



# Secure Coding in .NET - ASP.NET and C# Edition

## Training Calendar

Date	Training Time	Location
07 January 2019	3 Days	Bilginç IT Academy
17 June 2019	3 Days	Bilginç IT Academy

## Training Details

Training Time	:	3 Days
Capacity	:	12
Prerequisites	:	There are no prerequisites for this course.

## About Training

### About Training

This comprehensive 3-day course is designed to educate professional programmers on the skills necessary to develop and deploy secure applications as a fundamental element of the entire application development process.

### What You'll Learn

Upon Completing our Secure Coding in .NET will provide you with valuable knowledge and skills including the ability to:

- Understand common web application exposures and attacks
- Learn static analysis techniques for quickly finding web application flaws
- Understand the secure use of C#/VB.NET API
- Learn how to code defensively and perform proper input validation

- Learn threat modeling techniques to identify architectural issues as early as possible in the

## Who Should Attend

.NET Application Developers, C# Programmers, ASP.NET Developers; Managers, Architects and Technologists involved in deploying .NET applications

## Outline

### 1 - Introduction

- Web Application Environment and Components
- General Web Application Security Concepts
- .NET Framework Security Features

### 2 - Input Validation & Encoding

- Password Security
- Session Hijacking & Trapping
- Protecting User Sessions & Tokens
- Canonicalization Problems
- Parameter Manipulation

### 3 - Encryption, Confidentiality & Data Protection

- Cookie-Based Attacks
- Protecting Application Variables
- Cache Control Issues
- SSL Best Practices
- Protecting Usernames, Passwords and Personally Identifiable Information
- Common Cryptography Pitfalls

### 4 - Data Access

- Secure Database Programming
- Database Permissions Best Practices
- Parameterized Queries
- Common Stored Procedure Flaws

### 5 - Error Handling & Logging

- Attacking via Error Messages
- Secure Logging & Error Handling
- Input Driven Attacks
- Validation Best Practices
- Output Encoding

### 6 - Authentication, Authorization & Session Management

- Common Authentication Weaknesses
- Authorization Best Practices
- Controlling Application Access

### 7 - Server Configuration & Code Management

- Common Web & App Server Mis-Configurations

- Common Database Server Mis-Configurations
- Protecting Application Code

## **8 - XML Web Services**

- Overview of WSDL, SOAP & AJAX
- Web Service Attacks
- AJAX Pitfalls
- Web Service Best Practices

## **9 - Application Threat Modeling**

- Threat Modeling Concepts
- Application Context
- Identifying Attacks, Vulnerabilities & Countermeasures
- Threat Modeling Tools

## **10 - Practical Security Testing Techniques for Developers**

- Useful Web Application Assessment Tools
- Determining the Severity of Vulnerabilities
- Dealing with Time Constraints