**Explanation for entities, relationships and designing purpose:**

1. **STUDENTDETAILS, REGULARSTUDENT and PHDSTUDENT**: The roles of a regular student at the uni is different than the roles of a phd student. A phd student can be supervised and is not enrolled in main course. The opposite is true for regular students. Therefore, STUDENTDETAILS table stores the information of all students. The other two tables are dependent on this table. Their primary keys are foreign keys taken from the STUDENTDETAILS’ primary key.
2. **ALLCOURSE, SHORTCOURSE, MAINCOURSE**: The purpose of centralising all types of courses in the ALLCOURSE was mainly because the relationship between academic staff and courses. They teach all of the courses. So, if the courses are not centralised then it becomes necessary to create multiple table for “teaches” relationship. So, SHORTCOURSE and MAINCOURSE are made totally dependent on the ALLCOURSE table.

The bachelors, honours and masters divisions are solved by enum types rather than creating more tables.

1. **REGULARSTUDENT and SHORTCOURSE** : Because there are constraints such that a regular student can be enrolled in 3 shortcourses at most but they are optional, three attributes were created and linked to the shortcourses. These relationships are same types of relationships and so three one to many relationship lines are drawn in the ER Diagram (because the rules are limited to follow the conventions of this unit only).
2. **STAFF, ACADEMICSTAFF and TUTOR** : The TUTOR table and the ACADEMICSTAFF table are dependent on the STAFF table. As a phd student is not necessarily needed to be a staff, it is not linked to the staff table. Furthermore, in the scenario, the phd students have to fill the STAFF form separately. Same rule is maintained in the database requiring the entry of phd student as a staff to be separate.

Because Lecturers are part of the academic staff and academic staff is linked to staff, an extra table for LECTURER was not created. Instead, The tutor table is linked to the staff table and the Casual Staffs, Lecturers and PhD students are meant to be included in the TUTOR table if they are tutoring.

The positions allowed for all the tables linked to STAFF table and the STAFF table itself, are solved by the use of enum types.

Because this model has quite a few one to one relationships, it is worth mentioning that one to one relationship guideline provided in this unit was followed and foreign key constraints are mostly used in these places while writing the sql file. Foreign key constraint naming convention used - “fk\_current table name\_referred table name\_attribute name” .

