

CEN 4400 Intro to Computer Systems Performance Evaluation

Credits: 3

Text book, title, author, and year: *The Art of Computer Systems Performance Analysis*, by Raj Jain.

- 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