

The 55247A course is designed to help data professionals learn to design and implement Microsoft Azure on-premises and hybrid database solutions. Students will learn to secure, troubleshoot, monitor, scale and implement recovery solutions for cloud-based databases.

Each student is given access to their own Internet accessible virtual machine to do labs, or they may use their personal Windows, Linux or iOS computers. Different ways of managing Azure resources will be demonstrated including PowerShell, Python, Azure Portal, Azure Cloud Shell and Azure CLI. The course include the following features:

**Free Microsoft Azure Subscription**: Anyone taking the 55247AC course qualifies for a free Microsoft Azure subscription. Students perform live labs on Azure resources they create for class or work projects.

Interactive Simulations: Interactive simulations are provided that allow students to do lab exercises in a tool that imitates the Azure environment. Mimicking the Azure environment allows the "creation" of resources without incurring subscription costs. Tools can be used in combination with Azure labs or to make them easier to understand.

**Modular / Blended Course Delivery:** The course is designed so that modules can be skipped or delivered in any order. This allows the material to be easily combined with other courses that cover Azure, SQL Server & PowerShell topics.

**Design & Review Sections:** Each lab has a "Self Directed" exercise where students get to apply skills they have learned by creating their own solution in Azure. Each module includes a review and test in addition to the course assessment test offered at the end of the class.

**Regular Updates:** Azure is a fast changing environment with regular resource and feature upgrades. 55247A labs will be updated regularly to keep up with those changes. These updated class materials are posted regularly and students will continue to have access to these changes after they take the class.

**Appendices:** Appendix A includes answers to end-of-module review questions. PowerShell & Python tutorials are included in Appendices B & C and include lab exercises. This optional material will help students learn to use PowerShell and Python on different platforms. Students are provided with tools that allow them to perform all required and optional labs on their own computers after the class.

**Azure Cloud Shell:** The new Azure Cloud Shell features can be used for labs or exercises in the course. Students will be able to create virtual machines, SQL Databases, MySQL Servers and other resources using only their web browser.