## Higher Degrees and Honours Bachelor Degrees in mathematics and statistics completed in Australia in 2008

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This report presents data relating to students who completed Honours or Higher Degrees in Mathematics during 2008. The data are part of an on going project for the Australian Mathematical Society and should be read in conjunction with previous reports [1], [2], [3], [4], [5], [6], [7], [8], [9] covering the period 1993–2007.

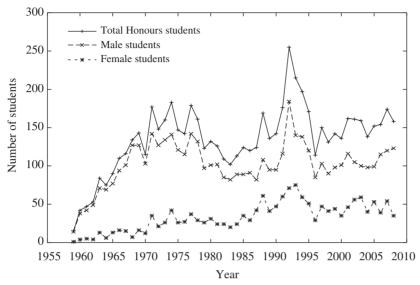
Appendix 1 presents data for students completing Honours degrees in 2008, at all universities in Australia. Within each institution, the data are broken down into male and female students and into the three traditional areas of mathematics: pure, applied and statistics. There is also the general category 'Mathematics' for institutions which 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. The appendix shows that in 2008 there were 158 Honours completions in Australia, with 108 (68%) receiving First Class Honours (compared with 119 out of 174 (68%) in 2007 and 106 out of 154 (69%) in 2006). Despite a slight decrease in total numbers, the quality of the students remains consistent.

Figure 1 presents the total number of students completing Honours degrees in Mathematics over the period 1959–2008. It shows that in 2008 there was a decrease in the number of Honours completions over the previous year, but the number is similar to numbers reported for most of the current decade. 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 again increased to 123 (up from 120), and there was a significant decrease in the number of female students (35, down from 54).

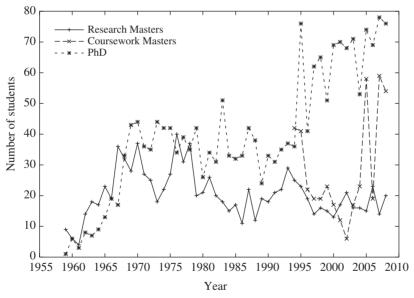
Appendix 2 presents the data for Higher Degree completions in 2008. The data are broken down into Coursework Masters, Research Masters and PhD degrees, with the latter two divided into the three typical areas of mathematics. These data are also represented in Figure 2, as part of the overall Higher Degree data for the period 1959–2008. The figure shows that:

(1) There was a slight decrease in the number of PhD completions, but it was still the equal second highest number recorded. In 2008, there were 76 PhD completions, of which 51 were by male students and 25 by female students. This presents a decrease in the number of male students (61 in 2007) and an increase in the number of female students (17 in 2007).

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**Figure 1.** Number of Honours degrees completed in mathematics and statistics, 1959–2008.



**Figure 2.** Number of research higher degrees completed in mathematics and statistics, 1959–2008.

- (2) The number of Research Masters completions has risen again after a dip last year.
- (3) There was only a slight decrease in the number of coursework masters completions.

For those who are interested in the finer details, the raw data are available from links on the web page <a href="http://www.cit.gu.edu.au/maths">http://www.cit.gu.edu.au/maths</a>. There is an Excel spread-sheet containing the complete data for 2008 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 30 out of a possible 38 responses to requests for data, similar to last year's response rate. Finally, if having read this report, you would like to contribute missing data for 2008, I can add it to the data on the website.

## References

- Petocz, P. (1996). Higher degrees and honours bachelor degrees in mathematics and statistics completed in Australia 1993. Gaz. Aust. Math. Soc. 23, 123–133.
- [2] Johnston, P. and Petocz, P. (2002). Higher degrees and honours bachelor degrees in mathematics and statistics completed in Australia in 1994 and 1995. Gaz. Aust. Math. Soc. 29, 62–72.
- [3] Johnson, P. (2003). Higher degrees and honours bachelor degrees in mathematics and statistics completed in Australia between 1996 and 2001. *Gaz. Aust. Math. Soc.* **30**, 42–44.
- [4] Johnston, P. (2003). Higher degrees and honours bachelor degrees 2002. Gaz. Aust. Math. Soc. 30, 315–320.
- [5] Johnston, P. (2004). Higher degrees and honours bachelor degrees in mathematics and statistics completed in Australia in 2003. Gaz. Aust. Math. Soc. 31, 314–319.
- [6] Johnston, P. (2005). Higher degrees and honours bachelor degrees in mathematics and statistics completed in Australia in 2004. Gaz. Aust. Math. Soc. 32, 320–325.
- [7] Johnston, P. (2006). Higher degrees and honours bachelor degrees in mathematics and statistics completed in Australia in 2005. Gaz. Aust. Math. Soc. 33, 249–254.
- [8] Johnston, P. (2007). Higher degrees and honours bachelor degrees in mathematics and statistics completed in Australia in 2006. *Gaz. Aust. Math. Soc.* **34**, 266–271.
- [9] Johnston, P. (2008). Higher degrees and honours bachelor degrees in mathematics and statistics completed in Australia in 2007. Gaz. Aust. Math. Soc. 35, 320–324.

Appendix 1. Number of Honours degrees completed in mathematics and statistics, 2008.

Uni.	Sex	Maths I IIA IIB III	Pure I IIA IIB III	Applied I IIA IIB III	Statistics I IIA IIB III	Other I IIA IIB III	Honou Total
ACU	M F						0
ADF	M						0
ANU	F M F		5	1	$\begin{array}{ccc} 1 & 1 & 1 \\ & 1 & \end{array}$		0 9
BOU	$\mathbf{M}$				1		0
CDU	F M						0
CQU	F M						0
CSU	F M						0
CUT	F M						0
DKU	F M						0
ECU	F M						0
FDU	F M						0
GFU	F M			$\begin{array}{cc} 1 \\ 2 & 1 \end{array}$			1 3
JCU	F						0
LTU							0
MDU	M						0
MNU	F M	1	9 1	3 2	3		1 18
иQU	$_{ m M}$	1	1	1 1			3 1
QUT	F M			5 2	1 1	1	$\frac{0}{10}$
RMT	F M	1				1	1 1
SCU	F	1			1 1		3
SUT	M						0
UAD	F M		5 3 1	2 1	1		0 13
UBR	F M				1 2		3
UCB	F						0
UMB	M		4 1 2	7 1 1	$\begin{array}{cccc}2&1&&&1\\1&&&1\end{array}$	1	$0 \\ 21$
UNC	F		2	3 3 1	1 1	1 1	13 0
UNE	M						0
JNS	F M			1 2			0
JQL	F M		6	6	1		$\begin{array}{c} 1 \\ 12 \end{array}$
USA	F					1	$\frac{1}{0}$
USN	M		9 1	8 1	2		$\begin{array}{c} 0 \\ 21 \end{array}$
USQ	F						0 0
UTM	M		1		1		0 2
UTS	F M			1	1	1	$\begin{array}{c} 1 \\ 2 \\ 0 \end{array}$
UWA	F M		2 1	1	1		0 5
UWG	$_{ m M}^{ m F}$		1	1	1		5 2 2
UWS	F M		1	1	1	1	$\frac{4}{0}$
VUT	F						0 0
Totals		2 2 0 0	46 5 5 0	41 15 3 2	16 10 2 1	3 3 1 1	0 158

 ${\bf Appendix~2.~Number~of~research~higher~degrees~completed} \\ {\bf in~mathematics~and~statistics,~2008}$ 

Uni.	Sex	Coursework Masters	Research Masters Pure Applied Statistics		Research Masters Total	PhD Pure Applied Statistics			PhD Total	
ACU	M F					0				0
ADF	M					0				0
ANU	F M	2			5 7	0 5	5			0 5
BOU	F M				7	7 0				0
CDU	$_{ m M}$					0 0				0
CQU	$_{ m M}$					0 0		1		0 $1$
CSU	F M					0 0		1		$\frac{1}{0}$
CUT	F M	2				0 0		4		$\frac{0}{4}$
DKU	F M	1				0		1 1		1 1
ECU	F M					0 0				0
FDU	F M					0			1	$\frac{1}{0}$
GFU	F M					0				0
JCU	F					0				0
LTU						0				0
MDU	M					0				0
MNU	F M			1		0 1		2		0 2
	F			2		2 0	,	2		0
MQU	M F	4				0	1		9	0
QUT	M F	4				0			3 2	3 2
RMT	M F	6 6				0		$\frac{1}{2}$		1 2
SCU						0				0
SUT	$_{ m F}^{ m M}$					0 0		1		$\frac{1}{0}$
UAD	M F					0 0	$\frac{4}{1}$	$\frac{2}{2}$	1	$\frac{6}{4}$
UBR	M F		1	1		2 0	3			3 0
UCB						0 0				0
UMB	M F					0 0	2	1	3	$\frac{2}{4}$
UNC						0				0
UNE	M F					0				0
UNS	M F					0				0
UQL	M F	3 1			1	1 0	4	2 3	3	9
USA	•	*				0		-		0
USN	$_{ m F}^{ m M}$			1		1 0		4	1	5 0
USQ	1					0				0
$_{\rm UTM}$	M				1	1	1	1	1	0
UTS	F M					0	1	1 1	1	3
UWA	F M	7				0	2	1		0
UWG	F M	2 9				0		2	1	0
UWS	F M	10				0 0		3	1	$\frac{4}{0}$
VUT	F					0 0				0
Totals		54	1	5	14	20	23	36	17	76