

| نام دوره: متخصص ارشد طراحی سایت بین الملل | |
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| Certified Internet Web Professional & PHP & My SQL | |
| مشخصات دوره | تعداد ساعت: ۲۴۰ پیش نیاز: آشنایی کامل با ویندوز و اینترنت و آشنایی اولیه با برنامه نویسی |
| مخاطبین دوره | علاقه مندان به طراحی سایت |
| شرح دوره | این دوره در زمینه طراحی و پیاده سازی سیستم های نرم افزاری تحت وب از جمله سایت های وب ، خدمات تجارت الکترونیکی ، نرم افزار های کاربردی تحت وب و همچنین مدیریت ساختارهای شبکه ای ؛ اطلاعات لازم را در اختیار دانشجویان قرار خواهد داد. شرکت کنندگان در این دوره با دانش کافی از ویندوز و اینترنت افرادی هستند که تمایل دارند در یک دوره جامع، عملی و پروژه ای طراحی سایت شرکت کنندو در آینده به عنوان طراح حرفه ای سایت های وب جذب بازار کار شوند. |
| آنچه در این دوره می آموزیم: | <ul style="list-style-type: none"> • آشنایی با مبانی شبکه های کامپیوتری • HTML-CSS • DHTML ،Java Script • متدولوژی و استاندارد های طراحی صفحات وب • Dreamweaver CS4Adobe • Expertion Web Microsoft (نرم افزار پیشرفته و جدید برای ایجاد سایتهای استاتیک و دینامیک) • Adobe Photoshop CS6 • Microsoft expression Web • Adobe Flash Cs6 (طراحی سایت های Full Flash و سي دي هاي تبليغاتي) • استفاده از Extension های نرم افزار های Adobe • آشنایی با متدهای SEO (بهینه سازی جهت موتور های جستجو) • آشنایی با ASP ،ADO • آشنایی با بانک اطلاعاتی SQL • آشنایی با مفاهیم E-Commerce • پیاده سازی سایت های تجاری به کمک نرم افزار Dreamweaver • PHP & My SQL |
| ترم های دوره | <p>1- CIW Foundational</p> <p>Internet Business Associate Exam 1D0-51a</p> <p>Site Development Associate Exam 1D0-51b</p> <p>Network Technology Associate Exam 1D0-51c</p> <p>2- CIW Web Design Professional</p> <p>Web Design Specialist Exam 1D0-520</p> <p>E-Commerce Specialist Exam 1D0-525</p> <p>3- CIW Web Development Professional</p> <p>Perl Specialist Exam 1D0-437</p> <p>Database Specialist Exam 1D0-541</p> <p>JavaScript Specialist Exam 1D0-635</p> <p>4- PHP & My SQL</p> |

CIW Foundational

Internet Business Associate Exam 1D0-51a

Domain 1: Internet Business Foundations

- 1.1 Identify job roles in the Information Technology (IT) industry, including the responsibilities, tasks and skills they require.
- 1.2 Identify the infrastructure required to access the Internet, including hardware and software components.
- 1.3 Define important Internet communications protocols and their roles in delivering basic Internet services.
- 1.4 Identify the basic principles of the Domain Name System (DNS).
- 1.5 Identify the functions of Web browsers, and use them to access the World Wide Web and other computer resources.
- 1.6 Use e-mail clients to send simple messages and files to other Internet users.
- 1.7 Define and use additional networking and Internet services.
- 1.8 Demonstrate ways to communicate effectively using Internet technology.
- 1.9 Identify and configure user customization features in Web browsers, including preferences, caching, cookies.
- 1.10 Identify security issues related to Internet clients (e.g., Web browsers, e-mail, instant messaging) in the workplace, including certificates, malware, illicit servers, viruses.
- 1.11 Use different types of Web search engines effectively.
- 1.12 Identify and use principles of Personal Information Management (PIM), including common applications.
- 1.13 Efficiently transmit text and binary files using popular Internet services.
- 1.14 Identify security-related ethical and legal issues faced by IT professionals.
- 1.15 Relate project management concepts and terms to the IT profession.
- 1.16 Recognize essential database concepts.
- 1.17 Conduct a Webcast and related services.
- 1.20 Manage career opportunities in the IT industry.
- 1.21 Represent technical issues to a non-technical audience.

Site Development Associate Exam 1D0-51b

Domain 2: Site Development Foundations

- 2.1 Demonstrate knowledge required to create a Web page.
- 2.2 Add images and graphical formatting to HTML files, and create and edit images and audio.
- 2.3 Identify and use design and color principles for Web pages.
- 2.4 Create a basic HTML form that accepts user input.
- 2.5 Create HTML frames.
- 2.6 Define Extensible Markup Language (XML), and identify its features and appropriate use.
- 2.7 Identify essential Web site navigation issues, and ensure page/site accessibility.
- 2.8 Define and apply essential aspects of the Cascading Style Sheets (CSS) standard, including CSS versions 1, 2 and 3.

- 2.9 Use Extensible Hypertext Markup Language (XHTML) to create Web pages.
- 2.10 Identify technologies for enhancing the user's Web experience, including programming languages, multimedia technologies.
- 2.11 Use GUI-based HTML editing software to create Web pages.
- 2.12 Test and analyze Web site performance issues.
- 2.13 Identify steps in the Web site planning and development process.
- 2.14 Identify essential issues in developing and maintaining a Web site, including project management, testing, legal issues.
- 2.15 Plan and deliver oral presentations of your Web site, during and after site development.
- 2.16 Define electronic commerce (e-commerce) and related technologies and concepts necessary to develop a secure, useful interface (i.e., storefront).
- 2.17 Demonstrate knowledge of languages commonly used to provide database connectivity to Web sites.
- 2.18 Identify the benefits and drawbacks of running your own Web server versus using a service provider.
- 2.19 Identify common strategies for managing an end user's experience and improving site creativity.
- 2.20 Consider copyright and ethical issues when creating Web pages.
- 2.21 Design Web pages to industry standards.

Network Technology Associate Exam 1D0-51c

Domain 3: Network Technology Foundations

- 3.1 Demonstrate knowledge of basic data communications components, and demonstrate technical knowledge of the Internet.
- 3.2 Identify the role of networking hardware, and configure common hardware for operation.
- 3.3 Identify the relationship between IP addresses and domain names, including assignment of IP addresses within a subnet.
- 3.4 Identify the functions and components of servers commonly used on the Internet.
- 3.5 Identify common Internet security and availability issues, including user-level and enterprise-level concerns.
- 3.6 Identify common performance issues affecting Internet clients, including analysis, diagnosis.
- 3.7 Perform basic hardware and system maintenance for network-aware systems.
- 3.8 Manage fundamental elements of modern network-based client operating systems.
- 3.9 Configure and troubleshoot wireless networks.
- 3.10 Demonstrate understanding of virtualization.
- 3.11 Explain concepts involving personal privacy protection on the Internet.

CIW Web Design Professional

Web Design Specialist Exam 1D0-520

Domain 1: Site Development Essentials

- 1.1 Identify and manage elements of the Web site development process.
- 1.2 Meet customer expectations with Web site project and design.
- 1.3 Identify ethical and legal issues relevant to Web development and design.

Domain 2: Web Design Elements

- 2.1 Use Web design principles to evaluate and develop a site's aesthetic qualities and its ability to enhance viewer experience.
- 2.2 Use Web design principles to enable navigation, usability and accessibility.

Domain 3: Basic Web Technologies

- 3.1 Use basic HTML and XHTML (X/HTML) to develop a series of Web pages.
- 3.2 Use X/HTML and extended technologies to enhance Web page structure, format and usability.
- 3.3 Create image files, and use images in X/HTML pages and site design.
- 3.4 Create Web sites using GUI site development applications.
- 3.5 Publish and maintain a production Web site.

Domain 4: Advanced Web Technologies

- 4.1 Use multimedia and plug-in technologies to enhance a Web site.
- 4.2 Use client-side and server-side programming to enhance Web site functionality.
- 4.3 Connect Web pages to a database.
- 4.4 Conduct effective Internet marketing.
- 4.5 Create syndicated feeds using feed management services.

E-Commerce Specialist Exam 1D0-525

Domain 1: E-Commerce Site Development

- 1.1 Evaluate an e-commerce site to maximize audience usability.
- 1.2 Develop and host an e-commerce site using instant storefront services and stand-alone ecommerce software.
- 1.3 Implement e-commerce-based learning solutions.
- 1.4 Implement inventory and fulfillment strategies for an e-commerce site.
- 1.5 Implement payment-processing services for an e-commerce site.
- 1.6 Develop a knowledge base.

Domain 2: E-Commerce Technology and Security

- 2.1 Define and use standards, initiatives and e-commerce frameworks that support supplier transactions.
- 2.2 Configure Web server software for an e-commerce site.
- 2.3 Analyze and improve e-commerce site performance.
- 2.4 Secure e-commerce transactions.
- 2.5 Secure an e-commerce site.

Domain 3: E-Commerce Business, Marketing and Legal Issues

- 3.1 Identify the effects of e-commerce on business operations and revenue generation.
- 3.2 Identify legal and governmental issues in e-commerce.
- 3.3 Implement effective marketing for an e-commerce site.
- 3.4 Implement strategies for effective customer service and manage customer relationships in ecommerce operations.

CIW Web Development Professional

Perl Specialist Exam 1D0-437

Domain 1: Perl Fundamentals

- 1.1 Define uses and operation of the Perl interpreter, including but not limited to: basic scripting, print function, variables.
- 1.2 Direct program flow using statements, loops and Boolean expressions.
- 1.3 Use regular expressions to search and manipulate strings.
- 1.4 Use arrays to store and manipulate program data.
- 1.5 Use hashes to organize and manipulate program data with keys.
- 1.6 Use subroutines to make code more logical and easier to debug.
- 1.7 Use files to store, read and write data.
- 1.8 Process command line and external data using environment variables and arguments.
- 1.9 Use packages and modules to organize, reuse and export program code.
- 1.10 Implement and create object-oriented programming techniques in Perl.
- 1.11 Define database programming, including but not limited to: use of modules and SQL to access external data.
- 1.12 Use Perl debugging features to identify programming errors.

Database Specialist Exam 1D0-541

Domain 1: Relational Database Fundamentals

- 1.1 Identify basic database types and management systems
- 1.2 List common database languages and their purposes, and identify language subsets of Structured Query Language (SQL).
- 1.3 Identify relational data modeling schemas, characteristics and manipulation

Domain 2: Relational Database Design and Application

- 2.1 Identify the steps of the database planning life cycle
- 2.2 Identify the activities in the conceptual design phase of a database

Domain 3: Normalization and Database Design

- 3.1 Apply normalization techniques and processes
- 3.2 Describe logical database design steps and practices
- 3.3 Interpret logical data models into a physical data model that can be implemented by a particular database management system (DBMS)

Domain 4: Structured Query Language (SQL)

- 4.1 Identify SQL commands and syntax
- 4.2 Create statements using Data Definition Language (DDL)
- 4.3 Form commands using Data Manipulation Language (DML)
- 4.4 Use Data Control Language (DCL) statements to control the access to data in a database and to grant users permissions for data operations

Domain 5: Relational Algebra and Databases

- 5.1 Define and describe the use of relational algebra in order to create new relationships from existing database relations
- 5.2 Compose joins in a database

Domain 6: Transactions, Currency Control and Database Security

- 6.1 Create transactions and enable currency control
- 6.2 Identify elements of database security

JavaScript Specialist Exam 1D0-635

Domain 1: Essential JavaScript Principles and Practices

- 1.1: Identify characteristics of JavaScript and common programming practices.
 - 1.1.1: List key JavaScript characteristics, including object-based nature, events, platformindependence, and differences between scripting languages and programming languages.
 - 1.1.2: Identify common programming concepts, including objects, properties and methods.
 - 1.1.3: Describe various JavaScript versions and flavors, including ECMA standards, JScript and similarities with proprietary scripting languages.
 - 1.1.4: Distinguish between server-side and client-side JavaScript applications, including JavaScript interpreters and rendering engines.
 - 1.1.5: Describe acceptable coding practices, including appropriate use of comment tags and the<noscript> tag.
- 1.2: Work with variables and data in JavaScript.
 - 1.2.1: Use attributes and methods to communicate with users, including the type attribute, and the alert(), prompt()1.2.2: Define variables.
 - 1.2.3: Use data types, including null and undefined.
 - 1.2.4: Obtain user input and store it in variables.
 - 1.2.5: Report variable text to the client window.
 - 1.2.6: Distinguish between concatenation and addition.
 - 1.2.7: Use expressions.
 - 1.2.8: Use operators, including string concatenation (+=), strict comparison (=== , !==) and mathematical precedence.
 - 1.2.9: Implement inline scripting.
 - 1.2.10: Implement simple event handlers, including onLoad() and onUnload().
 - 1.2.11: Define keywords and reserved words.
- 1.3: Use JavaScript functions, methods, and events.
 - 1.3.1: Use methods as functions.
 - 1.3.2: Define functions.
 - 1.3.3: Use data type conversion methods.
 - 1.3.4: Call functions.
 - 1.3.5: Pass arguments to functions, including argument creation, return values and the calculateAvg() function.
 - 1.3.6: Return values from functions.
 - 1.3.7: Distinguish between global and local variables.
 - 1.3.8: Use the conditional operator.
 - 1.3.9: Identify user events and event handlers.
 - 1.3.10: Use built-in functions and cast variables.

Domain 2: Intermediate JavaScript Programming Techniques

- 2.1: Use JavaScript statements to control program flow.
 - 2.1.1: Use the if... statement.
 - 2.1.2: Use the while... statement.
 - 2.1.3: Use the do...while statement.
 - 2.1.4: Use the for... statement.
 - 2.1.5: Use the break and continue statements.
 - 2.1.6: Use the switch... statement.

- 2.2: Use the JavaScript Document Object Model (DOM).
- 2.2.1: Use JavaScript to manipulate the Document Object Model (DOM).
- 2.2.2: Use the window object of the DOM.
- 2.2.3: Manipulate properties and methods of the document object within the DOM.
- 2.2.4: Use the with statement.
- 2.2.5: Use the image object of the DOM, including image rollover creation.
- 2.2.6: Use the history object of the DOM.
- 2.2.7: Evaluate and change URL information with the location object of the DOM.
- 2.2.8: Use the navigator object of the DOM.
- 2.3: Use JavaScript language objects and create expressions.
- 2.3.1: Use the String object to test user input.
- 2.3.2: Evaluate strings, including use of the length property, and use of the indexOf(), lastIndexOf(), substring() and charAt() methods.
- 2.3.3: Identify basic regular expressions and the RegExp object.
- 2.3.4: Use the Array object to create more efficient code.
- 2.3.5: Identify uses for the Date and Math objects.
- 2.4: Create and use custom JavaScript **objects**.
- 2.4.1: Create a custom JavaScript object.
- 2.4.2: Define properties and methods of custom objects.
- 2.4.3: Create new object instances.
- 2.4.4: Create client-side arrays using custom objects.
- 2.4.5: Create functions and methods for manipulating client-side arrays.
- 2.4.6: Use the prototype property.
- 2.5: Debug and troubleshoot JavaScript code.
- 2.5.1: List common steps for debugging JavaScript code, including reviewing code and testing code in different browsers.
- 2.5.2: Describe and use various native and supplemental debugging tools, including enabling/disabling display.
- 2.5.3: Test code in multiple display platforms, including mobile devices.
- Domain 3: Applied JavaScript
- 3.1: Use JavaScript to develop interactive forms.
- 3.1.1: Identify and use form controls, including X/HTML form elements.
- 3.1.2: Refer to form objects, including form, radio, select, button, text, textarea and checkbox.
- 3.1.3: Define the form object.
- 3.1.4: Use the button object.
- 3.1.5: Use the checkbox object.
- 3.1.6: Evaluate text with the text and textarea objects.
- 3.1.7: Process radio object options.
- 3.1.8: Capture choices from a select list with the select object.
- 3.1.9: Conduct form validation, including valid X/HTML code.
- 3.2: Modify X/HTML with JavaScript.
- 3.2.1: Identify steps and methods for changing X/HTML "on the fly," including the getElementById, getElementsByName and getElementsByTagName methods of the DOM.
- 3.2.2: Modify attributes in X/HTML using DOM elements.
- 3.2.3: Modify values in X/HTML using DOM elements.
- 3.2.4: Use the innerHTML element

- 3.3: Address JavaScript security issues involving browsers and cookies.
- 3.3.1: Distinguish between the browser and the operating system in relation to the elements responsible for security.
- 3.3.2: Discuss browser security issues relevant to JavaScript, including script blocking, prohibition of frame-to-frame URL changing, and document.write behavior differences among browsers.
- 3.3.3: Define signed scripts.
- 3.3.4: Perform client-side browser detection and determine browser compatibility.
- 3.3.5: Identify common issues and procedures for creating secure JavaScript code.
- 3.3.6: Define cross-site scripting and the associated security risks.
- 3.3.7: Define the functions of cookies and manipulate them effectively, including testing for presence of cookies, clearing cookies, enabling/disabling cookies in the browser, and deleting cookies from your hard drive.
- 3.3.8: Assign a cookie using JavaScript.
- 3.3.9: Use cookies and passwords to restrict entry to a page.
- Domain 4: JavaScript Technology Extensions
- 4.1: Implement JavaScript libraries.
- 4.1.1: Identify and evaluate the benefits and drawbacks of using predefined libraries and plug-ins, such as jQuery, Spry, Dojo, MooTools and Prototype.
- 4.1.2: Identify steps for using libraries (such as jQuery) and available plug-ins, including jQueryfriendly X/HTML and X/HTML optimization for faster JavaScript manipulation.
- 4.1.3: Identify steps for loading and referencing external scripts and pre-made external scripts.
- 4.2: Use JavaScript and AJAX to create interactive Web applications.
- 4.2.1: Define fundamental AJAX elements and procedures.
- 4.2.2: Diagram common interactions among JavaScript, XML and XHTML.
- 4.2.3: Identify key XML structures and restrictions in relation to JavaScript.
- 4.2.4: Explain how the XMLHttpRequest object interacts with XML.
- 4.2.5: Use the XMLHttpRequest object to retrieve data.
- 4.2.6: Describe typical AJAX-based requests.
- 4.2.7: Identify key server response issues related to AJAX-based requests.
- 4.2.8: Use JavaScript to communicate with databases.
- 4.2.9: Identify alternatives to XML-based AJAX.

PHP & My SQL

PHP Basics

- Syntax
- Operators
- Variables
- Constants
- Control Structures
- Language Constructs and Functions
- Namespaces
- Extensions
- Config
- Performance/bytecode caching

Functions

- Syntax
- Arguments
- Variables
- References
- Returns
- Variable Scope
- Anonymous Functions, closures

Data Format & Types

- XML Basics
- SimpleXML
- XML Extension
- Xpath
- Webservices Basics
- SOAP
- REST
- JSON & AJAX
- DateTime
- DOMDocument

Web Features

- Sessions
- Forms
- GET and POST data
- Cookies
- HTTP Headers
- HTTP Authentication

Object Oriented Programming

- Instantiation
- Modifiers/Inheritance
- Interfaces
- Exceptions
- Static Methods & Properties
- Autoload
- Reflection
- Type Hinting
- Class Constants
- Late Static Binding
- Magic (**) Methods
- Instance Methods & Properties
- Class Definition
- SPL

Security

- Configuration
- Session Security
- Cross-Site Scripting
- Cross-Site Request Forgeries
- SQL Injection
- Remote Code Injection
- Email Injection
- Filter Input
- Escape Output
- Encryption, Hashing algorithms
- File uploads
- Data storage
- SSL

I/O

- Files
- Reading
- Writing
- File System Functions
- Streams
- Contexts

Strings & Patterns

- Quoting
- Matching
- Extracting
- Searching
- Replacing
- Formatting
- PCRE
- HEREDOC and NOWDOC
- Encodings

Databases

- SQL
- Joins
- Analyzing Queries
- Prepared Statements
- Transactions
- PDO

Arrays

- Enumerated Arrays
- Associative Arrays
- Array Iteration
- Multi-Dimensional Arrays
- Array Functions
- SPL, Objects as arrays