

# Cloud Computing Application and Management, Graduate Certificate

Cloud computing is the delivery of computing services over the internet. Due to the relatively lower cost of IT solutions, many organizations have started to take advantage of cloud services provided by Amazon Web Services, Microsoft Azure, IBM Cloud and SoftLayer, Google Cloud Platform, Salesforce, and so on. These web service providers offer a broad range of global cloud-based IT products, including computing technologies, storage, databases, analytics, networking, mobile, developer tools, management tools, Internet of Things connectivity, and security and enterprise applications. These services can help organizations move faster, facilitate agile development, and better manage scalability.

The cloud computing application and management (CCA&M) graduate certificate offers students an opportunity to develop technical and management skills to address the needs of enterprise IT services. They study theoretical and practical aspects of distributed systems from both technical and business perspectives. Successful students will be able to identify frameworks, techniques, and existing IT solutions to manage internet services at different levels (infrastructure, platform, and software) and will also be able to demonstrate the ability to use APIs to integrate applications and business operations into the cloud. They can be directly employed by web service providers or instead work as IT solutions managers in organizations that contract with web service providers.

## Program Requirements

- Concentrations and course offerings may vary by campus and/or by program modality. Please consult with your advisor or admissions coach for the course availability each term at your campus or within your program modality.
- Certain options within the program may be *required* at certain campuses or for certain program modalities. Please consult with your advisor or admissions coach for requirements at your campus or for your program modality.

Complete all courses and requirements listed below unless otherwise indicated.

## Required Courses

Code	Title	Hours
ITC 6420	Introduction to Cloud Computing Applications and Management	3
ITC 6450	Advanced Cloud Computing Applications and Management	3
ITC 6015	Enterprise Information Architecture	3
ITC 6460	Cloud Analytics	3
ITC 6520	Network Protection and Cloud Security	3
Complete one of the following:		3-4
ITC 6355	Web Application Design and Development	
ITC 6470	Enterprise Data Storage and Management Technologies	
ITC 6480	Amazon Web Service (AWS) Cloud Architecting	

## Program Credit/GPA Requirements

18 total quarter hours required

Minimum 3.000 GPA required