F29SO Software Engineering

COURSE DETAILS
Course Code: F29SO
Full Course Title: Software Engineering
SCQF Level: 9
SCAF Credits: 15
Available as Elective: No

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

Additional Information:

COURSE AIMS
- To equip students with knowledge and skills for the effective management of a group project which encompasses the software development lifecycle
- To enable students to reinforce their knowledge and skills gained in software processes, internet technology, database management and interaction design
- To build students understanding, knowledge and skills in teamwork, software development in groups, and project planning.
- To enable students to develop a broader understanding of the interrelationship of development life-cycles and a critical capability in the selection of tools and methods to support project planning, systems analysis, requirements capture, and system specification.

LEARNING OUTCOMES – SUBJECT MASTERY
- A broad and integrated understanding and knowledge of the various development and programming paradigms, software development lifecycles, teamwork and project planning
- Detailed theoretical and practical knowledge of the use of methodologies for requirements capture, iterative design, resource capture and management, deployment and evaluation of systems, at a basic level
- Practice in the use of object-oriented programming, databases, scripting and markup languages applied to a substantial project

LEARNING OUTCOMES – PERSONAL ABILITIES
- Identification, critical analysis and evaluation of the development of a software system (PDP)
- Practice in working in a group, negotiating requirements, reaching a consensus, taking responsibility for own work, taking part in a presentation, and working with others to a deadline (PDP)
- Appreciation of the interrelationship of knowledge domains

SYLLABUS
- Review and extension of the components studied in earlier years which contribute to the group project
- Software project management including working in groups, project planning and costing, risk assessment
- Use of Industry-level Standards for software development and documentation, covering aspects such as change control and requirements traceability
- Further study of software development tools, especially version control
## COURSE RELATIONSHIPS

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<th>Title</th>
<th>School</th>
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<td>Database Management Systems</td>
<td>School of Math and Comp Sci.</td>
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<td>F28SD</td>
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<td>Software Design</td>
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<td>F29PD</td>
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<td>Professional Development</td>
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<td>User-Centred Experimental Design</td>
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## LOCATION AND ASSESSMENT METHODS

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