MAR AUGUSTHINOSE COLLEGE RAMAPURAM

DEPARTMENT OF COMPUTER SCIENCE

Scheme and Syllabus of
ADD ON Course

ASP.NET

BoS

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INTRODUCTION

The Department of Computer Science offers the Add-on course in ASP.NET for the final year BCA, in addition to the curriculum offered by the University.

AIM OF THE PROGRAMME

The Add-on course aims at imparting crucial job skills to the students, thus enabling them to acquire an additional certificate along with their degree certificate. Thus, improving the employability skills of students.

MEDIUM OF INSTRUCTION: English.

DURATION OF THE COURSE

The duration of Add-on course is 100 hours (including the hours of final examination) of which 40 hrs theory and 60 hrs for laboratory/demonstration/experimental activities including project based on ASP.NET.

The Add-on course will be a blend of theory classes / experimental learning / project-based learning / assignments / activity-based learning.

COURSE OBJECTIVES

- To get acquaintance with ASP.NET
- To familiarize major features of ASP.NET
- To develop websites and web applications.

COURSE OUTCOMES (Cos)

- Create websites and web applications using ASP.NET
- Create and consume libraries.
- Development of console application.
- Learn data access mechanism provided by .NET
- Learn Microsoft framework architecture.

EVALUATION

1. The add-on course shall be evaluated through an examination at the end of the course.
2. The duration of examination is one hour.
3. The total marks of the examination shall be 100

Components of Evaluation	Marks
Attendance	10
Project	50
Viva	20
External Examination	20
Total	100

4. A committee consisting of the Head of the Department, the course coordinator and a senior faculty member nominated by the Head of the department shall monitor the evaluation process.
5. Certificates will be issued to those students with 75% attendance, timely submission of assignment and project and a minimum of 40% marks in the qualifying examination.

Grading Pattern

Grades are given **on a 7-point scale** based on the total percentage of marks, *(ISA+ESA)* as given below: -

Percentage of Marks	Grade
95 and above	**S** Outstanding
85 to below 95	**A$^+$** Excellent
75 to below 85	**A** Very Good
65 to below 75	**B$^+$** Good
55 to below 65	**B** Above Average
45 to below 55	**C** Satisfactory
35 to below 45	**D** Pass
below 35	**F** Failure
Absent	**Ab**

SYLLABUS
ASP.NET

Introduction to ASP.NET MVC
   • Brief history of Web Application Development
   • What is wrong with ASP.Net Web Forms
   • Web Development Today
   • Key Benefits of ASP.NET MVC
   • Who should use ASP.NET MVC?

Getting Started with ASP.NET MVC
   • ASP.NET MVC project templates
   • Understanding the structure of an ASP.NET MVC project
   • Naming conventions
   • Creating views
   • Defining controllers
   • Defining a data model

Using the Razor View Engine
   • Razor design goals
   • Implementing a Razor view
   • Razor syntax
   • Accessing model data in Razor views
   • Working with Layouts

- Using Razor Expressions

URL Routing
- Introducing URL Patterns
- Creating and Registering a Simple Route
- Defining Default Values and using Static URL Segments
- Constraining Routes
- Bypassing the Routing System

Controllers and Actions
- Introducing the Controller
- Receiving Input
- Producing Output

View
- Defining a layout/master page
- Creating Custom View Engine
- Defining and using partial views, Sections
- Razor helper method syntax

elper Methods
- Using Built In Form Helper Methods
- Creating Custom Helper Methods
- Creating and using Templated Helper Methods
- Using Model Metadata

State Management
- Using hidden fields
- Session and application state
- Custom model bindings

Additional Techniques
- View scaffold templates
- Model Validation
- Global filters
- Model binding
- Bundling and Display Modes

Using Ajax, jQuery with ASP.NET MVC
- Overview of Ajax and ASP.NET MVC
- Unobtrusive Ajax and the 'this' context
- Using Ajax action links
- Overview of jQuery
- jQuery techniques