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

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>School</th>
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<td>Database Management Systems</td>
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<td>F28SD</td>
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<td>User-Centred Experimental Design</td>
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### LOCATION AND ASSESSMENT METHODS

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