Core Courses for CSE Batch 1999-2003 (Second Year)

CS 217 : Discrete Structures

Propositions and predicates, proofs and proof techniques, sets, relations and functions, cardinality, basic counting, posets and lattices, Dilworth's theorem, inversion and distributive lattices, graph theory, paths, cycles, trees, connectivity, Lagrange's theorem, homomorphisms, applications

Total credits : 4
Instructor : Prof. Rajarshi Murarka

CS 219 : Data Structures and Algorithms

Introduction to data structures, abstract data types, analysis of algorithms, creation and manipulation of data structures, arrays, lists, stacks, queues, trees, heaps, hash tables, balanced trees, tries, graphs, algorithms for sorting and searching, order statistics, depth-first and breadth-first search, shortest paths, minimum spanning tree

Total credits : 6
Instructor : Prof. Shyam Rai

CS 223 : Data Interpretation and Analysis

Descriptive statistics, Discrete and continuous probability, Random variables and expectation, Special random variables, Gaussian, Bernoulli, Beta, Gamma, Uniform, Poisson, Exponential, Binomial, etc., Hypothesis testing, Parameter estimation, Regression, Probability density estimation

Total Credits : 4
Instructor : Prof. Rama Krishnan Reddy

CS 259 : Software Systems Lab

Introduction to the UNIX operating system (file system and directory structure, and processes), Unix tools (shell programming, grep, tar, compress, sed, find, sort etc), Programming in AWK, Introduction to World Wide Web (html, cgi), Programming Using Java, Graphical User Interface Programming using Java, Socket programming in Java, Programming tools (make, source code control using sccs/rcs, debuggers), Document processing using Latex

Total credits : 8
Instructor : Prof. Harmanpreet Gogolia