

CDA-5655 Virtualized Systems

Catalog Description

Topics include the concepts and principles of virtualization and the mechanisms and techniques of building virtualized systems, from individual virtual machines to virtualized networked infrastructure. (3 credits)

Prerequisites

Permission of the instructor.

Type

Elective for M.S. and Ph.D. students

Course Objectives

Students will learn the concepts and principles of virtualization, the mechanisms and techniques of building virtualized systems, as well as the various virtualization-enabled computing paradigms.

Topics

Virtual machines (Classic virtual machines, Paravirtualization, Hardware-assisted virtualization), Virtual networking (Tunneling, Overlay networks), Virtual storage (File system level virtualization, Block level virtualization), Virtualized computing (Virtual machine based distributed computing, Cloud computing)

Textbook

N/A

Last Update

Ming Zhao 9/15/2012