CEN 4400 Intro to Computer Systems Performance Evaluation

Credits: 3

  a. Supplemental materials: Selected articles and papers are posted on the course website

Specific course information
  • Catalog description: Principles of the quantitative evaluation techniques for computer system hardware and software, emphasizing the establishment and analysis of performance criteria. Deterministic and stochastic methods will be discussed.
  • Prerequisites: COP 3014, 3014L, and STA 4821
  • Required, elective, or selected elective: elective

Specific goals for the course
  • Specific outcomes of instruction: By the end of the course students will be able to: (i) understand basic concept of performance modeling.

Brief list of topics to be covered:
  • Introduction - the art of performance evaluation
  • Measurement techniques and tools
  • Summarizing measured data
  • Comparing systems using sample data
  • Simple linear regression models
  • Other regression models
  • Introduction to experimental design
  • One-factor experiments
  • Two-factor full factorial design
  • Case studies