

**Mathematical, Physical, and Life Sciences Division**

**PG Cert, PG Dip, and MSc in Software Engineering  
PG Cert, PG Dip, and MSc in Software and Systems Security**

**Report of the examiners 2014-2015**

Covers the examiners' meetings and results released in December 2014 (assessing work from MT 2014 courses), April 2015 (HT 2015 courses), June 2015 (assessing available assignments only), and October 2015 (TT 2015 courses).

**Part I**

**A. Statistics**

**(1) Numbers and percentages in each class/category**

**(a) Classified examinations**

There were no classified examinations.

**(b) Unclassified examinations**

**MSc in Software Engineering**

Category	Number					
	2014/15	2013/14	2012/13	2011/12	2010/11	2009/10
Distinction	14	15	27	4	7	11
Pass	20	25	31	18	23	13
Fail	10	6	6	6	3	4
Totals	44	46	64	28	33	28

**MSc in Software Engineering**

Category	Percentage (%)					
	2014/15	2013/14	2012/13	2011/12	2010/11	2009/10
Distinction	32	33	42	14	21	39
Pass	45	54	48	64	70	46
Fail	23	13	9	21	9	14

### MSc in Software and Systems Security

Category	Number					
	2014/15	2013/14	2012/13	2011/12	2010/11	2009/10
Distinction	1	3	3	1	0	0
Pass	8	4	6	1	2	1
Fail	5	2	0	0	1	0
Totals	14	9	9	2	3	1

### MSc in Software and Systems Security

Category	Percentage (%)					
	2014/15	2013/14	2012/13	2011/12	2010/11	2009/10
Distinction	7	33	33	50	0	0
Pass	57	44	67	50	67	100
Fail	36	22	0	0	33	0

### PG Dip in Software Engineering

Category	Number					
	2014/15	2013/14	2012/13	2011/12	2010/11	2009/10
Distinction	1	3	0	0	2	0
Pass	2	0	5	1	1	3
Fail	0	0	1	0	0	0

### PG Dip in Software and Systems Security

Category	Number					
	2014/15	2013/14	2012/13	2011/12	2010/11	2009/10
Distinction	0	0	0	0	0	0
Pass	2	1	1	0	0	1
Fail	0	0	0	0	0	0

### PG Cert in Software Engineering

Category	Number					
	2014/15	2013/14	2012/13	2011/12	2010/11	2009/10
Distinction	0	2	1	0	1	3
Pass	0	3	1	4	4	1
Fail	0	0	0	2	1	0

### PG Cert in Software and Systems Security

Category	Number					
	2014/15	2013/14	2012/13	2011/12	2010/11	2009/10
Distinction	1	0	1	0	1	1
Pass	0	0	0	0	2	2
Fail	0	0	0	0	0	0

## **(2) If vivas are used:**

There were no vivas used.

## **(3) Marking of scripts**

All assignments are double marked by the assessor for the course in question (who may also be an examiner) and a second assessor (usually the course Teaching Assistant), and are then moderated by an examiner (who cannot examine a course they are assessing). Where the resulting marks differ significantly, the examiner will invite the assessors to reconcile their marks. Contentious cases are additionally reviewed by the external examiners.

All dissertations are independently marked by an assessor and an examiner. Where the resulting marks differ significantly, the examiner and assessor are invited to reconcile their marks prior to the Examiners' meeting. Contentious cases are additionally reviewed by the external examiners.

## **B. New examining methods and procedures**

No new method was applied in this year. The determination of final grades for assignments and projects works well.

## **C. Please list any changes in examining methods, procedures and conventions which the examiners would wish the faculty/department and the divisional board to consider.**

**Anonymous marking** As suggested in one of the previous reports, we are in the process of introducing anonymous marking. Some courses are piloting this, and we are building software support to make it scalable for the whole Programme. We believe anonymous marking is beneficial for the following reasons:

- It reduces the possibility of bias from classroom interactions. The assessor will already have an impression of an individual's ability and understanding, based upon their contributions in class; it is important that this impression should not prejudice the assessment of their assignment.
- It ensures that each assessment is independent of any other assessments. The assessor must judge each submission on its own merits; they cannot consult earlier assessment reports for the same student; neither can they be influenced by a student's existing profile of grades.

- It makes it less likely that the assessment could be influenced by any other factors: for example, any personal indulgence of a particular student, or of their employer.

Each submission will be allocated a temporary assessment number, assessed, and moderated without the student being identified. Only after moderation will the student's name be attached to the submission, moderated report, and grade.

**D. Please describe how candidates are made aware of the examination conventions to be followed by the examiners.**

The Programme Handbook is presented through the Software Engineering website, and incorporates a set of examination conventions.

<http://www.softeng.ox.ac.uk/handbook/index.html>

The website is periodically drawn to the attention of all students.

## Part II

### A. General comments on the examination

The form of the Software Engineering Programme means that this examination is unlike most others in MPLS. Students attend one-week modular courses at their own choice, spread over several years. After each course they are given a take-home assignment, for which they submit a script six weeks later. Each script is marked by two assessors—almost invariably the course lecturer and teaching assistant—and moderated by an examiner. The marking process entails producing an extensive (1–3 pages) report for the student, with formative assessment as well as a final summative grade on the University's standard scale. Students accumulate these grades through the years of their study, and these are normally averaged according to a process in the Examination Conventions to give an overall result. This is combined with a dissertation mark to give an overall fail/pass/distinction result.

**Marking of dissertations** Each dissertation is marked independently by an assessor and an examiner, who each supply a written report and a proposed mark. Where the examiner and assessor propose marks with a difference of 10 or less, and not crossing a fail/pass/distinction boundary, the mean of the two marks is used—with discussion between the two to agree that this is appropriate. In the other cases, an attempt is made to resolve the mark prior to the Examiners' meeting. Any remaining contentious cases are additionally reviewed by the external examiner.

**Examiners' meetings** The examiners' main meetings occur three times each year, coinciding with each academic term, with an additional meeting being held in June to approve the release of assignment results. Dissertations are considered at each of the three examiners' main meetings. These meetings are scheduled during or shortly before 0th week of the following term. A submission deadline falls four weeks before the Examiners' meeting. For those students who have reached the end of their period of study, this is a hard deadline. Those wishing to complete their studies sooner can submit in time for an earlier deadline. Because the examiners meet to consider student results four times in the year, the examiners keep detailed minutes of their meetings, in addition to preparing this report.

**Prizes** The examiners nominated one dissertation for the Richard Bird prize.

**Plagiarism** There were no cases of suspected plagiarism.

## **B. Equality and diversity issues and breakdown of the results by gender**

**Trends** It may be noted that the number of outright fails is somewhat high, which is disappointing. The fails are mostly due to the submission of incomplete or inadequate dissertations. Those who failed in this way are able to re-submit their dissertation on a subsequent occasion, and are generally found to pass.

**Gender differences** The regrettably low number of female candidates means that a breakdown of results by gender would yield no statistically-significant data.

## **C. Detailed numbers on candidates' performance in each part of the examination**

Presented as an annex.

## **D. Comments on papers and individual questions**

Through detailed personal feedback, students receive extensive comments on their assignments and individual questions. Where appropriate, the assessor includes information for the whole class on what might have been found in a model answer.

## **E. Comments on the performance of identifiable individuals and other material which would usually be treated as reserved business**

None.

## **F. Names of members of the board of examiners**

Prof Ralf Hinze (chair, prepared this report)  
Prof Jeremy Gibbons (Programme Director, ex officio)  
Dr Alastair Beresford (external)  
Dr Juliana Küster Filipe Bowles (external)  
Prof Cas Cremers  
Dr Ivan Martinovic  
Prof Niki Trigoni

## **Annex**

### **Distribution of marks awarded in each modular course**

Course	Date	Mean Grade	Registered to submit	Submitted	90-100	80-89	70-79	60-69	55-59	50-54	40-49	30-39	20-29	20-
OOD	28th April 2014	67.9	18	15	0	0	8	5	1	0	0	1	0	0
PMO	12th May 2014	63.6	11	8	0	1	1	3	2	0	1	0	0	0
SPR	19th May 2014	59.6	17	13	0	2	1	5	1	1	3	0	0	0
DPA	2nd June 2014	55.2	18	14	0	0	3	4	2	1	1	2	0	1
SDM	2nd June 2014	63.8	10	9	0	0	2	5	1	0	1	0	0	0
AGM	9th June 2014	60.0	13	10	0	0	3	4	1	0	1	1	0	0
MSS	9th June 2014	68.5	18	14	1	4	1	6	1	0	1	0	0	0
XML	16th June 2014	65.5	16	10	1	0	3	2	3	0	0	1	0	0
EAR	23rd June 2014	66.5	17	14	0	3	3	4	1	1	2	0	0	0
PRO	23rd June 2014	65.3	15	12	0	2	1	5	3	1	0	0	0	0
CDS	30th June 2014	65.7	13	9	0	0	4	3	1	1	0	0	0	0
APE	7th July 2014	65.5	15	13	0	1	2	6	3	1	0	0	0	0
SPR	7th July 2014	71.6	15	8	0	2	5	1	0	0	0	0	0	0
MOB	14th July 2014	62.0	10	8	0	2	1	1	0	2	2	0	0	0
OOD	1st September 2014	69.0	12	10	0	2	5	1	0	1	1	0	0	0
FPR	15th September 2014	58.8	20	15	0	0	2	6	4	0	2	0	1	0
STC	15th September 2014	61.6	6	5	0	0	1	2	0	1	1	0	0	0
MRQ	22nd September 2014	64.4	13	10	0	1	0	6	3	0	0	0	0	0
PAS	22nd September 2014	62.5	12	12	0	0	2	6	1	3	0	0	0	0
FOR	29th September 2014	70.3	16	15	2	2	3	7	0	1	0	0	0	0
BIG	13th October 2014	67.7	16	12	0	0	6	4	2	0	0	0	0	0
DAT	13th October 2014	71.9	18	17	0	7	6	1	0	1	2	0	0	0
SDM	20th October 2014	62.0	13	12	0	0	2	5	3	1	1	0	0	0
STE	20th October 2014	60.6	10	8	0	1	2	1	2	1	0	1	0	0
CPR	27th October 2014	62.8	15	10	0	1	3	4	0	0	1	0	1	0
SPR	27th October 2014	60.0	19	13	0	1	2	5	1	2	1	1	0	0
OOP	3rd November 2014	66.9	17	17	0	0	8	4	4	1	0	0	0	0
CLS	10th November 2014	63.2	18	17	1	1	3	4	3	4	1	0	0	0
SDE	10th November 2014	61.3	5	3	0	0	2	0	0	0	0	1	0	0
DES	17th November 2014	64.0	13	13	0	0	5	5	1	1	1	0	0	0
REN	17th November 2014	70.6	17	12	0	2	5	3	1	1	0	0	0	0
TCI	24th November 2014	70.7	11	11	0	3	2	6	0	0	0	0	0	0
DAS	1st December 2014	68.2	16	13	1	2	4	4	0	1	1	0	0	0
SOA	1st December 2014	62.1	23	21	0	3	5	4	4	2	2	0	0	1
NES	8th December 2014	60.6	20	19	0	0	6	5	3	3	2	0	0	0
ALG	12th January 2015	56.5	16	13	1	0	1	3	4	0	1	3	0	0
SPR	12th January 2015	59.3	23	16	0	0	3	6	3	3	1	0	0	0
APE	19th January 2015	66.9	17	13	0	4	2	3	2	0	2	0	0	0
CPR	19th January 2015	63.0	6	3	0	0	0	2	0	1	0	0	0	0
MCH	26th January 2015	69.3	5	3	0	0	2	1	0	0	0	0	0	0
CDS	2nd February 2015	66.2	5	5	0	1	0	3	0	1	0	0	0	0
FPR	2nd February 2015	60.3	11	6	0	0	0	5	0	0	0	1	0	0