

CCC - CLOUD COMPUTING (CCC)

CCC 4003 Cloud Technologies (2-2-3)

This course provides students an insight into the basics of cloud computing along with virtualization. The course will introduce the cloud computing domain and cover the topics of cloud infrastructures, virtualization, software defined networks and storage, cloud storage, and programming models. As an introduction, we will discuss the motivating factors, benefits and challenges of the cloud, as well as service models, service level agreements (SLAs), security, example cloud service providers and use cases.

Prerequisites: CIS 3303

CCC 4013 Virtualization for the Cloud (2-2-3)

This course provides an understanding of virtualization concepts and exposure to different types of virtualization solutions in context of cloud. Students will utilize this knowledge to design, implement and manage a scalable and highly reliable virtualization-based solution for a given cloud scenario.

Prerequisites: CNS 3203

CCC 4023 Cloud Architecting (2-2-3)

This course provides technical and management skills to effectively design cloud-based solutions using appropriate architectural design principles and best practices to address customer requirements and deliver quality cloud-based solutions to achieve high availability, scalability, performance efficiency and cost optimization.

Prerequisites: CCC 4003

CCC 4033 Cloud Application Development (2-2-3)

This course provides the skills and knowledge required to develop, deploy, and debug cloud-native applications. It delves into best practices of developing applications. By the end of this module the student will have a detailed overview of the design and development process involved in creating cloud-based applications.

Prerequisites: CCC 4003

CCC 4043 System Operations on the Cloud (2-2-3)

Provide the skills and knowledge required to perform functions related to Cloud system operations. Create automated and repeatable deployments of networks and systems on the cloud platform. Plan, build and run virtual networks and resilient, fault-tolerant systems for durable cloud storage. Monitor the cloud health, performance, and capacity. Explore the integration between on-premises and cloud services. Learn how to assure secure configurations and how to monitor compliance.

Prerequisites: CCC 4003