

.NET Certified Technology Specialist (MCTS) Diploma

.NET CERTIFIED TECHNOLOGY SPECIALIST (MCTS) CERTIFICATE

➤ **22-Week Program Includes:**

- ❖ .NET Framework 2.0
- ❖ Designing .NET Solutions
- ❖ VB.NET
- ❖ ADO.NET & SQLServer
- ❖ Database Design
- ❖ ASP.NET
- ❖ Web Application Development
- ❖ XML.NET
- ❖ Web Services
- ❖ Enterprise Development
- ❖ SQL Language
- ❖ MCTS Certification

OR: **Select Individual Courses**



Become a .NET Certified MCTS

In
Web Applications
Windows Applications
Distributed Applications

Be the First in Line for a Job!

Microsoft's new .NET enables an unprecedented level of software integration through the use of XML Web Services and other components in their .NET architecture that is revolutionizing software development.

This course is designed to prepare you for the MCTS (Microsoft Certified Technology Specialist), distinguishing you as a qualified .NET professional. For businesses to truly harness the power of the Internet, Web sites must evolve. They must learn to interact with one another as well as with existing systems and applications. XML Web services represent the evolution of the Web site:

- .NET will deliver best of breed integration for businesses.
- Exposing XML Web services increases potential reach and exposure, creating new business opportunities.
- .NET promises substantial savings in development costs, as well as creating new revenue streams, through the use of XML Web services

Showcase Your Cutting-Edge Technical Skills

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 Certified Technology Specialists are consistently capable of implementing, building, troubleshooting, and debugging a particular Microsoft technology.

The Microsoft Certified Technology Specialist credential enables professionals to target specific technologies and distinguish themselves by demonstrating in-depth knowledge and expertise in their specialized technologies

Positions Upon Graduation:

.NET Specialist, .ASP.NET Developer, Programmer/Analyst, Database Web Developer, Web Designer, Enterprise Developer, Web Author, .NET Designer, VB.NET Programmer, e-Commerce Developer

Certification

"Before you even get to the interview process, you must have certain certifications under your belt," says Bill Ross, co-chair of the Canadian Information Processing Society – April 2002.

<p>Course Content for the NET Certified Technology Specialist (MCTS) Diploma</p> <p>This course is suitable for those who either possess a post secondary technical education or a couple years in software development. The main focus of this course is on the Microsoft .NET Framework and .NET Technologies. The emphasis is on preparing for Industry certification.</p>	<p>Willis IT Program</p> <p>22 Weeks</p>
<p>➤ DEV105: Intro To VB.NET 2005</p> <ul style="list-style-type: none"> ◆ Introduction to the Microsoft .NET Framework 2.0 ◆ Visual Studio 2005 Development Environment ◆ Visual Basic 2005 Fundamentals: Variables, Data Types, Operators, Conditions, Loops ◆ Introduction to Object-Oriented Programming: Abstraction, Encapsulation, Inheritance, Polymorphism, Classes, Interfaces ◆ Creating and Debugging Windows Forms Applications, Error Handling 	<p>2 Weeks</p>
<p>➤ DEV110: Principles of Software Development & Systems Network Architecture</p> <p>Operating Systems & Windows Architecture</p> <ul style="list-style-type: none"> ◆ Schedulers (Round-Robin, Pre-emptive, etc.) ◆ Processes & Threads ◆ Memory and Resource Management (Mutexes, Semaphores, etc.) ◆ Event-driven model, real-time model, Internet browser sandbox model. ◆ Windows Messaging System (Queues, processing, delegation, etc.) ◆ Application Architecture (EXE, DLL, ActiveX, etc.) <p>Object-Oriented Analysis & Design Patterns</p> <ul style="list-style-type: none"> ◆ Object-Oriented Principles (identification, encapsulation, polymorphism, inheritance, etc.) ◆ Singleton Pattern ◆ Iterator/Enumerator Pattern ◆ Composite Pattern ◆ Observer Pattern ◆ Flyweight Pattern <p>Networking and Internet Infrastructure</p> <ul style="list-style-type: none"> ◆ IP: Packets, Addresses ◆ Internet: Domains, URL, DNS services ◆ Tools: IpConfig, Netstat, Packet Sniffers ◆ Protocols: HTTP, HTTPS, FTP, XML 	<p>1 Week</p>

➤ **DEV270: .NET Framework 2.0 Application Development Foundation**

- ◆ .NET Framework System Types: Value Types, Reference Types
- ◆ Interfaces: IConvertible, ICloneable, IFormattable, IDisposable
- ◆ Collections and Generics: ArrayLists, Stacks, Queues, Dictionaries
- ◆ Creating, Configuring, and Installing Assemblies
- ◆ Monitoring and Debugging Applications: Event log, Debug, Trace
- ◆ Reading and Writing Files: File System, Streams, StringBuilder
- ◆ Globalized Applications
- ◆ Multithreaded Applications and Application Domains: Threads, Synchronous and Asynchronous Environment
- ◆ Interoperating Between COM Components and .NET Assemblies: Interop Services, Platform Invocation Services
- ◆ Graphics Design Interface (GDI+): Graphics, Brushes, Pens, Fonts, etc.
- ◆ Application Security : Code Access Security, Role-Based Security, Data Security, Encryption
- ◆ Service Applications and E-mail Messages

➤ **DEV271: Windows Application Development with Visual Studio 2005 and VB.NET**

- ◆ Creating and Configuring Windows Forms and Controls
- ◆ Creating Forms Menus: Main Menu, Context Menu
- ◆ Forms Inheritance
- ◆ Building MDI Applications: Parent Form, Child Form
- ◆ Building and Licensing User Controls
- ◆ Using Dialog Boxes: OpenFileDialog, SaveFileDialog, Print, PrintPreview
- ◆ Validating User Input in a Windows Forms Application
- ◆ Implementing User Assistance and Usability
- ◆ Adding Print and Report Functionality
- ◆ Multithreading and Asynchronous Programming, BackgroundWorker Component
- ◆ Deploying a Windows Forms Application: ClickOnce and other Deployment Methods

➤ **DEV103: Database Theory and SQL Language**

- ◆ Data Modeling Techniques, Entity - Relation Model
- ◆ Relational Database Analysis and Design
- ◆ DML: Select, Insert, Delete, Update, Where Clause, Conditions, Joins
- ◆ Sub-Queries, Functions, Group By Clause, Having Clause
- ◆ DDL: Creating Objects: Tables, Views, Stored Procedures, Users, etc.
- ◆ Altering Data Structures, Defining Constraints

➤ **DEV272: Data Access Development - ADO.NET**

3 weeks

Microsoft Official Curriculum Course #5160 #5161



MS Exam 70-536:
*Technology Specialist:
Microsoft .NET Framework 2.0
— Application Development Foundation*

3 Weeks

Microsoft Official Curriculum Course # 2546 #2547



MS Exam 70-526:
*Technology Specialist:
Microsoft .NET Framework 2.0
— Windows-Based Client Development*

2 Weeks

2 Weeks

& SQL Server 2005

- ◆ ADO.NET architecture, XML, Describing Data-centric Applications
- ◆ Connecting to SQL Server & Executing Database Operations, Performing Transactional Operations
- ◆ Disconnected Environment: Creating DataSets and DataViews
- ◆ Performing Disconnected Operations: Typed DataSets, Populating and Modifying Data
- ◆ Using XML Techniques: Saving and Loading Dataset Schema and Data information using XML Format, Reading and Writing XML Data, Using DOM to Process XML Data, Querying XML by Using XPath, Transforming XML by Using XSLT Style Sheets
- ◆ Minimizing and Handling Database Operation Conflicts
- ◆ Enhancing Database Performance

➤ **DEV273: Developing Microsoft ASP.NET Web Applications Using Visual Studio 2005**

- ◆ Creating and Configuring ASP.NET Web Application: Web Pages, Configuration Files
- ◆ Programming Web Forms: Server-side Events, Page Header, Detecting Browser Types, Page-level Exceptions, Error Handlers
- ◆ Server Controls in an ASP.NET Web Form: Web Forms, HTML Controls, Server Controls
- ◆ Creating a Common Layout by Using Master Pages
- ◆ Creating Reusable Controls for Web Applications
- ◆ Managing State for Web Forms and Server Controls: Application, Session, and Cache Objects
- ◆ Accessing and Displaying Data from a Variety of Sources: Using SQLDataSource, XMLDataSource, and ObjectDataSource Controls
- ◆ Securing Web Applications: Authentication, Authorization, and Membership Features of ASP.NET 2.0
- ◆ Optimizing Web Application Performance
- ◆ Building Web Parts and Web Part Pages
- ◆ Configuring, Deploying an ASP.NET Web Application

➤ **DEV274: Distributed Application Development**

- ◆ XML Web Services Core Technologies
- ◆ Building and Consuming XML Web Services
- ◆ Configuring and Customizing XML Web Services: SOAP Messages, XML Serialization, XML Attribute
- ◆ Calling Web Methods Asynchronously
- ◆ Implementing SOAP Headers and Extensions
- ◆ Web Services Enhancements (WSE 3.0): Security, Policy, Transmission Optimization
- ◆ Building a Remoting Client and Server: Registering Classes, Configuring Channels
- ◆ Creating and Serializing Remotable Types
- ◆ Performing Remoting Operations Asynchronously
- ◆ Managing the Lifetime of Remote Objects

**Microsoft Official
Curriculum Course
#2541 #2542**



3 Weeks

**Microsoft Official
Curriculum Course
#2543 #2544**




MS Exam 70-528:
*Technology Specialist:
Microsoft .NET Framework 2.0
— Web-Based Client
Development*

4 Weeks

**Microsoft Official
Curriculum Course
#2548 #2549**



MS Exam 70-529:
*Technology Specialist:
Microsoft .NET Framework 2.0
— Distributed Application
Development*

<ul style="list-style-type: none"> ◆ Message Queuing: Creating and Receiving Messages, Optimizing and Protecting Message Queuing ◆ Creating and Consuming Serviced Components 	
<p>➤ DEV114: Software Development Labs & Certification Preparation</p> <p>During this time, students will practice their skills by doing labs, scenarios to reinforce their learning and practice exams questions which can lead to Industry certifications.</p> <ul style="list-style-type: none"> ◆ Microsoft Practice Certification Exam Preparation 	<p>2 weeks</p>
<p>➤ Career Development Seminars</p> <ul style="list-style-type: none"> ◆ Resume Preparation and Job Search ◆ Interview Techniques ◆ Teamwork & Communication ◆ Problem Solving 	<p>Seminars (outside of class time)</p>
<p>Certification Exams</p>	<p>Testing Centre</p>
<p>For students' convenience, Willis College – Ottawa is the first VUE Authorized Testing Center in the Ottawa/Hull area offering Virtual University Enterprises (VUE) testing capabilities. We also offer Prometric Testing therefore we only have certified Test Center Administrators delivering all professional exams.</p>	 <p>The logo features the letters 'VUE' in a large, bold, sans-serif font. To the left of the 'V' is a stylized globe with a ring around it. Below 'VUE' is the text 'VIRTUAL UNIVERSITY ENTERPRISES' in a smaller font. At the bottom right, it says 'a division of NETA' and 'Authorized Testing Center'.</p>
<p>Program Includes</p>	
<ul style="list-style-type: none"> ✓ All Textbooks and Materials (We use industry standard professional books) ✓ Many courses use real Official Curriculum instead of “Approved” courseware ✓ Student discount on Microsoft Certification Exam Vouchers ✓ Placement Services for all Graduates ✓ Possibility of Refresher Courses ✓ Personal Email Account and Backed-up File Storage ✓ Discount on Future Courses for Graduates ✓ Labs Available ✓ Career Development Seminars ✓ HRSDC Approved Tax Receipt for 100% of Tuition Fees 	

NOTE: Willis College reserves the right to modify or cancel any program, course, fee, timetable, room or campus location at any time without prior notice.