

# Kentico CMS 5.x Developer



## Course overview

This three-day instructor-led course will teach web developers introductory fundamentals and best practices for building, deploying and maintaining applications with Kentico CMS 5.x. This course focuses on using the Microsoft Visual 2008 development environment and the Microsoft .NET Framework 3.5 to create Kentico CMS applications that use the API, web parts, and widgets that deliver dynamic content to a website.

## Who should attend

This course is intended for web developers who have knowledge of Hypertext Markup Language (HTML) or Dynamic HTML (DHTML), along with programming experience using Microsoft Visual Basic or Microsoft Visual C#.

## Prerequisites

Before attending this course, students must have:

- Programming experience using Microsoft Visual Basic or Microsoft Visual C#
  - Declaring variables
  - Using loops
  - Using conditional statements
- Knowledge of HTML or DHTML, including:
  - Tables
  - Images
  - Forms

## What you will learn

Upon completion of this course, students will be able to:

- Describe the key features of Kentico CMS 5.x
- Describe the architecture of Kentico CMS 5.x
- Set up a Kentico CMS development environment
- Navigate the CMS Desk and Site Manager to perform common administration functions
- Describe document types and how they are used within Kentico CMS
- Create custom document types
- Describe the process used for developing a Kentico CMS website
- Understand page development options using Kentico CMS
- Create page templates using both the portal engine and ASPX templates
- Create and manage CSS style sheets using Kentico CMS
- Create and implement web parts
- Describe the common Kentico CMS web parts
- Create complex transformations
- Access and manipulate data stored with the Kentico CMS content repository
- Secure the Kentico CMS website using a variety of technologies, including authentication and membership
- Implement and manage workflow and versioning using Kentico CMS
- Set up and implement a multilingual website
- Create web parts
- Add additional functionality using the Kentico API
- Describe additional functionality using Kentico CMS extensibility
- View runtime and caching information using the built-in Kentico CMS functionality
- Deploy a Kentico CMS website

## Course outline

### Module 1: Overview of Kentico CMS

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*This module introduces the Kentico CMS architecture.*

After completing this module, students will be able to:

- Describe the benefits of a Content Management System (CMS)
- Explain the CMS development process
- Explain the key benefits of Kentico CMS
- Describe the Kentico CMS physical architecture
- Describe the Kentico CMS software architecture
- Describe the Kentico API object model

### Module 2: Installation and System Configuration

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*This module explains how to install and configure a Kentico CMS developer environment.*

After completing this module, students will be able to:

- List the Kentico CMS 5.x system requirements
- Install a Kentico CMS developer environment
- List available documentation and additional resources for developers.
- Explain how licensing works

### Module 3: Kentico CMS Site Basics

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*This module explains the Kentico CMS user interfaces.*

After completing this module, students will be able to:

- Explain the use of CMS Desk and Site Manager
- Sign into CMS Desk and Site Manager
- Explain CMS content and structure
- Explain Kentico CMS modules
- Understand built-in document structures
- Edit page content

### Module 4: Document Types

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*This module explains how to create and use document types.*

After completing this module, students will be able to:

- Create a news item
- Create a custom document type

### Module 5: Page Templates

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*This module explains the development of page templates using the Kentico CMS framework.*

After completing this module, students will be able to:

- Describe page templates
- Explain visual inheritance
- Explain template reuse within Kentico CMS
- Create new page templates
- Implement a master page
- Explain ASPX page template development
- Create and register an ASPX page templates
- Debug an ASPX page template
- Explain portal engine development
- Create a new portal engine page
- Use the design tab

### Module 6: Managing CSS Styles

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*This module explains working with CSS style sheets and .NET application themes.*

After completing this module, students will be able to:

- Manage CSS style sheets
- Understand and use .NET application themes
- Style web parts

### Module 7: Web Parts

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*This module explains web parts.*

After completing this module, students will be able to:

- List the common Kentico CMS web parts
- Modify the menu control web part
- Customise the layout of web parts
- Implement editable regions
- Implement navigation web parts
- Describe the web part development process
- Create web parts
- Explain accessing context information in web parts
- Implement data binding in web parts
- Debug web parts
- Explain widgets and their uses

## Module 8: Security and Membership

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*This module explains managing users, roles and permissions.*

After completing this module, students will be able to:

- Implement Kentico CMS users and roles
- Implement Kentico CMS module permissions
- Implement Kentico CMS document-type permissions
- Implement document-level permissions
- Create secured website areas
- Implement personalised content based on roles

## Module 9: Writing Transformations

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*This module explains writing transformations and using the built-in Kentico CMS functions.*

After completing this module, students will be able to:

- Explain the use of transformation in Kentico CMS
- Implement transformations
- Implement a transformation using Kentico CMS built-in functions

## Module 10: Workflow and Versioning

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*This module explains the configuration of workflow and versioning usage.*

After completing this module, students will be able to:

- Explain workflow within Kentico CMS
- Configure workflow
- Publish documents
- Implement Kentico CMS document versioning
- Implement Kentico CMS check-in/check-out

## Module 11: API and Extensibility

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*This module explains application development using the Kentico CMS API.*

After completing this module, students will be able to:

- Explain the Kentico CMS API object model
- Create code objects that call Kentico CMS API for retrieving, updating, creating, and deleting documents and users

- Create and register custom modules
- Create a custom function and use it in a transformation
- Create global event handlers

## Module 12: System Management

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*This module explains common system administration tasks.*

After completing this module, students will be able to:

- Describe the localisation process within Kentico CMS
- Implement additional languages to Kentico CMS
- Translate content into another language
- Change current language using a URL parameter
- Create additional websites
- Implement site-specific configurations
- Share content between websites
- Explain available caching options
- Configure web farms

## Module 13: Deployment

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*This module explains the different deployment options available.*

After completing this module, students will be able to:

- Deploy a new CMS installation from development to production
- Import/Export Kentico CMS data
- Synchronise website changes from a development to production environment