

Higher degrees and honours bachelor degrees in mathematics and statistics completed in Australia in 2015

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This report presents data relating to students who completed Honours or Higher Degrees in Mathematics during 2015. The data are part of an on-going project for the Australian Mathematical Society and should be read in conjunction with previous reports [1]–[16] covering the period 1993–2014.

This year represents the fifth 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 2015, 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 2015. Appendices 1 and 2 combined show that in 2015 there were 192 Honours completions in Australia, with 133 (69%) receiving First Class Honours (compared with 139 out of 186 (75%) in 2014 and 119 out of 173 (69%) in 2013). 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 1959–2015. It shows that in 2015 the number of Honours completions continues on an upward trend. 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 149 completions (141 in 2014 and 140 in 2013), while the number of female students decreased slightly to 43 (compared to 45 in 2014 and 33 in 2013).

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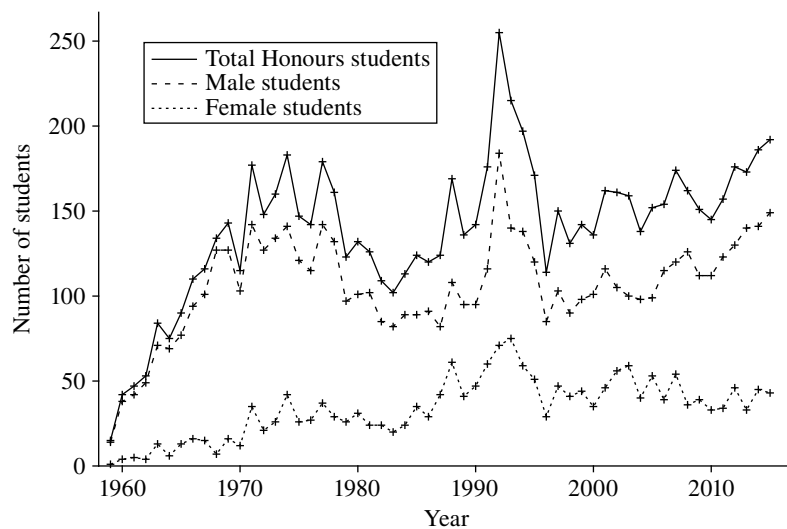


Figure 1. Number of Honours degrees, including two year Coursework Masters degrees (with classifications), completed in Mathematics and Statistics, 1959–2015.

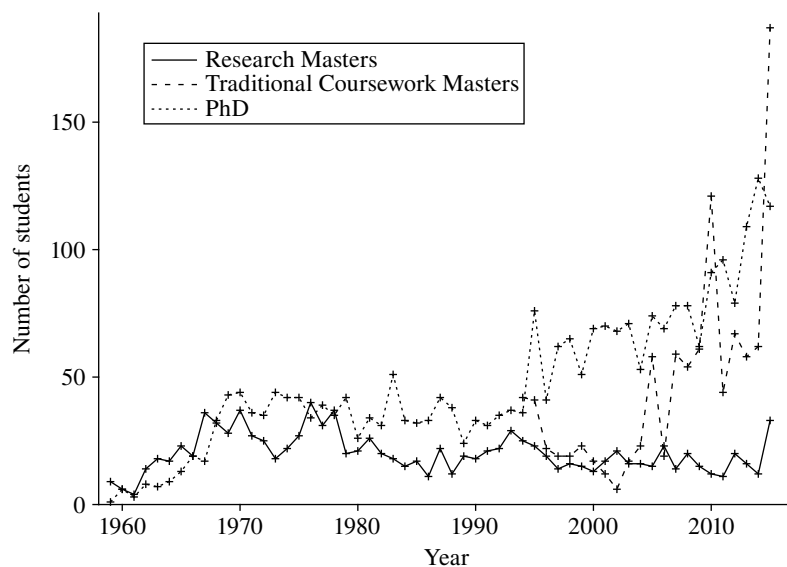


Figure 2. Number of research higher degrees completed in Mathematics and Statistics, 1959–2015.

Appendix 3 presents the data for Higher Degree completions in 2015. 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 1959–2015. The figure shows that:

- (i) There was a slight decrease in the number of PhD completions compared with 2014, but there is an overall increasing trend over the past 20 years. In 2015, there were 117 PhD completions (compared with 128 in 2014 and 109 in 2013), of which 74 were by male students and 43 by female students.
- (ii) The number of Research Masters completions (33) increased dramatically, up from 12 in 2014.
- (iii) There was a significant increase in coursework masters completions (187) in 2015, up from 62 in 2014 and 58 in 2013. This is even a significant increase over the previous peak number of completions (121 in 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 2015 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 34 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 2015, 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	
UCB																						0
																						0
UNC	M	1				1																2
	F		1				1															2
UNE	M																					0
	F																					0
UNS	M					8	1			4	3			5	4			1	2			28
	F						2			1				1								4
UQL	M									2	2	1		4	1			4	1			15
	F					2												1				3
USA	M									2												2
	F									4												4
USN	M					7		1		6	2			5		1						22
	F					2		1		1				2			1					7
USQ	M													1								1
	F																					0
UTM	M						1			4	4											9
	F					1																1
UTS	M									1				1								2
	F									1				1				1				3
UWA	M					1							1	2				3				7
	F												1									1
UWG	M					3	2	1											1			7
	F									1								2				3
UWS	M	1																				1
	F		1																			1
VUT	M																					0
	F																					0
Totals		15	3	0	0	35	7	2	1	37	14	1	0	27	9	1	1	10	5	1	0	169

Appendix 2. Number of two year coursework masters degrees (with classifications) completed in Mathematics And Statistics, 2015

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	2	1	1		2	1	1	2	2	1		1	2			1	1			18	
	F				1	1		1					2									5
Totals		2	1	1	1	3	1	2	2	2	1	0	3	2	0		1	1				23

Appendix 3. Number of research higher degrees completed
in Mathematics And Statistics, 2015

Uni.	Sex	Coursework Masters	Research Masters		Research Masters Total	PhD			PhD Total
			Pure	Applied Statistics		Pure	Applied Statistics	Other	
ACU	M				0				0
	F				0				0
ADF	M				0				0
	F				0		1		1
ANU	M	8	1	1	2	3	3		6
	F				0			1	1
BOU	M				0				0
	F				0				0
CDU					0				0
					0				0
CQU	M				0		1		1
	F				0				0
CSU	M				0				0
	F				0				0
CUT					0				0
					0				0
DKU	M				0		1		1
	F				0				0
ECU	M				0				0
	F				0				0
FDU					0				0
					0				0
FUA	M				0		4		4
	F				0		1		1
GFU	M				0				0
	F				0				0
JCU	M			1	1				0
	F				0		1		1
LTU	M	3			0			1	1
	F				0		1		1
MDU	M				0				0
	F				0		1		1
MNU	M			1	1		1		1
	F				0		1	2	3
MQU	M		4		4	3			3
	F				0		1		1
QUT	M	10	2	1	3		5	2	7
	F	4			0		6	2	8
RMT	M	85			0		3		3
	F	35			0		1	1	2
SCU	M				0				0
	F				0				0
SUT	M				0		2		2
	F				0		4		4
UAD	M			2	2	1	6	1	8
	F		1		1		1		1
UCB					0				0
					0				0

Appendix 3. (Continued)

Uni.	Sex	Coursework Masters	Research Masters			Research Masters Total	PhD			PhD Total	
			Pure	Applied	Statistics		Pure	Applied	Statistics Other		
UMB	M		2			2		7	2	9	
	F					0	1	1	1	3	
UNC	M					0	3	5		8	
	F					0				0	
UNE	M					0				0	
	F					0				0	
UNS	M	6	1	2		3	1	1	1	3	
	F	2				0	1			1	
UQL	M	10	1	1		2			3	5	
	F	9				0		2	2	4	
USA	M					0			1	1	
	F					0		1		1	
USN	M		1	5	3	9	3			3	
	F				1	1				0	
USQ	M					0		1		1	
	F					0		1		1	
UTM	M					0				0	
	F					0				0	
UTS	M	3		1		1				0	
	F	2		1		1			1	1	
UWA	M					0	1		1	2	
	F					0			1	1	
UWG	M	6				0	1	3	1	5	
	F	4				0		2	3	5	
UWS	M					0				0	
	F					0		1		1	
VUT	M					0				0	
	F					0				0	
Totals		187	10	16	7	33	18	70	26	3	117