F21IF Information Systems Methodologies

COURSE DETAILS
Course Code: F21IF
Full Course Title: Information Systems Methodologies
SCQF Level: 11
SCAF Credits: 15
Available as Elective: No

DELIVERY LEVEL
Undergraduate: No  Postgraduate Taught: Yes  Postgraduate Research: No
Additional Information:

COURSE AIMS
This module explores a range of issues concerning advanced contemporary methodological approaches to information systems development. The aim is to enable students to develop critical faculties and techniques in relation to the selection and application of these methodological approaches.

LEARNING OUTCOMES – SUBJECT MASTERY
This module develops further the knowledge and skills students should have already gained in the Information Systems and Software Engineering modules. It will enable students to:

• Determine alternative approached to gathering requirements and systems development
• Compare methodologies for use in organisations using a standardised Framework
• Rationalise systems development to prepare a more relevant system

LEARNING OUTCOMES – PERSONAL ABILITIES

• Critical reading and reviewing works in the field
• Evaluating Methods under an agreed Framework
• Structuring an argument (PDP)
• Presentations of mini lectures to show understanding of the topic area (PDP)
• Use of VLE as a means of learning, contributing and discussing

SYLLABUS
There is a growing requirement in industry for engineers and scientists with good and appropriate analytical skills when considering the development and evolution of systems, in particular information systems. This module develops further the knowledge and skills students should have already gained in the Information Systems and Software Engineering modules in topics such as:

• General Systems Principles;
• Systems Classification and Taxonomy Models;
• Information Systems Life Cycle and Functions;
F21IF Information Systems Methodologies

- Paradigmatic Approach to Methodology Classification;
- Framework for Analysis and Comparison of Methodologies (NIMSAD & Fitzgerald's);
- Process Improvement Models;

### COURSE RELATIONSHIPS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Level</th>
<th>Title</th>
<th>School</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>F29PD</td>
<td>9</td>
<td>Professional Development</td>
<td>School of Math and Comp Sci.</td>
<td>Pre-Requisite</td>
</tr>
<tr>
<td>F29SO</td>
<td>9</td>
<td>Software Engineering</td>
<td>School of Math and Comp Sci.</td>
<td>Pre-Requisite</td>
</tr>
</tbody>
</table>

### LOCATION AND ASSESSMENT METHODS

<table>
<thead>
<tr>
<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>Y</td>
<td></td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Coursework</td>
<td>40</td>
<td>120</td>
<td>Assessment</td>
<td>Semester 1</td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td></td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Examination</td>
<td>60</td>
<td>120</td>
<td>Assessment</td>
<td>Semester 1</td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td></td>
<td>Y</td>
<td></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>