	Member (nominated by the Academic Council)	Professor, NIT Warangal
9	Dr. A Nagesh	Subject Expert (nominated by the Academic Council)	Professor, MGIT, Hyderabad
10	**Dr. R. Sridevi**	**JNTUH Nominee**	**Professor of CSE, JNTUHCEH Hyderabad**
11	Mr. D. Srinivas Reddy	Industry Expert	Director, Znalytics Business Solutions
12	Mr. Sriram Bhagavanthula	Alumni	Software 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.

9.6.3 Transparency (5)

Institute Marks : 5.00

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	1300000	1366287	3800000	4076998	2000000	2205450	4500000	4734225
Library	700000	452723	1200000	1365752	1000000	1136130	1000000	959710
Laboratory equipment	2800000	3086525	8000000	8749441	4500000	4929643	5500000	5576837
Teaching and non-teaching sta	1550000	1563128	1500000	1462478	1130000	1122953	7500000	7484982
Outreach Programs	500000	477434	1000000	1175039	300000	298885	500000	335748
R&D	800000	504700	1500000	1341214	500000	502582	1550000	1644500
Training, Placement and Indust	4500000	4889355	3500000	3450861	2500000	2395655	3000000	3834576
SDGs	2200000	2117622	2000000	2363732	500000	613062	1500000	1530944
Entrepreneurship	500000	488816	500000	500000	1000000	1256784	1000000	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 2810000		Actual expenditure (till…): 2724689		Total No. Of Students 495
Demanded	Actual Allocated	Actual Expenditure	% Spent	Expenditure per student
3000000	2810000	2724689	96.96	5504.42

Table 2 :: CFYm1 2023-2024

Total Budget 4560000		Actual expenditure (till…): 4105129		Total No. Of Students 385
Demanded	Actual Allocated	Actual Expenditure	% Spent	Expenditure per student
5000000	4560000	4105129	90.02	10662.67

Table 3 :: CFYm2 2022-2023

Total Budget 3255000		Actual expenditure (till…): 3104960		Total No. Of Students 376
Demanded	Actual Allocated	Actual Expenditure	% Spent	Expenditure per student
3500000	3255000	3104960	95.39	8257.87

Table 4 :: CFYm3 2021-2022

Total Budget 3355000		Actual expenditure (till…): 3208632		Total No. Of Students 366
Demanded	Actual Allocated	Actual Expenditure	% Spent	Expenditure per student
3500000	3355000	3208632	95.64	8766.75

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	350000	325721	2000000	1640589	800000	800634	900000	828262
Software	300000	291584	100000	109299	200000	185296	300000	287106
SDGs	450000	423524	500000	472746	150000	122613	300000	306189
Support for faculty developmer	600000	605049	950000	924080	1500000	1416770	700000	691260
R & D	100000	100940	300000	268243	100000	100516	350000	328900
Industrial Training, Industry exp	1000000	977871	700000	690172	500000	479131	800000	766915
[illegible]	10000	0	10000	0	5000	0	5000	0
Total	**2810000**	**2724689**	**4560000**	**4105129**	**3255000**	**3104960**	**3355000**	**3208632**

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 2nd 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.

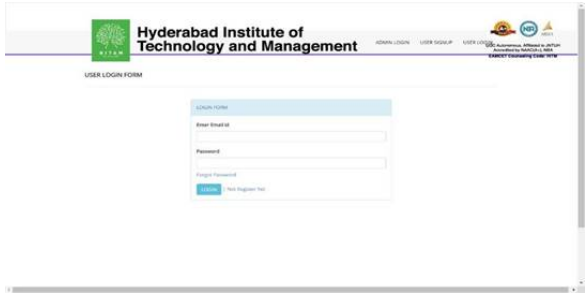


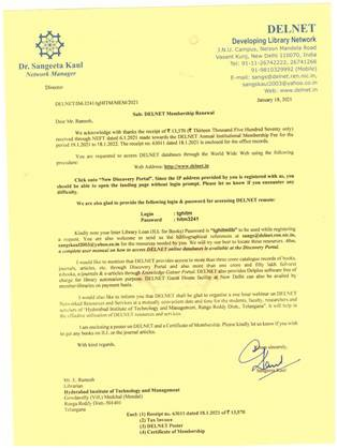
Figure 9.9.1: HITAM LMS

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.



DELNET
Developing Library Network

Dr. Sangeeta Kaul
Network Manager

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.

This
CERTIFICATE OF APPRECIATION
is hereby granted to
HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT (HITAM)
Adjudged As Best Performing (NDLI Club In Telangana India)

This certifies that the NDLI Club has displayed outstanding performance and unwavering dedication in promoting knowledge and learning through the National Digital Library of India (NDLI).

Through their remarkable efforts, they have successfully utilized the resources offered by the NDLI platform to foster a culture of continuous learning and digital literacy. Their commitment to organizing informative events, workshops, and study sessions has greatly contributed to the intellectual growth of its members and the wider community.

Their exceptional performance serves as an inspiring example of how a passion for learning can make a significant impact. Their achievements will serve as an inspiration to others, demonstrating the transformative power of digital resources and a passion for learning.

In recognition of their outstanding achievements, we proudly present this certificate as a token of appreciation and encouragement.

Congratulations on their remarkable performance, dedication, and contributions to promoting knowledge and learning.

NDLI Club

Prof. K. P. Sinhamahapatra
Joint Principal Investigator
National Digital Library of India Project
Chairman
Central Library IIT Kharagpur
Professor
Aerospace Engineering, IIT Kharagpur

Dr. B. Sutradhar
Joint Principal Investigator
National Digital Library of India Project
Librarian
Central Library IIT Kharagpur

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.

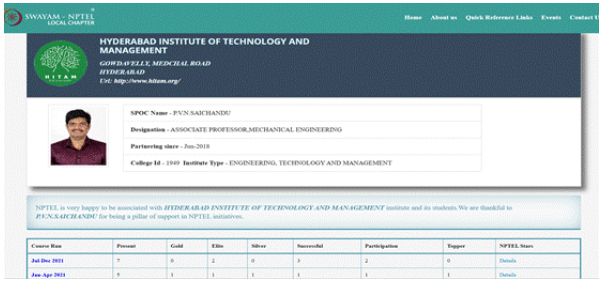


Figure 9.9.5: NPTEL Local chapter in the website

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.

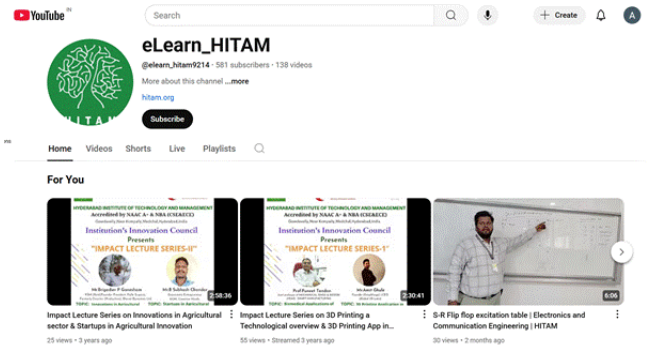


Figure 9.9.6: HITAM You Tube Channel

Table 9.9.1: List of resources available in the library

	If yes, details of membershi	**Link to the relevant document**

Library resources	**ps/ subscriptions**	
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

9.10 E-Governance (5)

Total Marks 5.00

Institute Marks : 5.00

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.

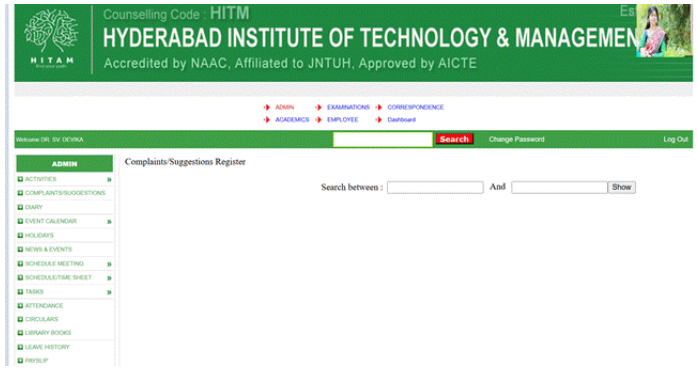


Figure 9.10.1: ERP software for administration

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.

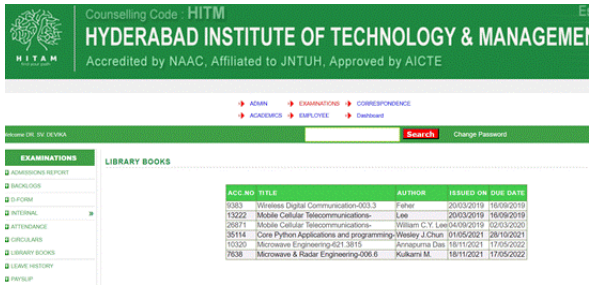


Figure 9.10.3: Library Management System

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.

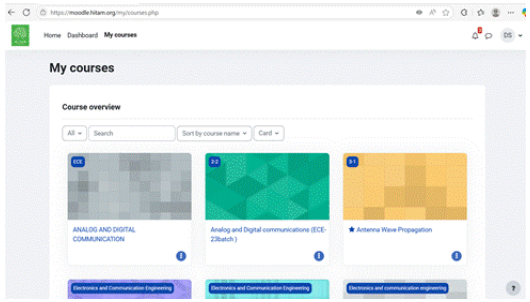


Figure 9.10.5: Moodle Software

8. Zoom:

Zoom at HITAM supports flexible, remote, and hybrid learning models, enhancing accessibility and real-time engagement across various stakeholders.

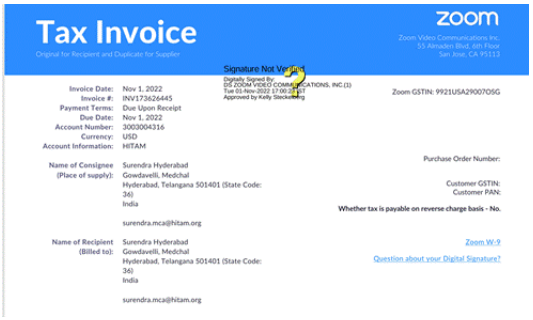


Figure 9.10.6: Zoom invoice

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.

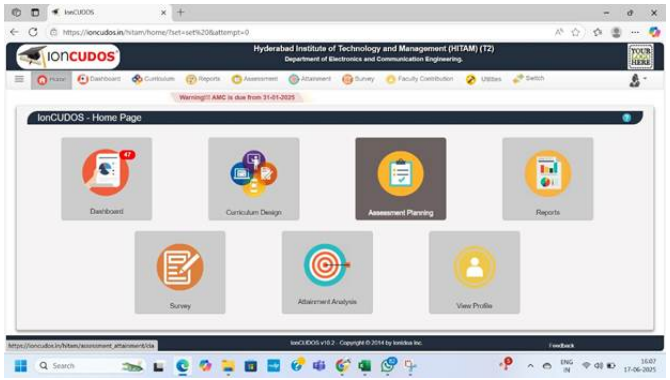


Figure 9.10.7: Ioncudos tool for outcome based education

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

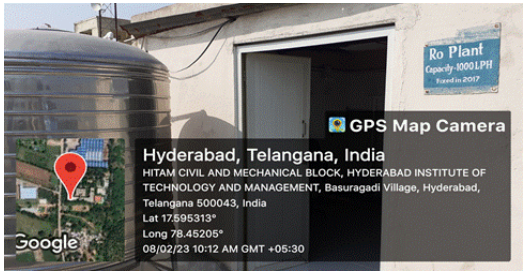


Figure 9.11.5: RO plant

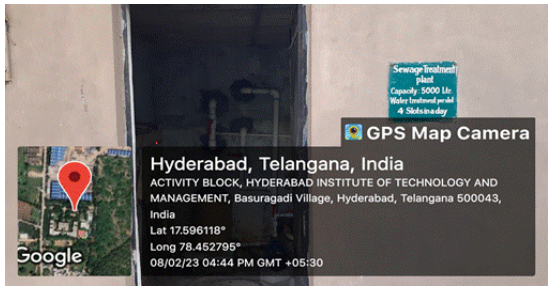


Figure 9.11.6: Sewage Treatment plant

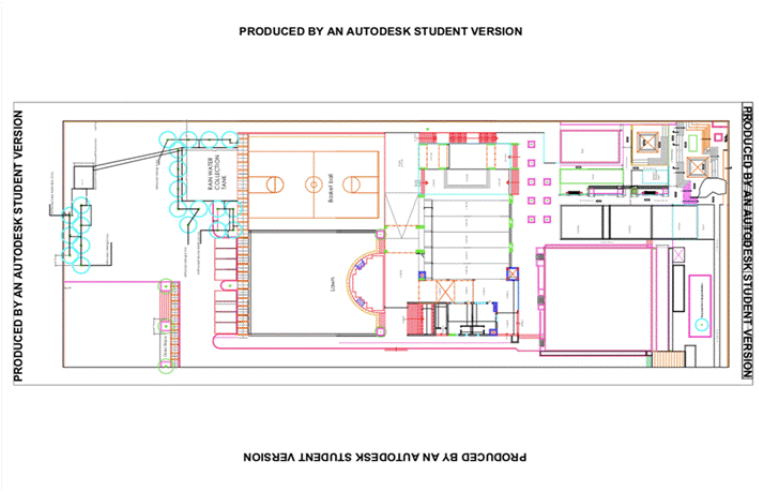


Figure 9.11.7: Water Distribution chart

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.

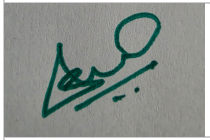
PSO1	To use mathematical methodologies to crack problem using suitable mathematical analysis, data structure and suitable algorithm
PSO2	To grasp the software development lifecycle and methodologies of software systems.
PSO3	To interpret the fundamental concepts and methodology of computer systems.

Declaration

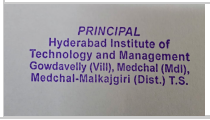
The head of the institution needs to make a declaration as per the format given -

- 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 :



Place : HYDERABAD
Date : 23-06-2025 14:34:14