



# CLOUD COMPUTING COURSES

2013

## Cloud Computing 200: Windows Azure Development

### Fundamentals

Introduction to Windows Azure

SDK Overview

Cloud solutions

Emulating the Cloud

Azure architecture and design

Introduction to Windows Azure Roles

### Execution Models

Web Sites

Cloud Services

Mobile Services

Virtual Machines

*Fundamentals  
Development  
Deployment  
Management  
Diagnostics  
More...*

### Data Services

Azure Storage

*Blob Service*

*Table Service*

*Using Blobs, Tables and Queues*

SQL (Azure) Database

*Working with Azure SQL Database*

*Using ADO.NET, ODBC and EntityClient provider*

*SQL Reporting*

Big Data

*Hadoop*

*HDInsight Service*

### App Services

Authentication

*Access Control*

*Windows Azure Identity*

Caching and CDN
<i>DataCache Object</i>
<i>Working with cache</i>
<i>Cache life-time</i>
<i>CDN accounts</i>
<i>Enabling and deleting CDN accounts</i>
<i>Accessing CDN account</i>
Media
<i>Media Service and account</i>
<i>CloudMediaContext</i>
Image Processing
<i>Blitline Image processing</i>
Email and Voice
<i>Email Service</i>
<i>Voice &amp; SMS Service</i>
Massaging
<i>Service Bus Queues</i>
<i>Queue Service</i>
<i>Service Bus relay</i>
<i>AMQP</i>
<i>Notification Hubs</i>
<b>Application Design</b>
Data design patterns
<i>Command Query Responsibility Segregation (CQRS)</i>
Messaging design patterns
<i>Publish/subscribe pattern</i>
<i>Queues</i>
Fault tolerance design pattern
<i>Error Handling</i>
<i>Database throttling management</i>
State design patterns
<i>Cache State data</i>
Scaling design patterns
<i>Autoscaling</i>

<b>Azure More...</b>
Scaling
Continuous Delivery
Hybrid Applications
Data Migration
Performance
Security
Diagnostics