

# TOROS ÜNİVERSİTESİ

Faculty Of Engineering  
Electrical And Electronics Engineering (English)

## Course Information

DATABASES					
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
CSE309	Fall	2	2	3	5

<b>Prerequisites and co-requisites</b>	
<b>Language of instruction</b>	English
<b>Type</b>	Elective
<b>Level of Course</b>	Bachelor's
<b>Lecturer</b>	Asst. Prof. Mehmet Ali AKTAŞ
<b>Mode of Delivery</b>	Face to Face
<b>Suggested Subject</b>	
<b>Professional practise ( internship )</b>	None
<b>Objectives of the Course</b>	This course is designed to give students a solid background in their databases, focusing on relational database management systems.
<b>Contents of the Course</b>	In this course, in this Data modeling, database design theory, data description and processing languages, storage and indexing techniques, query processing and optimization, concurrency control and recovery, database programming interfaces are covered.

## Learning Outcomes of Course

#	Learning Outcomes
1	Analyzing structured query language, database objects and data types.
2	Analyzing structural query language commands
3	Opening a table in structured query language, Analyzing change and delete commands
4	Analyzing administrative functions in structured query language.
5	Analyzing programming logic in a client / server-enabled database software.
6	Preparing an interface (form) in a client / server-enabled database
7	Preparing reports in a client / server-enabled database

## Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Introduction to databases, basic concepts	Lecture
2	Relational data model	Lecture
3	Relational algebra	Lecture
4	Database system design in E / R model	Lecture
5	Data system design theory	Lecture
6	SQL: Basic concepts	Lecture
7	Midterm	
8	SQL: Subqueries, aggregation	Lecture
9	SQL: Null and logical operations, table join, one-to-many join	Lecture

10	SQL: Modifying Tables, Constraints, Triggers	Lecture
11	SQL: Views, indexes	Lecture
12	More database design theory	Lecture
13	Providing data integrity, data mining	Lecture
14		
15		
16	Final Exam	

## Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	Databases books, Internet resources		

## Method of Assessment

#	Weight	Work Type	Work Title
1	40%	Mid-Term Exam	Mid-Term Exam
2	60%	Final Exam	Final Exam

## Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	Analyzing structured query language, database objects and data types.	1	1,2
2	Analyzing structural query language commands	1	1,2
3	Opening a table in structured query language, Analyzing change and delete commands	1	1,2
4	Analyzing administrative functions in structured query language.	1	1,2
5	Analyzing programming logic in a client / server-enabled database software.	1	1,2
6	Preparing an interface (form) in a client / server-enabled database	1	1,2
7	Preparing reports in a client / server-enabled database	1	1,2

PS. The numbers, which are shown in the column Method of Assessment, presents the methods shown in the previous table, titled as Method of Assessment.

## Work Load Details

#	Type of Work	Quantity	Time (Hour)	Work Load
1	Course Duration	14	4	56
2	Course Duration Except Class (Preliminary Study, Enhancement)	14	3	42
3	Presentation and Seminar Preparation	0	0	0
4	Web Research, Library and Archival Work	0	0	0
5	Document/Information Listing	0	0	0
6	Workshop	0	0	0
7	Preparation for Midterm Exam	1	8	8
8	Midterm Exam	1	2	2
9	Quiz	0	0	0
10	Homework	0	0	0
11	Midterm Project	0	0	0
12	Midterm Exercise	0	0	0
13	Final Project	0	0	0

14	Final Exercise	0	0	0
15	Preparation for Final Exam	1	15	15
16	Final Exam	1	2	2
				<b>125</b>