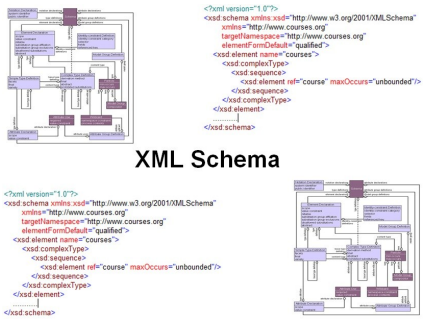
XML Schema

Duration: 3 days Price: € 1850

Open Schedule



Audience Course XML Schema

The course **XML Schema** is designed for developers of XML data structures and XML applications and project managers who want to use XML schemas to validate the contents of XML documents.

Prerequisites Course XML Schema

To join this course knowledge of the basic syntax of **XML** is required.

Realization Training XML Schema

The theory is discussed on the basis of presentation slides. Demos are used to illustrate the theory. There is ample opportunity to practice. The course material is in English. The course time are from 9.30 up and to 16.30.

Certification Course XML Schema

Participants receive an official certificate XML Schema after successful completion of the course.

Content Course XML Schema

In the course XML Schema you will gain extensive knowledge on the syntax and usage of the XML Schema language, as successor to Document Type Definitions (DTDs).

XML Schema Intro

XML Schema is used to define XML vocabulaires that define the structure, element names and contents of XML documents.

Design Models

Several XML Schema design models are discussed like Russian Doll, Salami Slice and Venetian Blind. Attention is given to declaring simple and complex elements and types and imposing constraints on the content of elements.

Simple Types

Also the creation of user defined simple data types using facets and regular expressions is among the subjects discussed. Namespaces are an important part in the XML Schema specification and is given a lot of attention.

Complex Types

Also the creation of complex derived data types and the difference between derivation by restriction and derivation by extension are discussed.

Import en Include

Further attention is paid to modularization of schemas and the usage of the include and import mechanisms.

Advanced Topics

Finally some advanced topics like Open Content Models and the XML Schema handling of keys and references and the removing of redundancy by identity constraints are addressed.

SpiralTrain BV
Standerdmolen 10, 2e verdieping
3995 AA Houten

info@spiraltrain.nl
www.spiraltrain.nl
Tel.: +31 (0) 30 – 737 0661

Locations
Houten, Amsterdam, Rotterdam, Eindhoven, Zwolle, Online

Modules Course XML Schema

Module 1 : XML-Schema Intro	Module 2 : XML Schema Basics	Module 3 : XML Schema Models
Why XML Schema?	XML Schema Components	Declaration versus Definition
What is XML Schema?	DTD to XML Schema Conversion	Global versus Local
Markup Languages	DTD Vocabulary	Element Declarations
Well Formed versus Valid	XML Schema Vocabulary	Global and Local Declarations
Document Type Definition (DTD)	Target Vocabulary	Referencing Global Declarations
DTD Limitations	Referencing XML Schema	Anonymous and Named Types
XML Schema as DTD Successor	XMLSchema-instance	Three Design Approaches
XML Schema Features	Multiple Levels of Checking	Salami Slice Design
Typical Use of XML Schema	Element Cardinality	Russian Doll Design
Use of XML Schema	Simple and Complex Types	Venetian Blind Design
Other Uses of XML Schema	Simple Type Restricted to Integer	Combined Design
Schema Validators	Complex Type with Attribute	Design Comparisons
Module 4 : XML Schema Data Types	**Module 5 : Derived Simple Types**	**Module 6 : Schema Documentation**
XML Schema Data Types	Creating Simple Types	Annotating Schema's
String Data Types	Derived Numeric Simple Types	Annotation Element
Language Data Type	Simple Types by Restriction	Meta Data
Name Types	Available Facets	Allowed Locations
ID Types	Enumerations and Patterns	Annotation Location
Qualified Names and URI's	Fixing Facet Values	Inlining Annotation
Binary String Encoded Types	Regular Expressions	Documentation Element
Primitive Numeric Data Types	Meta Characters	Appinfo Element
Derived Numeric Data Types	Quantifiers	Optional Attributes
Boolean Data Type	Character Classes	source Attribute
Date Data Types	List Type and simpleTypes	xml:lang Attribute
ur-type and anyType	Union type and simpleTypes	Defining Semantics
Module 7 : Namespaces	**Module 8 : Complex Types**	**Module 9 : Derived Complex Types**
Namespaces of XML Schema	Simple Content and Attributes	Derived Complex Types
XML Schema Namespace	Local Attribute Declarations	Deriving by Extension
TargetNamespace	use Attribute	Deriving by Restriction
Referencing XML Schema	Grouping Attributes	Prohibiting Derivations
Namespace Scope	Grouping Elements	Element Substitution
Default Namespace	Global Group Definition	Substitutable Elements
Symbol Spaces	Choice Element	International Clients
Name Conflicts	Fixed Element Values	substitutionGroup Features
What is in the Namespace?	Default Element Values	Substitution with Derived Types
Namespace Qualification	Sequence and Choice	Blocking Element Substitution
elementFormDefault	Any order with all	Transitive and Non-Symmetric
attributeFormDefault	Empty element	Abstract Elements
Rules for using Namespaces	nil and Mixed content	Abstract complexType
Module 10 : Schema Modules	**Module 11 : Schema Extensions**	**Module 12 : Uniqueness and Keys**
Schema Modularization	any Element	Uniqueness and Keys
Including Schema Documents	Extension Element	Unique versus Key
Using include	Instance with any	Key Requirements
Chameleon Effect	Namespace Extension Elements	Combination Key
Namespace Coercion	anyAttribute Element	Unique
Redefining Types	Extension Attribute	Unique Elements
Using redefine	Instance with anyAttribute	Key Referencing
Redefine no targetNamespace	Namespace Extension Attributes	IDREF
Importing Schema Documents	Open Content	key Element
Using import	Global and Local Openness	keyref Element

SpiralTrain BV
Standerdmolen 10, 2e verdieping
3995 AA Houten

info@spiraltrain.nl
www.spiraltrain.nl
Tel.: +31 (0) 30 – 737 0661

Locations
Houten, Amsterdam, Rotterdam, Eindhoven, Zwolle, Online