

Measurement Studio for Visual Studio Fundamentals

Overview

The Measurement Studio self paced course teaches you the concepts of .NET, Measurement Studio, and the different components that make up Measurement Studio.

Audience

- New users and existing users of Microsoft Visual Studio wishing to create applications using NI Measurement Studio.

Prerequisites

- General working knowledge of Microsoft Visual Studio, including .NET Windows, ASP.NET and MFC.

Products Required

- Microsoft Windows Vista/XP/2000
- Microsoft .NET Framework 2.0 for Visual Studio 2005 (required only for the Measurement Studio .NET class libraries)
- Standard, Professional, or Team System edition of Microsoft Visual Studio 2005 (required to use the Measurement Studio integrated tools); or Visual C# or Visual Basic .NET Express Editions of Microsoft Visual Studio 2005
- Measurement Studio

Ordering Information

Order online at ni.com/training or call (800)433-3488 Fax: (512)683-9300
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Part Number

780148-01

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Contents

Lesson 1 - Introduction to Measurement Studio

This lesson provides an overview of .NET and Measurement Studio, describes the components that make up Measurement Studio, including ActiveX controls, C++ class libraries, and .NET class libraries, and information about Measurement Studio software. Topics include:

- What is .NET?
- What is Measurement Studio?
- Measurement Studio Components

Lesson 2 - Windows Forms .NET Controls

This lesson provides detailed information about the Windows Forms .NET controls available for use in Measurement Studio. Topics include:

- Graphs
- Legend Control
- Numeric Edit Control
- Numeric Pointer Controls
- Switch and LED Controls
- Control Arrays
- Instrument Control Strip Control
- Property Editor Control

Lesson 3 - DataSocket and the Network Variable

This lesson provides an overview of DataSocket and network variable data sharing technologies, and how to use them to share data in Measurement Studio. Topics include:

- DataSocket Overview
- DataSocket API
- Network Variable Overview
- Network Variable Library

Lesson 4 - NI-DAQmx

This lesson introduces the NI-DAQmx assemblies and support for the .NET environment. Topics include:

- NI-DAQmx Review
- Installation, Documentation, and Examples
- NI-DAQmx .NET API
- Assistants and Wizards
- Additional Information

Lesson 5 - Instrument Control

This lesson describes GPIB and VISA technology in Visual Studio .NET, GPIB .NET programming, and creating GPIB and VISA applications. Topics include:

- GPIB and VISA Review
- NI-VISA .NET Library Overview
- NI-488.2 .NET Library Overview
- Assistant and Wizard
- Additional Information

Lesson 6 - Analysis

This lesson describes the Measurement Studio .NET analysis libraries for generating and analyzing data, and how to use analysis classes. Topics include:

- Analysis Libraries
- Using the Analysis Classes