**DB Design for NEW COE**

**DB Design for Department:**

1. Dept Id : Auto Increment, Primary Key, Not Null
2. Department Code : BE (Varchar 25)
3. Department Name : Bachelor of Engineering (Varchar 255)
4. Created At : Time of creation (datetime)
5. Created By : Admin / Users (Foreign Key with users table)
6. Updated At : Time of Update (datetime)
7. Updated By : Admin / User (Foreign Key with users table)

**Course DB Design :**

1. Course Id : Auto Increment, Primary Key, Not Null
2. Course Code : U10 (Varchar 25)
3. Course Name : BECSE (Varchar 45)
4. Graduation : Varchar(45)
5. Created Time : Datetime
6. Updated Time : Datetime
7. Created By : Admin / User (Foreign Key with users table)
8. Updated By : Admin / User (Foreign Key with users table)

**Batch Db Design**

1. Batch Id : Auto ,Primary, Not Null
2. Batch Course Id : Foreign Key from Courses
3. Batch Name : Varchar (10)
4. Created : Datetime
5. Updated : Datetime
6. Created By : Admin / User (Foreign Key with users table)
7. Updated By : Admin / User (Foreign Key with users table)

**Mapping Table for Batch & Course & Department**

1. Mapping id : Auto, Primary, Not null
2. Department Id : Foreign Key from Departments
3. Course Id : Foreign Key from Courses
4. Batch Id : Foreign Key from Batches
5. Section Name : Varchar(10)
6. Status : Active / Inactive INT OR VARCHAR
7. Created : Datetime
8. Updated : Datetime
9. Created By : Admin / User (Foreign Key with users table)
10. Updated By : Admin / User (Foreign Key with users table)
11. Group Unique of (Dept id,Course Id,Batch Id,Section Name)

**Subject DB Design :**

1. Subject Id : Auto,Not Null,Primary
2. Reg Year : Varchar(10)
3. Mapping Id : Foreign key from Mapping table Course & Department & Batche Table
4. Semester : INT
5. Subject Code : Varchar(45)
6. Subject Name : Varchar(255)
7. Paper No : INT
8. Paper Type : varchar(255)
9. Subject Type : varchar(255)
10. Cia Minimum : INT
11. Cia Maximum : INT
12. Ese Minimum : INT
13. Ese Maximum : INT
14. Total Minimum : INT
15. End Semester Marks : INT
16. Status : INT
17. Credit Points : INT
18. Created Time : Datetime
19. Created By : Admin / User (Foreign Key with users table)
20. Update Time : Datetime
21. Updated By : Admin / User (Foreign Key with users table)
22. **Group unique of mapping id,subject code,semester**