

Level 1: Fast Track to Flash MX

2 Day Course - \$895

Level 2: Design Techniques with Macromedia Flash

3 Day Course - \$1,050

Level 3: Macromedia Flash MX ActionScript

3 day Course - \$1,100

Level 4: Macromedia Flash MX Advanced ActionScript

3 Day Course - \$1,495

Developing Rich Internet Applications with Flash MX and ColdFusion MX

3 Day Course - \$1,495

Package Pricing:

Level 1 and 2 - \$1,595

Level 1, 2 and 3 - \$2,695

Level 1: Fast Track to Flash MX

Fast Track to Macromedia Flash MX is designed to teach a wide spectrum of software professionals how to design and deliver cross-platform, low-bandwidth animations, presentations, and Web applications using Macromedia Flash MX. It is a task-based course, with students learning by doing. Along with covering the basics of Macromedia Flash MX, the course focuses on best practices and design, stressing the importance of usability, accessibility, optimization, and performance.

- Topics
- Objectives
- Prerequisites
- Course Outline
- Find a Class

Topics

- The Macromedia Flash MX development environment
- Graphics and text
- Layers, frames, and the Timeline
- Masks
- Symbols, instances, and libraries
- Animations, including frame-by-frame, motion tweens, and shape tweens
- Motion guides
- Shape hints
- Document structure
- Actions and ActionScript
- Navigation buttons
- Sound

- Video
- Publishing

Objectives

Upon completion of this course, you should be able to:

- Develop efficient, compact Macromedia Flash movies using Macromedia Flash MX
- Create, import, and work with graphics
- Import graphics from Macromedia FreeHand
- Work with text
- Use layers and frames
- Use masks
- Create and use symbols, libraries, and instances
- Build frame-by-frame animations
- Motion tween
- Shape tween
- Work with motion guides
- Create navigation buttons
- Use the Movie Explorer
- Work with simple ActionScript commands
- Use components
- Add sounds to documents
- Import Video
- Use a preloader component
- Publish a Macromedia Flash MX document in HTML using Dreamweaver
- Implement basic principles of optimization and performance

Prerequisites

To gain the most from this class, you should already have:

- Have experience with the Windows or Macintosh operating system
- Be familiar with Web terminology

Course Outline

Unit 1: Learning the Basics

- Introduction to Macromedia Flash MX
- The Macromedia Flash MX interface
- Creating a new Macromedia Flash MX document
- Developing in Macromedia Flash MX

Unit 2: Creating Simple Graphics and Text

- Using graphics
- Importing graphics
- Using text
- Masking

Unit 3: Adding Simple Animation

- Working with symbols, libraries, and instances
- Creating frame-by-frame animation
- Motion tweening
- Using motion guides
- Shape tweening
- Adding stop actions

Unit 4: Using Symbols and Libraries

- Graphic symbols
- Button symbols
- Movie clip symbols
- The structure of a Macromedia Flash MX document
- Working with libraries

Unit 5: Enhancing Functionality Using Actions and ActionScript

- Using ActionScript
- Creating interactive buttons
- Linking to a URL.

Unit 6: Creating Compact Movies

- Using the Load Movie action to create more efficient documents
- Using shared libraries to create smaller Macromedia Flash MX documents

Unit 7: Adding Sound and Video

- Adding sound
- Modifying the sound level
- Adding video
- Using Components
- The Bandwidth Profiler

Unit 8: Publishing

- Factors to consider before publishing
- Techniques for optimizing movies
- Publishing

Level 2: Design Techniques with Macromedia Flash - [top](#)

Design Techniques with Macromedia Flash MX teaches beginning Macromedia Flash users principles and techniques for designing beautiful Macromedia Flash sites: how to lay out pages in Macromedia Flash, use color and text effectively, work with multiple image types, build navigation in Macromedia Flash, make Macromedia Flash usable, and incorporate sound and video. This course primarily uses the Macromedia Flash Timeline to create content, with limited attention to ActionScript. By learning design techniques along with some general principles of Web usability, you can develop Macromedia Flash content that best serves your users and clients—content that maintains a creative edge while enabling all users to achieve their goals.

- Topics
- Objectives
- Prerequisites
- Course Outline
- Find a Class

Topics

- Techniques of interactive design
- Site and page structure
- Using color effectively
- Addressing Macromedia Flash text issues, such as antialiasing and embedded fonts

- Advanced image techniques, including optimization, movie clip masking and dynamic loading of JPEGs
- Creating usable navigation
- Structuring Macromedia Flash MX documents with the Timeline
- Incorporating sound and video effectively
- Using interactive text
- Building hybrid Flash/HTML pages

Objectives

Upon completion of this course, you should be able to:

- Design usable, beautiful Macromedia Flash documents
- Understand design issues specific to Macromedia Flash MX
- Plan Flash sites and pages
- Structure Macromedia Flash documents effectively by using the Timeline, layers, and movie clips
- Address anti-aliased text in Macromedia Flash MX documents
- Add HTML and vector text to Macromedia Flash MX documents
- Create intuitive, functional navigation for Macromedia Flash MX documents
- Create rollovers and drop-down menus in Macromedia Flash MX
- Effectively add multiple types of images to Macromedia Flash MX documents; for example, photographs, bitmaps, and Freehand images
- Optimize graphics for Macromedia Flash
- Make effective use of advanced image techniques such as fills, masks, bitmap tracing, and compression
- Load JPEGs dynamically when a Macromedia Flash MX document runs
- Incorporate sound effectively, including making an on/off button
- Incorporate video into Macromedia Flash MX
- Create forms in Macromedia Flash MX
- Use an external text file to feed information to a dynamic text box and use HTML to format this text
- Export bookmarks from Macromedia Flash MX
- Integrate Macromedia Flash into HTML (using Macromedia Dreamweaver)

Prerequisites

To gain the most from this class, you should already have:

- Familiarity with the Windows or Macintosh operating system
- Familiarity with Web terminology
- Successfully completed Fast Track to Macromedia Flash instructor-led course and/or six months' experience using Macromedia Flash

Course Outline

Unit 1: Using Flash for Interactive Design

- Basic principles of interactive design
- Review of basic Macromedia Flash skills
- Animating with the timeline

Unit 2: Designing an Interface

- Interface design
- Site architecture
- Arranging page content
- Use of color
- Using color swatches

Unit 3: Using Text Effectively

- Addressing antialiasing, kerning, line length and spacing and font type
- Embedded versus device fonts
- Using text in bitmaps
- Adding a scroll bar to a text box
- Using font mapping

Unit 4: Building a Navigation System

- Designing a navigation system in Macromedia Flash MX
- Creating usable navigation buttons in Macromedia Flash MX
- Adding submenus
- Structuring documents by using the Timeline
- Using simple ActionScript for navigation
- Loading multiple SWF files into a document

Unit 5: Using Images in Flash

- Importing and manipulating images in Macromedia Flash MX
- Optimizing graphics in Macromedia Fireworks
- Working with bitmaps in Macromedia Flash MX
- Importing and working with vector graphics
- Using movie clip masks to create transitions
- Downloading JPEGs at run time

Unit 6: Creating Compact Movies

- Incorporating sound effectively
- Adding an on/off button to control sound
- Incorporating video into Macromedia Flash MX

Unit 7: Using Text Interactively

- Building interactive forms in Macromedia Flash MX
- Loading text into a dynamic text box

Unit 8: Integrating Flash into an HTML Page

- Publish Flash for Web use
- Export bookmarks from Macromedia Flash MX
- Building hybrid (Flash/HTML) pages

Level 3: Macromedia Flash MX ActionScript - [top](#)

Macromedia Flash MX ActionScript introduces Macromedia Flash users to programming with ActionScript, including using ActionScript to animate, process data, create dynamic content, and manipulate components. It is a task-based course, with students learning by doing. The course emphasizes the object-oriented capabilities of Macromedia Flash MX, and teaches students how to use ActionScript objects, methods, events, properties, and functions, with an eye toward ActionScript best practices. This course replaces Developing Applications with ActionScript.

- Topics
- Objectives
- Prerequisites

- Course Outline
- Find a Class

Topics

- ActionScript best practices
- Creating movie clips with ActionScript
- Using button movie clips
- Referencing object events from the Timeline
- Using forms
- Working with variables
- Using conditional logic
- Animating with ActionScript
- Drawing with ActionScript
- Understanding and using ActionScript objects
- Understanding object methods, properties and events
- Using the Color object
- Creating text fields with ActionScript
- Using the TextField and TextFormat objects
- Reusing code
- Working with functions
- Writing functions
- Creating dynamic content
- Using the LoadVars object
- Using components with ActionScript

Objectives

Upon completion of this course, you should be able to:

- Reference objects using ActionScript.
- Use instance properties.
- Use debugging features in ActionScript.
- Create movie clips using ActionScript.
- Draw using ActionScript.
- Load Macromedia Flash movies and JPEGs into a movie clip.
- Create animations using ActionScript.
- Work with variables.
- Create a form and use conditional logic to validate it.
- Pass variables out of a Macromedia Flash movie.
- Work with built-in functions.
- Use built-in objects.
- Use methods to manipulate objects.
- Reference variables across movies.
- Create reusable ActionScript with custom functions.
- Create an external data source for Macromedia Flash movies
- Display dynamic content in Macromedia Flash.
- Use Macromedia Flash MX components.

Prerequisites

To gain the most from this class, you should already have:

- Attending the Fast Track to Macromedia Flash course OR
- Three to six months' experience developing with Macromedia Flash.

Course Outline

Unit 1: Introducing ActionScript

- ActionScript Overview
- Walkthrough 1-1: Using Simple ActionScript to Control a Movie Clip
- Walkthrough 1-2: Adding Comments and Performing Simple Debugging
- ActionScript Concepts
- ActionScript Reference
- Walkthrough 1-3: Exploring ActionScript Concepts through the ActionScript Reference
- Lab 1: Exploring the Course Application

Unit 2: Learning Macromedia Flash MX ActionScript Fundamentals

- Working with Symbols and Instances
- Walkthrough 2-1: Understanding Symbols and Instances
- Adding Actions to Timeline Frames
- Walkthrough 2-2: Moving Code to the Main Timeline
- Inheriting Movie Clip Properties
- Walkthrough 2-3: Inheriting Movie Clip Properties
- Referencing Movie Clip Timelines
- Walkthrough 2-4: Using Paths with Nested Movie Clips
- Implementing Button Movie Clips
- Walkthrough 2-5: Applying an Event to a Movie Clip
- ActionScript Best Practices
- Lab 2: Adding a Decrease Size Button

Unit 3: Creating Forms in Macromedia Flash

- Forms Overview
- Creating Form Fields
- Walkthrough 3-1: Creating Input Text Fields on a Form
- Using Form Data Within Macromedia Flash
- Walkthrough 3-2: Displaying Form Variables in Dynamic Text Boxes
- Validating Forms
- Walkthrough 3-3: Using Conditional Logic to Validate a Form
- Passing Variables Out of Macromedia Flash
- Walkthrough 3-4: Passing Variables Out of Macromedia Flash
- Lab 3: Building a Form and Sending the Input Out of Macromedia Flash

Unit 4: Creating Movie Clips with ActionScript

- Creating Empty Movie Clips
- Walkthrough 4-1: Creating a Movie Clip with ActionScript
- Using the loadMovie Method to Load SWF and JPEG Files
- Walkthrough 4-2: Dynamically Loading JPEG Files into Movie Clips
- Drawing with ActionScript
- Walkthrough 4-3: Using the Drawing Methods to Build Movie Clips
- Walkthrough 4-4: Using the With Statement
- Creating Duplicate Movie Clips
- Walkthrough 4-5: Duplicating a Movie Clip
- Generating Multiple Copies of a Movie Clip
- Walkthrough 4-6: Creating Many Copies of a Movie Clip with Unique Instance Names
- Lab 4: Creating Movie Clips Dynamically

Unit 5: Animating with ActionScript

- Why Use ActionScript to Animate?
- Changing Movie Clip Properties Over Time

- Walkthrough 5-1: Using onEnterFrame
- Changing an Animation Interactively
- Walkthrough 5-2: Using onEnterFrame with hitTest
- Stopping Animation When a Condition Is Met
- Walkthrough 5-3: Using onEnterFrame for Animation
- Stopping onEnterFrame When Animation Stops
- Walkthrough 5-4: Deleting the onEnterFrame After Animation Is Complete
- Stopping Animation After a Specific Time Period
- Walkthrough 5-5: Unloading a Movie Clip After a Specific Time Period
- Lab 5: Animating Movie Clips Using ActionScript

Unit 6: Creating Objects

- Understanding Objects
- Walkthrough 6-1: Creating Objects That Inherit Events
- Creating Objects Visually
- Creating Objects Using Built-in Movie Clip Methods
- Walkthrough 6-2: Creating a TextField Object
- Creating Objects Using the new Keyword for Built-in Objects
- Walkthrough 6-3: Creating a TextFormat Object and Using It to Format a TextField Object
- Walkthrough 6-4: Creating and Using the Color Object
- Creating Custom Objects
- Walkthrough 6-5: Creating a Custom Object to Use with the Color Object Set Transform Method
- Lab 6: Instantiating and Applying Methods to Objects

Unit 7: Reusing Code

- Reusing Code
- Functions Overview
- Walkthrough 7-1: Creating and Using a Simple User-Defined Function
- Defining Variables Local to Functions
- Walkthrough 7-2: Using the var Statement
- Identifying When to Use Functions
- Walkthrough 7-3: Converting Repeated Blocks of Code to a User-Defined Function
- Using Dynamic Evaluation
- Walkthrough 7-4: Using Dynamic Evaluation
- Referencing an External ActionScript File
- Walkthrough 7-5: Including External ActionScript Files in Your Code
- Lab 7: Using Functions with Objects

Unit 8: Creating Dynamic Content Using Text Files

- Understanding Dynamic Content
- Where Does the Data Come From?
- Walkthrough 8-1: Formatting a Text File for Use by Macromedia Flash
- Getting Data into Macromedia Flash
- Walkthrough 8-2: Using Data from a Text File in Macromedia Flash
- Walkthrough 8-3: Using Data from a Text File in Different SWFs
- Waiting Until the Data Has Loaded
- Walkthrough 8-4: Using the the onLoad Event
- Lab 8: Building Dynamic Page Content from a Text File

Unit 9: Using ActionScript with Components

- Components Overview
- Walkthrough 9-1: Adding a Scroll Bar to a Text Field
- Manipulating Component Properties and Methods
- Walkthrough 9-2: Using Scroll Bar Properties and Methods
- Walkthrough 9-3: Creating a Dynamic Drop Down List
- Using Components with Change Handlers
- Walkthrough 9-4: Creating a Component with a Change Handler Function
- What Else Can You Do with Components?

- [top](#)

Level 4: Advanced ActionScript for Applications - [top](#)

Unit 1: Reviewing MFAS

- Introduction to OO concepts (properties, methods and classes)
- Movie Clip as object
- Instantiating objects with the new constructor
- Properties and methods of the date object.
- Using the .text property for all text fields
- Using the autosize property (text fields)
- Walkthrough 1-1: Instantiating and using methods of the date object
- Creating custom objects
- Trace action
- Using objects for data structures
- Walkthrough 1-2: Create a custom object and reference properties
- Review of ActionScript best practices
- Relative instead of absolute referencing
- Functions
- Concatentation
- Review looping
- Review dynamic evaluation
- Intuitive naming conventions with proper suffixes
- Code all in one frame
- Walkthrough 1-3: Build a custom function tied to an object (method)
- Lab 1: Exploring the Course Application

Unit 2: Custom Objects in Flash MX

- Creating a constructor for a class
- Using an instance of constructor
- Walkthrough 2-1: building a constructor and using an instance of that class
- Passing complex data structures to the class
- Review of the with statement
- Walkthrough 2-2: Pass an object to the class
- For in Loop
- Scalability
- Building a dump function
- Walkthrough 2-3: Build a dump function attached to the main timeline
- Prototype property
- Differences a class and an instance
- Walkthrough 2-4: Build a dump function attached to the Product class

- Adding a method to an existing versus custom class
- Inheritance of the Object Object
- Walkthrough 2-5: Build a dump function attached to the object object (inherited to all objects). Create an empty movie clip
- Lab 2: Creating and using a class

Unit 3: Arrays

- The advantages of Arrays
- Creating and Referencing Arrays in Flash MX
- Walkthrough 3-1 Creating an Array
- Using Arrays of Objects
- Flash UI Components
- Walkthrough 3-2: Creating an Array of objects to populate a component
- Instantiating a new instance of a class
- Using an array to store objects
- Walkthrough 3-3: Creating an Array of Objects
- Referencing Properties and methods of the Array object
- Unshift method
- Push method
- Looping structures
- AddItem() method of components

Unit 4: Building Custom Objects

- Building custom methods for an instance
- Building custom properties for a class
- Calling versus referencing a function
- Walkthrough 4-1: Building a custom method for an object instance
- Building custom methods for all instances of a class
- Building custom properties for all instances of a class
- The prototype property
- Walkthrough 4-2: Using the prototype property
- Inheritance
- Polymorphism
- Walkthrough 4-3: Using Inheritance
- Customizing an existing method on an object.
- Lab 4: Using Custom objects to manipulate user data

Unit 5: Using Flash Remoting to Retrieve Dynamic Data

- Introducing Flash Remoting
- Files required for remoting
- NetServices.as
- NetDebug.as
- Methods of NetServices
- setDefaultGatewayURL
- createGatewayConnection()
- Creating a Connection object
- connection.getService()
- Invoking methods on the Service object
- Using the NetConnect Debugger
- Walkthrough 5-1: Invoking a server side method using Flash Remoting.
- Adding onResult and onStatus to movie clip objects
- Handling responses from remote service methods

- Function _result
- Function _status
- onResult event
- onStatus event
- Walkthrough 5-2: Handling Flash Remoting responses and errors
- Manipulating data in the Flash player
- TBA depending on differences between Java, .NET and CFC services
- How different server technologies send data to Flash
- Looping
- Walkthrough 5-3: Using the array and or/record set object with dynamic data
- Sending data from Flash to a server technology.
- Walkthrough 5-4: Passing parameters from Flash to a server side technology
- Using Flash DataGlue
- Walkthrough 5-5: Using datagluе
- Lab 5: Making the class schedule dynamic

Unit 6: Using the XML object

- Define XML
- Advantages of XML
- Tags
- Flash XML limitations
- Walkthrough 6-1: Creating an XML file
- Instantiating the XML object
- Loading XML
- OnLoad
- ignoreWhite
- Walkthrough 6-2: Loading an XML file
- Accessing XML attributes
- Referencing XML nodes
- Looping through Data
- Placing XML in an Array object
- ChildNodes
- Walkthrough 6-3: Looping over XML to create an Array of objects
- Lab 6: Creating dynamic content with XML

Unit 7: Persisting Data on the client

- Introducing Shared Objects
- Local disk space considerations
- Creating a new shared object
- Using the flush() method
- Walkthrough 7-1: Creating and writing to a shared object
- Accessing data from a shared object
- Storing complex data structures in a shared object
- Walkthrough 7-2: Accessing Data from a shared object
- Lab 7: Persisting Data on the Client side

Unit 8: Using and Extending Components in Flash MX

- Data Grid
- Calendar
- Charting components
- Compare and Contrast
- Walkthrough 8-1: Using the charting components

- Building custom methods for components
- Register Class
- #InitClip and #endinitClip
- Walkthrough 8-2: Building your own “component” using register class
- Using addProperty
- Inheritance in classes
- Walkthrough 8-3: Adding a property that does something
- Overriding built in methods
- Extending built in methods
- Walkthrough 8-4: Adding a method to the Movie Clip object

Unit 9: Working with MovieClips

- Building Components
- Building Custom UI's

Developing Rich Internet Applications with Flash MX and ColdFusion MX [-top](#)

Course Outline

Unit 1: Course Overview

- About the course
- Course Methodology
- Internet Applications: The Big Picture
- Next generation Internet applications

Unit 2: Introducing the Macromedia Flash MX Interface

- Introducing Macromedia Flash MX
- Flash 6 Player
- Flash MX Interface Elements
- Creating a Flash Document
- Publishing Flash Documents
- Organizing Applications in Layers

Unit 3: Using Macromedia Flash MX ActionScript

- Basic data types
- Creating Functions
- Including ActionScript Files
- Using ActionScript Objects
- Using Arrays
- Debugging Complex Data Constructs
- Working with Visual Objects
- Responding to Events
- Creating Event Handlers in ActionScript

Unit 4: Manipulating Flash UI Components

- PushButton Component
- CheckBox Component
- RadioButton Component
- MessageBox Component
- ComboBox Component
- ListBox Component
- Linking a ComboBox with a ListBox

- Creating a Master-Detail View
- ScrollBar Component
- Changing the Look and Feel of Components

Unit 5: Creating Web Accessible Components in ColdFusion MX

- Creating ColdFusion Components
- Catching Exceptions in Component Methods
- Getting Information About CFCs
- Testing CFC Methods from ColdFusion Pages
- Making CFCs Web Accessible
- Accessing Remote CFC Methods
- Comparing Types of Remote Method Access

Unit 6: Retrieving Dynamic Data with Flash Remoting MX

- Installation
- Using Flash Remoting
- Invoking methods of the NetServices object
- Creating a Service
- Invoking CFC Methods on The Service Object
- Using the NetConnection Debugger
- Handling Responses From Remote Service Methods on the Main Timeline
- Populating Components with RecordSet Data Using DataGlue
- Handling Responses From Remote Service Methods in a Custom Object
- Building a General Responder Class

Unit 7: Creating Dynamic Data Tables with the DataGrid Component

- Introducing the DataGrid Component
- Installing the DataGrid Component
- Populating the DataGrid
- Manipulating the DataGrid Columns
- Manipulating the DataGrid Data
- Handling DataGrid Events
- Changing the DataGrid Appearance

Unit 8: Persisting Data on the Client and Server

- Persisting Data from Flash MX Movies
- Introducing Shared Objects
- Characteristics
- Methods
- Creating Shared Objects
- Using the flush() Method
- Local Disk Space Considerations
- Accessing Data from a Shared Object
- Passing Data from Flash to a CFC
- Data translation from Macromedia Flash to ColdFusion

Unit 9: Working with MovieClips

- Understanding MovieClips
- MovieClip Properties
- Manipulating MovieClip Depth
- MovieClip Methods
- Creating MovieClips Using ActionScript
- Loading JPGs or SWFs into a MovieClip

- **Creating MovieClips from Visual Stage Objects**
- **Using MovieClip Events and Methods to Interact with the User**
- **Creating Components Dynamically**
- **Creating Reusable MovieClips**
- **MovieClips, Timelines, Stages**
- **Working in a MovieClip Timeline**

[-top](#)