

Training: Capstone Courseware
511 XML for the Enterprise

FORM OF TRAINING	MATERIALS	PRICE	DURATION
Traditional	Hardcopy	1150 EUR	5 days
Traditional	CTAB Tablet	1250 EUR	5 days
Distance learning	Hardcopy	1150 EUR	5 days
Distance learning	CTAB Tablet	1150 EUR	5 days

LOCATIONS

Krakow - 5 Tatarska Street, II floor, hours: 9:00 am - 4:00 pm

Warsaw - 17 Bielska Street, hours: 9:00 am - 4:00 pm

TRAINING GOALS:

Version 1.1

This comprehensive course provides a full tour of the most prevalent XML standards, and introductory-to-intermediate training in each: XML itself, XML Schema, XSLT, and XSLFO. This is a great fit for students who are planning to work extensively with XML in the near future, as it gives a good grounding in how to manage XML information, define XML models (using **XML Schema**), transform XML information to text, HTML, or other XML formats (using **XSLT**), or to print-ready PDFs (using **XSLFO**).

CONSPECT:

Module 1. Introduction to XML

- Chapter 1. A Brief History of XML
 - Birth of XML
 - Content vs. Presentation
 - Self-Describing Data
 - A Standard Document Format
 - Uses for XML
- Chapter 2. XML Grammar
 - Structure of an XML Document
 - Handling Whitespace

- Character and Entity References
- Well-Formed XML
- Elements
- Attributes
- Processing Instructions
- Comments
- CDATA Sections
- Chapter 3. Valid XML
 - Document Types
 - DTD Structure
 - Defining Elements
 - Cardinality
 - Attributes
 - Required, Implied, Default, and Fixed Attributes
 - Enumerations
 - XML Namespaces
 - Limitations of DTDs
 - XML Schema
 - Advantages of XML Schema
 - Data Types
- Chapter 4. Using XML in Applications
 - SAX and DOM Parsing
 - XSLT
 - XPath
 - XSL-FO
 - Web Services
 - SOAP

Module 2. XML Schema

- Chapter 1. Getting Started with XML Schema
 - What is an XML schema?
 - Schemas vs. DTDs
 - Structure of a Schema
 - Associating Schema with Documents
 - Types of Types
 - Defining Elements

- Defining Complex Types
- Validation
- Chapter 2. Simple Types
 - Simple and Atomic Types
 - Built-In Types
 - Primitives
 - Numeric Derived Types
 - String Derived Types
 - Simple Type Restriction
 - Facets
 - Enumerations
 - Patterns
 - Lists
 - Unions
 - Nillable Values
- Chapter 3. Complex Types
 - Model Groups
 - Sequences, Conjunctions, and Disjunctions
 - Particles
 - Occurrence Constraints
 - Global and Local Definitions
 - Defining Attributes
 - Empty, Any, and Mixed Content
 - Model Group Definitions
 - Attribute Group Definitions
 - Annotations

Module 3. XSLT

- Chapter 1. Getting Started with XSLT
 - XSL and XSLT
 - Rule-Based Transformations
 - Templates
 - Producing Text, HTML, and XML
- Chapter 2. XPath
 - Addressing XML Content
 - XPath in XSLT

- Tree Structure
- XPath Expressions
- Type Model
- Context
- Axis, Node Test, and Predicate
- Abbreviations
- Proximity Position
- XPath Functions
- Comparisons Between Various Types
- Chapter 3. Templates and Production
 - Template Matching
 - Built-In Template Rules
 - Recursion Through Templates
 - Template Context
 - Output Methods
 - Controlling Whitespace
 - Literal Replacement Elements
 - Formalizing Text, Elements and Attributes
 - Defining Target Vocabulary
 - Generating Processing Instructions
- Chapter 4. Dynamic Content and Flow Control
 - Deriving Source Content
 - Getting Source Values
 - Attribute Value Templates
 - Copying Source Elements and Trees
 - Looping
 - Conditionals
- Chapter 5. Variables and Template Management
 - Variables
 - Using Variables to Capture Context Information
 - Result Tree Fragments
 - Parameters
 - Calling Templates Explicitly
 - Global Variables and Stylesheet Parameters
 - Template Modes

Module 4. XSLFO

- Chapter 1. Getting Started
 - Formatting XML
 - XSLT and XSLFO
 - Flow of Information
 - Formatting Objects
 - Properties
- Chapter 2. Page Masters
 - Pages and Areas
 - The Page-Master Model
 - Regions
 - Writing Mode and Orientation
 - The Page-Sequence Model
 - Flows
 - Page-Sequence Masters
 - Properties and the Inheritance Model
- Chapter 3. Formatting
 - Flows
 - Blocks and Layout Options
 - Inlines and Layout Options
 - Lists
 - Tables
 - Controlling Pagination
- Chapter 4. Formatting
 - Page Numbering
 - Identifying Content
 - Page-Number Citations
 - Links
 - Tables of Contents

Appendix A. Learning Resources

Appendix B. Quick Reference: W3C Namespaces

REQUIREMENTS:

- None.

Difficulty level



CERTIFICATE:

The participants will obtain certificates signed by Capstone Courseware.

TRAINER:

Authorized Capstone Courseware Trainer.