

SRM INSTITUTE OF SCIENCE & TECHNOLOGY

FACULTY OF ENGINEERING AND TECHNOLOGY SCHOOL OF COMPUTING

DEPARTMENT OF CSE

COURSE PLAN

Course Code: CS2109

Course Title: Data Warehousing and its applications

Semester : II

Course Time: Jan'2018 – Apr 2018

DAY	Hour	Timing
3	3	9.45 AM -10.35 A.M
5	1,2	8.00A.M- 9.40 A.M

Location: SRMIST TechPark Room No.1302

Faculty Details

Dr.S.Prabakaran	TechPark 702A	Monday to Friday	Prabakaran.s@ktr.srmuniv.ac.in
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REFERENCES

1. Reema Theraja "Data Warehousing" by Oxford University Press-2011
2. Prabhu C.S.R., "Data Warehousing Concepts, Techniques, Products and Applications"
PHI Learning Private Limited, Third Edition, 2011.
3. Amitesh Sinha,"Data Warehousing",Thomson Asia pteLtd-2001.

Objectives

1. To understand the fundamental concepts of Data Warehousing Technology.
2. To learn step by step approach to design and build a data Warehouse.
3. To learn case studies to bring out practical aspects of building a data Warehouse.

UNIT Assessment Details

Assessment	Marks
Cycle Test I	20
Cycle Test II	20
Surprise Test	5
Assignment	5

Test Schedule

S.NO	TEST	TOPIC S	DURATION
1	Cycle Test I	Unit 1, Unit 2	2 Hours
2	Cycle Test II	Unit 3 - Unit 5	3 hours

Outcomes

Students who have successfully completed this course will have full understanding of the following concepts

Course outcome	Program outcome
To learn The basics of warehouse. About Data Mart and Uses. About Hardware and Operational Design. About Data Mining Environment.	An ability to understand the basics of data warehouse. To analyze and Design different dimensional tables. To analyze and understand the capability performance of warehouse.

Detailed Session Plan

. UNIT I – INTRODUCTION TO DATA WAREHOUSING				
Introduction to Data Warehousing, Defining features-Architecture of data warehouse- Gathering the business requirements. Planning and project management.				
Session No.	Topics to be Covered	Ref	Teaching Method	Testing Method
1	Importance of Data Warehousing	1	BB	Discussion
2	Defining Features	1	BB	Test
3,4	Architecture of data Warehouse	1	BB& PPT	Quiz
5,6	Gathering of Business Requirement	1	PPT	Quiz
7,8	Planning and Project Management	1	PPT	Quiz

UNIT II – DATA WAREHOUSE SCHEMA

Data Warehouse Schema-Dimensional Modeling-ETL Process-Testing, Growth and Maintenance-OLAP in the Data Warehousing

9,10	Data Warehouse Schema	1	BB	Discussion
11,12	Dimensional Modeling	1	PPT	Test
13	ETL Process	1	PPT	Discuaaion
14	Testing purpose, organizing screen elements	1	BB	Quiz
15	Growth and Maintenance	1	BB	Quiz
16	OLAP in Data Warehousing	1	BB	Quiz

UNIT –III BUILDING A DATA WAREHOUSING

Building a data warehouse-Introduction- Critical Success Factors-Requirement Analysis-Planning for the data Warehouse-The data Warehouse design stage-Building and implementing data marts-Building data warehouses-Backup and Recovery-Establish the data quality framework-Operating the Warehouse-Recipe for a successful warehouse-Data warehouse pitfalls.

17	Building a data Warehouse	1	BB	Quiz
18	Introduction, Critical Success Factors	1	BB	Quiz
19	Requirement Analysis	1	BB	Discussion
20	Planning for the data Warehouse	1	BB	Discussion
21	The data Warehouse design stage	1	BB	Quiz
22	Building and implementing data marts	1	BB	Discussion
23	Building data Warehouses	1	BB	Test
24	Backup and Recovery	1	BB	Quiz
25	Establish the data quality framework, Operating the Warehouse	1	BB	Quiz
26	Recipe for successful warehouse-Data warehouse pitfalls	1	BB	Discussion

UNIT - IV

Data Mining basics-Moving into data mining-Introduction to Web Mining, Text Mining Temporal Data Mining-Issues in Data Mining.

27,28	Data Mining basics	1,3	BB	Discussion
29,30	Moving into data mining	1,3	BB	Quiz
31	Introduction to Web Mining	1,3	BB	Quiz
32	Text Mining Temporal Data Mining	1,3	BB	Assignment
33,34	Issues in Data Mining	1,3	BB	Assignment

UNIT-V DATA MINING BASICS

Data Warehousing in the Tamil Nadu Government-Data Warehouse for the Ministry of commerce-Data Warehouse for the government of Andhra Pradesh, Data Warehousing in Hewlett -Packard. Data Warehousing in Levi Strauss-Data Warehousing in the World Bank-HARBOR,A Highly available Data Warehouse-A typical Business data Warehouse for a Trading Company –Customer data warehouse of the world’s first and largest online Bank in the United Kingdom-A German super market EDEKA’s Data Warehouse

35	Data Warehousing in the Tamil Nadu Government	2	BB	Quiz
36,37	Data Warehouse for the Ministry of commerce	2	BB	Quiz
38	Data Warehouse for the government of Andhra Pradesh.	2	BB	Quiz
39	Data Warehousing in Hewlett-Packard	2	BB	Quiz
40	Data Warehousing in Levi Strauss	2	BB	Quiz
41	Data Warehousing in the World Bank-HARBOR ,A Highly available Data Warehouse	2,1	BB	Quiz Assignment
42	A typical Business data Warehouse for a Trading Company	2	BB	Discussion
43,44	Customer data warehouse of the world’s first and largest online Bank in the United Kingdom.	2	BB	Quiz
45	A German super market EDEKA’s Data Warehouse	2	BB	Discussion

Prepared By Dr.S.Prabakaran

Approved By