

## LNT CPE Microsoft

### LNT 0004 Developing Microsoft Azure Solutions (1-1) 1.5 crs.

Teaches students to take an existing ASP.NET MVC application and expand its functionality as part of moving it to Azure. Students will learn how to build an application infrastructure in Azure, host web applications on the Azure platform, store SQL data and tabular data in Azure, design Cloud applications, automate integration with Azure resources, and secure Azure web applications.

**Prerequisite:** Recommended preparation includes professional experience; experience working with the Azure platform and a general understanding of C# concepts for the lab scenario.

### LNT 0005 Installing and Configuring Windows 10 (1-2) 2 crs.

Provides IT professionals with the knowledge and skills required to install and configure Windows 10 desktops in a Windows Server small to medium-sized AD DS domain environment. Teaches how to install and customize Windows 10 operating systems and apps; configure local and remote network connectivity; and configure local and online storage. Explores how to configure security in addition to how to maintain, update and recover Windows 10.

**Prerequisite:** Recommended preparation includes some experience supporting Windows, working in a Windows Server Active Directory Domain Services (AD DS) environment and working with network services.

### LNT 0006 Install/Store/Compute Windows Server 2016 (1-2) 2 crs.

Teaches how to manage storage and computing by using Windows Server 2016. Demonstrates the scenarios, requirements and storage/computing options that are available and applicable to Windows Server 2016. This is usually offered as a five-day course that is designed primarily for IT professionals who have some experience with Windows Server.

**Prerequisite:** Recommended preparation includes experience working with Windows Server as well as general IT and networking knowledge.

### LNT 0007 Networking Windows Server 2016 (1-2) 2 crs.

Provides the fundamental networking skills required to deploy and support Windows Server 2016 in most organizations. Covers IP fundamentals, remote access technologies and more advanced content including Software Defined Networking.

**Prerequisite:** LNT 8740 (Installation, Storage, and Compute with Windows Server 2016) with a satisfactory grade or equivalent experience.

### LNT 0008 Querying Data With Transact - SQL (1-1) 1.5 crs.

Provides students with a good understanding of the Transact-SQL language which is used by all SQL Server-related disciplines; namely, Database Administration, Database Development and Business Intelligence. Teaches how to write SELECT queries, query multiple tables, sort and filter data, use built-in functions, group and aggregate data types, work with table expressions and set operators, and program with T-SQL.

**Prerequisite:** Recommended preparation includes basic knowledge of the Microsoft Windows operating system and its core functionality, and working knowledge of relational databases.

### LNT 0009 Administering SQL Database Infrastructure (1-2) 2 crs.

Provides students who administer and maintain SQL Server databases with the knowledge and skills to administer a SQL server database infrastructure. Useful for individuals who develop applications that deliver content from SQL Server databases. Learn how to authenticate and authorize users and access resources. Understand how to monitor and troubleshoot a SQL Server infrastructure.

**Recommended:** Basic knowledge of the Microsoft Windows operating system and its core functionality; working knowledge of Transact-SQL, working knowledge of relational databases, and some experience with database design.

### LNT 0011 Implementing A SQL Data Warehouse (1-1) 1.5 crs.

Provides students with the knowledge and skills to provision a Microsoft SQL Server 2016 database. Covers SQL Server 2016 provision both on-premise and in Azure, and covers installing from new and migrating from an existing install. Focuses on hands-on work creating BI solutions, including Data Warehouse implementation, ETL, and data cleansing.

**Recommended:** Basic knowledge of the Microsoft Windows operating system and its core functionality, working knowledge of relational databases, and some experience with database design.

### LNT 0012 Performance Tuning and Optimizing SQL Databases (1-1) 1.5 crs.

Provides students who manage and maintain SQL Server databases with the knowledge and skills to performance tune and optimize their databases. Covers SQL Server architecture, scheduling, waits, and I/O. Focuses on SQL Server memory and concurrency, along with query execution and query plan analysis. Covers tools and techniques to monitor, trace, and baseline SQL Server performance data.

**Recommended:** Basic knowledge of the Microsoft Windows operating system and its core functionality, working knowledge of database administration and maintenance, and working knowledge of Transact-SQL.

### LNT 0013 Microsoft Azure Developer Core Solutions (1-1) 1.5 crs.

Helps you prepare for Microsoft's Azure Developer certification exam AZ-200: Microsoft Azure Developer Core Solutions.

Designed for developers who already know how to code in at least one of the Azure-supported languages. Covers Azure architecture, design and connectivity patterns, and choosing the right storage solution for your development needs. Focuses on C#, Node.js, Azure CLI, Azure PowerShell, and JavaScript.

**Recommended:** Students should have some experience with Azure and must be able to program in at least one Azure-supported language.

### LNT 0014 Microsoft Azure Developer Advanced Solutions (1-1) 1.5 crs.

Helps you prepare for Microsoft's Azure Developer certification exam AZ-201: Microsoft Azure Developer Advanced Solutions.

Defines asynchronous processing, autoscaling, long-running tasks, and distributed transactions. Learn how to integrate and manage APIs by using the API Management service, configure a message-based integration architecture, and develop an application message model. Covers how to integrate Azure Cognitive Services, like Computer Vision, QnA Maker, and natural language processing in your solution. Create and manage bots using the Bot Framework and Azure portal. Learn how to leverage Azure Time Series Insights, Stream Analytics and the IoT Hub for your IoT solution. Focuses on C#, Node.js, Azure CLI, Azure PowerShell, and JavaScript.

**Recommended:** Students should have some experience with Azure and must be able to program in at least one Azure-supported language.

**LNT 8486 Developing ASP.NET MVC for Web Applications (1-2) 2 crs.**

Teaches how to develop advanced ASP.NET MVC applications using the .NET framework and technologies. Incorporates coding activities that enhance performance and scalability of website applications. Imports knowledge of developing advanced web applications and creating websites that separate the user interface, data access and application logic. Prepares for Microsoft certification exam 70-486 Developing ASP.NET MVC 4 Web Applications. Recommended Preparation: LNT8480, or equivalent knowledge. Experience with JavaScript, object-oriented programming and developing web-based applications required.

**LNT 8600 Introduction to Powershell (1-0.5) 1 cr.**

Explores PowerShell, a scripting language and a working administrative shell available for Windows, Linux, and the Mac environments. Starts with understanding what PowerShell is, what you can do with it, and where it is available to use. Identifies techniques, features, and putting PowerShell to use in automating parts of your Windows-based IT work. Covers key concepts, tips, and usage of scripting, in addition to lab work to reiterate the material via hands-on work.

**LNT 8765 Provisioning SQL Databases (0.5-1) 1 cr.**

Provides students with the knowledge and skills to provision a Microsoft SQL Server 2016 database. Covers SQL Server 2016 provision both on-premise and in Azure, and covers installing from new and migrating from an existing install. Learn to upgrade and configure SQL servers. Manage databases and files.

**Recommended:** Basic knowledge of the Microsoft Windows operating system and its core functionality, working knowledge of Transact-SQL, working knowledge of relational databases, and some experience with database design.

**LNT 8900 Microsoft Azure Fundamentals (0.5-0) 0.5 crs.**

Identifies foundational level knowledge of cloud services and how those services are provided with Microsoft Azure. Covers general cloud computing concepts as well as general cloud computing models and services such as Public, Private and Hybrid cloud and Infrastructure-as-a-Service (IaaS), Platform-as-a-Service(PaaS) and Software-as-a-Service (SaaS). Explores some core Azure services and solutions, as well as key Azure pillar services concerning security, privacy, compliance and trust. Prepares for Microsoft certification exam AZ-900.

**LNT 8901 Azure Database Administrator Associate (1-1) 1.5 crs.**

Teaches how to implement and manage the operational aspects of cloud-native and hybrid data platform solutions built on Microsoft Azure data services and Microsoft SQL Server. Explores how to use a variety of methods and tools to perform day-to-day operations, including applying knowledge of using T-SQL for administrative management purposes. Prepares for Microsoft certification exam DP-300.

**Prerequisite:** Basic knowledge of the Microsoft Windows operating system and its core functionality; working knowledge of relational databases.