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Indian Institute of Information Technology Lucknow

M.Sc.
Artificial Intelligence & Machine Learning (AI &ML)

Offered By

Department of IT

At a Glance

Indian Institute of Information Technology, Lucknow (IIIT Lucknow) is one of the 20 IIITs being set up by the Central Government in Public Private Partnership (PPP) mode, declared as 'Institute of National Importance' by the Act. Of Parliament, Govt. of India. The Institute is being set up with the financial contributions of MHRD, Govt. of India, Govt. of Uttar Pradesh, and U. P. Electronics Corporation Ltd. as industry partners. The mission of IIIT Lucknow is to be a unique and world class nucleating "Apex Center of Excellence" in the area of Information Technology to enhance India's Technological strength. It currently offers all the amenities, academic and non-academic to its students that can help them flourish and serve the nation with all their apprehension in the various fields of technology. IIIT Lucknow seeks to derive its strength from a linkage with sound Indian traditions of centuries past, and sets out to create knowledge-based resources in regional languages.

Department of Information Technology is the oldest running department in IIIT Lucknow from 2015. It consists of a team of highly dedicated, learned and well-qualified faculties. Department of IT also provides B.Tech and Ph.D programmes. Information Technology deals with the application of computers to solve real-world problems to facilitate businesses and create Information Systems. As the world becomes technologically advanced every day, well-trained IT professionals are needed. Courses designed by IIIT Lucknow are according to the industry requirements. The curriculum is revised regularly to keep up the future needs of the industries.

M. Sc. (AI & ML)

JAM
Joint Admission Test for Masters

Students completed B.A./BCA/B.S./B.Sc./B.Stat. /B.Math./ B.Tech/B.E. or any other equivalent degree with IT/ CS/ Mechanical/Electronics/ Electrical/ Mathematics/ Statistics or any other related field as major are eligible to apply. Selection for the programme will be through Joint Admission Test for Masters (JAM). For further information related to admission test, syllabus, cutoff etc. will be available on the JAM website.

CCMN 2023
https://ccmn.admissions.nic.in/

CCMN-2023 is a centralized counseling platform for the candidates who seek admission in M.Sc./M.Tech. programmes. It is based on the JAM score of year 2023, in NITs, IIITs and some GFTIs (for details, please refer to the list of Participating Institutes on the website). It is a convenient platform for online counseling wherein the candidates can fill-in a single online application form and apply to all the programmes offered by the participating institutions to which they are eligible.

M. Sc. (AI & ML)

This two-year course has been designed to keep pace with the rapidly growing industry requirements. It intends to teach the fundamentals and applications of Artificial Intelligence & Machine Learning. Artificial Intelligence is technology that enables a machine to simulate human behavior. Machine learning is a subfield of AI which enables machine to learn from past data or experiences without being explicitly programmed.

This programme will provide high quality learning to give better competitive advantage. Major subjects covered will be-Programming, deep learning, NLP, DAA, Image & Vision processing to name a few. To provide better research oriented approach, Thesis work is introduced from 2nd sem. onwards with a healthy pool of electives choices.

This curriculum is modern & innovative which give a broader outlook on the function of the two fields. One can get bright career opportunities like- Game programmer, Robotics Scientist, Computer Scientist, Big data Scientist & User experience specialist.

Course Structure
M. Sc. (AI & ML)

Minimum 80 Credits to be completed in 4 semesters for Degree requirement of M.Sc in AI & ML

First Semester

- Computational thinking through programming (4 cr)
- AI & ML with Python (4 cr)
- Mathematics for AI & ML (4 cr)
- Probability & Statistics (4 cr)
- Professional Communication (3 cr)
- Competitive coding (2 cr)
- Yoga & Fitness (1 cr)

Second Semester

- Deep Learning (4 cr)
- Data Structures (4 cr)
- Design & Analysis of Algorithms (4 cr)
- Database Management System (3 cr)
- Competitive coding (2 cr)
- Research Methodology & Technical Writing (2 cr)

Third Semester

- Natural language processing(4 cr)
- Advance Computer Algorithms (4 cr)
- Optimization Techniques (4 cr)
- Elective-I (4 cr)
- Thesis-I (4 cr)*

Fourth Semester

- Image & Vision processing (4 cr)
- Elective –II (4 cr)
- Thesis-II (12 cr)*

*Thesis –I, II can be done in continuation on the same research topic and under the same Supervisor

Pool of Elective (will be offered as per the availability of Faculties)

- Information Retrieval
- Data mining & warehousing
- AI for IoT
- Reinforcement Learning
- Data Security
- Mobile Application Development using AI/ML
- Distributed AI

- AI Blockchain
- TensorFlow
- MLOps & Cloud
- Distributed Systems
- Soft Computing
- Software Engineering

Seat matrix										
GEN	GEN-PwD	EWS	EWS-PwD	SC	ST	ST-PwD	SC-PwD	OBC	OBC-PwD	Total
11	1	3	0	5	2	0	0	8	0	30

Semester	Fee Structure										
	GEN	GEN-PwD	EWS	EWS-PwD	SC	ST	ST-PwD	SC-PwD	OBC	OBC-PwD	Remark
1st	Rs. 72000	Rs. 72000	Rs. 72000	Rs. 72000	Rs. 72000	Rs. 72000	Rs. 72000	Rs.72000	Rs. 72000	Rs. 72000	The fees mentioned are excluding the hostel fee and mess charges.
2nd	Rs. 51500	Rs. 51500	Rs. 51500	Rs. 51500	Rs. 51500	Rs. 51500	Rs. 51500	Rs. 51500	Rs. 51500	Rs. 51500	
3rd	Rs. 53500	Rs. 53500	Rs. 53500	Rs. 53500	Rs. 53500	Rs. 53500	Rs. 53500	Rs. 53500	Rs. 53500	Rs. 53500	
4th	Rs. 51500	Rs. 51500	Rs. 51500	Rs. 51500	Rs. 51500	Rs. 51500	Rs. 51500	Rs. 51500	Rs. 51500	Rs. 51500	

IIIT Lucknow
Department of IT

Contact:

Dr. Deepshikha Agarwal
Head of Department (Information Technology), IIIT Lucknow

hod.it@iiitl.ac.in
Landline: 0522- [233-8114]

Website: https://iiitl.ac.in/