

[www.lnmiit.ac.in](http://www.lnmiit.ac.in)

## THE LNM INSTITUTE OF INFORMATION TECHNOLOGY

(An Institute of higher learning that is deemed-to-be-university  
under section 3 of UGC Act 1956)

A Joint Venture of Lakshmi & Usha Mittal Foundation and Govt. of Rajasthan

## INSTITUTE **BROCHURE** 2024-25



NAAC Accreditation : 'A'  
AICTE Approved  
Engineering Programmes



# Realizing Dreams

Pursuing Excellence for a Bright Future

## Commitment to High Quality Education

### Admission

- Only merit based admission
- No management quota
- No capitation fee

### UG: Modes of Admission

- Regular Mode (JEE Mains)
- Direct Admission for Board Toppers
- DASA Mode (International admission through JEE and valid SAT score)
- Lateral Entry Mode (For admission to 2nd/3rd semester)

### Alumni

- Strong Alumni network in India and abroad
- Out of Alumni living abroad about 64% are in North America, 21% in Europe, and the rest in Singapore, China and Australia.

### Industry-Academia Interaction

- Industry Oriented Courses
- Co-branded Labs with TI, IBM, KPIT, ARM, and Intel
- Student Exchange Programs with foreign universities

### Scholarships and Assistantships

- UG: Merit, BPL Scholarships, Girls' Specific Scholarship and various types of assistantship
- PG: Merit-cum-Means, and various other teaching/research assistantships, AICTE scholarships for GATE qualified candidates
- Ph.D.: Institute fellowship, sponsored research/project fellowship from CSIR/UGC, DST-INSPIRE, NBHM etc.

### PG & Ph.D. Admission

- M.Tech. & M.S. (by Research): Based on valid GATE score or written test
- M.Sc.: Based on JAM / CUET-PG / Online Interview
- Ph.D.: Based on written test and interview

### Research

- 9 Multi-disciplinary Centres for Research and Development
- Funded research projects from various funding agencies worth more than 8 crores
- Collaboration with multiple research labs, universities in India and Abroad

## Accreditation and Ranking

### NAAC

Accredited with 'A' grade

### AICTE

AICTE Approved Engineering Programmes

### Outlook Ranking 2023

27th Rank in top 100 Private Engineering Institutes in India

### Education World Ranking 2023

2nd Rank among Private Engineering Institutes in Rajasthan

12th Rank among top Private Universities in India

15th Rank in Private Engineering Institutions in India

### India Today Ranking 2023

22nd Rank among Private Engineering Colleges in India

51st Rank in Top Engineering Colleges in India

### The Week Ranking 2024

2nd Rank in Top Private and Deemed Technical Universities In North Zone

2nd Rank in Deemed Technical Universities in North Zone

12th Rank In Top Technical Universities -North Zone

32th Rank in Top Technical Universities in India

## Internships & Placement

### Placement (for graduating batch 2023)

(~94% of registered eligible students have been placed)

#### Highest Package:

50.96 Lakhs

#### Median Package:

13.32 Lakhs

#### Average Package:

14.51 Lakhs

### Major Recruiters for their Indian and abroad operations :

Amazon, Google, Microsoft, Adobe, Samsung, ArcelorMittal etc. for India and abroad operations

### Internships

- Semester-Long Internships
- On-campus/off-campus Industrial /research Internships
- LUSIP (LNMIIT Undergraduate Summer Internship Program)

### Students' Achievements

- Google Venkat Scholarship
- Grace Hopper Celebration student scholarship
- Google Summer of Code
- Red Hat Women Open Source Award
- Tata Crucible
- Smart India Hackathon
- SMC Mechatronics Cup
- Student Start-up Exposure Programme

### Start-ups by LNMIITians

Some of the major startups are: Safe Security, Fanperk, InstaCash, BigStep, Nutrino, Dream Animator, Zubi Infotech, iDeepners, Veris

## Infrastructure

### Library

- Approx. 21037 text and reference books
- Access to approx. 48160 e-journals
- Institutional membership of National Digital Library of India with access of more than 1,00,00,000 learning resources

### Connectivity

- Internet connectivity: 1 Gbps Premium leased line (1:1)
- 1 Gbps connectivity through National Knowledge Network (NKN)
- Wired and Wi-Fi enabled campus

### Computing

- NVIDIA DGX Supercomputer with 1.x Peta FLOPs speed
- High-Performance Computing facility of 140 computing cores on 7 nodes
- 2 GPU, NAS and SAN facility and Clough Stores

### Teaching-Learning

- High definition IP based multi-party video conferencing facility
- Online Teaching-Learning support including live, flipped and blended modes of delivery
- Learning Management System with support for Proctored, Online and Offline examination

### Hostel

- Four boys' and one girls' hostel
- Semi furnished hostel rooms with Internet facility
- Three Messes
- A shopping complex with food court
- Indoor sports facilities, Gym and TV Room

### Medical

- In-house medical unit with a Resident Doctor, three supporting nursing staff & visiting specialist doctors
- Emergency care room and Physiotherapy room
- Well-equipped ambulance
- Group medical insurance policy for students

### Sports

- Students' Activity Centre with indoor sports facility: Table Tennis, Badminton, Squash Court, Gymnasium
- Out-door sports facility like Cricket, Football, Basketball, Volleyball, Lawn Tennis, Kabaddi
- 1 Mini Gym in Girls' Hostel and 3 Open Air Gyms

### Surveillance

- Fully residential campus with IP based video surveillance
- Biometric based identification system -
  - Biomax Indigo Face
  - Biomax N-X90W

# Director's Welcome Note

Dear Prospective Aspirant,

Thank you for choosing to consider the LNMIIT as part of your exploration process for identifying your next learning enabler!

Established in 2002, as an institution of higher learning jointly by the State Government of Rajasthan (India) and the Lakshmi & Usha Mittal Foundation of the well-known steel magnate and industrialist Padma Vibhushan Mr. Lakshmi N. Mittal, the LNMIIT Jaipur started operating from the academic session 2003-04, became an institution that is deemed to be a university (by the UGC) in 2006. It has been reaccredited by the NAAC in 2023, with an 'A' grade. All its engineering and technology programs are also approved by the AICTE.



Currently, the LNMIIT is undergoing a major transformation under the INR 400 Cr., 5-Year Initiative named the 'Mission Quantum Leap'. As one of its elements, the Institute is in the process of creating the 'LNMIIT International Center for Artificial Intelligence' (LICAI) with an investment of about INR 200 Cr. This centre, along with other existing multi-disciplinary centres of research and development, aims to attract some of the best minds in order to further enrich the research and innovation-driven ecosystem of the Institute that focuses on carrying out advanced and purposive research programs.

Any institution of higher learning needs to enable and celebrate diversity in so many ways; ranging from diversity of learning interests, pedagogy, opportunities, culture, flexibilities and opportunities to diversity of constructive thoughts and informed views. All these need to be achieved while maintaining a due balance between all aspects that could enable a young boy or girl to evolve as a good human being and a responsible citizen, with a 'can do' attitude and sound knowledge in her / his chosen domain. At the LNMIIT Jaipur, we celebrate merit, diversity, ethics, self-discipline and a deep sense of purpose as well as responsibility.

Thanks to the outstanding cooperation, hard work, ideas, initiatives and understanding by every single member of faculty, staff, students, alumni, collaborators and even recruiters, a resilient ecosystem has evolved at the LNMIIT.

If you are looking for a place where merit is the only way to get in and where you would have to burn midnight oil to learn and continually learn well in your chosen areas and graduate as a conscientious and able scientist, technologist, engineer, entrepreneur or someone who also evolves as a storyteller, a litterateur, photographer, dancer, painter or sportsperson with an ability to solve today's and tomorrow's problems with her / his knowledge and attitude, you are warmly welcome to the LNMIIT.

Come, join us and enjoy the ambience, diversity and richness that comes so naturally to the vibrant environment that is characteristic of the LNMIIT!

**Professor Rahul Banerjee, PhD, FIE, FIETE**  
Director



Sources : [www.inditrip.com](http://www.inditrip.com)

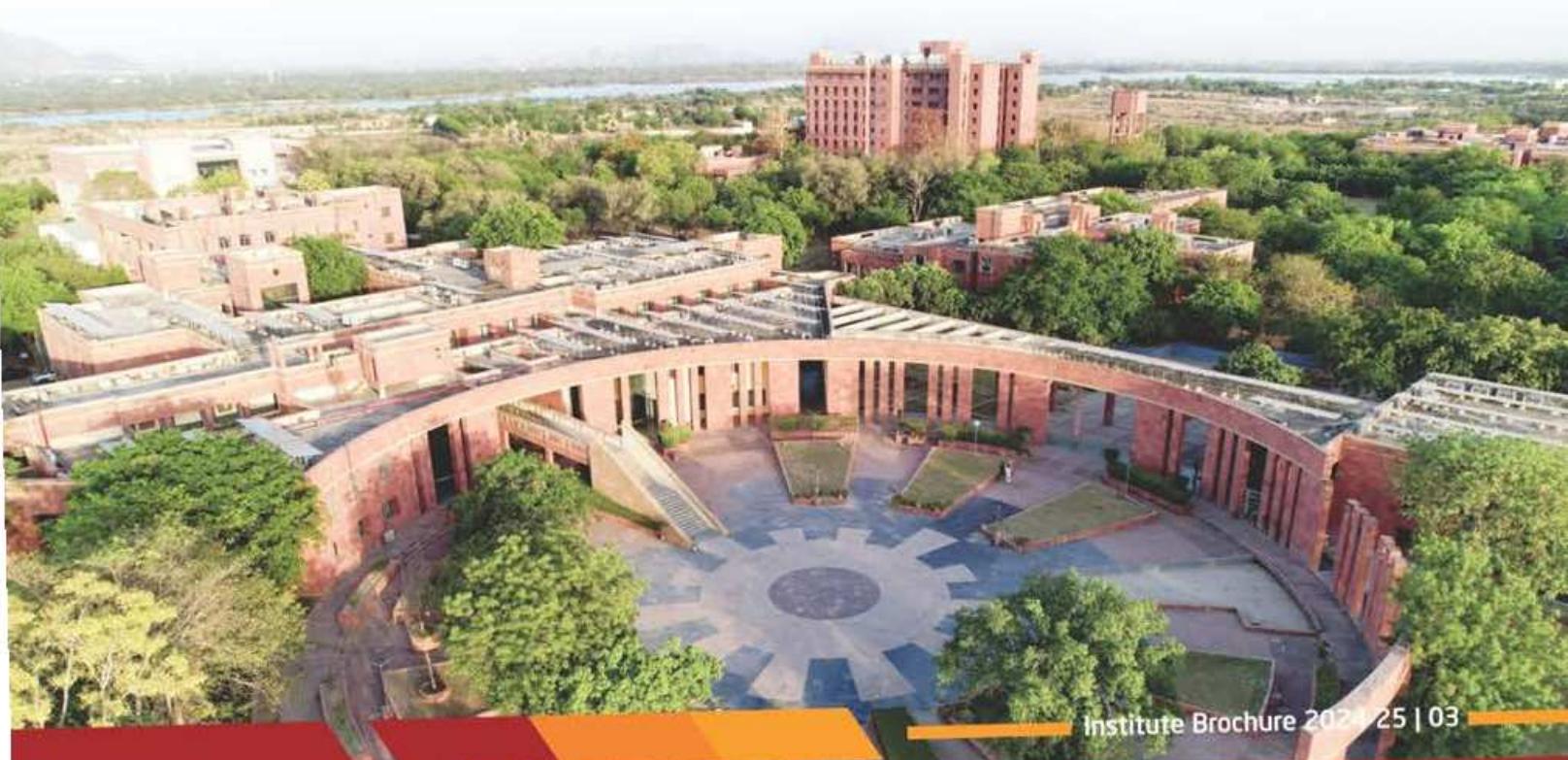
## Jaipur Smart Heritage City

Jaipur, known globally as Pink City, stands as a splendid amalgamation of the rich cultural heritage and the thriving new technologies in India. While in the past, Jaipur has been one of the magnificent examples of late medieval trade towns, in contemporary times, it is unique in wonderfully blending the living traditions with the emerging technologies. Earning the recognition of being a 'UNESCO World Heritage Site' in July 2019, Jaipur is also being redefined as a 'smart city' that aims to provide a world class smart heritage zone by preserving old heritage buildings along with the provisions of smart and sustainable infrastructure solutions. Today, Jaipur is famous for promoting multi modal mobility to improve road congestion levels and improve public hygiene and cleanliness.

As part of embellishing Jaipur as a 'Smart Heritage City', there are many areas in which major works are envisioned and will soon be accomplished. One of the most prominent works in this regard is the adaptive reuse of heritage structures. In this regard, rejuvenation of Talkatora lake in Baoris; improvement of heritage walks and Bazaar Street façade; and setting of green roof tops on some of the old buildings are few examples. Besides this, efforts are also been initiated to integrate common mobility card for monument entry payments and develop Heritage App with QR Code for monument information. Promoting and enhancing NMT mobility, multimodal integration of fare and physical design, and setting up of smart IPT Stands and App are the other prominent projects included in the overarching vision of re-constructing Jaipur as a 'smart heritage city' of India.

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# About the Institute

The LNMIIT was founded in 2002 as a joint venture between Govt. of Rajasthan and Lakshmi & Usha Mittal (LUM) Foundation as a philanthropic initiative. With the emphasis on quality and rigour in education, the Institute began its first academic session in July 2003 and was granted Deemed-to-be-University status by UGC in 2006 under the De-Novo category. The Institute, in spite of being young, is considered as one of the best institutions in its chosen areas of higher learning, both in the state and the country. In addition to having been accredited by the National Assessment & Accreditation Council (NAAC) as an 'A' grade institution, all the engineering programmes of the institute are approved by the AICTE. The 100-acre green residential campus is located in a serene atmosphere on the outskirts of India's pink city, Jaipur. Till now, 3996 students have graduated from the undergraduate (B.Tech., B. Tech. - M. Tech. (5 Year Integrated Degree) programmes and nearly 187 students from the postgraduate (M.Tech., M.S. by Research, M.Sc.) and 25 students have been awarded Ph.D. degrees. Currently, the Institute has 2150 undergraduate students; 35 postgraduate and 88 Ph.D. candidates. Girls constitute more than 16% of the total strength.

The Institute is guided, in broad terms, by its Governing Council (GC) which is headed by its Founding Chairman, Padma Vibhushan Mr. L. N. Mittal, who is also the Executive Chairman of ArcelorMittal, one of the largest multinational steel and mining companies, apart from having his interests in petrochemical and energy sector through HMEL, a joint enterprise of HPCL and Mittal Energy Ltd.



# Vision, Mission, and Strategic Plan

"Excellence Our Motto Discipline Our Way"

## VISION

- To establish a world class platform for creation of knowledge through quality research and its dissemination through technologically enabled teaching–learning pedagogy in the field of science, technology, engineering, arts and management.
- To become a catalyst in societal and national development, by ensuring continuous interaction with industry and other academic and research institutions in India and abroad.

## MISSION

- To offer state of the art undergraduate programmes in IT & ITES as well as core disciplines (CSE, CCE, ECE, ME) with emphasis on strong fundamentals.
- To establish centres of excellence in emerging areas to provide significant breakthrough required to solve real world problems.
- To make LNMIIT the most preferred institute for higher education across the country.
- To create intellectual property through innovations, quality research publications and patents.
- To instill core values of excellence, integrity, teamwork, professional ethics and environmental concerns.
- To foster and nurture leadership and entrepreneurial qualities and lifelong learning amongst students, research scholars, faculty and staff of The LNMIIT.

## STRATEGIC PLAN

The LNMIIT aspires to create a niche for itself in both Indian and global arenas by adopting a multi-disciplinary approach with a focus on contemporarily relevant as well as emerging areas of research, development, teaching-learning, entrepreneurship, outreach and collaboration while maintaining an ecosystem that would ensure work-life balance of its people (faculty & staff) and enable well-rounded personality development of its students.

This shall be achieved with the help of a sustainable strategic plan involving long-term, medium-term and short-term milestones, named as 'Mission-2035', 'Mission-2030', and 'Mission-2025'.



# Governing Council

The Governing Council (GC) of The LNMIIT, Jaipur is its apex mentoring and decision-making body. It has an array of distinguished academicians, corporate leaders, and top bureaucrats as its members.



## Chairman (Chancellor)

**Padma Vibhushan Shri Lakshmi Niwas Mittal,**

Executive Chairman, Arcelor Mittal



### Mr. Prabh Das (Ex-IAS)

**Member**  
(LUM Foundation)  
MD & CEO – HMETL



### Mr. Sudhansh Pant (IAS)

**Member (Ex-Officio)**  
Chief Secretary,  
Government of Rajasthan,  
Secretariat, Jaipur



### Mr. Rajan Tandon

**Member**  
(LUM Foundation)  
Vice President (Finance)  
Mittal Investment U.K. Limited.



### Mr. Akhil Arora, IAS

**Member (Ex-Officio)**  
Additional Chief Secretary,  
Government of Rajasthan, Department  
of Finance, Secretariat, Jaipur



### Mr. V. Krishnan

**Member**  
Talent Development Specialist &  
Performance Consultant  
(Former Head - Learning Shared  
Services, HCL Technologies Limited)



### Mr. Subir Kumar (IAS)

**Member (Ex-Officio)**  
Principal Secretary to Government,  
Higher and Technical Education  
Department, Government of Rajasthan



### Prof. Arjun Dasgupta

**Member (UGC Nominee)**  
Former Professor,  
Department of Library & Information  
University of Calcutta



### Prof. Narendra Ahuja

**Member**  
(Academic Institution), Donald Biggar  
Willett Professor Emeritus, University  
of Illinois at Urbana-Champaign



### Prof. Pankaj Jalote

**Member**  
(Academic Institution)  
Distinguished Professor, Indraprastha  
Institute of Information Technology  
(IIIT) Delhi



### Prof. B. Ravi

**Member**  
(Academic Institution)  
Chair Professor, Indian Institute of  
Technology Bombay



### Prof. J. P. Sharma

**Member**  
(Academic Institution)  
Former Vice Chancellor of GBU,  
Greater Noida



### Dr. Sandeep Saini

**Member (Ex-Officio)**  
Associate Dean of Academic Affairs  
(In-charge),  
The LNMIIT, Jaipur



### Prof. Rahul Banerjee

**Member Secretary (Ex-officio)**  
Director, The LNMIIT, Jaipur

# Deans, Heads of the Departments & Key Persons

## Deans

**Prof. Anupam Singh**

Dean of Admissions

**Prof. Somnath Biswas**

Dean of Academic Research

**Dr. Amit Neogi**

Dean of Alumni Relations & Engagement

**Dr. Santosh Shah**

Associate Dean of Student Affairs

**Dr. Kamal Kishore Khatri**

Associate Dean of Innovation & Consultancy

**Dr. Bharat Verma**

Assistant Dean of Admissions (UG)

**Mr. Vikas Bajpai**

Assistant Dean of Alumni Relations & Engagement

**Dr. Anirudh Agarwal**

Assistant Dean of Student Affairs

**Mr. Mukesh K Jadon**

Assistant Dean of Community Welfare & Institutional Social Responsibility

**Mr. Purnendu Karmakar**

Assistant Dean (and Chief Data Officer: IDAAR)

**Dr. Sakthi Balan Muthiah**

Dean of Sponsored & Industrial Research

**Prof. Manju Dhariwal**

Dean of International Student Enablement & Gender Sensitization

**Dr. Sandeep Saini**

Associate Dean of Academic Affairs

**Dr. Vikas Gupta**

Associate Dean of Faculty Affairs

**Dr. Joyeeta Singha**

Assistant Dean of Academic Affairs

**Dr. Bharavi Mishra**

Assistant Dean of Admissions (PG)

**Dr. Saurabh Kumar**

Assistant Dean of Faculty Affairs

**Dr. Akash Gupta**

Assistant Dean of Academic Research

**Dr. Gaurav Chatterjee**

Assistant Dean: e-Governance & ERP Affairs

## Heads of the Departments

**Dr. Sunil Kumar**

Communication and Computer Engineering

**Dr. Nikhil Sharma**

Electronics and Communication Engineering

**Dr. Ashok Garai**

Physics

**Dr. Surinder Singh Nehra**

Humanities and Social Sciences

**Dr. Jayaprakash Kar**

Computer Science and Engineering

**Dr. Mohit Makkar**

Mechanical-Mechatronics Engineering

**Dr. Manish Garg**

Mathematics

## Hostel Leadership

**Dr. Nabyendu Das**

Chief Warden

chief-warden@lnmiit.ac.in

**Dr. Kanjalochan Jena**

Associate Chief Warden

assoc.cw@lnmiit.ac.in

## Administration

**Dr. Pawan Kumar Paras**

Registrar

registrar@lnmiit.ac.in

**Mr. Ashok Kumar Salecha**

Finance Officer

finance@lnmiit.ac.in

**Mr. Manuj Sharma**

Deputy General Manager

tpo@lnmiit.ac.in

**Mr. Giridhar M. Kunkur**

Librarian

librarian@lnmiit.ac.in



# Academics

The Institute has developed a flexible, largely modular and modern curricular structure for all its programmes. Several relevant recommendations of learned bodies like ACM, IEEE, and ASME as well as the model curriculum from the AICTE, apart from several relevant recommendations by the UGC and the National Education Policy (NEP) have been kept in view in the process of creation of the associated teaching-learning framework that goes with this curricular structure. The Institute has also benchmarked its curriculum with some of the best institutions in the country and abroad. The LNMIIT has decided to undertake a periodic audit of its programmes that would involve external experts from academia and industry along with the internal faculty. These practices, in a broader sense, incorporate the Learning-outcome based Curriculum Framework (LOCF) of the UGC. Some of the unique features and important elements of our academic process are highlighted below. As of this writing, all our bachelor's and master's degree programmes are in compliance with the National Credit Framework as envisaged by the National Education Policy (NEP) 2020.

## Curriculum Design and Development process

- The curriculum is revised at regular intervals, typically every three to five years through a structured academic audit for several of its programmes by involving renowned academician's/industry experts at the institute level and from outside. However individual courses may be more frequently updated or revised, as per need. For instance, an advanced elective course may be even revised or updated every alternate semester/term.
- Stakeholders' feedback is regularly sought to figure out the emerging needs and changing trends through alumni and industry feedback during the placement activities through placement cell as well as through the various members of different governing bodies of the Institute. On a regular basis every semester student feedback is taken through a structured process, typically twice in a given semester, for every course and instructor. Of late, the Institute has also begun conducting the Student Satisfaction Survey for outgoing batches.
- Typically, discussions about individual courses and curricular structure begin at the individual faculty and department level respectively, get duly deliberated at the Board of Studies (BoS) from the discipline-specific point of view, at the Academic Affairs Committee (AAC) level from the overall perspective and finally discussed, deliberated and finalized at the level of the Academic Council (AC).
- The curriculum for all undergraduate programmes is revised in 2023. In the academic session 2019- 20, curricula of M.Sc. Physics, M.Tech. and M.S. (by Research) in Computer Science & Engineering had been revised.

## Introduction of B.Tech. (Hons.) with Specialization

- The institute has introduced B.Tech. (Hons.) with specialization in Artificial Intelligence and Data Science for eligible and selected undergraduate students of Computer Science Engineering (CSE) and Communications and Computer Engineering (CCE). In addition, B.Tech. (Hons.) with specialization in Robotics and Automation for eligible and selected undergraduate students of Mechanical Engineering.
- The specialization may be earned by the admitted students upon completion of 18 additional credits and it will enable the students to be ready for new-age job market and/or research careers in the niche areas.

## Introduction of Minor at the Undergraduate Level

- The Institute has introduced Minors programme for eligible and select undergraduate students with effect from the academic year 2020-21 in the following areas: Robotics and Automation, Artificial Intelligence & Data Science.
- These Minors may be earned by students admitted to them by the way of doing six to eight additional courses in these specific areas.

## Facilitation of Online Courses

- Institute offers online courses, as per need. Other than classroom instructions, the teaching-learning elements include critical thinking, self-learning and assessment through flipped/blended classroom model, design thinking and project- based courses with due emphasis on theory, design and practice, group projects and presentations for fostering peer- learning, team building and interpersonal communication, depending upon the nature of specific courses. The institute provides the facility for students to enroll for MOOC courses from Coursera under the respective Coursera University Program.

- Elective Courses, most often, use projects and seminars as an integral part of course delivery and evaluation. Use of LMS and communication platforms such as Moodle, Piazza, Google Classroom etc. also enhance the delivery.
- In addition, online support is also available and is used as per need.
- The institute also allows select MOOC courses of good quality to be taken by students, as approved by the Academic Council. Typically, such courses require planned proctored examinations.

## Choice-Based Credit System (CBCS)

- All programmes involve CBCS and do offer combinations of Institute Core (IC), Programme Core (PC), Programme specific Electives (PE), Open/Other Elective (OE), Program Core (PC), Program Electives (PE), Open Electives (OE) Basic Science Courses (BSC), Engineering Science Courses (ESC), Humanities and Social Science & Management Courses (HSMC), Mandatory Courses (MC) and Projects and Internships (PROJ) options.
- Although, in our undergraduate programmes of four-year (8-semester) duration, the curriculum provides flexibilities like accelerated completion for high performing and adequately prepared students, provision is also there for an academic pause in cases like entrepreneurial ventures, verified medical conditions, etc. There is also a provision for slower progression for academically underprepared or not so well performing students.

## Internship Policy

The institute has four possible avenues of internship of the following kinds:

- Off-campus industrial internship.
- Off-campus research internship at recognised research laboratories/institutions.
- Industry/academic research internship on-campus but with involvement of at least one external member along with a faculty member.
- A field internship with a pre-approved NGO for a credible duly approved start-up or a recognised Government/ Semi-Government body.

In addition, those who may have specific inclination and aptitude for creating their own entrepreneurial ventures/start-ups could actually divide their period of entrepreneurial internship into one or more period of 2-6 months duration depending upon the academic time-lines permitted by the curricular structure.

In terms of specific time slots, the following internship options will be available to eligible and duly prepared students:

- Three summer internships in first year, second year and third year (at the end of 2nd, 4th and 6th semesters).
- One semester-long internship period in their final year of undergraduate study or year before.
- In select cases, with specific well-planned value addition focus, short duration internship during winters may be an additional option available subject to availability of required number of slots and eligible students.

## Research-oriented Learning

The Institute has the following research-oriented learning opportunities that indicate the presence of an eco-system that supports interdisciplinary learning and research:

- The Institute has signed MoUs with several research and development organizations as well as with industrial research laboratories and institutions of higher learning/universities in keeping with its strategy to remain relevant both nationally and globally. Under many of these arrangements, its faculty members and students may make use of these provisions for furthering their research and development work. Even exploratory interactions and internships are possible in such cases.
- Some of the MoUs allow for faculty and student exchanges as well as for collaborative research and development.
- Many faculty members have research collaborations at national and international levels and do offer short and long term projects to interested students. At times, a research organization or an industry brings its problem to the institute to be solved by faculty and students. If adequately prepared, some students may take advantage of such opportunities under the guidance of the faculty member.

## Programmes Offered

B.Tech. (Honours) with Specialization	<ul style="list-style-type: none"> <li>Communication and Computer Engineering (CCE) with Specialization in Artificial Intelligence &amp; Data Science</li> <li>Computer Science and Engineering (CSE) with Specialization in Artificial Intelligence &amp; Data Science</li> <li>Mechanical Engineering (ME) with Specialization in Robotics &amp; Automation</li> </ul>
B.Tech. with Minor	<ul style="list-style-type: none"> <li>Communication and Computer Engineering (CCE) with Minor in Robotics &amp; Automation</li> <li>Computer Science and Engineering (CSE) with Minor in Robotics &amp; Automation</li> <li>Electronics and Communication Engineering (ECE) with Minor in Robotics &amp; Automation</li> <li>Electronics and Communication Engineering (ECE) with Minor in Artificial Intelligence &amp; Data Science</li> <li>Mechanical Engineering (ME) with Minor in Artificial Intelligence &amp; Data Science</li> </ul>
B.Tech.	<ul style="list-style-type: none"> <li>Communication and Computer Engineering (CCE)</li> <li>Computer Science and Engineering (CSE)</li> <li>Electronics and Communication Engineering (ECE)</li> <li>Mechanical Engineering (ME)</li> </ul>
B.Tech.-M.Tech. (5-Year Integrated Degree)	<ul style="list-style-type: none"> <li>Computer Science and Engineering (CSE)</li> <li>Electronics and Communication Engineering (ECE)</li> </ul>
M.Tech.	<ul style="list-style-type: none"> <li>Computer Science and Engineering (CSE)</li> <li>Electronics and Communication Engineering (ECE)</li> </ul>
Master of Science (M.S.) by Research	<ul style="list-style-type: none"> <li>Communication and Computer Engineering (CCE)</li> <li>Computer Science and Engineering (CSE)</li> <li>Electronics and Communication Engineering (ECE)</li> </ul>
Master of Science (M.Sc.)	<ul style="list-style-type: none"> <li>Mathematics (MTH)</li> <li>Physics (PHY)</li> </ul>
Doctor of Philosophy (Ph.D.)	<ul style="list-style-type: none"> <li>Communication and Computer Engineering (CCE)</li> <li>Computer Science and Engineering (CSE)</li> <li>Electronics and Communication Engineering (ECE)</li> <li>Mechanical-Mechatronics Engineering (MME)</li> <li>Mathematics (MTH)</li> <li>Physics (PHY)</li> <li>Humanities and Social Sciences (HSS)</li> </ul>



# Departments

## Communication and Computer Engineering (CCE)

The Department of Communication and Computer Engineering (CCE) aims to provide a strong foundation with an excellent combination of communication engineering skills and computer engineering skills to aspiring engineers to broaden their career prospects. The Department is ably supported by a team of faculty members having degrees from reputed institutes and excellent research credentials. The CCE discipline is arguably the best career option on offer at LNMIIT, in terms of market needs and growth prospects. The discipline is ably supported by an excellent team of faculty members, many of them having extensive industry-based experience in the fusion of software and hardware technologies. The CCE programme was the first flagship programme offered by the LNMIIT. The programme has been designed in such a way that a student can earn specialized knowledge in the areas like IoT/CPS, 5G/6G, Wireless Technologies, Artificial Intelligence, and Data Sciences. etc.

### Programmes Offered

The Department of CCE offers the following programmes:

- Ph.D.
- M.S. (by Research) in CCE
- B.Tech. (Hons.) in CCE with Specialization in Artificial Intelligence & Data Science (AI & DS)
- B.Tech. in CCE

### Curriculum Highlights

The curriculum consists of a mixture of well thought-out courses in the following broad categories: Mathematics, Science, Engineering Science, Humanities and Social Sciences/Management, Professional Courses, Elective Courses, Laboratory Courses, Project Courses. A semester-wise structure of the curriculum for each Programme, currently being followed, is given below. The students are encouraged to choose the course of their curriculum, to the extent feasible and desirable, to accommodate their own aspirations. The curriculum of is reviewed, periodically, with a view to incorporate the latest advances pertaining to the Programme.

### Program Educational Objectives (PEOs)

**PEO1:** Be able to apply the principles of computer science and communication principles, basic mathematics, and science to solve real-life problems requiring knowledge of the discipline.

**PEO2:** Be successful professionals/entrepreneurs in diverse career paths including computer software or in the domain of electronic communication or in pursuing higher studies.

**PEO3:** Be engaged in learning, understanding, and applying new ideas and technologies in multi-faceted and multi-disciplinary projects by being an effective leader or team member.

**PEO4:** Exhibit professionalism in their engineering ability, ethical values, technical communication skills, and have the ability to provide solutions that are technically strong, economically feasible, socially acceptable, and bounded by law or regulatory constraints.



## B.Tech. in Communication and Computer Engineering (CCE)

### 1st Semester

Courses	Type	L	T	P	C
Classical Physics	BSC	3	1	0	4
Calculus & Ordinary Diff. Equations	BSC	3	1	0	4
Basic Electronics	ESC	3	1	0	4
Basic Electronics Lab	ESC	0	0	3	1.5
Programming for Problem Solving	ESC	3	0	3	4.5
Technical Comm. in English	HSMC	2	0	2	3
Indian Knowledge System	MC	1	0	0	1

A 3-week Mandatory Induction Program

### 2nd Semester

Courses	Type	L	T	P	C
Human Values and Ethics	HSMC	3	0	0	3
Environmental Science	MC	1	0	0	1
Linear Algebra & Complex Analysis	BSC	3	1	0	4
Data Structures and Algorithms	ESC	3	0	3	4.5
UG Physics Laboratory	BSC	0	0	3	1.5
Introduction to Scripting Languages	ESC	0	0	2	1
Digital Systems	PC	3	0	2	4
Discrete Mathematics	PC	3	0	0	3

**Summer Term** Exit option with UG Certificate\* by complepling 40 credits from 2 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 3rd Semester

Courses	Type	L	T	P	C
Probability and Statistics	BSC	3	1	0	4
Design and Analysis of Algorithms	PC	3	0	2	4
Signals and Systems	PC	3	1	0	4
Com. Organization & Architecture	PC	3	0	0	3
Database Management Systems	ESC	3	0	2	4
Object Oriented Programming	PC	3	0	2	4

### 4th Semester

Courses	Type	L	T	P	C
Constitutional Studies	MC	1	0	0	1
Web Programming	PC	0	0	2	1
Operating Systems	PC	3	0	2	4
Computer Comm. Networks	PC	3	0	2	4
Analog & Digital Communication	PC	3	0	0	3
Analog & Digital Comm. Lab	PC	0	0	3	1.5
Embedded Systems and IoT	PC	3	0	3	4.5
Program Elective - 1	PE	3	0	0	3

**Summer Term** Exit option with UG Diploma by complepling 80 credits from 4 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 5th Semester

Courses	Type	L	T	P	C
Summer Internship/Project	Project	0	0	8	4
Psychology, Techno. & Society	HSMC	3	0	0	3
Wireless Communication	PC	3	0	0	3
Wireless Communication lab	PC	0	0	3	1.5
Software Engineering	PC	3	0	0	3
Digital Signal Processing	PC	3	0	0	3
Digital Signal Processing Lab	PC	0	0	3	1.5
Software Development Lab	PC	0	0	2	1
Program Elective - 2	PE	3	0	0	3

### 6th Semester

Courses	Type	L	T	P	C
B.Tech. Project (BTP)	Project	0	0	8	4
Introduction to Economics	HSMC	3	0	0	3
Seminar and Presentation Skills	Project	0	0	2	1
Information Theory and Coding	PC	3	0	0	3
Control System Engineering	PC	3	0	0	3
Introduction to AI and ML	PC	3	0	2	4
Program Elective - 3	PE	3	0	0	3

**Summer Term** Exit option with B.Sc. by complepling 120 credits from 6 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 7th Semester

Courses	Type	L	T	P	C
B.Tech. Project (BTP)	Project	0	0	8	4
Program Elective - 4	PE	3	0	0	3
Program Elective - 5	PE	3	0	0	3
Open Elective - 1	OE	3	0	0	3
Open Elective - 2	OE	3	0	0	3

### 8th Semester

S. No.	Courses	Type	L	T	P	C
Option 1	Industrial SLI	Project	0	0	24	12
	Or					
Option 2	Thesis	Project	0	0	24	12
	Or					
Option 3	4 Elective Courses	OE/PE	12	0	0	12
	Or					
Option 4	Project	Project	0	0	12	6
	2 Elective Courses	OE/PE	6	0	0	6
	Or					
Option 5	Internship	Project	0	0	12	6
	2 Elective Courses	OE/PE	6	0	0	6

The students can opt one option only.

## B.Tech. (Hons.) in CCE with Specialization in Artificial Intelligence & Data Science

### 1st Semester

Courses	Type	L	T	P	C
Classical Physics	BSC	3	1	0	4
Calculus & Ordinary Diff. Equations	BSC	3	1	0	4
Basic Electronics	ESC	3	1	0	4
Basic Electronics Lab	ESC	0	0	3	1.5
Programming for Problem Solving	ESC	3	0	3	4.5
Technical Comm. in English	HSMC	2	0	2	3
Indian Knowledge System	MC	1	0	0	1

A 3-week Mandatory Induction Program

### 2nd Semester

Courses	Type	L	T	P	C
Human Values and Ethics	HSMC	3	0	0	3
Environmental Science	MC	1	0	0	1
Linear Algebra & Complex Analysis	BSC	3	1	0	4
Data Structures and Algorithms	ESC	3	0	3	4.5
UG Physics Laboratory	BSC	0	0	3	1.5
Introduction to Scripting Languages	ESC	0	0	2	1
Digital Systems	PC	3	0	2	4
Discrete Mathematics	PC	3	0	0	3

**Summer Term** Exit option with UG Certificate\* by complepling 40 credits from 2 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 3rd Semester

Courses	Type	L	T	P	C
Probability and Statistics	BSC	3	1	0	4
Design and Analysis of Algorithms	PC	3	0	2	4
Signals and Systems	PC	3	1	0	4
Com. Organization & Architecture	PC	3	0	0	3
Database Management Systems	ESC	3	0	2	4
Object Oriented Programming	PC	3	0	2	4

### 4th Semester

Courses	Type	L	T	P	C
Constitutional Studies	MC	1	0	0	1
Web Programming	PC	0	0	2	1
Operating Systems	PC	3	0	2	4
Computer Comm. Networks	PC	3	0	2	4
Analog & Digital Communication	PC	3	0	0	3
Analog & Digital Comm. Lab	PC	0	0	3	1.5
Embedded Systems and IoT	PC	3	0	3	4.5
Program Elective - 1	PE	3	0	0	3

**Summer Term** Exit option with UG Diploma by complepling 80 credits from 4 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 5th Semester

Courses	Type	L	T	P	C
Summer Internship/Project	Project	0	0	8	4
Psychology, Techno. & Society	HSMC	3	0	0	3
Wireless Communication	PC	3	0	0	3
Wireless Communication lab	PC	0	0	3	1.5
Software Engineering	PC	3	0	0	3
Digital Signal Processing	PC	3	0	0	3
Digital Signal Processing Lab	PC	0	0	3	1.5
Software Development Lab	PC	0	0	2	1
Program Elective - 2	PE	3	0	0	3
Multiagent Systems	SC	3	0	0	3
Data Science Lab	SC	0	0	2	1
Artificial Intelligence Lab	SC	0	0	2	1

### 6th Semester

Courses	Type	L	T	P	C
B.Tech. Project (BTP)	Project	0	0	8	4
Introduction to Economics	HSMC	3	0	0	3
Seminar and Presentation Skills	Project	0	0	2	1
Information Theory and Coding	PC	3	0	0	3
Control System Engineering	PC	3	0	0	3
Introduction to AI and ML	PC	3	0	2	4
Program Elective - 3	PE	3	0	0	3
Machine Learning	SC	3	0	0	3
Machine Learning Lab	SC	0	0	2	1
Specialization Elective 1	SC	3	0	0	3

**Summer Term** Exit option with B.Sc. by complepling 120 credits from 6 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 7th Semester

Courses	Type	L	T	P	C
B.Tech. Project (BTP)	Project	0	0	8	4
Program Elective - 4	PE	3	0	0	3
Program Elective - 5	PE	3	0	0	3
Open Elective - 1	OE	3	0	0	3
Open Elective - 2	OE	3	0	0	3
Introduction to Big Data	SC	2	0	2	3
Specialization Elective 2	SE	3	0	0	3

### 8th Semester

S. No.	Courses	Type	L	T	P	C
Option 1	Industrial SLI	Project	0	0	24	12
	Or					
Option 2	Thesis	Project	0	0	24	12
	Or					
Option 3	4 Elective Courses	OE/PE	12	0	0	12
	Or					
Option 4	Project	Project	0	0	12	6
	2 Elective Courses	OE/PE	6	0	0	6
	Or					
Option 5	Internship	Project	0	0	12	6
	2 Elective Courses	OE/PE	6	0	0	6

The students can opt one option only.

## Faculty Members



**Sunil Kumar**

Assistant Professor & HoD

Ph.D., LNMIIT Jaipur

Research Areas: IoT, CPS, Sensor Networks, Distributed Systems, Multi-core Systems



**Ranjan Gangopadhyay**

Research Professor

Ph.D., IIT Kharagpur

Joint Appointment with ECE

Research Areas: Photonics & Wireless Communication, Cognitive Radio



**Abhishek Sharma**

Associate Professor

Ph.D., University of Genova, Italy

Joint Appointment with ECE

Research Areas: Embedded Systems and High Performance Embedded Computing



**Jayaprakash Kar**

Associate Professor

Ph.D., Utkal University, Bhubaneswar

Joint Appointment with CSE

Research Areas: Cryptology, Provable Security, Bitcoin & Cryptocurrency Technologies and Cyber Security



**Anirudh Agarwal**

Assistant Professor

Ph.D., LNMIIT Jaipur

Joint Appointment with ECE

Research Areas: 5G Wireless Comm., Green Comm. Networks (involving Wireless Power Transfer), Applied Machine Learning and Optimization



**Anukriti Bansal**

Assistant Professor

Ph.D., IIT Delhi

Joint Appointment with CSE

Research Areas: Image Processing, Machine Learning, Pattern Recognition



**Prateek Rathore**

Assistant Professor

Ph.D., IIT Guwahati

Research Areas: Modelling, Simulation, and Analyses of Wireless Networks



**Priyanka Gupta**

Assistant Professor (Contract)

Ph.D., DAIICT, Gandhinagar

Research Areas: Feature engineering using speech signal processing, neural network approaches for anti-spoofing for voice biometrics, and Automatic Speech Recognition (ASR) systems



**Rajbir Kaur**

Assistant Professor

Ph.D., MNIT Jaipur

Joint Appointment with CSE

Research Areas: Security in Mobile Ad-Hoc Networks, Internet of Things (IoT)



**Santosh Shah**

Assistant Professor

Ph.D., Universidad de Valencia Spain

Joint Appointment with ECE

Research Areas: Wireless Sensor Networks



**Varun Kumar Sharma**

Assistant Professor

Ph.D., Jaypee University of

Engg. & Tech., Guna

Joint Appointment with CSE

Research Areas: Network Communication

# Computer Science and Engineering (CSE)

Computer Science & Engineering (CSE) Department was established in the year 2008. The Department is ably supported by a team of faculty members having degrees from reputed institutes and excellent research credentials. The department currently has 35 faculty members, which include 2 Honorary Adjunct Professors, 1 Honorary Research Professor, 2 Visiting Professors, 1 Professor, 4 Associate Professors, 22 Assistant Professors and 3 Assistant Professors on contract.

## Programmes Offered

The Department offers the following programmes:

- Ph.D. Full time / Part-time
- M.S. (by Research) in CSE
- M.Tech. in CSE with specialization in AI & ML
- M.Tech in CSE
- M.Tech in CSE with specialization in Cybersecurity
- B.Tech. - M.Tech. (5- Year Integrated Degree) in CSE
- B.Tech. (Hons.) in CSE with Specialization in Artificial Intelligence & Data Science (AI & DS)
- B.Tech. in CSE
- B.Tech. with Minor in AI & DS (for ECE & ME students)

## Curriculum Highlights

The strength of each of the programmes lies in its progressive curriculum that offers flexibility to students to carefully select a set of program/other/ open electives to earn specialized knowledge in areas of their choice in all PG and UG programmes. We emphasize on hands-on based learning to bridge the gap between academia and industry. Projects and theses are encouraged to deal with real-world problems using emerging technologies. To enhance student learning, Department regularly organizes workshops and lectures by experts from renowned institutes, industries and organizations.

### • Specialization in Artificial Intelligence and Data Science

The specialization track provides an opportunity to students to specialize in this emerging domain by choosing a select set of additional courses. This specialization will enable them to innovate and solve real-life problems in the areas of Artificial Intelligence and Data Science. It addresses the need of equipping students with skill-sets in accordance with the new-age job requirements.

### • Minor in Artificial Intelligence and Data Science \*

The Department offers a Minor in the domain of Artificial Intelligence and Data Science to B.Tech. (ECE) and B.Tech. (ME) students to equip them with the required knowledge and enable them to be job-ready for related opportunities available in the industry. List of Additional Credit Courses for Minor in Artificial Intelligence & Data Science :

Course	(L-T-P-C)	Course	(L-T-P-C)
<b>Third Semester</b> • Discrete Mathematical Structures	Pass/Fail	<b>Sixth Semester</b> • Machine Learning • Machine Learning Lab	3-0-0-3 0-0-2-1
<b>Fourth Semester</b> • Design and Analysis of Algorithms • Probability & Statistics (For Mechanical Engineering students only)	Pass/Fail Audit	<b>Seventh Semester</b> • Artificial Intelligence • Artificial Intelligence Lab • Introduction to Big Data	3-0-0-3 0-0-2-1 2-0-2-3
<b>Fifth Semester</b> • Introduction to Data Science • Data Science Lab	3-0-0-3 0-0-2-1	<b>Eighth Semester</b> • Capstone project • Ethics in Artificial Intelligence & Data Science	3-0-0-3 1-0-0-1

\* Under revision and may change for Y 2024 batch.

## Computing Infrastructure

With a focus on holistic development, the department enables an environment to learn various IT technologies including programming environment, distributed environment (HPC, GPU), software development tools, design environment etc. In order to facilitate these, the department has rich hardware infrastructure including high performance computing system (seven nodes with 140-core), GPU server, Computing servers, network-attached storage (NAS) and storage area network (SAN). An NVIDIA DGX supercomputing unit with Deep Learning / AI framework support with higher than 1x PFLOP has been recently added to our computing infrastructure. There are three big computing laboratories with around 300 high-end computing nodes and a dedicated research laboratory for M.Tech. and Doctoral students.

The department has several compilers, Network Simulators, CPU Simulators, scientific softwares in addition to experimental toolkits related to IoT, Image Processing, Data Analytics. Department also provides access to computational resources beyond working hours to encourage self-learning, hands-on practice and innovation.

## Program Educational Objectives (PEOs)

**PEO1:** Be able to apply the principles of computer science and engineering, mathematics, and relevant sciences to solve problems requiring knowledge of the discipline.

**PEO2:** Be able to identify and analyze technology-related real-life problems and propose the models, designs and solutions addressing all relevant challenges.

**PEO3:** Be engaged in research and life-long learning, adapting new ideas, modern tools and technologies in multi-disciplinary projects by being a competent leader or a team member while possessing ethical values and effective communication skills.

**PEO4:** Be a professional, responsible for the environment and its sustainability and aware of contemporary socio-economic, cultural, and legal issues.



## B.Tech. in Computer Science and Engineering (CSE)

### 1st Semester

Courses	Type	L	T	P	C
Classical Physics	BSC	3	1	0	4
Calculus & Ordinary Diff. Equations	BSC	3	1	0	4
Basic Electronics	ESC	3	1	0	4
Basic Electronics Lab	ESC	0	0	3	1.5
Programming for Problem Solving	ESC	3	0	3	4.5
Technical Comm. in English	HSMC	2	0	2	3
Indian Knowledge System	MC	1	0	0	1

A 3-week Mandatory Induction Program

### 2nd Semester

Courses	Type	L	T	P	C
Human Values and Ethics	HSMC	3	0	0	3
Environmental Science	MC	1	0	0	1
Linear Algebra & Complex Analysis	BSC	3	1	0	4
Data Structures and Algorithms	ESC	3	0	3	4.5
UG Physics Laboratory	BSC	0	0	3	1.5
Introduction to Scripting Languages	ESC	0	0	2	1
Digital Systems	PC	3	0	2	4
Discrete Mathematics	PC	3	0	0	3

Summer Term Exit option with UG Certificate\* by complepling 40 credits from 2 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 3rd Semester

Courses	Type	L	T	P	C
Probability and Statistics	BSC	3	1	0	4
Signals and Systems	PC	3	0	0	3
Com. Organization & Architecture	PC	3	0	2	4
Database Management Systems	PC	3	0	2	4
Object Oriented Programming	PC	3	0	2	4
Design and Analysis of Algorithms	PC	3	0	2	4

### 4th Semester

Courses	Type	L	T	P	C
Constitutional Studies	MC	1	0	0	1
Principles of Management	HSMC	3	0	0	3
Web Programming	PC	0	0	2	1
Theory of Computation	PC	3	0	0	3
Operating Systems	PC	3	0	2	4
Computer Networks	PC	3	0	2	4
Data Science	PC	3	0	0	3
Program Elective 1	PE	3	0	0	3

Summer Term Exit option with UG Diploma by complepling 80 credits from 4 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 5th Semester

Courses	Type	L	T	P	C
Summer Internship/Project	Project	0	0	8	4
Psychology, Technology & Society	HSMC	3	0	0	3
Software Engineering	PC	3	0	0	3
Artificial Intelligence	PC	3	0	2	4
Computer System Security	PC	3	0	2	4
Software Development Lab	PC	0	0	2	1
Program Elective 2	PE	3	0	0	3

### 6th Semester

Courses	Type	L	T	P	C
B.Tech. Project (BTP)	Project	0	0	8	4
Introduction to Economics	HSMC	3	0	0	3
Seminar and Presentation Skills	Project	3	0	2	1
Numerical Analysis & Scientific Computing	BSC	3	1	0	4
Program Elective 3	PE	3	0	0	3
Program Elective 4	PE	3	0	0	3
Open Elective 1	OE	3	0	0	3

Summer Term Exit option with B.Sc. by complepling 120 credits from 6 semesters and addional 6 credits from an Internship or skill based courses in the summer term

### 7th Semester

Courses	Type	L	T	P	C
B.Tech. Project (BTP)	Project	0	0	8	4
Program Elective 5	PE	3	0	0	3
Program Elective 6	PE	3	0	0	3
Open Elective 2	OE	3	0	0	3
Open Elective 3	OE	3	0	0	3

### 8th Semester

S. No.	Courses	Type	L	T	P	C
Option 1	Industrial SLI	Project	0	0	24	12
	Or					
Option 2	Thesis	Project	0	0	24	12
	Or					
Option 3	4 Elective Courses	OE/PE	12	0	0	12
	Or					
Option 4	Project	Project	0	0	12	6
	2 Elective Courses	OE/PE	6	0	0	6
	Or					
Option 5	Internship	Project	0	0	12	6
	2 Elective Courses	OE/PE	6	0	0	6

The students can opt one option only.

## B.Tech. (Hons.) in CSE with Specialization in Artificial Intelligence & Data Science\*

\*This curriculum is for 2023 batch and may be changed for 2024 batch

### 1st Semester

Courses	Type	L	T	P	C
Classical Physics	BSC	3	1	0	4
Calculus & Ordinary Diff. Equations	BSC	3	1	0	4
Basic Electronics	ESC	3	1	0	4
Basic Electronics Lab	ESC	0	0	3	1.5
Programming for Problem Solving	ESC	3	0	3	4.5
Technical Comm. in English	HSMC	2	0	2	3
Indian Knowledge System	MC	1	0	0	1

A 3-week Mandatory Induction Program

### 2nd Semester

Courses	Type	L	T	P	C
Human Values and Ethics	HSMC	3	0	0	3
Environmental Science	MC	1	0	0	1
Linear Algebra & Complex Analysis	BSC	3	1	0	4
Data Structures and Algorithms	ESC	3	0	3	4.5
UG Physics Laboratory	BSC	0	0	3	1.5
Introduction to Scripting Languages	ESC	0	0	2	1
Digital Systems	PC	3	0	2	4
Discrete Mathematics	PC	3	0	0	3

**Summer Term** Exit option with UG Certificate\* by complepling 40 credits from 2 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 3rd Semester

Courses	Type	L	T	P	C
Probability and Statistics	BSC	3	1	0	4
Signals and Systems	PC	3	0	0	3
Com. Organization & Architecture	PC	3	0	2	4
Database Management Systems	PC	3	0	2	4
Object Oriented Programming	PC	3	0	2	4
Design and Analysis of Algorithms	PC	3	0	2	4

### 4th Semester

Courses	Type	L	T	P	C
Constitutional Studies	MC	1	0	0	1
Principles of Management	HSMC	3	0	0	3
Web Programming	PC	0	0	2	1
Theory of Computation	PC	3	0	0	3
Operating Systems	PC	3	0	2	4
Computer Networks	PC	3	0	2	4
Data Science	PC	3	0	0	3
Program Elective 1	PE	3	0	0	3

**Summer Term** Exit option with UG Diploma by complepling 80 credits from 4 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 5th Semester

Courses	Type	L	T	P	C
Summer Internship/Project	Project	0	0	8	4
Psychology, Technology & Society	HSMC	3	0	0	3
Software Engineering	PC	3	0	0	3
Artificial Intelligence	PC	3	0	2	4
Computer System Security	PC	3	0	2	4
Software Development Lab	PC	0	0	2	1
Program Elective 2	PE	3	0	0	3
Multiagent Systems	SC	3	0	0	3
Data Science Lab	SC	0	0	2	1
Artificial Intelligence Lab	SC	0	0	2	1

### 6th Semester

Courses	Type	L	T	P	C
B.Tech. Project (BTP)	Project	0	0	8	4
Introduction to Economics	HSMC	3	0	0	3
Seminar and Presentation Skills	Project	3	0	2	1
Numerical Analysis & Scientific Computing	BSC	3	1	0	4
Program Elective 3	PE	3	0	0	3
Program Elective 4	PE	3	0	0	3
Open Elective 1	OE	3	0	0	3
Machine Learning	SC	3	0	0	3
Machine Learning Lab	SC	0	0	2	1
Specialization Elective 1	SE	3	0	0	3

**Summer Term** Exit option with B.Sc. by complepling 120 credits from 6 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 7th Semester

Courses	Type	L	T	P	C
B.Tech. Project (BTP)	Project	0	0	8	4
Program Elective 5	PE	3	0	0	3
Program Elective 6	PE	3	0	0	3
Open Elective 2	OE	3	0	0	3
Open Elective 3	OE	3	0	0	3
Introduction to Big Data	SC	2	0	2	3
Specialization Elective 2	SE	3	0	0	3

### 8th Semester

S. No.	Courses	Type	L	T	P	C
Option 1	Industrial SLI	Project	0	0	24	12
	Or					
Option 2	Thesis	Project	0	0	24	12
	Or					
Option 3	4 Elective Courses	OE/PE	12	0	0	12
	Or					
Option 4	Project	Project	0	0	12	6
	2 Elective Courses	OE/PE	6	0	0	6
	Or					
Option 5	Internship	Project	0	0	12	6
	2 Elective Courses	OE/PE	6	0	0	6

The students can opt one option only.

## B.Tech.-M.Tech. (5-year Integrated Degree) CSE

### 1st Semester

Courses	Type	L	T	P	C
Classical Physics	BSC	3	1	0	4
Calculus & Ordinary Diff. Equations	BSC	3	1	0	4
Basic Electronics	ESC	3	1	0	4
Basic Electronics Lab	ESC	0	0	3	1.5
Programming for Problem Solving	ESC	3	0	3	4.5
Technical Comm. in English	HSMC	2	0	2	3
Indian Knowledge System	MC	1	0	0	1

A 3-week Mandatory Induction Program

### 2nd Semester

Courses	Type	L	T	P	C
Human Values and Ethics	HSMC	3	0	0	3
Environmental Science	MC	1	0	0	1
Linear Algebra & Complex Analysis	BSC	3	1	0	4
Data Structures and Algorithms	ESC	3	0	3	4.5
UG Physics Laboratory	BSC	0	0	3	1.5
Introduction to Scripting Languages	ESC	0	0	2	1
Digital Systems	PC	3	0	2	4
Discrete Mathematics	PC	3	0	0	3

Summer Term Exit option with UG Certificate by compleing 40 credits from 2 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 3rd Semester

Courses	Type	L	T	P	C
Probability and Statistics	BSC	3	1	0	4
Signals and Systems	ESC	3	0	0	3
Com. Organization & Architecture	PC	3	0	2	4
Database Management Systems	PC	3	0	2	4
Object Oriented Programming	PC	3	0	2	4
Design and Analysis of Algorithms	PC	3	0	2	4

### 4th Semester

Courses	Type	L	T	P	C
Constitutional Studies	MC	1	0	0	1
Principles of Management	HSMC	3	0	0	3
Web Programming	PC	0	0	2	1
Theory of Computation	PC	3	0	0	3
Operating Systems	PC	3	0	2	4
Computer Networks	PC	3	0	2	4
Data Science	PC	3	0	0	3
Program Elective 1	PE	3	0	0	3

Summer Term Exit option with UG Diploma by compleing 80 credits from 4 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 5th Semester

Courses	Type	L	T	P	C
Summer Internship/Project	Project	0	0	8	4
Psychology, Technology & Society	HSMC	3	0	0	3
Software Engineering	PC	3	0	0	3
Artificial Intelligence	PC	3	0	2	4
Computer System Security	PC	3	0	2	4
Software Development Lab	PC	0	0	2	1
Program Elective 2	PE	3	0	0	3

### 6th Semester

Courses	Type	L	T	P	C
Introduction to Economics	HSMC	3	0	0	3
Numerical Analysis & Scientific Com.	BSC	3	1	0	4
Program Elective 3	PE	3	0	0	3
Program Elective 4	PE	3	0	0	3
Open Elective 1	OE	3	0	0	3

Summer Term Exit option with B.Sc. by compleing 120 credits from 6 semesters and addional 6 credits from an Internship or skill based courses in the summer term

### 7th Semester

Courses	Type	L	T	P	C
Thesis	Project	0	0	8	4
Advanced Data Structures	PC	3	0	2	4
Program Elective 5	PE	3	0	0	3
Program Elective 6	PE	3	0	0	3
Open Elective 2	OE	3	0	0	3
Open Elective 3	OE	3	0	0	3

### 8th Semester

Courses	Type	L	T	P	C
Thesis	Project	0	0	8	4
Seminar and Presentation Skills	Project	0	0	2	1
Advanced Algorithms	PC	3	0	2	4
Program Elective 7	PE	3	0	0	3
Program Elective 8	PE	3	0	0	3
Open Elective 4	OE	3	0	0	3

### 9th Semester

Courses	Type	L	T	P	C
Thesis	Project	0	0	24	12
Program Elective 9	PE	3	0	0	3
Program Elective 10	PE	3	0	0	3
Open Elective 5	OE	3	0	0	3

### 10th Semester

Courses	Type	L	T	P	C
Thesis	Project	0	0	24	12
Internship	Project	0	0	24	12

## M.Tech. in Computer Science and Engineering \*

The following curriculum are under preparation ( Any future changes will be available in e-copy of brochure on the institute website)\*  
 (i) M.Tech in CSE with specialization in AI & ML (ii) M.Tech in CSE with specialization in Cybersecurity

### 1st Semester

Courses	Type	L	T	P	C
Advanced Data Structures & Algo.	PC	3	0	2	4
Mathematical Structures for Engg.	PC	3	0	0	3
Program Elective 1	PE	3	0	0	3
Program Elective 2	PE	3	0	0	3
Program Elective 3	PE	3	0	0	3

### 2nd Semester

Courses	Type	L	T	P	C
Machine Learning & Pattern Reco.	PC	3	0	2	4
Tech. Writing & Research Metho:	PC	4	0	0	4
Program Elective - 4	PE	3	0	0	3
Program Elective - 5	PE	3	0	0	3
Program Elective - 6	PE	3	0	0	3

### 3rd Semester

Courses	Type	L	T	P	C
M. Tech. Thesis I	PC	0	0	18	9
Program Elective - 7	PE	3	0	0	3
Open Elective	OE	3	0	0	3

### 4th Semester

Courses	Type	L	T	P	C
M. Tech. Thesis II	PC	0	0	36	18

### List of Programme Electives

Approximation & randomised algorithms	Introduction to convex optimization	Machine learning
Big data analytics	Introduction to convex optimization	Multagent systems
Cloud computing	Natural language processing	Wireless sensor networks
Computer graphics	Internet-of-things technologies	Network security
Compiler optimization	Information retrieval and web search	Network-on-chip
Data mining	Introduction to simulation & modeling	Optimization techniques & applications
Soft computing	Digital image processing	Parallel computer architecture
Malware: threats and analysis	Introduction to game theory	Principles of programming languages
Deep learning	Mobile ad hoc networks	Real time systems
Functional and non-functional testing	Machine learning & pattern recognition	Software metrics and design strategies
Genetic algorithms & applications	Mathematical structures for engineers	Social network analysis
Introduction to artificial intelligence	Multimedia processing & applications	Coding theory

### List of Specialization Electives

Analytics for internet of things	Knowledge graphs	Reinforcement learning
Computer vision & applications	Knowledge representation, reasoning & applications	Sequential pattern mining
Deep learning	Mining massive datasets	Social network analysis
Human-computer interaction	Natural language processing	Security and privacy in data science
Information visualization		Other relevant electives

### List of Other Electives (Available to all UG Programmes)

Active directory	French	Natural nano world: DFM
Algebra	Graph theory	Numeric linear algebra
Automotive electronics	Green communication and networking	Numerical analysis
Autosar	Indian modernity: text & context	Numerical methods
Basics of finance and soft skills	Industrial engineering and management	Operation research
Bio-medical engineering	Industrial management	Optimization
Biosensors: concepts and applications	International economics and soft skills	Organic electronics & opto electronics: MA
Cinema and indian society	Internet of things	Organizational behaviour
Classical mechanics and field theory	Introduction to nano science & engg.	Pervasive computing
Colonialism & the making of modern india	Linear algebra	Physics of material
Computational physics	Logical and critical thinking	Physics of the universe
Corpus pragmatics	Macro economics for managers	Pragmatics in social media
Digital vlsi circuits	Mathematical physics	Solid state physics
Electrical machines & power systems	Mathematical structures for engineers	Superconductivity: basics & applications
Engineering chemistry	Modernism: literary representation	System dynamics and control
Entrepreneurship practice	Nano technology	System level specifications and design
Ethnic conflict: literature & south asia	Non linear dynamics and chaos	The self: aspects and implications

## Faculty Members



**Jayaprakash Kar**

Associate Professor & HoD  
Ph.D., Utkal University, Bhubaneswar  
Research Areas: Cryptology, Provable Security, Blockchain Technologies and Cyber Security



**Rahul Banerjee**

Professor  
Ph.D., Faculty of Engineering & Tech., AU  
Research Areas: Computer Networking, Wearable Computing, Ubiquitous Computing (CPS/IoT), Intelligent Systems



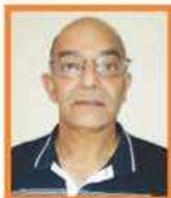
**Bimal Kumar Roy**

Research Professor  
Ph.D., University of Waterloo, Canada  
Research Areas: Combinatorics, and application of Statistics in Cryptology and Design of Experiments



**Ravi Prakash Gorthi**

Honorary Adjunct Professor  
Ph.D., IIT Madras  
Research Areas: Software & Performance Engineering, Human Computer Interaction, Artificial Intelligence



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Ph.D., IIT Kanpur  
Research Areas: Software Engineering, Programming Languages, Sensor Networks



**Prof Bhawani Sankar Panda**

Visiting Professor  
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Research Areas: Graph Theory, Algorithms and Parallel Computing, Machine Learning on Graphs  
(\* w.e.f. from 1 July, 2024)



**C. Pandu Rangan**

Visiting Professor  
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Research Areas: Cryptography and Security Protocols, Graph theory, Computational Geometry, Randomized and Parallel Algorithms



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Research Areas: Deep Learning, Pattern Recognition, Computer Vision



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Research Areas: Metaheuristics, Optimization, Swarm intelligence



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Research Areas: Data Mining, Machine Learning & Soft Computing, Security and Privacy



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Research Areas: Computer Vision, Image Restoration, and Image Synthesis



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Research Areas: Formal Methods, Program Analysis and Verification, Database Applications, Blockchain, Smart Contracts, and Machine Learning



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Research Areas: Web Application Security, Smart Contract Security (Blockchain)



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Research Areas: Cyber Security, Machine Learning, Software Engineering



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Research Areas: Machine Learning, Deep Learning, Natural Language Processing, Large Language Models



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Research Areas: Software Requirements Engineering, Software Testing, Software Quality Assurance, Architecting Software, Prediction and Estimation using Deep Learning



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Research Areas: Facial Expression Analysis, Medical Image Analysis and Classification, Machine Learning, Deep Learning, Computer Vision



**Nitesh Pradhan**

Assistant Professor

Ph.D Manipal University Jaipur  
Research Area: Machine Learning, Medical Imaging, Image Preprocessing, pattern recognition



**Abhijit Adhikari**

Assistant Professor

Ph.D NIT Durgapur

Research Area: KNOWLEDGE GRAPHS, SEMANTIC MEASURES, NLP, AI



**Ritu Sharma**

Assistant Professor (On contract)

Ph.D MNIT Jaipur

Research Area: Information Retrieval and Filtering, Artificial Intelligence, Machine Learning, Recommender Systems



**Jitendra Goyal**

Assistant Professor (On contract)

Ph.D MNIT JAIPUR

Research Area: Blockchain Technology, IoT Security



**Lal Upendra Pratap Singh**

Assistant Professor

Ph.D IIIT Allahabad

Research Area: Machine Learning, Deep Learning, Optimization, Transfer Learning for Computer Vision & Applied Natural Language Processing



# Electronics and Communication Engineering (ECE)

The Department of Electronics and Communication Engineering (ECE) was established in the year 2008, with only 58 students and 6 faculty members. The department currently has 37 faculty members, which include a Research Professor, 1 Professor of Practice, 1 Emeritus Professors, 2 Adjunct Professor, 4 Associate Professors and 28 Assistant Professors. Most of the faculty members have Ph.D. degrees from different IITs, NITs, and premier institutions in India and abroad. There is a blend of young and experienced faculty members, who are committed to provide quality education and research in the field of Communication and Signal Processing, VLSI and Embedded Systems Design, RF & Microwave, and greater few other areas. The ECE department nourishes a vibrant research environment motivated by our dedicated faculty and students. The department anchors two research centers (Center for Next Generation Communication Networks and LNMIIT Centre for Smart Technology). Along with this, the department has six laboratory staff and an Office Assistant who take care of different undergraduate and post-graduate laboratories and Department related works.

## Programmes Offered

The Department of ECE offers the following programmes:

- Ph.D.
- M.Tech. in ECE
- M.S. (by Research) in ECE
- B.Tech. in ECE
- B.Tech. - M.Tech. (5-Year Integrated Degree) in ECE

## Curriculum Highlights

All the students enjoy the academic freedom to choose their topics of interest, from an array of Elective Courses, through Program/ Open Electives. The courses under Program Electives are designed in such a way that it provides them the understanding of various domains of relevance, in which they may pursue the higher studies; whereas, the Open Electives are provided to broaden the horizon of knowledge. The faculty members are always encouraged to design and develop new courses, so that the students can get the maximum benefit of their rich experience and be exposed to current topics of higher learning. Additionally, the department offers academic flexibility to the students, which allow them to complete the credit requirement for the degree programme before the stipulated time and pursue their career interests in terms of semester-long academic internship or short term assignments in the reputed organizations. Additionally, an option of minor programme in Artificial Intelligence & Data Science and Robotics and Automation is available for B.Tech. ECE students.

## Laboratory Facilities

The laboratories are well-equipped with quality hardware instruments and software platforms for the purpose of measurement, analysis, and simulations in various areas of research, i.e., Communication (in particular Mobile Communication), Signal Processing, RF and Microwave, VLSI, etc. In order to provide adequate training and exposure to the undergraduate and postgraduate students, the Dept. of ECE has the following laboratories - Basic Electronics Lab, Communication Lab, Microwave Lab, E-CAD Lab, DSP Lab, Microprocessor and Interface Lab. Moreover, for the postgraduate students, there is a PG Research Lab. The students use these laboratories for their regular lab courses as per the curriculum and utilize some of the equipment/ software beyond the regular class hours to complete the given projects and carry out research activities. Some of the Laboratories are technically supported by industrial leaders like National Instruments (NI), Texas Instruments (TI), Intel Intelligent Systems Laboratory, etc. Moreover, the ARM Lab University Program enable the students to use ARM technologies in microprocessors/ microcontrollers, Mechatronics, SoC design by providing teaching material, hardware platform, etc.

## Program Educational Objectives (PEOs)

**PEO-1:** Ability to integrate, apply fundamental knowledge of Electronics and Communication Engineering, basic sciences and mathematics for solving complex real-life problems.

**PEO-2:** Ability to apply advanced engineering techniques and tools to implement multidisciplinary projects, developmental challenges with responsibility and leadership.

**PEO-3:** Engage in effective teamwork & collaborative project or work requiring technical, environmental, and socio-economic considerations through life-long learning, research activities, mentorship, and dissemination of work by publications, presentations etc.

**PEO-4:** Exhibit professionalism in their engineering ability, ethical values, technical communication skill, to provide solutions that are technically sound, economically feasible, bounded by law and regulatory constraints, and socially acceptable.

## B.Tech. in Electronics and Communication Engineering (ECE)

### 1st Semester

Courses	Type	L	T	P	C
Classical Physics	BSC	3	1	0	4
Calculus & Ordinary Diff. Equations	BSC	3	1	0	4
Basic Electronics	ESC	3	1	0	4
Basic Electronics Lab	ESC	0	0	3	1.5
Programming for Problem Solving	ESC	3	0	3	4.5
Technical Comm. in English	HSMC	2	0	2	3
Indian Knowledge System	MC	1	0	0	1

A 3-week Mandatory Induction Program

### 2nd Semester

Courses	Type	L	T	P	C
Human Values and Ethics	HSMC	3	0	0	3
Environmental Science	MC	1	0	0	1
Linear Algebra & Complex Analysis	BSC	3	1	0	4
Data Structures and Algorithms	ESC	3	0	3	4.5
UG Physics Laboratory	BSC	0	0	3	1.5
Introduction to Scripting Languages	ESC	0	0	2	1
Semiconductor Devices & Circuits	PC	3	0	0	3
Analog Electronics	PC	3	0	0	3
Analog Electronics Lab	PC	0	0	3	1.5

Summer Term Exit option with UG Certificate by compleing 40 credits from 2 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 3rd Semester

Courses	Type	L	T	P	C
Probability and Statistics	PC	3	1	0	4
Signals and Systems	PC	3	0	0	3
Signals and Systems Lab	PC	0	0	3	1.5
Digital Circuit and Systems	PC	3	0	0	3
Digital Circuit and Systems Lab	PC	0	0	3	1.5
Engineering Electromagnetics	PC	3	0	0	3
Microprocessor & Microcon.	PC	3	0	0	3
Microprocessor & Microcon. Lab	PC	0	0	3	1.5
Network Analysis and Synthesis	PC	3	0	0	3

### 4th Semester

Courses	Type	L	T	P	C
Constitutional Studies	MC	1	0	0	1
Analog & Digital Communication	PC	3	0	0	3
Analog & Digital Comm. Lab	PC	0	0	3	1.5
Fundamentals of VLSI	PC	3	0	0	3
VLSI Lab	PC	0	0	3	1.5
Microwave Engineering	PC	3	0	0	3
Microwave Engineering Lab	PC	0	0	3	1.5
Design and Project Lab	PC	0	0	3	1.5
Introduction to AI and ML	PC	3	0	2	4

Summer Term Exit option with UG Diploma by compleing 80 credits from 4 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 5th Semester

Courses	Type	L	T	P	C
Summer Internship/Project	Project	0	0	8	4
Psychology, Technology & Society	HSMC	3	0	0	3
Wireless Communication	PC	3	0	0	3
Wireless Communication lab	PC	0	0	3	1.5
Control System Engineering	PC	3	0	2	4
Digital Signal Processing	PC	3	0	0	3
Digital Signal Processing Lab	PC	0	0	3	1.5
Program Elective 1	PE	3	0	0	3

### 6th Semester

Courses	Type	L	T	P	C
B.Tech. Project (BTP)	Project	0	0	8	4
Introduction to Economics	HSMC	3	0	0	3
Seminar and Presentation Skills	Project	0	0	2	1
5G Wireless Systems & beyond	PC	3	0	0	3
Computer Comm. Networks	PC	3	0	2	4
Program Elective 2	PE	3	0	0	3
Program Elective 3	PE	3	0	0	3
Open Elective 1	OE	3	0	0	3

Summer Term Exit option with B.Sc. by compleing 120 credits from 6 semesters and addional 6 credits from an Internship or skill based courses in the summer term

### 7th Semester

Courses	Type	L	T	P	C
B.Tech. Project (BTP)	Project	0	0	8	4
Program Elective 4	PE	3	0	0	3
Program Elective 5	PE	3	0	0	3
Open Elective 2	OE	3	0	0	3
Open Elective 3	OE	3	0	0	3

### 8th Semester

S. No.	Courses	Type	L	T	P	C
Option 1	Industrial SLI	Project	0	0	24	12
	Or					
Option 2	Thesis	Project	0	0	24	12
	Or					
Option 3	4 Elective Courses	OE/PE	12	0	0	12
	Or					
Option 4	Project	Project	0	0	12	6
	2 Elective Courses	OE/PE	6	0	0	6
	Or					
Option 5	Internship	Project	0	0	12	6
	2 Elective Courses	OE/PE	6	0	0	6

The students can opt one option only.

## B.Tech.-M.Tech. (5-year Integrated Degree) ECE

### 1st Semester

Courses	Type	L	T	P	C
Classical Physics	BSC	3	1	0	4
Calculus & Ordinary Diff. Equations	BSC	3	1	0	4
Basic Electronics	ESC	3	1	0	4
Basic Electronics Lab	ESC	0	0	3	1.5
Programming for Problem Solving	ESC	3	0	3	4.5
Technical Comm. in English	HSMC	2	0	2	3
Indian Knowledge System	MC	1	0	0	1

A 3-week Mandatory Induction Program

### 2nd Semester

Courses	Type	L	T	P	C
Human Values and Ethics	HSMC	3	0	0	3
Environmental Science	MC	1	0	0	1
Linear Algebra & Complex Analysis	BSC	3	1	0	4
Data Structures and Algorithms	ESC	3	0	3	4.5
UG Physics Laboratory	BSC	0	0	3	1.5
Introd. to Scripting Languages	ESC	0	0	2	1
Semiconductor Devices & Circuits	PC	3	0	0	3
Analog Electronics	PC	3	0	0	3
Analog Electronics Lab	PC	0	0	3	1.5

Summer Term Exit option with UG Certificate by compleing 40 credits from 2 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 3rd Semester

Courses	Type	L	T	P	C
Probability and Statistics	PC	3	1	0	4
Signals and Systems	PC	3	0	0	3
Signals and Systems Lab	PC	0	0	3	1.5
Digital Circuit and Systems	PC	3	0	0	3
Digital Circuit and Systems Lab	PC	0	0	3	1.5
Engineering Electromagnetics	PC	3	0	0	3
Micropro. & Microcontroller	PC	3	0	0	3
Micropro. & Microcontroller Lab	PC	0	0	3	1.5
Network Analysis and Synthesis	PC	3	0	0	3

### 4th Semester

Courses	Type	L	T	P	C
Constitutional Studies	MC	1	0	0	1
Analog & Digital Communication	PC	3	0	0	3
Analog & Digital Comm. Lab	PC	0	0	3	1.5
Fundamentals of VLSI	PC	3	0	0	3
VLSI Lab	PC	0	0	3	1.5
Microwave Engineering	PC	3	0	0	3
Microwave Engineering Lab	PC	0	0	3	1.5
Design and Project Lab	PC	0	0	3	1.5
Introduction to AI and ML	PC	3	0	2	4

Summer Term Exit option with UG Diploma by compleing 80 credits from 4 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 5th Semester

Courses	Type	L	T	P	C
Summer Internship/Mini Project	Project	0	0	8	4
Psychology, Technology & Society	HSMC	3	0	0	3
Wireless Communication	PC	3	0	0	3
Wireless Communication lab	PC	0	0	3	1.5
Control System Engineering	PC	3	0	2	4
Digital Signal Processing	PC	3	0	0	3
Digital Signal Processing Lab	PC	0	0	3	1.5
Program Elective 1	PE	3	0	0	3

### 6th Semester:

Courses	Type	L	T	P	C
Introduction to Economics	HSMC	3	0	0	3
5G Wireless Systems & beyond	PC	3	0	0	3
Computer Comm. Networks	PC	3	0	2	4
Program Elective 2	PE	3	0	0	3
Program Elective 3	PE	3	0	0	3
Open Elective 1	OE	3	0	0	3

Summer Term Exit option with B.Sc. by compleing 120 credits from 6 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 7th Semester

Courses	Type	L	T	P	C
Thesis	Project	0	0	8	4
Program Elective 4	PE	3	0	0	3
Program Elective 5	PE	3	0	0	3
Program Elective 6	PE	3	0	0	3
Open Elective 2	OE	3	0	0	3
Open Elective 3	OE	3	0	0	3

### 8th Semester

Courses	Type	L	T	P	C
Thesis	Project	0	0	8	4
Seminar and Presentation Skills	Project	0	0	2	1
Program Elective 7	PE	3	0	0	3
Program Elective 8	PE	3	0	0	3
Open Elective 4	OE	3	0	0	3
Open Elective 5	OE	3	0	0	3

### 9th Semester

Courses	Type	L	T	P	C
Thesis	Project	0	0	24	12
Program Elective 9	PE	3	0	0	3
Program Elective 10	PE	3	0	0	3

### 10th Semester

Courses	Type	L	T	P	C
Thesis	Project	0	0	24	12
Internship	Project	0	0	24	12

## List of Programme Electives

Advanced DSP	Design for testability	Microwave circuits and systems
Analog VLSI circuits	Digital image processing	Modeling and simulation
Antenna engineering	Digital systems design with FPGAs	Modern digital communication
Broadband communication	Embedded systems	Telecommunications switching systems & networks
Co-operative communication based advanced wireless systems	Embedded systems and design	Wireless communication
	Information theory and coding	

List of other electives for UG students has been provided in page number on 21.

## M.Tech. in Electronics and Communication Engineering (Specialization in "Wireless Communication and Network Engineering")

### 1st Semester

Courses	Type	L	T	P	C
Advanced Wireless Communication	PC	3	0	0	3
Wireless Communication Lab	PC	0	0	2	1
Communication Signal Processing and Algorithms	PC	3	0	0	3
Wireless and Mobile Networks	PC	3	0	0	3
Program Elective 1	PE	3	0	0	3
Program Elective 2	PE	3	0	0	3

### 2nd Semester

Courses	Type	L	T	P	C
5G Wireless Technology	PC	3	0	0	3
Wireless Systems and Design Lab	PC	0	0	2	1
Advanced RF Engineering	PC	3	0	0	3
VLSI Circuits and Systems	PC	3	0	0	3
Research Methodology and IPR	IC	2	0	0	2
Program Elective 3	PE	3	0	0	3
Program Elective 4	PE	3	0	0	3

### 3rd Semester

Courses	Type	L	T	P	C
M. Tech. Thesis I	PC	0	0	18	9
Program Elective 5	PE	3	0	0	3
Program Elective 6	PE	3	0	0	3
Open Elective	OE	3	0	0	3

### 4th Semester

Courses	Type	L	T	P	C
M. Tech. Thesis II	PC	0	0	36	18

## Tentative Clusters of Programme Electives

### Cluster 1

Course Name	Type	L	T	P	C
Intelligent Wireless Sensor Networks	PE	3	0	0	3
Software Defined Networks and Applications	PE	3	0	0	3
Internet of Things	PE	3	0	0	3
Error Control Coding	PE	3	0	0	3
AI and Deep Learning for Wireless Communication	PE	3	0	0	3
Optimization Methods in Engineering	PE	3	0	0	3
Statistical Signal Processing for Communication	PE	3	0	0	3

### Cluster 2

Course Name	Type	L	T	P	C
Radio Access Networks	PE	3	0	0	3
Advanced Photonics, Communication and Networking	PE	3	0	0	3
Wireless Network Performance Modelling and Analysis	PE	3	0	0	3
Advanced Cryptography	PE	3	0	0	3
Big Data Analytics	PE	3	0	0	3
5G Networks for IoT	PE	3	0	0	3
Detection and Estimation Theory	PE	3	0	0	3

**Cluster 3**

Course Name	Type	L	T	P	C
Next-generation Wireless Technology	PE	3	0	0	3
Network and Service Management and Control	PE	3	0	0	3
5G Network Architecture & Design	PE	3	0	0	3
Cyber-Physical Systems	PE	3	0	0	3
Embedded Communication	PE	3	0	0	3
Cloud Computing	PE	3	0	0	3
Mm-Wave Technology	PE	3	0	0	3



Note: The electives mentioned above should be chosen as marked 1, 2 from Cluster 1, as marked 3,4 from Cluster-2 and as marked 5,6 from the Cluster-3.

## Faculty Members

**Nikhil Sharma**

Assistant Professor &amp; HoD

Ph.D., NSIT Delhi

Research Areas: Wireless Comm.  
Cooperative Communication,  
Free-space Optics, Visible Light Comm

**Ranjan Gangopadhyay**

Research Professor

Ph.D., IIT Kharagpur

Research Areas: Photonics & Wireless  
Communication, Cognitive Radio

**Raghuvir Tomar**

Professor of Practice

Ph.D., IIT Kanpur

Research Areas: Electromagnetics,  
Radio Frequency and Microwaves,  
Antennas

**Ganesh Dutt Sharma**

Emeritus Professor

Ph.D., IIT Delhi

Research Areas: Organic Electronics,  
Organic Solar Cells, Dye Sensitized  
Solar Cells, Nano-Science & Technology

**Subrat Kar**

Adjunct Professor

Ph.D., IISc, Bangalore

Research Areas: Optical communication,  
switching, access technologies, telecom  
protocols, embedded systems and  
high-speed networks.

**Rajeev Shorey**

Adjunct Professor

Ph.D., IISc Bangalore, India

Research Area: Communication  
Networks, Data Analytics,  
Machine Learning and Artificial  
Intelligence etc.

**Divyang Rawal**

Associate Professor

Ph.D., DAIICT Gandhinagar

Research Areas: ICT, Signal  
Processing for Communication

**Kusum Lata**

Associate Professor

Ph.D., IISc Bangalore

Research Areas: Analog & Mixed Signal  
Design, Modeling and Design of VLSI  
Circuits, Low Power and Circuit Design

**Soumitra Debnath**

Associate Professor

Ph.D., IIT Kharagpur

Research Areas: Optical Networks,  
Queuing Theory, Cognitive Radio

**Abhishek Sharma**

Associate Professor

Ph.D., University of Genova, Italy

Research Areas: Embedded  
Systems and High Performance  
Embedded Computing



**Akash Gupta**  
Assistant Professor  
Ph.D., NSIT Delhi  
University of Delhi  
Research Areas: Optical Wireless Comm., Visible Light Communication, Energy Harvesting, IoT applications



**Anirudh Agarwal**  
Assistant Professor  
Ph.D., LNMIIT Jaipur  
Research Areas: 5G Wireless Comm., Green Comm. Networks (involving Wireless Power Transfer), Applied Machine Learning and Optimization



**Bharat Verma**  
Assistant Professor  
Ph.D., IIITDM Jabalpur  
Research Areas: Control System, Indirect Design Approach, PID Control, Intelligent Control, Bio-medical Signal Processing



**Chirag Kumar**  
Assistant Professor  
Ph.D., IIT Kanpur  
Research Areas: Applications and Algorithms for Discriminative Dictionary Learning



**Gopinath Samanta**  
Assistant Professor  
Ph.D., IEST Shibpur  
Research Areas: Implantable and Wearable Antenna, Wireless Power Transfer, Tera Hertz Antenna & Tera Hertz Electromagnetic Absorber, Meta-surface for performance improvement of Antenna



**Gaurav Chatterjee**  
Assistant Professor  
Ph.D., LIRMM-CNRS, Montpellier France  
Research Areas: MEMS, Sensors, Robotics



**Harshvardhan Kumar**  
Assistant Professor  
Ph.D., NIT Delhi  
Research Areas: Optoelectronic devices, nano-photonics, & electronic devices, Silicon-based photonics, & GeSn-based photodetectors and light emitters.



**Joyeeta Singha**  
Assistant Professor  
Ph.D., NIT Silchar  
Research Areas: Image and Video Processing, Hand Gesture Recognition



**Kanjalochan Jena**  
Assistant Professor  
Ph.D., NIT Silchar  
Research Areas: Solid-State Devices, Nanotechnology and Biosensors: Compact Modeling and Simulation



**M. V. Deepak Nair**  
Assistant Professor  
Ph.D., University of Rome, Tor-Vergata  
Research Areas: Linearization Techni. for High Frequency Power Amplifier



**Navneet Upadhyay**  
Assistant Professor  
Ph.D., BITS Pilani  
Research Areas: Speech Processing, Digital Communication



**Nikhil Raj**  
Assistant Professor  
Ph.D., NIT Kurukshetra  
Research Areas: Low Power Analog & Mixed Signal Design, Bio-inspired Circuit Design



**Purnendu Karmakar**  
Assistant Professor  
Ph.D. (Pursuing), IIT Kharagpur  
Research Areas: Wireless Comm. Comp. Networks, Trust & Reputation in Virtual Comm. & Social Network



**Sandeep Saini**  
Assistant Professor  
Ph.D., MNIT Jaipur  
Research Areas: VLSI Design, Microelectronics



**Santosh Shah**  
Assistant Professor  
Ph.D., Universidad de Valencia Spain  
Research Areas: Wireless Sensor Networks



**Suvadeep Choudhury**  
Assistant Professor  
Ph.D., IIT Kharagpur  
Research Areas: Antennas, RF & Microwave Engineering



**Rohit Rana**  
Assistant Professor  
Ph.D., NSUT, New Delhi  
Research Areas: Embedded Systems Design, Signal processing, Control Systems



**Ritesh Bhardwaj**  
Assistant Professor  
Ph.D., IIT Indore  
Research Area: Solid State Election Devices for new Generation Electronics/Technology.



**Vaibhav Kumar Gupta**  
Assistant Professor  
Ph.D., IIT Bombay  
Research Area: Game theoretic aspects & algorithms for wireless cellular networks, Non-Terrestrial Networks (NTN)



**Navneet Garg**  
Assistant Professor  
Ph.D., IIT Kanpur  
Research Area: Interference Alignment, Integrated Sensing & Communications, Full duplex, Edge Caching, Reinforcement Learning



**Jeet Ghosh**  
Assistant Professor  
Ph.D., IIEST Shibpur  
Research Area: RF and Microwave Antenna, Metamaterial, Artificial Electromagnetic Surfaces.



**Shailza Gotra**  
Assistant Professor  
Ph.D., NIT Delhi  
Research Area: Microwave and Millimeter wave Antennas, Microwave Imaging Radar System



**Durga Prasad Mishra**  
Assistant Professor  
Ph.D., NIT ROURKELA  
Research Area: Radio Frequency Identification (RFID), Microwave and Antenna Engineering, UAV with RFID



**Harish Chandra Kumawat**  
Assistant Professor  
Ph.D., DIAT, Pune  
Research Area: RF, Signal Processing, Radar, Radar Signal Processing



**Deepshikha Lodhi**  
Assistant Professor (On contract)  
Ph.D., MNIT, Jaipur  
Research Area: RF and Microwave, UWB MIMO antennas, THz antennas



**Gurinder Singh**  
Assistant Professor (On contract)  
Ph.D., IIIT Delhi  
Research Area: VLC, NOMA, Edge Computing, Machine Learning and Reconfigurable Intelligent Surfaces



**Umesh Sharma**  
Assistant Professor (On contract)  
Ph.D., IIT Delhi  
Research Area: Statistical & Deterministic Signal Processing; Spectral Analysis of Signals; Signal Processing & Machine Learning for Sensing

## Mechanical-Mechatronics Engineering (MME)

The Department of Mechanical-Mechatronics Engineering aims to broaden the perspective of the engineering aspirants by showcasing different areas of Mechanical Engineering such as Robotics, Automobile-EVs, Engineering Design, Computer Integrated & Advanced-Unconventional manufacturing, Bio-mechanics etc. The MME department has a vision to transform the Mechanical Engineering aspirants into highly motivated and cultured engineers, technologists, researchers and entrepreneurs who are globally competitive and capable of leading in industry.

The team of MME department comprises young talented as well as experienced and enthusiastic faculty members having adequate academic, research and industrial experience. Therefore, students can benefit from the collective experience and knowledge available and make good use of it in taking up in research, development, industrial design projects etc. With academic nurturance, the students can pursue in designing, manufacturing, quality assurance, sales, and techno-management in industrial spheres.

### Programmes Offered

The Department of MME offers the following programmes:

- Ph.D.
- B.Tech. (Hons.) in ME with Specialization in Robotics & Automation
- B.Tech. with in Minor in Robotics & Automation (for B.Tech. CCE, CSE, ECE Programme)
- B.Tech. in Mechanical Engineering

### Curriculum Highlights <sup>#</sup>

The teaching-learning process is designed such that the students develop an ability to deal with real life challenges encountered in Manufacturing and Process Industries. For imparting skills, the department boasts of rich laboratory infrastructure. The undergraduates and research students of the department become Mechanical Engineering professionals readily employable by various industry such as: Aerospace industry, Automotive industry, Machine Tool Manufacturing, Product Design and Analysis, Oil and Gas, Biomedical Engineering, Business and Management, Manufacturing and Automation, Energy, Steel and many more. The department is offering Minor in Robotics and Automation and the courses required are listed below:

Course	(L-T-P-C)	Course	(L-T-P-C)
<b>Third Semester</b> • Introduction to Automation • Minor Project	3-0-2-4 0-0-2-1	<b>Sixth Semester</b> • Control and Optimisation of Automation and Robotic Systems	3-0-2-4
<b>Fourth Semester</b> • Modeling and Design of Robots	3-0-2-4	<b>Seventh Semester</b> • Artificial Intelligence for Robotics and Automation • Major Project	3-0-2-4 3-0-0-3
<b>Fifth Semester</b> • Programming for Automation and Robotics	1-0-3-2.5		

### Program Educational Objectives (PEOs)

**PEO1:** To provide the strong fundamental knowledge in Engineering Sciences and Mathematics among students so as to enable them to plan, design, construct and maintain mechanical engineering systems that are technically sound, economically feasible and socially acceptable to enhance quality of life.

**PEO2:** To develop ability among the students to apply analytical, computational and simulation tools & techniques to address the challenges faced in mechanical and allied engineering streams

**PEO3:** To provide opportunities for the students to demonstrate leadership & entrepreneurial skills and prepare them to work with multidiscipline field of engineering.

**PEO4:** To prepare the students to exhibit professionalism, ethical attitude, team spirit and enable them to understand the need for lifelong learning to achieve career and organizational goals.

## B.Tech. in Mechanical Engineering (ME)

### 1st Semester

Courses	Type	L	T	P	C
Classical Physics	BSC	3	1	0	4
Calculus & Ordinary Diff. Equations	BSC	3	1	0	4
Basic Electronics	ESC	3	1	0	4
Basic Electronics Lab	ESC	0	0	3	1.5
Programming for Problem Solving	ESC	3	0	3	4.5
Technical Comm. in English	HSMC	2	0	2	3
Indian Knowledge System	MC	1	0	0	1

A 3-week Mandatory Induction Program

### 2nd Semester

Courses	Type	L	T	P	C
Human Values and Ethics	HSMC	3	0	0	3
Environmental Science	MC	1	0	0	1
Linear Algebra & Complex Analysis	BSC	3	1	1	4
Data Structures and Algorithms	ESC	3	0	0	4.5
UG Physics Lab	BSC	0	0	0	1.5
Intro. to Scripting Languages	ESC	0	0	0	1
Introduction to Mechanical Engg.	PC	1	0	0	1
Engineering Drawing & Graphics	PC	0	0	0	1.5
Workshop Practices	PC	0	0	0	1.5
Engineering Physical Metallurgy	PC	3	0	0	3

**Summer Term** Exit option with UG Certificate by compleing 40 credits from 2 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 3rd Semester

Courses	Type	L	T	P	C
Probability and Statistics	BSC	3	1	0	4
Mechanics of Solids	PC	3	0	2	4
Rigid Body Dynamics	PC	2	0	0	2
Engineering Thermodynamics	PC	3	1	0	4
Welding and Casting	PC	3	0	2	4
Electrical Technology	PC	2	0	2	3

### 4th Semester

Courses	Type	L	T	P	C
Constitutional Studies	MC	1	0	0	1
Design of Machine Elements	PC	3	0	0	3
Fluid Mechanics and Machinery	PC	3	1	2	5
Machining and Metal Forming	PC	3	0	2	4
Mechanisms and Machines	PC	2	0	2	3
Intro. to Computational Methods	PC	0	0	2	1
Industrial Measurements	PC	3	0	2	4

**Summer Term** Exit option with UG Diploma by compleing 80 credits from 4 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 5th Semester

Courses	Type	L	T	P	C
Summer Internship/Project	Project	0	0	8	4
Heat Transfer	PC	3	0	2	4
Design of Transmission Elements	PC	3	0	2	4
Digital Manufacturing	PC	3	0	2	4
Robotics and Control	PC	2	0	2	3
Mechatronics & IoT	PC	2	0	2	3

### 6th Semester

Courses	Type	L	T	P	C
B.Tech. Project (BTP)	Project	0	0	8	4
Introduction to Economics	HSMC	3	0	0	3
Seminar and Presentation Skills	Project	0	0	2	1
IC Engines	PC	3	0	2	4
Finite Element Methods	PC	3	0	0	3
Industrial Engg. & Management	PC	3	0	0	3
Program Elective 1	PE	3	0	0	3

**Summer Term** Exit option with B.Sc. by compleing 120 credits from 6 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 7th Semester

Courses	Type	L	T	P	C
B.Tech. Project (BTP)	Project	0	0	8	4
Open Elective 1	OE	3	0	0	3
Program Elective 2	PE	3	0	0	3
Program Elective 3	PE	3	0	0	3
Program Elective 4	PE	3	0	0	3
Open Elective 2	PE	3	0	0	3

### 8th Semester

S. No.	Courses	Type	L	T	P	C
Option 1	Industrial SLI	Project	0	0	24	12
	Or					
Option 2	Thesis	Project	0	0	24	12
	Or					
Option 3	4 Elective Courses	OE/PE	12	0	0	12
	Or					
Option 4	Project	Project	0	0	12	6
	2 Elective Courses	OE/PE	6	0	0	6
	Or					
Option 5	Internship	Project	0	0	12	6
	2 Elective Courses	OE/PE	6	0	0	6

The students can opt one option only.

## B.Tech. (Hons.) in ME with Specialization in Robotics & Automation<sup>#</sup>

### 1st Semester

Courses	Type	L	T	P	C
Classical Physics	BSC	3	1	0	4
Calculus & Ordinary Diff. Equations	BSC	3	1	0	4
Basic Electronics	ESC	3	1	0	4
Basic Electronics Lab	ESC	0	0	3	1.5
Programming for Problem Solving	ESC	3	0	3	4.5
Technical Comm. in English	HSMC	2	0	2	3
Indian Knowledge System	MC	1	0	0	1

A 3-week Mandatory Induction Program

### 2nd Semester

Courses	Type	L	T	P	C
Human Values and Ethics	HSMC	3	0	0	3
Environmental Science	MC	1	0	0	1
Linear Algebra & Complex Analysis	BSC	3	1	0	4
Data Structures and Algorithms	ESC	3	0	3	4.5
UG Physics Lab	BSC	0	0	3	1.5
Intro. to Scripting Languages	ESC	0	0	2	1
Introduction to Mechanical Engg.	PC	1	0	0	1
Engineering Drawing & Graphics	PC	0	0	3	1.5
Workshop Practices	PC	0	0	3	1.5
Engineering Physical Metallurgy	PC	3	0	0	3

**Summer Term** Exit option with UG Certificate by compleing 40 credits from 2 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 3rd Semester

Courses	Type	L	T	P	C
Probability and Statistics	BSC	3	1	0	4
Mechanics of Solids	PC	3	0	2	4
Rigid Body Dynamics	PC	2	0	0	2
Engineering Thermodynamics	PC	3	1	0	4
Welding and Casting	PC	3	0	2	4
Electrical Technology	PC	2	0	2	3
Introduction to Automation	SC	3	0	2	4

### 4th Semester

Courses	Type	L	T	P	C
Constitutional Studies	MC	1	0	0	1
Design of Machine Elements	PC	3	0	0	3
Fluid Mechanics and Machinery	PC	3	1	2	5
Machining and Metal Forming	PC	3	0	2	4
Mechanisms and Machines	PC	2	0	2	3
Intro. to Computational Methods	PC	0	0	2	1
Industrial Measurements	PC	3	0	2	4
Modeling and Design of Robots	SC	3	0	2	4

**Summer Term** Exit option with UG Diploma by compleing 80 credits from 4 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 5th Semester

Courses	Type	L	T	P	C
Summer Internship/Project	Project	0	0	8	4
Heat Transfer	PC	3	0	2	4
Design of Transmission Elements	PC	3	0	2	4
Digital Manufacturing	PC	3	0	2	4
Robotics and Control	PC	2	0	2	3
Mechatronics & IoT	PC	2	0	2	3
Programming For Automation and Robotics	SC	1	0	3	2.5

### 6th Semester

Courses	Type	L	T	P	C
B.Tech. Project (BTP)	Project	0	0	8	4
Introduction to Economics	HSMC	3	0	0	3
Seminar and Presentation Skills	Project	0	0	2	1
IC Engines	PC	3	0	2	4
Finite Element Methods	PC	3	0	0	3
Industrial Engg. & Management	PC	3	0	0	3
Program Elective 1	PE	3	0	0	3
Control and Optimisation of Automation and Robotic Systems	SC	3	0	2	4

**Summer Term** Exit option with B.Sc. by compleing 120 credits from 6 semesters and additional 6 credits from an Internship or skill based courses in the summer term

### 7th Semester

Courses	Type	L	T	P	C
B.Tech. Project (BTP)	Project	0	0	8	4
Open Elective 1	OE	3	0	0	3
Program Elective 2	PE	3	0	0	3
Program Elective 3	PE	3	0	0	3
Program Elective 4	PE	3	0	0	3
Open Elective 2	PE	3	0	0	3
Artificial Intelligence for Robotics and Automation	SC	3	0	2	4
Major Project	SC	3	0	0	3

### 8th Semester

S. No.	Courses	Type	L	T	P	C
Option 1	Industrial SLI	Project	0	0	24	12
	Or					
Option 2	Thesis	Project	0	0	24	12
	Or					
Option 3	4 Elective Courses	OE/PE	12	0	0	12
	Or					
Option 4	Project	Project	0	0	12	6
	2 Elective Courses	OE/PE	6	0	0	6
	Or					
Option 5	Internship	Project	0	0	12	6
	2 Elective Courses	OE/PE	6	0	0	6

The students can opt one option only.

## List of Programme Electives

Automotive engineering	Optimization techniques	Unconventional machining process
Power plant engineering	Robot motion planning and control	Advanced mechanics of solids
Additive manufacturing	Smart materials for instrumentations	Refrigeration and air conditioning
Industrial welding	Introduction to prognostics & health management of machines	Advanced robotics
Industrial automation	Electric vehicle technology	Non-destructive evaluation
Mechanical vibration	Industrial entrepreneurship	Design and analysis of experiments
Condition monitoring and fault diagnosis	System dynamics and control	Vehicle noise vibrations & sound quality
Total quality management	Product design and development	Management of production systems
Industrial tribology	Vehicle dynamics	Fracture mechanics
Mobile robotics	Composite materials	Computational fluid dynamics
Distributed control systems		

List of other electives for UG students has been provided on page number on 21.

# (Any future changes will be available in e-copy of brochure on the institute website)



## Faculty Members



**Mohit Makkar**  
Assistant Professor & HoD  
Ph.D., University of Lille 1, France  
Research Areas: Robotics, Modeling and Simulation, Design of Control Systems, System Dynamics



**Sunil Pandey**  
Distinguished Professor  
Ph.D., IIT Delhi  
Research Areas: Welding and Joining Technology, Production Engineering, Process Engineering



**Kamal Kishore Khatri**  
Associate Professor  
Ph.D., MNIT Jaipur  
Research Areas: Alternate Fuels in IC Engines, Trigeneration, Modeling and Simulation of Thermal/ Energy Systems, Application of Nano-fluids



**Manoj Kumar**  
Associate Professor  
Ph.D., IIT Delhi  
Research Areas: Production and Industrial Engineering, Welding Technology



**Vikram Sharma**  
Associate Professor  
Ph.D., Guru Gobind Singh Indraprastha University, Delhi  
Research Areas: Supply Chain Management, Lean Manufacturing



**Ashok Kumar Dargar**  
Associate Professor  
Ph.D., Jamia Millia Islamia University, Delhi  
Research Areas: Synthesis and Analysis of Kinematic Chains and Mechanisms



**Deepak R. Unune**  
Assistant Professor  
Ph.D., MNIT Jaipur  
Research Areas: Hybrid Machining Processes, Electro Discharge Mach. Modelling & Analysis of Mech. Systems



**Atul Mishra**  
Assistant Professor  
Ph.D., IIT Kharagpur  
Research Areas: Industrial and Mobile Robotics, Production Planning and Control, Artificial Intelligence in Manufacturing



**Praveen Kumar Sharma**  
Assistant Professor  
Ph.D., IIT Hyderabad  
Research Areas: Dynamics of Drop Impacting a Dry Rigid Surface



**Servesh Kumar Agnihotri**  
Assistant Professor  
Ph.D., IIT Kanpur  
Research Areas: Fracture mechanics, Experimental Solid Mechanics, Functionally graded composites



**Vikas Sharma**  
Assistant Professor  
Ph.D., IIT Indore  
Research Areas: Gears and Bearings, Vibrations, Condition Monitoring, Fault Diagnosis, Signal Processing Techniques



**Bharat Singh**  
Assistant Professor (On contract)  
Ph.D., MNIT Jaipur  
Research Areas: Robotics and Artificial Intelligence



**Sandeep Singh Shekhawat**  
Assistant Professor (On contract)  
Ph.D., MNIT Jaipur  
Research Areas: Microbial Ecology, Water disinfection, Antimicrobial resistance, Wastewater Treatment, Water reuse policy

# Mathematics

The Department of Mathematics came into existence in 2012 along with four other departments when the LNMIIT switched over from being a single (combined) entity to having a department structure. Since its' inception, some of the prominent objectives of the Department have been:

- To produce qualified graduates who are equipped with deeper insight and research skills in the field of Mathematics.
- To encourage interdisciplinary research with other areas.
- To leverage the diversity of our faculty through the integration of ongoing scientific/ mathematics research with our innovative research and leadership.
- To utilize the diverse expertise of our faculty both within the Department and in collaborative efforts with other Departments, Institutes and Universities to strengthen the overall quality of the Department and to develop professional bonds.

The Department of Mathematics has a vision to establish a center for research and teaching excellence in Mathematics of international repute. The Department has a good research atmosphere with highly qualified and energetic faculty members backed up by excellent infrastructural facilities. The faculty members have taken strong initiatives for bringing in quality research in current emerging areas and are actively pursuing research in the areas of Topology, Stochastic Control, Partial Differential Equations, Numerical Analysis, Computational PDEs, Scientific/ Parallel Computing, Cryptography, Algebra and Functional Analysis. Moreover, the faculty members are involved in collaborative research activities within India and abroad in their respective research areas. At present, the Department offers 2-Year M.Sc. Programme and Ph.D. Programme. The M.Sc. Programme is designed to offer a complete, balanced combination of courses in Mathematics (including both theory and applications).

The long term vision of the Mathematics Department is to produce leaders in Mathematics at institutional, state, national and international level and to become a leading department in the country by imparting mathematics education in order to support the development of best practices and provide opportunities for participation in cutting-edge research to current and future professionals. The values that guide our decisions, strategies and actions are: Excellence, Integrity, Leadership, Innovation, and Ethics.

## Programmes Offered

The Department of Mathematics offers the following programmes:

- Ph.D.
- M.Sc. in Mathematics

## M.Sc. in Mathematics

### 1st Semester

Courses	Type	L	T	P	C
Analysis - I	PC	3	1	0	4
Linear Algebra	PC	3	1	0	4
Programming for Problem Solving	PC	3	0	0	3
Programming for Problem Solving Lab	PC	0	0	3	2
Optimization	PC	3	1	0	4
Algebra	PC	3	1	0	4

### 2nd Semester

Courses	Type	L	T	P	C
Probability & Statistics	PC	3	1	0	4
Analysis-II	PC	3	1	0	4
Complex Analysis	PC	3	1	0	4
Numerical Analysis and Scientific Computing	PC	3	0	2	4
Ordinary Differential Equations	PC	3	1	0	4

### 3rd Semester

Courses	Type	L	T	P	C
Topology	PC	3	1	0	4
Functional Analysis	PC	3	1	0	4
Partial Differential Equations	PC	3	1	0	4
Programme Elective-I	OE	3	1	0	4
Open Elective-I	OE	3	1	0	3
Project	PC				3

### 4th Semester

Courses	Type	L	T	P	C
Mathematical Methods	PC	3	1	0	4
Programme Elective-II	OE	3	1	0	4
Open Elective-II	OE	3	0	0	3
Open Elective-III	OE	3	0	0	3
Project	PC				5

## Faculty Members



**Manish Garg**  
Associate Professor & HoD  
Ph.D., IIT Roorkee  
Research Areas: Cryptography, Boolean Functions and Finite Field



**Mohan K. Kadambajoo**  
Distinguished Professor  
Ph.D., IIT Bombay  
Research Areas: Numerical Analysis, Parallel Algorithms, Computational PDEs, Computational Finance



**Ajit Patel**  
Associate Professor  
Ph.D., IIT Bombay  
Research Areas: Numerical Analysis, Computational PDEs, Finite Element Methods



**Pratibha Garg**  
Associate Professor  
Ph.D., IIT Delhi  
Research Areas: Topological and Function Space



**Vikas Gupta**  
Associate Professor  
Ph.D., IIT Kanpur  
Research Areas: Numerical Analysis, Singularly Perturbed Problems, B-spline



**Dishari Chaudhury**  
Assistant Professor  
Ph.D., IIT Guwahati  
Research Areas: Non-Commutative Algebras and Lie Algebras



**Ratan Giri**  
Assistant Professor  
Ph.D., NIT Rourkela  
Research Areas: Partial Differential Equations (PDEs), Theoretical aspects of nonlinear elliptic and parabolic PDEs



**Sudipto Chowdhury**  
Assistant Professor  
Ph.D., IISc Bangalore  
Research Areas: Numerical Analysis



**Sunil Kumar Gauttam**  
Assistant Professor  
Ph.D., IIT Bombay  
Research Areas: Stochastic Control, Probability Theory, Stochastic Processes



**Trivedi Harsh Chandrakant**  
Assistant Professor  
Ph.D., IIT Bombay  
Research Areas: Functional Analysis



**Dr. Ashish Mishra**  
Ph.D., IIT Bombay  
Research Areas: Representation theory of finite groups, Partition algebras and their subalgebras

# Physics

The Physics Department stands as a cornerstone of academic excellence within our institution, playing a pivotal role in advancing scientific knowledge and fostering a culture of innovation. Established in 2012, alongside four other departments, during the transition from a single combined entity to a structured departmental framework, our department has steadily grown into a dynamic hub for learning, research, and interdisciplinary collaboration. From its inception, the Physics faculty members have been integral contributors to the academic landscape of the institute, imparting knowledge and expertise that spans the entire spectrum of physics. The department was founded with clear and ambitious objectives, including the creation of a cadre of human resources with a strong foundation in physics, capable of making meaningful contributions to science and technology. Motivating students towards research in physics and interdisciplinary areas has been a consistent goal, driving our commitment to academic exploration and discovery. The department actively collaborates with esteemed academic institutions both in India and abroad, fostering a global perspective in our research endeavours. Our research interests encompass a wide array of subjects, reflecting the diverse expertise of our faculty members. From fundamental aspects of nature to applied and engineering facets of physics, our faculty engages in cutting-edge research across areas such as Organic Electronics, Nanomaterials, Optoelectronics, Material Science, Solar Cells, Cosmology, High Energy Physics, Gravity, Biophysics, Condensed Matter Physics, Biosensors, and Nanotechnology. The comprehensive approach to research involves experimental, theoretical, and computational methodologies.

The department takes pride in its collaborative and supportive research environment, encouraging faculty members to engage in interdisciplinary collaborations within and outside the department and the institute. External funding from prestigious agencies like DST, CSIR, and UGC-DAE supports various ongoing projects, highlighting the department's commitment to impactful and innovative research. In addition to its robust research activities, the Physics Department is committed to nurturing the next generation of scientists. The department offers a range of courses, including core and elective options for B.Tech. students, as well as comprehensive M.Sc. and Ph.D. programs. The establishment of a Centre of Excellence in Material Science and Energy Studies underscores our dedication to pushing the boundaries of knowledge and contributing to advancements in critical areas. As we continue to build on our strengths, the Physics Department remains dedicated to excellence in education, research, and outreach. Our pursuit of knowledge knows no bounds, and we stand poised to contribute significantly to the ever-evolving landscape of physics and scientific discovery.

## Programmes Offered

The Department of Physics offers the following programmes:

- Ph.D.
- M.Sc. in Physics

### Courses offered to the B.Tech. students:

- Classical Physics
- Elective courses (Hydrogen Energy: Science, Engineering, and Economics, Biomedical Engineering, Physics of Materials, Physics of Universe, Introduction to Biophysics, Quantum Computing and Quantum Information, etc.)

## M.Sc. in Physics

### 1st Semester

Courses	Type	L	T	P	C
Classical Mechanics	PC	3	1	0	4
Electronics	PC	3	1	0	4
Mathematical Physics-I	PC	3	1	0	4
Quantum Mechanics-I	PC	3	1	0	4
Comp. Methods in Physics	PC	3	0	0	3
Comp. Methods in Physics Laboratory	PC	0	0	2	1
Electronics Laboratory	PC	0	0	9	4

### 2nd Semester

Courses	Type	L	T	P	C
Thermody. & Statistical Mechanics	PC	3	1	0	4
Quantum Mechanics-II	PC	3	1	0	4
Mathematical Physics-II	PC	3	1	0	4
Condensed Matter Physics-I	PC	3	1	0	4
Electrodynamics-I	PC	3	1	0	4
General Physics Laboratory	PC	0	0	9	4

### 3rd Semester

Courses	Type	L	T	P	C
Atomic and Molecular Physics	PC	3	1	0	4
Nuclear and Particle Physics	PC	3	1	0	4
Condensed Matter Physics-II	PC	3	1	0	4
Electrodynamics-II	PC	3	1	0	4
Advanced Statistical Mechanics	PC	3	1	0	4
Master's Project (Part I)	PC	0	0	2	2

### 4th Semester

Courses	Type	L	T	P	C
Program Elective-I	PE	3	0	0	3
Program Elective-II	PE	3	0	0	3
Open Elective -I	OE	3	0	0	3
Open Elective- II	OE	3	0	0	3
SSM Characterization Laboratory	PC	3	0	0	4
Master's Project (Part II)	PC	0	0	9	6

## List of Programme Electives

Introduction to quantum field theory  
Introduction to quantum many-body theory  
Introduction to special & general relativity  
Physical cosmology

Phase transitions in materials  
Introduction to material science and engineering  
Experimental tech. For material Characterization

Non-equilibrium statistical mechanics and its applications  
Applied optics  
Group theory  
Advanced computational physics

## List of Open Electives

Organic electronics and optoelectronics  
Medical physics

Renewable energy: science & engg.  
Nonlinear dynamics and chaos

Quantum computing & quantum information  
Introduction to molecular modelling and simulation

## Faculty Members



**Ashok Garai**  
Associate Professor & HoD  
Ph.D., IIT Kanpur  
Research Areas: Theoretical & Computational Biophysics, Molecular Motors, Genetic Networks, Theory of Single Molecular Pulling Experiments, DNA Nanomechanics



**Anupam Singh**  
Professor  
Ph.D., Carnegie Mellon University, USA  
Research Areas: High Energy Physics and Cosmology



**Ganesh Dutt Sharma**  
Emeritus Professor  
Ph.D., IIT Delhi  
Research Areas: Organic Electronics, Organic Solar Cells, Dye Sensitized Solar Cells, Nano-Science & Technology



**Somnath Biswas**  
Professor  
Ph.D., IIT Kharagpur  
Research Areas: Magnetic Nanomaterials and Nano-structures, Spintronic Devices, FET-based Sensor Devices, Materials for Fuel Cells and Hydrogen Storage



**Subhayan Biswas**  
Associate Professor  
Ph.D., IACS Kolkata  
Research Areas: Third Generation Solar Cells, Photocatalysis



**Amit Neogi**  
Assistant Professor  
Ph.D., IIT Kanpur  
Research Areas: Medical Data Collection and Organization in Alternative Therapies



**Anjishnu Sarkar**  
Assistant Professor  
Ph.D., IIT Bombay  
Research Areas: Cosmology, Particle Physics



**Manish Kumar Singh**  
Assistant Professor  
Ph.D., MNNIT Allahabad  
Research Areas: Solid State Physics, Electronics, Nanomaterials, Laser Ablation in Liquids & Biosensors



**Nabyendu Das**  
Assistant Professor  
Ph.D., Institute of Physics, Bhubaneswar  
Research Areas: Theoretical Condensed Matter Physics



**Pomita Ghoshal**  
Assistant Professor  
Ph.D., HRI Allahabad University  
Research Areas: Particle Physics



**Rakesh Tibrewala**  
Assistant Professor  
Ph.D., Tata Institute of Fundamental Research, Mumbai  
Research Areas: General Relativity, Aspects of Quantum Gravity

# Humanities and Social Sciences (HSS)

The Department of HSS was established with the following objectives:

- To enhance students' communication skills through effective writing, speaking and presentations.
- To develop their fundamental understanding of economic and business environment.
- To build students' critical thinking, analytical aptitude and scientific temper.
- To promote interdisciplinary knowledge, learning and practice.

The Department is multidisciplinary in nature with the vision to provide value based education to future engineers, making them sensitive towards wide range of humane and social issues and enabling them to combine technical knowledge with social, cultural, economic, ethical, and humane issues involved in societal development. Moreover, it also focuses on enhancing communication and professional skills of the students.

The Department offers core courses and elective courses in the areas of English, Economics, Psychology, Business Skills, Public Policy, Philosophy and other allied areas. Currently, it offers Ph.D. in English, Applied Linguistics, Economics and Psychology.

## Programmes Offered

The Department of Humanities and Social Sciences offers the following programme:

- Ph.D. in English (Linguistics and Literature), Economics, and Psychology

## Faculty Members



**Surinder Singh Nehra**  
Assistant Professor & HoD  
Ph.D., University of Pune  
Research Areas: Social Security  
Urbanisation, Infrastructure



**Manju Dhariwal**  
Professor  
Ph.D., Univ. of Rajasthan  
Research Areas: English Language and  
Literature, Communication Theory



**Rajbala Singh**  
Associate Professor  
Ph.D., IIT Kanpur  
Research Areas: Health Psychology,  
Psychology of Technology,  
Organizational Behaviour



**Narendra Kumar**  
Associate Professor  
Ph.D., Univ. of Rajasthan  
Research Areas: Postcolonial Studies,  
Cultural Studies, Literatures of the  
Indian Subcontinent, Adaptation Studies



**Usha Kanoongo**  
Associate Professor  
Ph.D., Univ. of Rajasthan  
Research Areas: Applied Linguistics,  
English Language Teaching,  
Computer-mediated Communication



**Payel Pal**  
Assistant Professor  
Ph.D., IIT Kanpur  
Research Areas: South Asian Literature,  
Film and Cultural Studies, Women and  
Gender Studies



**Dr. Swati Sharma**  
Assistant Professor  
Ph.D., JNU New Delhi  
Research Area : Economics of  
education, labour economics,  
development economics & digital skilling



**Sandeep Singh Shekhawat**  
Assistant Professor (On contract)  
Ph.D., MNIT Jaipur  
Research Areas: Microbial Ecology,  
Water disinfection, Antimicrobial  
resistance, Wastewater Treatment,  
Water reuse policy



**Dr. Manasvini Rai**  
Guest Faculty  
Ph.D., MNIT Jaipur  
Research Area : Black British Writing:  
Contemporary British Fiction;  
Intersectionality & Marginality Studies;  
Film Studies; Ecocriticism; Women's Writing

# Research

The LNMIIT, Jaipur focuses on the latest areas of Science, Technology and Humanities for teaching and research in its curriculum. The curriculum has two major components: the first half being a set of core courses and the latter half consists of a variety of elective courses. The faculty members have publications in some of the well-reputed journals (high impact factor) and peer-reviewed conferences. Currently, the major research and development areas offered to the students by different departments are as follows:

## Communication and Computer Engineering (CCE)

- Internet-of-Things, Ad-hoc Networks, Body Area Networks, Wireless Sensor Networks
- Real-Time Embedded Systems
- Wireless Communication including 5G/ 6G
- Signal Processing
- Information and System Security
- Robotics
- Computer Vision, Machine Learning, and Artificial Intelligence

## Computer Science and Engineering (CSE)

- Artificial Intelligence
- Computer Security
- Computer Vision
- Cloud Computing
- Data Analytics
- Internet of Things
- Machine Learning
- Software Engineering
- Cryptology
- Blockchain

## Electronics and Communication Engineering (ECE)

- Wireless Communication
- Signal Processing
- Optical Wireless Communication
- RF and Microwave
- VLSI and Embedded Systems Design
- Antenna Engineering
- Internet of Things
- Instrumentation and Control
- MEMS and Sensors
- AI & Robotics

## Mechanical and Mechatronics Engineering (MME)

- **Design & Robotics:** Vibration analysis and control, Tribology, Fracture Mechanics, Condition Monitoring, Machine tool design, Experimental solid mechanics, High strain rate deformation, Functionally graded composites, Synthesis and analysis of mechanisms, Stress analysis, Solid mechanics, Robotics, Mechatronics, System Dynamics and Control, Engineering Design, Design for Manufacturability, Finite element methods, Composite materials, Theory of Elasticity & Plasticity.

- Thermal & Fluid Mechanics: Heat Pipes, Internal Combustion Engines, Automobiles, Jet Impingements, Water Management, Waste Management, Sustainable Energy Systems and Management, Combustion Generated Pollution, Alternate Fuels, Fuel Cells, Utilization of biogas, Biomass gasification, Cogeneration / Combined Heat and Power (CHP), Trigeneration, Multiphase flow, Fluid hydrodynamics, Fluid structure interaction, CFD, Modeling and simulation of thermal systems.
- Manufacturing & Industrial: Metal cutting and machining technology, Tool Wear in continuous and intermittent cutting, Unconventional / Non-Traditional Machining Processes, Minimum Quantity Lubrication (MQL), Metal forming, Metal Casting, Material Characterization, Welding and Joining, Underwater welding, Welding Consumables, Wear resistant compositions and Tribological investigations for industrial applications, Biomaterials and Medical Implants, Metal Matrix Composites, Metallic foams, 3-D printing, CAPP & Expert Systems in Welding, CAD, CAM, Measurements & Metrology, Finite Element Applications in Manufacturing, Computer Integrated Manufacturing Systems, Supply chain Management, Lean manufacturing, AI in manufacturing.

## Humanities and Social Sciences (HSS)

- **English Literature:** Early Twentieth Century Literature, Postcolonial Studies, Cultural Studies, Film and Adaptation Studies, Modernist Studies, Contemporary Literature of the Indian Subcontinent, Women and Gender Studies, South Asian Studies, Film and Cultural Studies.
- **English Language and Linguistics:** English Language Teaching, Professional Communication, Cross-cultural skills, Sociolinguistics, Pragmatics, English for Academic/ Specific purposes (EAP/ESP) Translanguaging.
- **Psychology:** Health Psychology, Organizational Behaviour, Social Psychology, Psychology of Technology, Consumer Psychology and Environmental Psychology.
- **Economics:** Labour Economics, Development Economics.

## Physics

- Biosensors
- Device Physics (Spin-FETs, Thin-film Transistors)
- General Relativity & Quantum Gravity
- High Energy Physics
- Organic Semiconductors
- Photovoltaics
- Theoretical Condensed Matter Physics
- Theoretical Cosmology
- Theoretical & Computational Biophysics

- Experimental Material Science (Magnetic Nanostructures, Photonic Materials, SOFC Materials, Plasmonic Materials)

## Mathematics

- Numerical Analysis and Differential Equations (Numerical Solution of ODEs and PDEs, Finite Difference Methods, Finite Element Methods, Domain Decomposition Methods, Singularly Perturbed Problems, Computational Finance Layer Adapted Meshes, B-Spline Collocation Methods)

Partial Differential Equations (PDEs) Theoretical aspects of nonlinear elliptic and parabolic PDEs

- Commutative algebra, non-commutative algebras, Liealgebras
- Cryptography, Number Theory, Boolean Functions
- Topology and Functional Analysis
- Probability & Stochastic Process, Stochastic Differential Equations

## Research Collaborations

Well-known international organizations which are connected to LNMIIT through joint research collaborations include Artificial Intelligence Institute, Univ. of South Carolina (USA), NATEL Engineering Co. Inc. (California, USA), Rhombus Power Inc. (San Jose, USA), Université de Sherbrooke (Canada), University of Waterloo (Canada), Scuola Superiore Sant'Anna (SSSUP, Pisa, Italy), University of Roma Tor Vergata (Italy), CERN (Geneva, Switzerland), National Ilan University (NIU, Taiwan), Patras University (Greece), University of Crete (Greece), Instituto de Nanociencia, Nanotecnología Materiales Moleculares (INAMOL) (Toledo, Spain), University of Bath (UK), Université de Bourgogne (France), Russian Academy of Science and Moscow University (Moscow), Umea University (Sweden), ICIQ (Barcelona, Spain). On a national level, joint research collaborations with IIT Delhi, IIT Bombay, IIT Kanpur, CEERI Pilani, IRPE Kolkata, NERIST (Arunachal Pradesh), Physical Research Laboratory (Ahmedabad), VNIT (Nagpur) & RRCAT (Indore) are in place.



## Memoranda of Understanding (MoU)

Name of the Organization	Organization Sector	Signed on	Level	Type of MoU
National Institute of Technology - Delhi	Education	29-Nov-2023	National	Academic & Research Collaboration
D & H Secheron Electrodes Pvt. Ltd. - Indore	Industry	09-Nov-2023	National	Academic, Research Collaboration including Industrial visit & internship
Rajiv Gandhi Centre of Advanced Technology (R-CAT)	Government Organization	15-Sep-2023	National	Academic & Research Collaboration
The Indus Entrepreneurs (TiE) – Rajasthan	Industry	14-Jul-2023	National	Incubation and Mentoring Programme Agreement
"CSIR-Central Electronics Engineering Research Institute (CSIR-CEERI) Pilani	Institute	3-Aug-2023	National	Collaboration Agreement
Department of Information Technology & Communication (DoIT&C), Govt. of Raj.	Government Organization	3-Jul-2023	National	Academic & Research Collaboration
Assam Science & Technology University Guwahati Assam	University	30-Nov-2022	National	Academic & Research Collaboration
Arcelor Mittal Ventures India Private Limited	Industry	7-Oct-2022	National	Academic & Research Collaboration
Google India Private Limited	Skill Development	15-Jul-2022	National	Collaboration Agreement
HPCL - Mittal Energy Limited, Noida (HMEL)	Industry	1-Mar-2022	National	Executive Development Programme
Normandie Universite	Education	4-Oct-2021	International	Collaboration between researchers & Universities
Episource India Pvt. Ltd.	Industry	15-Sep-2021	National	Academia and Industry by promoting research & Internships
Celebal Technologies, Jaipur, Raj.	Education	7-Jul-2021	National	Academic Collaboration
TeCIP Institute, Scuola Superiore Sant'Anna, Pisa, Italy	Education	9-Jun-2021	International	Academic Collaboration
Consorzio Nazionale Interuniversitario per le Telecomunicazioni (CNIT), PISA, Italy	Education	25-Mar-2021	National	Academia and Industry by promoting research and Internships
INFLIBNET Centre, an IUC of University Grants Commission at Gandhinagar	Government Organization	25-Sep-2020	National	Academic
National Institute of Pharmaceutical Education & Research (NIPER)-Hyderabad	Education	1-Jul-2020	National	Research Collaboration
Artificial Intelligence Institute, University of South Carolina, USA	Education	4-Mar-2020	International	Student and Faculty Exchange program
IIT Jodhpur (NM-ICPS Tech. Innovation Hub in Computer Vision & Virtual Reality)	Education	13-Jan-2020	National	Academic Partnership

Name of the Organization	Organization Sector	Signed on	Level	Type of MoU
LUCIDEUS Technologies Pvt. Ltd., New Delhi	Industry	7-Dec-2019	National	Executive Development Programme
Sigma Electric Manufacturing Corporation Pvt. Ltd., India	Industry	3-Jun-2019	National	Industrial Interaction Agreement
Department of Information Technology & Communication (DoIT&C), Govt. of Rajasthan	Govt. Organization	15-Oct-2018	National	Innovation & Entrepreneurship Development
Energy Efficiency Services Limited (EESL), Uttar Pradesh	Industry	28-Nov-2017	National	Promotion of Energy Efficiency & Development of Energy Efficiency Projects
Bowling Green State University, Ohio, USA	Education	3-Sep-2017	International	Faculty and Students Exchange Programme
Wright State University, USA	Education	30-Jun-2017	International	Academic Exchange Agreement
Wadhwani Operating Foundation, Los Altos, CA 94022	Industry	16-May-2017	International	Entrepreneurship Development
CSIR-Central Electronics Engineering Research Institute (CSIR-CEERI) Pilani, Rajasthan, India	Education	19-Sep-2016	National	Faculty and Students Exchange Programme
National Ilan University (NIU), Taiwan	Education	27-Jul-2016	International	Faculty Exchange Agreement
National Ilan University (NIU), Taiwan	Education	27-Jul-2016	International	Student Exchange Agreement
National Chiao Tung University, Hsinchu, Taiwan	Education	19-May-2016	International	R & D Framework Agreement
Intel Technology India Pvt. Ltd., Bangalore	Industry	4-May-2016	National	Intel College Excellence program through an intel approved vendor 'FICE'.
Fundacio Institut Catala d'Investigacio Quimica (ICIQ), Spain	Education	21-Apr-2016	International	R & D Framework Agreement
A. N. Nesmeyanov Institute of Organoelement Compounds of Russian Academy of Sciences (INEOS RAS)	Education	29-Mar-2016	International	Agreement to Supply Photovoltaic Materials
Collabera Technologies Private Limited, Vadodara	Industry	28-Oct-2015	National	Training Agreement
Endeavor Careers Pvt. Ltd., Gujarat	Education	20-Dec-2014	National	Training Agreement
Texas Instruments India through its partner M/s EdGate Technologies Pvt. Limited	Industry	30-Dec-2013	International	MCU Teaching Lab Setup Agreement
Karaganda State Industrial University, Temirtau, Republic of Kazakhstan	Education	27-May-2013	International	Cooperation Agreement
Dhirubhai Ambani Institute of Information and Communication Technology, (DAIICT) Gandhinagar, Gujarat	Education	17-Jan-2011	National	MoU for Network of Engineering Institutions
Scoula Superiore Sant'Anna, Pisa, Italy	Education	28-Oct-2008	National	Agreement of Cooperation on Academic Collaboration

## Multidisciplinary Centres for Research and Development

The institute has created the following specialized centres as part of its select focus on sustainable innovation enablement and technology-based opportunity creation initiatives having the potential to enable early as well as long-term benefits to the campus, society and the nation. These centres are envisioned to become an innovation, research, technology development, skill-development, consulting and outreach hub, as applicable, around which not only the LNMIIT but also many other institutions in the vicinity (or even beyond) might get enabled over the years. Each of the Research and Development centres have been provided a plan-linked seed grant for their research related activities and for a start-up initial research. Under this scheme, subject to receipt of eligible proposals reviewed by experts, a funding that ranges from 2 lakhs INR to 10 lakhs INR is made available by the institute.

Centre Name	Objectives
<b>LNMIIT International Centre for Artificial Intelligence (LICAi)</b> <b>Prof. Sarada Samantaray, Centre Lead</b> <b>Prof. (Dr.) Gopalan Oppiliappan, Nucleus Member</b>	<ul style="list-style-type: none"> <li>Advanced research and development at the intersection of AI and select thrust areas like Health Tech / Med Tech, Fin Tech, energy, sustainability, robotics, cyber-physical systems, policy planning and implementation, security &amp; digital forensics, networking, data analytics, education, Natural Language Processing (NLP), Indian language computing, computer vision, image processing, drug design and delivery, bioinformatics, structural safety analysis etc. with focus on applications relevant to industry, Nation and society.</li> <li>AI and ethics, Human-safe AI, Explainable AI, AI for Disaster Prediction and Management, AI for Mental Health, AI for Risk Mitigation etc.</li> </ul>
<b>Centre for Next Generation Communication Networks (C-NGCN)</b> <b>Prof. Ranjan Gangopadhyay, (Research Prof.) Lead</b> <b>Dr. Anirudh Agarwal, Co-Lead</b>	<ul style="list-style-type: none"> <li>Sponsored research and creation of software/ hardware research laboratory for xG Communication Networks.</li> <li>Development of new elective courses on relevant topics, such as, 5G Wireless, SDN, Massive MIMO, mm-wave Techniques, etc.</li> <li>Conducting workshops on "Emerging Technologies for Next Generation 5G".</li> </ul>
<b>Centre for Machine Learning and Big Data Analytics (CML- BDA)</b> <b>Dr. Subrat Kumar Dash, Lead</b> <b>Dr. Sakthi Balan, Co-Lead</b>	<ul style="list-style-type: none"> <li>To become a sustainable centre of excellence in terms of research, innovation, development and new venture creation in Machine Learning (ML), Big Data, Business Analytics, Information Retrieval and associated areas.</li> <li>To focus on quality research and development through multi-disciplinary and collaborative approach.</li> </ul>
<b>The LNMIIT Centre for Sustainability and Innovation (LCSI)</b> <b>Dr. Kamal Kishore Khatri, Lead</b>	<ul style="list-style-type: none"> <li>The Centre will have a multidisciplinary approach and will focus on sustainability, with particular attention to clean energy, clean water, clean air, culture, education and economics.</li> <li>The LCSI will be innovation-focused centre, working to conceptualize, design, develop, and help to implement scalable and locally relevant sustainable solution in select domains.</li> <li>The LCSI will be part of a major global movement towards a Circular Economy. However, this paradigm has several challenges to overcome, and costs need to be brought down through scalable innovations, smart engineering, culturally intelligent strategies.</li> </ul>
<b>Centre for Cryptology, Cyber Security and Digital Forensics (C3-SDF)</b> <b>Dr. Jayaprakash Kar, Lead</b>	<ul style="list-style-type: none"> <li>To carry out industry-relevant research involving Information Security, Cryptography, Cyber Security and Digital Forensics to address current and potential cyber security and digital forensic challenges.</li> <li>To promote wide-ranging multidisciplinary research and to train and develop skills in cyber security and digital forensic amongst its students and the wider community through seminars, workshops and training.</li> </ul>
<b>LNMIIT Centre for Smart Technology (L-CST)</b> <b>Dr. Abhishek Sharma, Lead</b> <b>Dr. Sunil Kumar, Co-Lead</b>	<ul style="list-style-type: none"> <li>To focus on the IoT/Cyber-Physical System Space.</li> <li>To make LNMIIT as a zero waste campus.</li> <li>To develop a system to identify and eliminate wastage of all kinds of natural resources.</li> <li>To develop a mechanism to systematically evolve a research prototype into industry prototype and minimum viable product in time bound and gated approach.</li> <li>To attain smart-energy monitoring and management solutions for campus is one of its agenda item of work.</li> </ul>

<p>Centre for Robotics and Industrial Automation (CRIA)  <b>Dr. Atul Mishra, Lead</b>  <b>Dr. Mohit Makkar, Co-Lead</b></p>	<ul style="list-style-type: none"> <li>To create innovation based technological solution in the field of Robotics and Artificial Intelligence for the industry and society.</li> <li>To focus on quality research and development through multi-disciplinary and collaborative approach.</li> </ul>
<p>Centre for Educational Technology &amp; Teaching-Learning Innovation (CET-TLI)  <b>Prof. Raghuvir Singh Tomar, (Prof. of Practice) Lead</b>  <b>Dr. Sandeep Saini, Co-Lead</b></p>	<ul style="list-style-type: none"> <li>Identification of key needs of the Institute in the areas of teaching-learning, pedagogy, effective evaluation/learning-assessment vehicles apart from the corresponding enabling technologies and intensive teaching-learning workshops for new (first-time) teachers and retraining of select existing faculty/laboratory staff as per need.</li> <li>Creation of a prioritized and phase-wise plan of action with an annual calendar that is in synchronization with the institute calendar. The CET-TLI shall also be charged with the responsibility of identifying and/or creating technology-based cost-effective solutions as well as their pilot testing, deployment and delivery; and, where feasible and relevant, enable outreach.</li> <li>Initiation to become an activity hub around which not only the LNMIIT but also many other institutions in the vicinity (or even beyond) might get enabled over the years.</li> </ul>
<p>Centre for Material Science and Nano Electronics (C-MSNE)  <b>Prof. Ganesh Datt Sharma, (Emeritus Prof.) Lead</b>  <b>Prof. Somnath Biswas, Co-Lead</b></p>	<ul style="list-style-type: none"> <li>The Centre will focus on the R&amp;D programmes in the emerging research area of material science and technology to develop new materials, process methodologies and technologies leading to the development of fast speed electronic and optoelectronic devices to be employed in Information technology and telecommunication through cutting edge research in nano-electronics, developing device for meeting the societal requirement in the country and creating the facilities of materials development and characterization and device fabrication.</li> <li>The thrust area includes Energy storage, energy conversion, supercapacitors, flexible electronics, sensor materials, green materials, nanomaterials and their applications, Nano-photonics, polymers for photonics, photonics sensors, organic electronics, computational nanoelectronics and displays.</li> </ul>
<p>Centre for Mathematical and Financial Computing (C-MFC)  <b>Dr. Vikas Gupta, Lead</b>  <b>Dr. Ajit Patel, Co-Lead</b></p>	<ul style="list-style-type: none"> <li>Carrying out industry-relevant and other forms of applied as well as basic research involving various forms and sub-areas of mathematical computing, modelling, and simulation as well as various areas and sub-areas of financial computing, economic and financial modelling and simulation.</li> <li>Promoting multi disciplinary work with relevant intervention of mathematics, economics or finance with other domains like information science, biology, astronomy, public policy, epidemiology, drug design and behavioural modelling and simulation etc.</li> </ul>

## Specialized Centres Focused on Other Major Functions and Activities

Centre Name	Objectives
<p>LNMIIT Centre for Entrepreneurship (LCE)  <b>Dr. Sheenu Jain, Lead</b>  <b>Dr. Nikhil Raj, Co-Lead</b>  <b>*Prof. Ramesh Mittal (Prof. of Entrepreneurship)</b>  <b>Nucleus Member</b>  (* w.e.f. from 5<sup>th</sup> July, 2024)</p>	<ul style="list-style-type: none"> <li>Providing a platform for faculty, staff, students and alumni for innovation, incubation and entrepreneurial leadership.</li> <li>Enabling technology-based solutions to problems that might be faced by the campus, society, state and the nation.</li> <li>Providing Business Assistance and Mentoring, accelerate emerging companies' development by providing hands-on assistance during the vulnerable start-up years.</li> </ul>

<p><b>LNMIIT Unified Computing Services Centre (LUCS)</b></p> <p><b>Dr. Gaurav Chatterjee, Lead</b> <b>Dr. Varun Kumar Sharma, Co-Lead</b></p>	<ul style="list-style-type: none"> <li>• Identifying key computing needs of the Institute for effective planning and maintenance of entire computing infrastructure including but not limited to network infrastructure, internet access, cyber security, VoIP telephony support and related integration services.</li> <li>• Providing IT based security and surveillance services, audio-visual conference services, in-campus audio-visual services, digital storage services and high-performance computing services.</li> <li>• Enabling design, deployment, maintenance and periodic update of LNMIIT website.</li> <li>• Guiding ERP/MIS related services and advising the Institute on timely, proactive enhancement of related facilities and services in keeping with the vision of the Institute and emerging trends.</li> </ul>
<p><b>Centre for Lifelong Learning (CLL)</b></p> <p><b>Dr. Vikram Sharma, Lead</b> <b>Dr. Atul Mishra, Co-Lead</b></p>	<ul style="list-style-type: none"> <li>• Creating need - based, industry-relevant and self-sustainable short-term, medium-term and long-term executive development programmes leading to different levels of certifications and continuing education programmes involving Massive Open Online Courses (MOOC), Small Private Online Courses (SPOC), Corporate Open Online Courses (COOC) as well as blended learning, virtual laboratories and secure online testing-based provisions.</li> <li>• Conceptualizing, analyzing requirements, design, implementation and deployment of an open source, integrated ERP System for the LNMIIT, covering all aspects of its operation including but not limited to complete student's life-cycle (admission to graduation), faculty and staff employment life-cycle recruitments, purchase inventory, taxation, financial planning, performance management, estate management and digital archive of records.</li> </ul>
<p><b>LNMIIT Centre for Wellness and Positive Health (L-CWPH)</b></p> <p><b>Dr. Amit Neogi, Lead</b></p>	<ul style="list-style-type: none"> <li>• Ensuring positive mental health, general feeling of wellness and help in realizing the value added by ethics-driven value system in both personal and professional spheres.</li> <li>• Focusing on bringing about positive changes in the way young students may perceive certain aspects and difficulties in life but would not be limited in the scope of its work and reach to students alone. It would be encouraged to become a mentoring, counselling, interaction and outreach hub around which, over a period of time, not only the LNMIIT but also the community around it, state and nationwould be benefitted overthe years.</li> </ul>
<p><b>Centre for Communication, Soft-Skills and Personality Development (C-CSPD)</b></p> <p><b>Dr. Usha Kanoongo, Lead</b></p>	<ul style="list-style-type: none"> <li>• The centre will strengthen communication skills, soft skills and overall personality of students and participating individuals.</li> <li>• The activities of this virtual centre are: Conducting Workshops, training on Interview Skills, Employability skills and personality development for students. Faculty and Staff Development Programmes will also be organized under this centre.</li> <li>• The centre works towards training the participants with the nuances of effective communication, workplace etiquette and socio-professional interaction and thus foster their employability and professional success.</li> </ul>
<p><b>Centre for Media Relations and Studies (CMRS)</b></p> <p><b>Mr. Girdhar M. Kunkur, Lead</b> <b>Mr. Vikas Bajpai, Co-Lead</b></p>	<ul style="list-style-type: none"> <li>• To bring LNMIIT to the forefront through ethical and value-based but thoughtful and convincing brand /image building and appropriate promotion forms.</li> <li>• To bring up community relations with all the Institute's external and internal stakeholders (including faculty, staff, students, alumni, parents, recruiters, and peers) through appropriate information sharing, events, and media relation activities, including but not limited to social media and press coverage.</li> </ul>

Centre for Advanced Software and Skills Development (CASSD)  
**Mr. Vikas Bajpai, Lead**

- Identification of key needs that the campus, society, state and the nation may have which in a prioritized and phase-wise manner could be helped with creation of software and hardware-software technology-based cost-effective solutions, testing, (pilot deployment included), deployment and finally technology transfer, commercialization and, where feasible and relevant, outreach.
- Becoming a design, development and innovation hub around which not only the LNMIIT but also many other institutions in the vicinity (or even beyond) might get enabled over the years.
- The Centre has the mandate of evolving into a Centre of excellence in terms of design research, innovation, advanced software skills, development and software solutions developed in the software and hardware-software areas.

Centre for Study and Use of Authentic Examination (L-CSUAE)  
**Prof. Philip L Miller, Lead**

- The centre shall primarily work in the areas of research, development and industry-ready technology/ services which would help any industry that needs to develop professional-grade, high quality software and recruit developers or train existing senior developers, project-leads etc. The centre shall help any such company that wishes to identify different levels of job readiness of potential recruits as well as assessing level of competency of software developers/ team leaders and project managers already on-roll of a company.



## Sponsored Research and Development Projects

Project Title	Funding Agency and Duration of the Project	Funding Amount	Principal Investigator
Investigation of Efficient Deep Learning Techniques for Hyperspectral Image Analysis	ISRO Regional Academic Centre for Space MNIT, Jaipur 2023-2024	₹ 98,500	Dr. Aloke Datta
Hardware Trojan Attack Resilient Convolution Neural Network (CNN) Accelerator Design using FPGA	Data Security Council of India 2023	₹ 6,20,000	Dr. Kusum Lata
The Twisted Derivation Problem on Algebras and Its Applications	SERB, DST, Govt. of India 2023-2026	₹ 17,65,000	Dr. Dishari Chaudhuri
Blockchain-based Lightweight Authentication Scheme for Implantable Medical Device Communication Networks.	SERB, DST, Govt. of India 2023-2026	₹ 21,49,630	Dr. Jayaprakash Kar
Construction of Scalable and Robust Signcryption Scheme for IoMT devices	Data Security Council of India 2023	₹ 5,95,900	Dr. Jayaprakash Kar
Lightweight proxy re-encryption technology and its application in medical Internet of Thing	National Foreign Specialized Program of the Ministry of Science and Technology of China (2022-2023)	1,20,000 CNY = ₹ 14,18,875	Dr. Jayaprakash Kar
Development of a High data rate Visible Light Communication System for Green Wireless Technology and Healthcare	DSIR, Ministry of Science and Technology, Govt. of India (2022-2024)	₹ 18,00,000	Dr. Nikhil Sharma
Development of shape memory alloy based smart bearing system for vibration isolation of an axle for locomotive applications	SERB, DST, Govt. of India	₹ 18,30,000	Dr. Vikas Sharma
Decompositions of completely contractive covariant representations	DST, Govt. of India (2022-2024)	₹ 6,00,000	Dr. Harsh Chandrakant Trivedi
Evaluation study on Schedule castes sub-plan (SCSP) and tribal sub-plan (TSP) components of Sarva Siksha Abhiyan (SSA) and Rashtriya Uchchatar Siksha Abhiyan (RUSA)	RUSA.2.0 (2021-2022)	₹ 1,71,97,000	Dr. Surendra Singh Nehra (Co-PI)
Contactless sanitizing tunnel	Unnat Bharat Abhiyan Sep 2020-Oct 2020	₹ 50,000	Dr. Mohit Makkar
Energy Efficient RF/VLC Networks for IoT Applications	SERB, DST-Govt. of India (2019-2022)	₹ 35,17,096	Dr. Nikhil Sharma (Co-PI)

Project Title	Funding Agency and Duration of the Project	Funding Amount	Principal Investigator
Magneto-transport Studies of ZnO Based Magnetic Tunnel Junctions Fabricated by Ion Implantation	UGC-DAE (2019-2022)	₹ 14,80,000	Prof. Somnath Biswas
Multimodal user interface for assisting elderly people in indoor environment	DST-SEED (2019-2022)	₹ 23,83,686	Dr. Joyeeta Singha
Hybrid electric discharge machining processes for favourable surface modifications of implant materials	DST, Govt. of India (2019-2020)	₹ 2,24,933.76	Dr. Deepak Rajendra Unune
FIST (Fund for Improvement of S&T Infrastructure in Universities and Higher Education Institutes)	DST-FIST and LNMIIT (2018-2023)	₹ 58,00,000	Dr. Vikas Gupta
Evaluation of Electro-Chemical and Thermo-Mechanical Properties of Novel Anode-Supported SOFC Membrane Electrolyte Assembly Structure for Intermediate Temperature Applications	DST-SERB Govt. of India (2018-2021)	₹ 32,15,520	Dr. Somnath Biswas
Sign Language to Regional Language Converter (SLRC)	DST-SEED Project (2018-2021)	₹ 42,88,161	Dr. Abhishek Sharma (PI) Dr. Sandeep Saini (Co-PI) Prof. Raghuvir Tomar (Co-PI)
Elasticity of Telomeric DNA and the Effect of Human TRF1 Protein Binding	(SERB), DST, Govt. of India (2018-2021)	₹ 26,65,203	Dr. Ashok Garai
Development of efficient polymer solar cells based on conjugated polymers and non-fullerene small molecules acceptors with low energy loss	DST (BRICS) (India, Russia China) (2018-2021)	₹ 34,63,020	Prof. G.D. Sharma (PI) Dr. Subhayan Biswas (Co-PI)
Low cost flexible organic solar cells based on non-fullerene acceptors as renewable energy conversion	DST, GITA (Indo-Taiwan) (2018-2021)	₹ 9,52,000	Prof. G.D. Sharma
Novel wide bandgap copolymers featuring excellent comprehensive towards practical for organic solar cells	DST-RFBR (Indo-Russia Joint Project) (2018-2020)	₹ 21,82,400	Prof. G.D. Sharma
Development of New Small Molecules and Device Architectures for Highly Efficient and Reliable Organic Solar Cells	Department of Science and Technology (DST), Govt. of India (2017-2020)	₹ 1,25,00,000	Prof. G.D. Sharma
Fabrication and finishing of micro-channels for micro-heat exchangers and micro-reactors	SERB-DST Govt. of India (2017-2020)	₹ 42,28,000	Dr. Deepak Rajendra Unune (Co-PI)

Project Title	Funding Agency and Duration of the Project	Funding Amount	Principal Investigator
Design and Analysis of Content Distribution Framework for Digital Rights Management Systems Based on Cryptographic Primitives	Science & Engineering Research Board (SERB), DST, Govt. of India (2016-2019)	₹ 15,07,809	Dr. Dheerendra Mishra
Development of Green Campus in The LNMIIT under the "Development of Solar Cities" program of MNRE	(MNRE), Govt. of India (2016-2017)	₹ 5,00,000	Dr. Kamal Kishore Khatri
Development of Solar Cells Utilizing Quantum Dot Sensitized Titanium Oxide Nanotube	CSIR (2014-2017)	₹ 11,00,000	Dr. Subhayan Biswas
Detection of Biomolecular Interactions with TMR based Sensing using Magnetic Nanotags	UGC-DAE (2014-2017)	₹ 9,58,000	Dr. Somnath Biswas
Tracing the Faultlines of Ethnic Conflict in the Postcolonial Indian Subcontinent: Narrative as a Socio-Political Discourse	ICSSR (2014-2016)	₹ 8,00,000	Dr. Narendra Kumar
Mobile Broadband Service Support over Cognitive Radio Networks	ITRA, DeitY (2013-2018)	₹ 1,02,96,000	Prof. Ranjan Gangopadhyay
Development of High Hydrostatic Pressure Metal Forms for Hydrogen Storage	DST Govt. of India (2013-2016)	₹ 13,56,000	Dr. Somnath Biswas
Non-equilibrium Dynamics of Quantum Fields with Applications to Dark Energy and Inflation	DST Govt. of India (2013-2016)	₹ 11,88,893	Prof. Anupam Singh Dr. Anjishnu Sarkar



## Patents

The Institute encourages its faculty and financially supports the filing of patents after due internal vetting. The following is the details of patents:

### Granted

Title	Name of Inventor(s)
Synthesis of Shape-Controlled Pristine and Diluted Magnetic Zinc Oxide Nanoparticles with Tuneable Properties	Prof. Somnath Biswas
Nanoparticles Having Highly Tunable Physical Properties and Method of Synthesizing the Same	Prof. Somnath Biswas
Process for Synthesizing Metallic Foams Having Controlled Shape, Size and Uniform Distribution of the Pores	Prof. Somnath Biswas
System and Method for Assisting Communication Between Users	Dr. Abhishek Sharma
Method and Apparatus for Monitoring Health Related Parameters of a Patient	Dr. Abhishek Sharma
Method and System for Assisting a Farmer in Crop Management	Dr. Abhishek Sharma
A Locking System	Dr. Abhishek Sharma
Method and System for Assisting a User in Performing a Pre-Defined Physical Exercise	Dr. Abhishek Sharma
Dynamic Digital Twin System and a Method of Operating Thereof	Dr. Abhishek Sharma
A Tranquillizer Equipment	Dr. Abhishek Sharma
A Centralized "Mini-Pool" based Distributed Hybrid Novel Approach for Channel Assignment in Cellular Network	Dr. Abhishek Sharma
Substrate Integrated Waveguide Monopole Antenna	Dr. Suvadeep Choudhury
An Improved Hybrid Energy Generation System for Waste Water Treatment Plants	Dr. Kamal Kishore Khatri Dr. Narendra Kumar (MME)
Submerged Arc Welding Apparatus	Dr. Manoj Kumar Dr. Ankush Choudhary (MME)
Mechatronics System Design to Avoid the Train Derailment	Dr. Prabin Kumar Jha Prof. S. S. Gokhale
Healthcare data exchange using Blockchain based Technology	Dr. Sonu Lamba
Method and System for Traffic Engagement for Emergency Vehicle in an Distributed Networking Environment	Dr. Chirag Kumar

**Published**

Title	Name of Inventor(s)
Optimal Tapping of Light Energy by Considering the Coherence Length Limit and Using Rectifiers to Prevent the Diminishing of Collected Power Due to Spatial and Temporal Averaging	Prof. Somnath Biswas Prof. Anupam Singh
Method of Synthesizing Soft Magnetic Ni-Zn Ferrite Nanoparticles Having Tailored Properties	Prof. Somnath Biswas
Method of Synthesizing ZnO: Metal (Metal: Zn, Ag) Core-Shell Nanoparticles	Prof. Somnath Biswas
A Method of Synthesizing Graphitic Carbon Stabilized Nickel Nanoparticles Having Tailored Properties	Prof. Somnath Biswas
A Method of Synthesizing $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> (Hematite) Nanoparticles with Controlled Microstructure for Pertinent Applications	Prof. Somnath Biswas Dr. Mahesh Patange
System and Method for Performing Surveillance of an Automated Teller Machine (ATM)	Dr. Praveen Kumar
Method of Synthesizing Ceramic Oxide Nanoparticles Having Tailored Properties	Prof. Somnath Biswas
Fabrication of Devices for Optimal Tapping of Light Energy by Considering the Coherence Length Limit to Prevent the Diminishing of Collected Power Due to Spatial and Temporal Averaging	Prof. Anupam Singh Prof. Somnath Biswas
A Millimeter Wave Horn Antenna	Dr. Suvadeep Choudhury
Charcoal Film Based Sensor and Random Signal Generator	Dr. Kanjalochan Jena
Method of Device Fabrication for Optimal Tapping of Light Energy	Prof. Anupam Singh Prof. Somnath Biswas
A Substrate Integrated Waveguide Inspired Multi-Horn Antenna	Dr. Suvadeep Choudhury
Dual Mode Automated Rotary Radial Parking System Using Hydraulics and Sensing Devices	Dr. Nikhil Raj
A Standalone Security Device and System for Initiating a Preemptive Action for Providing a Safe Environment to Women in a Vehicle	Dr. Preety Singh, Dr. Rajbir Kaur, Dr. Sunil Kumar
System for Providing Specific and Common Information to the Passengers using Hybrid Technology	Dr. Nikhil Raj
IoT based Smart Home Gas Leakage Prevention System	Dr. Abhishek Sharma
Advanced Adjustable Water Resistant Ultrasonic Based Blind Stick with GPS Tracking	Dr. Nikhil Raj
Holistic Database Management for Nitizens	Dr. Nikhil Raj
Hybrid Torrefaction-Energy Multi-generation system and Method of Operation thereof	Dr. Kamal Kishore Khatri
A novel Continuous Flow Biodiesel Reactor for Mass Production and Method of Operation thereof	Dr. Kamal Kishore Khatri
System for Biodiesel Production with Hybrid Energy Generation and Method of Operation Thereof	Dr. Kamal Kishore Khatri

## Workshops and Conferences

Title	Organized by	Event Date
Prayaash - Two Day Staff Development Program on Leadership and Team Building	LNMIIT Centre for Entrepreneurship	March 14-15, 2024
Hands-on Workshop on Dspace	Central Library	March 08, 2024
FDP on Effective Teaching Learning Practices	QATC and CET-TLI	March 04-08, 2024
5-Day Workshop on "Welding and Cutting Processes"	Dept. of MME	March 04-08, 2024
Advance Excel Training	Dept. of MME	Feb. 27-Mar 01, 2023
Workshop on "Quantum Communication: Trends and Research Opportunities"	Centre for Next Generation Communication and Networking	Feb. 02, 2024
One Week Workshop on "SolidWorks Modeling – Theory and Practice"	Dept. of MME	Dec. 18-22, 2023
Hands-on Workshop on Leveraging Social Media Marketing for Business and Personal Branding	LNMIIT Centre for Entrepreneurship	November 18, 2023
Web Development Workshop	IEEE Student Branch LNMIIT	Sep. 11-13, 2023
FDP on Modeling and Simulation of Stochastic Systems	Dept. of CSE	October 19, 2023
Workshop on "Virtual Reality"	Centre for Robotics and Industrial Automation (CRIA)	Oct. 10, 2023
5-day National Workshop on Cryptology (NWC 2023)	Dept. of CSE & C3-SDF	August 01, 2023
Workshop on Effective Communication at Workplace	C-CSPD	May 22, 2023
Web Application Recon and How to Begin with Bug Bounty	Dept. of CSE and Cipher Club	March 29, 2023
Industrial Automation Workshop	Centre for Robotics and Industrial Automation (CRIA)	March 17-18, 2023
Faculty Development Programme on Algorithms by Prof C. Pandu Rangan	CSE Department	March 2-4, 2023
12th International Conference on Security, Privacy and Applied Cryptographic Engineering (SPACE '22)	C3-SDF and CSE Department	December 9-12, 2022
Advanced Industrial Automation Training	MME Department & Centre for Robotics and Industrial Automation (CRIA)	October 13-15, 2022
IoT Workshop	MME Department & Centre for Robotics and Industrial Automation (CRIA)	September 16-17, 2022
One Day National Workshop on Digital Forensics and Cybercrime	C3-SDF	September 3, 2022
3-Day International Conference Cultural Trajectories Through Language, Literature and Media (Online)	HSS Department	April 29-May 1, 2022

Title	Organized by	Event Date
4th International Workshop on Multimedia Applications (IWMA 2022) was organized by the InterMedia Research Group and Department of Computer Science & Engineering, during March 14 – 18, 2022 in virtual mode.	CSE Department	March 14-18, 2022
Careers in the Social Sector	HSS Department (in collaboration with Indian School of Development Management, New Delhi)	February 19, 2022
AICTE-ISTE sponsored Faculty Development Programme on "Cybersecurity"	C3-SDF and CSE Department	January 3-8, 2022
Faculty Development Programme AICTE-ISTE sponsored FDP on "Shape Memory Alloys Modelling, Its applications to wearable devices and Smart structures".	MME Department	January 3-7, 2022
22nd International Conference on Cryptology in India (Indocrypt 2021)	C3-SDF and CSE Department in association with R. C. Bose Center for Cryptology & Security and The Chatterjee Group-Centers for Research and Education in Science and Technology, Kolkata,	December 12–15, 2021
2nd International Workshop on Post-Quantum Cryptography (IWPQC)	C3-SDF and CSE Department in collaboration with IRT SystemX France, University of Luxembourg, Belgium, Pondicherry Central University, and Bosch India	December 10–11, 2021
Vritika Research Internship	ECE Department	October 4-29, 2021
ATAL Sponsored FPD on Embedded Systems: Theory and Hands	L-CST	October 04–08, 2021
Microsystem Design and Fabrication by Dr. Ankur Gupta	MME Department	September 18, 2021
Workshop on Big Data Analytics by Celebal Technologies	CSE Department	July 3, 2021
AICTE Training and Learning Academy (ATAL) sponsored Faculty Development Programme on "Blockchain"	C3-SDF and CSE Department	June 14-18, 2021
ATAL Sponsored FPD on "Artificial Intelligence for CBSE Teachers"	ECE Department	June 07–11, 2021
AICTE-ISTE sponsored Faculty Development Programme on "Digital Forensics and Cybercrime"	C3-SDF and CSE Department	May 24–29, 2021
AICTE-ISTE sponsored Faculty Development Programme on "Cyber Security"	C3-SDF and CSE Department	April 6-10 & 30, 2021
31st Annual Conference of Rajasthan Ganita Parishad on Recent Trends of Mathematics in Sciences and Engineering (RTMSE-2021)	Mathematics Department	March 13-14, 2021

Title	Organized by	Event Date
Nvidia 5-day Training Workshop Introduction to DGX, Nvidia GPU Cloud (NGC), Hands-on sessions on docker, regression, clustering, neural networks, CNN, image classification, object detection, image segmentation	CSE Department and CMLBDA	March 9-13, 2021
International Workshop on Multimedia Applications (IWMA 2021) Theme: Intelligent Multimedia	CSE Department	March 2-6, 2021
Photonics for 5G Wireless Communication and Surveillance	ECE Department	Feb 19, 2021
Application of AI in Healthcare and Data Analysis using Tensorflow	ECE Department	Feb 11, 2021
Faculty Development Programme AICTE-ISTE sponsored FDP on "Blockchain Technology"	C3-SDF and CSE Department	December 7-12, 2020
Robotics training at Patrika in Education	ECE Department & Rajasthan patrika	June 18-23, 2020
Online program on Digital Circuit Design and Verification using Vivado	ECE Department & CoreEL Technologies Pvt. Ltd.	May 25-June 12, 2020
International Workshop on Multimedia Applications (IWMA 2020)	CSE Department	January 9-11, 2020
Workshop on Accelerating numerical computation on NVIDIA GPUs	CSE Department	October 18-19, 2019
Workshop on 5G Specifications and standardization by Industry Experts	ECE Department	April 23-24, 2019
Brainstorming: Key to discovering self, innovative research and teaching	MME Department	April 05, 2019
National Workshop on "Basics of Image Processing using OpenCV and MATLAB"	CSE Department	March 19, 2019
National Workshop on Topology and Functional Analysis (NWTFA-2019)	Mathematics Department	March 11-15, 2019
International Workshop on Multimedia Applications (IWMA-2019)	CSE Department	February 12-16, 2019
Workshop on Android, AI, ML-Python, Rubik's Cube and Web-Dev	CSE Department	January 19-20, 2019
National Workshop on Software Defined Networking and 5G	ECE Department	January 16-18, 2019
Training on IPG Carmaker	MME Department	September 5-6, 2018
Hands-on training on SMC Pneumatics & Electro- Pneumatics	MME Department	August 28-31, 2018
Training on PCB Designing	MME Department	May 9-10, 2018
Workshop on PLC, HMI/MMI, SCADA, Interfacing Project	MME Department	April 11-13, 2018
Faculty Development Program on Big Data Analytics	CSE Department	March 17-21, 2018
Workshop on MATLAB	CSE Department	February 2-4, 2018
Workshop on Robotics	CSE Department	January 22-28, 2018

Title	Organized by	Event Date
Training on Modular Production System, Distributing Station and CIROS	MME Department	January 3-4, 2018
National Instructional Workshop on Cryptography (NIWC)	Mathematics Department	July 5-7, 2017
Workshop on PLC, HMI/ MMI, SCADA, Interfacing Project	MME Department	April 1-3, 2017
Innovations in Software Engineering Conference	CSE Department	February 5-7, 2017
Advanced Level Workshop on Diffusion & Sub-Diffusion Problems: Theory, Numerics & Applications (WDSDPTNA)	Mathematics Department	January 31-February 5, 2017



## Lecture Series and Seminar

Session Title	Keynote Speaker	Event Date
Health Humanities	Dr. Sathyaraj Venkatesan, NIT Tiruchirappalli	March 15, 2024
Distinguished talk on "Photonics-aided Emerging Quantum Communication Applications"	Prof. Enrico Prati, Professor, Dept. Of Physics, University of Milan, Italy	March 15, 2024
Research Scholars Day on National Science Day	Prof. Jiten C Kalita IIT Guwahati	Feb. 28, 2024
Vulnerability Studies- Part 1	Prof. Pramod K Nayar, Professor of English, UNESCO Chair in Vulnerability Studies	Feb. 28, 2024
Vulnerability Studies- Part 2	Prof. Pramod K Nayar, Professor of English, UNESCO Chair in Vulnerability Studies	Feb. 28, 2024
Masterclass on User Centricity & Storytelling in Product Development	Prof. Puneet Sharma, Media Advisor, Smart India Hackathon, AICTE	Feb. 22, 2024
Webinar on "Unblocking Library Data: Transforming Raw Data into Insights through Visualizations".	Dr. Vinit Kumar, Assistant Prof., Department of Library and Information Science, Babasaheb Bhimrao Ambedkar University, Lucknow	Feb. 16, 2024
Masterclass on Design Thinking for Engineers	Meenakshi Babu, Founder-Director, Yugen Education Foundation, Stanford d. School Certified Design Thinker	Feb. 22, 2024
Masterclass on Customer Centric Costing: Need and Relevance for Financial Feasibility	Dr. Prashant Sharma, Assoc. Professor & Associate Dean Jindal School of Banking & Finance (JSBF) O. P. Jindal Global University	Feb. 15, 2024
Expert Talk on India's Drinking Water Initiative for Sustainable Development	Dr. B. P. Agarwal, President, Sustainable Innovation Inc.	Feb. 12, 2024
Distinguished talk on "Next-Generation Wireless Sensing for Non-intrusive Autonomous Environment Monitoring"	Dr. Deepak Mishra, Senior Lecturer at the School of EE&T, UNSW, Sydney, Australia	Jan. 24, 2024
Computational Intelligence in Invest Decision Making	Prof. Manoj Thakur (School of Mathematical & Statistics Sciences and Chair, School of Management, IIT Mandi)	Dec. 14, 2023
Webinar on "How to Improve Your Search and Research Skills: Tools & Techniques"	Dr. Santosh C. H., Librarian, Central University of Haryana	Dec. 01, 2023
PDE as a Topic of Analysis, History and Developments Prior to Modern Study	Prof. A. K. Nandakumaran, Chairman, Department of Mathematics, IISc Bangalore	Nov. 24, 2023
Masterclass on How to Create Wealth out of Startups	Dr. Sheenu Jain, LNMIIT	Nov. 11, 2023

Session Title	Keynote Speaker	Event Date
Rising from Margins: Trans voices for Equality	Mrs. Pushpa Gidwani, Nai Bhor Sanstha (NGO)	Nov. 03, 2023
Alumni Entrepreneur Talk – Building Deep Tech Startups	Shivani Shah, Co-founder Samp.ai	Oct. 30, 2023
Alumni Entrepreneur Talk - Building Deep Tech Startups	Dr. Sheenu Jain, LNMIIT	Oct. 30, 2023
How Google google	Prof. Jaydeb Sarkar, Indian Statistical Institute, Bangalore	Oct. 18, 2023
Distinguished talk on "AI Has Entered The Situation Room"	Dr. Anshuman Roy, Rhompus Power Inc., CA, USA	Oct. 10, 2023
An Expert Talk on "Industrial Best Practices in Supply Chain Management"	Mr. Rohan Chopra (Entrepreneur)	Sep. 21, 2023
Masterclass on Crafting Your Value Proposition	Dr. Sheenu Jain, LNMIIT	Feb. 28, 2024
Operations excellence through Lean & Digital/ Industry 4.0 and the latest trend in the Indian Economy & its impact on Manufacturing career.	Dr. Amol Nagar, Managing Director, GE Aviation India	Sep. 16, 2023
Automatic Generation of Cyberdefense Course of Action (CoA)	Dept. of CSE	Sep. 02, 2023
Keras Community Day	Dept. of CSE	August 19, 2023
Talk on Adolescence and Wellness	Dr. Swati Ghate	August 3, 2023
The Miracle of Positive Behaviour	Prof. Ramesh Arora	August 2, 2023
Expert Lecture on NWC-2023	Prof. Pandurangan Chandrasekharan, Professor, IIT Madras; Ms. Arpitra Maitra, Professor; Mr. Bimal Roy, Professor, Unit Indian Statistical Institute, West Bengal; Mr. Avishek Adhikari, Professor, Dept. of Mathematics, Presidency University, Kolkata; Mridul Nandi, Professor, Unit of the Indian Statistical Institute, Kolkata; Somitra Sanadhya, Professor, Dept. of CSE, IIT Jodhpur	Sep. 16, 2023
Interaction Session with Prof. Jawar Singh	Prof. Jawar Singh, IIT Patna	July 27, 2023
Discs and Cylinders Made of Functionally Graded Materials (FGMs)	C-MFC, LNMIIT	May 26, 2023
Visual Cryptography and Computer Security	Professor Dr. Avishek Adhikari, M.Sc. (Gold Medalist), a recipient of the President of India Medal, ISCA Young Scientist Award, and NANUM fund by the International Mathematical Union (IMU)	May 26, 2023

Session Title	Keynote Speaker	Event Date
Expert Talk on "Career prospects of engineers in Civil Services and Industry"	Dr. D. P. Agarwal, Ex. Chairman, UPSC	April 27, 2023
Expert Lecture on Machine Learning	Prof. Arun K. Pujari, Advisor & Professor Emeritus in Department of CSE, Mahindra University, Hyderabad	April 24, 2023
Preference Elicitation for Robust Matroid Optimization	Prof. Arun K. Pujari, Advisor & Professor Emeritus in Department of CSE, Mahindra University, Hyderabad	April 24, 2023
Awareness Session on Ask Me Everything About How to Register a Company	Dr. Sheenu Jain, LNMIIT	April 17, 2023
Large language models: Where do they stand?	Dr. Pawan Kumar, LNMIIT	April 01, 2023
Interaction Session with Faculty Mentors	Dr. Usha Kanoongo, LNMIIT	March 17, 2023
Expert Talk on Sustainable Machining Technologies: An Alternative for Indian Industries	Dr. Navneet Khanna, Institute of Infrastructure Technology Research and Management (IITRAM), Ahmedabad, India	March 13, 2023
Robotics Entrepreneurship and Internship	Mr. Bhuvanesh Mishra & Mr. Anshul Awasthi Club First Robotics, Jaipur	February 22, 2023
Sustainable development of Chidawa through public participation	Mr. Raghu Hari Dalmia, President, Dalmia Cement Bharat Ltd.	February 01, 2023
Interaction on space missions, chandrayaan and how to write Research Paper and Research Projects	Space scientist and Padma Shree Awardee, Prof N Vedachalam Director of ISRO Inertial Systems Unit & Director Liquid Propulsion Systems Centre	January 28, 2023
Interactive and informative session in the field of welding and electrode making technology	Mr. Arnav Maheshwari, Director, D&H Sécheron Electrodes Pvt. Ltd.	January 11, 2023
Webinar on "Tackling Imperfect SIC in Dual-Polarized Massive MIMO-RSMA Networks" by CNGCN, Dept of ECE, LNMIIT	Prof. Daniel B. Da Costa, Technology Innovation Institute, UAE	January 11, 2023
Machine Learning: A New Paradigm for Scientific Modelling	Prof. M K Kadambajoo, LNMIIT	December 15, 2022
Human-Wildlife Conflict and Popular Culture: The Politics of Conservation in Contemporary Indian Hindi Movies	Dr. Goutam Karmakar, NRF Postdoctoral Fellow at the University of the Western Cape	November 04, 2022
The Investment Climate, Regulations and Emissions in Manufacturing Firms of India	Dr. Santosh Kumar Sahu, IIT Madras	October 17, 2022
Underwater Welding	Prof. Sunil Pandey from LNMIIT at IIT Guwahati	October 10-14, 2022
Vedic Mathematics	Prof. Manjul Gupta,IIT Kanpur	October 10, 2022

Session Title	Keynote Speaker	Event Date
International Conference on Analytical & Interdisciplinary Research (ICAIR-2022)	Dr. K. K. Khatri at Sangam University Campus, Bhilwara	October 6-8, 2022
EULER: Biography and his Fundamental Discoveries	Prof. M K Kadambajoo, LNMIIT	September 5, 2022
Seminar on "Directed Energy Deposition (DED) Arc Additive Manufacturing and Intelligent Welding Power Sources"	Gaurav Choudhary, Frounis India Pvt. Ltd.	September 3, 2022
Monitoring & Mitigating Online Harms	Prof. Nishanth Sastry, Professor and Director of Research at the Department of Computer Science, University of Surrey	August 16, 2022
How Deep Learning, Computer Vision and Data Analytics help emerging research in Biomedical Sciences	Prof. Viji Draviam, Professor in Quantitative Cell and Molecular Biology at the School of Biological and Chemical Sciences, Queen Mary University of London and a Turing Research Fellow at The Alan Turing Institute	August 16, 2022
Deep Internal Learning: Deep Learning with no prior examples	Dr. Indra Deep Mastan, LNMIIT	August 6, 2022
Seminar on "Intellectual Property Rights"	Mr. Manish Soyal, Examiner- Patents and Design, Indian-Patent Office, New Delhi	May 4, 2022
Applications of Data Science: Business to Social Science Misinformation on Online Social Media	Dr. Rajesh Sharma, Associate Professor, University of Tartu	April 25-27, 2022
NoC Routing: From Tables To LBDR-Based Implementation	Dr. Anugrah Jain, LNMIIT	April 2, 2022
Electrical and Photoconductivity of Polymer Nanocomposites	Prof. Alexey Tameev, Russian Academy of Sciences, Moscow, Russia	March 15, 2022
Glimpses of Ancient Indian Mathematics (International Pi Day Celebration)	Prof. Parthasarathi Mukhopadhyay, Ramkrishna Mission Residential College (Autonomous), Narendrapur, Affiliated to University of Calcutta	March 14, 2022
Seminar on "Design of Experiments: Methods and Approaches"	Dr. Deepak Rajendra Unune, LNMIIT Jaipur	March 04, 2022
From molecules to energy conversion devices	Prof. Emilio Palomares, ICIQ, Spain	March 03, 2022

Session Title	Keynote Speaker	Event Date
Polymer solar cells as an alternative renewable energy source: Progress and Challenges	Prof. Genene Tessema Mola, University of KwaZulu-Natal, South Africa	February 23, 2022
An optimal error estimate of an IMEX finite element method for some partial integro-differential equations arising in finance	Prof. M. K. Kadalbajoo, LNMIIT	February 28, 2022
Multi-agent based collision handling in Railway Transport Network	Dr. Poulami Dalapati, LNMIIT	February 19, 2022
Introduction to EEG and its Applications to Neuromarketing	Prof. Partha Pratim Roy, IIT Roorkee	February 05, 2022
Low Dimensional Perovskite and their Applications in Photovoltaic Cells, Nanostructures and Semitransparency	Professor Lioz Etgar, The Hebrew University of Jerusalem, Edmond J. Safra Campus, Givat Ram, Jerusalem 91904, Israel	February 03, 2022
Semiconductor Nanostructures for Optoelectronics Applications	Professor Chennupati Jagadish, Australian National University, Canberra, ACT 2601, Australia	January 27, 2022
Nanophotonic for Life, Energy and Sustainability	Prof. Jean- Michel Nunzi, Queen's University, Kingston Ontario, Canada	January 27, 2022
Number of common zeros of systems of polynomials over finite fields	Prof. Sudhir Ghorpade, IIT Bombay	December 27, 2021
National Mathematics Day	Prof. S. Kesavan, IIT Madras, Prof. Anish Ghosh, TIFR Mumbai, Prof. M. K. Kadalbajoo, LNMIIT.	December 22, 2021
Recent Issues of Cryptology	Prof. Bimal Roy, ISI Kolkata	December 14, 2021
System Evolution Analytics based on Data Science	Dr. Animesh Chaturvedi, LNMIIT	December 4, 2021
A short term awareness program on "Application of Computational Fluid Dynamics (CFD) in Industry & Academia"	Dr. Ashok Kr. Dargar, Dr. Kamal Kishore Khatri, Dr. Manoj Kumar, Dr. Mohit Makkar, Dr. Praveen Sharma, LNMIIT.	November 11, 2022
Memory Corruption Attacks & Defenses	Dr. Mohit Gupta, LNMIIT	October 4, 2021
Executive Summary - Few Research Problems	Dr. Amitava Mukherjee (ex-IBM)	July 8, 2021
Artificial Intelligence (AI): Past, Present and Future	Dr. C. Mohan (Retd. from IBM Almaden Research Center and presently Visiting Prof. in NUS)	March 6, 2021

Session Title	Keynote Speaker	Event Date
Photonics for 5G Wireless Communication and Surveillance	Prof. Antonella Bogoni, SSSA, Pisa, Italy	February 19, 2021
Application of AI in Healthcare and Data Analysis using Tensorflow	Suryender Kr. Sharma & Johnathan Rajiv	February 11, 2021
Recent Trends and Innovation in Drone Technology	Mr. Arun Jaye Prakash, Director & CEO, Aviocian Technologies Pvt. Ltd. New Delhi	January 22, 2021
Models and Programs: Better Together	Dr. Sriram Rajamani (MD, Microsoft Research India)	January 9, 2021
Socialising and Learning with Machines	Prof. Nishanth Sastry, University of Surrey	October 27, 2020
Machine Learning Application in Businesses: Some Usecases	Dr. Kannan Balaji, Director, Nielson USA	October 17, 2020
AHA!!! Randomness!!!!	Prof. C. Pandu Rangan, IITM	October 10, 2020
At the margins: Experience of Indian women in COVID-19	Dr. Priyanka Tripathi, Department of Humanities and Social Sciences, IIT Patna	October 8, 2020
Narratives and their economic market values	Dr. Pragyan Rath, Business and Ethics Group, IIM Calcutta	September 18, 2020
Getting yourself published, an interactive session on writing a Research Article	Neha Agrawal, Alumna NTU Singapore, founder Wiseup Communications	August 29, 2020
Energy competence- how start-ups are making the world more sustainable	Solco Reijnders, PHYSEE Technologies, a Netherlands based startup	August 24, 2020
Design of ecosystem for continues innovation	Dr. Ade. Mobogunje, Stanford University USA	August 14, 2020
Thin film batteries - Power sources for next generation devices, Material issues in Development	Prof. Mohan Rao, IISc, Bangalore	March 11, 2020
Campaign and Awareness among Youth to Stop Sexual Violence	Prof. Lad Kumari Jain, University of Rajasthan, Jaipur	March 6, 2020
Challenges in Computational Calculus of Variations: 3 Examples in 1D	Prof. Carsten Carstensen Director of Center Computational Sciences, Humboldt-Universität zu Berlin	March 5, 2020
Some New Advances in Emerging Technologies for Beyond-5G Networks	Prof. Mark Flanagan University College Dublin, Ireland	February 20, 2020

Session Title	Keynote Speaker	Event Date
Polynomials and Sums of Squares	Dr. Charu Goel, IIT Kanpur	February 15, 2020
Maintaining balance between academic and co-curricular life	Gagan Mani, (Alumnus) Amazon, Seattle	February 15, 2020
Bernstein polynomials, computer-aided geometric design and real algebraic applications.	Prof. Marie-Françoise Roy Emeritus Professor, University of Rennes, France	February 14, 2020



# Infrastructure



The LNMIIT, spread over 100-acre green campus, is at par with the best technological institutions in the country. It possesses IT-enabled classrooms, well-equipped laboratories, a rich central library, and other modern amenities. Some of the key highlights of LNMIIT infrastructure are the following:

## Academic Area

There are seven air-conditioned and eighteen air-cooled lecture halls equipped with multimedia facilities, and with virtual teaching/learning aids. There are also seminar halls and meeting rooms. The institute also has an open-air theatre. In addition, one 400+ capacity multi-utility hall is also available as part of student activity centre. The institute has 32 state-of-the-art laboratories having latest technology equipment. Some of the labs are Electronics Lab, Microwave and Optical Communication Lab, Digital Signal Processing Lab, Communication Lab, Electrical Characterization Division, Materials Synthesis Division, Advanced Instrumentation Division, DI Water Plant, Physics Lab, CAD Lab, Graphics Lab, IC Engine Lab, Fluid Mechanics & Turbo-machinery Lab, Heat Transfer Lab, Material Analysis Lab, Automobile Engineering Lab, Computer Integrated Manufacturing Lab, Kinematics & Dynamics of Machine Lab, Mechatronics Lab, Metrology Instrumentation and Control Lab, MME Workshop, Robotics & Industrial Automation Lab.



## Resource Centres

- IBM Laboratory with industry standard tools for Big Data Analytics, and Mobile Application Development tools like Cognos Insight, Info Sphere Biginsight, Worklight.
- National Instruments (NI) laboratory with myRIO, cRIO, and sbRIO hardware, along with a wide range of sensors and actuators for research and robotic applications.
- Texas Instruments (TI) laboratory with the latest kits including Beaglebone Black, D8500, TIVA and Atmel Dragon Board Xmega, and Raspberry Pi Boards.
- High-end tools for Modelling, Design, and Simulation, which includes ANSYS, Adams and Vi-Rail. High-speed internet, including Wi-Fi in academic area and LAN connectivity in hostel rooms.
- Mechanical Workshop with conventional workshop and laboratories and NC-CNC machines and robots.

## LNMIIT Unified Computing Services

- **Internet Connectivity:** 1Gbps through NKN and 1Gbps through Jio.
- **VoIP and Internal Telephony:** The Institute has Enterprise Grade Communication Server with a hybrid gateway for VoIP-based Internet Telephony and PSTN connectivity with advanced functionalities like IVR and Web Collaboration.
- **Video Conferencing:** The Institute has two dedicated video conferencing (VC) rooms. Institute also has two on-demand software based VC setups to facilitate various academic collaborations through interactive lecture sessions which involve remote experts and local audiences.
- **Audio-Visual facility:** All lecture halls and most of the labs are equipped with Audio-Visual (projection) facility.
- **Centralized High Performance Computing facilities:** Institute has an HPC cluster consisting of 140 computing cores on 7 nodes and GPU Server to cater research and development requirements of students and faculty members. Various softwares running on the HPC includes the Matlab, Ansys and several compilers.
- **Servers & Workstations:** The Institute has various servers & workstations various software related to academic, library, ERP, application softwares, and network services. Institute also has multiple storage server for file & data storage.
- **Learning Management System:** Learning management systems like Moodle and Google Classroom are available for online lecture delivery, quizzes, assessment and notifications.
- **Other Network-based Services to student and faculty members:** In addition to the services listed above, the Institute also provides Authentication Services, E-Mail Services, Directory Services, Printing Services, File Transfer Services, Quota-based Storage Services etc.
- **Power Backup:** Dedicated online UPS for server room and another Online UPS for Computing Nodes in various laboratories, offices in Academic Area and lecture hall area.
- **IP Surveillance System:** All institute buildings and Open Areas are under IP based surveillance system.
- **Access Control System:** Bio-Metric based access control system with Visitor management system.



## Central Library

Welcome to the LNMIIT Central Library! Our mission is to seamlessly integrate teaching, learning, and research activities at the institute. Located at the heart of the institute, our Central Library boasts state-of-the-art facilities and a commitment to continual improvement. The library is completely automated with RFID technology including self issue and self return kiosk. Our collection is extensive, with over 22,534 physical books covering a wide range of subjects, including textbooks and reference materials. In addition, we offer access to 1,201 e-books and a diverse selection of 65 national and international periodicals, including newspapers.

For those who prefer digital resources, we provide access to nearly 50,000 e-journals from esteemed databases such as IEEE (ASPP+POP), American Physical Society (APS), American Society of Mechanical Engineers (ASME), JSTOR, Project Muse, Sage, Association for Computing Machinery (ACM), J-Gate, and more. Through our website and Shibboleth platform, users can access these resources remotely, ensuring convenience and flexibility.



To support academic integrity, we utilize tools such as Turnitin for similarity detection and maintain subscriptions to databases like Scopus for comprehensive literature searches. Moreover, our library offers the subscribed version of Grammarly for writing assistance. Embracing innovation, we actively participate in INFLIBNET projects like Shodhganga, Shodhachakra and utilize platforms like IRINS to enhance research information access. Additionally, as part of the ESS Consortia, we collaborate to expand our resources and services.



Our commitment to outreach extends to social media platforms, where we showcase scholarly works, successful events, and achievements of the LNMIIT community. Through these efforts, we aim to engage with the broader academic and research community, fostering collaboration and knowledge exchange.

At the Central Library, we are dedicated to empowering our users with the resources and support they need to excel in their academic and research endeavors. Visit us today and discover the wealth of knowledge and opportunities awaiting you.

## Residential Facilities

LNMIIT is a residential institute. It caters to the residential requirements of students, faculty and staff. Currently, there are four boys' hostels and one girls' hostel with state-of-the-art facilities. The institute provides comfortable accommodation to the students. The hostel rooms are equipped with a central cooling system. The hostels are provided with all basic facilities, including water coolers with water purifiers, hot and cold water, washing machines, a common TV room, a common reading room, a common gym etc. Clean and hygienic environment. Institute has a 24-hour security and surveillance system, power supply, and Intranet and Internet connectivity. Hostels are managed by a hostel team comprising chief-warden, associate chief-warden, wardens for each hostel, and care-takers.

## Mess and Canteen

The Institute has three common messes that offers high quality & cost effective service. The prime focus is to provide healthy and delicious food. The mess maintains standard operating procedure, with high emphasis on following food safety protocols, hygiene and cleanliness. The mess menu is decided by the elected student members. These messes serve breakfast, lunch, evening snacks and dinner. Once a month, the mess organises a special lunch/dinner. Membership in any one of these messes is compulsory for students staying in hostels.



## Shopping Complex

The shopping complex located in the institute's center caters to the daily needs of all the campus residents. A stationery shop is part of the shopping complex, providing photocopying and mobile recharging to people on campus. This complex includes a laundry shop, male and female salons, and a departmental store. There is a restaurant that serves delicious Indian and Continental cuisine. There is also a fast food corner that serves pizza, burgers, sandwiches, etc. A canteen also serves Indian fast food, tea and coffee. There is Amul parlor to provide dairy products and a juice and fruit shop. This shopping complex has a beautiful sitting area where people can exchange ideas and socialize.

## Medical Unit

Institute gives utmost priority to the health of the campus community. A medical unit is equipped with essential healthcare infrastructure to provide treatment facilities: a senior resident physician three staff nurses and additional support personnel. The medical unit has a physiotherapy unit with ambulance service. There are frequent visits by specialized doctors. The emergency services are available 24hrs in the medical unit. There is a tie-up with the best super specialty hospitals in Jaipur for immediate referrals. The Institute also facilitates a group medical insurance policy for all its students, staff and faculty.

## Student Activity Centre (SAC)

Student Activity Centre (SAC) is the hub of all indoor student activities. It comprises three synthetic badminton courts, multiple table tennis tables, one squash court, boxing arena, karate arena with mats, two gyms comprising machines for every aspect of a fit body, chess and carom room. Additionally, there is dance and music studio and an Open-Air Theatre (OAT) where all cultural events of the Institute are organized.

## Outdoor Sports Facilities

For holistic development of the students, wide range of outdoor sports facilities are available including one cricket and football ground, two basketball and volleyball courts, a lawn tennis court, 3 km jogging/cycling track, 3 open air gymnasium and a kabaddi ground with stand and Mats.



## Bus Service

The Institute has buses which ply between Jaipur city and the campus at regular intervals every day.

# Placement

## Placements at a Glance

The Training, placement and corporate relations cell (TPC) of the institute handles all aspects of placements at LNMIIT for the students of all departments. It is a student body, directly under the supervision of the honorable Director, headed by the Deputy general Manager. Cell stands for branding the outlook of the university to the corporate and the industry.

The Deputy General Manager along with the TPC team including the Deputy Manager and student members handle various crucial tasks in the Cell like reaching out to companies, scheduling and executing placement-related activities, and carrying out all official communication with recruiters and students. The Cell strives to match recruiter expectations with students' aspirations. The team of student representatives coordinates the activities to ensure compliance with various institute policies and company officials, who execute coordination with their recruiting organizations. Over the years the Cell has gone from strength to strength in achieving outstanding placements at LNMIIT and will continue to do so in the years to come.

The Cell also helps those students who have high aspirational goals like entrepreneurship, higher studies, research, and preparation for competitive exams, etc.

## Placement Data 2023 & 2024

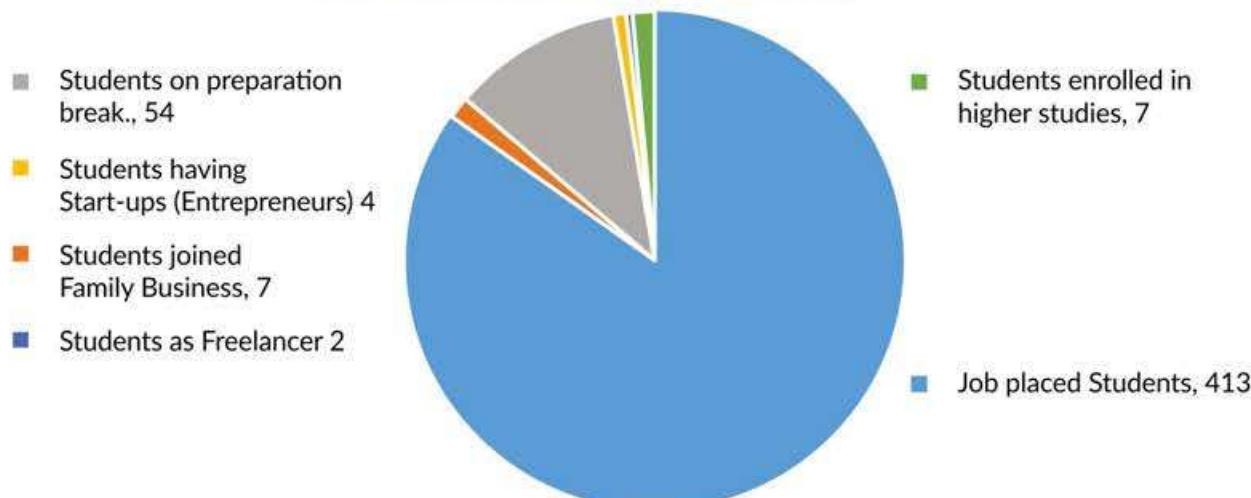
Graduating Year	Graduating Batch Strength (UG)	Students registered for Placement	Placed Students (Jobs)	Total Job Offers (Including multiple offers)	Number of Companies Visited	Placement % of Registered Students	Highest Salary Package	Average Salary Package
2023^	487	440	413**	446	61	~93.86%	50.96 Lakhs	14.51 Lakhs
2024**	524	430	272**	295	51	63.25	52.28 Lakhs	12.90 Lakhs

\*\* Including Full time & internship offers.

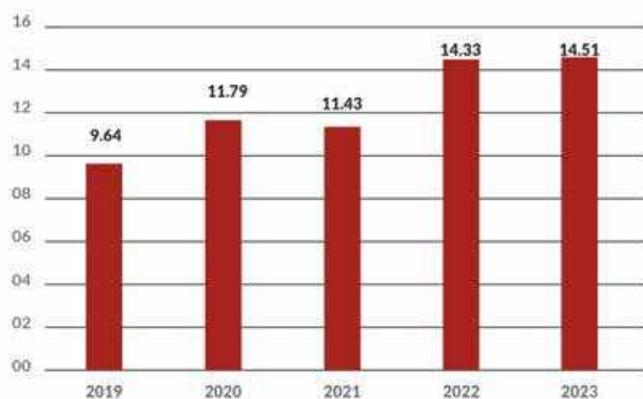
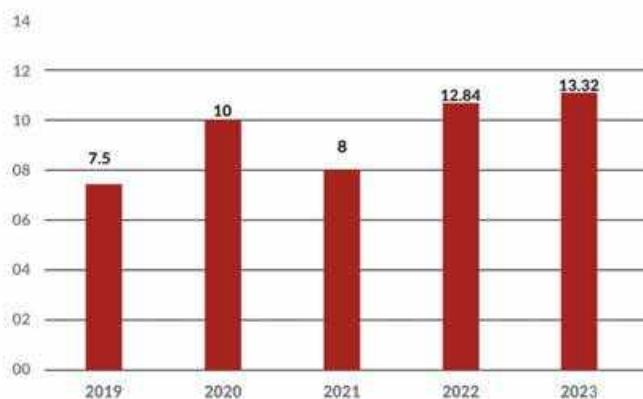
^ B.Tech, B.Tech+M.Tech Integrated Degree Students.

\* The placement process is going on.

### Placement Summary Batch 2023\*



\*Graduating batch strength 487.

**Average Salaries (Lakhs)****Median Salaries (Lakhs)****Last 5 Year Placement Stats**

Graduating Batch	Average (Lakhs)	Median (Lakhs)	Highest (Lakhs)
2023	14.51	13.32	50.96 Lakhs
2022	14.33	12.84	1.0056 CR.
2021	11.43	08	58.85
2020	11.79	10	63.27
2019	09.64	07.51	36

## Our Recruiters



# Alumni

The Institute takes efforts to continuously innovate in multiple spheres. LNMIIT is known to be one of the best Institutes in the country outside of the IIT system, both in terms of student and faculty quality and academic & research environment. Undoubtedly, it is a matter of immense pride that LNMIIT's Alumni have notched up as entrepreneurs, social workers, engineers, technologists, strategists, artists, academicians, managers, scientists, and have earned due respect from relevant quarters both locally and globally.

Many of our students have and are pursuing higher studies in premier institutes such as the IITs, IIMs, XLRI, and so on in India and prestigious universities and institutes in foreign countries such as:

University of Illinois, Chicago, USA	University of California, San Diego, USA
The University of Texas at Dallas, USA	University of Southern California, Los Angeles
North Carolina State University, USA	Arizona State University, Phoenix, AZ, US
Polytechnic Institute of New York University, USA	Wright State University, USA
Aston University, Birmingham, UK	University of Maryland, College Park
Simon Fraser University, Vancouver, Canada	Waterford Institute of Technology, Ireland
Technical University of Munich, Germany	Helmut Schmidt University/ University of the Federal Armed Forces, Hamburg, Germany
RWTH Aachen University, Germany	Technical University Darmstadt, Germany
Queensland University of Technology, Australia	Nanyang Technological University (NTU), Singapore
INRIA, France	ETSE-UAB, Spain
Singapore University of Technology & Design, Singapore	University of Minnesota, USA
Northeastern University, Massachusetts	National University of Ireland Galway, Ireland
RWTH Aachen University, Germany	Rochester Institute of Technology, USA
University of Toronto, Canada	Texas A&M University, College Station
George Mason University, Virginia, USA	Deloitte Los Angeles, California , USA
Tandon School of Engineering, NY University	Carnegie Mellon University, Pennsylvania, US
University of Windsor, Ontario, Canada	New Jersey Institute of Technology, New Jersey, USA
Indiana University, Indiana, USA	Missouri University of Science & Technology, Missouri, USA
RWTH Aachen University, Aachen, Germany	Albert-Ludwigs-Universitat, Freiburg im Breisgau, Germany
Australian National University, Canberra, Australia	Aalborg University, Copenhagen, Denmark
King's College, London, UK	Uppsala University, Sweden
Penn State University, Pennsylvania, USA	Worcester Polytechnic Institute, Massachusetts, US
And many more	

## Entrepreneurs/ CEOs

Our alumni are CEOs and first generation entrepreneurs, who have started organizations like:

Company	Year of Inception	Founder Alumni	Details
Lets Educate All Foundation	2024	Dr. Ayush Kumar Co-Founder	Lets Educate All Foundation in rural Bihar is & NGO that plans to spearhead a tech-driven educational revolution, introducing primary schools, computer labs, and digital libraries, thereby narrowing the gap between rural and urban education systems
JAR4U	2023	Mr. Himanshu Daga Founder	JAR4U transforms online shopping with AI-driven solutions like 3D Showcase, True AR, and a personalized Sales Assistant.
Digia	2023	Mr. Anupam Singh, CEO & Co-Founder	Digia Studio is a Mobile App Builder in the Cloud.
DC Foods	2022	Aarohi Surya CEO	Food Technology
Fanperk	2022	Mr. Kartik Rawat Mr. Prakhar Gupta Co-Founder and CEO	Information & Technology
CoinX	2022	Mr. Punit Agarwal CEO	Information and Technology
OpsLyft	2019	Mr. Aayush Kumar CEO & Founder	DevOps as a Service
Zubi Infotech	2019	Mr. Punit Agarwal CEO	Information and Technology
Wrytin Technologies Private Limited	2019	Mr. Karan Agarwal CEO, Engineering Manager at Highlevel	Information and Technology
Huddle 01	2019	Mr. Susmit Lavania Co-Founder & CTO	Information and Technology
Ideepners	2018	Mr. Shubham Sharma Mr. Harshit Jain Mr. Chhatrapati Jain Co- Founders	Information and Technology
Channelize.io	2018	Mr. Vudit Paliwal Co-Founder	Live Shopping Platform
GNG Agritech	2017	Mr. Gautam Agarwal CTO & Co-Founder	A Climate-tech and sustainability domain company
InstaCash	2017	Mr. Prateek Goyal CEO	InstaCash is the "Simplest way to get over used phones". And is advocating E-Clean India, in sync with Prime Minister's Swachh Bharat Abhiyaan.
Veris	2016	Mr. Utkarsh Jain CEO	Enterprise Solutions, Enterprise Mobility Platform, Identity Management, IoT, Connected Workplaces, Mobile Apps, Cloud Solutions, SaaS, Digital Workplace, Visitor Management, Access Solutions, Enterprise Security, Smart Offices, & Facility Management.
Event Graphia Pvt Ltd	2016	Mr. Dhiyavasu Bhaduria (Y13) CEO & Founder and Mr. Palansh Agarwal	Event Management

Wijungl	2014	Mr. Karmesh Gupta Co-founder and CEO	WiJungle is a unified network security gateway that helps organizations to manage and safeguard their entire local area network through a single window. Selected by Forbes under top young entrepreneurs 30 under 30 Asia-Enterprise Technology 2020.
Safe Security (Formerly Lucideus)	2012	Mr. Saket Modi CEO	Cyber-security Services
Dream Animators	2012	Mr. Prateek Saraf CO-Founder	CTO and CO-Founder of Appln, Founder of Dream Animators
Neutrino Technologies (Investor)	2009	Mr. Saurabh Gupta Founder & Chairman	Technology, Aviation & Investments
Enuke Softwares	2008	Mr. Manu Yadav CEO	Enuke have expertise in PHP, .NET, CMS – Drupal/Joomla/WordPress, GIS & Google Maps
BigStep Technologies	2008	Mr. Vudit Paliwal Co-Founder	BigStep is a Complete End-To-End Digital Technology Solutions Provider

Our alumni are in leading positions organizations like:

Arcelor Mittal	American Express (India) Pvt Limited	Microsoft
Tata Consultancy Services (TCS)	MTX	Bosch
Samsung (R & D)	Goldman Sachs	Uber
Urban Clap	Pharm Easy	Daily Hunt
Amazon	Google	Wayfair
Adobe	Go-Jek	Addverb Technologies Pvt. Ltd
Episource India Pvt Ltd	Delhivery	Senra Tech Pvt Ltd
NBC flexible solutions	Nagarro	BNY Mellon

Besides the above mentioned domains, our alumni are also in leading positions in the government sector and have made us proud through their contribution towards nation-building. They are prestigiously serving as higher officials in the Indian Army, BSE Central Secretariat and so on.

The Alumni network is spread globally (about 64% in North America, 21% in Europe, and the rest in Singapore, China and Australia). Besides the above mentioned achievements, some of our distinguished alumni are:

- Hemant Purohit, Ph.D. - Associate Professor at George Mason University, Fairfax, VA, US
- Kriti Bhargav, Ph.D. - Assistant Professor in Residence at University of Connecticut, Stamford, CA, US
- Ayush Kumar, Ph.D. - Fellow at Harvard Medical School and Research Assistant Professor at Stony Brook University, NY, US
- Ashwani Sharma, Ph.D. - Assistant Professor, IIT Ropar, Punjab, India
- Sumit Gautam, Ph.D. - Assistant Professor, IIT Indore, MP, India
- Udit Satija, Ph.D. - Assistant Professor, IIT, Patna, UP, India
- Smrati Gupta, Ph.D. - Principal Data Science Manager at Microsoft Intelligent Cloud, Seattle, WA, US
- Ashish Goyal, Ph.D. - Senior Scientist at Pfizer, Cambridge, Massachusetts, US
- Sanjay Goyal, Ph.D. - Senior Specialist, Wireless Radio Standardization at Nokia, New Providence, NJ, US
- Radhika Loomba, Ph.D. - Lead Data Scientist at Centre for Intelligent Power, Eaton, Dublin, Ireland
- Pratibha Rana, Ph.D. - Scientist at Institute for Infocomm Research, Singapore
- Gaurvi Goyal, Ph.D. - Researcher in Machine Vision for Human Centered Technology, Genoa, Liguria, Italy
- Nikita Jalodia, Ph.D. - Assistant Vice President, Manager (Data Product), ICG Applications Support, Citi, Dublin, Ireland
- Anshu Gupta, Ph.D. - Head of Department at Continental, Bengaluru, India

- Vinit Jalshetiya, Ph.D. – Assistant Professor, IIT Jammu
- Sagar Tandon - Partner at Beyond Impact, a biotech/climate-tech fund raising a USD 120 million fund. With a track record of leading 10 investments and strategic advisory roles in global climate and gender-smart capital initiatives
- Kanishka Garg – holds an MS in Computer Science from the University of Illinois at Chicago, graduating in 2015. Engineering Leader for Amazon FinTech's engineering team.
- Pushkal Agarwal Ph.D.-King's College, London, was a visiting researcher at UK parliament(2022), working as data scientist with cognizant AI, London, recipient of prestigious UK Global Talent visa in 2023
- Kriti Suneja Ph.D. – Assistant Professor, Department of ECE
- Mohit Taneja Ph.D. – Lead Data Scientist at Mastercard, Ireland

The institute also has an Alumni Association which has been connecting alumni all over the world by organizing 'Chapter meets' in various cities across the globe, and the 'Alumni Meet' at the institute campus. As the goodwill ambassadors and torch-bearers of the institute, each one of our alumni plays an integral role in guiding and motivating the current students to choose their career paths and accomplish their goals with excellence. The institute is proud of each one of them for proving their brilliance in different walks of life and chosen career paths.

This year, the Alumni Association successfully organized elections to form an Executive Committee. Our alumni community has chosen a dynamic team to lead us forward. The meticulous handling of the process by Swati Bhargava and her Election Commission team ensured its smooth execution. We proudly announce the elected members of the very first Executive Committee of the LNMIIT Alumni Association:

- Shourya Ranka (Y10 - Class of 2014) serving as the President of The LNMIIT Alumni Association. He has over 10 years of experience in software development and is currently based in Delhi NCR and working as Engineering Manager with The Economist Group.
- Nirmal Jain (Y05- Class of 2005), serving as the Vice President of LNMIIT Alumni Association. He is an Academician & Edupreneur presently associated with Allen Career Institute as a senior IIT JEE physics faculty in Jaipur.
- Anurag Bansal (Y10-Class of 2014), serving as the Secretary of The LNMIIT Alumni Association. He is an entrepreneur working in the field of Insurance and Financial Consultancy based out of Jaipur as well as running multiple social organizations in the State.
- Rishabha Sancheti (Y17 - Class of 2021), serving as the Treasurer of The LNMIIT Alumni Association, He co-founded Jobetto and serves as the Chief Operating Officer at IQ Infotech & Co, residing in Delhi NCR.



Shourya Ranka  
(President)



Nirmal Jain  
(Vice President)



Anurag Bansal  
(Secretary)



Rishabha Sancheti  
(Treasurer)

For more detailed information regarding Alumni and related events, kindly visit <https://alumni.lnmiit.ac.in/>



# Admissions 2024-25

## Undergraduate Programmes

### Undergraduate Programmes Offered

The Institute offers undergraduate admission in following AICTE approved programmes for Academic Year 2024-25:

#### B.Tech. (Honours) with Specialization

- Communication and Computer Engineering (CCE) with Specialization in Artificial Intelligence & Data Science
- Computer Science and Engineering (CSE) with Specialization in Artificial Intelligence & Data Science
- Mechanical Engineering (ME) with Specialization in Robotics & Automation

#### B.Tech.

- Communication and Computer Engineering (CCE)
- Computer Science and Engineering (CSE)
- Electronics and Communication Engineering (ECE)
- Mechanical Engineering (ME)

#### B.Tech. with Minor

- Minor in Robotics & Automation for B.Tech. (CCE/CSE/ECE)
- Minor in Artificial Intelligence & Data Science (ECE/ME)

#### B.Tech.-M.Tech. (5-Year Integrated Degree)

- Computer Science and Engineering (CSE)
- Electronics and Communication Engineering (ECE)

#### NOTE:

- The Institute has no provision for either Capitation Fee or Management Quota.
- The Institute reserves the right to reflect any changes with respect to the admission to a programme, number of rounds of seat allocations, respective deadlines, and also any changes as may be necessary in view of statutory requirements/ notifications from time-to-time.

There are four modes of admission for the above mentioned programmes.

1. Regular Mode (JEE Mains)
2. Direct Admission for Board Toppers
3. DASA Mode (International admission through JEE and valid SAT score)
4. Lateral Entry Mode (For admission to 2nd and 3rd semester)

The details of each of these modes of admission are as follows.

## Regular Mode

### Programmes offered and available number of seats

Programmes	Seats
B.Tech. in CSE	240
B.Tech. (Hons.) in CSE with Specialization in Artificial Intelligence & Data Science (40 Max.)	
B.Tech. in CSE with Minor in Robotics & Automation (10 Max.)	
B.Tech. in CCE	120
B.Tech. (Hons.) in CCE with Specialization in Artificial Intelligence & Data Science (20 Max.)	
B.Tech. in CCE with Minor in Robotics & Automation (5 Max.)	
B.Tech. in ECE	180
B.Tech. in ECE with Minor in Artificial Intelligence & Data Science (20 Max.)	
B.Tech. in ECE with Minor in Robotics & Automation (5 Max.)	
B.Tech. in ME	60
B.Tech. (Hons.) in ME with Specialization in Robotics & Automation (60 Max.)	
B.Tech. in ME with Minor in Artificial Intelligence & Data Science (10 Max.)	
B.Tech. - M.Tech. (5 Year Integrated Degree) in CSE	30
B.Tech. - M.Tech. (5 Year Integrated Degree) in ECE	30

#### NOTE:

- The Institute has no provision for either Capitation Fee or Management Quota.
- The Institute reserves the right to reflect any changes with respect to the admission to a programme, the number of rounds of seat allocations, respective deadlines, and any changes that may be necessary given statutory requirements/ notifications from time to time.
- A maximum of 5% of the seats within each branch may be available for Non-resident Indian (NRI) candidates as per regulatory norms. (Such seats will be filled through DASA mode of admission.)

## Eligibility Criteria

- The applicant must be a citizen of India. (Candidates holding OCI status must have to apply under DASA mode).
- The applicant must be appearing in Paper 1 (B.E./B.Tech.) during one or more sessions of JEE (Main) 2024 Examination conducted by the National Testing Agency (NTA).
- The applicant must have passed with an aggregate of minimum 60% marks or equivalent grade in Class 12th (10+2) examination. Applicants appearing in the class 12th examination are also eligible to apply.
- The applicant must have secured an aggregate of minimum 60% marks or equivalent grade in Mathematics, Physics and Chemistry in Class 12th examination.
- The applicant must have passed with an aggregate of minimum 60% marks or equivalent grade in Class 10th examination.

## Preparation of Merit List

- A Merit List will be prepared solely based on the Final NTA score (percentile) obtained in Paper-1 (B.E./B.Tech.) in JEE (Main) 2024 Examination for all eligible applicants.
- In case of identical Final NTA Score (Percentile), the following tie-breaker rules will be applied.
  - Mathematics NTA Score (Percentile) in JEE (Main) 2024
  - Physics NTA Score (Percentile) in JEE (Main) 2024
  - Chemistry NTA Score (Percentile) in JEE (Main) 2024
  - Mathematics, Physics, and Chemistry total percentage in class 12th examination
  - Mathematics marks in class 12th examination
  - Physics marks in class 12th examination
  - Chemistry marks in class 12th examination
  - Total percentage of marks in Class 10th examination

## Direct Admission for Board Toppers

Admission under this mode is available for candidates who are the toppers of all those recognised central and state boards in India who publish official merit lists.

## Eligibility Criteria

- An applicant who is among
  - Top 10 students in Class 12th examination in the academic year 2023-24 from the Merit List of the Rajasthan Board of Secondary Education (RBSE), provided that official Merit List mentioning such ranks is published.
  - OR
  - Top 2 students in Class 12th examination in the academic year 2023-24 of all those Central and State recognized boards in India who publish authorized Merit List indicating ranks.
- The applicant must have passed with an aggregate of minimum 60% marks or equivalent grade in Class 12th (10+2) examination.
- The applicant must have secured an aggregate of minimum 60% marks or equivalent grade in Mathematics, Physics and Chemistry in Class 12th examination.
- The applicant must have passed with an aggregate of at least 60% marks or equivalent grade in Class 10th examination.

## Selection Procedure

- Only the topper of each board, who have applied to LNMIIT for admission and fulfil the Eligibility Criteria mentioned above, will get the branch of their choice.
- An internal committee will look into the rest of the applications under this mode and considering the number of available seats will allocate branch of admission.

## DASA Mode

Admission under this mode is open for applicants under following three categories:

- **Foreign Nationals (FN)/ Overseas Citizens of India (OCI)**  
Candidate must have a valid passport issued by a foreign country.
- **Non-resident Indian (NRI)**  
Candidate must have completed her/his Class 11th and 12th or equivalent from outside India.
- **Children of Indian Workers in Gulf Countries (CIWG)**  
Candidate must have completed her/his Class 11th and 12th or equivalent from a gulf country (Bahrain, Iraq, Iran, Kuwait, Oman, Qatar, Saudi Arabia, UAE) and at least one of the parent must be working in a gulf country.

## Programmes offered and available number of seats

Programmes	Seats (Category-wise)		
	FN/OCI	NRI	CIWG
B.Tech. in CCE	12	6	6
B.Tech. (Hons.) in CCE with Specialization in Artificial Intelligence & Data Science (3 Max.)			
B.Tech. in CCE with Minor in Robotics & Automation (1 Max)			
B.Tech. in CSE	24	12	12
B.Tech. (Hons.) in CSE with Specialization in Artificial Intelligence & Data Science (6 Max.)			
B.Tech. in CSE with Minor in Robotics & Automation (2 Max.)			
B.Tech. in ECE	15	7	7
B.Tech. in ECE with Minor in Artificial Intelligence & Data Science (3 Max.)			
B.Tech. in ECE with Minor in Robotics & Automation (1 Max.)			
B.Tech. in ME	6	3	3
B.Tech. (Hons.) in ME with Specialization in Robotics & Automation (9 Max.)			
B.Tech. in ME with Minor in Artificial Intelligence & Data Science (2 Max.)			

### NOTE:

- The Institute has no provision for either Capitation Fee or Management Quota.
- The Institute reserves the right to reflect any changes with respect to the admission to a programme, the number of rounds of seat allocations, respective deadlines, and any changes that may be necessary given statutory requirements/ notifications from time to time.

## Eligibility Criteria

- The applicant should have a valid minimum aggregate score of 1040 (out of a maximum of 1600) in SAT conducted by College Board, USA.

OR

The applicant must have secured a minimum of 90 percentile as Final NTA score (percentile) in Paper 1 (B.E./B.Tech.) of JEE (Main) 2024 Examination conducted by the National Testing Agency (NTA).

- The applicant must have passed with an aggregate of minimum 60% marks or equivalent grade in Class 12th (10+2) examination or equivalent examination from board recognised by Association of Indian Universities (AIU) with adequate proficiency in English. Applicants appearing in the class 12th examination are also eligible to apply.
- The applicant must have secured an aggregate of minimum 60% marks or equivalent grade in Mathematics, Physics and Chemistry in Class 12th examination.
- The applicant must have passed with an aggregate of minimum 60% marks or equivalent grade in Class 10th examination or equivalent from board recognised by Association of Indian Universities (AIU).

## Preparation of Merit List

- Separate Merit Lists will be prepared on the basis of: (i) valid SAT score (ii) Final NTA score (percentile) obtained in Paper-1 (B.E./B.Tech.) in JEE (Main) 2024 Examination, for all eligible applicants.
- In case of identical Final NTA Score (Percentile), the following tie-breaker rules will be applied.
  - Mathematics, Physics, and Chemistry total percentage in class 12th examination
  - Mathematics marks in class 12th examination
  - Physics marks in class 12th examination
  - Chemistry marks in class 12th examination
  - Total percentage of marks in Class 10th examination
- Seats will be allotted as per the Merit Lists.

## Lateral Entry Mode (For 2<sup>nd</sup> and 3<sup>rd</sup> Semester)

### Eligibility Criteria

- The applicant must be pursuing B.Tech./B.E. (semster-1/ semster-2) from a recognized University/ Institute.
- The applicant must have appeared in Paper 1 (B.E. /B.Tech.) during one or more sessions of JEE (Main) 2023 Examination conducted by the National Testing Agency (NTA), and the applicant must have a JEE (Main) 2023 examination NTA (percentile) score equal or above the LNMIIT Cut-off scores of the admission year 2023-24 in the programme in which admission is sought.
- The applicant must have passed with an aggregate of minimum 60% marks or equivalent grade in Class 12th (10+2) examination.
- The applicant must have secured an aggregate of minimum 60% marks or equivalent grade in Mathematics, Physics and Chemistry in Class 12th examination.
- The applicant must have passed with an aggregate of minimum 60% marks or equivalent grade in Class 10th examination.

### Preparation of Merit List

- A Merit List will be prepared, solely on the basis of total percentile obtained in Physics, Chemistry and Mathematics in JEE (Main) 2023 Examination, of only those applicants who have applied to LNMIIT for admission and fulfill the Eligibility Criteria mentioned above.
- The admission through Lateral Entry mode will be based on the above prepared Merit List.

### Instructions to apply

- Interested applicants have to necessarily fill the online application form through the UG admission portal. The application form must be complete and correct in all respect.
- For Regular, Direct, Lateral entry mode of admission, the candidates have to pay a non-refundable and non-adjustable application fee of INR 2000/- (for female candidates it is INR 1000/-).
- For DASA mode of admission, the candidates have to pay a non-refundable and non- adjustable application fee of INR 7500/- (for female candidates it is INR 3750/-).
- Application form other than online mode would not be accepted in any case.

### Fee Structure

#### Fee for applicants admitted through Regular and Direct Admission for Board Toppers Mode:

A. Caution Money (One time deposit; Refundable, No interest is payable)	INR 10,000
B. Semester Fee	
• Registration Fee	INR 3,000
• Tuition Fee	INR 2,35,000

#### Fee for applicants admitted through DASA mode:

	CIWG Applicants	FN/OCI, NRI Applicants
A. Caution Money (One time deposit; Refundable, No interest is payable)	INR 10,000	INR 10,000
B. Semester Fee		
• Registration Fee	INR 3,000	INR 3,000
• Tuition Fee	INR 2,35,000	INR 5,17,800 (Yearly)

#### Fee for applicants admitted through Lateral mode:

A. Caution Money (One time deposit; Refundable, No interest is payable)	INR 10,000
B. Semester Fee	
• Registration Fee	INR 3,000
• Tuition Fee	INR 2,11,200

## Hostel and Mess charges per semester

Hostel Charges	INR 30,000
Electricity Charges	INR 7,000
Internet Charges	INR 750
Student Activity Charges	INR 1,500
Mess Food Charges (Advance) - Adjustable as per actual at the end of the Semester/ Academic year	INR 18,000

### NOTE:

- For B.Tech. (Hons.) with Specialization and B.Tech. with Minor programmes, an additional fee of INR 80,000/- is chargeable in addition to the fee applicable for the entire B.Tech. programme. (This additional fee is total additional and highly subsidized tuition fee for the Honours / Minor related full set of courses and projects related to a given minor or specialisation and is to be paid spread over multiple semesters, as per the schedule of courses in the table of respective minor or specialization.) This additional fee is NOT required to be paid at the time of admission.
- All charges are mandatory nothing can be waived off.
- Medical cum Accidental insurance yearly charges shall be charged on actual basis with 2nd semester fee.
- Alumnai lifetime membership Rs. 2,000/- is to be charged from the graduating students in the last semester.
- The Institute reviews the Fee Structure & charges periodically. There will be an annual increase of approximately 10% in Fee/charges.
- Same fee shall be charged in 2nd semester, annual increased in fee and charges as decided by the management.
- Summer/Winter course fee shall be paid separately as decided (if opted).
- Electricity charges may also change if any change the govt. tariff/charges proposed anytime in future.
- The LNMIIT is a residential institute. Therefore, staying in the Hostel and joining the Mess is compulsory for all the students. This condition may be relaxed if:
  - There is a shortage of accommodation or any other reason beyond institute's control. (For example, in view of COVID specific restrictions some hostel capacity may reduce.)
  - A student has a genuine reason to stay outside the campus. In this case, the institute will take the final decision on case-by-case basis.
- No separate bus charges payable to the Institute, subject to availability of such a service, therefore, no bus coupon shall be issued.
- Hostel and Mess charges would apply only to those provided with hostel accommodation and using the mess.

### Estimated tuition fee for the complete 4/5- year UG Programmes / PG Programmes

#### A. 4-Year Programme

Academic Year (AY)	2024-25	2025-26	2026-27	2027-28
Tuition Fee & Accommodation Charges (in INR)	5,54,500	6,01,500	6,53,200	7,10,100

#### B. 5-Year Integrated Programme

Academic Year (AY)	2024-25	2025-26	2026-27	2027-28	2028-29
Tuition Fee & Accommodation Charges (in INR)	5,54,500	6,01,500	6,53,200	7,10,100	Fee to be charged as applicable to the M.Tech student in that year, as per current estimate it is likely to be Rs. 3.65 lakh. It may be waived off against the teaching assistantship (if approved).

#### C. For MSC programme

Academic Year (AY)	2024-25	2025-26	Academic Year (AY)	2024-25	2025-26
Tuition Fee & Accommodation Charges (in INR)	1,31,700	1,36,500	Tuition Fee & Accommodation Charges (in INR)	2,77,820	2,97,160

#### D. For M.Tech. Programme

\* Tuition Fee in the 5th year shall be same as the Tuition Fee payable by the students of Final Year M.Tech. of that year. In 5th year, financial support is available as a half-time teaching / research assistant (HTTA / HTRA) as per the rules of the institute. The HTTAship / HTRAship under this scheme will be equivalent to the full Tuition Fee, and thus making it zero effective tuition fee.

## Postgraduate Programmes

Institute offers admission in the following PG programmes:

### Masters Programmes Offered:

Programme	Branch	Seats*
M.Sc.	Mathematics	15
	Physics	15
M.Tech.	Computer Science and Engineering (CSE)	15
	Electronics and Communication Engineering (ECE)	15
M.S. (by Research)	Communication and Computer Engineering (CCE)	No Upper Cap
	Computer Science and Engineering (CSE)	
	Electronics and Communication Engineering (ECE)	

\*The Institute has no provision for either Capitation Fee and /or Management Quota & These numbers are tentative in nature. The number of seats may be changed appropriately considering the overall academic quality of incoming students, regulatory permissions, etc.

### M.Sc.

#### Eligibility Criteria

##### M.Sc.(Mathematics)

Minimum 55% or equivalent CPI/ CGPA in B.Sc./ B.A./ B.E./ B.Tech./ B.Sc. (Engineering). Mathematics should be a major subject in the above Bachelor Degree.

##### M.Sc.(Physics)

A minimum of 55% or equivalent CPI/ CGPA in

- Three-year B.Sc. (Honours in Physics / Applied Physics or Honours in Electronics / Material Science / Computer Science / Chemistry / Mathematics / Statistics with Physics as one of the major subjects.)  
Or
- Four-year B. Tech. / B. E. / B. Sc. (Engineering) in any branch of engineering.  
Or
- Three-year general B. Sc. degree (with Physics as one of the major subject)

#### Admission Procedure

- **JAM Mode:** Joint Admission test for Masters (JAM)- 2024 qualified students will be admitted directly to the Institute subject to the merit list and availability of seats. (Note that the percentile should be above the cut-off score for the general category.)
- **CUET-PG Mode:** Central University Entrance Test (CUET-PG)-2024 exam qualified students will be admitted directly to the Institute subject to the merit list and availability of seats. (Note that the cut-off for the same will be decided post the last date of application via this mode.)
- **Institute Admission Mode:** Candidates can apply via the institute mode if
  - The candidate does not have a JAM-2024/ CUET-PG-2024 score card.
  - JAM-2024/ CUET-PG-2024 qualified candidates have missed the last date to fill the form in their respective mode. (Note: JAM-2024/ CUET-PG-2024 score will be null and void in this mode).

Institute admission procedure will be via **online** interview. The merit list will be prepared on the performance of the candidate in the interview only. Candidates will be admitted based on this merit list subject to availability of seats.

#### Selection Procedure

Admission will be conducted in stages via various modes, the merit list will also be created in the following order:

- JAM-2024 qualified students based on their percentile. (Note: percentile should be above the cut-off score for the general category).
- CUET-PG-2024 qualified students based on the CUET score and the cut-off decided by the Institute.
- Institute Admission Mode Qualified students based on the score obtained in the online interview.

## Fee Structure

The application fee (non-refundable) for the M.Sc. courses is INR 500. For women applicants, the application fee is INR 250.

A. Caution Money (One time deposit; Refundable at the end of the programme; No interest is payable)	INR 10,000
B. Semester Fee	
• Registration Fee	INR 3,000
• Tuition Fee	INR 23,600

### Hostel and Mess charges (per semester)

Hostel Charges	INR 30,000
Electricity Charges	INR 7000
Internet Charges	INR 750
Student Activity Charges	INR 1,500
Mess Food Charges (Advance) - Adjustable as per actual at the end of the Semester/ Academic year	INR 18,000

#### NOTE:

- All charges are mandatory, nothing can be waived off.
- Medical cum Acciential insurance yearly charges shall be charged on actual basis with 2nd semester fee.
- Alumnai lifetime membership Rs. 2,000/- is to be charged from the grduating students in the last semester.
- The Institute reviews the Fee Structure & charges periodically. There will be an annual increase of approximately 10% in Fee/charges.
- Same fee shall be charged in 2nd semester, annual increased in fee and charges as decided by the management.
- Summar/Winter course fee shall be paid separately as decided (if opted).
- Electricity charges may also change if any change the govt. traiff/charges proposed anytime in future.
- No separate bus charges payable to the Institute, subject to availability of such a service, therefore, no bus coupon shall be issued.
- If hostel opted, mess is compulsory.
- Hostel and Mess charges would apply only to those provided with hostel accommodation and using the mess.
- Staying in the Hostel is optional. Hostel facility would be available subject to availability of the rooms.

## M.Tech. & M.S. (by Research)

### Eligibility Criteria

Programme	Eligibility Criteria
M.S. (by Research) in CCE	<p>B.E. / B.Tech. in Computer Science and Engineering / Information Technology / Communication and computer engineering/Electronics and Communication Engineering/ Electrical Engineering or related branch with a minimum of 60% marks or equivalent CPI/CGPA (with/without valid GATE score)</p> <p>Or</p> <p>B.E. / B. Tech. (in any branch) or MCA or M.Sc. (in Computer Science/ Electronics or related subject) with a minimum of 60% marks or equivalent CPI/CGPA and a valid GATE score in CS/ EC subject.</p>

M.Tech. in CSE M.S. (by Research) in CSE	B.E. / B.Tech. in Computer Science and Engineering/ Information Technology / Software Engineering or related branch with a minimum of 60% marks or equivalent CPI/CGPA (with/without valid GATE score) Or B.E. / B. Tech. (in any branch) or MCA or M.Sc. (in Computer Science/ Information Technology/ Mathematics or related subject) with a minimum of 60% marks or equivalent CPI/CGPA and a valid GATE score in CS subject.
M.Tech. in (ECE) M.S. (by Research) in ECE	B.E. / B.Tech. in Electronics and Communication Engineering / Electrical Engineering / Instrumentation Engineering or related branch with a minimum of 60% marks or equivalent CPI/CGPA (with/without valid GATE score) Or B.E. / B. Tech. (in any branch) or M.Sc. (in Electronics / Physics with Electronics / Instrumentation or related subject) with a minimum of 60% marks or equivalent CPI/CGPA and a valid GATE score in EC subject.

**Note :** Candidates appearing for final examinations in 2024 can also apply.

### Selection Procedure

- GATE Mode:** GATE - 2024 qualified candidates will be admitted directly to the Institute subject to the merit list and availability of seats. (Note that the percentile should be above the cut-off score for the general category.)  
Or
- Candidates with CGPA  $\geq 8.0$  (out of 10) or equivalent in the qualifying degree (For B.Tech. Graduate):** Candidate will be admitted directly to the Institute subject to the merit list and available seats.  
Or
- Candidates with a valid CUET-PG 2024 Score:** CUET-PG 2024 qualified candidates will be admitted directly to the Institute subject to the merit list and availability of seats. (Note that the percentile should be above the cut off score for the general category in CUET.)  
Or
- All other applicants must** appear for an institute-conducted written test. A separate merit list will be prepared based on the applicant's performance in the institute-conducted written test. Candidates will be admitted based on this merit list, subject to the availability of seats.

Admissions will be made based on the above prepared merit lists.

Programme	Total Seat
M.Tech (CSE)	15
M.Tech (ECE)	15
M.S. (by Research)	No Upper Cap

### Fee Structure for M.Tech. / M.S. (by Research) 2024-25

	Without HTTA / HTRA	With HTTA / HTRA
A. Caution Money (One time deposit; Refundable; No interest is payable)	INR 10,000	INR 10,000
B. Semester Fee		
• Registration Fee	INR 3,000	INR 3,000
• Tuition Fee	INR 96,660	NIL <sup>†</sup>
	INR 99,660*	INR 3000*

\*Excluding caution money

## Hostel and Mess charges per semester

Hostel Charges	INR 30,000
Electricity Charges	INR 7000
Internet Charges	INR 750
Student Activity Charges	INR 1,500
Mess Food Charges (Advance) - Adjustable on the actual basis at the end of the Semester/ Academic year	INR 18,000
<b>TOTAL</b>	<b>INR 57,250</b>

### NOTE:

- All charges are mandatory, nothing can be waived off.
- Medical cum Accidental insurance yearly charges shall be charged on actual basis with 2nd semester fee.
- Alumnai lifetime membership Rs. 2,000/- is to be charged from the grduating students in the last semester.
- The Institute reviews the Fee Structure & charges periodically. There will be an annual increase of approximately 10% in Fee/charges.
- Same fee shall be charged in 2nd semester, annual increased in fee and charges as decided by the management.
- Summar/Winter course fee shall be paid separately as decided (if opted).
- Electricity charges may also change if any change the govt. traiff/charges proposed anytime in future.
- No separate bus charges payable to the Institute, subject to availability of such a service, therefore, no bus coupon shall be issued.
- If hostel opted, mess is compulsory.
- Hostel and Mess charges would apply only to those provided with hostel accommodation and using the mess.
- **Staying in the Hostel is optional. Hostel facility would be available subject to availability of the rooms.**

† Financial support is available as a half-time teaching / research assistant (HTTA / HTRA) as per the rules of the institute. The HTTAship / HTRAsip under this scheme will be equivalent to the full Tuition Fee, and thus making it zero effective tuition fee. This will be extended to the next three semesters, provided the candidate is able to maintain a minimum of 7 CGPA and do satisfactory work as assessed by the Department.



## Full-time Doctoral (PhD) / Part-time Doctoral (PhD) Programmes

The Institute offers Ph.D. Programmes in Engineering, Sciences, Humanities and Social Sciences. Moreover, the institute encourages quality and purposive interdisciplinary research in areas of its expertise. The broad objective of the Ph.D. Programme in the institute is to prepare the students to pursue their research careers in R&D organizations, industries and academia by the way of quality research of both basic and applied kind. The Institute provides a vibrant research atmosphere and invites applications from highly motivated applicants for admission to its Ph.D. Programme in the following departments:

- Communication and Computer Engineering
- Computer Science and Engineering
- Electronics and Communication Engineering
- Mechanical-Mechatronics Engineering
- Physics
- Mathematics
- Humanities and Social Sciences

### Eligibility Criteria

Department-wise Minimum Eligibility Criteria for Admission to Ph.D. Programmes:

Department	Eligibility Criteria
Communication and Computer Engineering (CCE)	<p>Master's degree in engineering (M. Tech. / ME / MS (by research)) in CCE / CSE / ECE / IT or any other relevant discipline with a minimum 60% marks or equivalent CPI/CGPA</p> <p>OR</p> <p>B.Tech. / B.E. in CSE / ECE / CCE / IT or any other relevant discipline or MCA with a minimum 75% marks or equivalent CPI/CGPA and GATE qualified</p> <p>OR</p> <p>M.Sc. in Computer Science / Electronics or any other relevant discipline with a minimum 75% marks or equivalent CPI/CGPA and GATE qualified.</p>
Computer Science and Engineering (CSE)	<p>Master's degree in engineering (M. Tech. / ME / MS (by research)) in CSE / CCE/ IT / ECE or any other relevant discipline with a minimum 60% marks or equivalent CPI/CGPA</p> <p>OR</p> <p>B.Tech. / B.E. in CSE / ECE / CCE / IT or any other relevant discipline with minimum 70% marks or equivalent CPI/CGPA and GATE qualified in relevant discipline</p> <p>OR</p> <p>MCA or M.Sc. in Computer Science / Operation Research / Statistics / Maths or any other relevant discipline with minimum 60% marks or equivalent CPI/CGPA and GATE qualified in relevant discipline.</p>
Electronics and Communication Engineering (ECE)	<p>Master's degree in engineering (M.Tech. / ME / MS (by Research)) in ECE - 60% or Equivalent CPI/CGPA</p> <p>OR</p> <p>B.Tech. in CSE, ECE, CCE, IT or any other equivalent discipline with a minimum of 75% or equivalent CPI/CGPA and GATE qualified</p> <p>OR</p> <p>M.Sc. (Electronics, Operation Research, Statistics, Maths or any equivalent discipline) with a minimum of 60% or equivalent CPI/CGPA and GATE qualified.</p>

Mechanical-Mechatronics Engineering (MME)	<p>Master's degree in engineering (M. Tech. / ME / MS (by research) in Mechanical Engineering or relevant discipline (such as aeronautical / aerospace, applied mechanics, tribology, science / metallurgical, automobile, HVAC, mechatronics, etc.) with a minimum 60% marks or equivalent CPI/CGPA</p> <p><b>OR</b></p> <p>B.Tech. / B.E. in Mechanical Engineering or relevant field (such as aeronautical / aerospace, applied mechanics, tribology, material science / metallurgical, automobile, HVAC, mechatronics, production, manufacturing, etc.) with a minimum 75% marks or equivalent CPI/CGPA and GATE qualification in Mechanical Engineering or relevant discipline.</p>
Mathematics	<p>Master's degree in Mathematics or in the relevant subject with 55% marks or equivalent CPI/CGPA</p> <p><b>OR</b></p> <p>Bachelor's degree in science and engineering (typically 4-year programme) relevant to Mathematics with 90% marks or equivalent CPI/CGPA and a valid GATE score of 99 percentile or above in the relevant area of application.</p>
Physics	<p>Master's degree in Physics or in the relevant subject with 55% marks or equivalent CPI/CGPA</p> <p><b>OR</b></p> <p>Bachelor's degree in science and engineering (typically 4-year programme) relevant to Physics with 90% marks or equivalent CPI/CGPA and a valid GATE score of 99 percentile or above in the relevant area of application.</p>
Humanities and Social Sciences (HSS)	Master's Degree in related subject/ relevant areas with a minimum of 55% marks or equivalent CPI/ CGPA.

The students awaiting their qualifying examination results are also eligible to apply. They need to submit the qualifying mark sheets and/or certificates at the time of admission. Please note that the qualifying degree of applicant should be from an accredited university /deemed-to-be-university or an institution of higher learning of comparable standing. The eligibility criteria given above are the absolute minimum. Institute may prescribe any requirements over and above these. In case the candidates are awarded grades/CPI/CGPA instead of marks, applicant would have to produce the grade-percentage conversion criterion or formula provided by the university/institution from where the applicant has obtained the degree. In case, where a university/institute does not provide any scheme for converting CPI/CGPA into equivalent marks, UGC and AICTE guidelines would be applicable.

## Admission Procedure

Admission to the Ph.D. programme is offered to eligible candidates on the basis of a written examination and an interview. Consequently, all applicants who qualify in the written examination have to appear for the personal interview on the same day or very next day. Candidates who have qualified for national level fellowships like CSIR/UGC-NET-JRF, DST-INSPIRE, NBHM Ph.D. scholarship or equivalent valid fellowship in the relevant subject/discipline may be exempted from the written examination but not from the interview. Ph.D. part-time aspirants who clear the written test are required to give a seminar on the proposed topic of research during the interview.

## Admission Procedure For Part-Time Ph.D.

- The minimum qualification for these candidates is the same as for full-time candidates except experience requirement.
- Experience required for admission to part-time Ph.D. Programmes varies with qualifying degree.
- The part-time candidates should submit, a No Objection Certificate (NOC) from the organization, in which s/he is employed, at the time of admissions giving an undertaking that s/he would be released from the normal duties to fulfill the course-work requirement (and qualifier examination, if applicable).

## Fee Structure

### Fee for applicants admitted in Ph.D. Programme

A. Caution Money (One time deposit; Refundable, No interest is payable)	INR 10,000
B. Semester Fee	
• Registration Fee	INR 3,000
• Tuition Fee	INR 23,600

**Note:**

- All charges are mandatory nothing can be waived off.
- The Institute also offers various scholarship/assistantship schemes and the details can be found in Doctoral fellowship section.
- The Institute reviews the Fee Structure & charges periodically. There will be an annual increase of approximately 10% in Fee/charges.
- Medical cum Accidental insurance yearly charges shall be charged on actual basis with 2nd semester fee.
- Limited financial support is available as per institute norms in form of partial or full tuition fee waiver on account of outstanding research publications.

### Hostel and Mess charges (per semester)

Hostel Charges	INR 30,000
Electricity Charges	INR 7000
Internet Charges	INR 750
Student Activity Charges	INR 1,500
Mess Food Charges (Advance) - Adjustable as per actual at the end of the Semester	INR 18,000

NOTE: Staying in the Hostel is optional. Hostel facility would be available subject to availability of the rooms.



# Scholarships & Assistantships

The LNMIIT has made a provision of various types of scholarships and assistantships in order to encourage merit, foster internal competition and support the economically challenged students, with certain level of academic performance.

## Undergraduate Scholarships

- **Merit Scholarships:** For select top rankers/meritorious students based on the following academic criteria. First Semester:

- Top 20 rankers (up to top 5000 rank, in general category) of JEE (Advanced 2024). The scholarship amount is up to INR 35000 per semester.
- Up to next 20 rankers (if up to top 7500 rank, in general category) of JEE (Advanced 2024). The scholarship amount is INR 30000 per semester.
- Up to next 20 rankers (if up to top 12000 rank, in general category) of JEE (Advanced 2024). The scholarship amount is INR 25000 per semester.

**Second Semester Onwards:** Academic performance at LNMIIT (CGPA of 9.25 or above).

- CGPA 9.81-10: The scholarship amount is up to INR 35000 per semester.
- CGPA 9.51-9.8: The scholarship amount is up to INR 30000 per semester.
- CGPA 9.25-9.5: The scholarship amount is up to INR 25000 per semester.

- **BPL Scholarships:** A few BPL scholarships are available for the neediest students.

**Academic Eligibility:**

- **First Semester:** Not Applicable.
- **Second Semester Onward:** For the continuity of the scholarship, the students will have to maintain the prescribed minimum academic performance (Academic eligibility: CGPA of 6.0 and above with no backlogs). The amount is equivalent to the full Tuition fee.

**Note:** The first reduction in CGPA below 6.0 will lead to a warning and continuance of the same in the next semester will lead to termination of scholarship. Backlog will result in immediate termination of scholarship. However, re-attainment of CGPA of 6.00 or above will result in reinstatement of scholarship.

**Financial Eligibility:**

- Applicable to BPL cardholders and beneficiaries of the National Food Security Act, 2013 having annual income below one Lac. (In some states on the adoption of the above Act, the categories of BPL and APL have been merged into new categories, namely, patrgrihasthi (priority household) and antyodaya etc.)

- **Vijay Bhatnagar Scholarship:** For a meritorious and economically challenged girl student based on the following criteria. The scholarship amount is INR 50000 (INR 25000 per semester)

**Academic Eligibility:** This scholarship is for an academically bright girl student with CGPA 8.5 or above with no backlog.

**Financial Eligibility:** Parental income below five lacs per annum.

- **Vandana Jain Merit Scholarship:** One scholarship of Rs. 50,000 per semester to be given to an academically bright student purely on the basis of merit. Award of the scholarship will be given to the student with the highest CGPA from all the UG batches.

## Undergraduate Assistantships

Select semester/ term-long assistantships/ stipends under earn while you learn (EWL) scheme, in lieu of academic / community support work is available.

- **Merit-Cum-Means Assistantship:** For a few meritorious and economically challenged students based on the following criteria. The assistantship amount is equivalent to 50% of the tuition fee.

**Academic Eligibility:**

**First Semester:** JEE (Advanced) AIR up to 12000 or JEE (Main) percentile of 97 and above.

**Second Semester Onwards:** CGPA of 8.50 or above and no backlog.

**Financial Eligibility:** Parental income below five Lacs per annum.

- **Type "A" Assistantships:** Admissible to a few (maximum four recipients, including all years) students facing economic hardships due to loss of bread-earner in the family during the degree period, assistantship amount is equivalent to full tuition fee.

**Financial Eligibility:** Parental Income (of the surviving parent/ guardian) 5.0 Lakh per Annum or below. Conditions for continuity of assistantship: SGPA of 6.50 and above.

- **Type "B" Assistantships:** Admissible to address economic hardships of students (against work in the departments, projects, library, etc.). assistantship amount is up to 6000/-p.m.

- **Type "C" Assistantships:** Admissible to address economic hardships of (maximum six recipients, including all years) students (against work in hostels), assistantship amount is equivalent to full or partial waivers of hostel fee.

- **Type "D" Assistantships:** Admissible to a few (maximum two recipients, including all years) students having a single parent who may be facing significant economic hardships due to no other bread-earner in the family during the degree period, assistantship amount is equivalent to full tuition fee.

**Financial Eligibility:** Parental income (of the surviving parent/ guardian) 5.0 Lakh per annum or below. Conditions for continuity of assistantship is SGPA of 6.50 and above.

- **UG Teaching Assistantships:** Available to meritorious students against work in lab/theory courses, assistantship amount is up to 4000/-p.m. no one would be allowed to voluntarily leave an assistantship of this kind when a semester / term is running.

**Notes:**

- No student shall be eligible for more than one scholarship/ assistantship.
- The maximum number of each type of scholarship/assistantship is fixed in given year as per budgetary provisions approved by the governing council. In the event of a greater number of eligible applicants, benchmarks of Income and/or merit, as applicable, shall be used for scrutiny and consequent award of scholarship/assistantship, subject to attendance, if recorded, not being less than 85%.
- The scholarship/assistantship is not a matter of right. It is a privilege offered by the Institute to enhance internal competition and thereby academic excellence and support the needy. The Institute reserves the right to eliminate or increase/ decrease the quantum of scholarship/ assistantship and change the policy conditions.
- Scholarship/assistantship policies are reviewed by the Institute from time to time.

## Scholarships from External Agencies

Students of LNMIIT have availed different scholarships from various external agencies, as per their respective rules and provisions, as listed below.

National Scholarship	Border Security Force (BSF)
Mukhyamantri Medhavi Vidyarthi Yojna (MMVY), Govt. of M.P.	Ministry of Human Resource Development, Govt. of India
Mukhyamantri Yuva Swavlamban Yojana, Govt. of Gujarat	Tata Steel Millennium Scholarship
Pragati Scholarship for Girls	Indian Railway
National Talent Search Scheme	Bharat Sanchar Nigam Limited (BSNL)
Indian Air Force Benevolent Association	Student Benevolence Fund
Kendriya Sainik Board (Dept. of Ex-Servicemen Welfare), Ministry of Defence, Govt. of India	Goverment of Bihar

## Postgraduate Scholarships / Assistantships

### M.Sc. (Mathematics/ Physics)

- A few assistantships (10 students in Mathematics and Physics each) are available, on the basis of merit/ selection as teaching assistantship.
- The assistantship amount at present is INR 5,000/- per month. The student's progress will be reviewed at the end of each semester and based on that the department will recommend the top 10 students for financial support for the next semester. For the first semester, top 10 students will get assistance based on their rank in the admission process. admission will be conducted in stages via various modes, the merit list will also be created in the following order:
  - a) JAM-2024 qualified students based on their percentile. (Note: percentile should be above the cut-off score for the general category).
  - b) CUET-PG-2024 qualified students based on the CUET score and the cut-off decided by the Institute.
  - c) Institute qualified students based on the score obtained in the online interview.
- Limited financial assistance for national and international travel to present research work in reputed (Tier- I/ Tier - II) refereed National/ International conferences as per the Institute Norms.

### M.Tech. (CSE/ECE) / M.S. (by Research) in CCE/CSE/ECE

- M. Tech. students with valid GATE score shall receive scholarship from AICTE as per rules.
- Financial support is available as a half-time teaching /research assistant (HTTA/HTRA) as per the rules of the institute. The HTTAship/HTRAsip under this scheme will be equivalent to the full tuition fee, and thus making it zero effective tuition fee. This will be extended to the next three semesters, provided the candidate is able to maintain a minimum of 7 CGPA and do satisfactory work as assessed by the Department.

Mode	MHRD Scholarship	HTTA/HTRA	Total
GATE	12,400 p.m.	16,110 p.m.*	28,510 p.m.
Without GATE	NA	16,110 p.m.*	16,110 p.m.*

\*Annual tuition fees- Rs. 1,93,320/- . A monthly stipend of Rs. 16,110/- will make effective fees to be zero.

**NOTE:** The institute reviews the fee structure & charges periodically. There will be an annual increase of approximately 10% in fee/charges. HTTA/HTRAsip will be revised accordingly.

- Limited financial assistance for national & international travel to present research work in reputed (Tier - I/Tier -II) referred national / international conferences.
- **NOTE:** The continuation of assistantship (HTTA/HTRA) will be subject to monthly attendance and satisfactory academic performance.

### Doctoral Fellowships

- Students may avail financial assistantship from external funding agencies (such as UGC/CSIR/NBHM/DST/DAE etc.) as well as from industries.
- Financial assistance is available from the Institute to the students in the form of teaching and research assistantships as per Institute norms, for those candidates who may not have any external fellowship. The institute fellowship for full time Ph.D. candidates is as follows:
  - INR 31,000 per month for initial two years ➢ INR 35,000 per month for the next three years
- Partial financial support is available to the meritorious students to attend the workshops, short-term courses and for paper presentations in refereed quality conferences as per Institute norms.
- Provisions are there for semester fee waiver on account of excellent publications, as per institute rules.
- For more details on fellowship, please visit the department specific page.

#### Note:

- Students are encouraged to avail financial assistantship from external funding agencies also (such as UGC/CSIR/NBHM/DST/DAE etc.) as well as from industries. They may have to be involved in the department as per rules.
- All Ph.D. students must work as TAs/RAs if they are being funded by the institute.
- Ph.D. students are advised to explore external financial assistance available in form of scholarships at the following portal.
  - SERB-CII Prime Minister's Fellowship Scheme for Doctoral Research
  - National Scholarship Portal ➢ Scholarship Portal, Government of Rajasthan

# Student Life @ LNMIIT

The students have an academically and culturally vibrant life in the institute. With an array of diverse facilities, students are offered an opportunity to pursue their creative talents and passions. The institute takes care to provide a conducive environment for fostering and nurturing holistic development of all students.

## Student's Achievements

- Abhay Kumar Gupta (20UCS005) and Mayank Deshwal (20UCC065) secured the First prize at CODS-COMAD 2024 held in Bangalore from 4-7 Jan 2024, receiving a prize of Rs 50,000.
- Kumar Mangesh (19UEC090) & Asher Ejaz (22UCS234) secured the First prize with trophies, certificates, and prize money of INR 1 lakh in SIB Ignite held at St. Joseph's University in Bangalore on 05-Feb-24.
- Dev Soni (22DCS004) & Shourya Kumar Singh (22UME036) secured third place in SIB Ignite at St. Joseph's University in Bangalore on 05-Feb-24.
- 1st Runner Up: Team E-Innovators (Saumya Kalra, Priyanshu Jain, Anmol Badlani - 20UEC119, 20UME042, 20UME009) secured the title along with a cash prize of ₹50,000, while Ananya Nautiyal (20UEC018) and Rajat Bothra (20UCS157) received the Special Jury Award of ₹10,000 for outstanding performance in V-Guard's 13th Annual "Big Idea Contest" held on 23-Sep-23.
- Manan Mishra (20UCC062) secured the 2nd position at AstroPixel-APOGEE '23 held at BITS, Pilani from 31-Mar to 03-April-23.
- Manmeet Singh Brar (20UCS112) won the ETHGlobal Superhack Online event held from 4 to 18-Aug-2023.
- Ayush Bajaj (21UCC129) and Yash Kabra (21UME029) emerged as the Runners-up, securing a cash prize of INR 1 Lakh at InQube, a business challenge hosted by Shiv Nadar IOE's prestigious Shiv Nadar University, Uttar Pradesh, held from 13-15-Oct-23.
- Vraj Shah (21UEC145), Varun Goyal (21UCS229), Yash Kabra (21UME059), and Ayush Bajaj (21UCC129) secured the 3rd position at Technostrophe'23 conducted by IIT Dharwad on 2-Sep-2023.
- Ayush Bajaj (21UCC129) secured First Position in the Rajasthan Cluster Finals of Tata Crucible 2023 - 'The Campus Business Quiz' held in Sep-2023, winning a Prize Money of Rs 35,000.
- Yash Kabra, Ayush Bajaj, Kumar Mangesh, Shiven Gupta, Tarun Agarwal & Ashwin Singh secured 1st position and Akshat Upadhyay, Garvika Joshi & Diya Hinger secured 2nd position in the third edition of Quriosity, the Annual Quizzing Fest of Manipal University Jaipur organized on 21st and 22nd of January, 2023.
- Yash Kabra, Ayush Bajaj and Kumar Mangesh secured 1st position, Shiven Gupta, Ashwin Singh & Tarun Agarwal secured 2nd position and Dev Soni, Shourya Kumar Singh & Shreyas Srivastava secured 3rd position in the third edition of Quriosity, the Annual Quizzing Fest of Manipal University Jaipur organized on 21st and 22nd of January, 2023.



- Varun Goyal and Vraj Shah were among the top 8 teams qualifying for the finals of "Quiz on the Beach" at TAPMI School of Business, Manipal University Jaipur held on 14th January, 2023.
- Ayush Bajaj, Yash Kabra and Tarun Agarwal secured 1st position in Prerana General Quiz, organized by NITIE (proposed to be renamed as Indian Institute of Management), Mumbai held in Nov, 2022 at NITIE (IIM), Mumbai.
- Kabaddi team participated at the all India inter IIT tournament Udghosh 2022 and secured 3rd position (bronze medal) which was held between 14-16 October, 2022 at IIT Kanpur.
- Aryan Rajnish Kasat, Kartikeya Sharma and Sarang Deb Saha were selected for a fellowship of INR 10000 per member per month for an initial period of 6 months by CHANAKYA UG Fellowship at iHUB DivyaSampark at IIT Roorkee on 16th Sep, 2022.
- Ayush Bajaj and Yash Kabra secured 3rd position in Technostrophe'22, an e-summit at IIT Dharwad in August, 2022.
- Muskan Tongaria, Nitin Sharma and Ujjwal Singhal successfully cleared their GATE 2022 examination in July, 2022 and got admissions into IIT's to pursue higher education.
- Hemakshi Manchandia (Y18 Batch) has been won the scholarship for the Virtual Grace Hopper Celebration in 2021.
- Shubham Tibrewal and Vasundhara Shukla are the winners of the Economic Times Campus Stars 4.0 in 2021.
- Vaibhav Jaiswal secured the first position in Hackathon as part of the Elan and Nvision and secured fifth position in Code Arduino as part of the Elan and Nvision in 2021.
- Advik Singhania is the winner of Hack the Box University CTF. He along with Aditya Mittal are also the winners of Cyber Santa CTF in 2021.
- Harshit Singhal, Ishita Mittal, Chirag Pareek, Harshit Bansal, Vivek Nunia, Kartikey Sharma, Abhijeet Kumar Jha and Yash Agarwal have won accolades from the Geoffrey Hinton Fellowship through their first Hackathon in 2021.
- Apoorv Srivastava, Mishal Singhai, Garv Tambi, Kinar Sharma, Utkarsh Maheswari and Vineet Jain are selected for Google Summer of Code (GSoC) 2021.
- Manas Vyas (Y18 Batch) secured third position in the Elevator Pitch competition at the ASME E-Fest Asia Pacific 2020 held at the Marwadi University, Rajkot, Gujarat INDIA. He also secured the first and third positions respectively in the Elevator Pitch competitions at the ASME E-Fest Digital and ASME E-Fest Asia Pacific 2020. He was chosen to be a part of the highly reputable ASME Student Leadership Training Conference (SLTC), from October 31st - November 1st, 2020 at the ASME Student Leadership Training Conference 2020.
- Yashowardhan Agarwal (Y17 Batch) selected as a mentor for Atal Tinkering Labs under the Atal Innovation mission of the Govt. of India.
- Nipun Jain, Jahanvi Budania and Somya Jain participated in industry India conclave quiz held nationally and got selected among the top 30 students in India under the mechanical division and secured a cash prize of ₹500 each at IISF 2020.
- Nilay Harjani and Harsh Mundra submitted their project regarding analysis of the conventional designs of DTH Bits and suggesting modifications to increase the drilling efficiency. It was selected to be amongst the top 100 entries and was showcased in a virtual booth with other projects. at "Connect Next Conference" by La Foundation Dassault Systems.
- Divyansh Singh published a paper titled "Polyth-Net: Classification of Polythene Bags for Garbage Segregation Using Deep Learning" in IEEE International Conference on Sustainable Energy and Future Electric Transportation, Jan 21-23, 2021.
- Advik Singhania (Y20 Batch) won the Best Hardware Hack (presented by Digi-Key) category in "Who Wants To Be A Hackionaire" hackathon. The event was organized virtually by Major League Hacking (MLH), a global community of student hackathons. (November 27-29, 2020).
- MTech student, Deepa Tilwani, under mentorship of Dr. Pramod Gaur, won 2nd place in the LINZ hackathon at the Ars Electronica Festival 2020 organised virtually and sponsored by IEEE brain (September 12-13, 2020) with a prize money of 300 USD.
- Deepa Tilwani (Y19 Batch) and team, under mentorship of Dr. Pramod Gaur, secured 2nd position in Brain-Computer Interface Designers Hackathon. The BR4IN.IO Brain-Computer Interface Designers Hackathon in the field of BCI and Neurotechnology, organized by g.tec medical engineering GmbH Austria was sponsored by IEEEbrain, September 2020.
- Harsh Gupta (Y18 Batch) secured 2nd position along with prize money of 100 USD in WITH-IN SUBJECT category in BCI challenge 2020 organized in the conference IEEE WCCI 2020.

- Three teams of 15 students from the LNMIIT participated in three national level Smart India Hackathon which were organized at Hyderabad, Ahmedabad and Indore. Two of them were first prize winners in two software categories (Complex and Complicated Software categories) nationwide while the third team received the second prize in the country. These were organized by the Ministry of Human Resource Development of Government of India.
- Two students, Abhinav Shukla (Y17 Batch) and Tarun Singh (Y17 Batch) received invitations from Harvard University, visited Cambridge and secured 1st and 2nd positions respectively in one of the Harvard Project for Asian and International Relations (HPAIR) events organized there.
- In addition to these, 10 students got selected for Google Summer of Code (GSoC) and two as GSoC Mentors, one girl student has been invited by Google at their Mountain View Headquarters. She is one of the only six Indian women students involved in computing at Google's Global Women in Computing Summit.
- Seven student start-ups are getting currently incubated on campus. (Earlier 11 students of the Institute had made it at the Student Startup Exposure Programme of Govt. of Rajasthan and were sent to Silicon Valley on an all-expenses paid trip by Govt. of Rajasthan).
- Aman Nigam and Kuljot Singh won the 2nd Prize in Best Innovative Idea in a programme for "Scheme and Support for Incubation" organized by MSME-Development Institute, Jaipur on 7th August, 2019
- Punit Agarwal (Y16 Batch), Yogesh Agarwal (Y17 Batch), Aniket Jain (Y17 Batch) won a prize of \$500, offered by Lengroid at ETHINDIA 2.0 (Asia's biggest Ethereum hackathon) in Bengaluru during 2-4 August, 2019.
- Kanika Shrimali (Y16 Batch) was selected in the GHCI conference at Bengaluru from 6-8th November 2019.
- Maharshi Saurabh Mishra (Batch 16) was honored with a Gold Honour (top 5% of all participants) in International Youth Math Challenge 2019.
- Parth Shandilya (Y16 Batch) was selected as a speaker at EuroPython 2019 at Basel Switzerland from 8-14 July, 2019.
- Akshat Sharma (Y16 Batch) & Tushar Bansal (Y16 Batch) was selected for 2019 Pycon, Thailand.
- Rahul Bhatia (Y16 Batch) was selected for a talk in the Python Conference at Malaysia from 24-25 August 2019.
- Manan Jethanandani (Y16 Batch) has been selected as a delegate of India to the 30th International Youth Forum (IYF) [<http://eng.iyorea.org/>] held at International Youth Centre, Seoul, South Korea (16 July to 23 July 2019).
- Abhishek Agrawal (Y17 Batch), Monali Thakur (Y16 Batch) & Vaibhav Gupta (Y17 Batch) were selected as delegates for The Harvard Project for Asian and International Relations. The conference was held in Nur-Sultan (Astana), Kazakhstan from 16 to 20 August 2019.
- Amit Sagtani (Y16 Batch) and Raj Vaibhav Dubey (Y17 Batch) got the First prizes in AI Development and Audience category and third prize in Cloud by IBM Category in the FOSSASIA Summit 2019 held at Lifelong Learning Institute Singapore on March 14 - March 17, 2019.
- Avish Jain (Y17 Batch), Utkarsh Kumar (16UEC116) and Ronit Vairagi (Y17 Batch) were selected in Developers Tutorial and Hackathon under the aegis of the India-EU Partnership Project on Collaboration for ICT Standardisation Union's Organization. The Hackathon was organized on 15-16 April, 2019.
- Codeathon, a competitive coding team event was conducted by Manipal University Jaipur, during their Techfest-Techideate on 13 March 2019. 54 teams from various colleges participated in this event. 1st, 2nd, 3rd, 4th and 6th positions were bagged by our team.
- Ashish Raj, Harsh Upadhyay, Rohit Samudralwar, Divya Baid, Pranjal Parnami and Shivan Gera won Smart India Hackathon 2019 (Software Edition) under the complicated category.
- A team of four students participated in 21st ISTE National Annual Students Convention on "Empowering India through Innovations" in Ahmedabad, Gujarat on 29-30 January 2019 and won the prizes.
- Madhav Khandelwal (Y16 Batch) got selected as a delegate at Business Today's International Conference 2018 held in New York City, New York.
- Four students got selected in Google Summer of Code (GSoC) 2019, 10 students in GSoC 2018, and 15 students in GSoC 2017.
- Punit Agarwal (Y16 Batch) was selected and invited to attend ETH Singapore, a blockchain hackathon organized by ETH Global in Singapore from 7 Dec. 2018 to 9 Dec. 2018.
- Quizzinga emerged victorious in Tata Crucible Campus Quiz Jaipur Edition. Deepjyoti Kalita (Y16 Batch) and Aditya Chakraborty (Y18 Batch) won a cash prize of Rs. 75,000/-, and to add to the Institute's pride, they scored 64 which turned out to be the National Record for highest score by a team. Besides this, Kartik Shankavaram (Y16 Batch) and Sameer Chaturvedi (Y18 Batch) also made it to the finals.

- Harshit Khandelwal (Y16 Batch) won a grand prize in the CodeHeat context organized by FOSSASIA (Asia's Open Technology Organisation), award was given at FOSSASIA summit 2019 at Singapore in March 2019.
- Aakash Singh Tanwar and Pranjal (Y16 Batch) won 2nd prize in SMC Mechatronics Cup 2019, held on 30 March 2019 at SMC Corporation, Noida.
- Neelansh Sethi (Y16 Batch) was selected as one of the 300 delegates from all over the world for the very reputed HPAIR (The Harvard Project for Asian & International Relations) - Harvard College Conference which was at Harvard University, Cambridge, Massachusetts, USA from 15 February 2019 to 18 February 2019.
- A team of 6 Students has been declared winner in the Smart India Hackathon 2019, Software Edition, held at Hyderabad center.
- Team "Order the Chaos" bagged the second position in Smart India Hackathon 2019, software edition, held at Oriental University, Indore.
- Ishant Rajpurohit (Y14 Batch) has become Assistant Director and a Photographer in a film, which will be on Netflix, in the coming one year. The name of the film is working on is "Kaali and Saraswati".
- Bhavya Pareek (Y17 Batch) participated in the TEXAS INSTRUMENTS DrishTI (an online contest by TI University Programme) and got second place in the WEBENCH - contest on 29 Oct 2018 and third place in Digital Signal Processing (DSP) contest on 15 Dec 2018. He was awarded the winning prize consisting of Texas Instruments TIVA C series Launchpad Micro Controllers.
- Amit Sagtani (Y16 Batch) was invited to attend the summit and to deliver a presentation titled "GCompris - The Open Source Educational Suite".
- The members of the Phoenix Club secured 2nd position in Robowar at AAROHAN, the Tech Fest of Poornima College.
- The team of Deepjyoti Kalita (Y16 Batch) and Aditya Chakraborty (Y18 Batch), secured second position in the Tata Crucible Campus Quiz 2019 - Hyderabad Zonals, held on 9 March 2019.
- Harsh Vardhan Gupta (Y15 Batch) Won 2nd prize in ASME E-Fest Old Guard Technical Presentation. He received \$400 prize amount and travel support \$1500 to visit ASME-IMECE conference held in Pittsburgh, USA, November 9-15, 2018.



## Student Gymkhana

Student Gymkhana is an independent self-governing student body, elected by the students. The primary objectives of the Student Gymkhana are the following:

- To promote leadership skills, communication, and self-reliance amongst the students.
- To give representation to all the important academic/non-academic committees of the Institute to share students' viewpoints.
- To act as an interface between students and administration for reconciliation of differing opinions of the students and institute administration on important issues.
- To organize extracurricular/co-curricular activities, on a regular/periodic basis, in the institute campus.
- To promote participation in competitions organized by other well-known institutions of the country.
- To help wardens in the management of hostel affairs, including the dining halls.

The students' voice is reflected through democratically elected representatives, e.g., President, Vice President, General Secretaries, and Senators of Student Gymkhana of LNMIIT.

The institute provides its students with opportunities for exploring and enhancing their talents not only in the technology but also in extracurricular activities. The academic programs are accordingly backed up with appropriate co-curricular and extra-curricular inputs promoting culture, sports, self-governance and values.

The Student Gymkhana organizes various extra-curricular/co-curricular activities and inter-institutional festivals through following three councils and various other clubs of these councils:

- Science and Technology Council
- Cultural Council
- Sports Council

## Science and Technology Council

The Council aims at stimulating the technical mindset of the students. It carries out its activities through the following clubs:

- **Cybers:** It provides budding computer enthusiasts a platform to learn as well as showcase their talents in various fields of computing.
- **Phoenix:** It motivates the students in the fields of electronics, robotics, and various other related technologies. The club has three subdivisions, viz. Hardware, Software, and Quarks.
- **E-cell:** It inculcates entrepreneurial spirit among the students. The cell is a formal member of the National Entrepreneurship Network (NEN).
- **Astronomy Club:** The club promotes the interest of students towards the awe-inspiring field of Astronomy while striving to increase the craze about the various fields enclosed within.
- **Debate Society:** The Society strives to inculcate a sense of reasoning and rationality among the students by promoting debates and discussions in a harmonious manner in the form of MUNs, Group Discussions and Parliamentary Debates.
- **Quizzinga:** A vibrant quizzing club that strives to create a community of quizzers and students who are jack of all trades. With students of several batches and interests, Quizzinga hosts quizzes in a variety of genres and is a place where your creativity can run wild.
- **Cipher:** The club strives to create a community and culture of Cyber Security and Blockchain among students.

**Plinth :** It is an annual technical festival organized by the Science and Technology Council. It hosts workshops on current topics and some of the best competitions in the fields of Computing, Robotics, Astronomy, Management, Quizzing, Model United Nations (MUN), and Literature. Eminent speakers from all over India are invited to deliver motivational talks. It also has Start-up Internship Fair to provide internship opportunities to the students in reputed start-up companies.



## Cultural Council

The Cultural Council manages a plethora of events, workshops, and club activities throughout the year. Its main objectives are to provide the students with an exposure and a platform to learn, enjoy, and showcase their talents in the fields of dance, drama, music, fashion, arts, social initiatives, health awareness programmes, cleanliness, and donation drives for the poor and the needy.

The following clubs/committees constitute the council and are responsible for its effective functioning: Dance Club, Drama Club, Music Club, Fashion Club, Nukkad Mandli, Art & Craft Club, Photography Club, and Movie Club. Every year LNMIIT Cultural Council organizes one of the biggest inter-institutional Techno-Cultural-Management festival called Vivacity. Moreover, Literary Committee facilitates the exchange of views and ideas on current issues. The committee organizes debates, elocution, extempore, essay competitions, etc. It publishes the LNMIIT Gazette, and the annual magazine Nth Degree, which covers the accomplishment of the students and showcases their ingenious literary talent.

### Activities of Cultural Council:

1. **Rubaroo**: Fresher's Night
2. **Dance Premier League**: Inter-house dance competition
3. **Gusto-Inter**: house drama and fashion show competition
4. **Melange**: Inter-house music competition and War of DJ's
5. **Nostalgia**: Farewell function of graduating students

**Vivacity**: An annual Techno-Cultural-Management festival organized by the Cultural Council. Competitions encompassing the technical, cultural, and managerial fields, celebrity performance, guest lectures and workshops define the basic framework of this festival. Vivacity is not just a platform to promote talent among the youth but it also aims to spread a very strong social message by means of various initiatives. It facilitates the students to showcase their organizational talent, to gain from cross-cultural learning experiences, to promote entrepreneurship, to provide a forum for sharing and exchange of knowledge and create a positive impact on society. Students from all over the country participate in this festival.

The students of LNMIIT participate in co-and extra-curricular activities at various institutes including IITs and NITs and deserving students receive partial financial assistance.

## Sports Council

The objective of this council is to promote sports activities among the students and to organize sports events and sports festivals. The institute provides sports equipment and facilities in sports like badminton, football, cricket, athletics, squash, table tennis, lawn tennis, volleyball, basketball, carrom, chess, etc. Sports Council hosts events like LNMIIT Premier League, LNMIIT Football League, LNMIIT Volleyball League, Inter-house Cricket & Badminton tournaments, and friendly matches with other nearby institutions throughout the year. Every year LNMIIT Sports Council organizes one of the biggest inter-institutional sports festivals called Desportivos. The council encourages the students to perform at the state and national level competitions. All the sports activities are supervised by a Physical Training Instructor (PTI). Moreover, LNMIIT arranges professional coaches for various sports.

### Activities of sports council:

1. Regular matches with other institutes/Universities: To maintain good relations and sports spirits, the students play many matches in various fields of sports with other colleges and universities of Jaipur.
2. Fitness and Yoga courses on offer: With an objective to make our students physically and mentally fit, the Academic Council (AC) approved two-credit courses on 'Health and Fitness' and 'Yoga'. Every semester, these courses get overwhelming response from students. These courses are unique to our institute.
3. Organizes Yoga-day celebration, Run for Unity and Sports day were successfully last year.
4. Organizes Inter-year tournaments and LNMIIT leagues and inter-hostel tournaments.

**Desportivos**: An annual sports festival of LNMIIT organized by the Sports Council. This is the most prestigious sports festival in Rajasthan. It attracts a wide spectrum of students from all over the country. The festival incorporates a wide range of outdoor as well as indoor sports activities like cricket, badminton, volleyball, basketball, football, table tennis, chess, carom, etc.

## Other Student Clubs

**Sankalp Club:** The club is committed to the pursuit of social welfare and self-transformation. The club works towards serving the poor and the needy to improve their quality of life and education.

**Nirog Club:** The club enlightens the students about maintaining hygiene and cleanliness inside as well as outside the campus and creates awareness regarding healthy lifestyles, anti-tobacco, and anti-smoking drives. In the recent past, a number of blood-donation awareness campaigns, cleanliness and donation drives have been coordinated by this club.

## Counselling and Guidance Cell

The Institute realizes that the first-year undergraduate students leave the safe haven of their home, perhaps for the first time in their lives, to pursue their academic dreams. They are enthusiastic, curious, and at the same time nervous and apprehensive about their new surroundings. The students also need to understand the new culture and various requirements of the Institute. The Counselling & Guidance Cell of the Institute provides a comfortable environment as soon as the first-year students enter the Institute. The Counselling Cell is an open, receptive, and safe forum to address the concerns of the students. The main aim is to help the incoming students to settle down in the Institute. It continues to provide guidance to the students to ease their transition from a school environment to the more demanding university standards. To address the individual concerns of the fresh students, the entire batch is divided into small groups of 25 students each. Each group is assigned to one or two faculty members and a senior student. These groups meet periodically to identify the problems of academic and non-academic nature. All efforts are made to solve the identified problems, to the extent possible. The healthy bond thus created between the students and the faculty continues throughout their stay at the institute, and even later in life. The Counselling Cell conducts several events for the first-year students like Orientation Programme, Student-Faculty Mentorship programme and guest lectures. Under Student-Faculty Mentorship programme, small groups of new students are formed, each with a faculty lead mentor and two student members. The teams meet formally and informally periodically during the entire academic session to provide guidance and resolve any concerns that the new students might have in their first year of the programme.

Some of the activities conducted by the CCell 2022-23 team are -

- The Orientation Program
- Academic Doubts Resolving Session
- Science & Tech Clubs Introduction
- Batch Photography Y22
- Online Mentor-Mentee Program (2022-23)
- Cultural Clubs Introduction
- Developing the C-Cell App
- Felicitation of Outgoing Team

## Professional Societies

### IEEE Student Chapter

Institute of Electrical and Electronics Engineers (IEEE) is a not-for-profit organization recognised globally as IEEE. IEEE's core purpose is to foster technological innovation and excellence for the benefit of humanity. IEEE has become a real communicator and facilitator amongst all the scientific and technical communities which are striving for the betterment of this world.

As an information technology Institute, LNMIIT plays an important counterpart role in this process. The IEEE Student Branch of LNMIIT is an amalgamation of faculty members and enthusiastic students of our Institute to develop technologies for people and for a better future. LNMIIT has always been a keen activity organizer in areas related to technology and professional growth of an individual. The Student Branch activities offer numerous educational, technical, and professional opportunities through various events, talks, and workshops to enhance the skill set of the students.

### Computer Society of India Student Chapter

Computer Society of India (CSI) offers a range of technical and networking opportunities through workshops, seminars, courses and participation by major industries, sharing best practices and exchange of ideas and information. CSI holds annual technical fests with programming contests, quizzes, interaction with IT industry luminaries, career counseling and much more. Various workshops conducted under CSI student chapter include game development, C and Python programming sessions, and talks on Big data, Kubernetes and mobile architecture. Also, semester long projects have been allotted to about 50 teams on various fields such as Android/Web development, Machine learning and Cryptography. Mentors have been allotted to each team for guided learning. CSI LNMIIT chapter has been awarded with the prestigious "Best Accredited Student Branch Award" as decided by CSI Awards Committee -2017 chaired by Dr. Anirban Basu at CSI Annual Convention.

## American Society of Mechanical Engineers

ASME is a not-for-profit membership organization that enables collaboration, knowledge sharing, career enrichment, and skills development across all engineering disciplines, toward a goal of helping the global engineering community develop solutions to benefit lives and livelihoods. ASME serves this wide-ranging technical community through quality programs in continuing education, training and professional development, codes and standards, research, conferences and publications, government relations and other forms of outreach.

## Association for Computing Machinery (ACM) Student Chapter

The ACM is an umbrella organization for academic and scholarly interests in computer science. The LNMIIT ACM Student Chapter was officially chartered by ACM Chapters Program Coordinator on November 13, 2017. Our chapter was started with a prime focus on implementing a firm professional culture among the students apart from the regular academics. We have a talented and diligent team working to deliver the best of ACM to the institute.

## Society of Automotive Engineers

SAE LNMIIT Jaipur, a collegiate chapter of SAE India was established in Oct 2015 by the collective efforts of a group of students with a strong urge to complement the theoretical knowledge imparted in classrooms, emphasizing on the practical aspects of engineering. Their idea to develop an automotive culture revolutionized the institute and SAE LNMIIT Jaipur started with an initial strength of over 50 student members and 6 faculty Members. One of the most important qualities of SAE LNMIIT Jaipur is its diversity with students from almost all departments of the institute.

We strongly believe that any passionate student of the institute can be a participating member of such a chapter. It provides a platform for students to share and increase their engineering know-how through Increased interaction between students at all levels via group activity, lectures, workshops, brainstorming sessions and many institute level competitions. We hope that LNMIIT Jaipur will act as a strong unifying force amongst Industry, Institute and above all students



# 16<sup>th</sup> Convocation

The 16th Convocation of our institute was held on 10th February 2023 (On Campus & Online Mode). The chief guest was Prof. Govindan Rangarajan, who is Director of the Indian Institute of Science, Bangalore. He obtained an Integrated MSc (Hons) degree from the Birla Institute of Technology and Science, Pilani, and a PhD from the University of Maryland, College Park, USA. He then worked at the Lawrence Berkeley Lab, University of California, Berkeley, before returning to India in 1992. He has been a faculty member of the Department of Mathematics, Indian Institute of Science (IISc), since 1992. He is currently the Director of IISc. Prof. Rangarajan's research interests include nonlinear dynamics and chaos and time series analysis. He is a Fellow of the Indian Academy of Sciences and the National Academy of Sciences, India. He was awarded a JC Bose National Fellowship. He was awarded the Chevalier dans l'Ordre des Palmes Academiques (Knight of the Order of Academic Palms) by the Government of France and the Distinguished Alumnus Award by BITS, Pilani. He was also a Homi Bhabha Fellow.

In this convocation, a total number of 508 students graduated; out of which 475 received B.Tech. degree, 20 students were awarded B.Tech.-M.Tech. (Integrated) degrees, 01 student was awarded M.Tech. degree, 11 students were awarded M.Sc. degrees and 1 student was awarded Ph.D. degree. Chairman's Gold Medal was awarded to Mr. Pulkit Jain (18UCS163) of Computer Science and Engineering. The Director's Gold Medal for UG programme was awarded to Mr. Patel Parth (18UCS015) of Computer Science and Engineering. The Director's Gold Medal for PG programme was awarded to Mr. Vaibhav Silmania (20MMT004) of Mathematics. The best B.Tech. project Award was earned by Mr. Rishabh Jain (18UCS231) for the B.Tech. Project on "E-Audit Solutions Android App".



# Looking Ahead

The LNMIIT aspires to create a niche for itself in both Indian and global arenas by adopting a multidisciplinary approach with a focus on contemporary relevant as well as emerging areas of research, development, teaching-learning, entrepreneurship, outreach and collaboration while maintaining an eco-system that would ensure work-life balance of its people (faculty and staff) and enable well-rounded personality development of its students.

This shall be achieved with the help of a sustainable strategic plan involving long-term, medium-term and short-term milestones.

## Mission Quantum Leap@LNMIIT

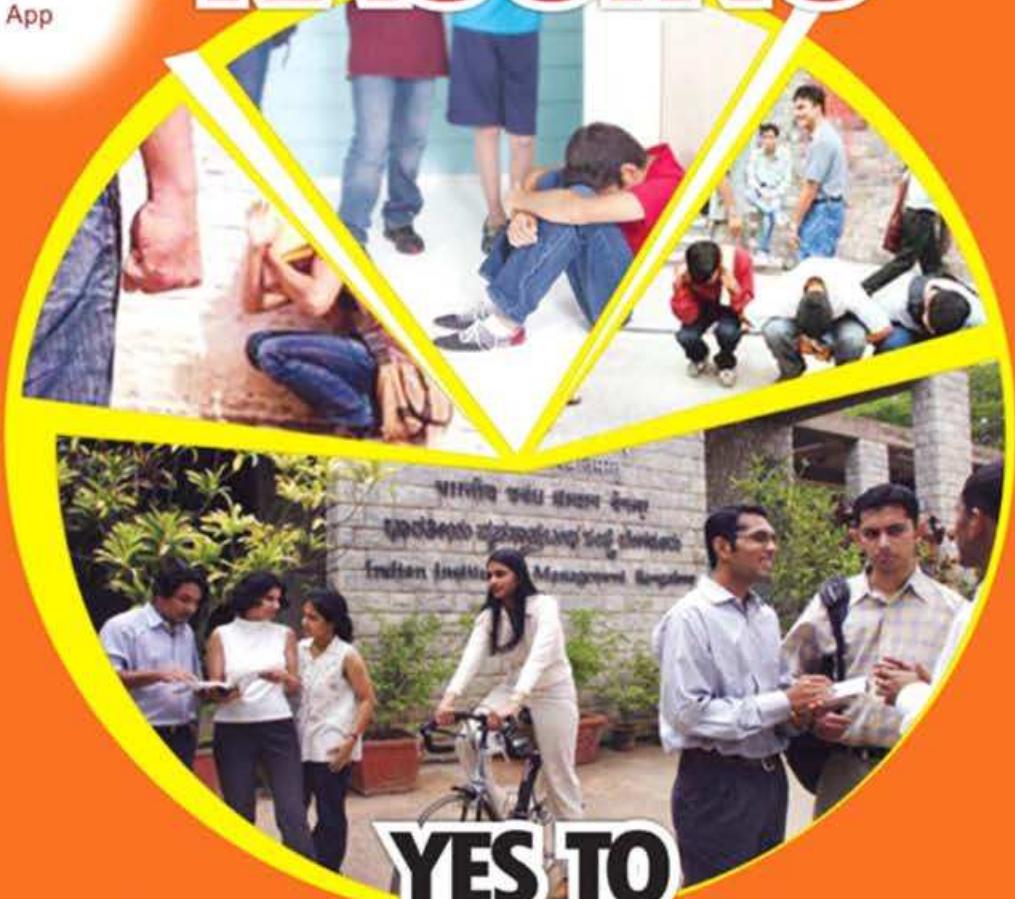
The LNMIIT Founder and the Chairman of the LNMIIT Governing Council has approved an ambitious 5-year INR 400 Crore (approx.) project under the 'Mission Quantum Leap'. The project aims to bring about transformation of LNMIIT into one of the best research universities in its domain of choice with distinctive focus on quality research, best-in-class teaching-learning and a significantly increased deep industry engagement and collaboration, in several current and new areas of relevance to the nation and the society.

In the first phase of this ambitious project, the Institute would create a world class modern multidisciplinary centre of research and development that would be likely known as 'LNMIIT International Centre for Artificial Intelligence, Data Science & Applications' (LICAi) at the cost of INR 200 crore as announced by the Chairman on December 19, 2021.



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## What is Ragging?

### Any Act Resulting in:

- Mental/physical/sexual Abuse
- Verbal Abuse
- Indecent Behaviour
- Criminal Intimidation/wrongful Restraint
- Undermining Human Dignity
- Financial Exploitation/extortion
- Use Of Force

### A STUDENT INDULGING IN RAGGING CAN BE:

- Cancellation of admission.
- Suspension from attending classes.
- Withholding/withdrawing Scholarship/Fellowship and other benefits.
- Debarring from appearing in any test/ examination or other evaluation process.
- Withholding results.
- Debarring from representing the institution in any regional, national or international meet, tournament or youth festival etc.
- **Collective punishment** : when the persons committing or abetting the crime of ragging are not identified the institution shall resort to collective punishment as a deterrent to ensure community pressure on potential ragger.



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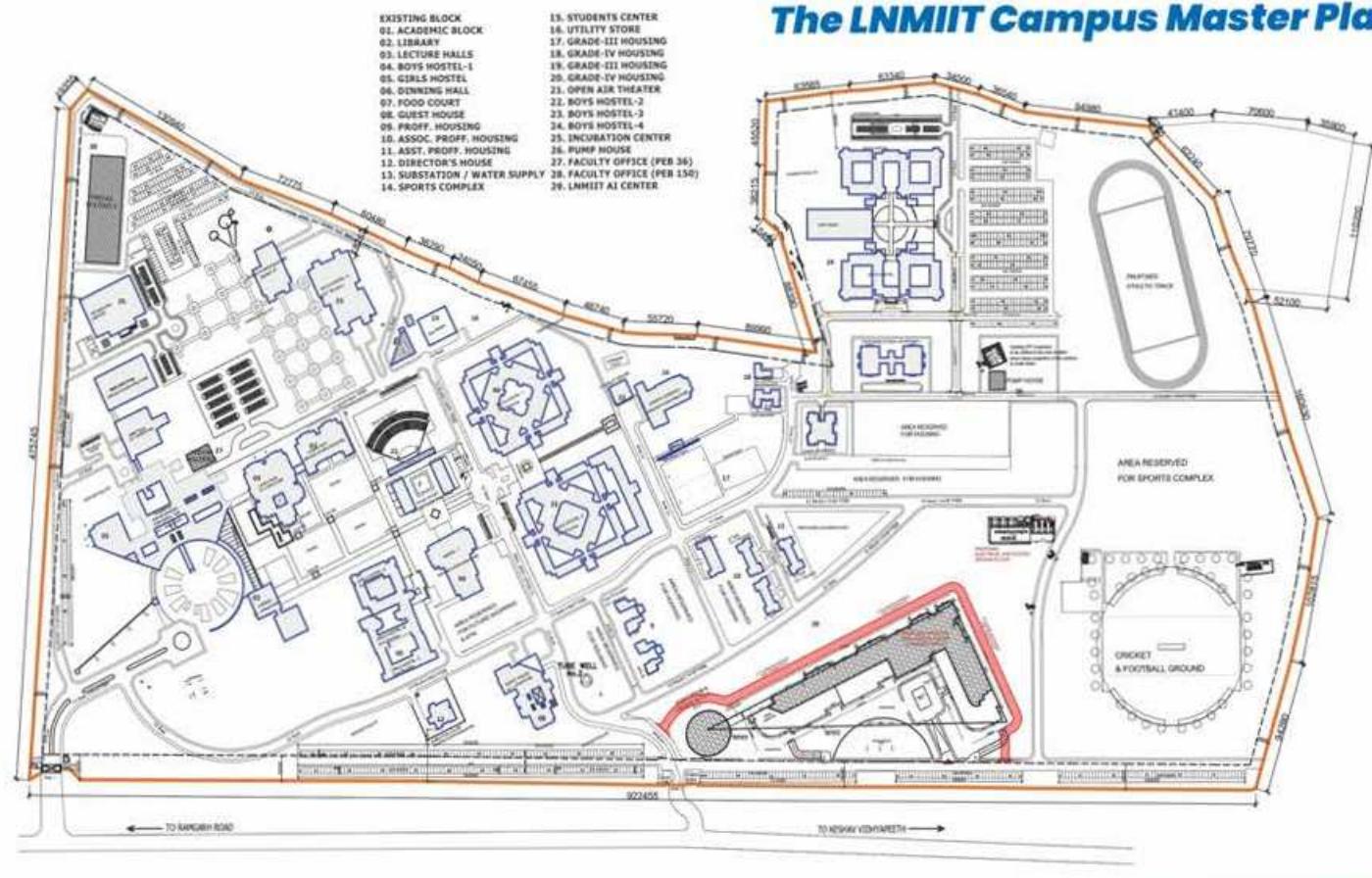
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## The LNMIIT Campus Master Plan



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It is advised that the applicants visit the website regularly for updates related to the Admissions 2024-25.