COMPUTER SCIENCE AND ENGINEERING

1. System and Networking Security

Computer and Network Security, Cryptography, Data Base Security, Intrusion detection, Firewalls, Digital Forensics.

2. Artificial Intelligence and Machine Learning

Search Algorithms, heuristic Search, Knowledge representation, Game Playing, Constraint Satisfaction, Robotics, supervised and Unsupervised Learning, Classification and Regression, Clustering, Dimensionality reduction, CNN, RNN, reinforcement learning, Soft Computing.

3. Systems (Database Systems, Operating Systems, Information Systems, Cloud Computing)

Data Base Management Systems, System software's, Operating Systems, Cloud Computing, Data Mining, Data Warehousing, Information Retrieval.

4. High Performance Computing

Computer System Organization, Architecture of large Systems, Distributed Systems, Parallel Algorithm and Computing, GPU Computing, Big Data Analytics, Cloud Computing.

5. Networking

Data Communication fundamentals, Computer Networks, OSI and TCP/IP protocols, Wireless Networks, Network Design, Network Security, High Speed Networks.

6. Theoretical Computer Science

Discrete Structures, Fundamental of Data Structures, Advanced Data Structures, Algorithm Design and Analysis, Parallel Algorithms, Theory of Computation, Compiler Design.