

Module Guide 2016/17

School of Computer Science

Module Title: *Software Engineering Project*

Module code: 6COM1056

Semester: *B*

Number of Credits: 30

Module Leader: *Paul Morris*

Introduction to the module

The Software Engineering project gives students a chance to extend and deepen their knowledge of Computer Science with an emphasis in a Software Engineering related topic, or significant content requiring a research and exploration of the Software Engineering field of study, and to apply it in an unfamiliar context. The project should be chosen to fit in with the student's interest, prior experience and/or personal objectives.

Students are required to undertake a substantial piece of practical work, which they plan and manage themselves under the guidance of a project supervisor and with the support of preparatory work undertaken on key issues for a project.

Students are expected to report on their progress at a number of meetings during the project and are required to deliver the results of their work in a final report, at the conclusion of the study.

1. Module Tutor(s) (The Module Leader is the first-named person):

Name	Room	Tel	Email	Preferred Mode of Contact
Paul Morris	C257	4371	P.M.Morris@herts.ac.uk	email
Ian Bradford	C259	4356	I.Bradford@herts.ac.uk	email

2. Module Aims

The aims of this module are to enable students to:

- increase the depth of their knowledge and understanding of Software Engineering aspects of Computer Science
- practice and enhance the skills they have gained through participation in an academic study programme in Computer Science and with reference to modules grounded in the area of Software Engineering, or as a result of a period of relevant work experience
- apply their knowledge and skills to a specialized task in an unfamiliar context
- design a programme of independent practical work, manage it to completion, and evaluate the quality of their work against an appropriate set of criteria

3. Module Learning Outcomes

a. Learning Outcomes: Knowledge and Understanding:

Successful students will typically:

1. understand a coherent set of Computer Science principles and techniques appropriate to the solution of a selected practical problem set in the specialist area of Software Engineering, or including a significant task set requiring study in that area
2. appreciate when and how general Computer Science principles and techniques as well as specific Software Engineering principles and techniques should be applied

b. Learning Outcomes: Skills and Attributes:

Successful students will typically be able to:

3. select and resolve a substantial practical problem in which knowledge of Software Engineering specific principles and techniques must be applied
4. plan and conduct a programme of practical work independently of close supervision
5. select and apply an appropriate set of criteria against which their own project work and the work of others may be evaluated
6. document, report on, and critically evaluate, their work in a manner appropriate to the needs of a specified readership

4. Class Contact Arrangements

For each teaching week identified on the plan each student will receive:

- One individual session with his/her Project Tutor
- In some weeks there will also be Project Lectures (see below)

Activity	Day	Time	Tutor	Room
Lecture	Friday	12:00-13:00	PM	LB154
Supervision Meeting	As arranged	As arranged	Assigned Supervisor	As arranged

5. Module Delivery Plan

Semester B			
No	Date (Mon)	Lecture Topic	Checkpoints/Deadlines
25	Jan 16 th		
26	Jan 23 rd		
27	Jan 30 th		
28	Feb 6 th		
29	Feb 15 th		
30	Feb 20 th		
31	Feb 27 th	Writing your Report	
32	Mar 6 th		Interim Report
33	Mar 13 th		
34	Mar 20 st		
35	Mar 27 th	Preparing for the Demonstration	
36	Apr 3 rd	EASTER	
36	Apr 10 th	EASTER	
37	April 17 th		
38	Apr 25 th		Final Report - Demos
39	May 1 st	Exams	Demos
40	May 8 th	Exams	
41	May 15 th	Exams	
42	May 22 nd	Exams	Project Orals

6. Assessment Regime

This module is assessed according to the following weightings:

- Coursework (C): 100%

Whilst there is a requirement to submit evidence of progress at an interim point during the course of the project, the student's work will be assessed principally through the quality of the final submission, the most important element of which is the final report.

Under normal circumstances, each student will be expected to produce:

- An interim progress report.
- A final submission, including
 - A report to the examiners on the conduct and results of the project, setting out how the project was managed, the lessons the student learned as a result of undertaking it, and any proposals the student might have for further work in the same vein.
 - Evidence of the students' achievements, such as:
 - a suite of programs (in source code and running form) and any associated documentation;
 - a set of requirements analysis and/or formal specification or structured design documents;

- details of a programme of experiments the student has undertaken and their results
- o A demonstration of any-computer based system (s)he produces, or a presentation of the results of an investigative project.

A student **may** also be required to attend an oral examination relating to his or her project.

Assessment Details								Learning outcomes assessed					
#	Title/Topic	Type of Submission	% of total	Set Date	Submission Date	Target Date for Return	Pass individually	1	2	3	4	5	6
1	Interim Report	Online	10	Jan 18 th	Mar 9 th	Next Meeting	No				■		■
2	Final Report	Manual + Online + Demo	90	Jan 18 st	Report: Apr 25 th Demo: Apr 26 th – May 3 rd		Yes	■	■	■	■	■	■
†	Oral Exam			†	May 22 nd – May 25 th †			■	■	■	■	■	■

† Date subject to confirmation. Not all students will be called for orals.

7. Type of Feedback

The module provides numerous feedback opportunities.

The Semester A module Project Planning (6COM1031) is compulsory for all final year students. This module includes a series of Formative and Summative Assessment Exercises designed to help the student choose an appropriate project for them, understand the importance of their role as a project manager, develop the skills needed to conduct a final year project successfully and obtain confidence in order to help successfully complete their project.

The principal mechanism for feedback in Semester B is the weekly meeting with an individual Project Supervisor. The agenda for these meetings should be set largely by the student. We would normally expect the student and tutor to discuss issues such as the student's achievements since the last meeting, the problems that (s)he is facing, and how (s)he plans to progress the project. The supervisor will endeavour to give feedback on progress in these meetings, but they will only be able to do this if the student supplies the necessary information, including a basic agenda and weekly progress report prior to the meeting.

8. Study Time (Key Information Set Data):

Delivery Mode	On-Campus
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This module takes a **total** of **300** hours of student effort which consists of:

Activity	Hours
1. Classroom Based Lectures	2
2. Classroom based seminars and tutorials	4
3. Classroom based practical classes, workshops or demos	-
4. Scheduled online activities (ie online versions of above)	-
5. Scheduled external learning activities (fieldwork, visits)	-
6. Online directed independent study	-
7. Other directed independent study	-
8 .Self-directed independent study	294
9. Placement	-
10. Year Abroad	-

9. Other Useful Information

Scope of Project

A Software Engineering Project should fit in with the programme of study, prior experience, and personal objectives of the student undertaking it.

The student will be expected to choose a project

- that is clearly within the Software Engineering discipline area or contains a major level of content in that area, as determined by academic staff in the School of Computer Science
- that can be completed within resource constraints such as the availability of hardware, software and staff expertise

The overall aims and objectives of a project may be set by a project supervisor or other member of staff, via a published specification. However, it will be the student's responsibility, under advice from a project supervisor, to determine the appropriate means of achieving the project aims and objectives, and to plan and execute the programme of practical work.

Recommended Reading

“Projects in Computing and Information Systems: A Student’s Guide”, 2nd Edition, Christian W Dawson, Addison Wesley, 2009

Lecture Slides, Notes and additional material will be provided on the CSIT Projects µ-site at <https://karl.cs.herts.ac.uk/>

Resources

Contact the Technical Help Desk (D217) for advice on specialist Hardware and Software at the earliest opportunity.

Module Guide Moderation		
<p>I have examined this module guide and all the sections have been completed with appropriate information.</p> <p>I confirm that the moderation process has been completed satisfactorily</p> <p>The printed signed copy of this module guide must be lodged in the module box by the module leader.</p>		
Signature (moderator)	Name (moderator)	Date

'Serious adverse circumstances' are significant circumstances beyond a student's control that would have affected the student's ability to perform to their full potential if they were to submit or attend assessments at the appointed time. **If, despite such circumstances, you decide to sit/submit an assessment, the University will not normally accept a claim of serious adverse circumstances in respect of that assessment.**

If there are Serious Adverse Circumstances that have affected your assessment(s), you must communicate details to the University together with appropriate evidence, using the form provided by your School.

You should read the University's guidance on **Serious Adverse Circumstances** before you sit/submit an assessment. Full guidance can be found in your Programme Handbook and in the A - Z Guide:
<http://content.yudu.com/Library/A1xq0g/AtoZoftheUniversityo/resources/index.htm?referrerUrl>