

EXPLANATION OF ER DIAGRAM:

Entity Name	Attributes	Primary	Foreign Key	Relationship	Entity
		Key			Туре
T4_Department	>Name >Location	Name		T4_ Faculty (One to many) T4_ Faculty (One to one) T4_Course (One to many)	Strong entity becaus e each depart ment name is unique.
T4_Faculty	>Faculty_ID >DepartmentNa me >HOD >FirstName >LastName >Phone	Faculty_ ID	>DepartmentName >HOD	T4_Department (Many to one) T4_Department (One to one) T4_Course_offe red (One to many) T4_Instructor_o n_Research (one to many)	Strong entity becaus e each instruct or id is unique.
T4_Course_offe red	>Course_ID >DepartmentNa me >InstructorID >Duration >Name	Course_ ID	>DepartmentName >InstructorID	T4_Department (Many to one) T4_Faculty (Many to one) T4_Course_Reg _Student (one to many)	Strong entity becaus e each course id is unique.
T4_Student	>ID >FirstName >LastName >Phone >date_of_birth >gender	ID		T4_Course_Reg _Student (One to many)	Strong entity becaus e each student id is unique.

T4_Course_Reg _Student	>CourseID >StudentID	>Course ID >Studen tID	>CourseID >StudentID	T4_Course_offe red (Many to one) T4_Student (Many to one)	Weak entity becaus e each student can have multipl e Courses And vice
T4_Instructor_o n_Research	>ProjectID >Faculty_ID >Date_from >Date_to	>Project ID >Faculty _ID	>ProjectID >Faculty_ID	T4_Faculty (Many to one) T4_Research_Pr ojects (Many to one)	versa Weak entity becaus e each Faculty can have multipl e Projects And vice versa
T4_Research_Pr ojects	>Project_ID >Area_of_Resea rch >Project_name	Project_ ID		T4_Instructor_o n_Research (One to many)	Strong entity becaus e each project id is unique.