



This data pack was produced by TBR to help the London Mathematical Society update the analysis in their February 2013 report *Advancing Women in Mathematics: Good Practice in UK University Departments*.



LONDON
MATHEMATICAL
SOCIETY
EST. 1865



Gender in Mathematics data update

January 2016

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A-level mathematics and further mathematics candidates by gender, Summer 2012 to Summer 2015.

Source: Joint Council for Qualifications (JCQ) 2012, 2013, 2014, 2015

Subject	2012			2013			2014			2015		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Mathematics	34,301	51,413	85,714	34,625	53,435	88,060	34,374	54,442	88,816	35,937	56,774	92,711
Mathematics (Further)	3,972	9,251	13,223	3,951	9,870	13,821	3,975	10,053	14,028	4,177	10,816	14,993

	2012			2013			2014			2014		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	40%	60%	100%	39%	61%	100%	39%	61%	100%	39%	61%	100%
	30%	70%	100%	29%	71%	100%	28%	72%	100%	28%	72%	100%

G1 Mathematics graduates by gender, domicile and level of study, 2011/12 to 2014/15

Source: HESA Student Record 2011/12, 2012/13, 2013/14, 2014/15

Domicile	Level of study	2011/12			2012/13			2013/14			2014/15		
		Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
UK	First degree	2,340	3,430	5,770	2,660	4,110	6,765	2,605	3,860	6,465	2,400	3,795	6,200
	Other undergraduate	415	575	985	225	330	555	240	375	615	155	335	485
	Masters	100	255	355	100	260	360	100	255	355	90	250	340
	Doctorate	50	165	215	70	210	280	50	160	210	60	185	245
	Other postgraduate	70	45	115	30	50	80	30	60	90	25	45	70
Non-UK	First degree	560	620	1,180	575	610	1,185	655	665	1,320	655	715	1,370
	Other undergraduate	5	30	35	10	5	15	35	45	85	25	55	80
	Masters	250	485	735	360	540	900	265	495	760	290	445	735
	Doctorate	60	140	200	75	155	225	75	135	205	70	175	240
	Other postgraduate	5	5	10	0	5	5	15	30	45	20	25	50
All graduates	First degree	2,900	4,050	6,950	3,235	4,720	7,950	3,260	4,525	7,785	3,055	4,510	7,565
	Other undergraduate	420	600	1,020	235	340	570	280	420	700	180	385	565
	Masters	350	740	1,090	460	800	1,260	365	750	1,115	385	695	1,080
	Doctorate	115	305	420	145	360	505	125	290	415	125	360	490
	Other postgraduate	75	50	125	30	55	85	45	90	135	45	70	115
Grand total		3,860	5,750	9,605	4,100	6,270	10,370	4,070	6,080	10,150	3,790	6,025	9,815

Note: data for the gender category 'other' are not shown in this table; however, they are included in the totals provided.

	2011/12			2012/13			2013/14			2014/15		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	41%	59%	100%	39%	61%	100%	40%	60%	100%	39%	61%	100%
	42%	58%	100%	40%	60%	100%	39%	61%	100%	31%	69%	100%
	28%	72%	100%	28%	72%	100%	28%	72%	100%	27%	73%	100%
	24%	76%	100%	25%	75%	100%	24%	76%	100%	24%	76%	100%
	60%	40%	100%	38%	62%	100%	32%	68%	100%	34%	66%	100%
	47%	53%	100%	48%	52%	100%	50%	50%	100%	48%	52%	100%
	15%	85%	100%	57%	43%	100%	43%	57%	100%	33%	67%	100%
	34%	66%	100%	40%	60%	100%	35%	65%	100%	40%	60%	100%
	31%	69%	100%	32%	68%	100%	36%	64%	100%	28%	72%	100%
	44%	56%	100%	29%	71%	100%	33%	67%	100%	47%	53%	100%
	42%	58%	100%	41%	59%	100%	42%	58%	100%	40%	60%	100%
	41%	59%	100%	41%	59%	100%	40%	60%	100%	32%	68%	100%
	32%	68%	100%	37%	63%	100%	33%	67%	100%	35%	65%	100%
	27%	73%	100%	28%	72%	100%	30%	70%	100%	26%	74%	100%
	59%	41%	100%	38%	62%	100%	32%	68%	100%	39%	61%	100%
Grand total	40%	60%	100%	40%	60%	100%	40%	60%	100%	39%	61%	100%

Type of Academic Contract	Age-band	2011/12			2012/13			2013/14			2014/15			
		Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	
Senior lecturers/lecturers	20 years and under	0	0	0	0	0	0	0	0	0	5	5	0	5
	21 to 25 years	5	10	15	15	35	55	25	50	75	30	60	85	
	26 to 30 years	30	110	135	40	130	170	50	125	175	55	120	175	
	31 to 35 years	80	265	345	85	285	370	100	330	430	95	365	460	
	36 to 40 years	75	275	350	90	290	380	105	315	425	110	310	420	
	41 to 45 years	65	215	280	55	220	275	55	230	285	75	250	320	
	46 to 50 years	40	180	220	55	195	250	50	195	250	55	210	265	
	51 to 55 years	40	125	165	45	150	195	40	160	200	40	150	195	
	56 to 60 years	35	85	120	35	120	155	35	110	145	35	125	160	
	61 to 65 years	20	70	90	20	80	100	20	75	95	15	70	85	
	66 years and over	5	30	35	10	40	45	10	50	55	5	45	55	
	Total	395	1365	1760	450	1545	1995	490	1645	2135	520	1700	2220	

Type of Academic Contract	Age-band	2011/12			2012/13			2013/14			2014/15		
		Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Researchers	20 years and under	0	0	0	0	0	0	0	0	0	0	0	0
	21 to 25 years	5	20	25	5	25	35	10	35	40	10	30	40
	26 to 30 years	60	250	310	75	270	345	85	290	370	80	290	370
	31 to 35 years	45	170	215	55	185	240	60	220	280	60	225	285
	36 to 40 years	15	60	70	20	60	80	20	55	70	15	55	70
	41 to 45 years	5	25	35	10	25	35	10	25	35	5	25	30
	46 to 50 years	5	15	15	5	20	25	5	20	25	10	10	20
	51 to 55 years	5	5	10	5	5	10	5	5	10	5	10	15
	56 to 60 years	0	5	5	5	5	10	5	5	10	5	5	10
	61 to 65 years	0	5	5	0	5	5	0	10	10	0	5	10
	66 years and over	0	0	0	0	0	0	0	0	0	0	0	0
	Total	145	550	695	185	605	790	195	660	855	195	660	850

Grand Total	630	2,655	3,285	690	2,780	3,470	750	2,955	3,705	780	3,015	3,795
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Note: "*" indicates where a percentage can not be calculated due to a denominator value of 0.

*Type of academic contract figures have been calculated using a different methodology for 2011/12 compared with all other years included in the tables. Please see the guidance notes sheet for more information.

2011/12	2011/12			2012/13			2013/14			2014/15		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
34%	66%	100%	33%	67%	100%	33%	67%	100%	64%	36%	100%	
30%	70%	100%	30%	70%	100%	30%	70%	100%	32%	68%	100%	
21%	79%	100%	23%	77%	100%	28%	72%	100%	33%	67%	100%	
23%	77%	100%	23%	77%	100%	23%	77%	100%	21%	79%	100%	
22%	78%	100%	24%	76%	100%	25%	75%	100%	26%	74%	100%	
23%	77%	100%	20%	80%	100%	19%	81%	100%	23%	77%	100%	
18%	82%	100%	21%	79%	100%	21%	79%	100%	20%	80%	100%	
23%	77%	100%	23%	77%	100%	19%	81%	100%	22%	78%	100%	
28%	72%	100%	24%	76%	100%	24%	76%	100%	22%	78%	100%	
23%	77%	100%	21%	79%	100%	22%	78%	100%	20%	80%	100%	
19%	81%	100%	19%	81%	100%	14%	86%	100%	13%	87%	100%	
23%	77%	100%	23%	77%	100%	23%	77%	100%	23%	77%	100%	

2011/12	2011/12			2012/13			2013/14			2014/15		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
10%	90%	100%	28%	72%	100%	0%	100%	100%	99%	1%	100%	
27%	73%	100%	22%	78%	100%	19%	81%	100%	23%	77%	100%	
20%	80%	100%	22%	78%	100%	22%	78%	100%	21%	79%	100%	
21%	79%	100%	24%	76%	100%	21%	79%	100%	22%	78%	100%	
20%	80%	100%	24%	76%	100%	25%	75%	100%	23%	77%	100%	
22%	78%	100%	28%	72%	100%	30%	70%	100%	23%	77%	100%	
20%	80%	100%	19%	81%	100%	27%	73%	100%	44%	56%	100%	
49%	51%	100%	38%	62%	100%	36%	64%	100%	36%	64%	100%	
25%	75%	100%	53%	47%	100%	62%	38%	100%	45%	55%	100%	
0%	100%	100%	29%	71%	100%	16%	84%	100%	9%	91%	100%	
34%	66%	100%	38%	62%	100%	0%	100%	100%	0%	100%	100%	
21%	79%	100%	23%	77%	100%	23%	77%	100%	23%	77%	100%	

19%	81%	100%	20%	80%	100%	20%	80%	100%	21%	79%	100%
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Average age of academic staff in permanent roles (professors, senior lecturers/lecturers, researchers, and other) in the mathematics cost centre, by gender, 2011/12 to 2014/15 & Average age of all academic staff in permanent roles, by gender, 2011/12 to 2014/15.

Source: HESA Staff Record 2011/12, 2012/13, 2013/14, 2014/15

Average age of mathematics cost centre permanent academic staff by staff grade and gender (including totals), 2011/12 to 2014/15.

Staff Grade	2011/12			2012/13			2013/14			2014/15		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Professor	50.5	52.2	52	49.6	52.5	52.2	49.4	52.6	52.3	50.4	53	52.7
Senior lecturers/ lecturers	43.5	43.2	43.2	43.2	43.5	43.5	42.0	43.1	42.9	41.6	43.2	42.9
Researchers	37.2	37.8	37.6	37.7	37.3	37.4	37.7	36.0	36.4	37.0	35.3	35.7
Other grades	..	..	..	..	..	41.5	..	..	..	..	..	..
Total	43.8	46	45.6	43.6	45.9	45.5	42.7	45.6	45.0	42.4	45.7	45.1

Note: ".." indicates where a value has been suppressed.

Please see the guidance notes sheet for more information.

Average age of permanent academic staff by cost centre marker and gender (including totals), 2011/12 to 2014/15.

Cost Centre	2011/12			2012/13			2013/14			2014/15		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Mathematics	43.8	46.0	45.6	43.6	45.9	45.5	42.7	45.6	45.0	42.4	45.7	45.1
Other	45.1	47.0	46.2	45.3	47.1	46.3	45.4	47.1	46.3	45.4	47.1	46.4
Total	45.1	47.0	46.2	45.3	47.1	46.3	45.3	47.0	46.3	45.3	47.1	46.3

Note: ".." indicates where a value has been suppressed.

Please see the guidance notes sheet for more information.

Explanatory Notes

Table Title	Notes
<p>HE academic staff by cost centre, type of academic contract (academic employment function/professor marker)*, and gender, 2011/12 and 2014/15.</p>	<p>Type of academic contract figures have been calculated using different methodologies for the year 2011/12 compared with all other years included in the tables due to a fundamental change to academic employment classifications commencing 2012/13. As of 2012/13, the classification of 'Professor' indicates a member of staff holding a contract which aligns with the Universities and Colleges Employers Association (UCEA) contract level 5A 'Professor'. This level indicates a senior academic appointment which may carry the title of Professor but which does not have departmental line management responsibilities.</p> <p>Further guidance on the levels to which contracts can be aligned may be found at www.hesa.ac.uk/13025/a/LEVELS. Professorial status is not available for non-academic atypical staff.</p> <p>Prior to 2012/13, 'Professor' was a term associated with those returned in the HESA Staff record as holding a contract for a professorial role, and as such the data is not directly comparable across years.</p>
<p>&</p>	<p>2011/12 Methodology: staff with the contract level classification of either 'teaching' or 'teaching and research' are counted as 'senior lecturers/lecturers'. 'Research only' contract level staff are here counted as 'researchers', and 'not teaching and/or research' staff are here labelled as 'other grades'. The figures for all 'senior lecturers/lecturers', 'researchers', 'other grades', and 'not applicable/not required (default code)' have been filtered to exclude professors using the professor marker indicator. Counts for these classifications include staff with the 'not a professor' and 'N/A (atypical staff)' markers. Counts for the 'Professor' classification in this table have been calculated using the 'professor' class in the professor marker. Please note that staff given the 'professor' class in the professor marker indicator are also given a contract level classification - these professors have been excluded from other academic contract categories in the above table in order to produce the 'professor' category shown here; therefore, double counting has been avoided.</p>
<p>HE academic staff in the mathematics cost centre, by type of academic contract (academic employment function/professorship marker), age-band and gender, 2011/12 and 2014/15.</p>	<p>2012/13 - 2014/15 Methodology: The Professor marker indicator is not applicable to the years from 2012/13 onwards so can therefore not be used to calculate the value for the professor category. The professor marker has thus been replaced by the contract level indicator in the 2012/13, 2013/14, and 2014/15 methodology. Those staff classed as having the contract level of 'F1 Professor' constitute the 'Professors' category in these tables. These Professors have then been excluded from the staff count, with the remaining staff being classified in the table using the academic employment function indicator with the same methodology as in 2011/12 i.e. staff with the 'only research' academic employment function are here classified as 'researchers' etc.</p> <p>Please note that the 'other grades' and 'not applicable/not required (default code)' categories have been excluded for reasons of suppression from the table entitled <i>HE academic staff in the mathematics cost centre, by type of academic contract (academic employment function/professorship marker), age-band and gender, 2011/12 and 2014/15</i>.</p>
<p>Average age of mathematics cost centre permanent academic staff by staff grade and gender (including totals), 2011/12 to 2014/15.</p>	<p>Average age calculations have been calculated on the FPE permanent academic staff with a known age. Atypical staff have been excluded.</p> <p>Staff grades are defined using the professorial marker/ contract levels and academic employment function fields as follows:</p> <p>Professors as indicated from the professorial marker/ contract levels fields are classified as "professors"</p> <p>Teaching and research academic employment function are classified as "senior lecturers/lecturers"</p> <p>Teaching only academic employment function are classified as "senior lecturers/lecturers"</p> <p>Research only academic employment function are classified as "researchers"</p> <p>Neither teaching nor research academic employment function are classified as "other grades"</p>

Average age of permanent academic staff by cost centre marker and gender (including totals), 2011/12 to 2014/15.

Average age calculations have been calculated on the FPE permanent academic staff with a known age. Atypical staff have been excluded.

Suppression rules for HESA data

Counts

Counts of student instances (and apportioned subject-level data) and staff are rounded to the nearest multiple of 5. Halves are always rounded upwards. For example 0, 1, 2 are rounded to 0, 3 is represented as 5, 22 is represented as 20, 3286 is represented as 3285 while 0, 20, 55, 3510 remain unchanged. This rounding strategy is also applied to total figures, so the sum of numbers in each row or column may not match the total shown.

Percentages

Percentages are calculated from un-rounded raw numbers.

Averages

Averages based on 7 or fewer individuals are suppressed