

- A. The Jupiter College Database Project (JCDP) involves the design and implementation of a database for Jupiter College. The JCDP shall first be designed using an ER diagram, which will then be mapped onto the relational data model. The JCDP shall be implemented into a MySQL database application using this model. The database must then be tested against the given requirements, and deployed with a user's guide.
- B. Constraints:
- Student ID is unique
 - Faculty id is unique
 - Faculty department is a valid department name
 - Faculty title is one of: instructor, lecturer, senior lecturer, assistant professor, associate professor, professor
 - Faculty status is one of: full-time, part-time
 - Faculty type is one of: tenure-track, visiting, adjunct
 - Department name is unique
 - Department chair is the faculty ID of a full-time, tenure-track faculty member
 - Each full-time faculty member belongs to only one department
 - Each part-time faculty member may belong to one or more departments
 - Each department offers one or more degree programs
 - Degree program name is unique
 - Degree program acronym is a 4-letter code
 - Degree program acronym is also referred to as major
 - Course acronym and number combined are unique
 - Course may have one or more prerequisites
 - Each prerequisite is a set of one or more courses
 - A student must satisfy one or more prerequisite courses prior to enrolling in a course offering
 - A semester is one of: fall, winter, spring, summer
 - Courses are only offered during semesters
 - Course offering section number and academic date of offering combined are unique
 - Students must pursue one or more degree programs
 - A grade is one of: A, B, C, D, F, I, W, AU, NG
 - A student may repeat a course no more than 3 times
 - The highest grade received in a course is used when considering whether degree program requirements or prerequisites have been satisfied
 - Students may add or drop any course offering from their semester enrollments
 - Students may add or drop their declared major(s)
 - A student is awarded a degree upon completing the requirements of a degree program