

Higher Degrees and Honours Bachelor Degrees in Mathematics and Statistics Completed in Australia in 2013

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This report presents data relating to students who completed Honours or Higher Degrees in Mathematics during 2013. The data are part of an on-going project for the Australian Mathematical Society and should be read in conjunction with previous reports [1]–[14] covering the period 1993–2012.

This year represents the third occasion that data has been reported for two-year Coursework Masters degrees with classifications (similar to existing Honours degrees). The University of Melbourne is the only university to offer such degrees in place of the traditional Honours degree, although some other universities are expected to follow this model. In the discussions that follow, these data have been merged together and will be referred to simply as ‘Honours’, although the completions for the two degrees are presented in separate tables. As time goes on, and more universities offer Coursework Masters degrees of this type, the two data sets will be differentiated and displayed as separated entities (backdated to 2010).

Appendix 1 presents data for students completing Honours degrees in 2013, at all universities in Australia. Within each institution, the data are broken down into male and female students and into the three traditional areas of Mathematics: Pure; Applied and Statistics. There is also the general category ‘Mathematics’ for institutions that do not differentiate between the conventional areas. Finally, there is an ‘Other’ category for newer areas of mathematics such as Financial Mathematics. Each category is further broken down into grades of Honours awarded. Appendix 2 presents the Coursework Masters degrees awarded by the University of Melbourne in 2013. Appendices 1 and 2 combined show that in 2013 there were 173 Honours completions in Australia, with 119 (69%) receiving First Class Honours (compared with 113 out of 176 (64%) in 2012 and 116 out of 157 (74%) in 2011). Over recent years the average fraction of First Class degrees awarded has been about 70%.

Figure 1 presents the total number of students completing Honours degrees in Mathematics, including two-year Coursework Masters degrees (with classifications) over the period 1959–2013. It shows that in 2013 the number of Honours completions continues on about the same level as the previous year. The figure also shows the numbers of male and female students who completed Honours over the same time period. For last year, the number of male students has again increased over the previous years with 140 completions (130 in 2012 and 123 in 2011), while the

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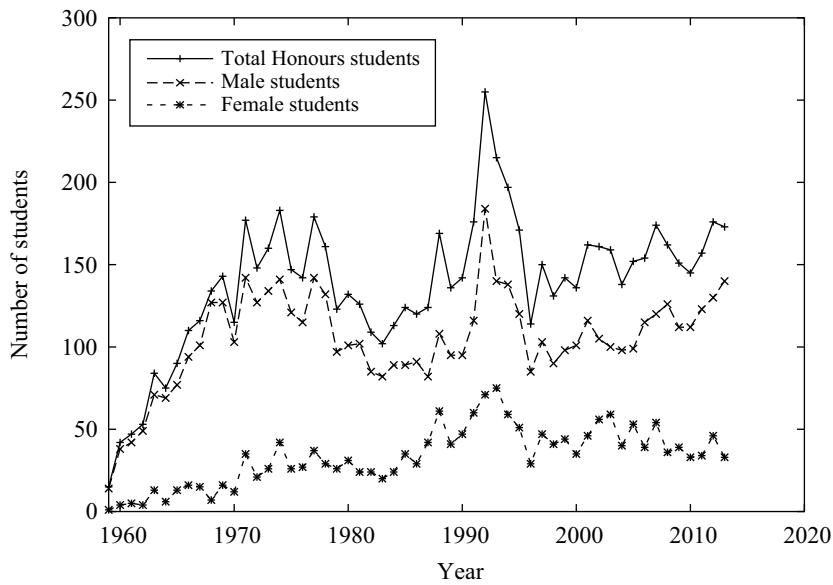


Figure 1: Number of Honours degrees, including two-year Coursework Masters degrees (with classifications), completed in Mathematics and Statistics, 1959–2013.

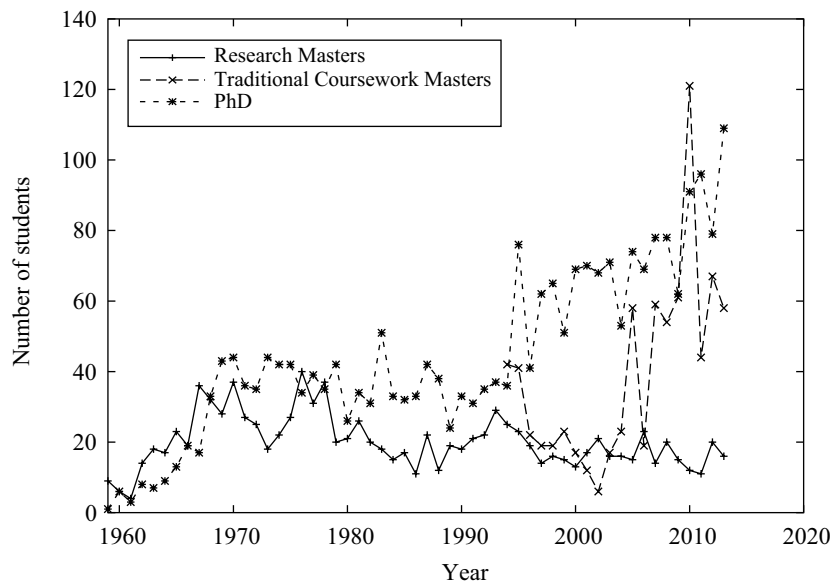


Figure 2: Number of research higher degrees completed in Mathematics and Statistics, 1959–2013.

number of female students decreased to 33 (compared to 46 in 2012) back to the level of 2011 (34).

Appendix 3 presents the data for Higher Degree completions in 2013. The data are broken down into traditional Coursework Masters, Research Masters and PhD degrees, with the latter two divided into the three typical areas of Mathematics. These data are also represented in Figure 2, as part of the overall Higher Degree data for the period 1959–2013. The figure shows that:

1. There was a considerable increase in the number of PhD completions compared with the previous two years. In 2013, there were 109 PhD completions (up from 79 in 2012 and 97 in 2011), of which 73 were by male students and 36 by female students. This represents a large increase in the number of male students (up from 48 in 2012) while the number of female students showed a slight increase (up from 31 in 2012).
2. The number of Research Masters completions (16) has decreased slightly, down from 20 in 2012.
3. There was a slight drop in Coursework Masters completions (58) in 2013, down from 67 in 2012, but more than in 2011 (44). However, these are considerably fewer than the 121 completions from 2010.

For those who are interested in the finer details, the raw data are available directly from me. Simply send me an e-mail. I have an Excel spreadsheet containing the complete data for 2013 as well as spreadsheets containing cumulative data from 1959 for Honours, Research Masters and PhD degrees.

I would like to thank the many people who took the time and effort to collect this data and forward it to me. This year I received 35 out of a possible 38 responses to requests for data, which is a very good response rate. Finally, if having read this report, you would like to contribute missing data for 2013, I would be happy to add it to the spreadsheet.

References

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Appendix 1. (continued)

Uni.	Sex	Maths				Pure				Applied				Statistics				Other				Honours Total
		I	IIA	IIB	III	I	IIA	IIB	III	I	IIA	IIB	III	I	IIA	IIB	III	I	IIA	IIB	III	
MNU	M					4				5	1	2				1						13
	F									2				1								3
MQU	M	1	1																			2
	F	1																				1
QUT	M									3	1											4
	F									1	1											2
RMT	M	3	2			1								2	1							9
	F		1	1										1								3
SCU	M																					0
	F																					0
SUT	M																					0
	F																					0
UAD	M	1	1															1	2			5
	F													1								1
UBR	M																					0
	F																					0
UCB	M																					0
	F																					0
UMB	M																					0
	F																					0
UNC	M	3	2																			5
	F																					0
UNE	M					1																1
	F																					0
UNS	M					4	1			2				3								10
	F					2	1															3
UQL	M					3				1	1			3				2				10
	F					2				1				1								4
USA	M																					0
	F													1								1
USN	M					5	1			5	1			4	1							17
	F									1				2	1							4
USQ	M									1												1
	F																					0
UTM	M					1				1												2
	F																					0
UTS	M									1	1			1								3
	F																					0
UWA	M					1				1	1			1								4
	F					1	1															2
UWG	M					3				3								3	1	1		11
	F																					0
UWS	M																					0
	F																					0
VUT	M																					0
	F																					0
Totals		20	6	3	0	29	4	1	0	25	10	3	1	23	6	2	0	6	3	1	0	143

Appendix 2. Number of two-year Coursework Masters degrees (with classifications) completed in mathematics and statistics, 2013

Uni.	Sex	Pure				Applied				Statistics				Other				Total
		I	IIA	IIB	III	I	IIA	IIB	III	I	IIA	IIB	III	I	IIA	IIB	III	
UMB	M	4			3	2				4	1	2	2	4	2	1	1	26
	F									1			2	1				4
Totals		4	0	0	3	3	0	0	0	5	1	2	4	5	2	1	1	30

Appendix 3. Number of research higher degrees completed in mathematics and statistics, 2013

Uni.	Sex	Coursework Masters	Research Masters			Research Masters Total	PhD			PhD Total
			Pure	Applied	Statistics		Pure	Applied	Statistics	
ACU	M					0				0
	F					0				0
ADF	M			1		1				0
	F					0				0
ANU	M	2				0	4	2		6
	F	1		1		1		1		1
BOU	M					0				0
	F					0				0
CDU	M					0				0
	F					0				0
CQU	M					0				0
	F					0				0
CSU	M					0				0
	F					0				0
CUT	M					0				0
	F					0				0
DKU	M					0		1		1
	F					0				0
ECU	M					0				0
	F					0				0
FDU	M					0				0
	F					0				0
GFU	M					0				0
	F					0				0
JCU	M					0				0
	F					0				0
LTU	M	1			2	2				0
	F	2				0	2		2	4
MDU	M					0				0
	F					0			1	1
MNU	M					0	1	3	3	7
	F					0		4		4

Appendix 3. (continued)

Uni.	Sex	Coursework Masters	Research Masters			Research Masters Total	PhD			PhD Total	
			Pure	Applied	Statistics		Pure	Applied	Statistics		Other
MQU	M					0	3			3	
	F					0		3		3	
QUT	M					0		6	1	7	
	F					0		2	2	4	
RMT	M	12			1	1				2	
	F	13		1		1		1	2	3	
SCU	M					0				0	
	F					0				0	
SUT	M					0		1		1	
	F					0				0	
UAD	M		1			1	1		1	2	
	F			2	1	3				0	
UBR	M					0				0	
	F					0				0	
UCB	M					0				0	
	F					0				0	
UMB	M		1	1		2	2	2		4	
	F					0		1	1	2	
UNC	M					0	1		1	2	
	F					0				0	
UNE	M					0				0	
	F					0				0	
UNS	M	2				0	6	2		8	
	F	1	1			1		2		2	
UQL	M	6				0	5	2	3	10	
	F					0			1	1	
USA	M					0		1	3	6	
	F					0		1	2	3	
USN	M		1	1		2	1	2	2	5	
	F					0	1			1	
USQ	M					0		1		1	
	F					0				0	
UTM	M					0				0	
	F					0				0	
UTS	M					0		1		1	
	F					0		1		1	
UWA	M					0	1	2		3	
	F					0		1		1	
UWG	M	14				0	1	3		4	
	F	4		1		1		1	4	5	
UWS	M					0				0	
	F					0				0	
VUT	M					0				0	
	F					0				0	
Totals		58	4	8	4	16	29	46	26	8	109