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 2011–2012

Covers the examiners' meetings and results released
in March 2012 (assessing work from MT 2011 courses),
June 2012 (HT 2012 courses), and December 2012 (TT 2012 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			Percentage (%)		
	2011/12	2010/11	2009/10	2011/12	2010/11	2009/10
Distinction	4	(7)	(11)	14	(21)	(39)
Pass	18	(23)	(13)	64	(70)	(46)
Fail	6	(3)	(4)	21	(9)	(14)

MSc in Software and Systems Security

Category	Number		
	2011/12	2010/11	2009/10
Distinction	1	(0)	(0)
Pass	1	(2)	(1)
Fail	0	(1)	(0)

PG Dip in Software Engineering

Category	Number		
	2011/12	2010/11	2009/10
Distinction	0	(2)	(0)
Pass	1	(1)	(3)
Fail	0	(0)	(0)

PG Dip in Software and Systems Security

Category	Number		
	2011/12	2010/11	2009/10
Distinction	0	(0)	(0)
Pass	0	(0)	(1)
Fail	0	(0)	(0)

PG Cert in Software Engineering

Category	Number			Percentage (%)		
	2011/12	2010/11	2009/10	2011/12	2010/11	2009/10
Distinction	0	(1)	(3)	0	(17)	(–)
Pass	4	(4)	(1)	66	(67)	(–)
Fail	2	(1)	(0)	33	(17)	(–)

PG Cert in Software and Systems Security

Category	Number		
	2011/12	2010/11	2009/10
Distinction	0	(1)	(1)
Pass	0	(2)	(2)
Fail	0	(0)	(0)

(2) If vivas are used:

There were no vivas used.

(3) Marking of scripts

All assignments (460) are marked by the assessor for the course in question (who may also be an examiner), and are moderated with sight of both marker's comments and the original assignment by an examiner (who is never the same person as the first marker).

All dissertations (31) are independently marked by an assessor and an examiner. Where the resulting marks differ significantly, they are re-marked by the external examiner. This happened in seventeen cases.

B. New examining methods and procedures

We have now detailed guidelines for grading written assignments and dissertations for all three bands: the *fail* band (0–49), the *pass* band (50–69), and the *excellence* band (70–100). (In previous years, guidance for the bands 0–9, 10–19, 20–29, 30–39 and 40–49 was missing.) Assessors and examiners seem to appreciate the additional guidance. Other than that 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 the previous report, 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.

Attendance of courses The specification of the Software Engineering Programme requires MSc students to attend ten courses, but the notion of 'attendance' is currently not clearly defined. We propose that a student has to be physically present for at least $\frac{7}{9}$ of the time, that is, they can miss at most one day. If a student misses more than a day, then the situation has to be discussed with the Director of the Programme.

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 an assessor—almost invariably the course lecturer—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 over-all result. This is combined with a dissertation mark to give an over-all 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 Examiners' meetings occur three times each year. Dissertations are considered at each Examiners' meeting. A submission deadline falls at the end of each vacation. 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 three 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 was one case of plagiarism, which was reported to the proctors in March 2012. This case is still being investigated.

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

Trends It may be noted (a) that the proportion gaining a distinction has again fallen considerably, and (b) that the number of outright fails is quite high. The first is unfortunate. In particular, as four students performed exceptionally well in the taught part of the programme, but did not receive a distinction-level grade for their dissertation. (One distinction-level candidate even failed overall due to a poorly written dissertation.) The fails are disappointing—with one exception they are all 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 break-down 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

Dr. Ralf Hinze (chair, prepared this report)
Dr Ivan Flechais
Prof Jeremy Gibbons (Programme Director, ex officio)
Dr Niki Trigoni
Prof Michael Butler (external)

Annex

Distribution of marks awarded in each modular course

Acronym	Date	Mean Grade	Registered	Submitted	90–100	80–89	70–79	60–69	55–59	50–54	40–49	30–39	20–29	20–
SPR	26th September 2011	65.36	18	14	0	2	5	3	2	1	1	0	0	0
SEM	26th September 2011	57.92	18	12	0	1	1	4	3	1	1	1	0	0
FPR	3rd October 2011	73	21	16	1	5	4	2	2	2	0	0	0	0
FOR	10th October 2011	72	7	5	1	1	1	1	0	1	0	0	0	0
Projects	10th October 2011		15											
MRQ	17th October 2011	68.29	11	7	0	1	1	5	0	0	0	0	0	0
STE	17th October 2011	64	12	10	0	0	4	2	2	1	0	1	0	0
AGM	24th October 2011	70	13	11	0	5	1	2	2	1	0	0	0	0
DPA	24th October 2011	64.36	15	11	0	1	3	4	3	0	0	0	0	0
RIS	31st October 2011	65.67	9	6	1	0	0	3	2	0	0	0	0	0
REN	7th November 2011	67.36	18	14	0	0	7	4	2	1	0	0	0	0
SDM	7th November 2011	61.22	11	9	0	0	2	3	2	1	1	0	0	0
DAS	14th November 2011	64.17	9	6	0	1	0	4	1	0	0	0	0	0
SDE	5th December 2011	45	8	5	0	0	1	0	1	1	0	1	1	0
NES	5th December 2011	67.81	18	16	1	4	2	6	0	3	0	0	0	0
SDE	5th December 2011	45.00	8	5	0	0	1	0	1	1	0	1	1	0
OOR	9th January 2012	65.57	16	14	1	2	1	8	0	0	1	1	0	0
APE	16th January 2012	72.08	13	12	0	2	8	1	0	1	0	0	0	0
Projects	16th January 2012		18											
DAT	23rd January 2012	67.85	13	13	1	2	3	3	3	0	0	1	0	0
SEM	23rd January 2012	63.73	15	15	0	4	2	4	3	0	0	2	0	0
OOP	30th January 2012	63.60	13	10	0	1	2	3	3	0	1	0	0	0
PRO	30th January 2012	67.64	13	11	0	1	4	3	2	1	0	0	0	0
SIM	6th February 2012	66.00	11	8	0	1	3	3	0	0	1	0	0	0
STE	13th February 2012	62.83	7	6	0	1	0	2	1	2	0	0	0	0
SDM	20th February 2012	60.89	10	9	0	1	0	2	4	2	0	0	0	0
OOD	19th March 2012	64.32	22	19	0	1	2	12	3	1	0	0	0	0
Projects	27th June 2011		20											
CDS	21st November 2011	72.0	15	10	1	2	3	3	0	1	0	0	0	0
SPR	9th January 2012	66.5	14	10	1	1	2	4	1	0	1	0	0	0
CPR	20th February 2012	66.6	20	18	0	4	2	8	1	0	2	1	0	0
DES	27th February 2012	59.7	8	7	0	1	0	3	1	1	0	1	0	0
REN	5th March 2012	64.8	19	16	0	0	6	6	1	3	0	0	0	0
MCH	12th March 2012	63.4	8	5	0	1	2	0	1	0	0	1	0	0
DPA	26th March 2012	68.7	13	10	0	1	4	5	0	0	0	0	0	0
XML	16th April 2012	62.9	17	13	1	2	0	4	2	2	2	0	0	0

SCS	16th April 2012	60.7	11	6	0	0	1	3	0	2	0	0	0	0
FOR	23rd April 2012	61.4	20	18	0	3	4	2	4	2	0	3	0	0
FPR	23rd April 2012	60.6	22	17	0	1	5	6	0	3	0	0	2	0
DAS	30th April 2012	69.2	13	11	0	2	5	1	2	1	0	0	0	0
MOB	30th April 2012	67.8	4	4	0	1	1	1	0	1	0	0	0	0
SPR	21st May 2012	65.6	21	17	0	1	6	6	3	1	0	0	0	0
SDM	11th June 2012	61.4	13	13	0	0	2	6	0	5	0	0	0	0
APE	25th June 2012	72.2	17	11	0	2	6	3	0	0	0	0	0	0
SEM	25th June 2012	61.0	10	10	1	1	1	3	2	1	0	0	1	0