

Department of Computer Science and Engineering National Institute of Technology Tiruchirappalli

1. Course Outline							
Course Title	Database Management and Systems Lab						
Course Code	CS LR32						
Programme & Department	B.Tech CSE	No. of Credits	3				
Pre-requisites Course Code	CSPC33	Faculty Name	Dr. E. Sivasankar Dr. M. Brindha				
E-mail	<u>sivasankar@nitt.edu</u> <u>brindham@nitt.edu</u>	Telephone No.	0431 - 2503213				
Course Type	Lab course						

2.Course Overview

This course mainly explores the internals of a Database Management Systems and its interface with front end tools for building real world applications.

3. Course Objectives

- To explore the features of a Database Management Systems •
- To interface a database with front end tools. •
- To understand the internals of a database system •

4. Course Outcomes (CO)

- Ability to use databases for building client server applications. •
- Ability to comprehend the internal working of a database system. •
- Ability to design and develop a database using SQL and the mechanism in connecting with a • Web based GUI

5. Course Outcomes (CO)		Aligned Programme Outcome (PO)							
		PO- 2	PO- 3	РО- 4	PO- 5	PO- 6	PO- 7	PO- 8	
Ability to use databases for building client server applications.	S	М	М	М	S	S	В	М	
Ability to comprehend the internal working of a database system.	S	S	М	М	S	S	М	М	
Ability to design and develop a database using SQL and the mechanism in connecting with a Web based GUI	S	S	М	М	S	S	М	М	
S = 0.6 M =	0.4]	B = 0.0)				

6. Course Teaching and Learning Activities							
Sl. No	Title	Туре		Мо			
		L	T	C & T	PP T	VL/V C	DEMO
1.	Working with Basic SQL commands. (DDL,DML,DCL)						\checkmark
2.	Inbuilt functions in RDBMS.						\checkmark
3.	Working with Nested Queries & Join Queries.						\checkmark
4.	Working with set operators & views in SQL Control structures						\checkmark
5.	Working with Procedures and Functions.						
6.	Triggers						
7.	Working with HTML forms , PHP & MySQL						\checkmark
8.	Dynamic & Embedded SQL						
9.	Working with XML						
10.	Database Design and implementation (Mini Project)						\checkmark

7. Course Assessment Methods									
Sl. No.	Mode of Assessment	Week/Date	Duration	Marks					
1	Continuous assessment	Every week	3 hour	25					
2	Cycle Test	7 th week	2 hour	25					
3	Mini Project	10 th week		25					
4	Semester Examination	11 th week	2 hour	25					
			Total	100					

8. Essential Readings (Textbooks, Reference books, Websites, Journals, etc.)

Text Books:

- 1. Abraham Silberschatz, Henry F. Korth, and S. Sudharshan, "Database System Concepts", 6th edition, Tata McGraw Hill, 2011
- 2. Ramez Elmasri and Shamkant B. Navathe, "Fundamentals of Database Systems", 4th edition, Pearson/Addision wesley, 2007

