

Yardi School of Artificial Intelligence, IIT Delhi

Course List

Bridge Core

- Principles of Artificial Intelligence

*May be waived on the recommendations of the program co-ordinator

Program Core

- Mathematical Foundations of MINDS or
- Mathematical Foundations of Computer Technology
- Machine Learning
- Data Mining
- Numerical Optimization
- Optimization for Electrical Engineers
- Ethics of MINDS

Program Electives (Mathematics)

- Numerical Optimization
- Multivariate Statistics
- Signal Theory
- Detection and Estimation Theory
- Fuzzy Sets and Applications
- Stochastic Processes and Applications
- Introduction to Algebraic topology
- Introduction to Game theory
- Mathematical Analysis in Learning Theory
- Introduction to the Mathematics of Machine Learning

Program Electives (Learning)

- Advanced Machine learning

- Deep Learning
- Reinforcement Learning
- Learning Probabilistic Graphical Models
- Stochastic Control and Reinforcement Learning
- Computational Learning Theory and the Mind
- Neural Systems and Learning Machines
- Swarm Intelligence & Natural Computing
- Special Topics in Machine Learning – I
- Selected Topics in Machine Learning – II
- Special Topics in Machine Learning

Program Electives (Data Science)

- Information Retrieval and Web Search
- Advanced Data Management
- Querying and Mining Graph Data
- Scalable Data Handling for ML
- Special Topics in Data Mining
- Special Topics in Database Systems
- Special Topics in Data Science

Program Electives (AI Applications)

- Natural Language Processing
- Advanced Artificial Intelligence
- Advanced Functional Brain Imaging
- Statistical Signal Processing
- Computer Vision
- Embedded Intelligence
- Machine Learning for Computational Finance
- Computational Neuroscience
- Computational Linguistics

M.Tech Project

- M.Tech. Project Part I
- M.Tech. Project Part II