Course   : .NET Programming
Duration : 151 hrs

Module 1:
Object Oriented Programming Concepts

- Introduction to Object-Oriented Programming
- Object-oriented Design
- Classes and Methods
- Abstraction and Inheritance
- 5.Multiple Inheritance and Interfaces
- Polymorphism
- Overloading
- Overriding
- Polymorphic Variable
- Generics
- Frameworks and Reflection
- Patterns

Module 2:
Application Programming (C#)

- Getting Started with C#
- Variables and Data Types in C#
- Statements and Operators
- C# Programming Constructs
- Arrays
- Classes and Methods
- Inheritance and Polymorphism
- Abstract Classes and Interfaces
- Properties and Indexers
- Namespaces
- Exception Handling
- Events, Delegates, and Collections
- Generics and Iterators
- Advanced Methods and Types

- Advanced Concepts in C#
- Encrypting and Decrypting Data

Module 3:
Web Programming using ASP .NET MVC

- Introduction to ASP.NET MVC
- Controllers in ASP.NET MVC
- Views in ASP.NET MVC
- Models in ASP.NET MVC
- Data Validation and Annotation
- Data Access
- Consistent Styles and Layouts
- Responsive Pages
- State Management and Optimization
- Authentication and Authorization
- Security
- Globalization
- Debugging and Monitoring
- Advanced Concepts of ASP.NET MVC
- Testing and Deploying

Module 4:
Agile System Development Life Cycle for Software Projects

- Software Characteristics
- Software Development Life Cycle
- Linear Process Models
- Iterative Process Models
- Specialized Process Models
- Agile Software Development - I
- Agile Software Development - II
- Extreme Programming
- Scrum
- Agile Process Models - I
- Agile Process Models - II
- Comparing Agile with Traditional Models
- Introduction to DevOps and Configuration Management
- Continuous Integration and Delivery in DevOps

- Continuous Deployment and Monitoring in DevOps
- DevOps Tools

Module 5:
Securing Web Applications

- Introduction to Web Application Security
- Malicious Software, Viruses, and their Solutions
- Service Attacks and Firewalls
- Web Application Vulnerabilities and Counter Measures
- Server Security
- Designing Principles, Measures, and Testing Tools
- Common Threats to Web Applications and Countermeasures
- Language-specific Security
- Web Services and Web Server Security