BSE2101; Introduction to Database Systems (4CU)

Course objectives: By the end of the course, students should be able to:(i)Develop a sound data model for an application domain; (ii) Realize this model as a relational database schema; (iii) Implement this schema as a Postgre SQL application; (iv) Build an HTML/forms based (PHP) interface to a relational database; (v) Aanalyse the costs/benefits of data structures and algorithms used in the implementation of relational database management systems; (vi )Understand the theory and techniques behind managing concurrent access to databases and recovery from errors; and (v) Appreciate the limitations of existing relational database technology and have an over view of upcoming database technologies.

Course content: An introduction to SQL, Advanced SQL, Query-By-Example (QBE), Visual Basic and other fourth generation languages will be given. This subject aims to explore the theory behind relational database systems, the practice of developing database applications, and the technologies used to implement database management systems. This course will also cover introduction to Micro soft Access.

References

•Database Systems: The Complete Book, by Hector Garcia-Molina, Jeffrey D. Ullman, and

Jennifer Widom. Prentice Hall. 2002.

•FundamentalsofDatabaseSystems,byRamezElmasriandShamkantB.Navathe.4thEdition, ISBN0-321-12226-7