Schema (logical design)

Address (Area name, City name, Block name, Street name)

Nationality (Nationality)

Employee (Employee id, Full Arabic name, Full English name, National id, sex (M/F), Social status(S/M/D), Salary, Birth place, Date of birth, Religion, Health status, Number of family members, Phone, Telephone, Email, Area name, City name, Block name, Street name, Employment Date)

- nationality REFERENCES nationality (nationality)
- (area_name,city_name,block_name,street_name)
 REFERENCES Address(area_name,city_name,block_name,street_name)

Building (Building code (one char), Building description)

Floor (Floor number (2Digits), Building code, Floor description)

building_code REFERENCES building(building_code)

Room (Room number, Floor number, Building code, Capacity (No. people))

(building_code,floor_number) REFERENCES floor(building_code,floor_number)

Department (Department id, Department name, Room number, Floor number, Building code)

(building_code,floor_number,room_number) REFERENCES room (building_code,floor_number,room_number)

Majors Department (Majors department id, Majors department name, Room number, Floor number, Building code)

(building_code,floor_number,room_number) REFERENCES room (building_code,floor_number,room_number)

Major (Major id, Major name, Majors department id)

majors_department_id REFERENCES majors_department (majors_department_id)

Course (Course id, Course name, Credit (No of hours), Course level(semester), Description, Majors department id)

majors_department_id REFERENCES Majors_Department (majors_department_id)

Pre-required courses (Course id, Pre-required course id (course id))

- course_id REFERENCES course(course_id)
- pre_required_course_id REFERENCES course(course_id)

Teacher (teacher id (Employment id), Teaching start year, Teaching start semester (1/2/3), Teaching start date, Teaching end date, Majors department id, Salary)

- teacher_id REFERENCES employee(employee_id)
- majors_department_id REFERENCES majors_department (majors_department_id)

Manager (Manager id (Employment id), Managing start year, Managing start semester (1/2/3), Managing start date, Managing end date, Salary, Manager grade, Managed major's department id, Manager department id (accept one null)

- manager_id REFERENCES employee(employee_id)
- majors_department_id REFERENCES majors_department (majors_department_id)
- department_id REFERENCES department (department_id)

Security (<u>Security id (Employment id)</u>, <u>Security start year</u>, <u>Security start semester (1/2/3)</u>, Security start date, Security end date, Salary, <u>Department id</u>)

- security_id REFERENCES employee(employee_id)
- department_id REFERENCES department (department_id)

Secretary (Secretary id (Employment id), Secretary start year, Secretary start semester (1/2/3), Secretary Start date, Secretary end date, Salary, Majors department id, Department id)

- secretary_id REFERENCES employee(employee_id)
- majors_department_id REFERENCES majors_department (majors_department_id)
- department_id REFERENCES department (department_id)

Item (Item id, Item name, Item description)

Room_items (Item id, Room number, Floor number, Building code, Quantity)

- item id REFERENCES item (item id)
- (room_number, floor_number, building_code)
 REFERENCES room (room_number, floor_number, building_code)

Study_plan (Plan number, Major id)

major_id REFERENCES major (major_id)

Study_plan_courses (plan number, Major id, Course id, Year, Semester (1/2/3))

- course_id REFERENCES course (course_id)
- (plan_number, major_id) REFERENCES study_plan (plan_number, major_id)

Student (Student id, Full Arabic name, Full English name, Nationality, National id, sex (M/F), Social status(S/M/D), Guardian name, Guardian national id, Guardian relation, Birth place, Date of birth, Religion, Health status, Mother name, Mother job, Mother job description, Father job description, Parents status(S/M/D), Number of family members family university students, Social affairs, Phone, Telephone, Emergency phone, Email, Tawjihi GPA(%), Tawjihi field(S/L), Area name, Block name, Street name, Major id, Balance)

- nationality REFERENCES nationality (nationality)
- major_id REFERENCES major(major_id)
- (area_name,city_name,block_name,street_name)
 REFERENCES address(area_name,city_name,block_name,street_name)

Academic Advice (Teacher id, Year, Semester, Student id)

- student_id REFERENCES student (student_id)
- (teacher_id ,year ,semester) REFERENCES teacher(teacher_id ,teacher_start_year , teacher_start_semester)

Section (Section number, Course id, Year, Semester(S/M/D), Teacher id)

- course_id REFERENCES course (course_id)
- (teacher_id ,year ,semester) REFERENCES teacher(teacher_id ,teacher_start_year , teacher_start_semester)

Enroll (Student id, Course id, Section number, Year, Semester, Middle year grade (from 40), Final exam grade (from 60))

- student_id REFERENCES student (student_id)
- (section_number, course_id, year, semester) REFERENCES section (section_number, course_id, year, semester)

Section Rooms (Section number, Course id, Year, Semester, Day, Room number, Floor number, Building code, Start Time, End Time)

- (building_code,floor_number,room_number) REFERENCES room (building_code,floor_number,room_number)
- (section_number, course_id, year, semester) REFERENCES section (section_number, course_id, year, semester)