COURSE DETAILS

Course Code: F21DF
Full Course Title: Databases and Information Systems
SCQF Level: 11
SCAF Credits: 15
Available as Elective: No

DELIVERY LEVEL

Undergraduate: Yes  Postgraduate Taught: Yes  Postgraduate Research: No

COURSE AIMS

- To equip students with a detailed and critical understanding of the processes and methodologies required for the analysis, specification and design of database systems and information systems, and the inter-relationship between such systems.
- To provide the students with practical experience in designing, building and using databases, and critical awareness in the development and deployment of databases and information systems within organisations.

LEARNING OUTCOMES – SUBJECT MASTERY

- Extensive, detailed and critical understanding of the nature, scope and boundaries of data models and database management systems, in relational and XML paradigms.
- Both theoretical and practical knowledge of methodologies for specification and design of databases.
- Skill in the use of software tools and languages for database design, development and management.
- A critical understanding of and practical skills in interfacing DBMS and programs.
- A critical understanding of emerging database technologies.

LEARNING OUTCOMES – PERSONAL ABILITIES

- Taking responsibility for own work, taking responsibility in the development of resources, critical reflection on development process and work undertaken by self.
- Critical analysis, evaluation and synthesis of current database and information system technologies leading to original and creative response to design task.
- Effective communication in electronic and written report form.

SYLLABUS

Introduction to Information Systems;
Domain and Types of Information Systems;
Databases and Database Management System Concepts;
Data Modelling & Database Design;
Relational Data Model
SQL Language and Constructs;
Database connectivity
Emerging database technologies: e.g. XML, Data Warehousing, alternative database models
Prerequisites: Undergraduate experience of database technologies, at least at application level. Numerate background

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