Microsoft Training and Certification Guide

Current as of December 31, 2013
Welcome to the Microsoft Training and Certification Guide. This device is intended to provide a quick, comprehensive view of our training and certification landscape, and covers all of the training requisites and upgrade paths that lead to modern Microsoft Certifications. Use this guide to help you achieve your IT goals.

→ New editions of this tool will be provided periodically. To ensure that you’re referencing the most recent information, be sure to replace this tool as new editions are provided. Please send questions and feedback to desktopsalestool@microsoft.com
Client
Microsoft Technology Associate
MTA: Windows 8 Infrastructure

Passing any one exam achieves MTA certification.
Pass all three Windows 8 Infrastructure exams to validate the breadth of skills need to pursue MCSA Client path.

**COURSE 40349**  
**EXAM 98-349**  
Windows Operating System Fundamentals
- Understanding Operating System Configurations
- Installing and Upgrading Client Systems
- Managing Applications
- Managing Files & Folders
- Managing Devices
- Understanding Operating System Maintenance

**COURSE 40366**  
**EXAM 98-366**  
Networking Fundamentals
- Understanding Network Infrastructures
- Understanding Network Hardware
- Understanding Protocols & Services

**COURSE 40367**  
**EXAM 98-367**  
Security Fundamentals
- Understanding Security Layers
- Understanding Operating System Security
- Understanding Network Security
- Understanding Security Software
Microsoft Certified Solutions Associate
MCSA: Windows 8

Passing both exams is required to achieve MCSA certification.

COURSE 20687
EXAM 70-687
Configuring Windows 8.1
- Install and Upgrade to Windows 8.1
- Configure Hardware and Applications
- Configure Network Connectivity
- Configure Access to Resources
- Configure Remote Access and Mobility
- Monitor and Maintain Windows Clients
- Configure System and Data Recovery Options

COURSE 20688
EXAM 70-688
Supporting Windows 8.1
- Supporting Operating System and Application Installation
- Support Resource Access
- Support Windows Clients and Devices
Upgrade Paths to
MCSA: Windows 8

Passing one exam is required to achieve MCSA certification.

MCITP:
- ENTERPRISE DESKTOP ADMINISTRATOR ON WINDOWS 7
- ENTERPRISE DESKTOP SUPPORT TECHNICIAN ON WINDOWS 7

MCSA:
- WINDOWS 7

EXAM 70-689
Upgrading Your Skills to MCSA Windows 8
- Install and Upgrade to Windows 8
- Configure Hardware and Applications
- Configure Remote Access and Mobility
- Configure Backup and Recovery Options
- Design an Installation and Application Strategy
- Maintain Resource Access
- Maintain Windows Clients and Devices
- Manage Windows 8 Using Cloud Services and Microsoft Desktop Optimization Pack
Server
Microsoft Technology Associate

MTA: IT Infrastructure

Passing any one exam achieves MTA certification. Pass all four IT Infrastructure exams to validate the breadth of skills needed to pursue MCSA.

COURSE 40349
EXAM 98-349
Windows Operating System Fundamentals
- Understanding Operating System Configurations
- Installing and Upgrading Client Systems
- Managing Applications
- Managing Files & Folders
- Managing Devices
- Understanding Operating System Maintenance

COURSE 40365
EXAM 98-365
Windows Server Administration Fundamentals
- Understanding Server Installation
- Understanding Server Roles
- Understanding Active Directory
- Understanding Storage
- Understanding Server Performance Management
- Understanding Server Maintenance

COURSE 40366
EXAM 98-366
Networking Fundamentals
- Understanding Network Infrastructures
- Understanding Network Hardware
- Understanding Protocols & Services

COURSE 40367
EXAM 98-367
Security Fundamentals
- Understanding Security Layers
- Understanding Operating System Security
- Understanding Network Security
- Understanding Security Software

SERVER
Microsoft Certified Solutions Associate

MCSA: Windows Server 2012

Passing all three exams is required to achieve MCSA certification.

COURSE 20410
EXAM 70-410
Installing and Configuring Windows Server 2012
- Install and Configure Servers
- Configure Server Roles and Features
- Configure Hyper-V
- Deploy and Configure Core Network Services
- Install and Administer Active Directory
- Create and Manage Group Policy

COURSE 20411
EXAM 70-411
Administering Windows Server 2012
- Deploy, Manage, and Maintain Servers
- Configure File & Print Services
- Configure Network Services & Access
- Configure a Network Policy Server Infrastructure
- Configure and Manage Active Directory
- Configure and Manage Group Policy

COURSE 20412
EXAM 70-412
Configuring Advanced Windows Server 2012 Services
- Configure and Manage High Availability
- Configure File and Storage Solutions
- Implement Business Continuity and Disaster Recovery
- Configure Network Services
- Configure the Active Directory Structure
- Configure Access and Information Protection Solutions
Upgrade Paths to
MCSA: Windows Server 2012

Passing one exam is required to achieve MCSA certification.

MCSA:
WINDOWS SERVER 2008

MCITP:
VIRTUALIZATION ADMINISTRATOR ON WINDOWS SERVER 2008 R2
ENTERPRISE MESSAGING ADMINISTRATOR 2010
SHAREPOINT ADMINISTRATOR 2010
ENTERPRISE DESKTOP ADMINISTRATOR
LYNC SERVER ADMINISTRATOR 2010

COURSE 20417
EXAM 70-417
Upgrading Your Skills to MCSA Windows Server 2012

- Install and Configure Servers
- Configure Server Roles and Features
- Configure Hyper-V
- Install and Administer Active Directory
- Deploy, Manage, and Maintain Servers
- Configure Network Services and Access
- Configure a Network Policy Server Infrastructure

- Configure and Manage Active Directory
- Configure and Manage Group Policy
- Configure and Manage High Availability
- Configure File and Storage Solutions
- Implement Business Continuity and Disaster Recovery
- Configure Network Services
- Configure Identity and Access Solutions
Microsoft Certified Solutions Expert
MCSE: Desktop Infrastructure

Passing both exams is required to achieve MCSE certification.

**COURSE 20415**
**EXAM 70-415**
Implementing a Desktop Infrastructure
- Create and Maintain Desktop Images
- Design and Deploy Desktops
- Plan and Implement a Remote Desktop Services Infrastructure
- Design and Configure Desktop Settings
- Manage and Maintain a Desktop Infrastructure

**COURSE 20416**
**EXAM 70-416**
Implementing Desktop Application Environments
- Design and Prepare the Application Environment
- Design and Implement a Presentation Virtualization Environment
- Design and Implement an Application Virtualization Environment
- Deploy, Manage, and Maintain the Application Environment
- Design Business Continuity for the Desktop and Application Environment
Microsoft Certified Solutions Expert
MCSE: Server Infrastructure

Passing both exams is required to achieve MCSE certification.

**COURSE 20413  EXAM 70-413**
Designing and Implementing a Server Infrastructure

- Plan and Deploy a Server Infrastructure
- Design and Implement Network Infrastructure Services
- Design and Implement Network Access Services
- Design and Implement an Active Directory Infrastructure (Logical)
- Design and Implement an Active Directory Infrastructure (Physical)

**COURSE 20414  EXAM 70-414**
Implementing an Advanced Server Infrastructure

- Manage and Maintain a Server Infrastructure
- Plan and Implement a Highly Available Enterprise Infrastructure
- Plan and Implement a Server Virtualization Infrastructure
- Design and Implement Identity and Access Solutions
Microsoft Certified Solutions Expert
MCSE: Private Cloud

Passing both exams is required to achieve MCSE certification.

COURSE 20246
EXAM 70-246
Monitoring and Operating a Private Cloud Using System Center 2012
- Configure Data Center Process Automation
- Deploy Resource Monitoring
- Monitor Resources
- Configure and Maintain Service Management
- Manage Configuration and Protection

COURSE 20247
EXAM 70-247
Configuring and Deploying a Private Cloud Using System Center 2012
- Design and Deploy System Center
- Configure System Center Infrastructure
- Configure the Fabric
- Configure System Center Integration
- Configure and Deploy Virtual Machines and Services
Microsoft Certified Solutions Expert
MCSE: Communications

Passing both exams is required to achieve MCSE certification.

COURSE 20336
EXAM 70-336

Core Solutions of Microsoft Lync Server 2013
• Plan and Design a Lync Topology
• Plan and Design Lync Features
• Deploy and Configure Lync
• Manage Operations and Data Resiliency for Lync

COURSE 20337
EXAM 70-337

Enterprise Voice and Online Services with Microsoft Lync Server 2013
• Design Enterprise Voice
• Design and Configure Network Services
• Configure Enterprise Voice
• Plan and Configure a Lync Online Hybrid Solution
Microsoft Certified Solutions Expert

MCSE: Messaging

Passing both exams is required to achieve MCSE certification.

COURSE 20341
EXAM 70-341

Core Solutions of Microsoft Exchange Server 2013

- Plan, Install, Configure, and Manage Transport
- Install, Configure, and Manage the Mailbox Role
- Plan, Install, Configure, and Manage Client Access
- Design and Manage an Exchange Infrastructure

COURSE 20342
EXAM 70-342

Advanced Solutions of Microsoft Exchange Server 2013

- Configure, Manage, and Migrate Unified Messaging
- Design, Configure, and Manage Site Resiliency
- Troubleshooting
- Configure and Manage Compliance, Archiving, and Discovery Solutions
- Implement and Manage Coexistence, Hybrid Scenarios, Migration, and Federation
Microsoft Certified Solutions Expert

MCSE: SharePoint

Passing both exams is required to achieve MCSE certification.

COURSE 20331
EXAM 70-331

Core Solutions of Microsoft SharePoint Server 2013

• Design a SharePoint Topology
• Plan Security
• Install and Configure SharePoint Farms
• Create and Configure Web Applications and Site Collections
• Maintain a Core SharePoint Environment

COURSE 20332
EXAM 70-332

Advanced Solutions of Microsoft SharePoint Server 2013

• Plan Business Continuity Management
• Plan a SharePoint Environment
• Upgrade and Migrate a SharePoint Environment
• Create and Configure Service Applications
• Manage SharePoint Solutions, BI, and Systems Integration
Database
Microsoft Technology Associate

MTA: Database Fundamentals

Passing any one exam achieves MTA certification. Pass set of 4 IT Infrastructure exams to validate breadth of skills needed for DBA career.

COURSE 40364
EXAM 98-364

Database Fundamentals
• Understanding Security Layers
• Understanding Operating System Security
• Understanding Network Security
• Understanding Security Software

IT INFRASTRUCTURE COURSES & EXAMS (see page 9)

• Windows Operating System Fundamentals
• Windows Server Administration Fundamentals
• Networking Fundamentals
• Security Fundamentals
Microsoft Certified Solutions Associate

MCSA: SQL Server 2012

Passing all three exams is required to achieve MCSA certification.

COURSE 10774
EXAM 70-461
Querying Microsoft SQL Server 2012
- Create Database Objects
- Work with Data
- Modify Data
- Troubleshoot & Optimize

COURSE 10775
EXAM 70-462
Administering Microsoft SQL Server 2012 Databases
- Install and Configure
- Maintain Instances and Databases
- Optimize and Troubleshoot
- Manage Data
- Implement Security
- Implement High Availability

COURSE 10777
EXAM 70-463
Implementing a Data Warehouse with Microsoft SQL Server 2012
- Design and Implement a Data Warehouse
- Extract and Transform Data Load Data
- Configure and Deploy SSIS Solutions
- Build Data Quality Solutions

LEVEL 2
Upgrade Paths to
MCSA: SQL Server 2012

Passing two exams is required to achieve MCSA certification.

MCTS:
- SQL Server 2008, Implementation and Maintenance
- SQL Server 2008, Business Intelligence Development and Maintenance
- SQL Server 2008, Database Development

MCSA:
- SQL Server 2008

EXAM 70-457
Transition Your MCTS on
SQL Server 2008 to MCSA:
SQL Server 2012, Part 1
- Create Database Objects
- Work with Data
- Modify Data
- Troubleshoot and Optimize Queries
- Install and Configure SQL Server
- Maintain Instances and Databases
- Optimize and Troubleshoot SQL Server

EXAM 70-458
Transition Your MCTS on
SQL Server 2008 to MCSA:
SQL Server 2012, Part 2
- Manage Data
- Implement Security
- Implement High Availability
- Design and Implement a Data Warehouse
- Extract and Transform Data
- Load Data
- Configure and Deploy SSIS Solutions
- Build Data Quality Solutions
Microsoft Certified Solutions Expert
MCSE: Data Platform

Passing both exams is required to achieve MCSE certification.

COURSE 10776
EXAM 70-464
Developing Microsoft SQL Server 2012 Databases
• Implement Database Objects
• Implement Programming Objects
• Design Database Objects
• Optimize and Troubleshoot Queries

COURSE 20465
EXAM 70-465
Designing Database Solutions for Microsoft SQL Server 2012
• Design Database Structure
• Design Databases and Database Objects
• Design Database Security
• Design a Troubleshooting and Optimization Solution
Microsoft Certified Solutions Expert
MCSE: Business Intelligence

Passing both exams is required to achieve MCSE certification.

COURSE 10778
EXAM 70-466
Implementing Data Models and Reports with Microsoft SQL Server 2012
- Build an Analysis Services Database
- Manage, Maintain, and Troubleshoot an SSAS Database
- Build a Tabular Data Model
- Build a Report with SQL Server Reporting Services (SSRS)

COURSE 20467
EXAM 70-467
Designing Business Intelligence Solutions with Microsoft SQL Server 2012
- Plan Business Intelligence (BI) Infrastructure
- Design BI Infrastructure
- Design a Reporting Solution
- Design BI Data Models
- Design an ETL Solution
Microsoft Technology Associate
MTA: Software Development

Passing any one exam achieves MTA certification. Pass additional exams to validate breadth of skills needed for given MCSD path.

<table>
<thead>
<tr>
<th>COURSE 40361</th>
<th>EXAM 98-361</th>
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<tbody>
<tr>
<td>Software Development Fundamentals</td>
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</tr>
<tr>
<td>- Understanding Core Programming</td>
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<tr>
<td>- Understanding Object-Oriented Programming</td>
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<tr>
<td>- Understanding General Software Development</td>
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<td>- Understanding Web Applications</td>
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<td>- Understanding Desktop Applications</td>
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<tr>
<td>- Understanding Databases</td>
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<table>
<thead>
<tr>
<th>COURSE 40362</th>
<th>EXAM 98-362</th>
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</thead>
<tbody>
<tr>
<td>Windows Development Fundamentals</td>
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<tr>
<td>- Understanding Windows Programming Basics</td>
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<tr>
<td>- Creating Windows Forms Applications</td>
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<td>- Creating Windows Services Applications</td>
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<tr>
<td>- Accessing Data in a Windows Forms Application</td>
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<tr>
<td>- Deploying a Windows Application</td>
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<thead>
<tr>
<th>COURSE 40363</th>
<th>EXAM 98-363</th>
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<tbody>
<tr>
<td>Web Development Fundamentals</td>
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<tr>
<td>- Programming Web Applications</td>
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<tr>
<td>- Working with Data and Services</td>
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<tr>
<td>- Troubleshooting and Debugging Web Applications</td>
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<tr>
<td>- Working with Client-Side Scripting</td>
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<tr>
<td>- Configuring and Deploying Web Applications</td>
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<thead>
<tr>
<th>COURSE 40372</th>
<th>EXAM 98-372</th>
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<tbody>
<tr>
<td>Microsoft .NET Fundamentals</td>
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<tr>
<td>- Understanding .NET Framework Concepts</td>
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<tr>
<td>- Namespaces and Classes in the .NET Framework</td>
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<tr>
<td>- Understanding .NET Code Compilation</td>
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<td>- Understanding I/O Classes in the .NET Framework</td>
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<td>- Understanding Security</td>
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<td>- Understanding .NET Languages</td>
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<td>- Understanding Memory Management</td>
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<thead>
<tr>
<th>COURSE 40375</th>
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<tbody>
<tr>
<td>HTML5 Application Development Fundamentals</td>
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<tr>
<td>- Manage the Application Life Cycle</td>
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<tr>
<td>- Build the User Interface by Using HTML5</td>
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<tr>
<td>- Format the User Interface by Using CSS</td>
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<tr>
<td>- Code by Using JavaScript</td>
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</table>
Microsoft Certified Solutions Developer
MCSD: SharePoint Applications

Passing all four exams is required to achieve MCSD certification.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>EXAM</th>
<th>LEVEL</th>
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<tbody>
<tr>
<td>MTA</td>
<td>20480</td>
<td>26</td>
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<tr>
<td>EXAM 70-480</td>
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<tr>
<td>Programming in HTML5 with JavaScript and CSS3</td>
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<tr>
<td>• Implement and Manipulate Document Structure and Objects</td>
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<tr>
<td>• Implement Program Flow</td>
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<tr>
<td>• Access and Secure Data</td>
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<tr>
<td>• Use CSS3 in Applications</td>
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<tr>
<th>COURSE</th>
<th>EXAM</th>
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<td>MCSD</td>
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<tr>
<td>EXAM 70-486</td>
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<tr>
<td>Developing ASP.NET 4.5 MVC Web Applications</td>
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<tr>
<td>• Design the Application Architecture</td>
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<td>• Design the User Experience</td>
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<tr>
<td>• Develop the User Experience</td>
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<tr>
<td>• Troubleshoot and Debug Web Applications</td>
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<tr>
<td>• Design and Implement Security</td>
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<td>MCSD</td>
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<tr>
<td>EXAM 70-488</td>
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<tr>
<td>Developing Microsoft SharePoint Server 2013 Core Solutions</td>
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<tr>
<td>• Plan and Design SharePoint Sites</td>
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<tr>
<td>• Implement Authorization and Authentication</td>
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<tr>
<td>• Access and Manage Data</td>
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<tr>
<td>• Implement SharePoint Solutions</td>
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<tr>
<td>• Implement the User Experience and Information Architecture</td>
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<tr>
<td>• Create Business Processes</td>
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<tr>
<td>• Create Office Applications</td>
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<th>COURSE</th>
<th>EXAM</th>
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<tbody>
<tr>
<td>MCSD</td>
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<td>EXAM 70-489</td>
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<tr>
<td>Developing Microsoft SharePoint Server 2013 Advanced Solutions</td>
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<tr>
<td>• Design and Implement Search</td>
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<td>• Implement Business Connectivity Services</td>
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<tr>
<td>• Implement User Profiles and Customize Social Workload</td>
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<tr>
<td>• Implement Enterprise Content Management and Web Content Management</td>
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<tr>
<td>• Design for Performance and Troubleshooting</td>
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<tr>
<td>• Implement Managed Metadata Service</td>
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</table>
Microsoft Certified Solutions Developer
MCSD: Web Applications

Passing all three exams is required to achieve MCSD certification.

COURSE 20480
EXAM 70-480
Programming in HTML5 with JavaScript and CSS3
- Implement and Manipulate Document Structure and Objects
- Implement Program Flow
- Access and Secure Data
- Use CSS3 in Applications

COURSE 20486
EXAM 70-486
Developing ASP.NET 4.5 MVC Web Applications
- Design the Application Architecture
- Design the User Experience
- Develop the User Experience
- Troubleshoot and Debug Web Applications
- Design and Implement Security

COURSE 20487
EXAM 70-487
Developing Windows Azure and Web Services
- Accessing Data
- Querying and Manipulating Data by Using the Entity Framework
- Designing and Implementing WCF Services
- Creating and Consuming Web API-based Services
- Deploying Web Applications and Services
Microsoft Certified Solutions Developer

MCSD: Windows Store Apps Using HTML5

Passing all three exams is required to achieve MCSD certification.

COURSE 20480
EXAM 70-480
Programming in HTML5 with JavaScript and CSS3
- Implement and Manipulate Document Structure and Objects
- Implement Program Flow
- Access and Secure Data
- Use CSS3 in Applications

COURSE 20481
EXAM 70-481
Essential of Developing Windows Store Apps using HTML5 and JavaScript
- Design Windows Store Apps
- Develop Windows Store Apps
- Create the User Interface
- Program User Interaction
- Manage Security and Data

COURSE 20482
EXAM 70-482
Advanced Windows Store App Development using HTML5 and JavaScript
- Develop Windows Store Apps
- Discover and Interact with Devices
- Program User Interaction
- Enhance the User Interface
- Manage Data and Security
- Prepare for a Solution Deployment
Microsoft Certified Solutions Developer

MCSD: Windows Store Apps Using C#

Passing all three exams is required to achieve MCSD certification.

### COURSE 20483
#### EXAM 70-483
Programming in C#
- Manage Program Flow
- Create and Use Types
- Debug Applications and Implement Security
- Implement Data Access

### COURSE 20484
#### EXAM 70-484
Essential of Developing Windows Store Apps using C#
- Design Windows Store Apps
- Develop Windows Store Apps
- Create the User Interface
- Program User Interaction
- Manage Security and Data

### COURSE 20485
#### EXAM 70-485
Advanced Windows Store App Development using C#
- Develop Windows Store Apps
- Discover and Interacting with Devices
- Program User Interaction
- Enhance the User Interface
- Manage Data and Security
- Prepare for a Solution Deployment
Microsoft Certified Solutions Developer

MCSD: Application Lifecycle Management

Passing all three exams is required to achieve MCSD certification.

COURSE 20496
EXAM 70-496
Administering Microsoft Visual Studio Team Foundation Server 2012
  • Install and Configure Team Foundation Server
  • Manage Team Foundation Server
  • Customize Team Foundation Server for Team Use
  • Administer Version Control

COURSE 20497
EXAM 70-497
Software Testing with Visual Studio 2012
  • Create and Configure Test Plans
  • Manage Test Cases
  • Manage Test Execution

COURSE 20498
EXAM 70-498
Delivering Continuous Value with Visual Studio 2012 Application Lifecycle Mgmt
  • Define an Effective End-to-End Software Development Lifecycle
  • Define the ALM Process
  • Define a Software Iteration
  • Define End Value for the Software Iteration
  • Develop Customer Value with High Quality
  • Integrate Development and Operations
Services
Microsoft Certified Solutions Associate
MCSA: Office 365

Passing two exams achieves an MCSA certification.

COURSE 20346
EXAM 70-346
Managing Office 365 Identities and Requirements
- Provision Office 365
- Plan & Implement Networking & Security in Office 365
- Manage Cloud Identities
- Implement & Manage Identities by Using DirSync
- Implement & Manage Federated Identities [single sign-on (SSO)]
- Monitor & Troubleshoot Office 365 Availability & Usage

COURSE 20347
EXAM 70-347
Enabling Office 365 Services
- Manage Clients & End-User Devices
- Provision SharePoint Online Site Collections
- Configure Exchange Online & Lync Online for End Users
- Plan for Exchange Online & Lync Online
Upgrade
Upgrade Paths to
MCSA: Windows 8

Passing one exam is required to achieve MCSA certification.

MCITP:

ENTERPRISE DESKTOP ADMINISTRATOR ON WINDOWS 7
 enters
ENTERPRISE DESKTOP SUPPORT TECHNICIAN ON WINDOWS 7.

MCSA:

WINDOWS 7

EXAM 70-689

Upgrading Your Skills to MCSA Windows 8

- Install and Upgrade to Windows 8
- Configure Hardware and Applications
- Configure Remote Access and Mobility
- Configure Backup and Recovery Options
- Design an Installation and Application Strategy

- Maintain Resource Access
- Maintain Windows Clients and Devices
- Manage Windows 8 Using Cloud Services and Microsoft Desktop Optimization Pack
Upgrade Paths to
MCSA: Windows Server 2012

Passing one exam is required to achieve MCSA certification.

MCITP:
- VIRTUALIZATION ADMINISTRATOR
- ENTERPRISE MESSAGING ADMINISTRATOR 2010
- SHAREPOINT ADMINISTRATOR 2010
- ENTERPRISE DESKTOP ADMINISTRATOR
- LYNC SERVER ADMINISTRATOR 2010

MCSA:
- WINDOWS SERVER 2008

COURSE 20417
EXAM 70-417

Upgrading Your Skills to MCSA Windows Server 2012

- Install and Configure Servers
- Configure Server Roles and Features
- Configure Hyper-V
- Install and Administer Active Directory
- Deploy, Manage, and Maintain Servers
- Configure Network Services and Access
- Configure a Network Policy Server Infrastructure
- Configure and Manage Active Directory
- Configure and Manage Group Policy
- Configure and Manage High Availability
- Configure File and Storage Solutions
- Implement Business Continuity and Disaster Recovery
- Configure Network Services
- Configure Identify and Access Solutions
Upgrade Paths to
MCSA: SQL Server 2012

Passing two exams is required to achieve MCSA certification.

**MCTS:**
- SQL Server 2008, Implementation and Maintenance
- SQL Server 2008, Business Intelligence Development and Maintenance
- SQL Server 2008, Database Development

**MCSA:**
- SQL Server 2008

**EXAM 70-457**
Transition Your MCTS on SQL Server 2008 to MCSA: SQL Server 2012, Part 1
- Create Database Objects
- Work with Data
- Modify Data
- Troubleshoot and Optimize Queries
- Install and Configure SQL Server
- Maintain Instances and Databases
- Optimize and Troubleshoot SQL Server

**EXAM 70-458**
Transition Your MCTS on SQL Server 2008 to MCSA: SQL Server 2012, Part 2
- Manage Data
- Implement Security
- Implement High Availability
- Design and Implement a Data Warehouse
- Extract and Transform Data
- Load Data
- Configure and Deploy SSIS Solutions
- Build Data Quality Solutions
Upgrade Paths to MCSD: SharePoint Applications

Passing two exams is required to achieve MCSD certification.

**MCSD:**

**WEB APPLICATIONS**

**COURSE 20488**
**EXAM 70-488**

Developing Microsoft SharePoint Server 2013 Core Solutions
- Plan & Design SharePoint Sites
- Implement Authorization & Authentication
- Access and Manage Data
- Implement SharePoint Solutions
- Implement the User Experience and Information Architecture
- Create Business Processes
- Create Office Applications

**COURSE 20489**
**EXAM 70-489**

Developing Microsoft SharePoint Server 2013 Advanced Solutions
- Design & Implement Search
- Implement Business Connectivity Services
- Implement User Profiles & Customize Social Workload
- Implement Enterprise Content Management & Web Content Management
- Design for Performance & Troubleshooting
- Implement Managed Metadata Service
Guidance
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