

Course duration

- 2 days

Course Benefits

- Learn the purpose and power of XML Schema
- Learn to declare simple-type and complex-type elements
- Learn to derive custom types
- Learn to declare attributes
- Learn to annotate schemas
- Learn to understand namespaces
- Learn to work with multiple XML schema documents

Available Delivery Methods

Public Class

Public expert-led online training from the convenience of your home, office or anywhere with an internet connection. Guaranteed to run .

Private Class

Private classes are delivered for groups at your offices or a location of your choice.

Course Outline

1. XML Schema Basics
 1. The Purpose of XML Schema
 2. The Power of XML Schema
 3. A First Look
 1. A Simple XML Schema
 4. Validating an XML Instance Document
2. Simple-Type Elements
 1. Overview
 2. Built-in Simple Types
 1. 19 Primitive Data Types
 2. Built-in Derived Data Types
 3. Defining a Simple-type Element
 3. User-derived Simple Types
 1. Applying Facets

- 2. Controlling Length
 - 3. Specifying Patterns
 - 4. Working with Numbers
 - 5. Enumerations
 - 6. Whitespace-handling
- 4. Specifying Element Type Locally
- 5. Nonatomic Types
 - 1. Lists
 - 2. Unions
- 6. Declaring Global Simple-Type Elements
 - 1. Global vs. Local Simple-Type Elements
 - 2. Default Values
 - 3. Fixed Values
 - 4. Nil Values
- 3. Complex-Type Elements
 - 1. Overview
 - 2. Content Models
 - 1. xs:sequence
 - 2. xs:all
 - 3. xs:choice
 - 3. Complex Model Groups
 - 4. Occurrence Constraints
 - 5. Declaring Global Complex-Type Elements
 - 6. Mixed Content
 - 7. Defining Complex Types Globally
- 4. Attributes
 - 1. Overview
 - 2. Empty Elements
 - 3. Adding Attributes to Elements with Complex Content
 - 4. Adding Attributes to Elements with Simple Content
 - 5. Restricting Attribute Values
 - 6. Default and Fixed Values
 - 1. Default Values
 - 2. Fixed Values
 - 7. Requiring Attributes
- 5. Reusing Schema Components
 - 1. Overview
 - 2. Groups
 - 1. Element Groups
 - 2. Attribute Groups
 - 3. Extending Complex Types
- 6. Tying It All Together
 - 1. Workshop: Creating and reusing XML schemas
- 7. Annotating XML Schemas
 - 1. Overview
 - 2. Annotating a Schema
 - 3. Transforming an XML Schema for Documentation

8. Namespaces

1. Overview
2. Purpose of Namespaces
3. Target Namespaces
4. Default Namespaces
5. Locally Declared Elements and Attributes
6. Qualified Locals
7. The XMLSchema-instance Namespace
8. Using Multiple Namespaces

Class Materials

Each student will receive a comprehensive set of materials, including course notes and all the class examples.

Class Prerequisites

Experience in the following *is required* for this XML class:

- Basic XML

Prerequisite Courses

Courses that can help you meet these prerequisites:

- [Introduction to XML Training](#)

Follow-on Courses

- [XSLT 1.0 and XPath 1.0 Training](#)
- [XSLT 2.0 and XPath 2.0 Training](#)