Liverpool John Moores University

Title:	SOFTWARE ENGINEERING DEVELOPMENT WORKSHOP
Status:	Definitive
Code:	**7000ESE** (120626)
Version Start Date:	01-08-2016

Owning School/Faculty: Computer Science
Teaching School/Faculty: Computer Science

Team	Leader
David England	Y

Academic Level:	FHEQ7	**Credit Value:**	20	**Total Delivered Hours:**	36
Total Learning Hours:	200	**Private Study:**	164		

Delivery Options
Course typically offered: Semester 2

Component	Contact Hours
Lecture	1
Workshop	35

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Artefacts	AS1	Group assessment - Development of a Software system.	100	

Aims

To provide the students with an opportunity to practice the principles of structured development using a set of appropriate software engineering tools, techniques and methods, and consolidate learning from proceeding modules.

Learning Outcomes

After completing the module the student should be able to:

1   Plan an appropriate high-level development strategy.
2   Develop the necessary quality control and testing procedures.
3   Generate the appropriate design techniques to produce a suitable design.
4   Implement the design using an appropriate development environment.
5   Critically reflect on the development process including professional and ethical issues.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

System development   1   2   3   4   5

Outline Syllabus

The students will work in a problem-based learning mode where they will be given an outline brief to development and deliver a medium-sized application. They will be required to work independently in teams to develop the requirements specification, design documents, implementation and testing plans of the application. They will be required to manage their development schedule and make predictions about the expected effort. They will also work within the BCS Code of Conduct for professional developers and reflect on this in their documentation. Workshop sessions will be scheduled by the students following an introductory lecture on problem based learning and Software Engineering
System Identification and its wider context. Requirements gathering and analysis, Design Specification, Implementation Plan and Testing and Release planning .

Learning Activities

Self-directed study and use of appropriate tool(s), research into Software Engineering and related disciplines.

Notes

The module uses a mini project done in groups to consolidate earlier learning. The project will follow all stages of the software development life cycle to produce a prototype application. The students will also examine the implications of the BCS Code of Practice and the Principles of Data Protection in their work. The following are examples of the type of exercises used:
Project plan for embedded software for a Vending Machine.
Exercises using a CASE tool for project implementation and control.
The Design and implementation of an e-commerce software catalogue.
Individual marks are determined by peer assessment.