



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			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	<u>Introduction</u> <ul style="list-style-type: none"> • Introduction to SQL Server 2012 • Data Architecture • Installing SQL Server • Client Connectivity • SQL Server Management and Development Tools 	10
2	<u>Building Database and Working with Data</u> <ul style="list-style-type: none"> • Relational Database Design and Creating the Physical Database Schema • Data Type, Expression and Scalar Functions. • Merging Data with Joins, Sub-queries and CTEs • Aggregating, Windowing, and Ranking Data • Projecting Data through Views • Modifying Data in SQL Server • Using XML Data 	14
3	<u>Programming with T-SQL</u> <ul style="list-style-type: none"> • Programming with T-SQL • Developing Stored Procedures • Building User-Defined Functions 	06
4	<u>Enterprise Data Management</u> <ul style="list-style-type: none"> • Backup and Recovery Planning • Maintaining the Database • Transferring Database • Database Snapshots • Log Shipping 	16

	<ul style="list-style-type: none"> • Database Mirroring • Replicating Data • Clustering 	
5	<u>Securing and Monitoring SQL Server</u> <ul style="list-style-type: none"> • Authentication Type in SQL Server • Row-Level Security • Creating Triggers 	6
		52

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