

Factors related to graduation rates: Transfer entrants

January, 2017

OVERVIEW

This report has descriptive statistics of and graduation rates by demographic variables, transfer GPA, academic indicators at Berkeley, and campus experiences. Graduation rates adjusted for these variables are also presented. This report provides the background data for the accompanying briefing note, “Opportunities to increase the normative graduation rate: Transfer entrants” and has a companion report focused on freshman entrants, “Factors related to graduation rates: Freshman entrants.”

Methodology

This analysis includes students who entered as transfers in Fall 2008 (n = 2,017), Fall 2009 (n = 2,205), Fall 2010 (n = 2,199), and Fall 2011 (n = 2,337). These cohorts were chosen to allow for calculation of 3-year graduation rates. Graduation data include graduates through Summer 2014. Normative graduation for transfer entrants is two years from the time of entry. One extra term is defined as one academic-year term (Fall or Spring) beyond the normative graduation time.

Demographic variables (gender, ethnicity, Pell Grant recipient status, and first-generation college student information) were sourced from Cal Answers. “First-generation college” is defined as a student who reported that neither parent graduated from a four-year college. “Pell Grant recipient” is defined as a student who received a Pell Grant while at Berkeley. U.S. residents and eligible non-citizens at lower annual income levels (typically less than \$45,000) are eligible to receive Pell Grants.

Admissions selection data, including transfer grade point average (GPA) and athlete at entry, were sourced from Cal Answers. One percent (n = 92) of the students were athletes at entry; additionally, about one-third entered with fewer than 60 units. Given the small number of athletes at entry and the sizeable proportion who entered at less than Junior standing, athletes at entry were not considered separately for analysis.

Initial academic indicators include first-term units attempted, first-term GPA, and first-year Academic Probation. The number of units attempted was measured at the time of Census for each student’s first term at Berkeley. To evaluate academic performance, students were placed into groups based on their first-term GPA and whether or not they were on Probation in their first year:

- GPA < 2.00 or Academic Probation
- GPA 2.00-2.69 (C / C+)
- GPA 2.70-3.69 (B average)
- GPA 3.70-4.00 (A average)

Students were grouped into the School, College, or Division in which they first declared a major. If a student declared more than one major at the same time, the first major alphabetically was used. Time to declaration was measured in elapsed terms from entry. Data on academic indicators were sourced from Cal Answers.

Campus experiences included in the analysis are Work-Study participation and study abroad participation. Information was provided by the Berkeley Study Abroad Office for students who participated in UC Education Abroad Program (EAP) / Berkeley Abroad from Summer 2008 through Spring 2016. Students who studied abroad through other programs were not included in the count of study abroad participants. The Berkeley Financial Aid and Scholarships Office supplied the data about Work-Study activity from academic year 2008-09 through 2015-16.

The demographic, admissions selection, academic indicator, and campus experience factors described were used in logistic regression models. Two separate models were estimated:

- Graduating within 2 years compared to graduating at 2.5 years
- Graduating within 2.5 years compared to graduating at 3 years

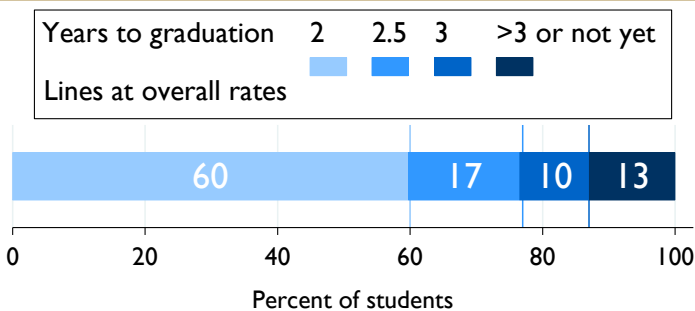
Adjusted graduation rates were calculated post hoc.

DEMOGRAPHIC VARIABLES AND ADMISSIONS CRITERION

Graduation rates by demographic variables and admissions criterion

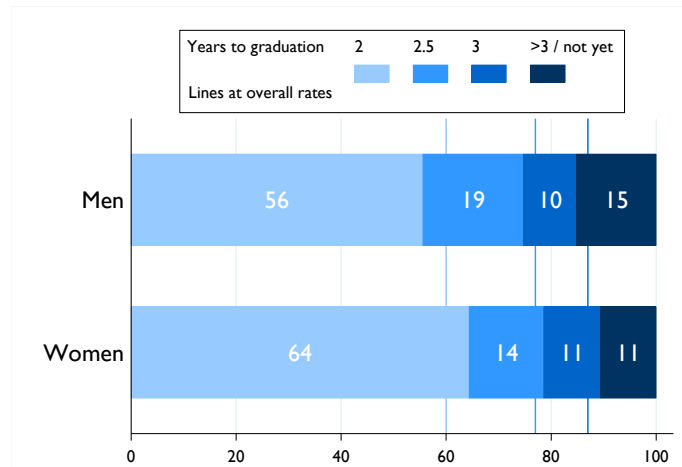
	Overall		% graduated within		
	Count	%	2 years	2.5 years	3 years
Total	8,758		60%	77%	87%
Gender					
Men	4,604	53%	56%	75%	85%
Women	4,154	47%	64%	79%	89%
Ethnicity					
Underrepresented Minority	1,667	19%	51%	67%	83%
International	1,141	13%	67%	82%	87%
White / Other	3,640	42%	61%	77%	88%
Asian / Pacific Islander	2,310	26%	61%	80%	89%
Parent education					
First-generation college	3,705	46%	58%	75%	86%
Not first-generation	4,435	54%	62%	78%	88%
Income					
Pell Grant recipient	4,665	53%	52%	71%	85%
Not Pell Grant recipient	4,093	47%	69%	82%	90%
Transfer GPA					
<3.60	2,140	25%	56%	71%	83%
3.60 – 3.79	2,171	25%	59%	75%	86%
3.80 – 3.99	2,368	27%	62%	80%	89%
4.00	1,999	23%	63%	80%	90%

Overall graduation rates: Transfer entrants Fall 2008, 2009, 2010, and 2011

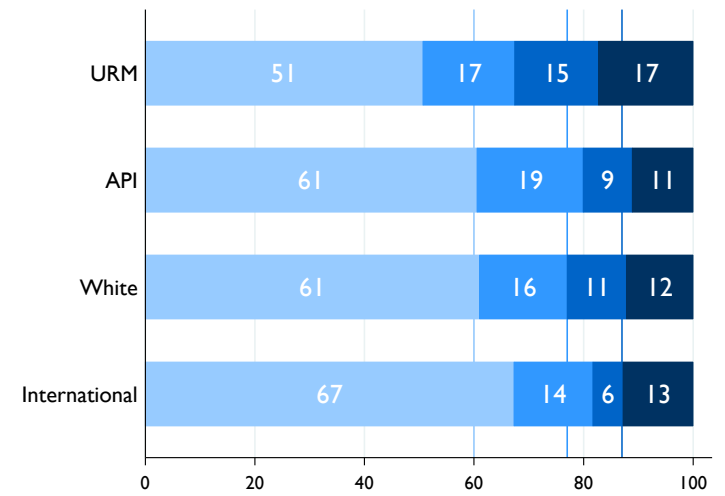


Note: Due to rounding, percentages may not sum to 100% and may differ from rates reported in tables

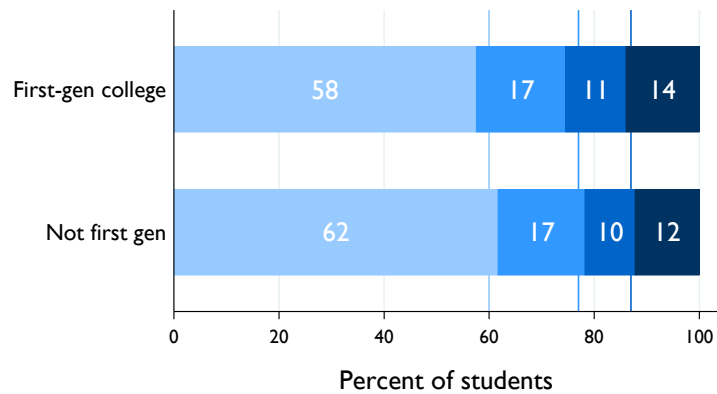
Graduation rates by gender



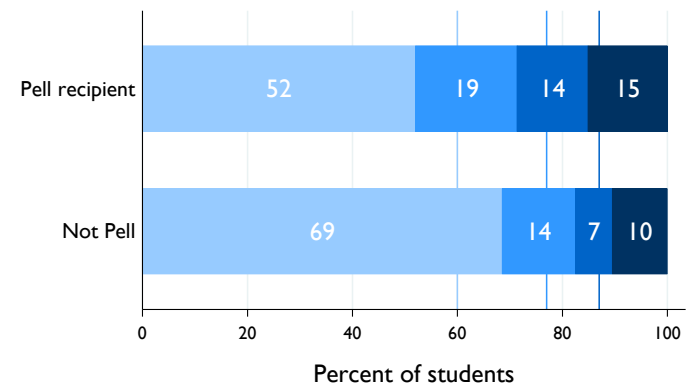
Graduation rates by ethnicity



Graduation rates by parent education

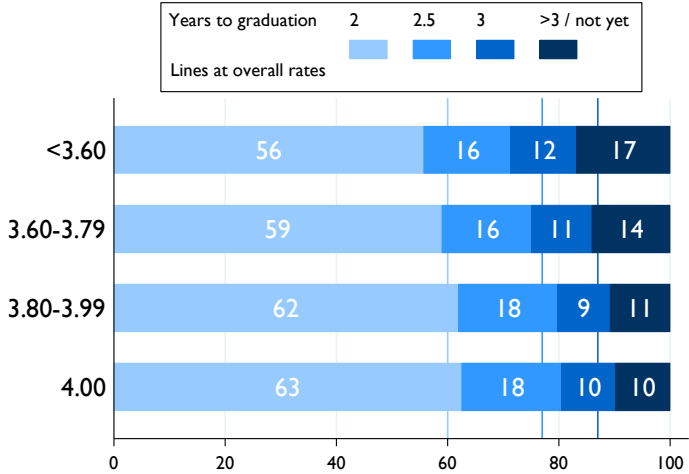


Graduation rates by family income



Note: Due to rounding, percentages may not sum to 100% and may differ from rates reported in the table on page 2

Graduation rates by transfer GPA



Note: Due to rounding, percentages may not sum to 100% and may differ from rates reported in the table on page 2

ACADEMIC INDICATORS AND CAMPUS EXPERIENCES

Graduation rates by academic indicators and campus experiences

	Overall		% graduated within		
	Count	%	2 years	2.5 years	3 years
Total	8,758		60%	77%	87%
Units attempted in the first term					
< 13	624	7%	38%	56%	73%
13 – 14.5	5,358	61%	61%	78%	88%
15 or greater	2,774	32%	63%	79%	88%
First-term GPA / first-year Probation					
< 2.00 or Academic Probation	647	7%	23%	36%	50%
First-term GPA <2.00	480	--	--	--	--
First-year Probation	557	--	--	--	--
C to C+ (2.00 – 2.69)	942	11%	51%	71%	84%
B average (2.70 – 3.69)	4,979	57%	64%	82%	91%
A average (3.70 or greater)	2,093	24%	66%	81%	93%
Declared first major					
After second term	659	8%	18%	30%	46%
By the end of the second term	8,099	92%	63%	80%	90%
First declared major*					
Chemistry	266	3%	44%	74%	88%
Engineering	769	9%	39%	80%	88%
Environmental Design	262	3%	81%	87%	92%
Natural Resources	452	5%	71%	82%	91%
Haas	366	4%	89%	93%	96%
Letters & Science	6,466	75%	61%	77%	88%
Administered Programs	526	6%	59%	78%	88%
Arts & Humanities	1,615	19%	62%	77%	88%
Bio Sciences	371	4%	64%	82%	93%
Math & Phys Sci	541	6%	47%	76%	86%
Social Sciences	2,364	28%	65%	78%	89%
Undergraduate Division	1,049	12%	59%	73%	86%
Work-Study					
Work-Study participant	1,088	12%	54%	73%	90%
Not Work-Study participant	7,670	88%	61%	77%	87%
Study Abroad					
Trip(s) during academic year	424	5%	29%	50%	87%
Summer trip(s)	354	4%	59%	77%	90%
No study abroad	7,980	91%	61%	78%	87%

*Students who did not declare a major (n = 177) are not included.

DEMOGRAPHIC GROUPS WITH RELATIVELY LOW NORMATIVE GRADUATION RATES

In the bivariate analysis of graduation rates by demographic groups, two groups emerged as having relatively low 2-year graduation rates: Underrepresented Minority (URM) students and Pell Grant recipients (see table on page 2 and charts on page 3). In the following pages (pages 6 -14), further analyses of these two groups are presented.

The table below shows the 2-year graduation rates of URM and non-URM students by gender, parental education, family income, and transfer GPA. There was an 11-point difference between the overall 2-year graduation rates of URM (51%) and non-URM students (62%). This difference was consistent across most groups. For example, women URM students had a 56% 2-year graduation rate while women non-URM students had a 67% rate (11-point difference).

However, the difference was less pronounced among those who were not first-generation college students (7 points) or students who did not receive a Pell Grant (3 points).

Count and percent of students graduating within two years, by Underrepresented Minority students and by demographic variables and transfer GPA

	URM students				Not URM students				Point difference in 2-year rate
	Within 2 years		>2 years		Within 2 years		>2 years		
	n	%	n	%	n	%	n	%	
Total	845	51%	822	49%	4,389	62%	2,702	38%	11
Gender									
Men	393	46%	461	54%	2,166	58%	1,584	42%	12
Women	452	56%	361	44%	2,223	67%	1,118	33%	11
Parent education									
Not first generation	287	56%	230	44%	2,450	63%	1,468	37%	7
First generation college	512	48%	557	52%	1,621	61%	1,015	39%	13
Family income									
Not Pell recipient	308	66%	156	34%	2,498	69%	1,131	31%	3
Pell Grant recipient	537	45%	666	55%	1,891	55%	1,571	45%	10
Transfer GPA									
<3.60	287	48%	313	52%	906	59%	634	41%	11
3.60-3.79	244	52%	225	48%	1,037	61%	665	39%	9
3.80-3.99	190	55%	155	45%	1,277	63%	746	37%	8
4.00	122	50%	123	50%	1,129	64%	625	36%	14

The table on the following page presents the 2-year graduation rates of URM and non-URM students by academic indicators and campus experience variables. The 11-point difference in overall 2-year graduation rates of URM compared with non-URM students was largely consistent across variables. For example, for students who attempted 13-14.5 units in their first term, those who were URM students had a 52% 2-year graduation rate while those who were not URM students had a 63% rate.

Groups with relatively small URM compared with non-URM differences in 2-year graduation rates include: students in the Haas School of Business (3 points) and those participating in study abroad during the academic year (7 points). For students who have not declared a major by the end of the second term, URM students had a higher 2-year graduation rate (20%) than non-URM students (18%). Groups with relatively large differences include: students in the College of Engineering (29 points), L&S Math & Physical Sciences Division (29 points), the College of Natural Resources (20 points), and those who participated in Work-Study (16 points).

Count and percent of students graduating within two years, by Underrepresented Minority students and by academic indicators and campus experiences

	URM students				Not URM students				Point difference in 2-year rate
	Within 2 years		>2 years		Within 2 years		>2 years		
	n	%	n	%	n	%	n	%	
Total	845	51%	822	49%	4,389	62%	2,702	38%	11
First-term units attempted									
<13	39	30%	90	70%	195	39%	300	61%	9
13-14.5	567	52%	520	48%	2,697	63%	1,574	37%	11
15+	239	53%	210	47%	1,497	64%	828	36%	11
First-term GPA / Probation									
<2.0 or first-year Probation	17	13%	118	87%	132	26%	380	74%	13
C / C+	94	45%	116	55%	390	53%	342	47%	8
B average	557	57%	423	43%	2,640	66%	1,359	34%	9
A average	176	55%	142	45%	1,215	68%	560	32%	13
Declared first major									
After 2 nd term	28	20%	111	80%	93	18%	427	82%	-2
By 2 nd term	817	53%	711	47%	4,296	65%	2,275	35%	12
First declared major									
Chemistry	5	38%	8	62%	112	44%	141	56%	6
Engineering	8	12%	59	88%	291	41%	411	59%	29
Environmental Design	28	70%	12	30%	184	83%	38	17%	13
Natural Resources	44	54%	38	46%	275	74%	95	26%	20
Haas School of Business	47	87%	7	13%	280	90%	32	10%	3
Letters & Science	713	52%	662	48%	3,247	64%	1,844	36%	12
Administered Programs	59	51%	57	49%	251	61%	159	39%	10
Arts & Humanities	188	54%	163	46%	821	65%	443	35%	11
Bio Sciences	25	52%	23	48%	214	66%	109	34%	14
Math & Phys Sci	10	21%	37	79%	246	50%	248	50%	29
Social Sciences	313	54%	264	46%	1,213	68%	574	32%	14
Undergraduate Division	118	50%	118	50%	502	62%	311	38%	12
Work-Study									
Yes	135	43%	178	57%	456	59%	319	41%	16
No	710	52%	644	48%	3,933	62%	2,383	38%	10
Study abroad									
Did not study abroad	756	53%	665	47%	4,147	63%	2,412	37%	10
Summer trip(s)	56	51%	53	49%	154	63%	91	37%	12
Trip(s) during the academic year	33	24%	104	76%	88	31%	199	69%	7

The table below shows the 2-year graduation rates of Pell Grant recipients and non-Pell recipients by gender, parental education, ethnicity, and transfer GPA. There was a 17-point difference between the overall 2-year graduation rates of Pell Grant recipients (52%) and those who did not receive a Pell Grant (69%). This difference was consistent across most groups. However, the difference was less pronounced among Asian / Pacific Islander students (13-point gap). The gap in 2-year graduation rates was more pronounced among URM students (21-point gap).

Count and percent of students graduating within two years, by Pell Grant recipients and by demographic variables and transfer GPA

	Pell Grant recipients				Not Pell recipients				Point difference in 2-year rate
	Within 2 years		>2 years		Within 2 years		>2 years		
	n	%	n	%	n	%	n	%	
Total	2,428	52%	2,237	48%	2,806	69%	1,287	31%	17
Gender									
Men	1,198	48%	1,284	52%	1,361	64%	761	36%	16
Women	1,230	56%	953	44%	1,445	73%	526	27%	17
Parent education									
Not first generation	948	53%	847	47%	1,789	68%	851	32%	15
First generation college	1,335	52%	1,244	48%	798	71%	328	29%	19
Ethnicity¹									
API	825	56%	653	44%	574	69%	258	31%	13
URM	537	45%	666	55%	308	66%	156	34%	21
White / Other	1,052	54%	900	46%	1,170	69%	518	31%	15
Transfer GPA									
<3.60	656	50%	653	50%	537	65%	294	35%	15
3.60-3.79	599	51%	584	49%	682	69%	306	31%	18
3.80-3.99	646	54%	551	46%	821	70%	350	30%	16
4.00	514	55%	429	45%	737	70%	319	30%	15

¹ Excludes International students

The table on the following page presents the 2-year graduation rates of Pell Grant recipients and non-Pell recipients by academic indicators and campus experience variables. The 17-point difference in overall 2-year graduation rates of Pell Grant recipients compared with non-Pell recipients was largely consistent across groups.

The largest gaps and the smallest gaps were seen within Colleges, Schools, and L&S Divisions. The narrowest gaps in Pell Grant recipient and non-Pell recipient 2-year graduation rates were in the Haas School of Business (4 points) and the College of Environmental Design (10 points). Students who had not declared a major by the end of the second term also had a narrow gap (6 points) compared to those who had not declared by that time. Relatively large differences in 2-year graduation rates among Pell Grant recipients compared with non-Pell recipients were in L&S Administered Programs (27 points), the College of Natural Resources (23 points), L&S Arts & Humanities Division (23 points), and L&S Math & Physical Sciences Division (23 points).

Count and percent of students graduating within two years, by Pell Grant recipients and by academic indicators and campus experiences

	Pell Grant recipients				Not Pell recipient				Point difference in 2-year rate
	Within 2 years		>2 years		Within 2 years		>2 years		
	n	%	n	%	n	%	n	%	
Total	2,428	52%	2,237	48%	2,806	69%	1,287	31%	17
First-term units attempted									
<13	123	33%	252	67%	111	45%	138	55%	12
13-14.5	1,587	54%	1,356	46%	1,677	69%	738	31%	15
15+	718	53%	628	47%	1,018	71%	410	29%	18
First-term GPA / Probation									
<2.0 or first-year									
Probation	60	17%	301	83%	89	31%	197	69%	14
C / C+	229	43%	302	57%	255	62%	156	38%	19
B average	1,503	57%	1,129	43%	1,694	72%	653	28%	15
A average	632	58%	464	42%	759	76%	238	24%	18
Declared first major									
After 2 nd term	51	15%	280	85%	70	21%	258	79%	6
By 2 nd term	2,377	55%	1,957	45%	2,736	73%	1,029	27%	18
First declared major									
Chemistry	49	37%	83	63%	68	51%	66	49%	14
Engineering	117	30%	269	70%	182	48%	201	52%	18
Environmental Design	105	76%	33	24%	107	86%	17	14%	10
Natural Resources	148	60%	98	40%	171	83%	35	17%	23
Haas	146	87%	22	13%	181	91%	17	9%	4
Letters & Science	1,863	53%	1,647	47%	2,097	71%	859	29%	18
Administered	138	47%	157	53%	172	74%	59	26%	27
Arts & Humanities	457	52%	423	48%	552	75%	183	25%	23
Bio Sciences	113	58%	83	42%	126	72%	49	28%	14
Math & Phys Sci	97	36%	176	64%	159	59%	109	41%	23
Social Sciences	796	59%	551	41%	730	72%	287	28%	13
Undergraduate Div	262	50%	257	50%	358	68%	172	32%	18
Work-Study									
Yes	474	52%	440	48%	117	67%	57	33%	15
No	1,954	52%	1,797	48%	2,689	69%	1,230	31%	17
Study abroad									
Did not study abroad	2,212	54%	1,873	46%	2,691	69%	1,204	31%	15
Summer trip(s)	138	53%	120	47%	72	75%	24	25%	22
Trip(s) during the academic year	78	24%	244	76%	43	42%	59	58%	18

The table below is limited to only Underrepresented Minority students (N = 1,667). The URM students were grouped into those who graduated in normative time (first two columns) and those who took more than two years to graduate or had not graduated. These groups were then distributed by demographic groups and transfer GPA. The distribution of URM students across transfer GPA was similar for those who graduated within two years and those who took more than two years to graduate or who had not yet graduated. Thirty-four percent of URM students who graduated within two years had a transfer GPA less than 3.60. This was similar to the 38% who graduated in greater than two years or had not yet graduated and had a transfer GPA less than 3.60. These proportions were similar across the other transfer GPA groupings.

Notably, there was a greater proportion of students who did not receive a Pell Grant in the group that graduated within two years (36%) compared to the group that took more than two years to graduate or had not yet graduated (19%).

Only Underrepresented Minority students (N = 1,667): Demographic variables and transfer GPA by graduation

	Within 2 years		>2 years		Total URM	
	n	%	n	%	n	%
All URM	845	100%	822	100%	1,667	100%
Gender						
Men	393	47%	461	56%	854	51%
Women	452	53%	361	44%	813	49%
Total	845	100%	822	100%	1,667	100%
Parent education						
Not first generation	287	36%	230	29%	517	33%
First generation college	512	64%	557	71%	1,069	67%
Total	799	100%	787	100%	1,586	100%
Family income						
Not Pell recipient	308	36%	156	19%	464	28%
Pell Grant recipient	537	64%	666	81%	1,203	72%
Total	845	100%	822	100%	1,667	100%
Transfer GPA						
<3.60	287	34%	313	38%	600	36%
3.60-3.79	244	29%	225	28%	469	28%
3.80-3.99	190	23%	155	19%	345	21%
4.00	122	14%	123	15%	245	15%
Total	843	100%	816	100%	1,659	100%

The table below is limited to only Underrepresented Minority students (N = 1,667). The URM students were grouped into those who graduated in a normative time and those who did not. These groups were then distributed by academic indicators at Berkeley.

Overall, 92% of URM students declared their first major by the end of the second term. Among those who graduated within two years, a higher proportion (97%) had declared by the end of the second term. Although Haas and L&S Social Sciences Division had 3% and 35% of URM students, respectively, each had higher shares among those who graduated within two years (Haas 6%, L&S Social Sciences 37%). Conversely, the College of Engineering and L&S Math & Physical Sciences Division had 4% and 3%, respectively, of URM students overall, but 1% each of URM students who graduated within two years.

Only Underrepresented Minority students (N = 1,667): Academic indicators by graduation

	Within 2 years		>2 years		Total URM students	
	n	%	n	%	n	%
Total	845	100%	822	100%	1,667	100%
First-term units attempted						
<13	39	5%	90	11%	129	8%
13-14.5	567	67%	520	63%	1,087	65%
15+	239	28%	210	26%	449	27%
Total	845	100%	820	100%	1,665	100%
First-term GPA / Probation						
<2.0 or first-year Probation	17	2%	118	15%	135	8%
C / C+	94	11%	116	15%	210	13%
B average	557	66%	423	53%	980	60%
A average	176	21%	142	18%	318	19%
Total	844	100%	799	100%	1,643	100%
Declared first major						
After 2 nd term	28	3%	111	14%	139	8%
By 2 nd term	817	97%	711	86%	1,528	92%
Total	845	100%	822	100%	1,667	100%
First declared major						
Chemistry	5	1%	8	1%	13	1%
Engineering	8	1%	59	7%	67	4%
Environmental Design	28	3%	12	1%	40	2%
Natural Resources	44	5%	38	5%	82	5%
Haas School of Business	47	6%	7	1%	54	3%
Letters & Science	713	84%	662	84%	1,375	84%
Administered Programs	59	7%	57	7%	116	7%
Arts & Humanities	188	22%	163	20%	351	21%
Bio Sciences	25	3%	23	3%	48	3%
Math & Phys Sci	10	1%	37	5%	47	3%
Social Sciences	313	37%	264	32%	577	35%
Undergraduate Division	118	14%	118	14%	236	14%
Undeclared	0	0%	36	4%	36	2%
Total	845	100%	822	100%	1,667	100%

Only Underrepresented Minority students (N = 1,667): Campus experiences by graduation

	Within 2 years		>2 years		Total URM students	
	n	%	n	%	n	%
Total	845	100%	822	100%	1,667	100%
Work-Study						
Yes	135	16%	178	22%	313	19%
No	710	84%	644	78%	1,354	81%
Total	845	100%	822	100%	1,667	100%
Study abroad						
Did not study abroad	756	89%	665	81%	1,421	85%
Summer trip(s)	56	7%	53	6%	109	7%
Trip(s) during the academic year	33	4%	104	13%	137	8%
Total	845	100%	822	100%	1,667	100%

The table below is limited to only Pell Grant recipients (N = 4,665). Pell Grant recipients were grouped into those who graduated in normative time (first two columns) and those who took more than two years to graduate or had not yet graduated. These groups were then distributed by demographic groups and transfer GPA. Notably, there was a smaller proportion of men students in the group that graduated within two years (49%) compared to the group that took more than two years to graduate or had not yet graduated (57%).

Only Pell Grant recipients (N = 4,665): Demographic variables and transfer GPA by graduation

	Within 2 years		>2 years		Total Pell recipients	
	n	%	n	%	n	%
All Pell recipients	2,428	100%	2,237	100%	4,665	100%
Gender						
Men	1,198	49%	1,284	57%	2,482	53%
Women	1,230	51%	953	43%	2,183	47%
Total	2,428	100%	2,237	100%	4,665	100%
Parent education						
Not first generation	948	42%	847	41%	1,795	41%
First generation college	1,335	58%	1,244	59%	2,579	59%
Total	2,283	100%	2,091	100%	4,374	100%
Ethnicity¹						
API	825	34%	653	29%	1,478	32%
URM	537	22%	666	30%	1,203	26%
White / Other	1,052	44%	900	41%	1,952	42%
Total	2,414	100%	2,219	100%	4,633	100%
Transfer GPA						
<3.60	656	27%	653	29%	1,309	28%
3.60-3.79	599	25%	584	26%	1,183	26%
3.80-3.99	646	27%	551	25%	1,197	26%
4.00	514	21%	429	19%	943	20%
Total	2,415	100%	2,217	100%	4,632	100%

¹ Excludes International students

Only Pell Grant recipients (N = 4,665): Academic indicators by graduation

	Within 2 years		>2 years		Total Pell recipients	
	n	%	n	%	n	%
Total	2,428	100%	2,237	100%	4,665	100%
First-term units attempted						
<13	123	5%	252	11%	375	8%
13-14.5	1,587	65%	1,356	61%	2,943	63%
15+	718	30%	628	28%	1,346	29%
Total	2,428	100%	2,236	100%	4,664	100%
First-term GPA / Probation						
<2.0 or first-year Probation	60	2%	301	14%	361	8%
C / C+	229	9%	302	14%	531	11%
B average	1,503	62%	1,129	51%	2,632	57%
A average	632	26%	464	21%	1,096	24%
Total	2,424	100%	2,196	100%	4,620	100%
Declared first major						
After 2 nd term	51	2%	280	13%	331	7%
By 2 nd term	2,377	98%	1,957	87%	4,334	93%
Total	2,428	100%	2,237	100%	4,665	100%
First declared major						
Chemistry	49	2%	83	4%	132	3%
Engineering	117	5%	269	12%	386	8%
Environmental Design	105	4%	33	1%	138	3%
Natural Resources	148	6%	98	4%	246	5%
Haas School of Business	146	6%	22	1%	168	4%
Letters & Science	1,863	77%	1,647	77%	3,510	77%
Administered Programs	138	6%	157	7%	295	6%
Arts & Humanities	457	19%	423	19%	880	19%
Bio Sciences	113	5%	83	4%	196	4%
Math & Phys Sci	97	4%	176	8%	273	6%
Social Sciences	796	33%	551	25%	1,347	29%
Undergraduate Division	262	11%	257	11%	519	11%
Undeclared	0	0%	85	4%	85	2%
Total	2,428	100%	2,237	100%	4,665	100%

Overall, 93% of Pell Grant recipients had declared a major by the end of the second term. However, for those who graduated within two years, 98% had declared a major by the end of the second term. Although the College of Engineering and L&S Math & Physical Sciences Division have 8% and 6% of Pell Grant recipients, respectively, the proportion of these students among those who graduated within two years was low (College of Engineering 5%, L&S Math & Physical Sciences Division (4%). Conversely, Haas (6%) and L&S Social Sciences Division (33%) had higher percentages of students who graduated within two years, compared to their overall percentages.

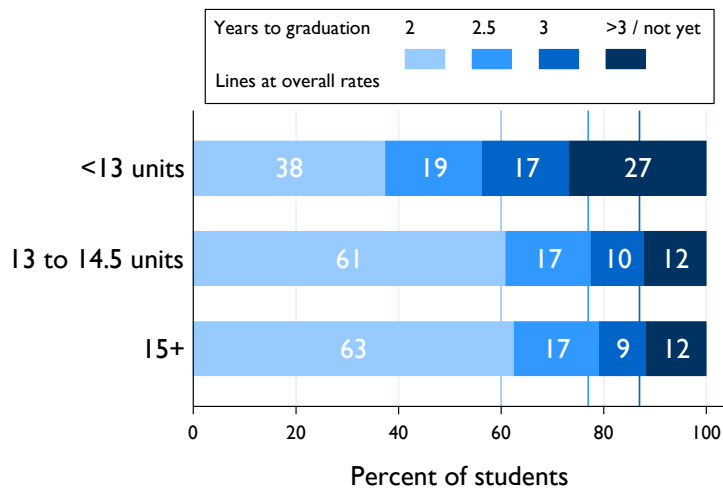
Overall, 88% of Pell Grant recipients did not study abroad. Among those who graduated within two years, 91% did not study abroad.

Only Pell Grant recipients (N = 4,665): Campus experiences by graduation

	Within 2 years		>2 years		Total Pell recipients	
	n	%	n	%	n	%
Total	2,428	100%	2,237	100%	4,665	100%
Work-Study						
Yes	474	20%	440	20%	914	20%
No	1,954	80%	1,797	80%	3,751	80%
Total	2,428	100%	2,237	100%	4,665	100%
Study abroad						
Did not study abroad	2,212	91%	1,873	84%	4,085	88%
Summer trip(s)	138	6%	120	5%	258	6%
Trip(s) during the academic year	78	3%	244	11%	322	7%
Total	2,428	100%	2,237	100%	4,665	100%

ACADEMIC INDICATORS

Graduation rates by first-term units attempted



Note: Due to rounding, percentages may not sum to 100% and may differ from rates reported in the table on page 5

The following models analyze subsets of the population. The first model excludes students who graduated in three years or greater, or who had not graduated. Comparing students who graduated within 2 years with those who graduated at 2.5 years, students who attempted fewer than 13 units (compared to students who attempted 15 units or greater) in their first term were statistically significantly less likely to finish within 2 years. There was no difference in 2-year graduation between students who attempted 13 to 14.5 units compared to 15 units or greater.

The second model excludes students who graduated in 3.5 years or greater or who had not graduated. Comparing students who graduated within 2.5 years with those who graduated at 3 years, students who had attempted fewer than 13 units in their first term continued to have lower graduation rates.

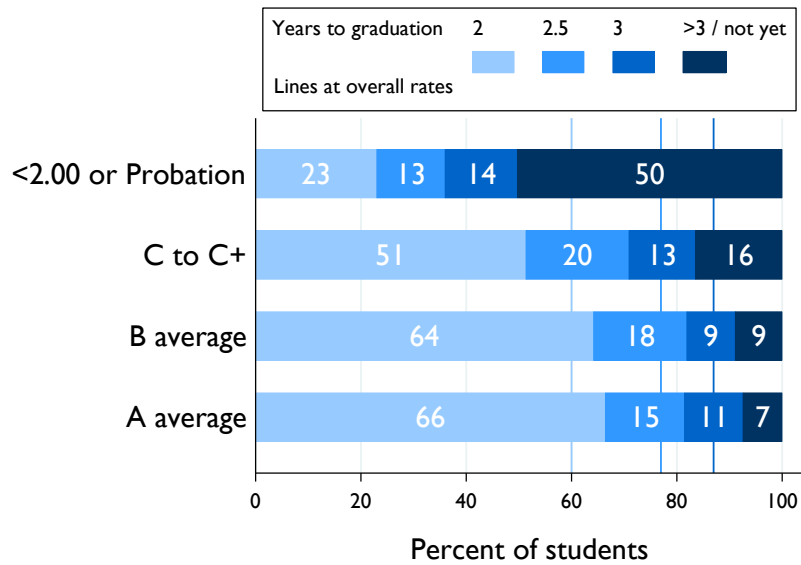
Additional analyses are presented in the briefing notes, “Transfer student first-term academic load and graduation” (September 2016) and “Freshman entrant first-term academic load and graduation” (October 2016). The findings for transfer students were similar to those for freshman entrants, for whom attempting 13-14.5 units compared to 15 units or greater in their first term was not related to normative graduation or taking one extra term once demographic and admissions factors were controlled.

Actual and adjusted graduation by first-term units attempted: Subsets of the population

	Graduated within 2 years compared to <u>at</u> 2.5 years N = 6,706 ¹		Graduated within 2.5 years compared to <u>at</u> 3 years N = 7,625 ²	
	Actual	Adjusted ³	Actual	Adjusted ³
Overall	78%	79%	88%	89%
First-term units attempted				
<13 units	66% *	69% *	77% *	80% *
13 to 14.5 units	79%	79%	88%	89%
15+ units (reference)	79%	80%	90%	90%

* Significant at the 0.05 level of significance; ¹ Excludes students who graduated in 3 years or greater, or did not graduate; ² Excludes students who graduated in 3.5 years or greater, or did not graduate; ³ Adjusted for gender, ethnicity, parent education, family income, transfer GPA

Graduation rates by first-term GPA and first-year Academic Probation



Note: Due to rounding, percentages may not sum to 100% and may differ from rates reported in the table on page 5

Comparing students who graduated within 2 years with those who graduated at 2.5 years, students who earned an A average were significantly more likely than all other students to graduate within 2 years, even after controlling for demographics and transfer GPA.

Comparing students who graduated within 2.5 years with those who graduated at 3 years, students who earned a B average were significantly more likely than all other students to graduate within 2.5 years, although the magnitude of the difference for students with an A average was small.

These findings highlight the greater importance of first-term GPA for transfer students' normative graduation, than for freshman entrants. For freshman entrants, there was no difference for students who had earned at least a C average in graduating within 4 years compared to at 4.5 years after controlling for demographic variables.

Actual and adjusted graduation by first-term GPA and first-year Probation: Subsets of the population

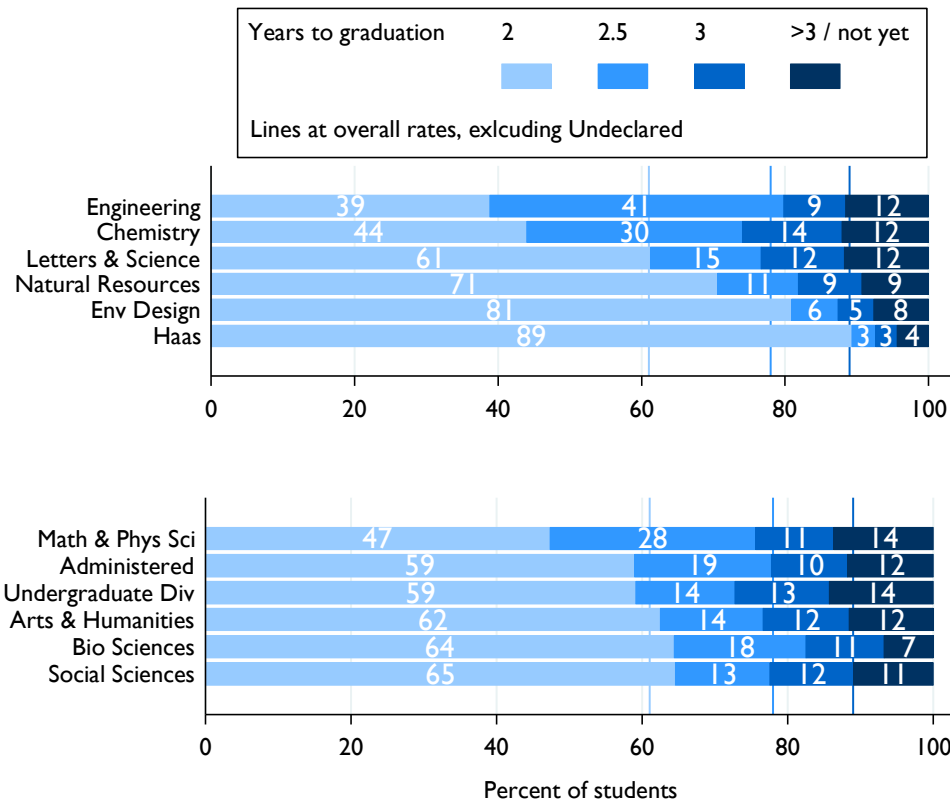
	Graduated within 2 years compared to at 2.5 years N = 6,706 ¹		Graduated within 2.5 years compared to at 3 years N = 7,625 ²	
	Actual	Adjusted ³	Actual	Adjusted ³
Overall	78%	79%	88%	89%
First-term GPA				
<2.00 or Probation	64% *	64% *	72% *	75% *
C / C+	72% *	73% *	85% *	86%
B average	78% *	79% *	90% *	91% *
A average (reference)	82%	82%	88%	89%

* Significant at the 0.05 level of significance; ¹ Excludes students who graduated in 3 years or greater, or did not graduate

² Excludes students who graduated in 3.5 years or greater, or did not graduate; ³ Adjusted for gender, ethnicity, parent education, family income, transfer GPA

As shown in the graphs below, graduation rates differed greatly by unit of first major declared.

Graduation rates by School, College, or Division of first major



Notes: Students who did not declare a major (n = 177) are not included
 Due to rounding, percentages may not sum to 100% and may differ from rates reported in the table on page 5

Actual and adjusted graduation by unit of first major: Subsets of the population

	Graduated within 2 years compared to <u>at</u> 2.5 years N = 6,706 ¹		Graduated within 2.5 years compared to <u>at</u> 3 years N = 7,625 ²	
	Actual	Adjusted ³	Actual	Adjusted ³
Overall	78%	79%	88%	89%
Chemistry	59% *	57% *	84% *	83% *
Engineering	49% *	48% *	90% *	90% *
Environmental Design	93% *	93%	95%	95%
Natural Resources	86% *	85% *	90% *	90% *
Haas (reference)	96%	96%	97%	97%
Letters & Science	80% *	81% *	87% *	88% *
Administered Programs	76% *	78% *	88% *	90% *
Arts & Humanities	82% *	83% *	87% *	88% *
Biological Sciences	78% *	78% *	88% *	89% *
Math & Physical Sciences	63% *	61% *	88% *	87% *
Social Sciences	83% *	85% *	87% *	89% *
Undergraduate Division	81% *	81% *	85% *	87% *

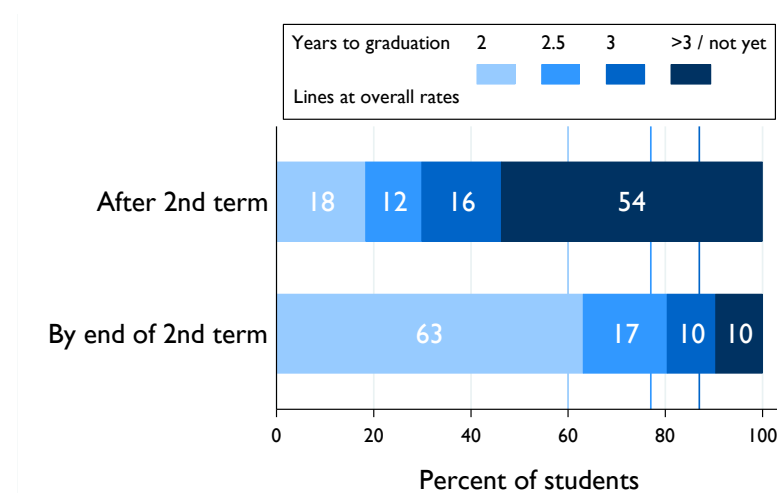
* Significant at the 0.05 level of significance; ¹ Excludes students who graduated in 3 years or greater, or did not graduate; ² Excludes students who graduated in 3.5 years or greater, or did not graduate; ³ Adjusted for gender, ethnicity, parent education, family income, transfer GPA

In the table on the previous page, comparing students who graduated within 2 years with those who graduated at 2.5 years, the Haas School of Business (reference category) had higher shares of 2-year graduation than the other Colleges or Divisions. For the College of Environmental Design (CED), the difference was reduced after adjusting for demographic variables and transfer GPA (see table above).

Comparing students who graduated within 2.5 years with those who graduated at 3 years yielded similar results, with 2.5-year shares at 95% and 97% for students in CED and Haas, respectively, but 90% or lower for students in all other Colleges and Division.

These findings highlight the importance of the School, College, or Division in which a transfer student first declared a major. Many differences in the 4- compared to 4.5-year graduation by School, College, or Division for freshman entrants were not statistically significant, and even fewer were significant after controlling for demographic variables.

Graduation rates by timing of declaring first major



In the table below, comparing students who graduated within 2 years with those who graduated at 2.5 years, students who declared their first major after the second term were significantly less likely to finish within 2 years ($p < 0.05$), even after controlling for demographic variables and transfer GPA.

Comparing students who graduated within 2.5 years compared to those who graduated at 3 years, the same pattern emerged – after controlling for demographic and admissions factors, the difference in 2.5-year graduation persisted for students who declared their first major after the second term.

These findings are consistent with those for freshman entrants.

Actual and adjusted graduation by timing of major declaration: Subsets of the population

	Graduated within 2 years compared to <u>at</u> 2.5 years N = 6,706 ¹		Graduated within 2.5 years compared to <u>at</u> 3 years N = 7,625 ²	
	Actual	Adjusted ²	Actual	Adjusted ³
Overall	78%	79%	88%	89%
Declare first major				
After second term	61% *	62% *	65% *	69% *
By second term	79%	79%	89%	90%

* Significant at the 0.05 level of significance; ¹ Excludes students who graduated in 3 years or greater, or did not graduate; ² Excludes students who graduated in 3.5 years or greater, or did not graduate; ³ Adjusted for gender, ethnicity, parent education, family income, transfer GPA

Virtually 100% of students who first declared outside of the College of Letters & Science did so by the end of the second term from entry. Within the College of Letters & Science, proportions of students who declared by the end of the second term ranged from 80% in Undergraduate Division to 97% in Social Sciences.

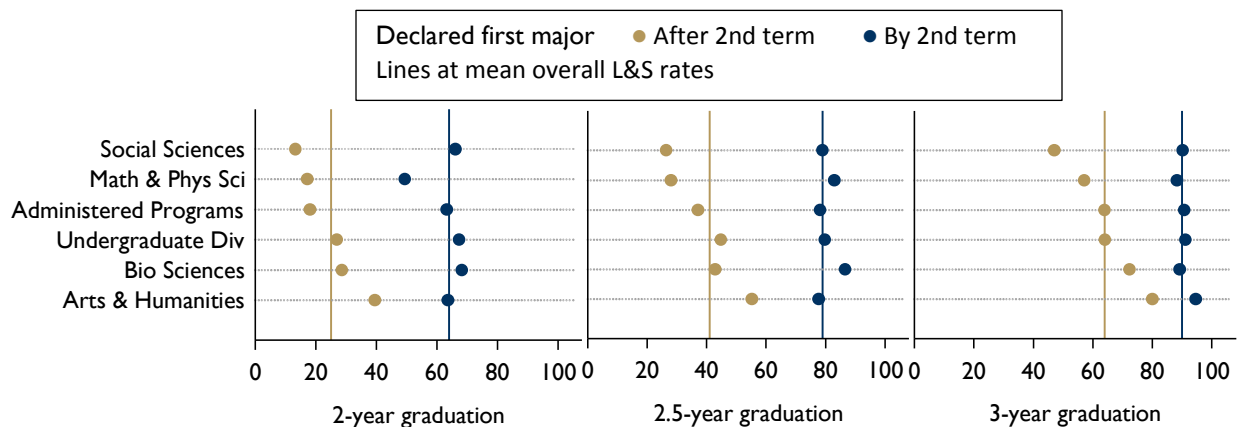
School / College / Division of first declared major, and students declared by 2nd semester within School / College / Division

	Overall (N = 8,581)		Declared by end of 2nd semester	
	Count	%	Count	% within School / College / Division
Chemistry	266	3%	265	100%
Engineering	769	9%	769	100%
Environmental Design	262	3%	261	100%
Natural Resources	452	5%	449	99%
Haas	366	4%	365	100%
Letters & Science	6,466	75%	5,990	93%
Administered Programs	526	6%	476	90%
Arts & Humanities	1,615	19%	1,539	95%
Bio Sciences	371	4%	336	91%
Math & Phys Sci	541	6%	506	94%
Social Sciences	2,364	28%	2,296	97%
Undergraduate Division	1,049	12%	837	80%

Note: Students who did not declare a major (n = 177) are not included.

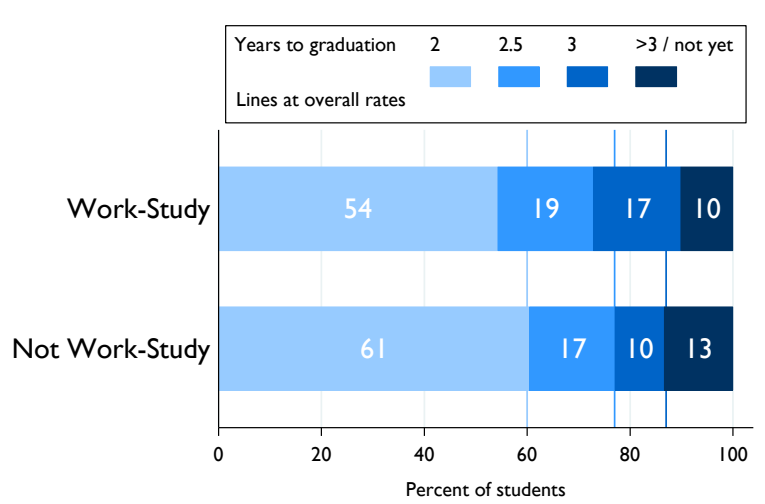
Within the College of Letters & Science, graduation rates were closely related to when the first major was declared (see graphic below). Among transfer students who declared after the second term (n = 659), 25% graduated within two years (gold line on the far left). Among transfer students who declared by the end of the second term (n = 8,099), 64% graduated within two years (blue line on the far left).

Graduation rates by declaring a major by the end of the 2nd term for L&S Divisions



CAMPUS EXPERIENCES

Graduation rates by Work-Study participation



Note: Due to rounding, percentages may not sum to 100% and may differ from rates reported in the table on page 5

Comparing students who graduated within 2 years with those who graduated at 2.5 years, students who participated in Work-Study were significantly less likely to finish within 2 years ($p < 0.05$), compared to students who did not participate in Work-Study. Controlling for demographic variables and transfer GPA, the difference diminished magnitude and was no longer statistically significant. However, the difference increased after adding academic experience variables to the model: first-term units attempted, first-term GPA and first-year Probation, and timing and unit of first major declared.

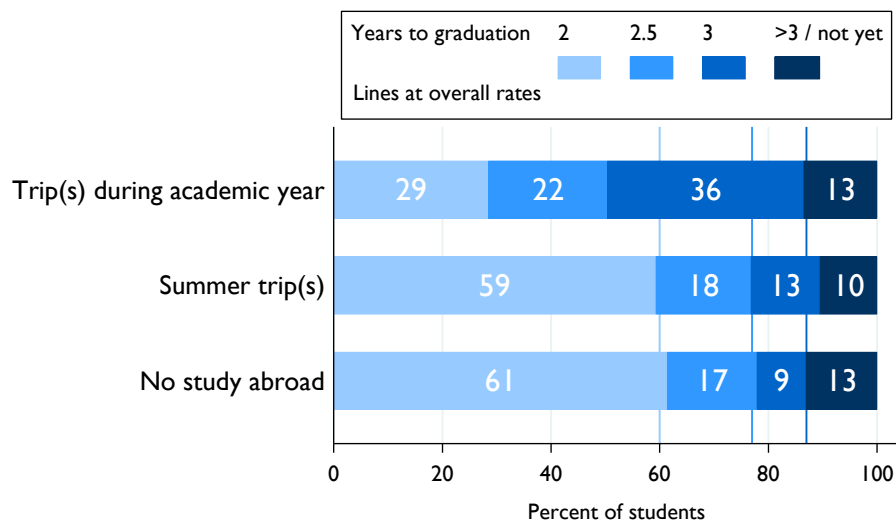
Comparing students who graduated within 2.5 years with those who graduated at 3 years, the difference for students who participated in Work-Study persisted across all models.

Actual and adjusted graduation by Work-Study participation: Subsets of the population

	Graduated within 2 years compared to <u>at</u> 2.5 years N = 6,706 ¹			Graduated within 2.5 years compared to <u>at</u> 3 years N = 7,625 ²		
	Actual	Adjusted ³	Further adjusted ⁴	Actual	Adjusted ³	Further adjusted ⁴
Overall	78%	79%	81%	88%	89%	90%
Work-Study	75% *	77%	78% *	81% *	85% *	86% *
Not Work-Study	79%	79%	82%	89%	90%	91%

* Significant at the 0.05 level of significance; ¹ Excludes students who graduated in 3 years or greater, or did not graduate; ² Excludes students who graduated in 3.5 years or greater, or did not graduate; ³ Adjusted for gender, ethnicity, parent education, family income, transfer GPA; ⁴ Further adjusted for first-term units attempted, first-term GPA / first-year Probation, timing and unit of first major declared

Graduation rates by study abroad participation



Note: Due to rounding, percentages may not sum to 100% and may differ from rates reported in the table on page 9

Comparing students who graduated within 2 years with those who graduated at 2.5 years, students who studied abroad during the academic year were significantly less likely to finish within 2 years ($p < 0.05$), compared to students who did not study abroad (see table below). The differences persisted after controlling for demographic, admissions, and academic indicator variables.

Comparing students who graduated within 2.5 years with those who graduated at 3 years, the same pattern emerged – after controlling for demographic factors, transfer GPA, and academic indicators, the differences in 2.5-year graduation persisted for students who studied abroad during the academic year, compared to students who did not study abroad.

However, students who studied abroad for one summer had similar graduation rates to those who did not study abroad. After controlling for demographic, selection, and academic variables, the difference in graduating within 2 compared with at 2.5 years increased in magnitude and became statistically significant. Conversely, the difference in graduating within 2.5 compared with at 3 years was no longer significant in the adjusted models.

Actual and adjusted graduation by study abroad participation: Subsets of the population

	Graduated within 2 years compared to <u>at</u> 2.5 years N = 6,706 ¹			Graduated within 2.5 years compared to <u>at</u> 3 years N = 7,625 ²		
	Actual	Adjusted ³	Further adjusted ⁴	Actual	Adjusted ³	Further adjusted ⁴
Overall	78%	79%	81%	88%	89%	90%
Trip(s) during academic year	57% *	59% *	53% *	58% *	64% *	63% *
Summer trip(s)	77%	78%	75% *	86% *	89%	89%
No study abroad (reference)	79%	80%	82%	90%	90%	92%

* Significant at the 0.05 level of significance; ¹ Excludes students who graduated in 3 years or greater, or did not graduate; ² Excludes students who graduated in 3.5 years or greater, or did not graduate; ³ Adjusted for gender, ethnicity, parent education, family income, transfer GPA; ⁴ Further adjusted for first-term units attempted, first-term GPA / first-year Probation, timing and unit of first major declared