



LLOYD INSTITUTE OF ENGINEERING & TECHNOLOGY



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TECHVIST

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Department of Computer
Science & Engineering

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LIET

LIET

About



LIET, Lloyd Institute of Engineering & Technology has become a place where dreams are indeed transformed into reality. The institute is affiliated to Dr. A.P.J. Abdul Kalam Technical University (Formerly UPTU) and recognized by the A. I. C. T. E. (Min of HRD), New Delhi, and the U.P. Govt. LIET has been constantly engaged in moulding the lives of future engineers with the employment of innovative approaches that are job-oriented only.

Affiliated to



Lucknow

Approved by



New Delhi



VISION

“To emerge as an Institute of academic excellence by empowering young minds through problem-solving skills, knowledge & ethical values and transforming them into professionals of global competence”.



MISSION

M1: To equip the students with state-of-the-art technological advancement and skills.

M2: To create a conducive environment for teaching and learning through continuous engagement with industry for corporate understanding and Professionalism.

M3: To focus on holistic development of students through enhanced learning along with moral and ethical value system.



About Department

The Computer Science Engineering department strives to equip students with a strong foundation in technology, innovation, and problem-solving, preparing them for successful careers in the ever-evolving tech industry.

LIET is committed to addressing the industry's need for digitally skilled engineers by upgrading its curriculum through academic collaborations with major IT leaders. The department offers a full-time B.Tech in Computer Science and Engineering is approved by AKTU and AICTE.

In response to emerging digital technologies like Big Data, AI, Cloud, and IoT, Lloyd is preparing students for high-demand roles in areas like mobile app development and data science. As digital technologies are expected to significantly boost India's economy by 2025, Lloyd has infused its CSE curriculum with relevant tech skills, including Full Stack Programming, Big Data, Machine Learning, AI, and IoT.



Transforming students through skill-based learning with ethical values, producing competent Computer Science Professionals, to cater technological and industrial challenges of global need.



DM1: Provide support and facilities to create and disseminate knowledge in the area of Computer Science and Engineering.

DM2: Provide practical learning and exposure on advanced tools and technologies.

Dm3: To instill global level competence and skills with innovative thoughts maintaining ethical values and professionalism.





Program Educational Objectives (PEOs)

The Program Educational Objectives of the Computer Science & Engineering department are:

- PEO-1:** Graduates will work in the area of application software development, testing and cyber security domain.
- PEO-2:** Graduates will become successful professional with managerial quality in different IT industry.
- PEO- 3:** Graduates will exhibit professional understanding and ethics, will able to work as a team to continue effectively for the growth of industry and society.

PROGRAM SPECIFIC OUTCOMES (PSOs)

- PSO-1:** Problem solving by applying computational concepts and design solutions using suitable data structures and algorithmic techniques.
- PSO-2:** Apply the advanced Coding techniques and framework in product development process.
- PSO-3:** Exposure to advanced cyber security tools and practices to secure critical infrastructure.

President

Mr. Manohar Thairani



It gives me immense pride and satisfaction to witness the remarkable growth and achievements of the CSE & Allied Branches at LIET. In an age where technology drives progress and innovation shapes the future, Computer Science stands at the core of global transformation.

At LIET, we believe that education must evolve alongside technology. Our vision is to create a dynamic academic ecosystem that nurtures innovation, leadership, ethical values, and a spirit of entrepreneurship. The CSE & Allied Branches are playing a pivotal role in realizing this vision by producing future-ready professionals equipped with technical excellence and strong moral foundations.

This magazine is a reflection of the intellectual energy, creativity, research excellence, and innovative mindset of our students and faculty members. It highlights their accomplishments and reinforces our commitment to academic distinction and continuous improvement.

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I extend my heartfelt congratulations to the entire CSE & Allied Branches team for their dedication and commendable efforts in bringing out this publication. I encourage all students to think big, stay curious, and lead the technological revolution with confidence and integrity.

Together, let us build a future driven by knowledge, innovation, and excellence.

Senior Director

Prof. (Dr.) Rajeev Agrawal



In the era of exponential technological evolution, I extend a warm welcome to all students, faculty members, and readers of the CSE Magazine at LIET. Today, technology is not merely advancing — it is transforming the way we live, learn, and innovate. At LIET, we recognize the importance of staying ahead in this ever-evolving digital landscape.

Our commitment goes beyond conventional education. We strive to nurture future-ready engineers equipped with cutting-edge technical expertise, innovative thinking, and the adaptability required to excel in a fast-paced global environment. The Department of Computer Science & Engineering plays a pivotal role in driving this vision by fostering creativity, research, and industry-oriented learning.

This magazine reflects the intellectual vibrancy, technical achievements, research initiatives, and creative pursuits of our CSE students and faculty. It stands as a testament to their dedication and the institution's progressive academic environment.

I encourage all students to embrace innovation, think beyond boundaries, and continuously upgrade their skills. The future belongs to those who are prepared to evolve with technology and lead with vision.

Embrace the evolution. Shape your future.

Dean (R & D) – LIET

Dr. S.P. Dwivedi



At Lloyd Institute of Engineering and Technology, the Department of Computer Science & Engineering is emerging as a dynamic center of technological excellence and research-driven innovation. As Dean (R&D), I am proud of the enthusiasm and dedication shown by our CSE students and faculty in rapidly evolving fields such as Artificial Intelligence, Machine Learning, Data Science, Cyber Security, Cloud Computing, and the Internet of Things. Our focus is not only on academic achievement but also on nurturing analytical thinking, creativity, and a strong problem-solving mindset that prepares students to lead in the digital era.

The Research & Development ecosystem within the CSE branch is designed to encourage curiosity, experimentation, and collaboration. Through funded research projects, industry-driven problem statements, hackathons, coding competitions, and interdisciplinary innovation initiatives, students are provided with hands-on exposure that bridges the gap between academic learning and industry expectations. We actively promote research publications, patent filing, startup incubation, and participation in national and international technical competitions to strengthen our students' global outlook.

Collaboration remains the cornerstone of our growth. We continuously seek partnerships with technology companies, research organizations, and academic institutions to provide our students with advanced laboratories, expert mentorship, internships, and real-time project opportunities. Our aim is to build a dynamic research culture where innovation thrives and ideas transform into impactful technological solutions.

I firmly believe that the future belongs to those who innovate. Through strong academic foundations, ethical values, and a spirit of continuous learning, the CSE branch at LIET is committed to shaping future-ready professionals who will contribute significantly to society, industry, and the nation. Together, let us continue to explore, innovate, and excel in the ever-evolving world of computing and technology.



ONE DAY AWARENESS PROGRAMME ON INTELLECTUAL PROPERTY RIGHTS (IPR)

Lloyd Institute of Engineering & Technology (LIET), in collaboration with the MSME–Development & Facilitation Office, Okhla, and Industrial Entrepreneurs Association, Greater Noida, successfully organized a One Day Awareness Programme on IPR on 06th February 2026.

The programme aimed to create awareness among MSMEs, startups, faculty, and students about the importance of protecting innovations and understanding legal and financial aspects of Intellectual Property.

Expert sessions by distinguished speakers covered key topics such as patents, trademarks, copyrights, GI registration, data privacy, domain name protection, and financial support schemes for MSMEs.



IDEATHON 1.0

From Idea to Prototype

Lloyd Institute of Engineering & Technology (LIET), Greater Noida, in collaboration with UPStartUP, successfully organized IDEATHON 1.0, a two-day innovation marathon by LTBIF. The event saw participation from 192 teams, with the top 15 teams shortlisted and top 3 winners awarded from a prize pool of ₹37,500. Over 100 industry leaders and CEOs interacted with participants, offering valuable insights. IDEATHON 1.0 provided a dynamic platform for young innovators to present ideas, gain exposure, and foster entrepreneurship, reflecting LIET's strong commitment to innovation and startup development.



Quiztronix 2025

The Techtronix Club of the ECE/EEE Department, in collaboration with IIC, successfully organized Quiztronix 2025 on 13th November 2025 at LIET. The event witnessed participation from 83 teams and nearly 300 students, reflecting high enthusiasm and strong technical skills.

The session was graced by **Ms. Seema Chauhan** from Intel Technologies, who delivered an insightful talk on transformers and their role in modern AI applications.

Winners:

- 1st – Techtrix
- 2nd – Terminals
- 3rd – Volt and Bolt

The event fostered technical learning, innovation, and a competitive spirit among students.



PROUD ACHIEVEMENT AT YOUTH PARLIAMENT

Lloyd Institute of Engineering & Technology (LIET) takes pride in the remarkable achievement of its students at the Youth Parliament event organized by SRM University, Ghaziabad, on the theme "One Nation, One Election." The event served as a platform for young minds to showcase their leadership, communication skills, and awareness of national issues.

Our students delivered outstanding performances, bringing laurels to the institute:

- Tanisha Sharma secured First Position
- Osheen Vishnoi secured Third Position

The event was graced by the Hon'ble Deputy Chief Minister of Uttar Pradesh, Shri Brajesh Pathak Ji, whose presence inspired participants. The students were highly appreciated by dignitaries and organizers for their clarity of thought, confidence, and exceptional articulation.

This achievement highlights LIET's commitment to holistic development, encouraging students to excel not only in academics but also in leadership and public engagement.



ACHIEVEMENT AT SPARKTANK – BUSINESS PITCH COMPETITION

Students of Lloyd Institute of Engineering & Technology (LIET), under its Incubation Cell – LTBIF, achieved remarkable success by securing the 1st Runner-Up position at SparkTank – The Business Pitch Competition, organized by the Indian Institute of Forest Management (IIFM), Bhopal, during Coalescence'25 (13th–15th October 2025).

Competing against 250 teams from across the country, the LIET team impressed the judges with their innovative and sustainable business idea, earning a spot among the Top 10 finalists and winning a cash prize of ₹25,000.

This achievement reflects LIET's strong focus on innovation, entrepreneurship, and nurturing future business leaders.



VOICE OF DEMOCRACY ECHOES: YOUTH PARLIAMENT AT LIET

Lloyd Institute of Engineering & Technology (LIET) organized a vibrant Youth Parliament Competition, providing students a platform to debate key national issues such as the Supreme Court verdict on stray dogs, GST reforms, and the expansion of premier institutions like IITs and IIMs.

The event, convened by Prof. Dr. A. Kakoli Rao, highlighted the importance of youth participation in nation-building. Chief Guest Sanjay Singh, senior journalist and ward councilor, inspired students to contribute towards a self-reliant India by 2047.

Winners:

- Abhishek – Winner
- Sneha – Runner-up

The initiative was appreciated by Prof. Dr. Rajeev Agrawal, Senior Director, for fostering awareness, critical thinking, and leadership among students. The event witnessed enthusiastic participation and engagement from students and faculty alike.



BHARAT INNOVATION CONCLAVE 2025

Lloyd Institute of Engineering and Technology proudly participated in the Bharat Innovation Conclave 2025, organized by the Atal Incubation Centre at Banaras Hindu University (BHU), Varanasi. Five student teams showcased innovative ideas, with Aspirofy advancing to the Pitch Deck Round, while AgriDrop, AgriMist, Krishi Urja, & Agri Sankalp presented in the Agriculture Prototype segment.

The event provided a valuable platform for students to engage with investors, startup founders, & industry mentors, enhancing their entrepreneurial outlook. Guided by Prof. (Dr.) Rajiv Agrawal and Prof. (Dr.) S. P. Dwivedi, LIET students demonstrated creativity, confidence, and innovation on a national stage.



BHARAT INNOVATION CONCLAVE 2025

Lloyd Institute of Engineering & Technology successfully hosted the Internal Smart India Hackathon 2025, bringing together over 80 enthusiastic student teams in a dynamic showcase of innovation and problem-solving. The event served as a vibrant platform for young minds to present creative prototypes addressing real-world challenges, highlighting the spirit of collaboration, interdisciplinary learning, and mentorship.

Students demonstrated remarkable ingenuity across diverse problem statements, transforming ideas into practical and impactful solutions. The hackathon encouraged teamwork, critical thinking, and hands-on learning, preparing participants for national-level competition.

The event was further enriched by the presence of distinguished jury members including Mr. Vijay Kumar (Ex-IES Officer), Mr. Vikas Gangwar (Landysgir), Mr. Vivek Singh (Data Science & Machine Learning Expert, FinTech), and Mr. Prashant Kumar (Fintech Director). Their valuable insights, industry perspectives, and constructive feedback inspired students to refine their ideas with a focus on scalability, innovation, and real-world applicability.



EXPERT TALK ON BFSI WITH A TECH PERSPECTIVE

Lloyd Institute of Engineering & Technology hosted Ms. Loveena Kansal for an insightful session on "Navigating the BFSI Industry with a Tech Lens." She highlighted how technologies like AI/ML, Blockchain, UPI, and Cybersecurity are transforming the BFSI sector. The session focused on emerging career opportunities, industry trends, and the skills required for students to succeed in this domain. It provided a clear understanding of how technology is reshaping finance, making it an engaging and enriching learning experience for all participants.



ISACA NDC VISIT AT LIET

Lloyd Institute of Engineering & Technology had the honour of hosting the ISACA New Delhi Chapter leadership team for an engaging and insightful visit. The interaction included discussions on emerging cybersecurity trends, career opportunities, and the growing importance of AI/ML in the industry.

The team also toured key facilities such as the Drone Skills Centre, IT Park & Incubation Cell, Forensic Lab, and Computer Human Interaction Lab, appreciating the institute's advanced infrastructure. Students benefited greatly from expert guidance on career pathways and the value of ISACA certifications.

The visit strengthened industry-academia collaboration and provided valuable exposure, making it a truly enriching experience for all.



Coding Beyond the Classroom

Being a **Computer Science and Engineering (CSE)** student in today's digital era is both exciting and challenging. With technologies like Artificial Intelligence, Data Science, and Cybersecurity growing rapidly, students constantly try to learn new skills and keep themselves updated. Along with academics, CSE students work on coding practice, projects, internships, and hackathons to prepare for future careers.

While social media often highlights success stories such as placements and competition wins, it rarely shows the hard work behind them. Many students face rejected applications, coding errors, and long hours spent debugging programs. These struggles are a normal part of the learning journey.

In computer science, failure is often the first step toward success. When a program fails or a project doesn't work as expected, it gives us an opportunity to learn and improve. Each mistake strengthens our problem-solving ability and technical skills.

The real journey of CSE students happens behind the screens—where we practice, experiment, learn from errors, and slowly grow into better engineers every day.

In addition, learning in computer science never truly stops. New technologies and tools continue to emerge, encouraging students to stay curious and adaptable. By participating in coding communities, online platforms, and collaborative projects, students gain valuable exposure and experience. These efforts not only enhance technical knowledge but also build confidence and creativity. With dedication and continuous learning, CSE students gradually transform their ideas into innovative solutions that shape the future of technology.

Kanishq Raj, CSE, 2 Year
Roll No : 2401721540026



Role of Projects in Learning

Projects play a very important role in the learning journey of students in the field of technology. While classroom lectures provide theoretical knowledge, projects help students apply these concepts to real-world situations. Through project work, students understand how programming, algorithms, and software tools are actually used to solve practical problems.

Working on projects such as developing software, websites, or mobile applications allows students to explore new technologies and improve their technical skills. It also helps them learn how to plan, design, and implement solutions step by step. During this process, students face challenges like coding errors or system failures, which help them develop patience and strong problem-solving abilities.

Projects also encourage teamwork and communication, as many projects are completed in groups. Students learn how to share ideas, divide responsibilities, and collaborate effectively to achieve a common goal. These experiences not only improve technical knowledge but also build leadership and management skills.

In addition, project-based learning motivates students to think creatively and find innovative solutions to real-world problems. It provides practical exposure and prepares them to handle professional challenges with confidence.

Overall, projects help students build creativity, confidence, and practical knowledge. They bridge the gap between theory and practice and play a significant role in preparing students for successful careers in the technology industry.

Manish Kumar, CSE (DS) 2nd Year
Roll No : 2401721540030



Hackathons and Competitions

Hackathons and coding competitions provide an exciting platform for students to showcase their technical skills and creativity. These events bring together students from different backgrounds to solve real-world problems within a limited time. It encourages innovation, teamwork, and the ability to think quickly under pressure.

Participating in hackathons allows students to apply their programming knowledge and explore new technologies. Students often work in teams where they share ideas, divide tasks, and develop practical solutions. This experience helps them improve communication, collaboration, and leadership skills.

Such competitions also provide exposure to industry-level challenges and help students understand how technology can be used to solve practical problems. Winning or losing is not the most important aspect; the real benefit lies in the learning experience and confidence student's gain.

Hackathons also encourage creativity and innovation by allowing students to experiment with new ideas and technologies. In a short span of time, participants learn how to plan, design, and implement a project efficiently. This hands-on experience helps them strengthen their technical knowledge and improve their time management skills. In addition, hackathons often bring opportunities to interact with mentors, industry experts, and fellow innovators. These interactions help students gain valuable guidance, learn about current industry trends, and expand their professional networks.

Overall, hackathons and competitions motivate students to think creatively, improve their technical abilities, and gain practical exposure. They play an important role in preparing students for future careers by building confidence, encouraging innovation, and developing problem-solving skills in a dynamic environment.

Bhumika Dubey, CSE (DS) 3rd Year
Roll No : 2301531540010



The Journey of Continuous Learning

In computer science, learning never truly stops. New programming languages, tools, and technologies continue to emerge every year, making it important for students to stay updated. Successful engineers are those who are willing to learn, adapt, and grow with changing technologies.

Students should develop curiosity and a strong habit of continuous learning. Exploring online resources, practicing coding, and working on projects help expand knowledge and improve understanding of technical concepts. By staying motivated and open to new ideas, individuals can gradually strengthen their problem-solving and analytical abilities.

In addition, participating in workshops, webinars, and technical communities provides opportunities to learn from experts and peers. Reading technical blogs, contributing to open-source projects, and experimenting with new tools also help in improving practical skills. Continuous learning not only enhances technical knowledge but also builds confidence, creativity, and adaptability. It encourages individuals to explore innovative ideas and discover new ways of solving problems. Developing a mindset of lifelong learning helps students remain competitive in the rapidly evolving technological world.

With dedication, persistence, and a willingness to learn, students can continuously improve their abilities and prepare themselves for future opportunities. The journey of learning may be challenging, but it ultimately leads to personal growth, professional success, and the ability to contribute meaningfully to the field of technology.

Ayushi Bhagel, CSE (DS) 2nd Year

Roll No : 2401721540017



Building the Future with Technology

Students in the field of technology are the innovators and problem-solvers of tomorrow. With dedication, creativity, and strong technical knowledge, they have the ability to design solutions that can transform the world. From developing smart applications to creating advanced technological systems, their work can bring positive change to society.

By using technology in meaningful ways, students can contribute to the growth of industries, education, healthcare, and many other sectors. Their ideas, innovations, and determination have the potential to build a smarter and more connected future.

Technology is shaping the modern world, and skilled professionals play a major role in this transformation. Through learning and experimentation, students can develop intelligent systems, improve digital communication, and create tools that make everyday life easier.

Through research, innovation, and collaboration, they can address real-world challenges and develop sustainable solutions. By working together and sharing knowledge, students can create impactful technologies that benefit communities and industries.

With passion, dedication, and continuous learning, these future innovators will continue to push the boundaries of technology. Their creativity and determination will help create opportunities, solve complex problems, and build a better and more technologically advanced tomorrow.

Lal Aman Singh, CSE (A2) 2nd Year

Roll No : 2401720100066



The Impact of Cloud Computing

Cloud computing has changed the way data is stored and accessed. It allows users to store information online and access it from anywhere in the world. Learning about cloud technologies helps students understand modern computing systems and prepares them for industry demands.

With the help of cloud computing, businesses and organizations can store large amounts of data securely without relying on physical storage devices. It also allows multiple users to access and share information easily, improving collaboration and productivity. Popular cloud services provide platforms for developing applications, storing data, and managing digital resources efficiently.

Cloud computing is widely used in areas such as online education, business management, banking, and entertainment. Many applications and websites today rely on cloud technology to provide fast and reliable services to users.

For students and aspiring professionals, understanding cloud computing opens up many career opportunities in fields such as cloud architecture, system administration, and software development. By learning cloud platforms and tools, students can gain valuable skills that are highly demanded in the technology industry.

Overall, cloud computing plays a vital role in the modern digital world. It helps organizations operate more efficiently, supports innovation, and enables people to access information and services anytime and anywhere.

Brijendra Mani Tripathi, CSE 2nd Year

Roll No : 2401720100039



Importance of Programming Skills

Programming is one of the most essential skills in the field of computer science. It helps students develop logical thinking and problem-solving abilities. By learning programming languages such as Python, Java, and C++, students can create applications, websites, and software solutions that solve real-world problems.

Programming also encourages creativity and innovation. When students write code, they learn how to break complex problems into smaller and manageable steps. This process improves analytical thinking and helps them design efficient solutions. Through regular practice, students become more confident in handling technical challenges.

In addition, programming skills open the door to many career opportunities in areas such as software development, data science, artificial intelligence, and cybersecurity. Many modern technologies are built on programming, making it a valuable skill for the future.

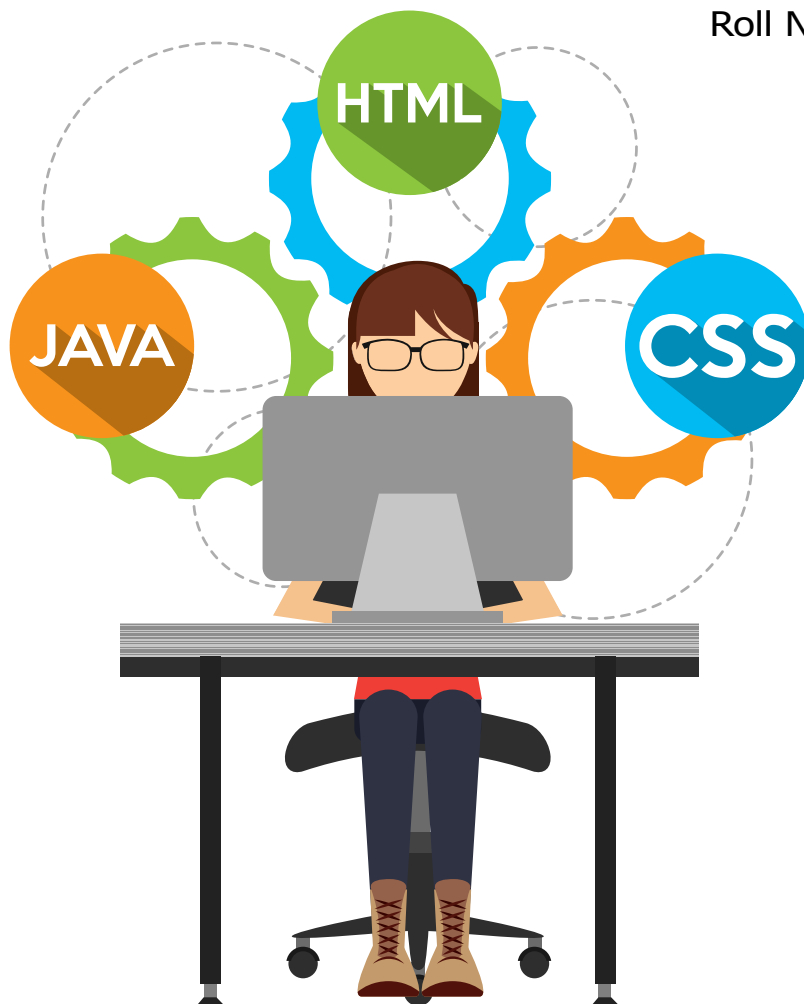
Learning programming not only helps students understand how technology works but also empowers them to build new tools and applications. With dedication and continuous practice, programming skills can help students turn their ideas into practical and impactful solutions.

Furthermore, programming helps students develop patience and persistence. Writing code often involves trial and error, and fixing errors teaches students how to stay focused and keep improving. It also encourages a mindset of continuous learning, as new languages and technologies continue to evolve.

In today's digital world, programming is not only useful for software engineers but also beneficial for individuals in many other fields. From automation to data analysis, programming skills help people work more efficiently and solve problems in innovative ways. By mastering programming, students can contribute to technological advancements and shape the future of the digital world.

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