



# C. U. Shah University, Wadhwan City

## Faculty of Computer Science

Name of Program: Bachelor of Computer Application (BCA)

Semester : IV

W.e.f. June - 2015

### Teaching & Evaluation Scheme

Sr. No	Subject Code	Subject Name	Teaching Hours/Week				Credits	Evaluation Scheme/Semester								
			Th	Tu	Pr	Total		Theory				Practical(Marks)			Total Marks	
								Internal Exam		University Exam		Total	Ext	Int		Total
								Marks	Hrs	Marks	Hrs					
3	4CS04BSQ3	.Net Technology with SQL - Server	4	-	-	4	4	30	1.5	70	3	70	-	-	-	100

**Objectives:** This course contains developing SQL Server database, developing data connection, administering SQL Server and keeping your database performing at their perk.

**Pre-requisites:** No prior knowledge required to develop a system.

**Course Outline:**

Ch. No	Course Contents	Lect. Hours
1	<b>Introduction</b> <ul style="list-style-type: none"> <li>Introduction to SQL Server 2012</li> <li>Data Architecture</li> <li>Installing SQL Server</li> <li>Client Connectivity</li> <li>SQL Server Management and Development Tools</li> </ul>	10
2	<b>Building Database and Working with Data</b> <ul style="list-style-type: none"> <li>Relational Database Design and Creating the Physical Database Schema</li> <li>Data Type, Expression and Scalar Functions.</li> <li>Merging Data with Joins, Sub-queries and CTEs</li> <li>Aggregating, Windowing, and Ranking Data</li> <li>Projecting Data through Views</li> <li>Modifying Data in SQL Server</li> <li>Using XML Data</li> </ul>	14

3	<b>Programming with T-SQL</b> <ul style="list-style-type: none"> <li>• Programming with T-SQL</li> <li>• Developing Stored Procedures</li> <li>• Building User-Defined Functions</li> </ul>	06
4	<b>Enterprise Data Management</b> <ul style="list-style-type: none"> <li>• Backup and Recovery Planning</li> <li>• Maintaining the Database</li> <li>• Transferring Database</li> <li>• Database Snapshots</li> <li>• Log Shipping</li> <li>• Database Mirroring</li> <li>• Replicating Data</li> <li>• Clustering</li> </ul>	16
5	<b>Securing and Monitoring SQL Server</b> <ul style="list-style-type: none"> <li>• Authentication Type in SQL Server</li> <li>• Row-Level Security</li> <li>• Creating Triggers</li> </ul>	6
<b>Total Lecture</b>		52

**Learning Outcomes:**

At the end of this course the students can analyse, design and develop a mini project.

**Books Recommended:**

1. Adam Jorgensen “Microsoft SQL Server 2012 Bible” wiley
2. Kognet “SQL Server 2012 Black Book” Dreamtech.
3. Robert Vieira “Microsoft SQL Server 2012 programming” paper back