

XML DOCUMENT DESIGN COURSE



The **XML Document Design Course** teaches students how to create intelligent structured documents using the Extensible Markup Language (XML).

Students will study the functions and relationships between XML and other members of the XML family of technologies, including Extensible Hypertext Markup Language (XHTML), Extensible Stylesheet Language (XSL), XPath, XLink, namespaces, schemas, and Extensible Stylesheet Language Transformation (XSLT).

Students will create and apply styling to XML documents in a series of hands-on labs that focus on the development of coding conventions and compliance with the rules for well-formed XML.

This course is suitable for students wanting to follow a career as a Webmaster, software developer, application programmer, client/server developer or desktop publisher. Students must have CIW Foundations certification or equivalent experience and have a good grasp of Web Languages or have a working knowledge of client-side scripting, JavaScript or VBScript.

The course is split into the following Units:

- **Unit 1: Introduction to XML**

The following topics are covered by this unit: What Is XML?; Markup Languages; SGML Roots; XML Directives; XHTML, XML and HTML; XML Development Organisations; XML Parsers; XML Browsers; XML Alone Is Insufficient; Implementing XML; and Benefits of XML.

- **Unit 2: Well-Formed XML Documents**

The following topics are covered by this unit: What Is an XML Document?; Tags and Elements in XML; Rules for Well-Formed XML; Discerning Structure; Working with Mixed Content; Adding Comments to XML Documents; XML Encoding; and Balkanization of the Web?

- **Unit 3: Creating a Valid XML Document**

The following topics are covered by this unit: Beyond Well-Formedness: Valid XML; Documents; Document Object Model (DOM); Document Type Definition (DTD); Referencing DTD Definitions in XML; Creating a DTD for an Existing XML File; Creating a DTD for Mixed Content; Declaring Attributes in a DTD; Creating XML Documents from a DTD; and Pre-Existing DTDs.

- **Unit 4: XML Parsers**

The following topics are covered by this unit: Parsers; Object-based and Event-based Parsers; Validating and Non-Validating Parsers; Online XML Parsers; Command-Line Parsing; and GUI Parser Applications.

Price:
£125.00

Instalment Options:
You can spread the payments for this course over 4 monthly payments. 1 initial payment of £50.00, followed by 3 monthly payments of £25.00.

Course Format:
Course Book & CD ROM

Assessment:
No Assessment

Approximate Study Time:
80 Hours of Self Study

- **Unit 5: The XML Family of Technologies**

The following topics are covered by this unit: The XML Family; Namespaces in XML; XPath; XPath Expressions; XLink; XPointer; XForms; XML Query; and Resource Description Framework (RDF).

- **Unit 6: XSL Transformation**

The following topics are covered by this unit: XSL; XSLT and Style Sheets; XSLT Document Structure; XSLT Templates; Transforming Data: XML to XML; Saxon XSLT Processor; Transforming Data: XML to HTML; and Multiple Document Sources.

- **Unit 7: XML Formatting**

The following topics are covered by this unit: XML Styling; XML and CSS; CSS Syntax; XML and XSL; Formatting Objects; XSL Page Layout; XML XSL and Formatting Objects; XSL/XSLT Processing; and Converting XSL Flow Objects to PDF.

- **Unit 8: XML Schemas**

The following topics are covered by this unit: Schemas; Components; Data Types; Document Instance Schema Reference; Schema Element; SimpleType vs. ComplexType; Attributes; Facets; and Grouping.

- **Unit 9: Extensible Hypertext Markup Language (XHTML)**

The following topics are covered by this unit: XHTML Roadmap; HTML vs. XML; XHTML Definition Variations; XHTML Conformance Requirements; and XHTML 1.1 and Modules.

- **Unit 10: XML Tools**

The following topics are covered by this unit: XML Tools; Tool Types; HTML to Well-Formed XML; Creating a DTD; Creating a Schema; Importing Database Information; XML Project Management Guidelines; and XML-Driven Technologies.

Pre-Requirements:

Students must have CIW Foundations certification or equivalent experience and have a good grasp of Web Languages or have a working knowledge of client-side scripting, JavaScript or VBScript.

Course Duration & Support:

Students may register at any time. The courses are designed as self-study courses but if you have any problems you can email our email support. As the course is self study you can complete in as little or as long a time as you prefer, and we do not impose a cut-off date for study.

Assessment:

The course has non-assessed assignments to complete.

Qualification:

The course is not accredited. The contents of the course were originally part of the CIW Web Developer Curriculum, but are still available as a stand alone course.