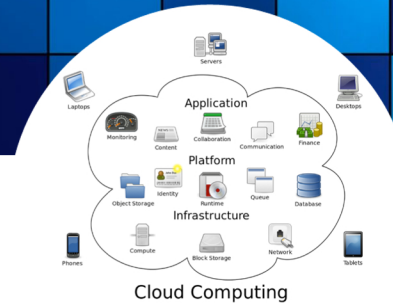


CEN4083

Introduction to Cloud Computing

Ming Zhao, Ph.D.



COURSE DESCRIPTION

Topics include the concepts and principles of cloud computing and the techniques of using cloud systems and developing cloud applications.

COURSE OUTCOMES

1. Master the concepts and principles of cloud computing
2. Be familiar with the concepts and principles of virtualization
3. Master the techniques of using Infrastructure-as-a-Service, Platform-as-a-Service and big data systems
4. Master the techniques of developing, deploying, and managing cloud applications

TOPICS

INTRODUCTION

- o Background and history of cloud computing
- o Cloud computing models

VIRTUALIZATION

- o Background and history of virtualization
- o Virtual machines, virtual networks, virtual storage

INFRASTRUCTURE AS A SERVICE (IaaS)

- o IaaS system architecture
- o IaaS programming

PLATFORM AS A SERVICE (PaaS)

- o PaaS system architecture
- o PaaS programming

BIG DATA

- o Big data system architecture
- o Big data programming