Implementing a University Database System

What is Schema?

Schema defines the structure of a database. It tells how many tables are there, what are their attributes, and how they are related. It includes table names, column names(attributes), datatypes, and keys.

Syntax of Schema:

Table Name (column1 : datatype, column2: datatype, column3: datatype, ……., columnN: datype)

Attributes per Table:

* **Students Table**  
  Attributes: StudentID, StudentName, Major
* **Courses Table**  
  Attributes: CourseID, CourseName, Credits
* **Enrollments Table**  
  Attributes: StudentID, CourseID, EnrollmentDate
* **Instructors Table**  
  Attributes: InstructorID, InstructorName, Phone
* **Course\_Instructors Table**  
  Attributes: CourseID, InstructorID

Schema for University Database:

Students (StudentID:string, StudentName:string, Major:string)

Courses (CourseID:string, CourseName:string, Credits:integer)

Enrollments (StudentID:string, CourseID:string, EnrollmentDate:date)

Instructors (InstructorID:integer, InstructorName:string, Phone:integer)

Course\_Instructors (CourseID:string, InstructorID:integer)