

# Windows® Phone 7 Advanced Development Using Visual Studio® 2010



**Instructor: Bret Stateham** is the owner of a technical training and consultant company, Net Connex. He has been both working and teaching on Microsoft platforms since the DOS day, and has over twenty years experience in the IT field, and over a decade of experience as a trainer. Bret has contributed to multiple books and is a frequent speaker at regional events.

**Total Learning Time:** 8 hours

Media run time is 8+ hours. This course can also be used as quick reference material, with the ability to access just the information you need in a matter of minutes.

**Course Description:** This Windows Phone 7 course takes a deeper look at the mobile OS from Microsoft. Starting with the use of MVVM and why you need to use MVVM. The course then moves in to unit testing so you as the developer can test your code right away. The exchange and storage of data is covered next including how to use LINQ to SQL for the phone OS. As part of any data exchange there needs to be a network, how to use WCF or OData services for this exchange is covered. Next the course moves on to tiles and notifications then search integration. Next graphics for applications and games from Silverlight and XNA are covered for application development. The final subject is on background operations and how it effects an application.

## Course Outline:

### Introduction to MVVM

- Introduction to MVVM
- Creating a Model
- Creating a View Mode
- Creating a View
- Creating Commands

### MVVM Frameworks

- A Quick Review of MVVM
- Simplifying ViewModel Creation
- Simplifying Command Creation
- Simplifying ViewModel Assignment Using Third Party Frameworks

### Unit Testing Windows Phone Applications

- Windows Phone Unit Testing Frameworks
- Creating a Unit Test Project
- Creating and Running Unit Tests
- Additional Test Scenarios

### Local Database

- Introduction to Local Databases
- Creating the Data Context
- Creating a Database
- Querying and Updating Data

### Networking

- Introduction to Networking
- Detecting Network Status
- Connecting to WCF Web Services
- Connecting OData Services
- Connecting with Sockets

### Tiles and Notifications

- Introduction to Tiles
- Working with Tiles in Code
- Push Notifications

### Search Integration

- Search Extensibility Overview
- Extending Search with App Connect
- Extending Search with App Instant Answer

### Windows Phone XNA Games

- Introduction to XNA
- Working with Assets
- Accepting Input
- Game Play

### Silverlight and XNA Integration

- Silverlight and XNA Integration
- Hosting XNA in Silverlight
- Rendering Silverlight in XNA

### Scheduled Actions

- Introduction to Background Operations
- Scheduled Notifications
- Scheduled Tasks

Number of Modules	Media Run Time	Total Learning Time	Online Courseware	Hands-on Labs	Sample Code	Pre/Post Exams	Supports Microsoft Exam Number
8 Modules	9+ hours	9+ hours	N/A	N/A	Yes	Yes	N/A