

<b>Course Code</b>	CSE 606		
<b>Course Name</b>	Data Warehouse		
<b>Credits</b>	4		
<b>Course Offered to</b>	UG/PG		
<b>Course Description</b>	<p>The international market for Business Intelligence and Data warehouse is increasing rapidly and is currently estimated to be in hundreds of billion of US dollars. A number of Indian companies, even in NCR of Delhi, are already carrying out projects in the area. Yet, there is an acute shortage of skilled human resources in the subject and the course attempts to plug this gap.</p> <p>Students will be taken over the development life cycle of a data warehouse. The application environment in which a data warehouse is embedded shall be brought out so that the value of the new technology is clearly discernible.</p>		

<b>Pre-requisites</b>		
Pre-requisite (Mandatory)	Pre-requisite (Desirable)	Pre-requisite(other)
Relational DBMS		

\*Please insert more rows if required

<b>Post Conditions*(For suggestions on verbs please refer the second sheet)</b>			
<b>CO1</b>	<b>CO2</b>	<b>CO3</b>	<b>CO4</b>

Relate data warehousing to decision making  
Elicit required information for a decision  
Design and implement the data warehouse  
Obtain Business Intelligence from data

<b>Weekly Lecture Plan</b>			
<b>Week Number</b>	<b>Lecture Topic</b>	<b>COs Met</b>	<b>Assignment/Labs/Tutorial</b>
1	Overview of Databases, Data Warehouse Definition, Decisions and their types, Decision making process	CO1	Build and load relational data base
2	Influence and Augmented Influence diagrams Perspectives of DW: Basic Dimension Modeling	CO1	Build and load relational data base
3	Decisional and DW Information Models Conversion to Dimension Model Computer Assisted Tools	CO1, CO2	Build Decisional Tool
4	Databases vs. Data Warehouses Star Schema Design	CO2, CO3	Build Decisional Tool
5	The DW Process, ETL	CO1	Build Decisional Tool
6	Fact Design, transaction, periodic snapshots, evolving snapshots, granularity Multiple and type specific stars	CO3	Build Decisional Tool
7	Evaluation of Decisional Tools of students	CO3	DW Project
8	Dimension Design: Types, properties and design considerations	CO3	DW Project: Submit Influence Diagram
9	Dimension Design: Bridges, Attribute and Recursive Hierarchies, Transactions, snapshots	CO3	Dw Project: Submit Information Systems

10	Operational Issues in Star Schema Design: NULLS, Special rows in Dimensions, snowflake schema issues	CO3	DW Project: Submit Fact Design
11	Data Warehouse Consolidation Agile DW development	CO3	DW project: Submit Dimension c
12	Business Intelligence OLAP operations Mining Visualization	CO4	Complete Project
13	Project Evaluation	CO3, CO4	
<b>Assessment Plan</b>			
Type of Evaluation		% Contribution in Grade	
End-sem exam			25
Mid-sem Exam			25
Quix exam			15
Decisional Tool construction			15
DW constrcution			20
*Please insert more row for other type of Evaluation			
<b>Resource Material</b>			
<b>Type</b>	<b>Title</b>		
Textbook			

#### Reference Material

Kimball R. and Ross M., The Data Warehouse Tool kit, Wiley  
 Inmon , Imhoff, and Sousa, The Corporate Information Factory, Wiley  
 Imhoff, Galemno, Geiger, Mastering Data Warehouse Design Wiley  
 P. Ponniah, Data Warehouse Fundamentals, Wiley India  
 Adamson C., Star Schema, Tata McGraw Hill  
 Inmon, Building the Data warehouse, Wiley  
 Prakash and Prakash, Data Warehouse Requirements Engineering, Springer  
 Marakos G.M., Decision Support Systems, PHI

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