

DIAdem Basics Course

Overview

The DIAdem Basics course teaches you how to use the most important analysis, reporting, and data management features of the DIAdem environment. At the end of this course you will be comfortable importing data sets, analyzing them visually and computationally, and creating publisher-quality reports. You will also learn how to use DIAdem SCRIPT to automate each of these tasks.

Duration

Three (3) Days

Audience

- New DIAdem users
- Users and technical managers evaluating DIAdem in purchasing decisions
- Users needing to display, analyze and produce reports for large amounts of test data

Prerequisites

Experience using Windows; programming experience is helpful, but not essential

NI Products Used During the Course

DIAdem

After attending this course, you will be able to:

- Find the data you want to import using simple search terms and conditions
- Import ASCII files and load TDM files
- View and graphically investigate loaded data
- Execute channel-based calculations on loaded data
- Create reports to present the data, including graphs and tables
- Use DIAdem SCRIPT to automate the above steps
- Complete the most common tasks performed in DIAdem

Suggested Next Courses

DIAdem Advanced

Registration

Register online at ni.com/training or call (800)433-3488 Fax: (512)683-9300
info@ni.com

Outside North America, contact your local NI Office.
Worldwide Contact Info: ni.com/global

Part Number

910616-xx
-01 NI Corporate or Branch
-11Regional
-21 Onsite (at your facility)

DIAdem Basics Course

Introduction to DIAdem

This lesson introduces the DIAdem environment. This lesson defines the role of DIAdem, explains the inherent operations of DIAdem, and describes the main components of DIAdem.

Topics include:

- Understanding the role of DIAdem
- Learning about the inherent operations of DIAdem
- Using the main components of DIAdem

Managing Data

This lesson describes how to use data within the DIAdem environment. You will learn how to search for data with the DataFinder, and how data is organized in DIAdem. Topics include:

- Understanding the uses of the NAVIGATOR Panel
- Learning about the components of the NAVIGATOR Panel
- Searching for data with the DataFinder
- Browsing found data
- Loading and saving channels from a data file

Viewing Data

In this lesson, you will use DIAdem to display channels as curves or tables, add text, pictures, or videos to the layout, and create, save, and load layouts. Topics include:

- Understanding the uses of the VIEW Panel
- Learning about the components of the VIEW Panel
- Getting Data into the VIEW panel
- Using the various Display Types
- Loading and Saving a DIAdem VIEW Layout
- Transferring Worksheets into DIAdem REPORT
- Introducing the DIAdem Calculator

Reporting Data

In this lesson, you will use DIAdem to display your data in graphs or in tables. Learn how to share results with others and collaborate on projects by communicating results clearly and concisely with a drag-and drop environment tailored for creating engineering and scientific reports. Topics include:

- Understanding the components of the REPORT Panel
- Creating a Report
- Formatting and Display Modes
- Comparing the VIEW Panel with the REPORT Panel

Analyzing Data

In this lesson, you will learn how to use the ANALYSIS Panel to perform interactive analysis using the DIAdem analysis libraries. You will learn how to analyze data using a wide range of mathematical functions. Topics include:

- Understanding the uses of the ANALYSIS Panel
- Learning about the components of the ANALYSIS Panel
- Performing calculations and data analysis in the ANALYSIS Panel
- Operating with NoValues

Calculator

In this lesson, you will use the Calculator to mathematically analyze data with your own formulas. Topics include:

- Understanding the uses of the Calculator
- Working with the Calculator
- Learning the calculator Operands and Operations
- Using Calculator variables
- Calculating with NoValues

DIAdem Basics Course Outline

Units in DIAdem

In this lesson, you will learn how to execute calculations with units and which input help DIAdem provides. Topics include:

- Using Units in DIAdem
- Understanding Units Definition and Use
- Editing the Units Catalog
- Working with Units

Automating Sequences

In this lesson, you will learn how to automate recurring sequences and standard evaluations as scripts in DIAdem SCRIPT. Topics include:

- Understanding the uses of the SCRIPT Panel
- Learning about the components of the SCRIPT Panel
- Learning how to use script syntax
- Automating DIAdem with the Recording Mode
- Editing a Script
- Creating a Serial Evaluation

Executing Typical Tasks with DIAdem

In this lesson, you apply what you have learned in the previous lessons by solving common tasks with DIAdem.

Topics include:

- Loading Non-DIAdem Data
- Identifying and Graphing Peaks
- Finding Events and Trends
- Finding Frequency Content
- Performing Curve Fitting
- Working with 3D Data
- Comparing Data from Multiple Data Runs