



FOOTHILL COLLEGE

Institutional Research and Planning

DATE: October 17, 2014

TO: Sarah Parikh, Instructor, Engineering

FROM: Elaine Kuo, College Researcher

RE: Engineering Course Success Rates by Gender, 2010-11 to 2013-14

Overview

Students enrolled in an engineering (ENGR) course from 2010-11 and 2013-14 were identified to determine enrollment and course success patterns. Table 1 shows both the headcount and enrollment numbers for the ENGR department. There has been a 71% increase in unique students and a 95% increase in enrollment from 2010-11 and 2013-14.

Table 1. Headcount and Enrollment in ENGR Courses, 2010-11 to 2013-14.

Year	Headcount	Enrollment
2010-11	151	202
2011-12	164	242
2012-13	183	286
2013-14	258	393

Females compose less than one-fifth of ENGR course enrollment during this time period (Table 2). In 2013-14, female student enrollment reached a four-year high at 17% of total enrollment, which is a three percentage point increase from 2010-11.

Table 2. Enrollment in ENGR Courses by Gender, 2010-11 to 2013-14.

Year	<u>Female</u>		<u>Male</u>		<u>Unknown</u>		<u>Total</u>	
	Enr	Percent	Enr	Percent	Enr	Percent	Enr	Percent
2010-11	29	14%	172	85%	1	0%	202	100%
2011-12	27	11%	211	87%	4	2%	242	100%
2012-13	37	13%	246	86%	3	1%	286	100%
2013-14	68	17%	321	82%	4	1%	393	100%

Course success rates have increased by 11 percentage points between 2010-11 and 2013-14, from 75% to 86% (Table 3). There was a large decline in the number of withdrawals, from a high of 18% in 2010-11 to 6% in 2013-14.

Table 3. Success Rates in ENGR Courses, 2010-11 to 2013-14.

Year	<u>Success</u>		<u>Nonsuccess</u>		<u>Withdraw</u>		<u>Total</u>	
	Enr	Percent	Enr	Percent	Enr	Percent	Enr	Percent
2010-11	151	75%	14	7%	37	18%	202	100%
2011-12	194	80%	28	12%	20	8%	242	100%
2012-13	237	83%	25	9%	24	8%	286	100%
2013-14	337	86%	34	9%	22	6%	393	100%

Table 4 shows that females have successfully completed ENGR courses at increasingly higher rates between 2010-11 and 2013-14 (62% vs. 90%). The withdrawal rate has decreased from 24% in 2010-11 to 4% in 2013-14 and the nonsuccess rate from 14% to 6% during the same time period.

Table 4. Success Rates in ENGR Courses by Gender, 2010-11 to 2013-14.

Year	Gender	<u>Success</u>		<u>Nonsuccess</u>		<u>Withdraw</u>		<u>Total</u>	
		Enr	Percent	Enr	Percent	Enr	Percent	Enr	Percent
2010-11	Female	18	62%	4	14%	7	24%	29	100%
	Male	132	77%	10	6%	30	17%	172	100%
	Unknown	1	100%					1	100%
2011-12	Female	23	85%	1	4%	3	11%	27	100%
	Male	167	79%	27	13%	17	8%	211	100%
	Unknown	4	100%					4	100%
2012-13	Female	28	76%	4	11%	5	14%	37	100%
	Male	207	84%	20	8%	19	8%	246	100%
	Unknown	2	67%	1	33%			3	100%
2013-14	Female	61	90%	4	6%	3	4%	68	100%
	Male	272	85%	30	9%	19	6%	321	100%
	Unknown	4	100%					4	100%

Methodology

Headcount is counting each student one time in a given year, even if the student has enrolled in more than one ENGR course. Enrollment is a duplicated count of all students who enrolled in an ENGR course during a given year. Course success is defined as earning a final grade of "A," "B," "C," or "P" while non-success is "D," "F," "NP." Withdraws are indicated with a "W" grade. Only students with a final grade are included in this analysis.

Source

FHDA IR&P, ODS [Registration Analysis, Student Demographic FHDA]