CS3360  Software Project Management

Level:  F  
Credits:  10  
Teaching Period:  1  
Module Tutor:  Dr R Calinescu

Aims
This module aims to provide students with an understanding of the underlying principles of Software Project Management, and of established techniques for the management of software projects. By introducing students to key concepts and techniques related to project planning, scheduling and resourcing, and to requirements, risk and quality management, the module lays the foundation for their future contribution to the principled management of software projects, both tactically and at the more strategic level of an organisation’s software development process.

Content
Concepts and terminology: management aims; software process; tactical & strategic issues
Metrics for software process management: principles and techniques of measurement, estimation, experimentation and data analysis
Project management: planning; scheduling; resourcing; monitoring and earned value analysis; control; productivity
Risk management: risk analysis, assessment, control, resolution
Quality management: characterisation of quality; quality control, assurance and management systems; quality models and metrics

Teaching
Formal lectures: 24 hours (2 hours/week)
Tutorial classes: 6 hours (1 hour/fortnight)

Assessment
Written exam: 100% (2 hours, January)

Feedback will be provided in several ways:
• via discussion during tutorial sessions;
• via verbal feedback provided in context during the tutorial exercises;
• via discussion during lectures;
• via informal one-on-one discussion with students during office-hour sessions;
• via exam marks.

Module outcomes
What the student should gain from successful completion of the module

<table>
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<tr>
<th>Knowledge and Understanding</th>
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<td>Main principles of, and techniques underpinning, Software Project Management, especially in relation to planning, scheduling, resourcing, monitoring and control. Key concepts and activities related to project management for information systems, including tactical and strategic aspects, and the management of requirements, risks and quality.</td>
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<tr>
<td>Lectures</td>
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<td>Exam</td>
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<th>Intellectual Skills</th>
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<td>Ability to analyse particular areas of software project and process management, and to use the results of software project monitoring to devise and refine project plans, schedules and resourcing. Ability to apply a wide range of appropriate quantitative-based techniques to analyse new as well as ongoing software projects, and to interpret the results thereof.</td>
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<tr>
<td>Lectures</td>
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<td>Exam</td>
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<th>Professional/Subject-Specific Skills</th>
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<td>Ability to select appropriate project management techniques and tools, and to contribute to the planning, resourcing, monitoring and control of software projects. Ability to analyse ongoing software projects, and to propose solutions related to risk and quality management for software projects.</td>
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<tr>
<td>Lectures</td>
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<td>Exam</td>
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Transferable Skills

Dr A J Beaumont

Last update  22/10/2010
Learning resources

Other study requirements to take this module
CS2020 Software Engineering OR CS2190 Software Lifecycle