

Uka Tarsadia University



BCA

**Basics of Web Development using ASP.NET
(030010501)**

5thSemester

EFFECTIVE FROM JUNE-2013

UKA TARSADIA UNIVERSITY			
BCA(5th Semester) Syllabus, 2014-2015			
Course Code: 0300100501		Course Title: Basics of Web Development using ASP.NET	
Course Credits: 04	Total Hours: 48	[Lectures: 04, Tutorial: 00, Practical: 03]	
Prerequisites:	030010102-Database Management Systems, 030010106-Web Design and Internet Based Application.		
Prerequisites By Topics:	030010102-SQL, 030010106-HTML		
Objectives:	To provide basic understanding of ASP.NET and in-depth knowledge of developing dynamic and rich web application in conjunction with event handling, state management and data access using ASP.NET.		
1	ASP.NET		[07 Hours]
	1.1.	ASP.NET: Introduction	
	1.2.	C#: Overview	
	1.3.	Visual Studio: Introduction	
	1.4.	Web forms: Introduction	
2	Server Controls		[09 Hours]
	2.1.	Stepping Up to Web Controls	
	2.2.	Web Control Classes	
	2.3.	List Controls	
	2.4.	Web Control Events and AutoPostBack	
	2.5.	Validation controls	
	2.6.	Rich Controls	
	2.7.	Error Handling	
3	State Management		[08 Hours]
	3.1.	View State	
	3.2.	Query String	
	3.3.	Cookies	
	3.4.	Session and Application state	
4	Building Web Forms		[08 Hours]
	4.1.	Themes and CSS	
	4.2.	Master Pages	
	4.3.	Website Navigation	
	4.4.	Global.asax	
	4.5.	Web.config	
5	Working with Data		[08 Hours]
	5.1.	Databases: DML and DDL statement.	
	5.2.	Configuring Database	
	5.3.	Running Queries in Visual Studio	
	5.4.	Understanding the Data Provider Model	
	5.5.	Using Direct Data Access	
	5.6.	Using Disconnected Data Access	
6	Data Binding		[08 Hours]
	6.1.	Data Binding: Introduction	
	6.2.	Using Single-Value and Repeated-Value Data Binding	
	6.3.	Working with Data Source Controls r0	
	6.4.	GridView	
	6.5.	DetailsView and FormView	
Course Outcomes:			
C01:	Determine usage and working of ASP.NET with C#.		
C02:	Create ASP.NET pages, react to its events and manipulate its content in code.		
C03:	Explore basic web controls and their class hierarchy.		
C04:	Develop dynamic web pages with the use of various server controls.		

C05:	Design well-integrated and consistent web applications.
C06:	Build web application in place of individual page using state management and its different types of options that are available to manage state in an ASP.NET Web application.
C07:	Access data by using built-in data access tools of ASP.NET.
C08:	Build rich data bound pages.
C09:	Design and develop web utility with rich GUI.

Course Objectives and Course Outcomes Mapping:

Objective	Outcome
Understanding of ASP.NET	C01, C02
In depth knowledge of Event handling	C02, C04, C09
In-depth knowledge of State management	C06
In depth knowledge of Data access	C07,C08, C09
Developing dynamic and rich web application	C02, C03, C04,C05, C09

Course Units and Course Outcomes Mapping:

Unit	Unit Name	Outcome
1	Introduction	C01, C02
2	Server Controls	C03, C04, C09
3	State Management	C06
4	Building Better web forms	C05,C09
5	Working with Data	C07, C09
6	Data Binding	C08, C09

Laboratory:

❖	There shall be at least 15 list of problems. Students shall provide all these problems to get the journal certified.																												
❖	The practical list contain the problem as follows:																												
	<table border="1"> <thead> <tr> <th>Unit No.</th> <th>Minimum No. of problem</th> <th>Required No. of problem to get journal certified</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1</td> <td>1</td> <td>Covering topics: 1.2, 1.4.</td> </tr> <tr> <td>2</td> <td>3</td> <td>3</td> <td>Covering topics: 2.2 to 2.7</td> </tr> <tr> <td>3</td> <td>2</td> <td>2</td> <td>Covering all sub- topics from unit 3.</td> </tr> <tr> <td>4</td> <td>2</td> <td>2</td> <td>Covering topics: 4.1, 4.2, 4.3</td> </tr> <tr> <td>5</td> <td>4</td> <td>4</td> <td>Covering all sub- topics from unit 5.</td> </tr> <tr> <td>6</td> <td>3</td> <td>3</td> <td>Covering all sub- topics from unit 6.</td> </tr> </tbody> </table>	Unit No.	Minimum No. of problem	Required No. of problem to get journal certified	Remarks	1	1	1	Covering topics: 1.2, 1.4.	2	3	3	Covering topics: 2.2 to 2.7	3	2	2	Covering all sub- topics from unit 3.	4	2	2	Covering topics: 4.1, 4.2, 4.3	5	4	4	Covering all sub- topics from unit 5.	6	3	3	Covering all sub- topics from unit 6.
Unit No.	Minimum No. of problem	Required No. of problem to get journal certified	Remarks																										
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5	4	4	Covering all sub- topics from unit 5.																										
6	3	3	Covering all sub- topics from unit 6.																										
❖	Laboratory experiments (i.e. problem definition) shall be announced separately by course teacher before commencement of term.																												
❖	Problem definition shall not be repeated for next two consecutive years.																												
❖	Viva shall be conducted when the practical solution are checked in the journal by the laboratory supervisor and/or subject teacher. Laboratory supervisor and/or subject teacher shall sign in the index/journal only after he/she feels satisfied by the student's work.																												
❖	Journal shall be verified at the end of 5 laboratory experiments by subject teacher.																												
❖	Journal shall not be certified if copied or not written clearly or contains less programs than required.																												
❖	Group of 4 students shall design and develop 1 web utility having data manipulation functionality, for which problem definition shall be provided in advance by course teacher.																												
❖	Web utility problem definition and respective student group will be placed on website after approval of Course Coordinator on website in the 3 rd week of the semester.																												
❖	There shall be 3 hours laboratory associated to one week time frame.																												

Computing Environment:

	A student must have the following computing environment available in laboratory as well as in his/her personal laptop.
❖	Visual Studio 2012

Modes of Transaction (Delivery):

❖	Lecture/Discussion method shall be used.
❖	Demonstration of topic covered in each unit shall be given.
❖	Hands on training shall be given of topic covered in each unit.

Activities/Practicum:

The following activities shall be carried out by the students.	
❖	Develop Web utility to get exposure to web application development.
❖	Group of 8 students shall solve question bank after completion of each unit.
❖	As and when instructed by teacher, student shall perform hands-on activity in class room in their personal laptop.
The following activities shall be carried out by the teacher.	
❖	Demonstration of server controls.
❖	Demonstration of SQLServer, Access and Oracle databases connections with ASP.NET.
❖	Form a group of 8 students to solve question bank completion of each unit.

Text Book:

1.	Matthew MacDonal - Beginning ASP.NET 4.5 in C# - Apress.
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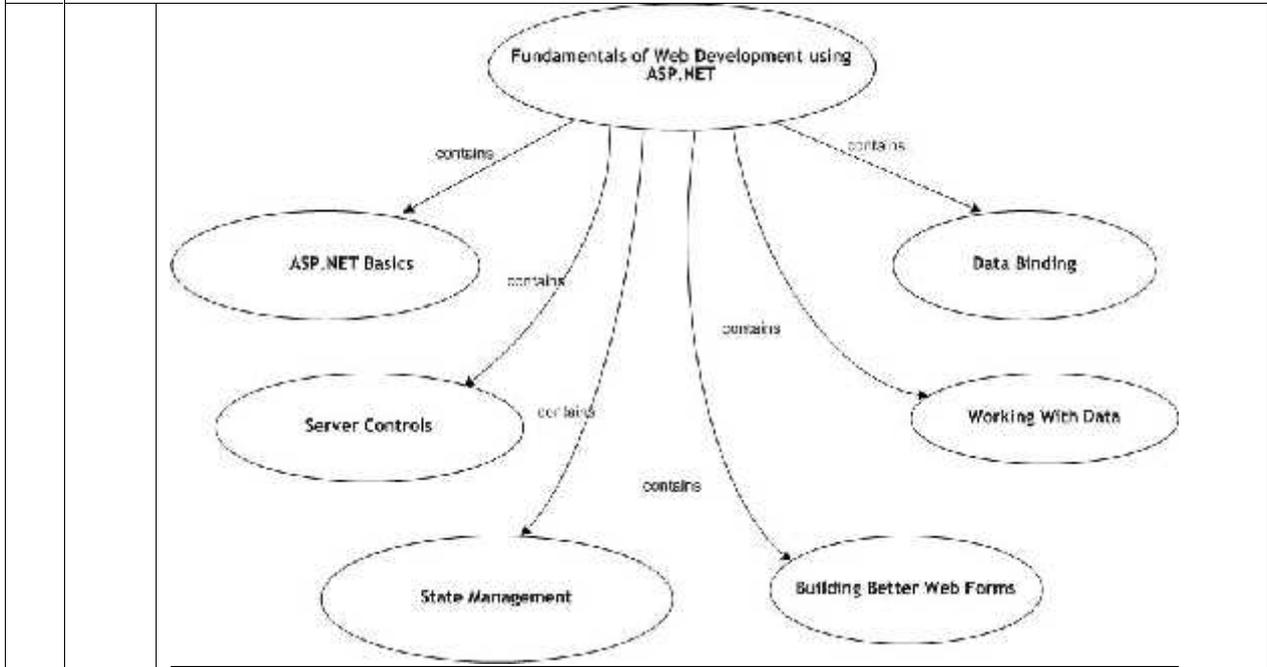
Reference Books:

1.	Matthew MacDonald, Adam Freeman and Mario Szpuszta - Pro ASP.NET 4.5 in C# 2012 - Apress.
2.	Imar Spaanjaars - Beginning ASP.NET 4.5 in C# and VB - Wrox.
3.	Stephen Walther, Kevin Hoffman and Nate Dudek (2010) - ASP.NET 4 Unleashed - SAMS
4.	Matthew MacDonald - Beginning ASP.NET 4 in C# 2010 - Apress.
5.	Anne Boehm, Joel Murach (2011) - murach's ASP.NET 4 web programming with C#2010, Fourth Edition-SPD.

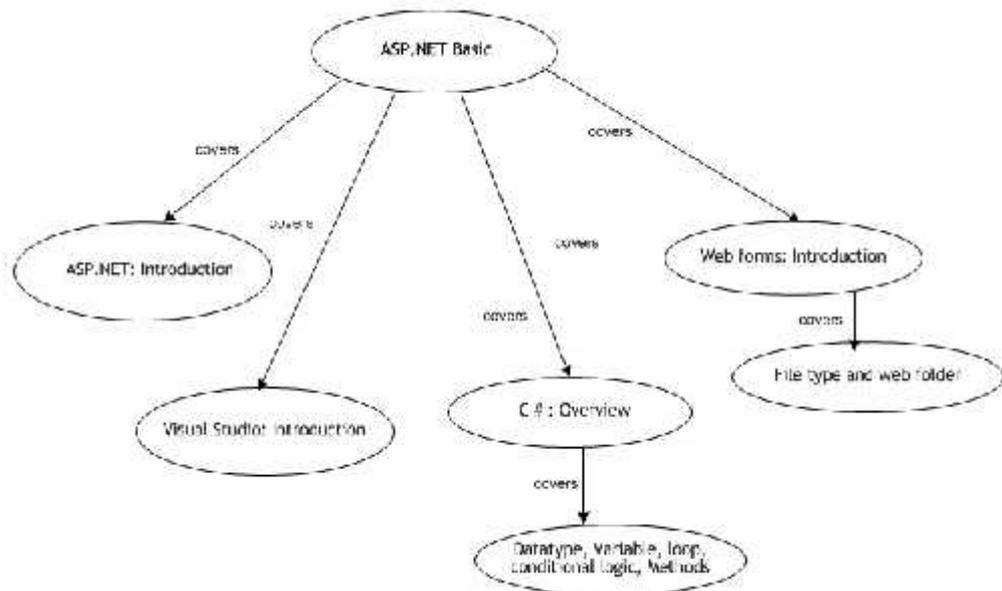
Concept Map:

It is a hierarchical / tree based representation of all topics covered under the course. This gives direct / indirect relationship /association among topics as well as subtopics.

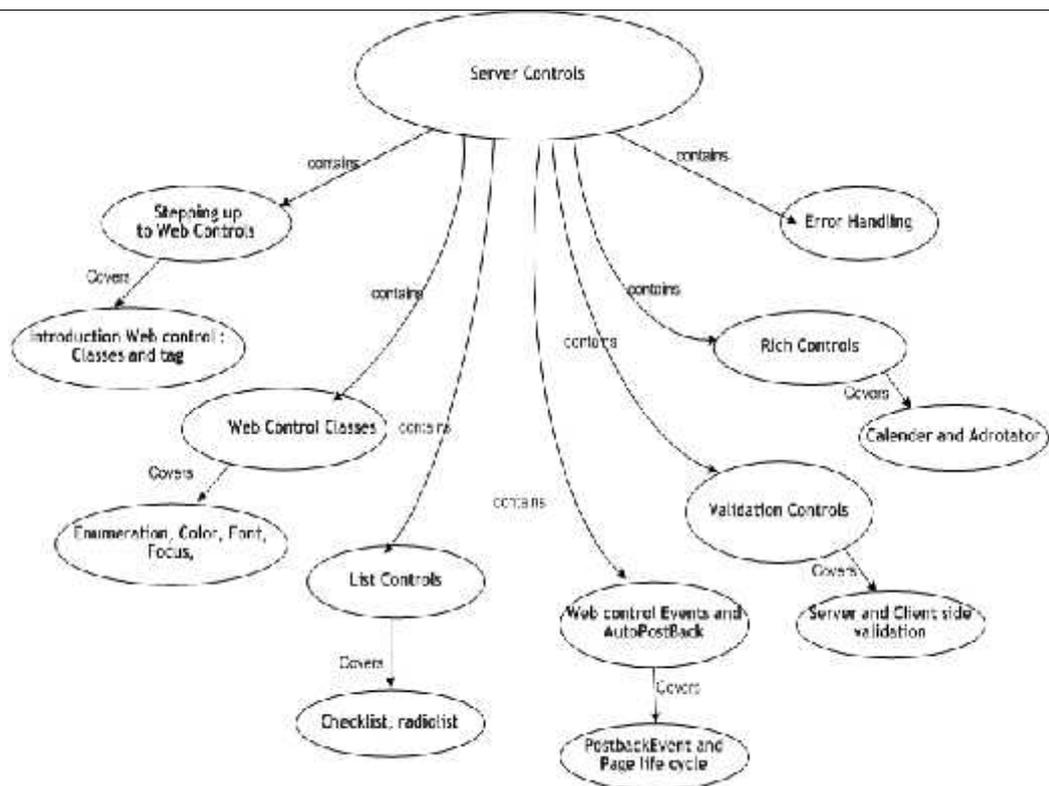
Basics of Web Development using ASP.NET



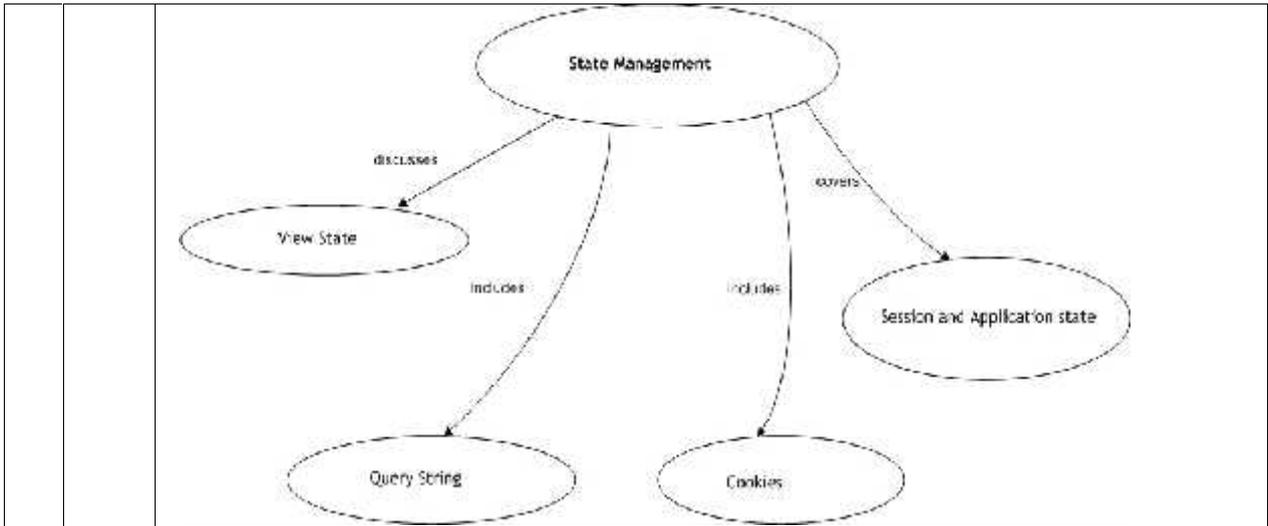
Unit-1: ASP.NET Basics



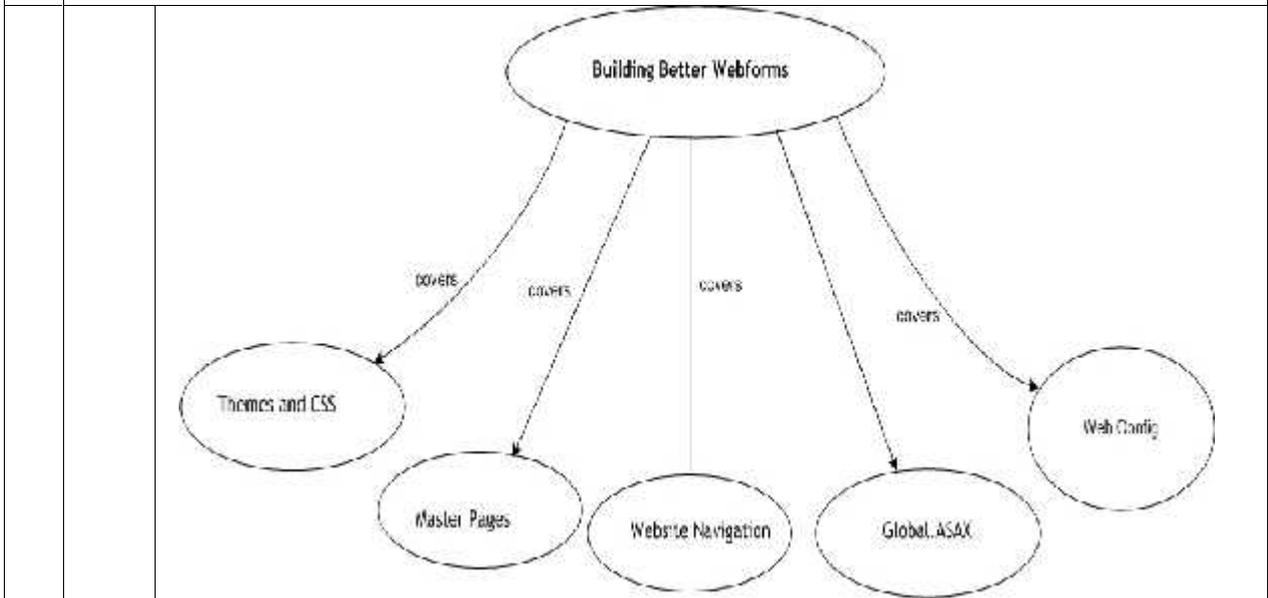
Unit-2: Server Controls



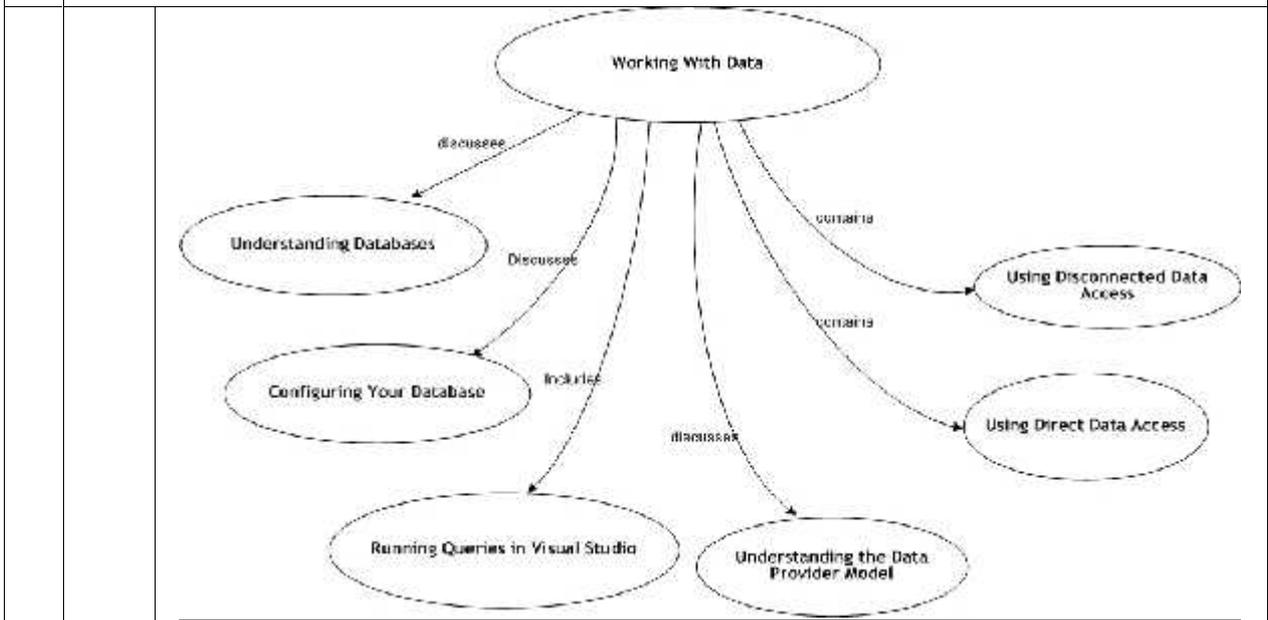
Unit-3: State Management



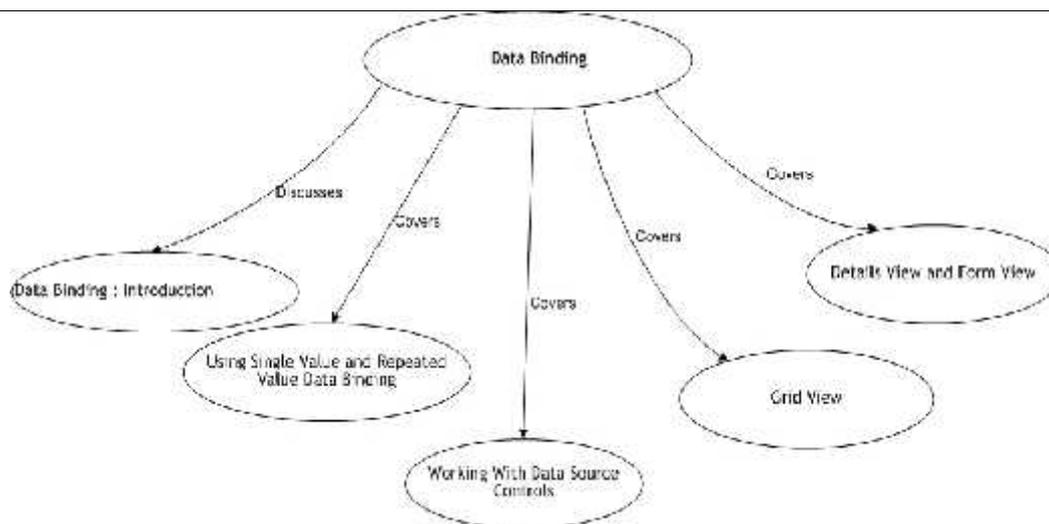
Unit-4: Building Better Webforms



Unit-5: Working with Data



Unit-6: Data Binding



Assessment:

The weightage of CIE and University examination shall be as per the University regulations.

There will be 1 internal examination for theory and 1 practical internal examination.

Student shall have 20% of full marks as bonus marks for 10 days early submission of web-utility.

Student shall have 10% of full marks as Penalty marks for late submission.

Assessment Type	Duration	Occurrence	Marks	marks for final evaluation
Theory Quiz	45 Minutes	4	10	4×3=12
Unit Test	45 Minutes	2	25	4×2=8
Web-utility (Group of 4 students)	1 month	1	25	5×1=5
Theory Internal	3 Hours	1	50	15×1=15
Practical Quiz	1 hour	2	20	2×2=4
Practical Internal	2 Hour	1	50	12×1=12
Practical viva	5 min	2	10	2×2=4

Composition of CIE shall be

Syllabus for each CIE parameter will be covered by the date of the corresponding test.

Assessment Code	Assessment Type	Duration of each	Occurrence
A1	Theory Quiz 1	Unit 1	2 week
A2	Theory Quiz 2	Unit 2	4 week
A3	Theory Quiz 3	Unit 3	8 week
A4	Theory Quiz 4	Unit 6	12 week
A5	Theory Unit Test 1	Unit 1, 2	6 week
A6	Theory Unit Test 2	Unit 4, 5	10 week
A7	Theory Internal	Unit 1-6	12 week
A8	Practical Quiz 1	Unit 2,3	5 week
A9	Practical Quiz 2	Unit 5,6	11 week
A10	Viva 1	Unit 1,2,3	5 week
A11	Viva 2	Unit 4,5,6	11 week
A12	Practical Internal	Unit 2,3,5,6	12 week

❖	<<Add assessment guidelines for each assessment code as per requirement of the Course eg: Team formation, Bonus and Penalty, Submissions etc>>
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Course Assessment with Course Outcomes Mapping

CIE Parameters	Outcomes								
	C01	C02	C03	C04	C05	C06	C07	C08	C09
A1									
A2									
A3									
A4									
A5									
A6									
A7									
A8									
A9									
A10									
A11									
A12									

Question Bank:

Question Bank shall consist of MCQ, Fill in the blanks, True and False, short type questions, long type questions. It shall also consist of practical list, web utility definition and practice questions.

Academic Honesty:

Coursework is assumed to be accomplished individually (otherwise stated). Any portion of submission taken directly from anywhere (like statements in assignment/report etc.) without modification shall be accompanied with the properly formatted reference giving credit to the author and to the source.

UFM:

❖ Any ascertained fact of breaking institute policy will be associated with one or all of the following:
(i) zero marks for the work; (ii) report to the Course coordinator; (iii) report to the Director.

Discussion Group:

Students are welcome to post on the Course Discussion Board available on SRIMCA View Course Webpage. It is responsibility of the concern subject teacher to maintain Discussion Board.

Attendance:

- ❖ Attendance means being present for the entire class session. Those arriving significant late or leaving significantly early without prior permission will be counted as ABSENT for the entire class session.
- ❖ Concern teacher must clearly state his/her attendance policies at the first class meeting.