CSE 452 Introduction to Distributed Systems

Credits
4.0 (3 hrs lecture, 1 hr section)

Lead Instructor
Thomas Anderson

Textbook
None

Course Description
Covers abstractions and implementation techniques in the construction of distributed systems, including cloud computing, distributed storage systems, and distributed caches.

Prerequisites
eitherCSE 444, CSE 451, or CSE 461.

CE Major Status
Selected Elective

Course Objectives
Give students a working knowledge of the principles, design issues, and algorithms underlying distributed systems. Build programming experience through a sequence of targeted distributed system projects.

ABET Outcomes
N/A

Course Topics
Client server computing, the web, cloud computing, peer-to-peer systems, and distributed storage systems.

Remote procedure call, preventing and finding errors in distributed programs, maintaining consistency of distributed state, fault tolerance, high availability, distributed lookup, and distributed security.