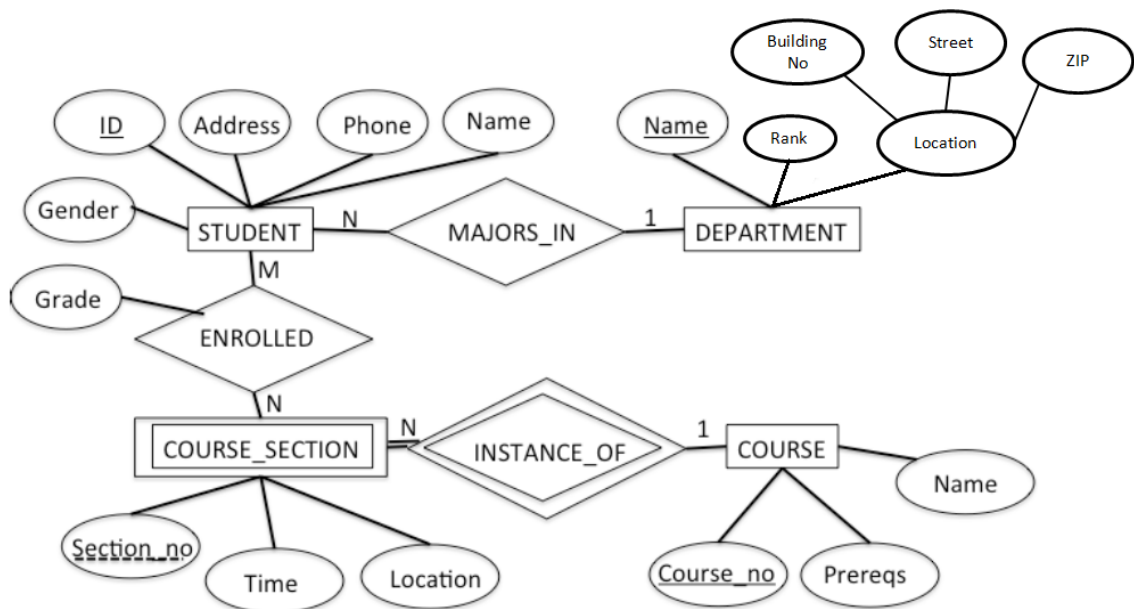


CS 34800 - PSO Solutions - Week 3

1. Consider the following set of requirements for a UNIVERSITY database, draw an ER diagram for the database and then convert it into the relational model:
 - (a) The university keeps track of each student's name, student ID number (unique), current address, phone number, gender, and major department.
 - (b) Each department is described by a unique name, rank, and has a location; the location is composed of street name, building number and ZIP code.
 - (c) Each course has a unique course number, a course name and a set of prerequisites.
 - (d) There could be multiple sections for a course, distinguished by the section number. Each course section also has a time and location.
 - (e) A student can be enrolled in multiple course sections (or no sections at all) and a course section can have multiple students enrolled in it (or no students).
 - (f) A student can major in at most one department, but a department may or not have students majoring in it.

ER diagram



2. Change your design to allow each department to have multiple locations.

ER diagram

