



C. U. Shah University, Wadhwan City

Faculty of Computer Science

Name of Program: Bachelor of Science in Information Technology  
(B.Sc.IT)

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			Total Marks
								Sessional Exam		University Exam		Internal		Uni.	
								Marks	Hrs	Marks	Hrs	Pr	TW	Pr	
3	4CS04ISQ3	.Net Technology with SQL -Server	4	-	-	4	4	30	1.5	70	3	-	-	-	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	Chapter Name and Topics	Lect. Hours
1	<b><u>Introduction</u></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><u>Building Database and Working with Data</u></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><u>Programming with T-SQL</u></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><u>Enterprise Data Management</u></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> </ul>	16

	<ul style="list-style-type: none"> <li>• Replicating Data</li> <li>• Clustering</li> </ul>	
5	<b><u>Securing and Monitoring SQL Server</u></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>52</b>

**Learning Outcomes:**

At the end of this course the students can analyze, 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