SHREE L.R. TIWARI COLLEGE OF ENGINEERING

HIGHLIGHTS:

- Advancing Student-Centered & Outcome-Based Education
- Academic Toppers
- Students Achievements
- Staff Achievements
- Training and Placement
- Internship 2024-25
- Seminar/Workshops
- An Article on Relevance of Open Source Tools

VELOCITY

The Newsletter of Computer Engineering Department

17th EDITION

ODD SEM

AY 2024-2025

OUR VISION

To be a department of high repute focused on quality education, training, and skill development in the field of computer engineering and to prepare professionals and entrepreneurs of high calibre with human values to serve our nation and globe.

OUR MISSION

M1: To provide a fertile academic environment for the development of skilled professionals and empower students with knowledge, skills, values, and confidence to take the leadership role thus bridging the gap between industry, institute, and society in the field of Computer engineering.

M2: To promote caring and interactive teaching practices in a joyous learning ambience, richly supported with modern educational tools and techniques.

M3: To enhance and revitalize research culture and to provide practical exposure, by establishing a synergy between teaching and research and enabling speedy progress.

M4: To pursue the enhancement of soft skills and personality development through an interplay of achievers of all segments of our society.

M5: To provide human values to students by promoting lifelong learning ability.

OUR PROGRAM EDUCATIONAL ONJECTIVES

PEO1: To equip graduates with a strong foundation in mathematics, science, and core engineering principles, enabling them to analyze, design, and implement innovative computing solutions.

PEO2: To develop professionals capable of excelling in multidisciplinary teams by applying their computer engineering expertise to overcome complex technical challenges in global, societal, and environmental contexts.

PEO3: To empower graduates with ethics, leadership, and an innovative mindset to grow with technology and support the progress of industry and the community.

PEO4: To foster a commitment to continuous learning and professional excellence through research, self-learning, and the effective use of modern computing tools in their careers.

OUR PO's AND PSO'S

PO	Short title of the PO	Description of the Programme outcome as defined by the NBA
PO-1	Engineering knowledge	Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO-2	Problem analysis	Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO-3	Design/development of solutions	Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO-4	Conduct investigations of complex problems	Use research -based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO-5	Modern tool usage	Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO-6	The engineer and society	Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO-7	Environment and sustainability	Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO-8	Ethics	Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO-9	Individual and team work	Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO-10	Communication	Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO-11	Project management and finance	Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO-12	Life-long learning	Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.
Program Specific Outcomes (PSOs)		
PSO-1	Computing solution to solve real life problem	The graduate must be able to develop, deploy, test and maintain the software or computing hardware solutions to solve real life problems using state of the art technologies, standards, tools and programming paradigms.
PSO-2	Computer Engineering knowledge and skills	The graduate should be able to adapt Computer Engineering knowledge and skills to create career paths in industries or business organizations or institutes of repute.

Message from HOD

Dear Readers,

Computer Engineering is a dynamic field that drives innovation and transforms industries. At our department, we are dedicated to fostering an environment that combines academic excellence with holistic development. Our goal is to prepare students to become confident problem-solvers, critical thinkers, and responsible professionals who can address the challenges of an ever-evolving technological world.

This newsletter reflects the collective achievements of our students, faculty, and staff. It highlights success stories in academics, research, and co-curricular activities, showcasing our commitment to bridging theoretical knowledge with practical applications. From groundbreaking research projects to accolades in competitions and impactful community initiatives, these accomplishments demonstrate the talent and dedication of our department.

We continuously strive to enhance our teaching-learning processes, adopting innovative approaches and aligning our efforts with the needs of the industry and society. By encouraging creativity, interdisciplinary projects, and a culture of collaboration, we ensure that our students are equipped with the skills and mindset needed to excel in their careers and make meaningful contributions to society.

As we move forward, our focus remains on inspiring excellence, fostering innovation, and building a strong foundation for the future. My heartfelt congratulations to everyone who has contributed to these milestones, and my gratitude to all who support our vision. Together, let us continue to achieve new heights and shape a brighter future

Warm regards,

Dr. Bhushankumar Nemade

Researcher & Associate Professor | IEEE Senior Member |
Head of Department
Computer Engineering.

Message from Editor

I am immensely honored to write as the editor of the seventeenth issue of the Computer Engineering Department Newsletter. I would like to thank Dr. Deven Shah, Principal, SLRTCE for providing, the faculty and the students, an excellent platform to keep themselves updated about all the recent events. I would also like to thank Mrs. Neelam Phadnis, Head of the Computer Engineering Department for her valuable suggestions and support. This issue covers all the major events & and workshops conducted in the SLRTCE. As a staff, I feel delighted to see the students participating in different events and deliver their best. The departmental Newsletter portrays the hard work shown by the students in such events and workshops effectively. I wish my best to The Departmental Editorial Board for the future and hope the Newsletter continues its commendable work in keeping us updated.

Warm regards,
Ashwini P. Parkar

Advancing Student-Centered & Outcome-Based Education

Dear Faculty and Students,

In the department of computer engineering our commitment to continuously refining our educational strategies remains focused, with a dual emphasis on student-centered learning and Outcome-Based Education (OBE). This integrated approach ensures we not only meet the educational needs and aspirations of our students but also align our teaching strategies with the specific competencies required for their professional and personal growth.

Introduction to Student-Centered Learning

We recognize our students as active participants in their educational journey, not just passive recipients of information. We encourage all students to actively engage by asking questions, expressing their opinions, and exploring their personal interests. This active engagement is crucial as it fosters a sense of responsibility and prepares students for real-world challenges.

Our educational methods extend beyond traditional classroom instruction by incorporating practical experiences such as internships, research projects, and community service. These initiatives bridge the gap between theoretical knowledge and practical application, enriching students' learning experiences and enhancing their professional skills.

Enhancing Critical Thinking Skills

In today's increasingly complex global environment, critical thinking is more important than ever. We are dedicated to fostering this essential skill by creating an educational atmosphere that encourages students to challenge conventional views and consider multiple perspectives. Through interactive classroom discussions, challenging assignments, and collaborative projects, we aim to sharpen students' analytical skills and enhance their problem-solving capabilities.

Our Commitment to a Student-Centered Approach

Our dedication to a student-centered education is supported by four key pillars:

1. **Innovative Teaching:** We continuously update our curriculum to include the latest teaching methods and relevant content, ensuring that our educational offerings are both modern and effective.
2. **Resource Accessibility:** We provide students with access to comprehensive libraries, digital databases, and cutting-edge technological tools, facilitating a thorough understanding and practical application of their studies.
3. **Clear Learning Outcomes:** We align our educational strategies with specific, measurable learning objectives, ensuring that students acquire the necessary skills and knowledge to succeed.
4. **Continuous Evaluation:** We employ a continuous feedback mechanism to adapt our teaching methods to meet the evolving needs of our students, guaranteeing personalized support and success.

Innovative Teaching and Problem-Solving Initiatives

Our teaching methodologies are enhanced by innovative practices such as the ARCS model, which focuses on Attention, Relevance, Confidence, and Satisfaction to make learning more engaging. Additionally, the Prayas initiative encourages both students and faculty to engage in solving real-world problems, providing practical skills that are highly valued in the workplace and contribute positively to the community.

Expanding Teaching Strategies

- ✓ **Project-Based Learning:** Students engage in real-world projects, applying their academic knowledge to practical challenges and enhancing their ability to solve problems.
- ✓ **Case Studies and Simulations:** These methods help students develop critical thinking and decision-making skills in simulated environments that mirror real-life scenarios.
- ✓ **Digital Literacy:** Ensuring students are proficient in digital literacy is vital in today's information-rich world, preparing them to manage and utilize digital resources effectively.

Utilizing Bloom's Taxonomy to Define Learning Outcomes

We dynamically define and measure our educational outcomes using Bloom's Taxonomy. This framework provides a comprehensive list of action verbs, enabling us to articulate our Course Learning Outcomes (CLOs) effectively:

- **Remember and Understand:** Tasks involve recalling facts and explaining concepts.
- **Apply and Analyze:** Students use information in new situations and connect ideas for deeper understanding.
- **Evaluate and Create:** Learners make judgments based on criteria and generate innovative work, demonstrating mastery and creativity.

Program Goals and CLOs for Data Structures and Algorithms

- ✓ **Activity:** Students engage in coding exercises, algorithm design, and data structure development.
- ✓ **CLO Example:** "Design and implement efficient data structures and algorithms to solve given problems."
- ✓ **Measurable Outcomes:**
  - **Analyze:** Differentiate between various data structures and their applications.
  - **Apply:** Implement algorithms using appropriate data structures in a programming environment.
  - **Evaluate:** Assess the efficiency of algorithms and data structures based on space and time complexity.
  - **Create:** Develop and present a new algorithm or improve an existing one, aiming for at least 80% of students to achieve this with a minimum satisfaction rate of 65%.

Operationalizing Assessment with Data Structures

Effective assessment design is crucial for verifying if learning outcomes are achieved:

A. Queue Data Structure:

a) **Context:** Simulate a printer queue system in a networked environment.

b) **Performance:** Effectively manage print jobs with priorities.

c) **Criterion:** At least 80% of students must demonstrate the queue's efficient management, achieving a satisfaction rate of at least 65%.

B. Tree Data Structure:

a) **Context:** Manage a dataset of employee records.

b) **Performance:** Efficiently construct a tree to represent organizational hierarchy.

c) **Criterion:** At least 80% of students must accurately perform insertions, deletions, and searches, maintaining correct hierarchical relationships and achieving at least 65% satisfaction in query handling.

As we continue to refine our educational approach at computer engineering department of SLRTCE, the active engagement of both faculty and students in these pedagogical innovations is essential. This commitment ensures that our department not only prepares students for professional success but also equips them to lead and innovate in a dynamic world.

Best regards,

Dr Uma Goradiya,
Deputy HoD, Computer Engineering

Dr Bhushankumar Nemade
Head of Department, Computer Engineering

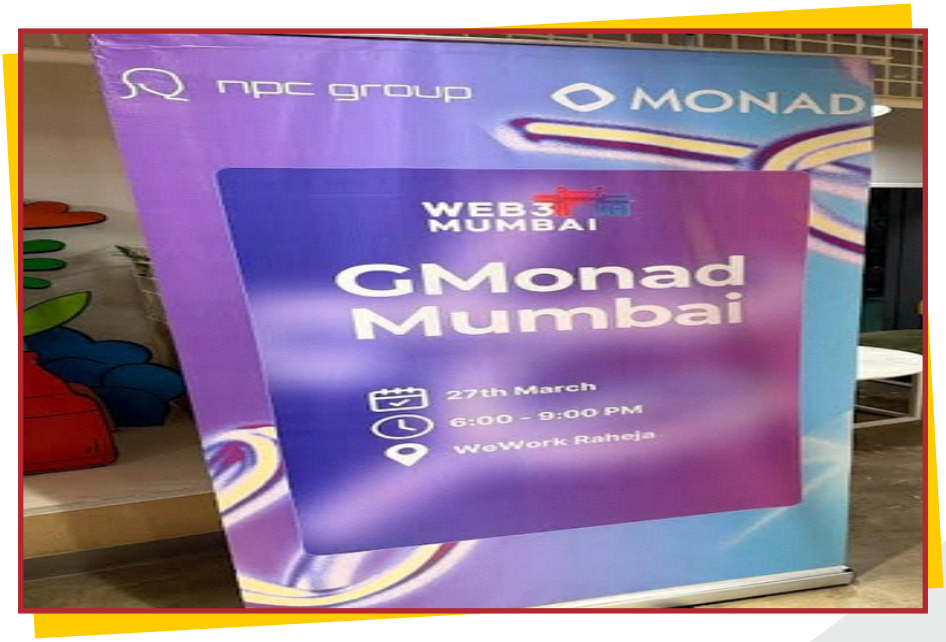
Academic Toppers

EVEN SEM Academic Year 2023-24

SEMESTER	RANK	NAME	SGPI
IV	1st	Siddharth Shravan Kumar Singh	9.85
	2nd	Animesh Narayan Devarkar	9.67
	3rd	Ronak Ravindra Thul	9.63
VI	1st	Rathod Rahul Deepak Neela	10
	1st	Singh Rishikesh Subhash Rita	10
	2nd	Yadav Shreekrishna Santoshkumar Sudami	9.87
	2nd	Moulavi Faiz Kafll Farhana	9.87
	3rd	Singh Pratham Akhand Seema	9.74
VIII	1st	Khan Rushqa Sher Mallika	9.56
	2nd	Rathod Kruti Deepak Neela	9.40
	3rd	Rajbhar Ayush Jitendra Renu	9.29

Students Achievement

1. Mr Sahil Gujrati Student of T.E. invited as a panel speaker at Web3 Mumbai meetup.Mr Sahil Gujrati is a co-founder and CTO of Monadex Labs, a custom gamified AMM engine on Monad which managed to amass 8,10,000 transactions, 21,000 daily average users, 3,00,000 active wallets and 42,000 active community members in just 3 weeks since testnet launch.



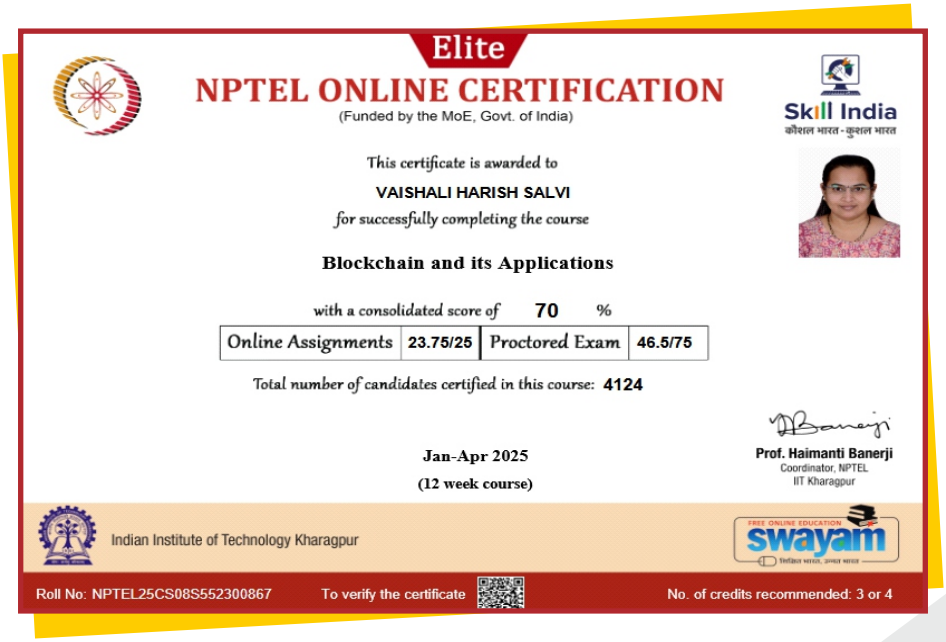
2. Mr Hemant Kadam and Mr Kaustubh Bane secured 5th Rank (Top performer) at Techpragyan 2025, a National Level Hackathon held at Amrutvardhini College of Engineering, Sangamner.

3. Mr. Satyam Pandey secured 1st Prize at the AMD AI Sprint: Hackathon & Workshop Series, held at IIT Bombay.

Staff Achievement

NPTEL Certification:

Completed Blockchain and its Applications by
1) Ms Vaishali Salvi
2) Ms Manasi Churi


Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India
कौशल भारत - कुशल भारत

This certificate is awarded to

VAISHALI HARISH SALVI

for successfully completing the course

Blockchain and its Applications

with a consolidated score of 70 %

Online Assignments	23.75/25	Proctored Exam	46.5/75

Total number of candidates certified in this course: 4124

Jan-Apr 2025

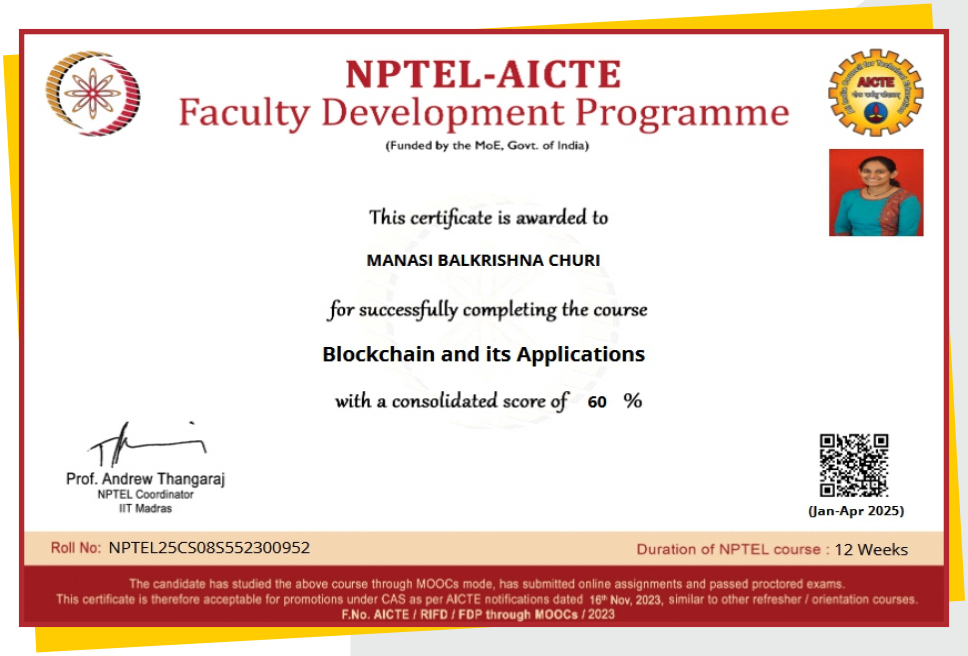
(12 week course)

Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL25CS08S552300867 To verify the certificate No. of credits recommended: 3 or 4


NPTEL-AICTE
Faculty Development Programme

(Funded by the MoE, Govt. of India)

This certificate is awarded to

MANASI BALKRISHNA CHURI

for successfully completing the course

Blockchain and its Applications

with a consolidated score of 60 %

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

(Jan-Apr 2025)

Roll No: NPTEL25CS08S552300952 Duration of NPTEL course : 12 Weeks

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams.
This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 16th Nov, 2023, similar to other refresher / orientation courses.
F.No. AICTE / RIFD / FDP through MOOCs / 2023

Ms Vaishali Salvi Assistant Professor CS dept successfully conducted training program for Navy Officers at INS HAMALA during February'25 to May'25 on Sybase, Data Replication and DBMS.

Dr Pravin Jangid Associate Professor Cs Dept successfully conducted training program for Navy Officers at INS HAMALA from 5th March 2025-20th March 2025 on ASP.net.

Faculty Publications:

SR. NO.	TITLE OF PAPER	NAME OF THE AUTHOR'S	DEPARTMENT OF THE TEACHER	NAME OF THE JOURNAL	YEAR OF PUBLICATION	ISSN NUMBER
1	Graph Attention Dialogue Network Based Drug Model for Next - Gen Healthcare and Consumer - Centric Devices	Dr. Bhushankumar Nemade	Computer Engineering	IEEE Transactions on Consumer Electronics	2025	ISSN: 2456-3307
2	Intelligent Corporate Bankruptcy Prediction: A Data-Driven Machine Learning Approach	Dr. Bhushankumar Nemade, Dr. Uma Goradiya	Computer Engineering	Journal of Information Systems Engineering and Management	2025	ISSN: 1660-6795
3	A Review: Data Overfitting and Underfitting Techniques	Dr. Bhushankumar Nemade	Computer Engineering	Journal of Information Systems Engineering and Management	2025	ISBN: 978-981-97-5080-1
4	Urbanshield: Integrated Vehicle Security and Road Safety System For Metropolitan City	Mrs Alka Srivastava	Computer Engineering	International Journal on Advanced Computer Theory and Engineering	2025	ISSN: 2319-2526 Volume 14 Issue 01, 2025
5	Urbanshield: Integrated Vehicle Security and Road Safety System For Metropolitan City	Ms Pradnya Karekar	Computer Engineering	International Journal on Advanced Computer Theory and Engineering	2025	ISSN: 2319-2526 Volume 14 Issue 01, 2026
6	Urbanshield: Integrated Vehicle Security and Road Safety System For Metropolitan City	Ms Shraddha Sharma	Computer Engineering	International Journal on Advanced Computer Theory and Engineering	2025	ISSN: 2319-2526 Volume 14 Issue 01, 2027
7	Smart Energy Tracker	Ms Shraddha Sharma	Computer Engineering	International Journal on Advanced Electrical and Computer Engineering	2025	ISSN: 2349-9338 Vol. 14 Issue 01 2025
8	Gyaanmudra:An AI crafted Regional Sign language app for Deaf and Mute.	Miss.Akshata Patil	Computer Engineering	International Journal on Advanced Computer Engineering And Communication Technology.	2025	ISSN:2278-5140

9	Smart Energy Tracker	Mrs Ashwini Parkar	Computer Engineering	International Journal on Advanced Electrical and Computer Engineering	2025	ISSN: 2349 -9338 Vol. 14 Issue 01 2025
10	Video-Based Dynamic Human Authentication System Using Facial Recognition	Mrs Ashwini Parkar	Computer Engineering	International Journal on Advanced Electrical and Computer Engineering	2025	ISSN: 2349 -9338 Vol. 14 Issue 01 2025

Training and Placement

Following students were placed during academic year 2024-25

SR. NO.	NAME	COMPANY NAME
1	Mohit Pawan Kumar Tiwari	QSpiders
2	Nikhil Rajesh Nishad	QSpiders
3	Ayush Jitendra Rajbhar	QSpiders,CMSS,Course Compass
4	Kaushik Arjun Tondon	QSpiders,Raise
5	Sarvesh Arvind Pratap Singh	QSpiders
6	Vishal Jitendra Yadav	QSpiders,Nimap Infotech
7	Neha Verma	QSpiders
8	Namrata Jayshankar Gupta	QSpiders,Nimap Infotech
9	Swanand Sawant	Course Compass,Nimap Infotech
10	Sairaj Pankar	Blue Jay Robotics,Nimap Infotech, **VIP**
11	Suyash Tarde	Nimap Infotech
12	Harsh Kandu	Nimap Infotech
13	Vishal Vishnu Yadav	Nimap Infotech
14	Priyan Vishwakarma	Nimap Infotech
15	Yash Gupta	Nimap Infotech
16	Mohammed Saad Patel	Expound Technivo

Internship 2024-25 (Odd Sem)

Numbers:

Total Number of Students Registered - **289**

Grouped Count of Interns:

Type of Internship	A.Y. 24-25
Inhouse	237
Outhouse	27
Paid Internships	25

Titles of Inhouse Internships Conducted:

I. Securing the Digital Society: Building Awareness for a Safer Future
ii. Digital Defense Internship:Protecting Communities from Cyber Threats
iii. Unlocking Blockchain Potential: Building a Secure & Transparent Digital World

1. Introduction

Internships are an essential component of the undergraduate curriculum in the Department of Computer Engineering. They provide students with real-world exposure to engineering challenges, help them develop practical skills, and familiarize them with current industry trends.

- **Enrollment Overview (A.Y. 2024–25):**
  - A. **Out-house Internship:** 220 students have completed outhouse internship.
  - B. **In-house Internship:** 42 have Completed (Odd Sem and Even Sem).

Total: 228 Completed

This report highlights the internships undertaken by our students during the Academic Year 2024–25, divided into Out-house (external) and In-house (internal) internships.

Primary objectives of these internships:

- Provide exposure to professional working environments and technologies
- Develop problem-solving abilities in real-life projects
- Foster teamwork, communication, and leadership skills
- Encourage innovation, creativity, and industry-driven research

2. Out-house Internship

Out-house internships involve student placements in external organizations. This arrangement enables them to gain practical knowledge, work with latest technologies, and explore professional networking opportunities. Below is the list of companies and organizations where students are currently working in internship:

1. **Compozent**
   a. Focus Areas: Web and mobile development, cloud computing
   b. Internship Type: Software Development, Front-end/Back-end Support
2. **Contentstack**
   a. Focus Areas: Headless CMS, serverless architecture
   b. Internship Type: Developer, QA Testing, Platform Operations

1. **SurfBoard Ventures**
    a. Focus Areas: Startup incubation, product innovation, investment strategies
    b. Internship Type: Product Development, Business Analysis
2. **RAW Engineering**
    a. Focus Areas: Cloud and DevOps, enterprise solutions
    b. Internship Type: Full Stack Development, API Integration
3. **Build My Guild**
    a. Focus Areas: Platform development, membership management software
    b. Internship Type: Software Engineering, UI/UX
4. **Edba Academy**
    a. Focus Areas: EdTech solutions, data analytics
    b. Internship Type: E-learning Portal Development, Data Analysis
5. **Savit Interactive**
    a. Focus Areas: Digital marketing, web design, software solutions
    b. Internship Type: Web Analytics, Digital Marketing Automation
6. **ONGC**
    a. Focus Areas: Oil and Natural Gas exploration, industrial automation
    b. Internship Type: SCADA Systems, Application Development
7. **Mira Bhayandar Municipal Corporation's SafaiMitra Internship**
    a. Focus Areas: Smart city initiatives, public utility software
    b. Internship Type: Project Management, IoT-based Waste Management Solutions
8. **NullClass Edtech Pvt. Ltd.**
    a. Focus Areas: Educational technology, online learning platforms
    b. Internship Type: Mobile App Development, Web Engineering
9. **InDeft Technology Solutions Pvt. Ltd.**
    a. Focus Areas: IT services, custom software solutions
    b. Internship Type: Enterprise Application Development, Cloud Integration
10. **APSV Technologies**
    a. Focus Areas: Software consulting, data-driven solutions
    b. Internship Type: Data Engineering, Machine Learning Prototyping
11. **SAP Edunet**
    a. Focus Areas: SAP ERP, data management, business solutions
    b. Internship Type: ERP Module Customization, Database Administration
12. **Externs Club**
    a. Focus Areas: Industry exposure, open-source projects, community collaboration
    b. Internship Type: Open-Source Contributions, Project Management

3. In-house Internship

In parallel with external internships, the Department of Computer Engineering also offers In house Internship programs. These are designed to give students hands-on experience through department-led projects and research initiatives, often in collaboration with industry mentors or institutional bodies.

3.1 Securing the Digital Society: Building Awareness for a Safer Future (Odd Sem)

- **Objective:** Train students to identify, analyze, and mitigate cybersecurity threats by developing secure coding practices and conducting awareness campaigns.
- **Scope:**
    I. Cybersecurity modules and workshops
    ii. Developing risk assessment models and security best practices
    iii. Creating awareness materials for social media and campus events

3.2 Research Internship Under IIC and Start-Up Clinic (Odd Sem)

- **Objective:** Encourage innovation and entrepreneurship by involving students in ongoing departmental research and guiding them to build viable start-up ideas.
- **Scope:**
    I. Exploring emerging technologies (AI, IoT, Blockchain, etc.)
    ii. Mentoring sessions with industry experts
    iii. Pitching sessions for start-up ideas and prototypes

3.3 Digital Defense Internship:Protecting Communities from Cyber Threats (Even Sem Ongoing)

- **Objective:** To equip users with essential knowledge and skills to recognize cyber threats, handle data securely, and implement effective security measures.
- **Scope:** This includes phishing awareness, secure media practices, multi-factor authentication, mobile security, physical breach prevention, and understanding the ethical and societal dimensions of cybersecurity.

3.4 Unlocking Blockchain Potential: Building a Secure & Transparent Digital World (Even Sem Ongoing)

- **Objective:** To provide foundational and practical knowledge in blockchain technology, empowering learners to build smart contracts and interact with decentralized tools.
- **Scope:** Covers blockchain architecture, Solidity programming, wallet operations, DeFi interactions, testing frameworks, and Solana ecosystem development.

4. Out-house Internship:

A. List of Companies:

Below is the distribution of students across companies during their Out-house internship:

SR. NO.	ORGANIZATION
1	Compozent
2	QSPIDERS
3	Stayatlas
4	MBMC
5	Daten & Wissen
6	KarpuraGaur.ai
7	HumbleWalkingm,b,jb
8	Lab Systems Pvt. Ltd.
9	Other companies (like ONGC, APSV Technologies, Edba Academy, etc.)
	Total Outhose : 220

B. Paid Internship Analysis:

SR. NO.	COMPANY	AVERAGE STIPEND
1	Build MyGuild	₹ 20,000
2	Nimap Infotech	₹ 12,000
3	Course Compass	₹ 8,000
4	Edba Academy	₹ 8,000
5	QSPIDERS, Course Compass	₹ 8,000
6	Arihant Consultant	₹ 8,000
7	Compozent	₹ 3,000
8	Stayatlas	₹ 3,000
9	Lab Systems Pvt. Ltd.	₹ 5,000
10	KarpuraGaur.ai	₹ 5,000
11	MBMC	₹ 4,000
12	HumbleWalking	₹ 2,000
13	NullClass Edtech	₹ 3,000
14	Surfboard	₹ 8,000
15	AI Mishkat	₹ 3,000

5. Learning Outcomes

Through both Out-house and In-house internships, students are expected to achieve the following outcomes:

1. **Technical Proficiency:** Acquire and enhance coding, software development, testing, and system design skills.
2. **Practical Exposure:** Relate academic knowledge to real-world scenarios using relevant industry tools and technologies.
3. **Teamwork & Collaboration:** Work in multidisciplinary teams alongside professionals and peers.
4. **Communication Skills:** Develop stronger written and oral communication skills for technical documentation and presentations.
5. **Problem-Solving & Innovation:** Identify technological challenges and propose creative, effective solutions.
6. **Professional Ethics:** Understand and apply ethical practices in handling software projects, data security, and user privacy.

Seminar/Workshops

The details of Seminars/Workshops conducted by the Department Of Computer Engineering during the semester:

PARTICULARS	DESIGNATION
Activity	Seminar/Workshop
Sub Activity	Seminar (Group Discussion)
Activity Level	Department
Title	Cybersecurity and Digital Forensics: Safeguarding the Digital World.
Organized by	Department of Computer Engineering
Date	4th February, 2025
Time	2:30 PM
Speaker	**Dr. Bhisaji Surve** **Designation:** Associate Professor in Prof. L.N. Welingkar Institute of Management Research, Mumbai

Relevance of Open Source Tools in Computer Engineering Practical Subjects

Subject Area	Recommended Open Source Tools	Relevance in Practical Learning
Programming (C, Java, Python)	GCC, Code::Blocks, Eclipse, VS Code, Python IDLE	Provides a cost-free environment for developing, compiling, and debugging code across platforms.
Data Structures & Algorithms	C++ STL, Python libraries (collections, heapq), Visualgo	Helps visualize and implement complex structures like trees, graphs, and sorting algorithms.
Operating Systems	Ubuntu/Linux, QEMU, Minix, GDB	Enables kernel-level understanding of process, memory, and system calls in real-world OS platforms.
Database Management Systems	MySQL, PostgreSQL, SQLite, phpMyAdmin	Facilitates hands-on SQL query writing, data modeling, normalization, and transactions.
Computer Networks	Wireshark, Packet Tracer, NS-3, Nmap	Allows packet-level analysis, protocol tracing, and network topology simulations.
Web Development	Apache, PHP, MySQL, Node.js, MongoDB	Supports end-to-end dynamic web application development and backend integration.
AI/ML & Data Science	Scikit-learn, TensorFlow, Keras, Jupyter Notebook	Encourages model development, experimentation, and data visualization in labs and projects.
Cybersecurity & Ethical Hacking	Kali Linux, Metasploit, Nmap, Burp Suite	Enables secure coding practices and vulnerability assessment for cybersecurity labs.
Cloud & DevOps	Docker, Git, Jenkins, Kubernetes, GitHub	Trains students on containerization, version control, CI/CD pipelines, and deployment workflows.

Advantages of Using Open Source Tools in Computer Engineering Practicals

Advantage	Explanation
Cost-effective	Freely available tools reduce licensing costs, making them ideal for academic institutions.
Industry-Relevant Exposure	Students gain familiarity with tools widely used in professional and industrial settings.
Hands-on Learning Experience	Source code access and community support promote self-learning and practical problem-solving.
Customizability & Flexibility	Tools can be modified for advanced learning, research projects, or lab-specific customization.
Supports Interdisciplinary Learning	Useful in domains such as AI, IoT, Cloud, and Cybersecurity, fostering innovation.
Platform Independence	Most tools run on multiple operating systems, supporting diverse lab infrastructure.
Encourages Collaboration	Promotes teamwork, Git-based development, and open-source contribution culture.
Aligns with NEP 2020 & OBE	Supports skill-based learning, critical thinking, and real-world problem-solving approach.

Team Members

Assistant Prof.
Ashwini P. Parkar

Ms. Pranjali Parab
(BE-CS-B)

Mr. Prashant Ray
(TE-CS-B)

College Campus

Shree L.R. Tiwari College of Engineering,
Kanakia Rd, Kanakia Park, Mira Road East,
Mira Bhayandar, Thane - 401107