



FALL 2011



## OUR PARTNERSHIP

Monroe Community College (MCC) has been designated a Microsoft IT Academy by Microsoft Corporation. This program is designed to allow accredited academic institutions to deliver to participants a premium education on cutting-edge Microsoft® technologies. The training delivered by MCC through this program prepares individuals for rigorous Microsoft® certification exams and for career opportunities as Network Administrators, Technical Support Specialists, and Software/Hardware Developers and Design Engineers. Microsoft® provides tools to MCC to facilitate the delivery of their courseware. These tools prepare students for Microsoft product certification. What this means to you is:

1. Discounted pricing on Microsoft Official Curriculum (included in your tuition).
2. Microsoft certified instructors and certified facilities.
3. Academic pace to delivering the training, classes will generally meet no more than eight hours per week. Training is delivered over an extended period of time, in the evening only.
4. Access to the Microsoft IT Academy Student Online Campus, an education portal that supports participants taking Microsoft training classes through MCC.

The Microsoft IT Academy is meant as an alternative to Microsoft's more widely known Microsoft Certified Partners for Learning Solutions (CPLS), formerly Microsoft Certified Technical Education Centers. Most CPLS's tend to deliver their training in either three or five-day formats. MCC's training will be held two evenings per week, with breaks throughout the life of the program. Participants can expect to receive structured classroom lectures and labs along with assigned reading from Microsoft Official Curriculum (MOC) textbooks to progress towards required Microsoft exams which must be passed for successful completion.

## GENERAL INFORMATION ON MICROSOFT CERTIFIED TECHNOLOGIES SPECIALIST (MCTS)



The Technology Specialist certifications enable professionals to target specific technologies and to distinguish themselves by demonstrating in-depth knowledge and expertise in their specialized technologies. Microsoft Technology Specialists are consistently capable of implementing, building, troubleshooting, and debugging a particular Microsoft technology.

There are currently 53 Microsoft Certified Technology Specialist (MCTS) certifications. More will become available as new technologies are introduced. Our program will only focus on .NET Framework 4.0 ASP.NET Applications. Developers holding this certification have demonstrated breadth and depth of skills and knowledge of Web application technology and data access in Web applications.

Technology Specialists typically pursue careers as Web developers, Windows developers, or enterprise software developers. They may also be database developers or systems administrators who do not work daily with the .NET Framework 3.50 but who want to show their technology experience.

## GENERAL INFORMATION ON MICROSOFT CERTIFIED PROFESSIONAL DEVELOPER (MCPD)



The Microsoft Certified Professional Developer (MCPD Web Developer) certification demonstrates that one has the comprehensive skills that are required to build interactive, data-driven Web applications that use ASP.NET 3.50 for both intranet and Internet uses. The MCPD serves as the premiere Microsoft certification for enterprise applications developers. The MCPD credential highlights your job role, featuring your specific area of expertise. Now you can distinguish yourself as an expert in Web application development.

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## **WEB APPLICATION DEVELOPMENT – MCTS TO MCPD**

Developers holding the Microsoft Certified Technology Specialist: .NET Framework 4.0 Web Applications (MCTS: .NET Framework 4.0 Web Applications) certification have demonstrated breadth and depth of skills and knowledge of Web application technology and data access in Web applications. Technology Specialists typically pursue careers as Web developers, Windows developers, or enterprise software developers. They may also be database developers or systems administrators who do not work daily with the .NET Framework 4.0 but who want to show their technology experience. MCPD Web Developer candidates must first complete the requirements for the MCTS: .NET Framework 4.0 Web Applications certification (three exams). After earning this certification, candidates may earn their MCPD: Web Developer by passing one additional required exam. MCC offers the following Modules for MCTS exam preparation.

**MCTS REQUIRED EXAM 1: 70-515 TS: WEB APPLICATION DEVELOPMENT WITH MICROSOFT .NET 4.0. MCC OFFERS THE FOLLOWING CLASS FOR THIS EXAM PREP.**

### **Module 1: 10267A – Introduction to Web Development with Microsoft Visual Studio 2010**

This five-week instructor-led course provides knowledge and skills on developing Web applications by using Microsoft Visual Studio 2010.

**October 19, 25 & 27 / November 1, 3, 8, 10, 15, 17 & 22**

**6:00 – 9:30 p.m.**

**Topics to be covered include:**

- Overview of Web Application Design
- Designing a Web Application
- Developing MVC Models
- Developing MVC Controllers
- Developing MVC Views
- Designing for Discoverability
- Writing Server-Side Code for Web Forms
- Optimizing Data Management for Web Forms
- Ensuring Quality by Debugging, Unit Testing, and Refactoring
- Securing a Web Application
- Applying Master Pages and CSS
- Developing Client Side Scripts and Services
- Implementing Advanced AJAX in a Web Application
- Deploying a Web Application
- Developing a Web Application by Using Silverlight

**ALTHOUGH NOT REQUIRED, IT IS RECOMMENDED THAT PARTICIPANTS USE THE BREAK BETWEEN MODULES 1 & 2 TO TAKE THE FIRST REQUIRED CORE EXAM # EXAM 1: 70-515 TS: WEB APPLICATION DEVELOPMENT WITH MICROSOFT .NET 4.0**

**MCTS REQUIRED EXAM 2 - 70-513: TS: WINDOWS COMMUNICATION FOUNDATION DEVELOPMENT WITH MICROSOFT .NET FRAMEWORK 4. MCC OFFERS THE FOLLOWING CLASSES FOR THIS EXAM PREP.**

### **Module 2: 10263A – Developing Windows Communication Foundation Solutions with Microsoft® Visual Studio 2010**

This four-week instructor-led course provides participants with the knowledge and skills to develop distributed applications using WCF 4 and Microsoft Visual Studio 2010.

**November 29 / December 1, 6, 8, 13, 15, 20 & 22**

**6:00 – 9:30 p.m.**

**Topics to be covered include:**

- Service-Oriented Architecture
- Getting Started with Microsoft Windows Communication Foundation Development
- Hosting Microsoft Windows Communication Foundation Services
- Defining and Implementing Microsoft Windows Communication Foundation Contracts
- Endpoints and Behaviors
- Testing and Troubleshooting Microsoft Windows Communication Foundation Services
- Security
- Introduction to Advanced Microsoft Windows Communication Foundation Topics

**ALTHOUGH NOT REQUIRED, IT IS RECOMMENDED THAT PARTICIPANTS USE THE BREAK BETWEEN MODULES 2 & 3 TO TAKE THE SECOND REQUIRED CORE EXAM # 70-513: TS: WINDOWS COMMUNICATION FOUNDATION DEVELOPMENT WITH MICROSOFT .NET FRAMEWORK 4.**

**MCTS REQUIRED EXAM 3 - 70-516: TS: ACCESSING DATA WITH MICROSOFT .NET FRAMEWORK 4. MCC OFFERS THE FOLLOWING CLASSES FOR THIS EXAM PREP.**

**Module 3: 10265A – Developing Data Access Solutions with Microsoft Visual Studio 2010**

In this course, experienced developers who know the basics of data access (CRUD) in Windows client and Web application environments will learn to optimize their designs and develop better performing data access code by using the ADO.NET Entity Framework, LINQ, WCF Data Services, the Sync Framework, and ADO.NET.

**January 10, 12, 17, 19, 24, 26 & 31 / February 2, 7, 9, 14 & 16**

**Topics to be covered include:**

- Architecture and Data Access Technologies
- Building Entity Data Models
- Querying Entity Data
- Creating, Updating, and Deleting Entity Data
- Handling Multi-User Scenarios by Using Object Services
- Building Optimized Solutions by Using Object Services
- Customizing Entities and Building Custom Entity Classes
- Using POCO Classes with the Entity Framework
- Building an N-Tier Solution by Using the Entity Framework
- Handling Updates in an N-Tier Solution by Using the Entity Framework
- Building Occasionally Connected Solutions
- Querying Data by Using WCF Data Services
- Updating Data by Using WCF Data Services
- Using ADO.NET
- Using LINQ to SQL

**SUCCESSFUL COMPLETION OF EXAMS 70-513, 70-515 & 70-516, WILL EARN YOU THE MICROSOFT CERTIFIED TECHNOLOGY SPECIALIST (MCTS) CREDENTIAL**

**TO CONTINUE ON WITH MCPD PREPARATION MICROSOFT REQUIRES THAT YOU PASS ONE ADDITIONAL EXAM KNOWN AS: 70-519 PRO: DESIGNING AND DEVELOPING WEB APPLICATIONS USING THE MICROSOFT .NET FRAMEWORK 4. MCC OFFERS THE FOLLOWING CLASSES IN PREPARATION FOR THIS EXAM:**

**Module 4 – Designing and Developing Web Applications Using Microsoft .NET Framework 4**

At this time there is no official Microsoft curriculum that corresponds to this class. It is anticipated that the curriculum will consist of the material listed below:

**Topics to be covered include:**

- Designing and Implementing Controls
- Designing the Presentation and Layout of an Application
- Accessing Data and Services
- Establishing ASP.NET Solution Structure
- Leveraging and Extending ASP.NET Architecture
- Applying security principles
- Exam 70—519 Review

**PREREQUISITES:**

This program is for professionals who develop and maintain department-level applications, components, web or desktop clients, or back-end data services.

To enter this program an individual should possess:

- A background in Basics of Programming, and Object-Oriented Analysis & Design or equivalent experience.

MCTS/MCPD certifications are **not** appropriate for those new to information technology.

**WHY THESE CERTIFICATIONS, AND THESE PROGRAMS, MIGHT BE RIGHT FOR YOU...**

Most important is our approach to learning these technologies. We will provide high quality, certified instructor lead training, over an extended period of time, with plenty of “hands-on” opportunity. We feel that this combination is a great alternative for people seeking to learn this information. This is not an “intensive”, or “crash” course.

By offering this program we feel we have created an excellent way to enhance your current position, or provide you with the skills necessary to seek a new one. Despite current employment conditions, the United States Department of Labor still projects that over the next ten years, three out of the ten fastest growing occupations will be in information technology. Feel free to review the report at: <http://www.acinet.org/acinet/oview1.asp?soccode=&stfips=&from=National&Level=Overall&x=37&y=7>

**COST:**

The fee for the entire MCTS (first three modules) program:	\$3,500
The fee for the entire MCPD (all four modules) program:	\$4,500

The full program fees for MCTS and/or MCPD include books and materials and discounted pricing on the required exams. The exam fees themselves are not included in the program fee.

**LOCATION:**

MCC has entered into an agreement with New Horizons Computer Learning Centers and all classes will be held at their facility located at 50 Methodist Hill Drive, Suite 50 in Rochester.

**APPLICATION PROCEDURE**

Contact Charles Caples @ MCC:

585-262-1429

ccaples@monroecc.edu

**CANCELLATION / REFUND POLICY**

You may cancel your registration 10 business days prior to the start of the program. The request must be received in writing. Cancellations received later than this date are subject to forfeiting the application deposit. You will receive a full refund if you

cancel within the allotted time. Refunds will be made within 60 days of cancellation. If a student attends a portion of the program, and does not complete, the student will be liable for:

1. The registration deposit
2. The cost of any textbooks or supplies accepted
3. Tuition liability as of the day the student notifies MCC of his/her desire to cancel from the class
4. No refunds are available after program completion

The effective termination for refund purposes will be the earliest of either the last date of attendance or the date of receipt of written notice from the student. The tuition liability will be a pro rata refund for the remaining class hours for students who cancel from class according to the following table:

<u>If termination occurs</u>	<u>MCC may keep</u>
0-3% of the program	00% (only the application deposit)
4-15% of the program	20%
16-30% of the program	40%
31-45% of the program	60%
46-60% of the program	80%
After 60% of the program	100%

## **CURRICULUM AT A GLANCE**

Course Name	Exam	Contact Hours
10267A – Introduction to Web Development with Microsoft Visual Studio 2010	Exam 70-513	35
10263A – Developing Windows Comm. Foundation Solutions With MS Visual Studio 2010	Exam 70-515	28
10265A – Developing Data Access Solutions with Microsoft Visual Studio 2010	Exam 70-516	42
Designing and Developing Web Applications Using Microsoft .NET Framework 4	Exam 70-519	35
<b>TOTAL HOURS</b>		<b>140</b>

For questions please call:  
**Chuck Caples (585) 262-1429 or [ccaples@monroecc.edu](mailto:ccaples@monroecc.edu)**