

## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### COURSE PLAN

|                          |  |
|--------------------------|--|
| Department               | : Computer Science & Engineering   |
| Subject Name and Code    | : Advanced Internet Technology (CSE-403)   |
| Semester & branch        | : VII B.Tech. CSE  |
| Name of the faculty      | : Mrs. Rajashree Krishna,<br>Mrs. Sucharita Shetty,<br>Mrs Ancilla Pinto,<br>Ms Jimcymol James |
| No of contact hours/week | : 4  |

### ASSESSMENT PLAN:

1. In Semester Assessments - 50 %
  - Written tests : 40 Marks
  - Surprise quizzes : 10 MARKS
2. End Semester Examination - 50 %
  - Written examination of 3 hours duration (Max. Marks: 50 )

| Portion for Assignment |         |
|------------------------|---------|
| Assignment no.         | Topics  |
| 1                      | L1-L9   |
| 2                      | L10-18  |
| 3                      | L19-L27 |
| 4                      | L28-L36 |
| 5                      | L37-L45 |
| Portion for Test       |         |
| Test no.               | Topics  |
| 1                      | L1-L24  |
| 2                      | L25-L40 |

MIT/GEN/F-05/R0

| Lecture no. | Topics to be covered   |
|-------------|--|
| 1           | Introduction to SQL, HTML Basics   |
| 2           | HTML Basics (Cont.), ASP   |
| 3           | <b>The .NET Framework</b> - The Evolution of Web Development, The .NET Framework   |
| 4           | <b>The C# Language</b> - The .NET Languages, Variables and Data Types, Variable Operations, Object-Based Manipulation.   |
| 5           | <b>The C# Language(Cont.)</b> - Conditional Logic, Loops, Methods  |
| 6           | <b>Types, Objects, and Namespaces</b> - The Basics of Classes, Building a Basic Class, Value Types and Reference Types   |
| 7           | <b>Types, Objects, and Namespaces(Cont.)</b> -, Understanding Namespaces and Assemblies, Advanced Class Programming  |
| 8           | <b>Visual Studio</b> - The Promise of Visual Studio, Creating Websites, Designing a Web Page, The Anatomy of a Web Form, Writing Code, Visual Studio Debugging       |
| 9           | <b>Web Form Fundamentals</b> - The Anatomy of an ASP.NET Application, Introducing Server Controls  |
| 10          | <b>Web Form Fundamentals (Cont.)</b> - Improving the Currency Converter, A Deeper Look at HTML Control Classes   |
| 11          | <b>Web Form Fundamentals (Cont.)</b> - The Page Class, Application Events, ASP.NET Configuration   |
| 12          | <b>Web Controls</b> - Stepping Up to Web Controls, Web Control Classes   |
| 13          | <b>Web Controls (Cont.)</b> - List Controls, Table Controls  |
| 14          | <b>Web Controls (Cont.)</b> - Web Control Events and AutoPostBack, A Simple Web Page   |
| 15          | <b>Error Handling, Logging, and Tracing</b> - Common Errors, Exception Handling, Handling Exceptions, Throwing Your Own Exceptions, Logging Exceptions, Page Tracing |
| 16          | <b>State Management</b> - The Problem of State, View State, Transferring Information Between Pages   |
| 17          | <b>State Management (Cont.)</b> - Cookies  |
| 18          | <b>State Management (Cont.)</b> - Session State, Application State, An Overview of State Management Choices  |
| 19          | <b>Validation</b> - Understanding Validation, The Validation Controls  |
| 20          | <b>Rich Controls</b> - The Calendar, The AdRotator   |
| 21          | <b>Rich Controls (Cont.)</b> - Pages with Multiple Views   |
| 22          | <b>Styles, Themes, and Master Pages</b> - Styles, Themes   |

|    |  |
|----|--|
| 23 | <b>Styles, Themes, and Master Pages (Cont.)</b> - Master Page Basic, Advanced Master Pages                             |
| 24 | <b>ADO.NET Fundamentals</b> - Understanding Data Management, Configuring Your Database                                 |
| 25 | <b>ADO.NET Fundamentals (Cont.)</b> - SQL Basics, The Data Provider Model  |
| 26 | <b>ADO.NET Fundamentals (Cont.)</b> - Direct Data Access   |
| 27 | <b>ADO.NET Fundamentals (Cont.)</b> - Disconnected Data Access   |
| 28 | <b>ADO.NET Fundamentals (Cont.)</b> - Discussion of Examples   |
| 29 | <b>Data Binding</b> - Introducing Data Binding, Single-Value Data Binding  |
| 30 | <b>Data Binding (Cont.)</b> - Repeated-Value Data Binding  |
| 31 | <b>Data Binding (Cont.)</b> - Data Source Controls   |
| 32 | <b>Data Controls</b> - The GridView, Formatting the GridView, Selecting a GridView Row                                 |
| 33 | <b>Data Controls (Cont.)</b> - Editing with the GridView, Sorting and Paging the GridView                              |
| 34 | <b>Data Controls (Cont.)</b> - Using GridView Templates  |
| 35 | <b>Data Controls (Cont.)</b> - The DetailsView and FormView  |
| 36 | <b>Files and Streams</b> - Files and Web Applications, File System Information   |
| 37 | <b>Files and Streams (Cont.)</b> - Reading and Writing with Streams, Allowing File Uploads                             |
| 38 | <b>XML</b> - XML Explained, The XML Classes  |
| 39 | <b>XML (Cont.)</b> - XML Validation, XML Display and Transforms  |
| 40 | <b>Security Fundamentals</b> - Understanding Security, Authentication and Authorization                                |
| 41 | <b>Security Fundamentals (Cont.)</b> - Forms Authentication, Windows Authentication                                    |
| 42 | <b>Membership</b> - The Membership Data Store, The Security Controls, Role-Based Security                              |
| 43 | <b>Profiles</b> - Understanding Profiles, Using the SqlProfileProvider   |
| 44 | <b>Component-Based Programming</b> - Uses of Components, Component Jargon, Creating a Component, Properties and State. |
| 45 | <b>Component-Based Programming (Cont.)</b> - Data-Access Components, The ObjectDataSource                              |
| 46 | <b>Caching</b> - Understanding Caching, Output Caching   |

|    |   |
|----|---|
| 47 | Caching (Cont.) - Data Caching, Caching with Dependencies |
| 48 | Caching (Cont.) - Discussion of Examples                  |

**References:**

1. Matthew MacDonald, "Beginning ASP.NET 4.5 in C#", Apress, 2012
2. Stephen Walther, Nate Scott Dudek, "ASP.NET 4.5 Unleashed", Pearson Education Inc., 2013.
3. Adam Freeman, Matthew MacDonald, Mario Szpuszta, "Pro ASP.NET 4.5 in C#", Apress, 2013.
4. Elliotte Rusty Harold & W. Scott Means, "XML In a nutshell", O'Reilly 3<sup>rd</sup> edition, 2005.

**Submitted by:**

Mrs. Rajashree Krishna  
Mrs. Sucharita Shetty  
Miss Ancilla Pinto  
Ms. Jimcymol James

**(Signature of the faculty)**

**Date: 30-08-2015**

**Approved by:**

**(Signature of HOD)**