CIS 262 Discrete Mathematics for Computer Science

CIS 262 DISCRETE MATHEMATICS FOR COMPUTER SCIENCE

Covers topics in discrete mathematics with emphasis on computer science applications. Includes algorithms, Master’s theorem, base and number representation, logic, sets and category theory, relations, functions, induction, recursion, Boolean algebra and digital circuits, combinatorics, Pascal’s Identity, permutations and combinations, counting, probability, Bayes’ Theorem, Statistics, algebraic structures, Binomial theorem, directed and undirected graphs, elementary number theory, discrete probability, proof techniques, induction, pigeonhole principle, sequences, Fibonacci numbers and computational complexity. Letter Grade Only. Degree Credit.

Units: 3
Hours/semester: 48-54 Lecture; 96-108 Homework
Prerequisites: CIS 250 or CIS 284 and MATH 120 or MATH 123 (offered at CSM or Skyline) with a grade of C or better, or appropriate score on the College Placement Test or other multiple measures assessment.
AA/AS Degree Requirements: Math Competency
Transfer Credit: CSU, UC
C-ID: COMP 152