**BUSINESS RULES:**

1. IEB sends accreditation manual with PLO’s defined to the departments. Each department then gathers information from the IEB manual/ website.
2. Each of the Degree Programs under which a student gets admitted belongs to a department. A Program has exactly one department. Each program consists of many courses and a course belongs to exactly one program.
3. Under the OBE model for each program there will be a set of program learning outcomes (PLO). A PLO has a PLOId, PLO name and description.
4. A Department has many students but a student must have exactly one department.Each of the departments has a name and a phone. Each department has a particular faculty as a head. Department offers many courses but a course is offered by exactly one department.
5. To evaluate the students in each course, courses have a set of course outcomes(COs) that are mapped with the PLOs of the degree program. A CO must be mapped with exactly one PLO. A PLO may be mapped with one or more COs. The COs are measured through different assessment techniques(e.g., quiz, mid, final, project, presentation). A CO has a COId, CO name and description.
6. An assessment is mapped with exactly one CO and a CO is mapped with one or more assessments. Each of the assessments are identified uniquely using an AssessmentID. Assessment has an assessment name (eg.Mid Q1, Mid Q2, Final Q1, Final Q3 etc), CourseID, COID, Section Number and the total marks that is achievable in that particular assessment. An assessment contains exactly one section. A section must have one or more assessments.
7. Faculties evaluate the COs achieved and mapped PLOs achieved by each student in a course.An Evaluation is done by one or more faculties and a faculty must do atleast one evaluation. There is a date of evaluations done by a faculty. Each of the evaluations are identified uniquely using a StudentID and an AssessmentID. Evaluation also has the total marks obtained by a student in an assessment. An assessment has one or more evaluation but an evaluation is done for exactly one assessment. A student belongs to one or more evaluation but an evaluation belongs to exactly one student.
8. Accounts are maintained for two kinds of users of the system: students and faculties.An account has an ID, name (first name, last name), birth date, gender, email address, contact number, address.A student must log in to Iras for registration of course.
9. Faculties have academic qualifications (i.e. highest degree certificate so far), area/s of specialization, job position (e.g. Lecturer, Professor), salary. A student must have an enroll date and the total course completed. A faculty has exactly one department and a department has multiple faculties.
10. A Course have a CourseID that uniquely identifies the course. Course also has a CourseTitle. A course can be a prerequisite of one or more courses and a course may have one or more prerequisites. A course may be mapped with many other courses and multiple courses may be mapped with exactly one course.
11. Each course must be taught by atleast one faculty. A Faculty may teach multiple courses. Every faculty has a teaching schedule i.e. teaching days and teaching time for a course. There may be multiple sections for each course in a particular semester but a particular section teaches exactly one course.
12. A section has a section number; however, different courses may have sections with the same number assigned to them. Hence, a semester and CourseID are required along with the section number to identify a section. A section also has a schedule and a maximum capacity. A student may enroll in one or more sections and a section must have atleast one student. There is a registration date for the courses taken by a student in a semester. If a course has no student enrolled, then all of it's sections along with the course are removed.