



June 2012

Accepted Applicants to Degree Courses in UK Higher Education Institutions

This report was prepared for the Institute of Physics by
Sean McWhinnie of Oxford Research and Policy.

Oxford Research and Policy is a consultancy that carries out
research and evaluation, and specialises in higher education,
science policy, and equality and diversity.

Tel +44 (0)1235 439188

E-mail info@oxfordresearchandpolicy.co.uk

www.oxfordresearchandpolicy.co.uk

Contents

Summary	2
1: Introduction	3
1.1: UCAS datasets	3
2: Applicants and accepted applicants to UK higher education institutions	4
2.1: The numbers of accepted applicants	4
2.2: The ratio of applicants to accepted applicants	8
2.3: Tariff points of applicants	10
2.4: Age of accepted applicants	14
Appendix A: List of tables	15
Appendix B: List of figures	17

Summary

¹ The definition of physics used is all courses classified under the JACS code F3 in the UCAS datasets.

- The total number of accepted applicants to degree courses in physics¹ rose from 2905 in 2003 to 4086 in 2011. The proportion of accepted applicants who were UK domiciled varied from 90.9% in 2003 to 89.0% in 2011 and the proportion of accepted applicants who were female varied from 18.8% in 2003 to 18.6% in 2011.
- In 2011, 0.93% of all UK-domiciled accepted applicants who entered degree courses entered degree courses in physics.
- In 2011, 90.2% of male and 83.6% of female accepted applicants who entered physics degree courses were UK-domiciled.
- The proportions of UK-domiciled accepted applicants reading physics, mathematics, chemistry and the biological sciences increased between 2003 and 2011, although the proportionate increase in physics was less than in the other subjects. In contrast, the proportion reading electronic and electrical engineering fell.
- Among the subjects under consideration in the report (physics, mathematics, chemistry, electronic and electrical engineering, and biological sciences) physics has the highest proportion of first-choice acceptances, 78%, and the lowest proportion of clearing acceptances, 8%. The proportion of first-choice acceptances in physics is similar to the average figure across all subjects, but the proportion of clearing acceptances is lower.
- In 2011, 8% of UK-domiciled accepted applicants who entered physics degree courses were accepted through clearing. The corresponding figures for the other subjects under consideration were: 12% for mathematics; 15% for biological sciences; 13% for chemistry; and 20% for electronic and electrical engineering. Overall, 14% of the total UK-domiciled accepted applicants who entered degree courses were accepted through clearing.
- For degree courses in physics between 2003 and 2009 the ratio of applicants to accepted applicants varied from year to year between 1.03 and 1.11. However, the ratio rose sharply from 1.06 in 2009 to 1.23 in 2011, suggesting that there was an increase in the demand for places on physics degree courses.
- 45.8% of accepted applicants who entered degree courses in physics had 480 plus tariff points in 2011. Mathematics had a lower proportion than physics, 39.8%, followed by chemistry, 30.1%. Electronic and electrical engineering, and biological sciences had lower proportions, 13.7% and 21.2%, respectively.
- 93.8% of UK-domiciled accepted applicants who entered physics degrees courses were aged 20 and under in 2011.

1: Introduction

This report presents an overview of applicants and accepted applicants to degree courses in UK higher education institutions (HEIs) in physics and a number of other selected other subjects. The data source for the report is the University and College Admissions Service (UCAS). UCAS is the organisation responsible for managing applications to higher education courses in the UK.

1.1: UCAS datasets

Two publicly available datasets have been used for this report, the UCAS qualification/subject dataset and the UCAS subject dataset from 2003 to 2010. Descriptions of the datasets are given below. In addition, a custom dataset was used containing data on the numbers of applicants that accepted their firm or insurance choices.

The UCAS qualification/subject dataset is restricted to UK applicants and accepted applicants. The dataset contains the following variables:

- Subject group
- Subject
- Tariff
- Age (shown as one of four age bands).

The dataset contains data on the following:

- Male, female and total applicants
- Male, female and total accepted applicants to degree courses (up to 2007 including foundation degrees)
- Male, female and total accepted applicants to HND courses
- Male, female and total accepted applicants to foundation degree courses (from 2007 onwards)
- Male, female and total accepted applicants to other courses (from 2007 onwards)
- Male, female and total accepted applicants to all courses.

Applicants are classified according to the subject listed most frequently on their application form. Acceptances are classified according to the subject of acceptance.

The UCAS tariff was introduced for the 2002 entry. The tariff establishes agreed equivalences between different types of qualifications and reports achievement for entry to higher education in a numerical format. This allows comparisons between applicants with different types and volumes of achievement. Students can collect tariff points from a range of different qualifications, for example, GCE A-level with BTEC nationals. There is no ceiling to the number of points that can be accumulated.

Table 1: UCAS tariff values for GCE A-levels

A-level grade	Tariff points
A*	140
A	120
B	100
C	80
D	60
E	40

Source: UCAS.

Full details of tariffs are published on the UCAS website (www.ucas.com/students/ucas_tariff/tariffables/). As an example, GCE A-level has the tariff values as shown in table 1.

The UCAS subject dataset contains information on all applicants and accepted applicants. The dataset contains the following variables:

- Subject group
- Subject
- Applicant domicile (UK, EU (non-UK), non-EU)
- Age (shown as one of 11 ages/age bands)
- Gender.

The dataset contains data on the following:

- All applicants
- Accepted applicants for degree courses and those accepted through clearing (up to 2007 including foundation degrees)
- Accepted applicants for HND courses and those accepted through clearing
- Accepted applicants for foundation degree courses and those accepted through clearing (from 2007 onwards)
- Accepted applicants for other courses and those accepted through clearing (from 2007 onwards)
- Accepted applicants for all courses and those accepted through clearing.

As is the case with the UCAS qualification/subject dataset, applicants are classified according to the subject listed most frequently on the application form and acceptances are classified according to the subject of acceptance.

Clearing acceptances includes those accepted through UCAS Extra and direct entrants.

As well as presenting data for physics, the report presents data for a small number of other subjects: mathematics, chemistry, electronic and electrical engineering, and for a group of biological science subjects.²

² The subjects included in the definition of biological sciences used in this report and those included in the Joint Academic Coding System (JACS) of subjects biological sciences group differ. The subjects used in the definition of biological sciences used in this report are: biology; botany; zoology; genetics; microbiology; molecular biology, biophysics and biochemistry; and others in biological sciences. Sports science and psychology are included in the JACS biological science but not in the definition of biological sciences used in this report.

2: Applicants and accepted applicants to UK higher education institutions

3. The definition of physics used is all courses classified under the JACS code F3 in the UCAS datasets.

2.1: The numbers of accepted applicants

The number of accepted applicants to degree courses in physics³ is shown in table 2. The number of accepted applicants rose from 2905 to 4086 between 2003 and 2011. The proportion of UK-domiciled accepted applicants varied from 90.9% in 2003 to 89.0% in 2011. The proportion of women varied from 18.8% in 2003 to 18.6% in 2011. In 2011, there was a lower proportion of female accepted applicants who were from the UK, 83.6%, than male accepted applicants who were

from the UK, 90.2%: the proportion of UK-domiciled applicants who were female was 17.5%.

Figure 1 shows the number of accepted applicants to physics degree courses between 1996 and 2011, and the proportion of the total accepted applicants to all degree courses that this represents. There have been fluctuations in the number of accepted applicants to physics degree courses since 1996, but numbers are currently increasing and were at their highest level during the period under consideration in 2011.

Table 2: Numbers of accepted applicants to degree courses in physics 2003–2011

Year	Male				Female				All
	UK	EU (ex-UK)	Non-EU	Total	UK	EU (ex-UK)	Non-EU	Total	
2003	2161	99	100	2360	481	34	30	545	2905
2004	2039	93	91	2223	396	29	23	448	2671
2005	2156	90	101	2347	498	33	49	580	2927
2006	2164	106	95	2365	459	48	62	569	2934
2007	2364	150	88	2602	531	41	43	615	3217
2008	2407	144	115	2666	557	38	59	654	3320
2009	2536	164	128	2828	620	49	56	725	3553
2010	2592	171	132	2895	637	66	59	762	3657
2011	2999	174	152	3325	636	73	52	761	4086

Source: UCAS subject dataset.

Figure 1: Number of accepted applicants to degree courses in physics, and the proportion of all accepted applicants to degree courses that this represents 1996–2011



Source: UCAS qualification/subject dataset and UCAS online statistical enquiry tool.

2: Applicants and accepted applicants to UK higher education institutions

Table 3: Domicile and gender of accepted applicants to degree courses in physics 2003–2011

Year	Male			Female		
	UK	EU (ex-UK)	Non-EU	UK	EU (ex-UK)	Non-EU
2003	91.6%	4.2%	4.2%	88.3%	6.2%	5.5%
2004	91.7%	4.2%	4.1%	88.4%	6.5%	5.1%
2005	91.9%	3.8%	4.3%	85.9%	5.7%	8.4%
2006	91.5%	4.5%	4.0%	80.7%	8.4%	10.9%
2007	90.9%	5.8%	3.4%	86.3%	6.7%	7.0%
2008	90.3%	5.4%	4.3%	85.2%	5.8%	9.0%
2009	89.7%	5.8%	4.5%	85.5%	6.8%	7.7%
2010	89.5%	5.9%	4.6%	83.6%	8.7%	7.7%
2011	90.2%	5.2%	4.6%	83.6%	9.6%	6.8%

Source: UCAS subject dataset.

Table 4: Numbers of accepted applicants to degree courses in selected subjects by gender and domicile in 2011

Subject/ subject group	Male				Female				All
	UK	EU (ex-UK)	Non-EU	Total	UK	EU (ex-UK)	Non-EU	Total	
Physics	2999	174	152	3325	636	73	52	761	4086
Mathematics	3912	183	427	4522	2569	170	371	3110	7632
Chemistry	2368	88	136	2592	1607	98	169	1874	4466
Electronic and electrical engineering	3055	355	897	4307	244	40	200	484	4791
Biological sciences	4549	240	211	5000	5799	535	334	6668	11,668
All degree subjects	175,246	11,805	16,476	203,527	214,815	14,211	16,875	245,901	449,428

Source: UCAS subject dataset.

Table 5: Domicile and gender of accepted applicants to degree courses in selected subjects in 2011

Subject/subject group	Male			Female		
	UK	EU (ex-UK)	Non-EU	UK	EU (ex-UK)	Non-EU
Physics	90.2%	5.2%	4.6%	83.6%	9.6%	6.8%
Mathematics	86.5%	4.0%	9.4%	82.6%	5.5%	11.9%
Chemistry	91.4%	3.4%	5.2%	85.8%	5.2%	9.0%
Electronic and electrical engineering	70.9%	8.2%	20.8%	50.4%	8.3%	41.3%
Biological sciences	91.0%	4.8%	4.2%	87.0%	8.0%	5.0%
All degree courses	86.1%	5.8%	8.1%	87.4%	5.8%	6.9%

Source: UCAS subject dataset.

2: Applicants and accepted applicants to UK higher education institutions

However, the proportion of total accepted applicants entering physics courses has fallen from 1.06% in 1996 to 0.91% in 2011, although the proportion has increased slightly in recent years after reaching a minimum of 0.74% in 2004.

Table 3 shows the proportions of accepted applicants to physics degree courses by domicile between 2003 and 2011. The proportion of females who were UK domiciled is consistently lower than the proportion of males who were UK domiciled.

Table 4 shows the accepted applicants to degree courses in a number of selected subjects in 2011. Table 5 shows the proportions of accepted applicants to degree courses in selected subjects by domicile in 2011. Table 6 shows data on the proportions of males and females who were UK-domiciled accepted applicants, and the proportion of UK domiciled and all accepted applicants who were female.

There was some variation in the proportions of accepted applicants who were UK domiciled but electronic and electrical engineering had a significantly lower proportion of accepted applicants who were UK domiciled in 2011 than the other subjects under consideration. It is notable that physics has a higher proportion of UK-domiciled male accepted applicants

than the average for all subjects, but a lower proportion of UK-domiciled female accepted applicants than the average for all subjects. This pattern is similar to that for mathematics and chemistry.

In all the selected subjects under consideration the proportion of UK-domiciled accepted applicants who were female was lower than the proportion of non-UK-domiciled accepted applicants who were female. This is not the case for accepted applicants across all degree subjects. As expected, the proportion of all accepted applicants who were female varied from electronic and electrical engineering at 10% to biological sciences at 57%.

Table 7 shows the numbers of UK-domiciled accepted applicants to degree courses in selected subjects from 2003 to 2011, and table 8 shows all accepted applicants to degree courses in selected subjects from 2003 to 2011.

Table 9 shows the UK-domiciled accepted applicants to selected subject/subject groups as a proportion of accepted applicants to all degree courses, and table 10 shows the same information for non-UK-domiciled accepted applicants. The data for physics for all accepted applications was also presented earlier in figure 1.

Source (both tables):
UCAS subject dataset.

Table 6: Derived data for accepted applicants to degree courses in selected subjects in 2011

Subject/subject group	Proportion of male accepted applicants who are from the UK	Proportion of female accepted applicants who are from the UK	Proportion of UK-domiciled accepted applicants who are female	Proportion of non-UK domiciled accepted applicants who are female	Proportion of all accepted applicants who are female
Physics	90.2%	83.6%	17.5%	27.7%	18.6%
Mathematics	86.5%	82.6%	39.6%	47.0%	40.7%
Chemistry	91.4%	85.8%	40.4%	54.4%	42.0%
Electronic and electrical engineering	70.9%	50.4%	7.4%	16.1%	10.1%
Biological sciences	91.0%	87.0%	56.0%	65.8%	57.1%
All degree subjects	86.1%	87.4%	55.1%	52.4%	54.7%

Table 7: UK-domiciled accepted applicants to degree courses in selected subjects 2003–2011

Subject/subject group	Accepted applicants to degree courses								
	2003	2004	2005	2006	2007	2008	2009	2010	2011
Physics	2642	2435	2654	2623	2895	2964	3156	3229	3635
Mathematics	3700	4091	4533	4593	5014	5371	5809	6161	6481
Chemistry	2754	2790	3171	3256	3525	3607	3427	3859	3975
Electronic and electrical engineering	4272	3469	3336	2824	2699	2636	2912	2939	3299
Biological sciences	8226	7914	8458	7723	8001	8702	8933	9737	10,348
All degree subjects	316,242	320,537	348,848	336,938	335,918	358,530	372,806	374,517	390,061

2: Applicants and accepted applicants to UK higher education institutions

Table 8: All accepted applicants to degree courses in selected subjects 2003–2011

Subject/subject group	Accepted applicants to degree courses								
	2003	2004	2005	2006	2007	2008	2009	2010	2011
Physics	2905	2671	2927	2934	3217	3320	3553	3657	4086
Mathematics	4366	4778	5263	5412	5915	6403	6916	7276	7632
Chemistry	3042	3080	3464	3583	3897	4009	3895	4316	4466
Electronic and electrical engineering	6375	5767	5281	4630	4637	4475	4711	4810	4791
Biological sciences	9136	8963	9556	8736	9059	9841	10,163	11,017	11,668
All degree subjects	355,531	362,985	393,316	381,643	383,541	408,813	427,901	435,591	449,428

Source: UCAS subject dataset.

Table 9: UK-domiciled accepted applicants to selected subject/subject groups as a proportion of accepted applicants to all degree courses 2003–2011

Subject/subject group	Proportion of the total applicants to all degree courses for UK-domiciled accepted applicants								
	2003	2004	2005	2006	2007	2008	2009	2010	2011
Physics	0.84%	0.76%	0.76%	0.78%	0.86%	0.83%	0.85%	0.86%	0.93%
Mathematics	1.17%	1.28%	1.30%	1.36%	1.49%	1.50%	1.56%	1.65%	1.66%
Chemistry	0.87%	0.87%	0.91%	0.97%	1.05%	1.01%	0.92%	1.03%	1.02%
Electronic and electrical engineering	1.35%	1.08%	0.96%	0.84%	0.80%	0.74%	0.78%	0.78%	0.85%
Biological sciences	2.60%	2.47%	2.42%	2.29%	2.38%	2.43%	2.40%	2.60%	2.65%

Table 10: Non-UK-domiciled accepted applicants to selected subject/subject groups as a proportion of accepted applicants to all degree courses 2003–2011

Subject/subject group	Proportion of the total applicants to all degree courses for non-UK-domiciled accepted applicants								
	2003	2004	2005	2006	2007	2008	2009	2010	2011
Physics	0.67%	0.56%	0.61%	0.70%	0.68%	0.71%	0.72%	0.70%	0.76%
Mathematics	1.70%	1.62%	1.64%	1.83%	1.89%	2.05%	2.01%	1.83%	1.94%
Chemistry	0.73%	0.68%	0.66%	0.73%	0.78%	0.80%	0.85%	0.75%	0.83%
Electronic and electrical engineering	5.35%	5.41%	4.37%	4.04%	4.07%	3.66%	3.27%	3.06%	2.51%
Biological sciences	2.32%	2.47%	2.47%	2.27%	2.22%	2.27%	2.23%	2.10%	2.22%

The proportions of UK-domiciled accepted applicants reading physics, mathematics, chemistry and the biological sciences has increased over the timescale under consideration, although the proportionate increase in physics is less than in the other subjects. In contrast, the proportion reading electronic and electrical engineering has fallen.

The patterns of the proportions of accepted applicants reading particular subjects differs between UK and non-UK-domiciled accepted applicants. In particular, there is a significantly greater proportion of non-UK-domiciled accepted applicants reading electronic and

electrical engineering. The data for non-UK-domiciled accepted applicants shows some variation but less than for the UK-domiciled accepted applicants, except in the case of electronic and electrical engineering where the proportion has fallen from 5.35% in 2003 to 2.51% in 2011.

Table 11 shows the proportion of UK-domiciled individuals accepted onto degree courses in physics through clearing from 2003 to 2011. There are no clear patterns as the proportion accepted through clearing varied from year to year and between males and females.

Source (tables 9 and 10): UCAS qualification/subject dataset.

2: Applicants and accepted applicants to UK higher education institutions

Table 12 presents a breakdown of the numbers of UK-domiciled accepted applicants to degree courses who accepted their first-choice (firm) offer, their second-choice (or insurance) offer, or who accepted a place through the clearing system in selected subjects in 2011. Figure 2 presents the same data as proportionate breakdowns.

Among the subjects under consideration, physics has the highest proportion of first-choice acceptances, and

the lowest proportion of clearing acceptances. The proportion of first-choice acceptances in physics is similar to the average figure across all subjects, but the proportion of clearing acceptances is lower. In other words, UK-domiciled accepted applicants to physics degree course are less likely to be accepted through clearing than those in the other subjects under consideration. In all the subjects under consideration the patterns for males and females are similar except for electronic and electrical engineering, where females are less likely than males to have been accepted onto their first-choice course.

Among the subjects under consideration, physics had the lowest proportion of individuals accepted through clearing, and electronic and electrical engineering the highest. Considering all individual subjects, there is no correlation between the proportion of applicants accepted through clearing and the proportion of accepted applicants with, say, 480 plus tariff points.

2.2: The ratio of applicants to accepted applicants

Table 13 shows the UK-domiciled applications and accepted applicants for males and females to physics degree courses from 2003 to 2011 and the ratios of applications to accepted applicants. It should be noted that the number of applicants is the applicants to all courses and not just degree courses. However, the number of accepted applicants to HND and foundation degree courses in physics is very small and so the ratios of applicants to accepted applicants for degrees

Source: UCAS subject dataset.

Table 11: Proportion of UK-domiciled individuals accepted onto degree courses in physics through clearing 2003–2011

Year	Proportion of UK-domiciled individuals accepted onto degree courses in physics through clearing	
	Male	Female
2003	9.3%	6.7%
2004	8.1%	8.3%
2005	8.3%	9.0%
2006	8.5%	8.3%
2007	8.5%	9.0%
2008	11.0%	11.5%
2009	10.3%	7.9%
2010	9.1%	9.3%
2011	7.6%	7.7%

Table 12: Number of UK-domiciled individuals accepted onto degree courses in selected subjects via firm, insurance and clearing offers by gender in 2011

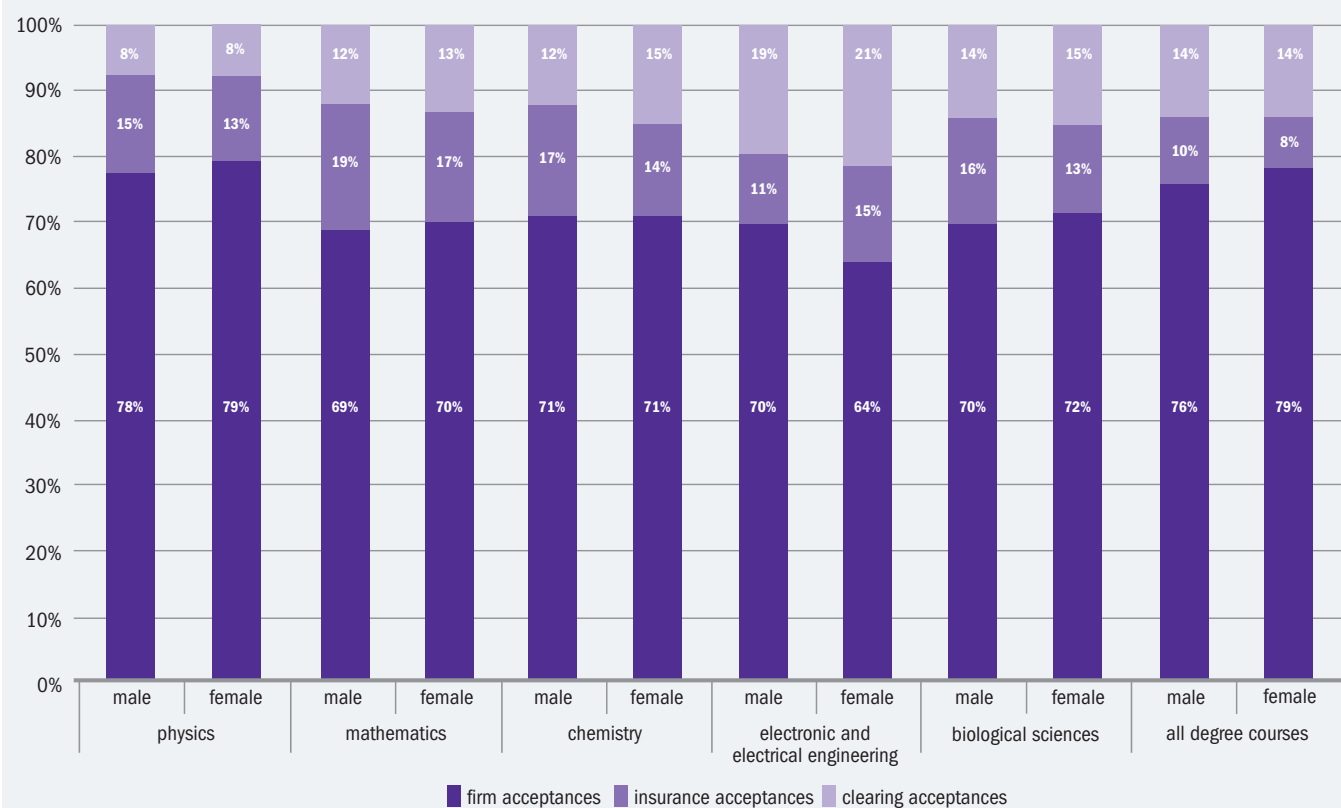
Subject/subject group	Gender	Number of accepted applicants by source			
		Firm acceptances	Insurance acceptances	Clearing acceptances	Total acceptances*
Physics	Male	2326	443	227	2996
	Female	504	83	49	636
Mathematics	Male	2684	744	468	3896
	Female	1796	435	336	2567
Chemistry	Male	1678	400	286	2364
	Female	1138	225	241	1604
Electronic and electrical engineering	Male	2132	328	595	3055
	Female	156	36	52	244
Biological sciences	Male	3181	719	649	4549
	Female	4147	770	879	5796
All degree courses	Male	133,097	17,623	24,302	175,022
	Female	168,576	16,794	29,166	214,536

Source: UCAS subject dataset and custom enquiry.

* These totals do not match the overall totals given in table 4 as that total includes a few other accepted applicants.

2: Applicants and accepted applicants to UK higher education institutions

Figure 2: Proportions of UK-domiciled individuals accepted onto degree courses in selected subjects via firm, insurance and clearing offers by gender in 2011



Source: UCAS subject dataset and custom enquiry.

Table 13: UK-domiciled applications and accepted applicants to degree courses in physics 2003–2010

Year	Applications			Accepted applicants			Ratio of applications to accepted applicants		
	Male	Female	All	Male	Female	All	Male	Female	All
2003	2304	557	2861	2161	481	2642	1.07	1.16	1.08
2004	2118	419	2537	2039	396	2435	1.04	1.06	1.04
2005	2317	515	2832	2156	498	2654	1.07	1.03	1.07
2006	2336	507	2843	2164	459	2623	1.08	1.10	1.08
2007	2617	573	3190	2364	531	2895	1.11	1.08	1.10
2008	2591	587	3178	2407	557	2964	1.08	1.05	1.07
2009	2689	660	3349	2536	620	3156	1.06	1.06	1.06
2010	2974	692	3666	2592	637	3229	1.15	1.09	1.14
2011	3662	794	4456	2999	636	3635	1.22	1.25	1.23

in physics are reasonably close to the true value of applicants to accepted applicants for degree courses.

Between 2003 and 2009 the ratio of applicants to accepted applicants varied from year to year and for females and males between 1.03 and 1.11. However, the ratio rose sharply in 2010 to 1.15 for males, and 1.14 overall, and then again in 2011 to 1.22 for males, 1.25 for females and 1.23 overall, suggesting that the

number of applicants has increased more than the increase in intake. It will be interesting to see whether the ratio remains at this level in 2012, or whether it falls back due to the forthcoming introduction of higher fees.

Table 14 shows the UK-domiciled applications and accepted applicants for males and females to degree courses in a number of selected subjects in 2011. The ratio of applications to accepted applicants varies

Source: UCAS qualification/subject dataset.

2: Applicants and accepted applicants to UK higher education institutions

Table 14: UK-domiciled applications and accepted applicants to degree courses in selected subjects in 2011

Year	Applications			Accepted applicants			Ratio of applications to accepted applicants		
	Male	Female	All	Male	Female	All	Male	Female	All
Physics	3662	794	4456	2999	636	3635	1.22	1.25	1.23
Mathematics	4257	2659	6916	3912	2569	6481	1.09	1.04	1.07
Chemistry	2622	1575	4197	2368	1607	3975	1.11	0.98	1.06
Electronic and electrical engineering	2965	199	3164	3055	244	3299	0.97	0.82	0.96
Biological sciences	4631	5332	9963	4549	5799	10,348	1.02	0.92	0.96
All degree courses	254,503	334,847	589,350	175,246	214,815	390,061	1.45	1.56	1.51

Source: UCAS qualification/subject dataset.

Table 15: Tariff points of UK-domiciled applicants and accepted applicants to degree courses in physics in 2011

Tariff points	Applications			Accepted applicants			Ratio of applications to accepted applicants		
	Male	Female	All	Male	Female	All	Male	Female	All
540 plus	905	242	1147	789	202	991	1.15	1.20	1.16
480–539	459	116	575	454	104	558	1.01	1.12	1.03
420–479	526	118	644	503	113	616	1.05	1.04	1.05
360–419	531	103	634	486	82	568	1.09	1.26	1.12
300–359	417	71	488	327	57	384	1.28	1.25	1.27
240–299	260	44	304	148	21	169	1.76	2.10	1.80
180–239	151	14	165	54	5	59	2.80	2.80	2.80
120–179	58	15	73	15	4	19	3.87	3.75	3.84
080–119	24	6	30	6	2	8	4.00	3.00	3.75
001–079	17	5	22	8	2	10	2.13	2.50	2.20
0*	314	60	374	209	44	253	1.50	1.36	1.48
Total	3662	794	4456	2999	636	3635	1.22	1.25	1.23

Source: UCAS qualification/subject dataset.

* Not all post-16 qualifications attract tariff points. Likewise, not every university or college uses the tariff for making offers. Minimum entry requirements for specific courses are at the discretion of the individual university or college. Higher education admissions staff take a wide range of factors into account in their admissions decisions. Consequently, some applicants and accepted applicants will not have any tariff points.

4. Where the ratio of applications to accepted applicants is below zero it is likely that applicants who accepted places either did not specify a majority subject when completing their application form, or accepted a place on a course that was not most frequently listed on their application form. Candidates may also have applied through clearing to named courses that they were not classified when originally applying.

between subjects. The lowest ratio is found in electronic and electrical engineering for females at 0.82,⁴ however, unlike the other subjects under consideration there were 118 accepted applicants to HND courses in electronic and electrical engineering so in this case the ratio is likely to be misleading.

The ratio of applications and accepted applicants is higher at 1.51 for all degree subjects than the specific subjects under consideration suggesting that there are fewer applicants to places in science and engineering than across all degree courses.

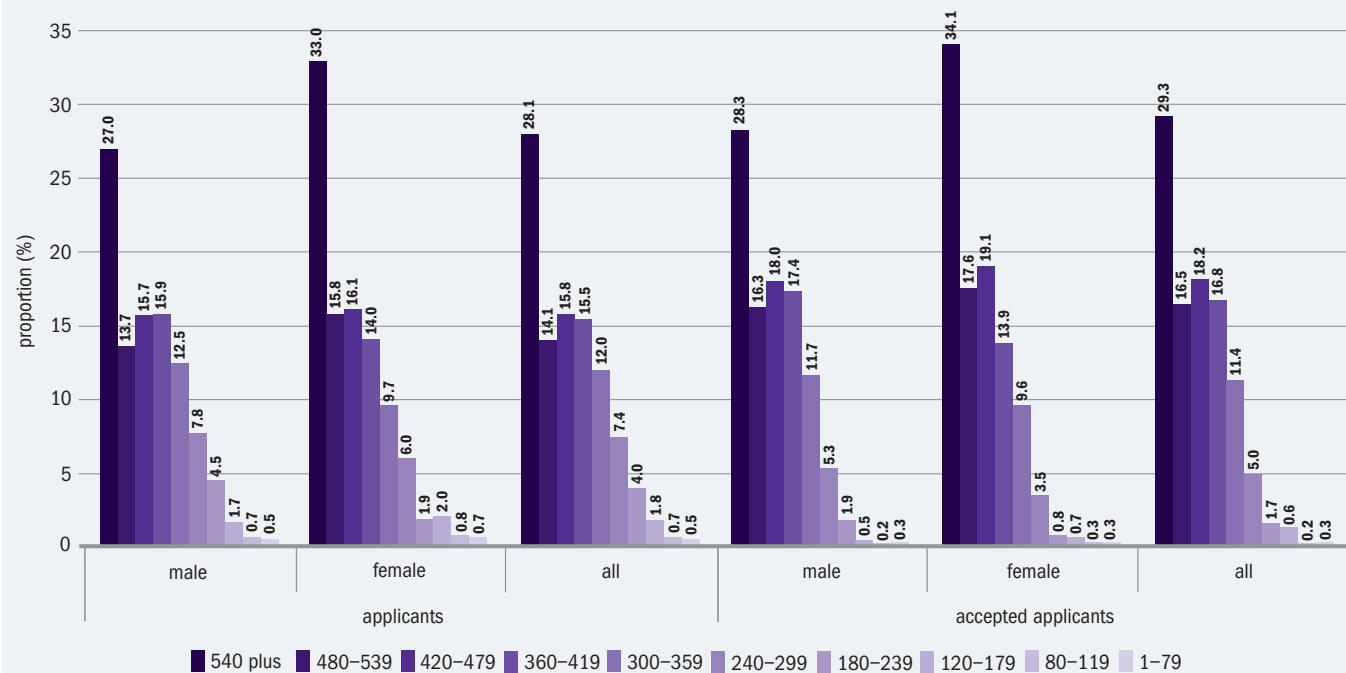
2.3: Tariff points of applicants

Table 15 presents data on the tariff points of male, female and all UK-domiciled applicants and accepted applicants to degree courses in physics in 2011, and figure 3 shows the distributions of tariff points for male, female and all UK-domiciled applicants and accepted applicants. Figure 4 shows the distributions of tariff points for all male, female and all UK-domiciled applicants and accepted applicants to all degree courses.

In physics higher proportions of female than male applicants accepted applicants had 540 plus and 480–539 tariff points, which suggests that females entering physics degree courses had higher entry

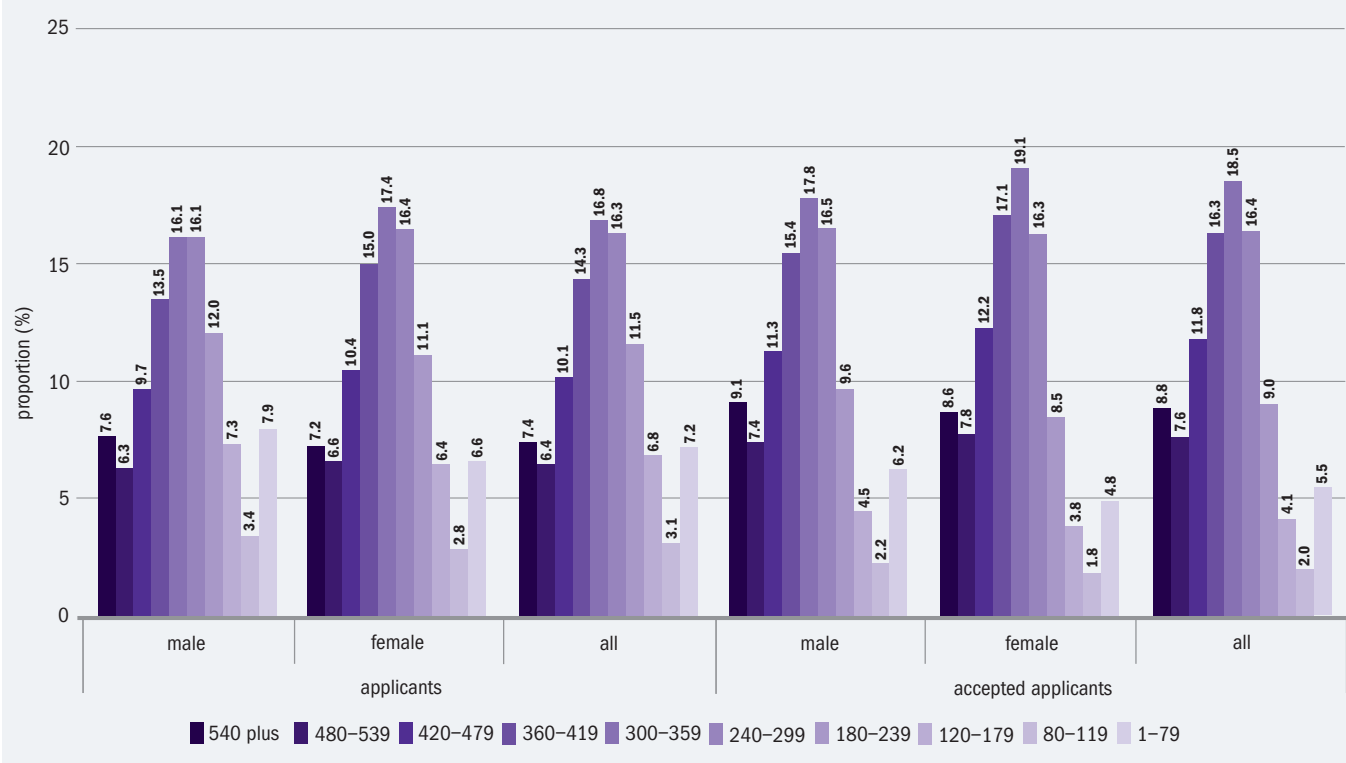
2: Applicants and accepted applicants to UK higher education institutions

Figure 3: Distribution of tariff points of UK-domiciled applicants and accepted applicants to degree courses in physics in 2010



Source: Source: UCAS qualification/subject dataset. Individuals with zero tariff have not been included in the distribution.

Figure 4: Distribution of tariff points of UK-domiciled applicants and accepted applicants to all degree courses in 2011



Source: Source: UCAS qualification/subject dataset. Individuals with zero tariff have not been included in the distribution.

2: Applicants and accepted applicants to UK higher education institutions

Table 16: Distributions of tariff points for UK-domiciled accepted applicants to degree courses in subject groups in 2011

Rank of subject group*	Subject group/subject	Proportion of accepted applicants with ranges of tariff points			
		540 plus	539–480	479–240	239–0
1	Medicine and dentistry	43.6%	22.0%	31.9%	2.5%
2	European languages, literature and related	17.6%	13.0%	65.9%	3.6%
3	Physical sciences	14.7%	11.4%	65.0%	8.9%
4	Linguistics, classics and related	12.8%	11.5%	67.5%	8.3%
5	Historical and philosophical studies	12.1%	11.1%	68.7%	8.1%
6	Engineering	12.7%	9.8%	58.1%	19.4%
7	Non-European languages and related	11.1%	11.4%	72.3%	5.2%
8	Biological sciences	10.8%	10.4%	68.0%	10.8%
9	Mathematical and computer science	12.8%	7.7%	52.6%	27.0%
10	Vet science, agriculture and related	11.6%	8.4%	58.5%	21.5%
11	Law	10.1%	8.6%	64.8%	16.5%
12	Social studies	9.0%	8.1%	67.2%	15.7%
13	Architecture, building and planning	7.9%	7.5%	61.6%	23.0%
14	Subjects allied to medicine	5.4%	6.5%	66.2%	21.8%
15	Creative arts and design	4.9%	5.2%	58.6%	31.3%
16	Technologies	4.4%	3.8%	60.3%	31.5%
17	Business and admin studies	2.6%	3.7%	63.9%	29.8%
18	Education	2.0%	3.0%	68.1%	26.8%
19	Mass communications and documentation	1.6%	2.8%	68.1%	27.5%

Source: UCAS qualification/subject dataset.

* Subject group rank based on the proportion of accepted applicants with 480 or more tariff points.

Table 17: Distributions of tariff points for UK-domiciled accepted applicants to degree courses in selected subjects in 2011

Rank of subject*	Subject group/subject	Proportion of accepted applicants with ranges of tariff points			
		540 plus	480–539	240–479	0–239
1	Social studies: any area of study	61.2%	17.0%	19.2%	2.5%
2	Pre-clinical medicine	45.4%	21.6%	30.5%	2.5%
3	Pre-clinical dentistry	32.8%	25.0%	40.0%	2.2%
4	Pre-clinical veterinary medicine	36.9%	20.0%	39.6%	3.5%
5	Physics	29.3%	16.5%	51.4%	2.8%
9	Mathematics	26.1%	13.7%	54.8%	5.4%
17	Chemistry	16.8%	13.3%	64.8%	5.1%
68	Electronic and electrical engineering	6.7%	7.0%	55.4%	31.0%

Source: UCAS qualification/subject dataset.

* Subject rankings based on the proportion of accepted applicants with 480 or more tariff points for subjects with 100 or more accepted applicants in 2011.

2: Applicants and accepted applicants to UK higher education institutions

qualifications than males. The ratios of applications to accepted applicants were similar for males and females in each tariff band that suggests that males and females with similar qualifications were equally likely to gain places in to read physics.

Comparing figure 3 and figure 4 illustrates that applicants and accepted applicants for physics courses had higher tariffs than the average tariffs overall across all degree subjects.

Tables 16 and 17 show the distributions of tariff points for accepted applicants for subjects groups and selected subjects ranked on the proportion of accepted applicants with 480 or more tariff points.

Among subject groups, medicine and dentistry has 65.6% of accepted applicants with 480 plus tariff

points. Physical sciences has the third highest proportion of accepted applicants with 480 plus tariff points (26.1%). Among the subjects under consideration, physics has a high proportion of accepted applicants with 480 plus tariff points, 45.8%. In comparison, mathematics has a lower proportion than physics, 39.8%, followed by chemistry, 30.1%. Electronic and electrical engineering has 13.7%. The biological sciences group used in this report had 21.2% of accepted applicants with 480+ tariff points.

The physical sciences in general, and physics in particular, are among the subjects with the highest proportions of well qualified accepted applicants as measured by UCAS tariff points.

Table 18: Distribution by age of UK-domiciled accepted applicants to degree courses in selected subjects/subject groups in 2011

Subject/subject group	Distribution of ages of UK-domiciled accepted applicants by gender (%)											
	20 and under			21–24			25–39			40 and over		
	M	F	All	M	F	All	M	F	All	M	F	All
Physics	92.3	93.7	93.8	4.4	3.1	3.5	3.1	3.0	2.4	0.2	0.2	0.2
Mathematics	93.6	95.3	94.6	3.8	2.8	3.4	2.2	1.4	1.6	0.4	0.5	0.4
Chemistry	94.4	94.8	95.2	3.7	3.0	3.0	1.8	1.9	1.5	0.2	0.2	0.2
Electronic and electrical engineering	69.1	72.1	71.4	15.3	14.8	14.8	13.7	11.5	12.2	2.0	1.6	1.6
Biological sciences	88.5	89.6	89.2	7.1	6.0	6.4	4.0	4.0	4.0	0.4	0.4	0.4
All degree courses	75.8	79.7	80.7	12.6	9.2	9.7	9.4	8.6	7.6	2.2	2.5	1.9

Source: UCAS qualification/subject dataset.

Table 19: Distribution by age of accepted applicants to degree courses in physics by gender and domicile in 2011

Source: UCAS subject dataset.

Age (years)	Distribution of ages of UK domiciled accepted applicants by gender and domicile (%)					
	Male			Female		
	UK	EU (ex-UK)	Non-UK	UK	EU (ex-UK)	Non-UK
17 and under	3.7	6.3	3.3	3.1	12.3	5.8
18	69.6	31.6	30.9	71.4	46.6	40.4
19	17.4	37.4	32.9	16.8	34.2	32.7
20	3.2	13.8	15.1	2.4	4.1	9.6
21	1.5	5.7	9.9	1.3	2.7	1.9
22	1.0	1.1	4.6	0.8	0.0	1.9
23	0.5	1.1	2.0	0.8	0.0	1.9
24	0.6	0.0	0.7	0.3	0.0	0.0
25–29	1.5	1.7	0.7	2.0	0.0	3.8
30–39	0.8	1.1	0.0	0.9	0.0	1.9
40 and over	0.2	0.0	0.0	0.2	0.0	0.0
Total accepted	2999	174	152	3325	636	73

2.4: Age of accepted applicants

Table 18 shows the ages of UK-domiciled accepted applicants to degree courses in selected subjects in 2011. The distributions of ages of accepted applicants were similar for physics, mathematics and chemistry. Accepted applicants in the biological sciences were older and those in electronic and electrical engineering were the oldest. This pattern may be caused by a number of factors. For instance, engineering disciplines like electronic and electrical engineering may be seen as more vocational than the physical sciences or mathematics, and therefore are more attractive to mature students who may be giving up paid work to enter higher education.

Table 19 shows a more detailed breakdown of

accepted applicants to physics degree courses in 2011. About 70% of UK-domiciled accepted applicants to physics degree courses were 18 years old in 2011, suggesting that the majority of accepted applicants entered physics courses straight from school. Around 17% of UK-domiciled accepted applicants were 19 years old: it is likely that a proportion of these individuals had a gap year, and, perhaps, the others were a year behind at school.

Non-UK-domiciled accepted applicants are older than UK-domiciled accepted applicants. Among EU-domiciled and non-EU-domiciled accepted applicants females are younger than males. Even among non-UK-domiciled accepted applicants there is a relatively small proportion of individuals older than 22 years.

Appendix A: List of tables

Table 1: UCAS tariff values for GCE A-levels	3
Table 2: Numbers of accepted applicants to degree courses in physics 2003–2011	4
Table 3: Domicile and gender of accepted applicants to degree courses in physics 2003–2011	5
Table 4: Numbers of accepted applicants to degree courses in selected subjects by gender and domicile in 2011	5
Table 5: Domicile and gender of accepted applicants to degree courses in selected subjects in 2011	5
Table 6: Derived data for accepted applicants to degree courses in selected subjects in 2011	6
Table 7: UK-domiciled accepted applicants to degree courses in selected subjects 2003–2011	6
Table 8: All accepted applicants to degree courses in selected subjects 2003–2011	7
Table 9: UK-domiciled accepted applicants to selected subject/subject groups as a proportion of accepted applicants to all degree courses 2003–2011	7
Table 10: Non-UK-domiciled accepted applicants to selected subject/subject groups as a proportion of accepted applicants to all degree courses 2003–2011	7
Table 11: Proportion of UK-domiciled individuals accepted onto degree courses in physics through clearing 2003–2011	8
Table 12: Number of UK-domiciled individuals accepted onto degree courses in selected subjects via firm, insurance and clearing offers by gender in 2011	8
Table 13: UK-domiciled applications and accepted applicants to degree courses in physics 2003–2010	9
Table 14: UK-domiciled applications and accepted applicants to degree courses in selected subjects in 2011	10
Table 15: Tariff points of UK-domiciled applicants and accepted applicants to degree courses in physics in 2011	10

Table 16: Distributions of tariff points for UK-domiciled accepted applicants to degree courses in subject groups in 2011	12
Table 17: Distributions of tariff points for UK-domiciled accepted applicants to degree courses in selected subjects in 2011	12
Table 18: Distribution by age of UK-domiciled accepted applicants to degree courses in selected subjects/subject groups in 2011	13
Table 19: Distribution by age of accepted applicants to degree courses in physics by gender and domicile in 2011	13

Appendix B: List of figures

Figure 1: Number of accepted applicants to degree courses in physics, and the proportion of all accepted applicant to degree courses that this represents 1996–2011	4
Figure 2: Proportions of UK-domiciled individuals accepted onto degree courses in selected subjects via firm, insurance and clearing offers by gender in 2011	9
Figure 3: Distribution of tariff points of UK-domiciled applicants and accepted applicants to degree courses in physics in 2010	11
Figure 4: Distribution of tariff points of UK-domiciled applicants and accepted applicants to all degree courses in 2011	11

Statistical Report

Accepted Applicants to Degree Courses in UK Higher Education Institutions

June 2012

For further information contact:

Sophie Robinson

IOP Institute of Physics

76 Portland Place, London W1B 1NT

Tel +44 (0)20 7470 4887, Fax +44 (0)20 7470 4848

E-mail sophie.robinson@iop.org

www.iop.org

www.iopblog.org

Registered charity number: 293551

Scottish charity register number: SC040092

The report is available to download from our website and if you require an alternative format please contact us to discuss your requirements.

The RNIB clear print guidelines have been considered in the production of this document. Clear print is a design approach that considers the requirements of people with visual impairments. For more information, visit **www.rnib.org.uk**.