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## TECNOLOGIA MICROSOFT

### *Track Microsoft.Net*

Incluye dos cursos:

Curso 1: 2541: Core Data Access with Microsoft Visual Studio 2005

Curso 2: 2543: Core Web Application Technologies with Microsoft Visual Studio 2005

**DURACION: 48 Hrs.**

## 2541: Core Data Access with Microsoft Visual Studio 2005

### ACERCA DE ESTE CURSO

Fundamentos de tecnologías de aplicaciones web y aplicaciones distribuidas con Microsoft Visual Studio 2005

### OBJETIVOS:

- Permitir el conocimiento del uso de Visual Studio 2005.
- Comprensión de la estructura del .NET Framework 2.0.
- Entendimiento sobre la programación y publicación de sitios web.
- Comprensión del acceso, manejo y despliegue de datos.
- Construcción de un cliente y un servidor remoto.
- Construcción y consumo de XML WebServices simples.
- Creación y consumo de componentes de servicios.

### DIRIGIDO A:

Dirigido a desarrolladores con conocimientos básicos en herramientas de desarrollo de tecnología Microsoft, desarrolladores principiantes, maestros, alumnos y pasantes de carreras afines con la programación web.

### REQUISITOS DE LOS ASISTENTES

- Contar con fundamentos básicos de HTML
- Conocimientos básicos de JScript
- Fundamentos de publicación web
- Conocer el sistema operativo Windows XP
- Conocimiento de estructura de datos y SQL Server 7 ó posterior (recomendable)

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## TEMARIO

### Unit 1: Connecting to Databases and Reading Data

- a) Overview
- b) What Is ADO.NET?
- c) The Process for Connecting to a Database and Reading Data
- d) What Is Connection Pooling?
- e) Lab Scenario
- f) Lab Tasks and Objectives
- g) Lab: Connecting to Databases and Reading Data
- h) Lab Discussion

### Unit 2: Querying and Updating Databases by Using Commands

- a) Overview
- b) ADO.NET Commands
- c) The Process for Passing Parameters into Commands
- d) Lab Scenario
- e) Lab Tasks and Objectives
- f) Lab: Querying and Updating Databases by Using Commands
- g) Lab Discussion

### Unit 3: Performing Transactional Operations

- a) Overview
- b) What Is a Transaction?
- c) The Process for Managing Local Transactions
- d) The Process for Managing Distributed Transactions
- e) Isolation Levels
- f) Lab Scenario
- g) Lab Tasks and Objectives
- h) Lab: Performing Transactional Operations
- i) Lab Discussion

### Unit 4: Performing Disconnected Operations Programmatically

- a) Overview
- b) What Is the ADO.NET Disconnected Model?
- c) The Process for Loading and Saving Data in a DataSet
- d) What Are DataViews?
- e) Lab Scenario
- f) Lab Tasks and Objectives
- g) Lab: Performing Disconnected Operations Programmatically
- h) Lab Discussion

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Unit 5: Performing Disconnected Operations by Using Visual Studio 2005 Wizards

- a) Overview
- b) Comparing Untyped Datasets with Typed Datasets
- c) What Are Table Adapters?
- d) Demonstration: Creating a Typed Dataset by Using Visual Studio 2005 Wizards
- e) Lab Scenario
- f) Lab Tasks and Objectives
- g) Lab: Performing Disconnected Operations by Using Visual Studio 2005 Wizards
- h) Wizards
- i) Lab Discussion

Unit 6: Performing XML Operations on Disconnected Data

- a) Overview
- b) XML Representation of Datasets
- c) What Are DiffGrams
- d) Lab Scenario
- e) Lab Tasks and Objectives
- f) Lab: Performing XML Operations on Disconnected Data
- g) Lab Discussion

Unit 7: Reading and Writing XML Data

- a) Overview
- b) The Process for Serially Reading XML Data
- c) The Process for Serially Writing XML Data
- d) Lab Scenario
- e) Lab Tasks and Objectives
- f) Lab: Reading and Writing XML Data
- g) Lab Discussion

Unit 8: Processing XML Data by Using DOM

- a) Overview
- b) What Is DOM?
- c) What Are DOM Trees?
- d) Types of XML Nodes in a DOM Tree
- e) Lab Scenario
- f) Lab Tasks and Objectives
- g) Lab: Processing XML Data by Using DOM
- h) Lab Discussion
- i) Workshop Evaluation

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## ***2543: Core Web Application Technologies with Microsoft Visual Studio 2005***

### **Temario**

#### Unit 1: Creating a Web Application

- a) Overview
- b) Visual Studio Web Site Types
- c) Default Event Handling in Web Applications
- d) Web Configuration Files
- e) Lab Scenario
- f) Lab Tasks and Objectives
- g) Lab: Creating a Web Application
- h) Lab Discussion

#### Unit 2: Programming a Web Application

- a) Overview
- b) Event Handling in Web Applications
- c) Browser Capability Detection
- d) Page Header Retrieval
- e) Page-Level and Application-Level Error Handling
- f) Lab Scenario
- g) Lab Tasks and Objectives
- h) Lab: Programming a Web Application
- i) Lab Discussion

#### Unit 3: Adding and Configuring Server Controls

- a) Overview
- b) HTML Controls and Web Server Controls
- c) Types of Web Server Controls
- d) Working with Web Server Controls
- e) The ASP.NET 2.0 Page Postback Model
- f) Lab Scenario
- g) Lab Tasks and Objectives
- h) Lab: Adding and Configuring Server Controls
- i) Lab Discussion

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Unit 4: Creating a Common Layout by Using Master Pages

- a) Overview
- b) What Are Master Pages?
- c) What Are Content Pages?
- d) Nested Master Pages
- e) Lab Scenario
- f) Lab Tasks and Objectives
- g) Lab: Creating a Common Layout by Using Master Pages
- h) Lab Discussion

Unit 5: Managing State for a Web Application

- a) Overview
- b) ViewState Properties and ControlState Data
- c) Application and Session Objects
- d) Strategies for Managing Session State Data
- e) The Cache Object
- f) Lab Scenario
- g) Lab Tasks and Objectives
- h) Lab: Managing State for a Web Application
- i) Lab Discussion

Unit 6: Accessing and Displaying Data

- a) Overview
- b) Database Connections and the Web.Config File
- c) Relational Data and Data Source Controls
- d) XML Data and Data Source Controls
- e) Object Data and Data Source Controls
- f) Lab Scenario
- g) Lab Tasks and Objectives
- h) Lab: Accessing and Displaying Data
- i) Lab Discussion

Unit 7: Controlling Access to a Web Application

- a) Overview
- b) Authentication for Web Applications
- c) Authorization for Web Applications
- d) Site Membership Systems Using the Membership Class
- e) Web Site Security Administration Using the Roles Class
- f) Lab Scenario
- g) Lab Tasks and Objectives
- h) Lab: Controlling Access to a Web Application
- i) Lab Discussion

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Unit 8: Deploying a Web Application

- a) Overview
- b) The Copy Web Site Utility
- c) The Publish Web Site Utility
- d) Windows Installer Setup Packages
- e) Lab Scenario
- f) Lab Tasks and Objectives
- g) Lab: Deploying a Web Application
- h) Lab Discussion

Unit 9: Making Web Applications Available to Mobile Devices

- a) Overview
- b) Device Emulators for Mobile Web Forms
- c) Mobile Device Detection and Redirection
- d) Mobile Web Forms
- e) Device-Specific Features in Mobile Web Forms
- f) Lab Scenario
- g) Lab Tasks and Objectives
- h) Lab: Making Web Applications Available to Mobile Devices
- i) Lab Discussion
- j) Workshop Evaluation

**NOTA:** Curso es totalmente en español