



## XSLT

**Course #:** XML-101      **Duration:** 2 days

### Prerequisites

Experience using XML.

### Details

In this two-day course you will use the features of XSLT and XPath to develop stylesheets that convert XML documents to other XML, HTML, or text. The course begins with an introduction to commonly used tags such as `template`, `apply-templates`, and `value-of`. From there, you will learn how to use XPath nodeltypes, axes, and predicates. Flow control and functions are covered next. Finally, you will learn some advanced XSLT features such as variables and parameters.

### Software Needed

An XML editor, such as OXgen or XML Spy.

### Outline

#### XSLT

- **Introduction to XSLT**
  - Stylesheet, Source, and Result
  - XSLT Processors
  - Processor Implementations
  - XPath Basics
  - `xsl:stylesheet`
  - `xsl:template`
  - `xsl:value-of`
  - `xsl:apply-templates`
  - `xsl:output`
- **XPath Nodeltypes**
  - XPath Expressions
  - XPath Context
  - XPath Location Steps
  - Element and Root Nodes
  - Text and Attribute Nodes
  - Comment and Processing Instruction Nodes
  - Namespace Nodes
  - Wildcards
  - Whitespace
  - Default Template Rules
- **XPath Axes and Predicates**

- Location Paths and Location Steps
- Peer Axis Types
- More Peer Axis Types
- Descendant Axis Types
- Ancestor Axis Types
- Node Tests
- Predicates
- Functions
- **XSLT Flow Control**
  - xslif
  - xslchoose
  - xslfor-each
  - xslsort
  - Named Templates
  - Mode
- **Generating Output with XSLT**
  - Output Methods
  - HTML Output
  - Plain Text Output
  - XML Output
  - xsl:element and xsl:attribute
  - Attribute Value Templates
  - xsl:attribute-set
  - Text, Processing-Instructions, and Comments
  - Working with Namespaces
- **Using XPath and XSLT Functions**
  - XPath Datatypes and Functions
  - Node Test Functions
  - Node Set Functions
  - Boolean Functions
  - String Functions
  - Number Functions
  - The document() Function
  - xsl:key and key() Function
- **Advanced XSLT**
  - Copying Elements
  - Numbering
  - Variables
  - Parameters
  - Using Other Stylesheets
  - apply-imports
  - Template Rule Conflicts
  - Extensions
- **XSLT and XPath 2.0 New Features**
  - XSLT 2.0 Grouping Elements and Functions
  - User-Defined XSLT Functions
  - Multiple Output and XHTML Documents
  - Temporary Trees
  - Sequences
  - Types
  - Stylesheets that are Schema-Aware
  - Character Mapping
  - Regular Expressions