

CS432/532 Homework 1

Draw your ER diagram using Visio, Powerpoint or draw.io

To do this homework, use the Requirements Document on MyCourses.

1. [75%] Design an ER diagram for the Student Registration System based on the provided Requirements Document. Remember to indicate the key for each entity set and the connectivity of each relationship; 2% will be deducted every time a key is not underlined. Use (min, max) format to indicate connectivity. (Note: Many constraints cannot be represented in the ER diagram and they will be represented at later stages of the design. Question 3 of this homework asks you to list these constraints.)
2. [10%] Discuss whether it is a good idea to create a super entity set for Students and Faculty in the ER diagram for the Student Registration System or not.
3. [15%] Identify and discuss constraints in the Requirements Document for the Student Registration System that cannot be expressed using the ER model discussed in class. First list the constraints not represented in the ER diagram for each entity set separately. Then list the constraints involving multiple entity sets.