

# DIAdem Advanced Course

## Overview

This course teaches you how to automate common tasks in the DIAdem panels with DIAdem's standard VBScript commands. You will also learn how to customize the DIAdem environment by creating user-defined dialog boxes, user commands and custom menus, which enable you to use DIAdem as the basis for complex applications.

## Duration

Two (2) Days

## Audience

New DIAdem users who have taken the DIAdem Basics Course

DIAdem users who want to learn how to programmatically control DIAdem

Integrators who are tasked with developing technical data management solutions

## Prerequisites

DIAdem Basics or equivalent experience

## NI Products Used During the Course

DIAdem

## After attending this course, you will be able to:

- Automate DIAdem using VBScript
- Use the Calculator to perform complex arithmetic expressions
- Use standard dialog boxes
- Design user-defined dialog boxes
- Create user-defined variables and commands
- Control the script sequence
- Define functions and procedures
- Optimize and structure scripts
- Programmatically handle files
- Import data with SQL queries in VBScript

## Registration

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

Outside North America, contact your local NI Office.  
Worldwide Contact Info: [ni.com/global](http://ni.com/global)

## Part Number

910618-xx  
-01 NI Corporate or Branch  
-11 Regional  
-21 Onsite (at your facility)

# DIAdem Advanced Course

## Introduction to DIAdem SCRIPT

This lesson explains the functions and procedures you use to write a script. Topics include:

- Introduction to automating processes
- Learning the DIAdem SCRIPT functions
- Understanding the script structure
- Learning about the script syntax

## The VBS Functionality

In this lesson, you will learn the most important aspects of the VBS functionality. Topics include:

- Understanding data types
- Using variables and constants
- Understanding operators
- Learning about condition instructions
- Using loops to incorporate repetition
- Working with objects
- Handling errors
- Understanding the differences between DIAdem commands and VBS commands
- Using VBS in User Dialog Boxes
- Accessing databases

## Working with the Debugger

In this lesson, you will learn how to use the integrated debugger and breakpoints. Topics include:

- Determining Error Causes
- Working in Debug Mode
- Minimizing Errors in Scripts
- Using Error Handling in Scripts

## Creating and Editing Scripts

This lesson introduces the technique of creating a script with the recording mode and learning techniques to edit the script to customize the behavior. Topics include:

- Creating a script
- Starting and stopping a script
- Integrating a script in the DIAdem interface
- Using tools that help you to create scripts

## Script Variables

In this lesson, you will learn about the different types of variables in DIAdem, their value ranges, and the environments in which you use them. Topics include:

- Using DIAdem variables
- Learning how to create and use user-defined variables
- Understanding dynamic enumeration list variables
- Using VBS variables

## Customized User Interface

In this lesson, you will learn how to create dialog boxes to set function parameters, to specify settings, to select properties, and to enter data. Topics include:

- Understanding the components of the Scriptable User Dialog Editor
- Using user dialog boxes in scripts

## Working with DIAdem Panels

In this lesson, you will learn how to access various DIAdem panels using a script. Topics include:

- Working with DIAdem REPORT layouts
- Displaying data with DIAdem VIEW
- Accessing Internal Data
- Mining Data using DIAdem NAVIGATOR

## Searching and Finding Data

In this lesson, you will learn how to use the Quick search and Advanced search in scripts. You can search in data files, channel groups or channels using the DataFinder. If you want the user to interact manually you can use the user interface in DIAdem NAVIGATOR. You will learn about the objects, methods and properties available in DIAdem NAVIGATOR. Topics include:

- Understanding the object-oriented scripting interface of DIAdem NAVIGATOR
- Searching with and without the NAVIGATOR user interface