

What is system for?

The system is for **managing university data**, such as students, courses, instructors, departments, and enrollments. It helps track who is enrolled in what, which instructor teaches which course, and manage grades and schedules.

Who are the users?

1. Admin – Manages the whole system (adds users, departments, courses).
2. Instructor – Views and manages courses and student grades.
3. Student – Registers for courses, views grades and schedules

Key Entities (Tables) and Their Attributes (Columns)

1. Student

ID, Name, Email, Phone, DateOfBirth, Department_ID

2. Instructor

ID, Name, Email, Title, Department_ID

3. Department

ID, Name, Faculty

4. Course

ID, Name, CreditHours, Department_ID

5. Enrollment :

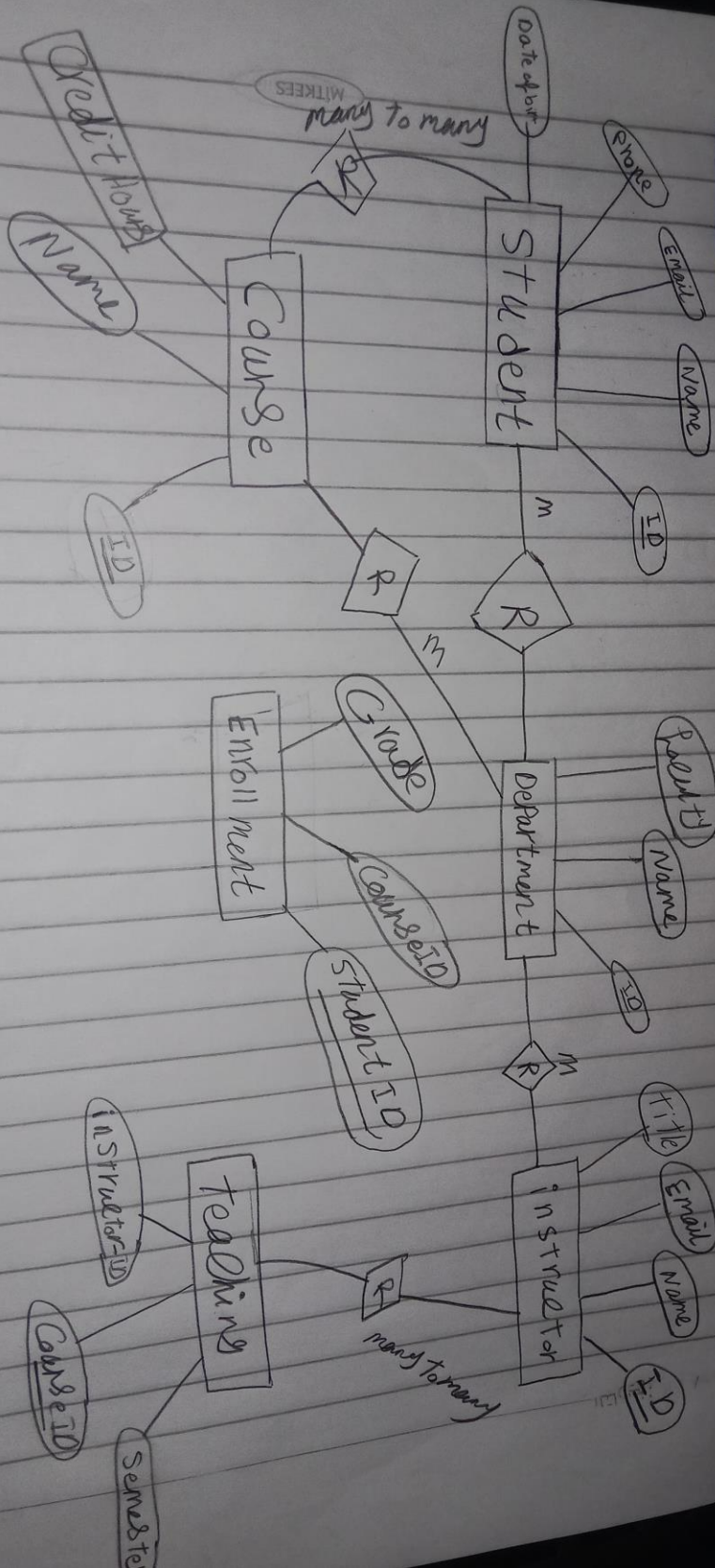
Student_ID, Course_ID, Grade

6. Teaching

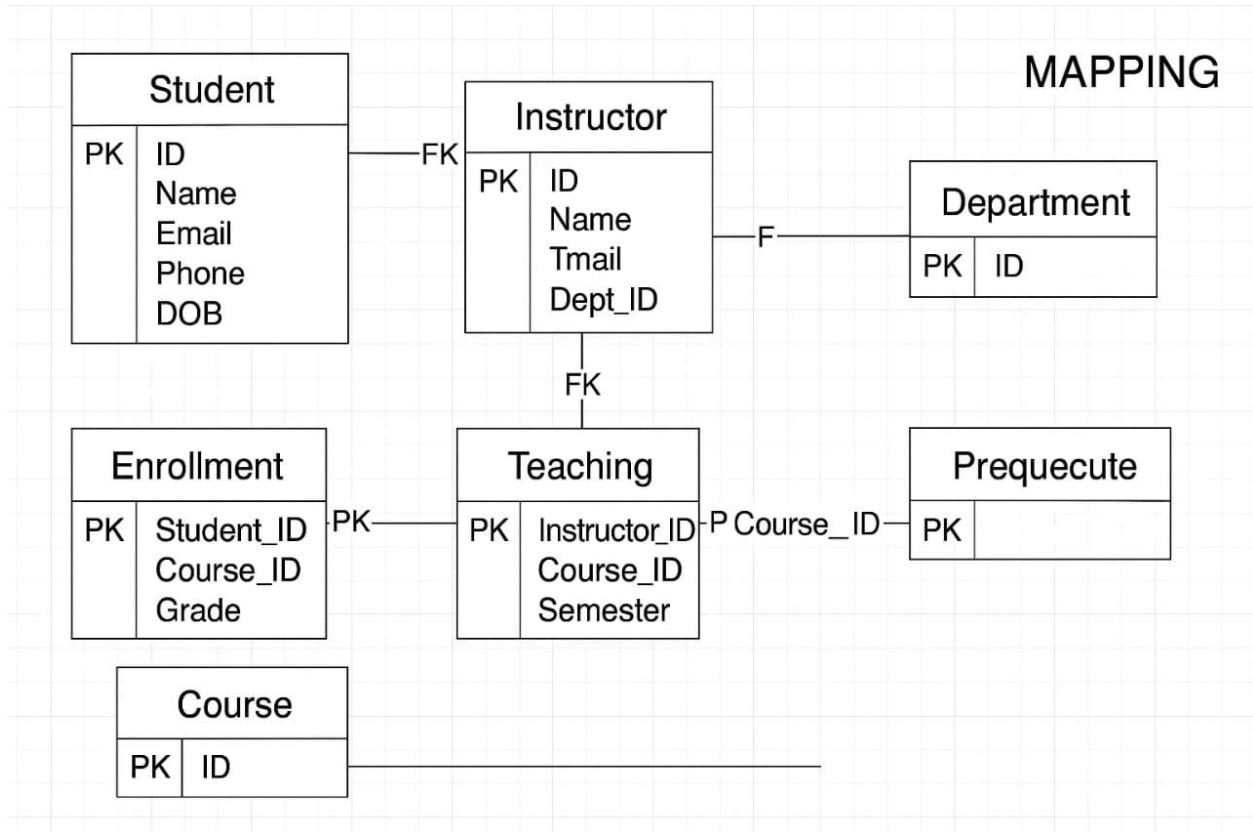
Instructor_ID, Course_ID, Semester

ERD:

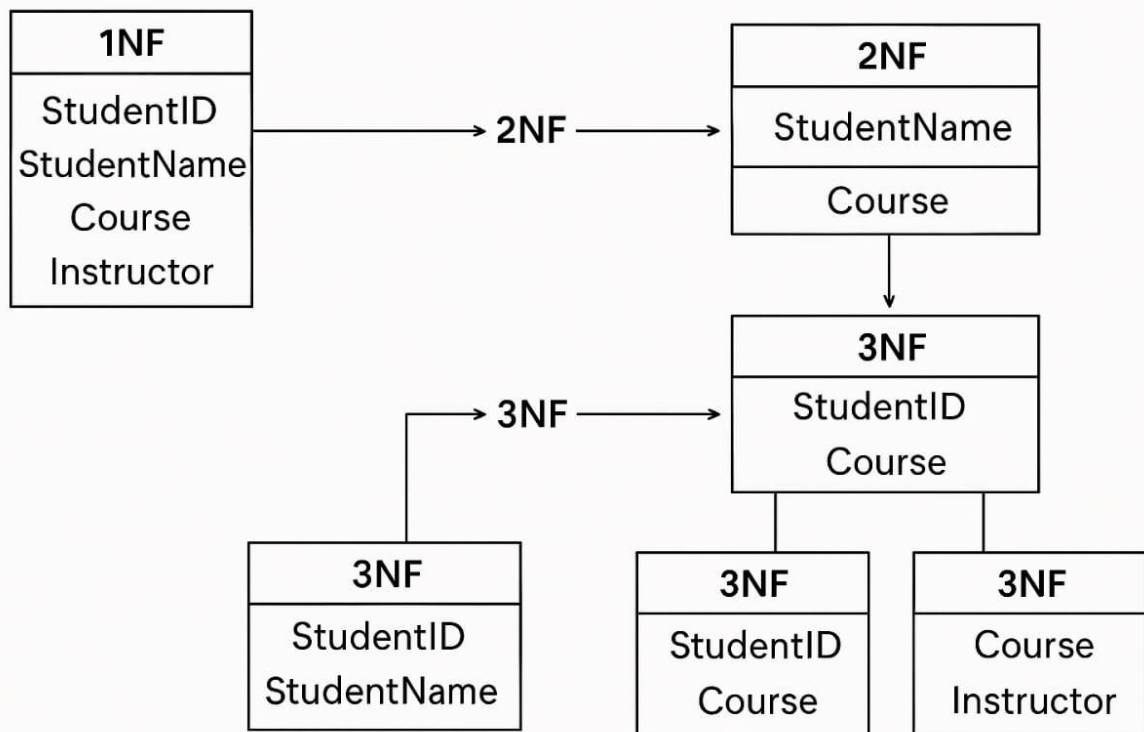
ERD



Mapping:



Normalization:



Output

Name	Department
Ahmed Ali	Cs
Sarah Ahmed	Cs
Khaled Mohamed	Electrical engineering

Course	Semester
data base	Spring 2025
software engineering	Spring 2025

Student

ID	Name	Email	Phone
101	Ahmed Ali	ahmed@gmail.com	01112345678
102	Sarah Ahmed	sara@gmail.com	01234567891
103	Khaled Mohamed	khaled@gmail.com	01098765432

Teaching

Instructor_ID	Course_ID	Semester
201	301	Spring 2025
201	302	Spring 2025
202	303	Spring 2025

Name	Total_Students
Business	0
Cs	2
Electrical engineering	1

Student_ID	Average_Grade
101	91.5
102	90

Instructor_ID	Total_Courses
201	2
202	1

Name	CreditHours
data base	3
web	3
software engineering	4