FIU School of Computing and Information Sciences

Course Title: Introduction to Cloud Computing

Course Number: CEN 4083

Number of Credits: 3

Catalog Description:
Topics include the concepts and principles of cloud computing and the techniques of using cloud systems and developing cloud applications

Textbook: None.

Prerequisites Courses: CDA-4101

Type: CS Elective

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
    - Background and history of cloud computing
    - Cloud computing models
- Virtualization
    - Background and history of virtualization
    - Virtual machines, virtual networks, virtual storage
- Infrastructure as a Service (IaaS)
    - IaaS system architecture
    - IaaS programming
- Platform as a Service (PaaS)
    - PaaS system architecture
    - PaaS programming
- Big data
    - Big data system architecture
    - Big data programming