The department, established in 1982, has been ranked at the top in India (QS ranking 2017-18).

It contains students from BTech, MTech and PhD with a commitment to pursuing research and career in the application of computer science for making a better future. They are groomed under apt academic rigor which enables them to acquire skills to form efficient solutions for the problems of industry and academics.
COURSES OFFERED

- Introduction to Computer Science
- Data Structures
- Computer Architecture
- Programming Languages
- Operating Systems
- Computer Networks
- Analysis and Design of Algorithms
- Introduction to Database Management Systems
- Advanced Data Structures and Algorithms
- Architecture of High Performance Computers
- Synthesis of Digital Systems
- Advanced Algorithms
- Design Practices in Computer Science
- MTech Software Lab
- Digital System Design Laboratory
- Design Practice

- Discrete Mathematical Structures
- Digital Logic and System Design
- Principles of Artificial Intelligence
- Fundamentals of Machine Learning
- Intro to Automata & Theory of Computation
- Intro to Parallel & Distributed Programming
- Logic for Computer Science
- Theory of Computation and Complexity
- Introduction to Compressed Sensing
- Advanced Computer Networks
- Numerical Algorithms
- Compiler Design
- Compiler Optimisation
- Parallel Programming
- Virtualization And Cloud Computing
- Cloud Computing Technology Fundamentals
Areas of Research

- Algorithms and Complexity Theory
- Artificial Intelligence and Machine Learning
- Databases and Data Analytics
- Architecture and Embedded Systems
- Graphic and Vision
- Computer Networks and Distributed Systems
- Programming Languages, Semantics and Verification
- Operating Systems, High Performance Computing and Systems
- Information and Communication Technologies for Development
- Neuroinformatics and Medical Informatics

Lab Facilities

- Information and Communication Technology for Development (ICTD)
- VLSI Design and Tools Lab
- Data Analytics and Intelligence Research (DAIR) Lab
- Mobile and Machine to Machine Lab
Recent Publications


- Paper titled "Effective use of SMT solvers for Program Equivalence Checking through Invariant Sketching and Query Decomposition" by Shubhani Gupta, Aseem Saxena, Anmol Mahajan and Sorav Bansal accepted at International Conference on Theory and Applications of Satisfiability Testing (SAT 2018)

- Akhil Arora, Sainyam Galhotra and Sayan Ranu, "Debunking the Myths of Influence Maximization: An In-Depth Benchmarking Study", in *SIGMOD*.


- **Automatic Verification of Intermittent Systems** - This work won the first place award at the *APLAS 2017 Student Research Competition*.

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