

CIT 281: Cloud Computing

Students learn how to deploy cloud-based computing services including executing a deployment plan, the most common service models, and the various ways that clouds are delivered such as public, private, and community. Topics include virtualization, service-oriented architectures, migrating to the cloud, implementing cloud security, cloud operations, cloud performance, and cloud troubleshooting. This course prepares students to pass cloud-based certification exams including the CompTIA Cloud+ CV0-002 exam and Amazon Web Services (AWS) Cloud Practitioner. Prerequisite: CIT150 Cybersecurity Principles or permission of the instructor. Three lecture hours per week. Instructional support fee applies. Gen. Ed. Competencies Met: Critical Thinking, Information Literacy, and Scientific Reasoning and Discovery.

Course Student Learning Outcomes

1. Describe the most common cloud components, service models, and cloud solutions. 2. Describe the advantages, disadvantages, and economic impact of cloud computing on business processes. 3. Describe the process of migrating services to the cloud. 4. Explain how to execute a cloud deployment plan using the most common service models. 5. Implement cloud security for networks, computer systems, and cloud-based storage systems. 6. Demonstrate how to manage cloud systems and provision resources in response to shifting business requirements and application life cycles.

Credits: 3

Program: Computer Information Technology

1 2024-25 Catalog