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education

course description

## developing Microsoft .NET applications for Windows (C# .NET)

u2782s  
MOC 2555

### course overview

This five-day, instructor-led course provides students with the skills required to build Microsoft® Windows® Forms applications by using the Microsoft .NET Framework. This course is a part of the Microsoft Visual C#™ .NET curriculum and is intended to provide C# programmers with the skills required to create Windows Forms applications by using the .NET Framework. The course will cover the major topics for Windows client application programming on the .NET Framework. These topics include: Windows Forms, GDI+, simple data access, interoperating with unmanaged code, threading and asynchronous programming issues, simple remoting, Web access, Web Services consumption, debugging, security, and deployment issues for desktop applications.

### audience

- Intermediate programmers who are responsible for designing and building Windows applications with the .NET Framework.
- Developers who have C# development skills.

### benefits to you

Acquire the skills to build Microsoft® Windows® Forms applications by using the Microsoft .NET Framework.

### pre-requisites

Students should the have:

- Experience with a .NET language such as Visual C# .NET or Microsoft Visual C++® .NET
- Experience developing basic applications with MFC and/or Microsoft Visual Basic® 6

The following course is also recommended:

- Introduction to C# programming for the Microsoft .NET platform (H8350S, MOC2124) or equivalent knowledge

### course objectives

Gain the skills and knowledge you need to:

- Create and populate Windows forms.
- Create multiple-document interface (MDI) applications.
- Use dialogs in Windows Forms applications.
- Validate user input in a Windows Forms application.
- Bind Windows Applications to various data sources using Microsoft ADO.NET.
- Call Win32® application programming interfaces (APIs) from a Windows Forms application.
- Debug a Windows Forms application.
- Incorporate accessibility features in a Windows Forms application.
- Deploy Windows Forms application.
- Implement code-access and role-based security in a Windows Forms application.
- Add deployment flexibility to applications by using shared assemblies.
- And more. See detailed course outline below.

## next steps

Validate your technical expertise and gain recognition for your knowledge and skill by signing up for and passing the following Microsoft Certified Professional exam:

- 70-316, Developing and Implementing Windows-based Applications with Microsoft® Visual C# .NET and Microsoft® Visual Studio® .NET

## to order

You can order this course online at <http://education.hp.com>. At the site, select a country, then choose "registration" or "Book a course" and fill out the online registration form.

## why hp education services?

- Convenient, worldwide network of Microsoft CTECs at HP and partner locations
- Comprehensive Microsoft Official Curriculum student materials
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## detailed course outline: developing Microsoft .NET applications for Windows (Visual C# .NET) (u2782s/MOC 2555)

module	key topics
Introducing Windows Forms	<ul style="list-style-type: none"><li>• Creating a Form</li><li>• Adding Controls to a Form</li><li>• Creating an Inherited Form</li><li>• Organizing Controls on a Form</li><li>• Creating MDI Applications</li></ul>
Working With Controls	<ul style="list-style-type: none"><li>• Creating an Event Handler for a Control</li><li>• Using Windows Forms Controls</li><li>• Using Dialog Boxes in a Windows Forms Application</li><li>• Adding Controls at Run Time</li><li>• Creating Menus</li><li>• Validating User Input</li></ul>
Building Controls	<ul style="list-style-type: none"><li>• Declare an Event and Raising It from an Extended Control</li><li>• Creating a Composite Control</li><li>• Adding Design-Time Support</li></ul>
Using Data in Windows Forms Applications	<ul style="list-style-type: none"><li>• Adding ADO.NET Objects to and Configuring ADO.NET Objects in a Windows Forms Application</li><li>• Accessing and Modifying Data by Using DataSets</li><li>• Binding Data to Controls</li><li>• Overview of XML Web Services</li><li>• Creating a Simple XML Web Services Client</li><li>• Persisting Data</li></ul>
Interoperating with Managed Objects	<ul style="list-style-type: none"><li>• Using .NET and COM Components in a Windows Forms Application</li><li>• Calling Win32 APIs from Windows Forms Applications</li></ul>
Printing and Reporting in Windows Forms Applications	<ul style="list-style-type: none"><li>• Printing From a Windows Forms Application</li><li>• Using the Print Preview, Page Setup, and Print Dialogs</li><li>• Constructing Print Document Content by Using GDI+</li><li>• Creating Reports by Using Crystal Reports</li></ul>
Asynchronous Programming	<ul style="list-style-type: none"><li>• The .NET Asynchronous Programming Model</li><li>• The Asynchronous Programming Model Design Pattern</li><li>• How to Make Asynchronous Calls to Any Method</li><li>• Helping Protect State and Data in a Multithreaded Environment</li></ul>
Enhancing the Usability of Applications	<ul style="list-style-type: none"><li>• Adding Accessibility Features</li><li>• Adding Help to an Application</li><li>• Localizing an Application</li></ul>

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Deploying Windows  
Forms Applications

- .NET Assemblies
- Deploying Windows Forms Applications

Securing Windows  
Forms Applications

- Security in the .NET Framework
- Using Code Access Security
- Using Role-Based Security

for more  
information

To locate country contact information and to learn more about HP Education Services, please visit our worldwide web site at <http://education.hp.com>.

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