



Value to individual developers

- Earning the MCAD for .NET credential demonstrates that you are up-to-date with technology and that you possess developer knowledge and skills.
- The MCAD certification represents a subset of the skills required by the Microsoft Certified Solution Developer (MCS D) for Microsoft .NET certification. The exams required to earn the MCAD credential also count toward the MCS D for .NET credential.
- The MCAD credential enhances your professional status with clients and employers.

Value to hiring managers and organizations

- The MCAD for .NET credential promotes technical readiness for the adoption of Microsoft .NET.
- MCAD training and certification can provide a reliable benchmark for hiring and promotions.
- The MCAD credential offers a career step for company developers.
- MCAD for .NET helps ensure that an organization is built on top-quality technical talent.
- When outsourcing development work, the MCAD credential provides vendor qualification assurance.

Choose your path for .NET training and MCAD certification

Our comprehensive training offerings include Microsoft Official Curriculum (MOC) courses delivered at a Microsoft Certified Technical Education Center (Microsoft CTEC) and Self-Paced Training Kits from Microsoft Press®. Training reflects real-world scenarios and is developed by respected and experienced training experts who work closely with Microsoft product teams.

MCAD for .NET candidates will be required to pass two core exams and one elective exam. Choose a .NET language (Visual Basic .NET or Visual C# .NET) to leverage existing skills and to become familiar with the Microsoft .NET Framework. Then, to fulfill the core certification requirements, pass one exam focused on either Web application development or Windows-based application development in the language of your choice. Demonstrate additional skills by passing one exam on XML Web services and server components. Finally, pass one elective exam to complete the certification.

For more information, including steps you can take toward earning the MCAD for Microsoft .NET credential, please visit the Microsoft Training & Certification Web site, or contact your local Microsoft CTEC.

www.microsoft.com/mcad



MCAD for Microsoft .NET

Put your .NET skills to the test.



Key Data

AVAILABLE:

- August 2002

TARGET AUDIENCE:

- Developers who create and maintain department-level applications, components, Web or desktop clients, or back-end data services.

TYPICAL JOB TITLES FOR MCAD:

- Programmer
- Programmer/Analyst
- Software Developer

EXPERIENCE:

- MCAD candidates typically have at least one to two years of work experience in software development.

MCP EXAMS REQUIRED:

- 2 core exams + 1 elective

MICROSOFT OFFICIAL CURRICULUM (MOC) FOR CORE EXAMS:

- **Web Applications:**
Course 2640 or 2310
- **Windows Applications:**
Course 2565 or 2555
- **XML Web Services and Server Components:**
Course 2557 or 2524
- **Data Access (useful for all core exams):**
Course 2389

MORE INFORMATION:

- www.microsoft.com/mcad

The Microsoft® Certified Application Developer (MCAD) for Microsoft .NET credential is for developers who use Microsoft Visual Studio® .NET and the .NET Framework to develop, deploy, and maintain department-level applications and components for Microsoft Windows® and the Web. These developers also build enterprise solutions incorporating data services and XML Web services. The MCAD credential covers job roles that include tasks such as building, testing, and supporting the following:

- Windows and Web applications built on the Microsoft .NET Framework
- .NET-connected applications and services

Individuals working in these job roles typically have at least one to two years of relevant work experience.

The technology and tools to build powerful applications

Microsoft .NET is software that connects information, people, systems, and devices. Built on Web service standards, Microsoft .NET enables both new and existing applications to connect with software and services across platforms, applications, and programming languages. Microsoft Visual Studio .NET is a comprehensive development tool for creating leading-edge applications. Web Services enable you to assemble applications from new and existing code, regardless of platform, programming language, or object model.

Training enhances your skill level and expertise

MCAD training enhances and accelerates your ability to create .NET-connected applications and services using Microsoft Visual Studio .NET and the .NET Framework. Microsoft .NET training is created by real-world experts and is structured around typical application developer job roles. This is so students can learn comprehensive .NET solutions in their area of expertise. Training content is deep, relevant, and vital for building skills and pursuing certification.

MCAD for Microsoft .NET increases your opportunities

The MCAD credential was created in response to industry demand for developers trained and certified to show that they have acquired the necessary skills to successfully implement applications, components, and services built on the Microsoft .NET Framework. Certification validation studies have consistently shown that certified individuals perform better than non-certified individuals on the job. The MCAD for Microsoft .NET credential demonstrates your ability to use the power of Microsoft Visual Studio .NET and Web services to be more productive. Earning the MCAD for .NET certification is proof of technology know-how, allowing developers and businesses alike to market their up-to-date knowledge. Developers will have a strong foundation for moving into a lead developer role, and employers will have standards for promoting and hiring developers.

Training courses for MCAD for Microsoft® .NET

Gain prerequisite knowledge

1. Choose a Programming Language

Assess your experience and current job role to choose the most appropriate entry point.

Existing Microsoft® Visual Basic® 6.0 Developers

2373:
Programming with Microsoft Visual Basic .NET

New to programming

2667: Introduction to Programming

2559:
Introduction to Visual Basic .NET Programming with Microsoft .NET

OR

2609:
Introduction to C# Programming with Microsoft .NET

Existing Developers with C++ or Other Programming Languages

2124:
Programming with C#

2. Learn the Microsoft .NET Framework

2415:
Programming with the Microsoft .NET Framework (Visual Basic .NET)

OR

2349:
Programming with the Microsoft .NET Framework (Visual C#™ .NET)

AND

2389:
Programming with ADO .NET

Prepare for MCAD core exams

3. Build Windows® or Web Applications Using Microsoft Visual Studio® .NET

Windows Application Development

2565:
Developing Microsoft .NET Applications for Windows (Visual Basic .NET)

OR

2555:
Developing Microsoft .NET Applications for Windows (Visual C# .NET)

Exam: 70-306

Exam: 70-316

Web Application Development

Existing ASP Developers:

2640:
Upgrading Web Development Skills from ASP to Microsoft ASP .NET

New ASP Developers:

2310:
Developing Microsoft ASP .NET Web Applications using Visual Studio .NET

Exam: 70-305 or 70-315

4. Build XML Web Services and Server Components

XML Web Services and Server Components Development

2557:
Building COM+ Applications using Microsoft .NET Enterprise Services

AND

2524:
Developing XML Web Services using Microsoft ASP .NET

Exam: 70-310 or 70-320

Prepare for an elective exam

2071:
Querying Microsoft SQL Server™ with Transact SQL

AND

2073:
Programming a Microsoft SQL Server 2000 Database

Exam: 70-229

OR

2379:
Developing and Deploying Microsoft BizTalk™ Server 2000 Solutions

Exam: 70-230

OR

2341:
Fundamentals of Building a Business to Consumer Solution with Microsoft Commerce Server 2000

Exam: 70-234

NOTE: If you use Exams 70-305 or 70-315 to satisfy a core exam requirement, you may use either 70-306 or 70-316 as an elective. If you use Exams 70-306 or 70-316 to satisfy a core exam requirement, you may use either 70-305 or 70-315 as an elective.

Microsoft Press® produces training kits for individuals preparing for MCAD exams. They include training manuals, lab exercises, reusable source code, and sample exam questions. See <http://www.microsoft.com/mspress/certification/mcad.asp> for more information.

Exam requirements for MCAD for Microsoft .NET

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|--------------------------------|---|--|--|
| Core Exams (2 required) | 1 | Web Application Development | 70-305* Developing and Implementing Web Applications with Microsoft Visual Basic .NET and Microsoft Visual Studio .NET |
| | | | 70-315* Developing and Implementing Web Applications with Microsoft Visual C# .NET and Microsoft Visual Studio .NET |
| | | Windows Application Development | 70-306* Developing and Implementing Windows-based Applications with Microsoft Visual Basic .NET and Microsoft Visual Studio .NET |
| | | | 70-316* Developing and Implementing Windows-based Applications with Microsoft Visual C# .NET and Microsoft Visual Studio .NET |
| | 2 | XML Web Services and Server Components Development | 70-310* Developing XML Web Services and Server Components with Microsoft Visual Basic .NET and the Microsoft .NET Framework |
| | | | 70-320* Developing XML Web Services and Server Components with Microsoft Visual C# .NET and the Microsoft .NET Framework |
| Elective Exams (1 required) | 3 | 70-229 Designing and Implementing Databases with Microsoft SQL Server 2000 Enterprise Edition | |
| | | 70-230 Designing and Implementing Solutions with Microsoft BizTalk Server 2000, Enterprise Edition | |
| | | 70-234 Designing and Implementing Solutions with Microsoft Commerce Server 2000 | |
| | | 70-305* If you use exam 70-305 or 70-315 to satisfy the core exam requirement, you may use either exam 70-306 or 70-316 as an elective. If you use exam 70-306 or 70-316 to satisfy the core requirement, you may use either exam 70-305 or 70-315 as an elective. | |
| | | 70-316* | |

* In the following combinations, candidates will receive credit toward the MCAD or MCSA certification for only one of the two exams: 70-305 or 70-315, 70-306 or 70-316, 70-310 or 70-320.