

DBI202

INTRODUCTION



OBJECTIVES

- Understand the **database concepts** and **database management system**
- Understand the **relation model** of data and Algebraic Query Language
- Understand data **normalization** and apply normalization techniques in database design
- Be able to model an application's data requirements using conceptual modeling tools like **ER diagrams** and **design database schemas** based on the conceptual model.

OBJECTIVES

- Be proficient in **structure query language** including Data Definition Language(**DDL**) and Data Manipulation Language(**DML**)
- Understand **PL/SQL** (Procedural Language/Structured Query Language) concepts and manipulate with **View, Cursors, Stored Procedures, Functions, Database Triggers**
- Apply the Indexes in database design and query optimization

CONTENT

Chapter 1. The Worlds of Database Systems

Chapter 2. The Relational Model of Data

Chapter 3. Design Theory for Relational Databases

Chapter 4. High-Level Database Models

Chapter 5. Self study

Chapter 6. The Database Language (SQL)

Chapter 7. Practical Issues of database application

Chapter 8. Constraints and T-SQL Programming

MATERIALS

1. Text Book:

**First Course in Database Systems - Jeffrey D. Ullman -
Prentice Hall - Third edition**

2. Slides, labs, assignment: LMS

ASSESSMENT

5 assessment(s)

Category	Type	Part	Weight	Completion Criteria	Duration	CLO	Question Type	No Question
Assignment	on-going	1	20.0%	>0	28 slots			N/A
Lab	on-going	5	10.0%	>0	90'			N/A
Practical Exam	on-going	1	30.0%	>0	90			N/A
Progress test	on-going	2	10.0%	>0	30'		Multiple choices; Marked by Computer or a suitable format	20
Final exam	final exam	1	30.0%	4	60			50

ASSESSMENT

1) On-going Assessment

- Progress tests (2): 10%
- Labs (5): 10%
- Assignment (1): 20%
- Practical exam (1): 30%

2) Final exam (60'): 30%

3) Final Result: 100%

Completion Criteria:

- 1) Every on-going assessment component >0
- 2) Final Exam Score ≥ 4 & Final Result ≥ 5