

Department of Computer Science and Engineering, IIT Delhi
PhD Comprehensive Area Courses

(Last Updated: 28 February 2017)

Algorithms

COL702 Adv. Data Structures and Algorithms
COL758 Advanced Algorithms
CS705 Theory of Computation
COL830 Distributed Computing
CSL847 Distributed Algorithms
COL751 Algorithmic Graph Theory
COL752 Computational Geometry
COL753 Complexity Theory
COL754 Approximation Algorithms
CSL855 Models of Computation
COL756 Mathematical Programming
CSL857 Randomized Algorithms
COL759 Cryptography and Computer Security

Embedded Systems and Architecture

COL718 Arch of High Perf Comput Systems
COL719 Synthesis of Digital Systems
COL728 Compiler Design
COP745 Digital Systems Design Laboratory
COL750 Foundations of Automatic Verification
COL812 System Level Design and Modelling
COL821 Reconfigurable Computing
COL730 Parallel Computing
CRL702 Arch and Algorithms for DSP Systems
EEL704 Robotics and Automation
EEL734 MOS VLSI
EEL832 Computer Aided VLSI Design
COL 788 Advanced Embedded Computing
COL633 Operating systems

Formal Methods in Software

COL728 Compiler Design
COL740 Software Engineering
COL750 Foundations of Automatic Verification
COL765 Introduction to Logic and Functional
COL830 Distributed Computing
COL831 Semantics of Programming Languages

COL832 Proofs and Types

CSL847 Distributed Algorithms

CSL855 Models of Computation

COL 818 Principles of Multiprocessor Systems

Graphics, Vision and Multimedia

COL781 Computer Graphics

COL783 Digital Image Analysis

COL780 Computer Vision

COL752 Computational Geometry

COL829 Advanced Computer Graphics

EEL707 Multimedia Systems

Networks and Distributed Systems

COL730 Parallel Computing

COL768 Wireless Networks

COL724 Advanced Computer Networks

SIL765 Networks and System Security

SIL769 Internet Traffic – Measurement, Modelling & Analysis

COL732 Virtualization and Cloud

COL672 Computer Networks

COL 819 Advanced Distributed Systems

COL633 Operating systems

Software Systems

COL730 Parallel Computing

COL740 Software Engineering

COL762 Database Implementation

SIL765 Networks and System Security

COL760 Advanced Data Management

COL772 Natural Language Processing

COL671 Artificial Intelligence

COL 819 Advanced Distributed Systems

COL 774 Machine Learning

COL 776 Learning Probabilistic Graphical Models

COL 632 Introduction To Database Systems

COL633 Operating systems

COL728 Compiler Design

COL730 Parallel Computing