## Hands-On

# **ASP Programming**



## **Course Description**

This hands on ASP programming course provides the knowledge necessary to design and develop dynamic web pages using Active Server Pages (ASP). Topics include VBScript syntax, ASP intrinsic objects, IIS components, file I/O and database interaction.

Students will learn how to connect to data from any ODBC-compliant database, and create database-driven HTML forms and reports. Students will also learn how to use all the standard ASP software components to implement dynamic web pages. The ASP scripting environment is used to create server-side scripts using VBScript and to provide dynamic web site content.

## **Students Will Learn**

- IIS and ASP Architecture
- VBScript
- Constructing Forms
- Server Objects
- ASP Component
- Database Access using ADO
- Error Handling

# **Prerequisites**

Basic computer skills and knowledge of HTML fundamentals.

#### **Course Outline**

Overview Of Active Server Pages (ASP)

- Static vs. Dynamic Web Sites
- Dynamic Content from Databases
- Developing Dynamic Internet Applications
- Client-Side Scripting vs. Server-Side Scripting

## Introduction to Internet Information Server (IIS)

- IIS Overview
- IIS Microsoft Management Console
- WWW Sites within IIS
- · Adding a Website to the IIS
- Website Properties
- Exploring a Site
- Setting Up ASP Applications

#### Processing Forms

- Setting the Action Attribute of the FORM tag
- Setting the Method Attribute of the FORM tag
- Processing Data with the Form and QueryString Collections
- Checking for Submission

#### Introduction to VBScript

- Fundamental Syntax
- Documenting Code with Comments
- Declaring Variables
- The Option Explicit Statement
- · Storing and Manipulating Data in VBScript
- Defining Arrays
- Creating Custom Procedures
- Formatting Data
- Working with Date and Time Information
- Differences Between Client-Side vs. Server-Side VBScript
- Use of Include Files

## Implementing Control Constructs

- Using Conditional and Looping Constructs
- The IF THEN Statement
- SELECT CASE Construct
- The DO Loop
- The FOR EACH Loop
- The FOR NEXT Loop
- The WHILE Loop

## ASP Object Model

- · Request Object
- Response Object
- Server Object
- Session Object
- Application Object
- Global .asa File
- Maintaining State with Cookies

## Scripting Objects

- Additional VBScript Components
- Relationship of the File System Objects
- FileSystemObject Object
- Drives Collection
- Drive Object
- Folders Collection
- Folder Object
- Files Collection

- File Object
- TextStream Object
- Dictionary Object

#### Database Access with the ADO Object

- Data Access Architecture
- Connecting to ODBC Databases
- DSN vs. DSNLess Connections
- OLE DB Connections
- The ADO Object Model
- Data Access Objects
- Obtaining Multiple Recordsets
- Recordset Paging
- Creating SQL Queries
- Displaying Data on the Web Page
- Reading, Updating, Adding, and Deleting Records
- · Adding Full Text Search Capability

#### ASP Components

- Browser Capabilities Component
- Ad Rotator Component
- Counters Component
- Content Linking Component
- Content Rotator Component

## Error Handling and the Script Debugger

- The Err Object
- Error Handling with the On Error Statement
- Using the IIS Script Debugger
- ASPError Object

#### Tuning Up your ASP

- Speeding up Database Queries
- OLE DB Connections vs. DSN Connections vs. DSNless Connections
- Maintaining your Recordset in Memory
- Efficient Coding Techniques

## Sending E-mail with CDO

- SMTP Overview
- Message Object
- Configuring and E-mail Message

#### ASP.NET Overview

- · ASP.NET Defined
- Benefits of ASP.NET
- Compiled Languages vs. Scripting Languages
- ASP.NET Examples
- ASP.NET vs. ASP Today

## Using XML to Transfer Data

- Importance of XML
- XML Defined
- Creating an XML Document
- How XML is Used in ASP Applications
- The XML Document Object Model
- Using AJAX with ASP

• XMLHttpRequest Object

# **Equipment Requirements**

(This apply's to our hands-on courses only)

BTS always provides equipment to have a very successful Hands-On course. BTS also encourages all attendees to bring their own equipment to the course. This will provide attendees the opportunity to incorporate their own gear into the labs and gain valuable training using their specific equipment.

# **Course Length**

5 Days