INTRODUCTION
In this course, students will learn essential programming skills and techniques that are required to develop Windows Store apps. This includes a combination of both design and development skills, as well as ensuring that students are comfortable using and making the most of the Microsoft Visual Studio and Expression Blend tools.

AUDIENCE
This course is intended for professional developers who have one or more years of experience creating applications and who are comfortable programming in HTML5, JavaScript, and CSS3

AT COURSE COMPLETION
After completing this course, students will be able to:
- Describe the Windows 8 platform and features, and explore the basics of a Windows app interface.
- Create the User Interface layout and structure.
- Apply the MVVM pattern to application design.
- Implement the AppBar and layout controls.
- Use templates to create the UI.
- Use data binding to present data in the UI.
- Handle files and streams.
- Design and implement Process Lifetime Management (PLM).
- Handle navigation scenarios in a Windows Store app.
- Implement Semantic Zoom.
- Design and implement contracts such as Search, Share and Settings.
- Implement tiles and toast notifications in a Windows Store app.
- Respond to mouse, keyboard and touch events, including gestures.
- Deploy a Windows Store app to the Windows Store or an enterprise store.

PREREQUISITES
Before attending this course, students must have:
- 1 or more years of experience creating applications
- 1 to 3 months experience creating Windows client applications
- 1 to 3 months experience using Visual Studio 2010 or 2012
- Attended Course 20480B: Programming in HTML5 with JavaScript and CSS3, or equivalent knowledge

COURSE OUTLINE
Module 1: Overview of the Windows 8.1 Platform and Windows Store Apps
- Introduction to the Windows 8.1 Platform
- Windows 8 UI Principles
- WinRT and Language Projections

Module 2: Single-Page Apps and the MVVM Design Pattern
- Single-Page Applications
- The MVVM Design Pattern

Module 3: Using WinJS
- The WinJS Library
- WinJS APIs

Module 4: Implementing Layout Using Windows 8.1 Controls
- Windows 8.1 Layout Controls
- Implementing WinJS Controls and Templates
- The AppBar Control
- Windowing Modes

Module 5: Presenting Data
- Working with Data Presentation Controls
- The ListView Control

Module 6: Implementing Tiles and User Notifications
- Implementing Tiles, Live Tiles, Secondary Tiles, and Badge Notifications
- Implementing Toast Notifications

Module 7: Handling Files in Windows Store Apps
- Handling Files and Streams in Windows Store Apps
- Working with File User Interface Components

Module 8: Windows Store App Process Lifetime Management
- Process Lifetime Management
- Windows Store App Activation and Background Tasks
- Implementing a State Management Strategy

Module 9: Designing and Implementing Navigation in a Windows Store App
- Handling Navigation in Windows Store Apps
- Semantic Zoom
Module 10: Implementing Windows 8.1 Contracts
- Designing for Charms and Contracts
- The Search Contract
- The Share Contract
- Managing App Settings and Preferences

Module 11: Designing and Implementing a Data Access Strategy
- Evaluating Data Access Strategies
- Working with Remote Data

Module 12: Responding to Mouse and Touch
- Working with Mouse Events
- Working with Gesture Events

Module 13: Planning for Windows Store App Deployment
- The Windows Store App Manifest
- Windows Store App Certification