

# Tech Talent Academy

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MTA Microsoft Technology Associate Course | 2019-2020



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**Student Guide** | version 1.0.0

Curated by [Kostas Minaidis](#)

- Database Fundamentals // [MTA Exam 98-364](#)
- Networking Fundamentals // [MTA Exam 98-366](#)
- Security Fundamentals // [MTA Exam 98-367](#)

- Slack Forum: [socialinnov.slack.com](https://socialinnov.slack.com)
  - This is where you can interact with the mentor as well as with other students.
- [GitHub Repository](#)
  - With constantly updated material and resources

# GUIDE: DATABASE FUNDAMENTALS | MTA

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## Prerequisites

- Install SQL Server 2017 Express Edition (Free) | [DOWNLOAD](#)
  - Choose the **Basic** Install
- Install SQL Server Management Studio (SSMS) | [DOWNLOAD](#)
- Optional Download of SQL Server 2017 (180 Day Trial) | [DOWNLOAD](#)

## Material (Syllabus)

- [Introduction to Core Database Concepts \(30 min\)](#)
- [Relational Concepts: \(50 min\)](#)
- [Creating Databases and Database Objects: \(50 min\)](#)
- [Using DML Statements: \(50 min\)](#)
- [SQL Server Administration Fundamentals: \(50 min\)](#)

## Material (Extras)

- [MTA Database Administration Fundamentals \(26 min\)](#)
- [Study material for exam 98-364 Database Fundamentals](#)
- [TrainSignal DBA Fundamentals](#)
- [How I Passed the 98-364 Exam \(Reddit Post\)](#)

## Online Resources & Tools

- [SQL Cheat Sheet & Query Syntax](#)
- [SQL Online: SQLFiddle](#)
- [SQL Online: Paiza](#)
- [SQL Commands Cheat Sheet](#)
- [AdventureWorks2012 Database](#)

## Material / Microsoft Virtual Academy (Syllabus)

- [Understanding Local Area Networking: \(120 min\)](#)
- [Networking Fundamentals: 01 Understanding Local Area Networking \(120min\)](#)
- [Understanding Local Area Networks - Part I: \(20 min\)](#)
- [Understanding Local Area Networks - Part II: \(15 min\)](#)
- [Defining Networks with the OSI Model: \(50 min\)](#)
- [Defining Networks with the OSI Model: \(30 min\)](#)
- [Understanding Wired and Wireless Networks: \(50 min\)](#)
- [Understanding Wired and Wireless Networks - Part I: \(15min\)](#)
- [Understanding Wired and Wireless Networks - Part II: \(15 min\)](#)
- [Understanding Internet Protocol: \(50 min\)](#)
- [Understanding Internet Protocol: \(30 min\)](#)
- [Implementing TCP/IP in the Command Line: \(50 min\)](#)
- [Implementing TCP/IP in the Command Line: \(20 min\)](#)
- [Working with Networking Services: \(60 min\)](#)
- [Networking Services: \(10 min\)](#)
- [Understanding Wide Area Networks: \(40 min\)](#)
- [Understanding Wide Area Networks: \(15 min\)](#)
- [Defining Network Infrastructure and Network Security: \(50 min\)](#)
- [Concepts of the Internet: \(15 min\)](#)

## Material (Extras)

- [Networking Playlist by Eli the Computer Guy \(Total: 30h\)](#)
- [Microsoft Virtual Academy Videos on YouTube Playlist \(incomplete\)](#)
  - **Contents:**
  - [Objectives](#)
  - [Network components and Terminology](#)
  - [LAN](#)
  - [Networks](#)
  - [Network Documentation](#)
  - [Hub](#)
  - [Switch](#)
  - [Router](#)
  - [Network Adapter & RJ45 Patch Cable](#)
  - [WAP](#)
  - [Demo](#)
  - [Serial Data Transfer](#)
  - [Data Transfer Rate](#)
  - [IP Address](#)
  - [LAN Example](#)
  - [Virtual LAN](#)
  - [Network Topologies](#)
  - [Star topology](#)
  - [Mesh topology](#)
  - [Ring topology](#)
  - [Token Ring topology](#)
  - [Ethernet](#)
  - [Frames](#)
  - [Centralized Computing](#)

- [Client/Server Model](#)
- [Peer-to-Peer networking](#)
- [Distributed Computing](#)
- [Remote Desktop Services and Remote Sessions](#)
- [Client and Server Operating Systems](#)
- [P2P](#)
- [Summary](#)

# GUIDE: SECURITY FUNDAMENTALS | MTA

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## Material / Microsoft Virtual Academy (Syllabus)

- [Understanding Security Layers: \(50 min\)](#)
- [Authentication, Authorization, and Accounting: \(60 min\)](#)
- [Understanding Security Policies: \(30 min\)](#)
- [Understanding Network Security: \(60 min\)](#)
- [Protecting the Server and Client: \(50 min\)](#)

## Material (Extras)

- [Security Fundamentals YouTube Playlist](#)



**Q: *What is the Microsoft Technology Associate Certification?***

**A:** It's an entry-level certificate that validates fundamental technology knowledge.