F21DF Databases and Information Systems

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

| Course Relationships | N/A |

<table>
<thead>
<tr>
<th>Location and Assessment Methods</th>
<th>Edi</th>
<th>SBC</th>
<th>Ork</th>
<th>Dub</th>
<th>Malay</th>
<th>IDL</th>
<th>COLL</th>
<th>ALP</th>
<th>OTH</th>
<th>Method</th>
<th>Weight</th>
<th>Exam Mins</th>
<th>Type</th>
<th>Diet</th>
<th>Synoptic Course</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Y</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Examination</td>
<td>70</td>
<td>120</td>
<td>Assessment</td>
<td>Semester 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td></td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Coursework</td>
<td>30</td>
<td></td>
<td>Assessment</td>
<td>Semester 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td></td>
<td></td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Examination</td>
<td>100</td>
<td>120</td>
<td>Reassessment</td>
<td>Semester 3</td>
<td></td>
</tr>
</tbody>
</table>