Fall 16

Institutional Overview of the Colorado School of Mines

OFFICE OF ACADEMIC AFFAIRS
COLORADO SCHOOL OF MINES

Institutional Overview of the Colorado School of Mines

History

In 1873, Mines opened under the auspices of the Episcopal Church. In 1874 the School of Mines became a territorial institution and has been a state institution since 1876 when Colorado attained statehood. The first formal commencement for two graduates was held in 1883. Courses offered to students during the early years of Colorado School of Mines included chemistry, metallurgy, mineralogy, mining engineering, geology, botany, math and drawing. The focus of the early academic programs was on gold and silver and the assaying of those minerals. As the institution grew, its mission expanded to focus specifically on understanding the Earth, harnessing energy and sustaining the environment. In the mid twentieth century Mines became known for its strong ties to the extractive earth science industries and the positive impact of its graduates on these industries.

Facts

- Mines has a student body of approximately 5,793 (4,566 undergraduates 1227 graduate students, and 227 undecided or non-degree seekers), a student-to-faculty ratio of 14.8 : 1, and an average undergraduate class size of 34 students.
- Entering freshmen have an average ACT score of 30 and most rank in the top 10 percent of their high school graduating class. The average GRE Quant score for graduate students is 159.
- Mines ranked first engineering school in USA TODAY College's "The top 10 engineering colleges in the U.S."
- Mines ranked first in public university in the state, #53 in nation by *The Business Journals.*
- Mines ranked first public school in the state for best value colleges (average starting salary for graduates: $66,700), and second in the nation by New York-based Smart Asset.
- Mines ranked seventh in Brookings' 'value-added' college rankings.
- Mines ranked 22nd in the 2014-2015 Learfield Sports Directors Cup by the National Association of Collegiate Directors of Athletics.
- Mines ranked 29th in U.S. News and World Report's Top Public Schools in "2015 Best Colleges." Mines also ranked 41st in Best Engineering Programs (where the highest degree is a doctorate), 56th for graduate schools in Best Engineering Schools, and 75th for Best National Universities.
- Mines has 180 student organizations, including the country's largest student chapter of the Society of Women Engineers.
- Mines has 18 intercollegiate athletic teams that compete in NCAA Division II.
- Mines is home to the $9 million National Science Foundation funded Renewable Energy Materials Research Science and Engineering Center — a strategic partnership with the National Renewable Energy Laboratory, the University of New South Wales and Imperial College London.
- In 2014, Mines received awards totaling more than $63 million with nearly half funded by private industry.
- Undergraduate tuition and fees for 2016-17 is $15,690 for residents and $34,020 for non-residents (14 credits per semester load).

Mines Today

The Colorado School of Mines' mission statement is "Education and research in engineering and science to solve the world's challenges related to the earth, energy and the environment."

Mines has the highest admission standards of any public university in Colorado and among the highest of any public university in the nation. Mines awards baccalaureate degrees in the following programs:

Applied Mathematics and Statistics
Chemical and Biochemical Engineering
Chemical Engineering
Chemistry
Civil Engineering
Computer Science
Economics
Electrical Engineering
Mechanical Engineering
Physics
Environmental Engineering
Geological Engineering
Geophysical Engineering
Metallurgical/Materials Engineering
Mining Engineering
Petroleum Engineering

Of the 979 baccalaureate graduates in 2015-2016, 36% were in the geological, mining, petroleum, economics and business, and geophysical engineering programs, 24% were in the metallurgical and materials, chemical and biological engineering, physics and chemistry programs, the remaining 40% were awarded in the civil, electrical, mechanical and environmental engineering, math and statistics, and computer science programs.

This dichotomy between specificity of mission in legacy areas and the flux of a significant number of undergraduate students to other programs has been an issue at Mines for at least two decades. This, in part, prompted the institution to undertake a significant academic reorganization in order to: 1) produce organizational units that produce distinction for our degrees and 2) deploy faculty in a way that addressed long-standing structural imbalances.

In Spring 2011, at the direction of the Provost, the leadership and faculty began discussing the need for and advantages of realigning their administrative structures. With faculty input, Mines developed a reorganizational plan that resulted in the creation of three colleges:

- College of Engineering and Computational Sciences (CECS)
- College of Applied Science and Engineering (CASE)
- College of Earth Resource Sciences and Engineering (CERSE)

Institutional Data of Colorado School of Mines

Faculty Profile

At the start of the 2015-2016 academic year, the Colorado School of Mines (CSM) tenure/tenure-track (T/TT), teaching faculty (TF), visiting faculty (LTE), and transitional faculty totals **298.53** full-time equivalent faculty and is composed of **27.8% female** faculty and **72.2% male** faculty. Nearly one-fifth (19.23%) of the faculty have been hired in the last three years and 27.8% have been at CSM for more that 16 years.

Full-time equivalent faculty: 2014-2015

Colleges	T/TT	TF	LTE	Transitional	Total FTE
College of Engineering and Computational Sciences (CECS)	70	29.4		2	**101.4**
College of Applied Science and Engineering (CASE)	65	19.5		3.8	**88.3**
College of Earth Resource Sciences and Engineering (CERSE)	71.2	21	1	3	**96.2**
CSM TOTAL	**206.2**	**69.9**	**1**	**8.8**	**285.9**

Full-time equivalent faculty: 2015-2016

Colleges	T/TT	TF	LTE	Transitional	Total FTE
College of Engineering and Computational Sciences (CECS)	72.5	32.45		2.5	**107.45**
College of Applied Science and Engineering (CASE)	65	20		1.75	**86.75**
College of Earth Resource Sciences and Engineering (CERSE)	68	25		3	**96**
CSM TOTAL	**205.5**	**77.45**		**7.25**	**290.2**

Full-time equivalent faculty: 2016-2017

Colleges	T/TT	TF	LTE	Transitional	Total FTE
College of Engineering and Computational Sciences (CECS)	72.5	36.78		3	**112.28**
College of Applied Science and Engineering (CASE)	66.5	20		2.75	**89.25**
College of Earth Resource Sciences and Engineering (CERSE)	68	26.5		2.5	**97**
CSM TOTAL	**207**	**83.28**		**8.25**	**298.53**

Student Profile

Nearly 4,566 students were enrolled in bachelor's programs in Fall 2016. Undergraduate students represent 78.8% of the student body. Graduate students (674 master's students and 553 doctoral students) represent 21.2%, and the undecided or non-degree seeker students represent 4.5% of the enrolled students.

Student Enrollment: Fall 2016

Department	BS	MS Thesis	MS Non-Thesis	PhD	GR	TOTAL
Applied Science & Engineering (CASE)	***1,204***	***64***	***12***	***203***	***279***	***1,483***
Chemical & Biological Engineering	733	10	4	49	63	**796**
Chemistry	74	11	2	46	59	**133**
Metallurgical and Materials Engineering	158	38	6	61	105	**263**
Physics	239	5	0	47	52	**291**
Earth Resource Sci & Engineering (CERSE)	***1,026***	***173***	***168***	***181***	***522***	***1,548***
Economics and Business	19	4	108	15	127	**146**
Geology and Geological Engineering	120	93	24	59	176	**296**
Geophysics	137	27	5	37	69	**206**
Liberal Arts and International Studies		1	2	0	3	**3**
Mining Engineering	89	11	12	28	51	**140**
Petroleum Engineering	661	37	17	42	96	**757**
Engineering/Computational Science (CECS)	***2,182***	***77***	***180***	***169***	***426***	***2,608***
Applied Mathematics and Statistics	108	9	5	20	34	**142**
Civil & Environmental Engineering	332	23	60	51	134	**466**
Electrical Engineering & Comp Sci	564	17	46	44	107	**671**
Engineering - Electrical	275	6	26	24	56	**331**
Computer Science	289	11	20	17	48	**337**
Mechanical Engineering	1,178	28	69	54	151	**1,329**
Undecided	154	0	0	0	0	**154**
Non-Degree Program Undergrad	46	37	0	0	37	**110**
Degree Seeking Total	**4,566**	**314**	**360**	**553**	**1,227**	**5,793**

Notes: https://inside.mines.edu/UserFiles/File/president/IR/EnrollmentReports/Fall2016EnrollmentReport.pdf.
Non-Degree students were not included in the totals.

The undergraduate student/faculty ratio is 14.8 to 1 for the 2016-2017 academic year, but there is a considerable range (from 1.3 to 1 in Economics and Business to 38.9 to 1 in Petroleum Engineering) among the academic departments.

Student / Faculty Ratio: Fall 2016

Department	Faculty	Undergraduate Students	Student/Faculty Ratio
Applied Science & Engineering (CASE)	***94***	***1,204***	***12.8***
Chemical & Biological Engineering	28	733	26.2
Chemistry	21	74	3.5
Metallurgical &Materials Engineering	20	158	7.9
Physics	25	239	9.6
Earth Resource Sci & Engineering (CERSE)	***100***	***1,026***	***10.3***
Economics and Business	15	19	1.3
Geology & Geological Engineering	20	120	6.0
Geophysics	8	137	17.1
Liberal Arts & International Studies	29		0.0
Mining Engineering	11	89	8.1
Petroleum Engineering	17	661	38.9
Engineering/Computational Science (CECS)	***114***	***2,182***	***19.1***
Applied Math & Statistics	23	108	4.7
Civil & Environmental Engineering	25	332	13.3
Electrical Engineering and Computer Science	29	564	19.4
Electrical Engineering	16	275	17.2
Computer Science	13	289	22.2
Epics	5		0.0
Mechanical Engineering	32	1,178	36.8
Grand Total	**308**	**4,566**	**14.8**

Notes: https: Student numbers were obtained from //inside.mines.edu/UserFiles/File/president/IR/EnrollmentReports/Fall2016EnrollmentReport.pdf. Faculty numbers were obtained from Academic Affairs Planner Spreadsheet for FY17. Undecided students were not included in this table.

Mines awarded 966 bachelor's degrees, 388 master's degrees, and 115 doctoral degrees in from July 2015 to June 2016. Students in the College of Engineering and Computational Sciences (CECS) earned 40% of the total degrees awarded, students in the College of Earth Resource Sciences and Engineering (CERSE) earned 37%, and students in the College of Applied Science and Engineering (CASE) earned 23% of total degrees awarded.

Degrees Awarded: July 2015–June 2016

Department	BS Degrees	MS and ME - Thesis	MS Non-Thesis	MS Total	PhD	GR Total	Total Degrees	%
Applied Science & Engineering (CASE)	***226***	***37***	***22***	***59***	***54***	***113***	***339***	***23%***
Chemical & Biological Engineer	105	1	13	14	20	34	139	9%
Chemistry	22	5		5	8	13	35	2%
Metallurgical & Materials Eng	47	21	4	25	17	42	89	6%
Physics	52	10	5	15	9	24	76	5%
Earth Resource Sci & Enginring (CERSE)	***313***	***81***	***107***	***188***	***36***	***224***	***537***	***37%***
Economics and Business	9	1	63	64	6	70	79	5%
Geology	36	44	9	53	10	63	99	7%
Geophysics	41	20	3	23	6	29	70	5%
Liberal Arts & Intern'l Study			5	5		5	5	0%
Mining	29	0	17	17	3	20	49	3%
Petroleum	198	16	10	26	11	37	235	16%
Engineering/Computational Sci (CECS)	***427***	***35***	***106***	***141***	***25***	***166***	***593***	***40%***
Applied Math & Statistics	29	5	8	13	2	15	44	3%
Civil & Environmental Enginrng	68	11	38	49	12	61	129	9%
Electrical Enginrg & Comp Sci	112	11	22	33	4	37	149	10%
Computer Science	56	7	12	19	2	21	77	5%
Electrical Engineering	56	4	10	14	2	16	72	5%
Mechanical Engineering	218	8	38	46	7	53	271	18%
Grand Total	**966**	**153**	**235**	**388**	**115**	**503**	**1,469**	**100%**

Note*: Mines Institutional Research Office (July 2015-June 2016) . Jan 10, 2017*

Females represent 28% of Fall 2016 enrollment at the undergraduate level and 29% at the graduate level. The proportion of female students varies substantially among programs, however, with a low of 11% female in Mining and a high of 61% in Chemistry at the undergraduate level. Among the graduate programs, 67% is the highest proportion of females (Liberal Arts and International Studies) and 13% is the lowest (Mechanical Engineering.)

Distribution of Students by Gender: Fall 2016

Department	Undergraduate Female Students	Undergraduate Male Students	Graduate Female Students	Graduate Male Students
Applied Science & Engineering (CASE)	***38%***	***62%***	***31%***	***69%***
Chemical & Biological Engineering	41%	59%	27%	73%
Chemistry	61%	39%	44%	56%
Metallurgical and Materials Engineering	35%	65%	30%	70%
Physics	23%	77%	23%	77%
Earth Resource Sci & Engineering (CERSE)	***23%***	***77%***	***29%***	***71%***
Economics and Business	16%	84%	15%	85%
Geology and Geological Engineering	40%	60%	42%	58%
Geophysics	36%	64%	38%	62%
Liberal Arts and International Studies	0%	0%	67%	33%
Mining Engineering	11%	89%	16%	84%
Petroleum Engineering	19%	81%	21%	79%
Engineering/Computational Science (CECS)	***24%***	***76%***	***27%***	***73%***
Applied Mathematics and Statistics	38%	62%	38%	62%
Civil & Environmental Engineering	51%	49%	47%	53%
Electrical Engineering & Comp Sci	16%	84%	21%	79%
Engineering - Electrical	16%	84%	20%	80%
Computer Science	16%	84%	23%	77%
Mechanical Engineering	20%	80%	13%	87%
Undecided	36%	64%	0%	0%
Non-Degree Program Undergrad	16%	84%	32%	68%
Degree Seeking Total	**28%**	**72%**	**29%**	**71%**

Note*: Information obtained from* https://inside.mines.edu/UserFiles/File/president/IR/EnrollmentReports/ *Fall 2016 EnrollmentReport.pdf*

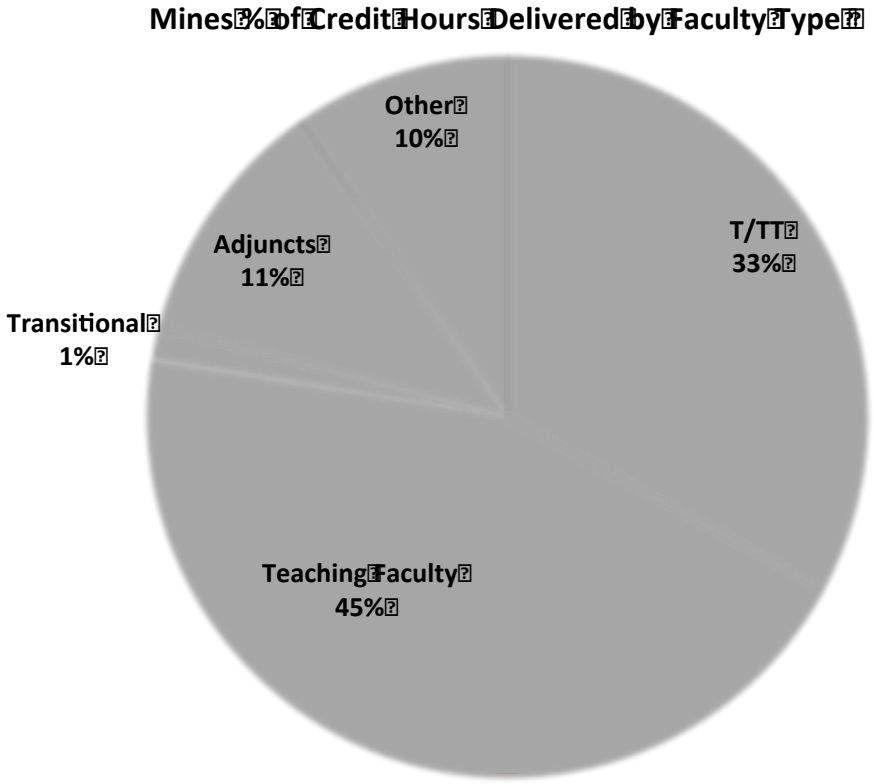
At the undergraduate level, 58% of the student body is comprised of Colorado residents while at the graduate level, 50.3% of students are residents. As is the case with gender, the proportion of resident and non-resident students varies by department. At the undergraduate level, the range of residents by department is 40% to 70%.

Course and Credit Hour Profile

One-fifth of all credit hours generated in 2015-2016 were in courses with enrollment of less than 25 students. Nearly 27% of credit hours were generated in courses with enrollment of 81 or more students. Most of the high enrollment courses were at the freshman and sophomore levels.

In academic year 2015-2016, the College of Engineering and Computational Sciences (CECS) generated 40% of the total credit hours, while the College of Earth Resource Sciences and Engineering (CERSE) generated 33% and the College of Applied Science and Engineering (CASE) generated 27%.

At CSM, in academic year 2015-2016 teaching faculty and tenure/tenure track faculty taught the majority of classes and generated the majority of credit hours. Transitional retirees, adjunct faculty, and administrators teach on an as needed basis. At the 100 and 200 level (which are first and second-year courses) teaching faculty generated 60% of credit hours, tenure/tenure track faculty delivered 12%, and other faculty (adjuncts, transitional retirees, and administrators) delivered the remaining 28%. Tenure/tenure track faculty delivered 46% of the junior and senior level courses, while teaching faculty delivered 35%, and other faculty delivered the remaining 19%. Tenure/tenure track faculty delivered 77% of the graduate course credits.



Notes: *Notes: Data was obtained from ODS HR Schedule Hybrid View and from Academic Affairs Planner Spreadsheet for FY16. Faculty FTE's were counted depending on their % of effort for the year. All faculty members who were on sabbatical leave are counted as a full FTE. Run Date: Feb 10, 2065. (Census for Spring and End of Term for Fall) All faculty members who were on transitional retirement (TRAN) are counted at the "FTE rate" associated with their position (typically 0.5). They are counted in Fall, Spring or both depending on their contract. Faculty paid from external sources are assigned an FTE based on their position, not based on funding source. Visiting Faculty was counted in the LTE (Limited Term Employment) section. Credit hours production is counted by multiplying the class maximum number of credit hours by the actual enrollment by the faculty member percentage of responsibility.*

Course Offerings by Class Size, Level and Weighted by Credit Hour (Fall 2015-Spring 2016)

Departments	Class Level	Class Size				
		LT 25	25-50	51-80	81 and Higher	Grand Total
College of Engineering/Computational Sci		**11,475**	**34,069**	**12,489**	**10,117**	**68,150**
Applied Mathematics and Statistics	100-200	521	9,932	78	3,089	13,620
	300-400	345	3,246			3,591
	500-600	601	75			676
Civil and Environmental Engineering	100-200	205	585	1,374	-	2,164
	300-400	1,290	2,280	885		4,455
	500-600	1,056	84			1,140
College of Engr & Comp Sci - Admin	100-200	494	150			644
	300-400	128	191	216		535
	500-600	24				24
Electrical Eng and Computer Science	100-200	192	4,415	1,335		5,942
	300-400	1,028	3,654	2,532	1,650	8,864
	500-600	861				861
EPICS	100-200	3,259	4,951		512	8,722
	300-400	47	252		1,479	1,778
Mechanical Engineering	100-200		558	642		1,200
	300-400	393	3,189	5,232	3,387	12,201
	500-600	1,033	507	195		1,735
College of Applied Science & Engineering		**5,561**	**5,575**	**12,075**	**20,738**	**43,949**
Chemical and Biological Engineering	100-200	141	1,149	2,531		3,821
	300-400	1,093	1,227	4,143	723	7,186
	500-600	330	98			428
Chemistry and Geochemistry	100-200	255	576		9,945	10,776
	300-400	643	261	715	464	2,083
	500-600	521				521
Metallurgical and Mat. Eng	100-200			603	507	1,110
	300-400	1,010	753	2,046		3,809
	500-600	536				536
Physics	100-200	7	675	260	9,099	10,041
	300-400	665	397	1,777		2,839
	500-600	361	439			800
College of Earth Resource Sci & Enginring		**16,435**	**15,151**	**8,010**	**14,920**	**54,515**
College Earth Res. Sci & Engr-Admin	100-200	3				3
	300-400	-	-	192	447	639
Economics and Business	100-200	-	-		2,709	2,709
	300-400	708	912	1,275	642	3,537
	500-600	576	1,830	168		2,574
Geology and Geological Engineering	100-200	38	312	268	2,296	2,914
	300-400	604	990			1,594
	500-600	1,319	481			1,800
Geophysics	100-200	120	270			390
	300-400	533	1,408		555	2,496
	500-600	633				633
Liberal Arts and Intl Studies	100-200	7,737	1,621	1,104	1,701	12,163
	300-400	1,799	4,266	588		6,653
	500-600	219				219
Mining Engineering	100-200		336	495		831
	300-400	644	1,239			1,883
	500-600	628	162			790
Petroleum Engineering	100-200		252	333		585
	300-400	106	670	3,587	6,570	10,933
	500-600	768	402			1,170
TOTAL		**33,471**	**54,794**	**32,574**	**45,775**	**166,613**

Notes: *Student Credit hours delivered by College. Freshman-Sophomore Level Classes (100-200), Junior-Senior Level (300-400), Graduate Level (500-600). Data was obtained from ODS HR Schedule Hybrid View and from Academic Affairs Planner Spreadsheet for FY16. Faculty FTE's were counted depending on their % of effort for the year. All faculty that was on sabbatical leave are counted as a full FTE. Run Date: Feb 10, 2016 (Census for Spring and Fall).*

CSM % of Credit Hours Delivered by Faculty Type (Fall 2015 – Spring 2016)

Credit Hours Delivered	100-200						300-400						500-600					
100-600 Level	T/TT	Teaching Faculty	Transitional	Adjuncts	Other	Total	T/TT	Teaching Faculty	Transitional	Adjuncts	Other	Total	T/TT	Teaching Faculty	Transitional	Adjuncts	Other	Total
Engineering/Computational Sci	7%	39%	2%	35%	17%	**100%**	39%	42%		13%	6%	**100%**	87%	2%		3%	7%	**100%**
Applied Mathematics and Statistics	8%	36%		42%	14%	**100%**	45%	42%		3%	9%	**100%**	99%	1%				**100%**
Civil and Environmental Engineering		66%	24%	2%	8%	**100%**	42%	41%		7%	11%	**100%**	67%	6%		8%	18%	**100%**
College of Engr & Comp Sci - Admin					100%	**100%**				68%	32%	**100%**	100%					**100%**
Electrical Eng and Computer Science	20%	51%		19%	10%	**100%**	31%	49%		13%	8%	**100%**	97%	3%				**100%**
EPICS		30%		50%	20%	**100%**		6%		84%	11%	**100%**						
Mechanical Engineering		51%	13%		36%	**100%**	48%	46%		4%	2%	**100%**	91%			2%	7%	**100%**
Applied Science & Engineering	18%	79%	1%	2%	0%	**100%**	58%	21%	0%	9%	12%	**100%**	80%			5%	15%	**100%**
Chemical and Biological Engineering		92%		7%	0%	**100%**	47%	32%	0%	7%	14%	**100%**	100%					**100%**
Chemistry and Geochemistry	31%	69%				**100%**	90%	2%		8%		**100%**	100%					**100%**
Metallurgical and Mat. Eng	77%	23%				**100%**	72%	12%		3%	13%	**100%**	75%			15%	10%	**100%**
Physics	4%	92%	1%	3%		**100%**	43%	16%	2%	23%	16%	**100%**	60%			5%	36%	**100%**
Earth Resource Sci & Enginring	14%	72%	3%	5%	6%	**100%**	48%	35%	3%	0%	13%	**100%**	69%	9%	2%	3%	17%	**100%**
College Earth Res. Sci & Engr-Admin	100%					**100%**	100%					**100%**						
Economics and Business		100%				**100%**	27%	17%	9%		48%	**100%**	66%	17%	5%		13%	**100%**
Geology and Geological Engineering	41%	59%				**100%**	73%	5%	11%		11%	**100%**	76%		1%		23%	**100%**
Geophysics	100%					**100%**	68%			2%	29%	**100%**	69%			12%	19%	**100%**
Liberal Arts and Intl Studies	7%	75%		9%	10%	**100%**	31%	57%	7%		5%	**100%**	50%	28%	14%		9%	**100%**
Mining Engineering	40%		60%			**100%**	64%				36%	**100%**	57%				43%	**100%**
Petroleum Engineering		100%				**100%**	51%	49%				**100%**	78%	11%		11%		**100%**
Grand Total	**12%**	**61%**	**2%**	**17%**	**9%**	**100%**	**46%**	**35%**	**1%**	**7%**	**10%**	**100%**	**77%**	**5%**	**1%**	**3%**	**14%**	**100%**

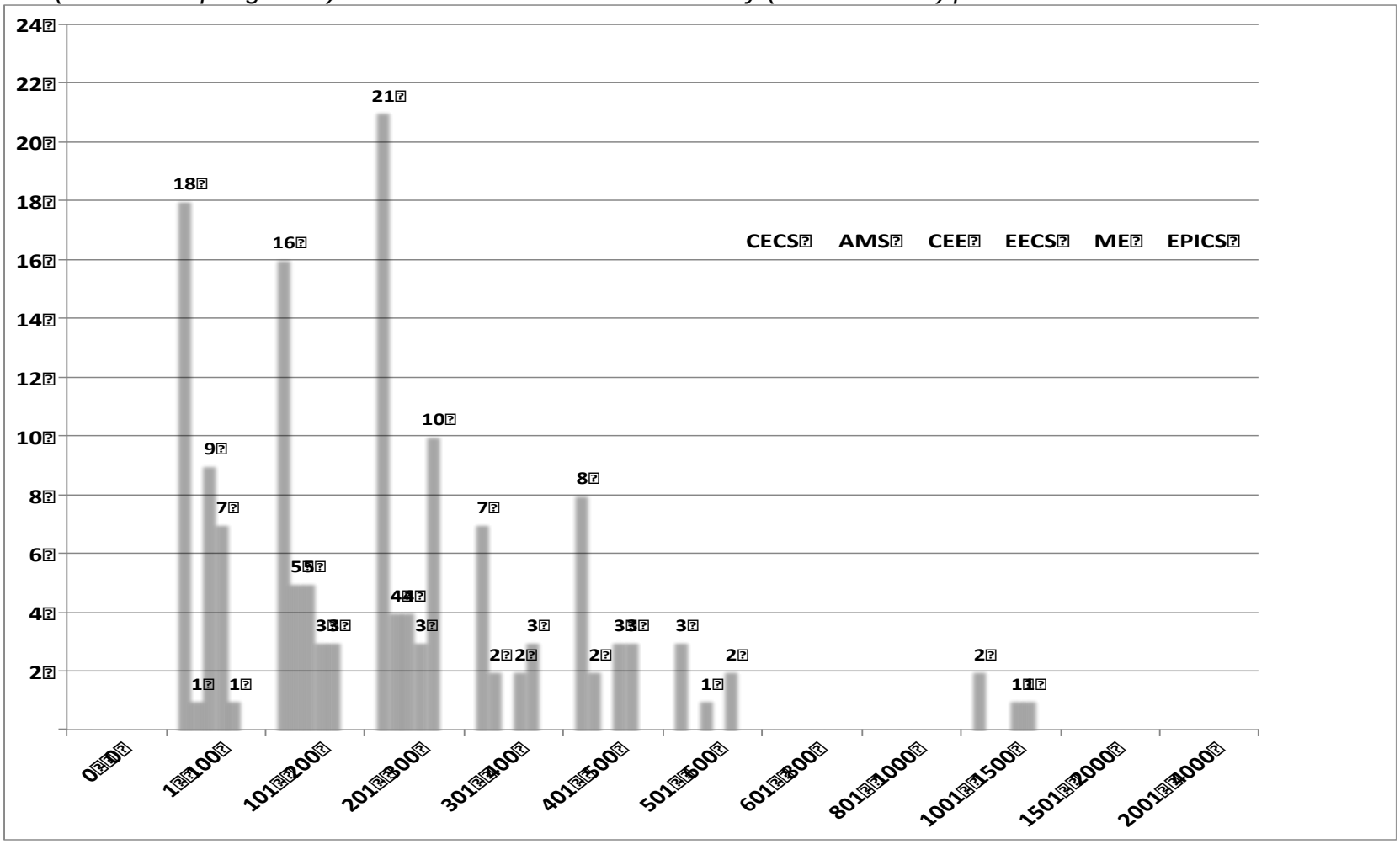
Notes: *Data was obtained from ODS HR Schedule Hybrid View and from Academic Affairs Planner Spreadsheet for FY16. Faculty FTE's were counted depending on their % of effort for the year. All faculty that were on sabbatical leave are counted as a full FTE. Run Date: Feb 10, 2016. (Census for Spring and End of Term for Fall) All faculty that were on transitional retirement (TRAN) are counted at the "FTE rate" associated with their position (typically 0.5). They are counted in Fall, Spring or both depending on their contract. Faculty paid from external sources are assigned an FTE based on their position, not based on funding source. Visiting Faculty was counted in the LTE (Limited Term Employment) section. Credit hours production is counted by multiplying the class maximum number of credit hours by the actual enrollment by the faculty member percentage of responsibility. All faculty that were on transitional retirement (TRAN) are counted at the "FTE rate" associated with their position (typically 0.5). They are counted in Fall, Spring or both depending on their contract. Faculty paid from external sources are assigned an FTE based on their position, not based on funding source. Visiting Faculty was counted in the "Other" portion of the chart.*

CSM Credit Hours Delivered by Faculty Type (Fall 2015 - Spring 2016)

Credit Hours Delivered	100-200						300-400						500-600						
100-600 Level	T/TT	Teaching Faculty	Transitional	Adjuncts	Other	Total	T/TT	Teaching Faculty	Transitional	Adjuncts	Other	Total	T/TT	Teaching Faculty	Transitional	Adjuncts	Other	Total	TOTAL
Engineering/Computational Sci	2,256	12,562	666	11,306	5,501	**32,291**	12,122	13,322		3,942	2,038	**31,423**	3,872	103		129	332	**4,436**	**68,150**
Applied Mathematics and Statistics	1,050	4,909		5,757	1,904	**13,620**	1,632	1,521		111	327	**3,591**	672	4				**676**	**17,887**
Civil and Environmental Engineering		1,435	513	42	174	**2,164**	1,877	1,807		297	474	**4,455**	769	72		96	203	**1,140**	**7,758**
College of Engr & Comp Sci - Admin					644	**644**				365	170	**535**	24					**24**	**1,203**
Electrical Eng and Computer Science	1,206	3,016		1,116	604	**5,942**	2,722	4,325		1,136	681	**8,864**	834	27				**861**	**15,667**
EPICS		2,591		4,391	1,740	**8,722**		100		1,490	188	**1,778**							**10,500**
Mechanical Engineering		612	153		435	**1,200**	5,891	5,569		543	198	**12,201**	1,573			33	129	**1,735**	**15,136**
Applied Science & Engineering	4,588	20,466	132	549	13	**25,748**	9,203	3,267	59	1,402	1,986	**15,916**	1,830			114	341	**2,285**	**43,949**
Chemical and Biological Engineering		3,532		276	13	**3,821**	3,375	2,286	6	483	1,036	**7,186**	428					**428**	**11,435**
Chemistry and Geochemistry	3,335	7,441				**10,776**	1,874	47		162		**2,083**	521					**521**	**13,380**
Metallurgical and Mat. Eng	855	255				**1,110**	2,747	472		105	485	**3,809**	402			78	56	**536**	**5,455**
Physics	398	9,238	132	273		**10,041**	1,207	462	53	652	466	**2,839**	479			36	285	**800**	**13,680**
Earth Resource Sci & Enginring	2,741	14,161	495	1,037	1,161	**19,595**	13,326	9,760	970	52	3,627	**27,735**	4,968	616	168	210	1,224	**7,186**	**54,515**
College Earth Res. Sci & Engr-Admin	3					**3**	639					**639**							**642**
Economics and Business		2,709				**2,709**	945	591	318		1,683	**3,537**	1,698	426	117		333	**2,574**	**8,820**
Geology and Geological Engineering	1,182	1,732				**2,914**	1,160	72	181		181	**1,594**	1,371		21		408	**1,800**	**6,308**
Geophysics	390					**390**	1,708			52	736	**2,496**	434			78	121	**633**	**3,519**
Liberal Arts and Intl Studies	830	9,135		1,037	1,161	**12,163**	2,046	3,792	471		344	**6,653**	109	61	30		19	**219**	**19,035**
Mining Engineering	336		495			**831**	1,200				683	**1,883**	447				343	**790**	**3,504**
Petroleum Engineering		585				**585**	5,628	5,305				**10,933**	909	129		132		**1,170**	**12,688**
Grand Total	**9,585**	**47,189**	**1,293**	**12,892**	**6,675**	**77,633**	**34,650**	**26,349**	**1,029**	**5,396**	**7,651**	**75,074**	**10,670**	**719**	**168**	**453**	**1,897**	**13,907**	**166,613**

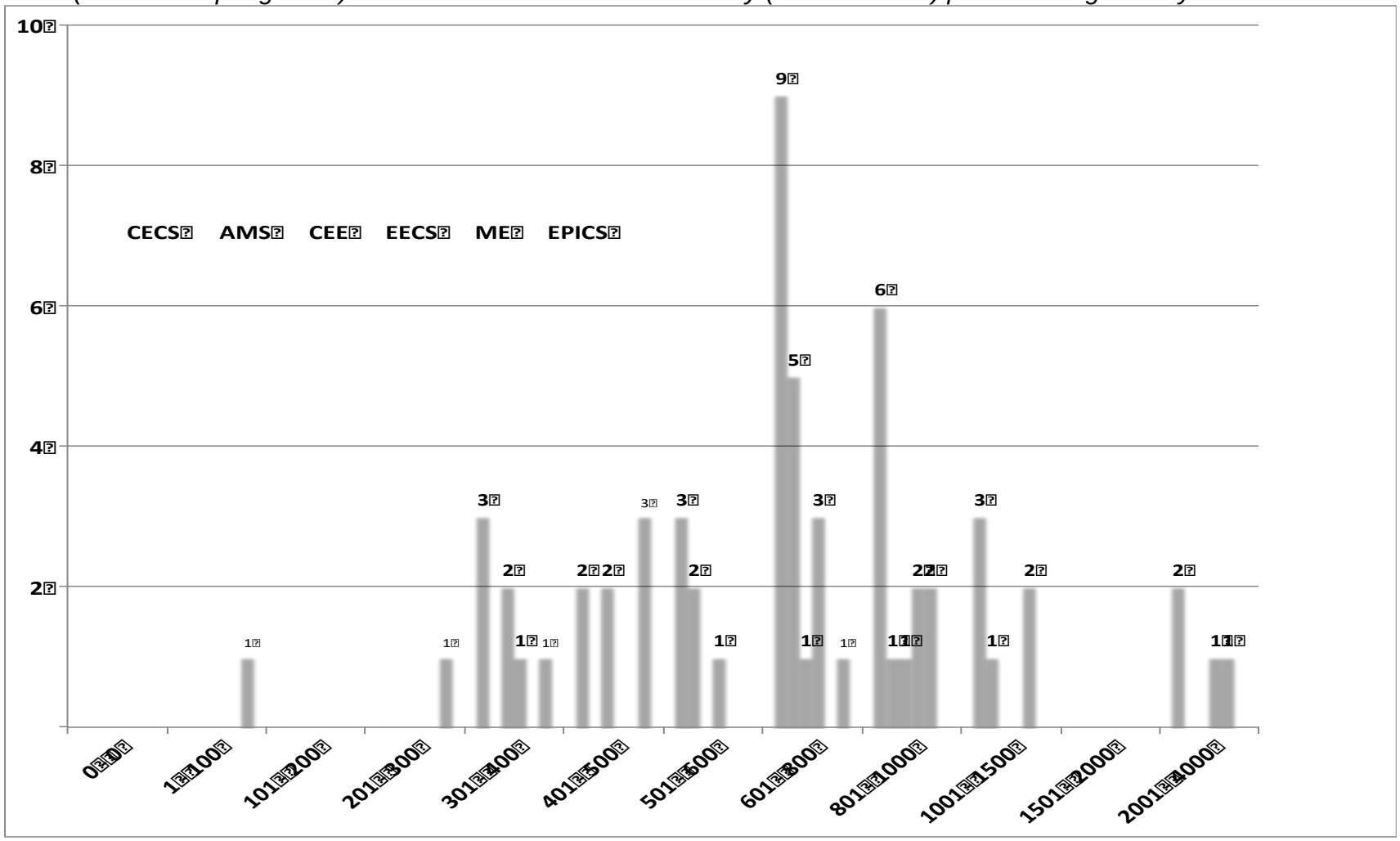
Notes: *Data was obtained from ODS HR Schedule Hybrid View and from Academic Affairs Planner Spreadsheet for FY16. Faculty FTE's were counted depending on their % of effort for the year. All faculty that were on sabbatical leave are counted as a full FTE. Run Date: Feb 10, 2016. (Census for Spring and End of Term for Fall) All faculty that were on transitional retirement (TRAN) are counted at the "FTE rate" associated with their position (typically 0.5). They are counted in Fall, Spring or both depending on their contract. Faculty paid from external sources are assigned an FTE based on their position, not based on funding source. Visiting Faculty was counted in the LTE (Limited Term Employment) section. Credit hours production is counted by multiplying the class maximum number of credit hours by the actual enrollment by the faculty member percentage of responsibility. All faculty that were on transitional retirement (TRAN) are counted at the "FTE rate" associated with their position (typically 0.5). They are counted in Fall, Spring or both depending on their contract. Faculty paid from external sources are assigned an FTE based on their position, not based on funding source. Visiting Faculty was counted in the "Other" portion of the chart.*

CECS (Fall 2015-Spring 2016) Distribution of Credit Hour Delivery (100-600 level) per Tenured and Tenure-Track Faculty



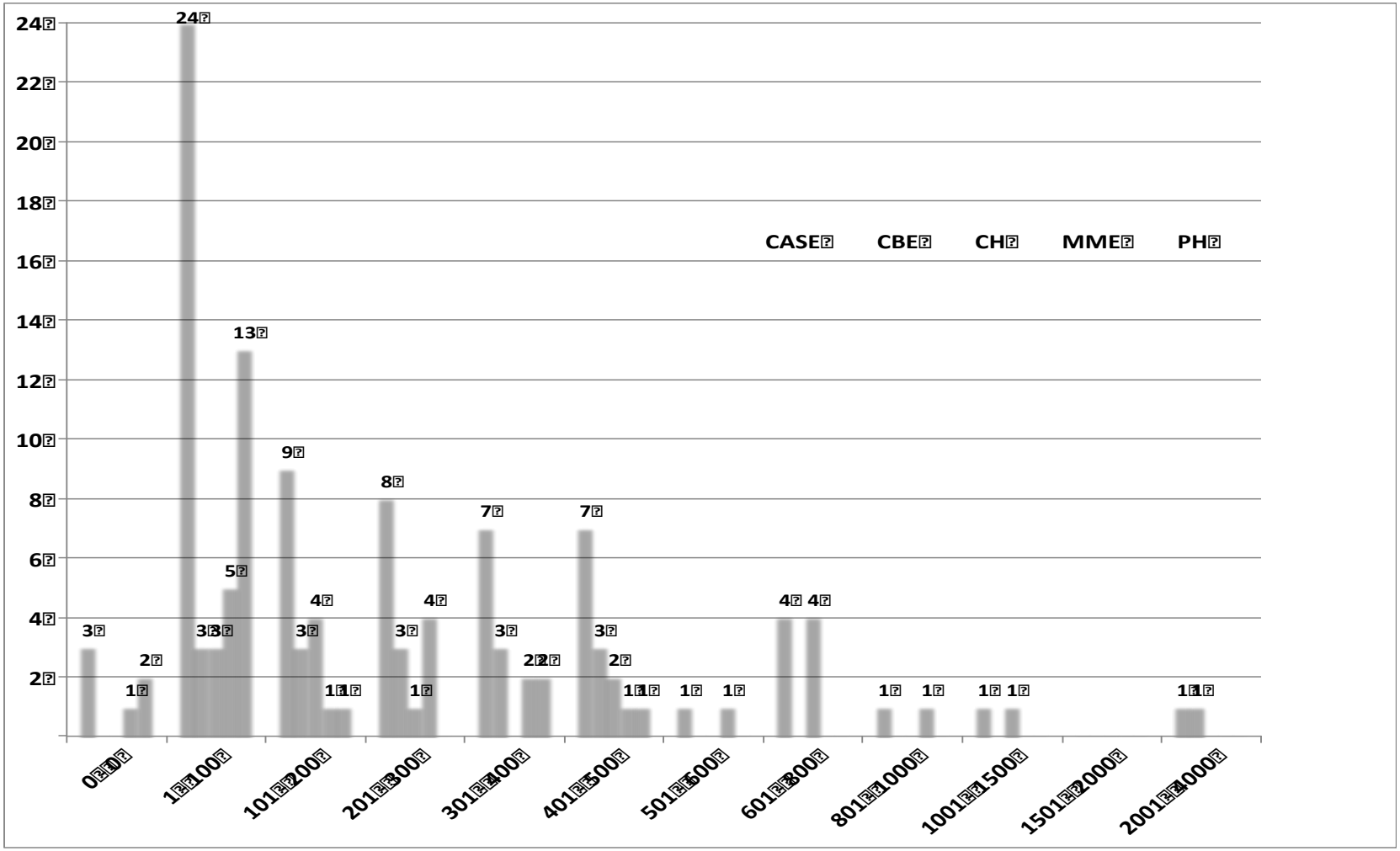
Notes: *Data was obtained from ODS HR Schedule Hybrid View and from Academic Affairs Planner Spreadsheet for FY16. Faculty FTE's were counted depending on their % of effort for the year. All faculty that were on sabbatical leave are counted as a full FTE. Run Date: Feb 10, 2016. (Census for Spring and End of Term for Fall)*

CECS (Fall 2015-Spring 2016) Distribution of Credit Hour Delivery (100-600 level) per Teaching Faculty



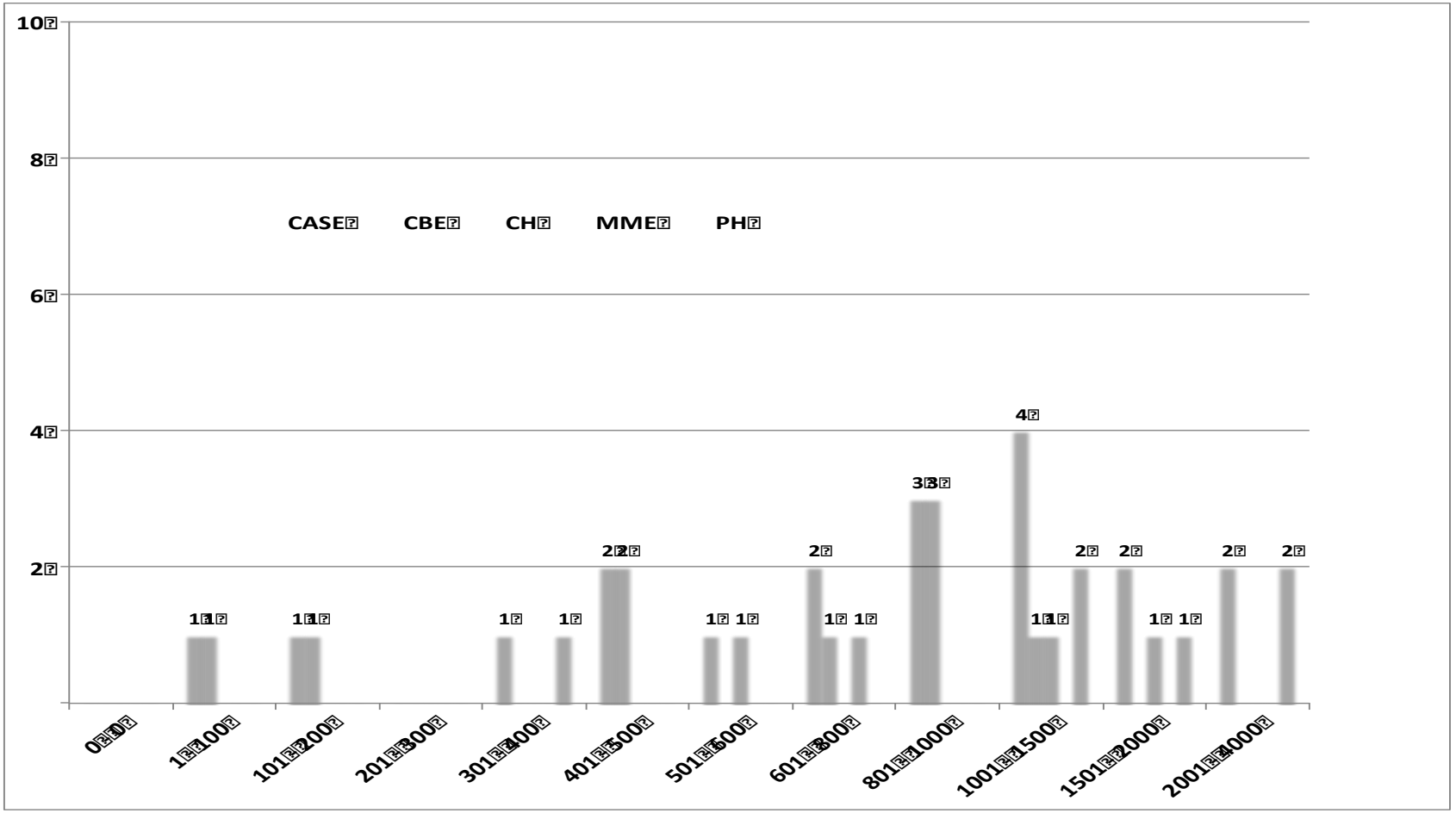
Notes: *Data was obtained from ODS HR Schedule Hybrid View and from Academic Affairs Planner Spreadsheet for FY15. Faculty FTE's were counted depending on their % of effort for the year. All faculty that were on sabbatical leave are counted as a full FTE. Run Date: Feb 10, 2016. (Census for Spring and End of Term for Fall)*

CASE (Fall 2015-Spring 2016) Distribution of Credit Hour Delivery (100-600 level) per Tenured and Tenure-Track Faculty



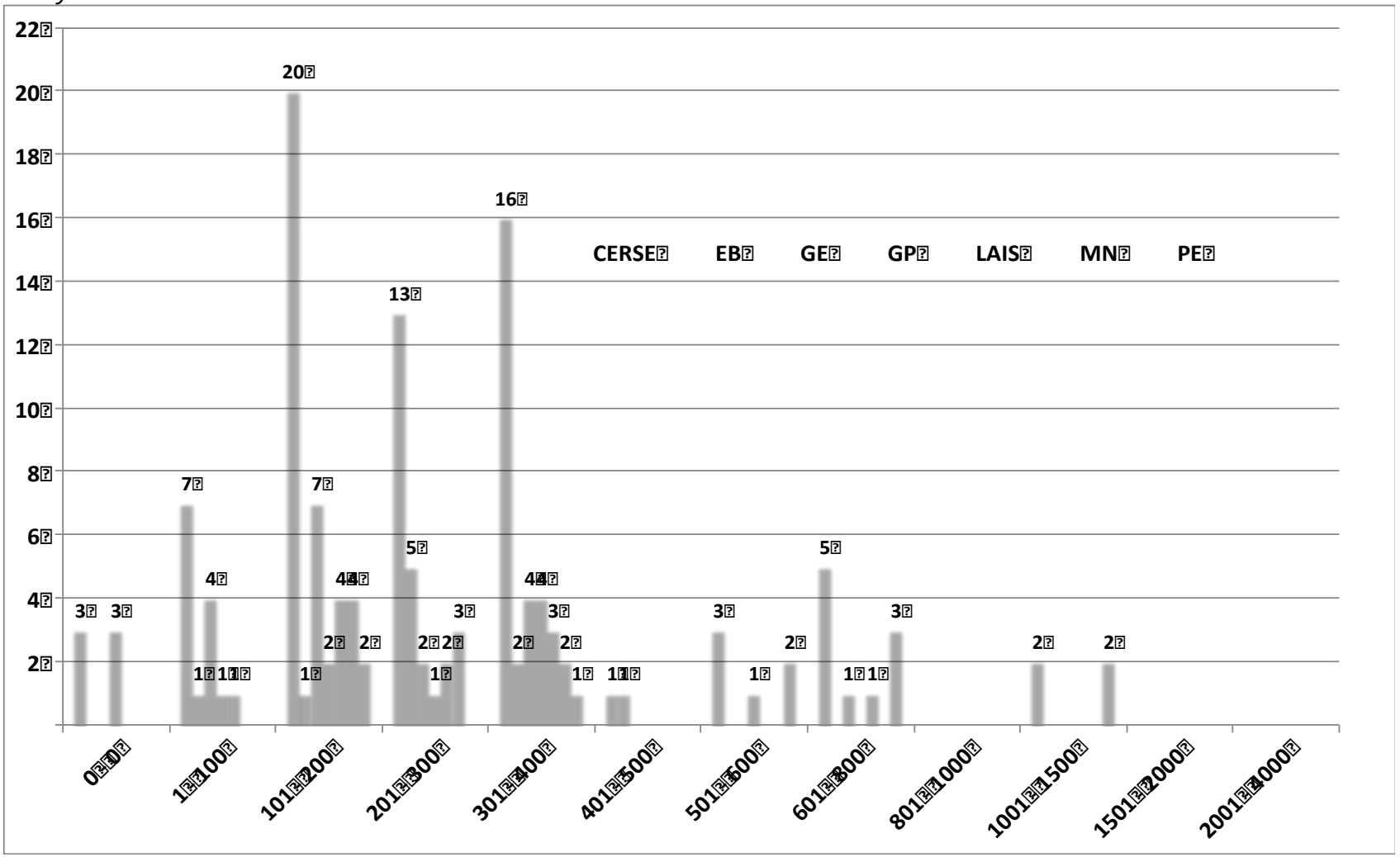
Notes: *Data was obtained from ODS HR Schedule Hybrid View and from Academic Affairs Planner Spreadsheet for FY16. Faculty FTE's were counted depending on their % of effort for the year. All faculty that were on sabbatical leave are counted as a full FTE. Run Date: Feb 10, 2016. (Census for Spring and End of Term for Fall)*

CASE (Fall 2015-Spring 2016) Distribution of Credit Hour Delivery (100-600 level) per Teaching Faculty



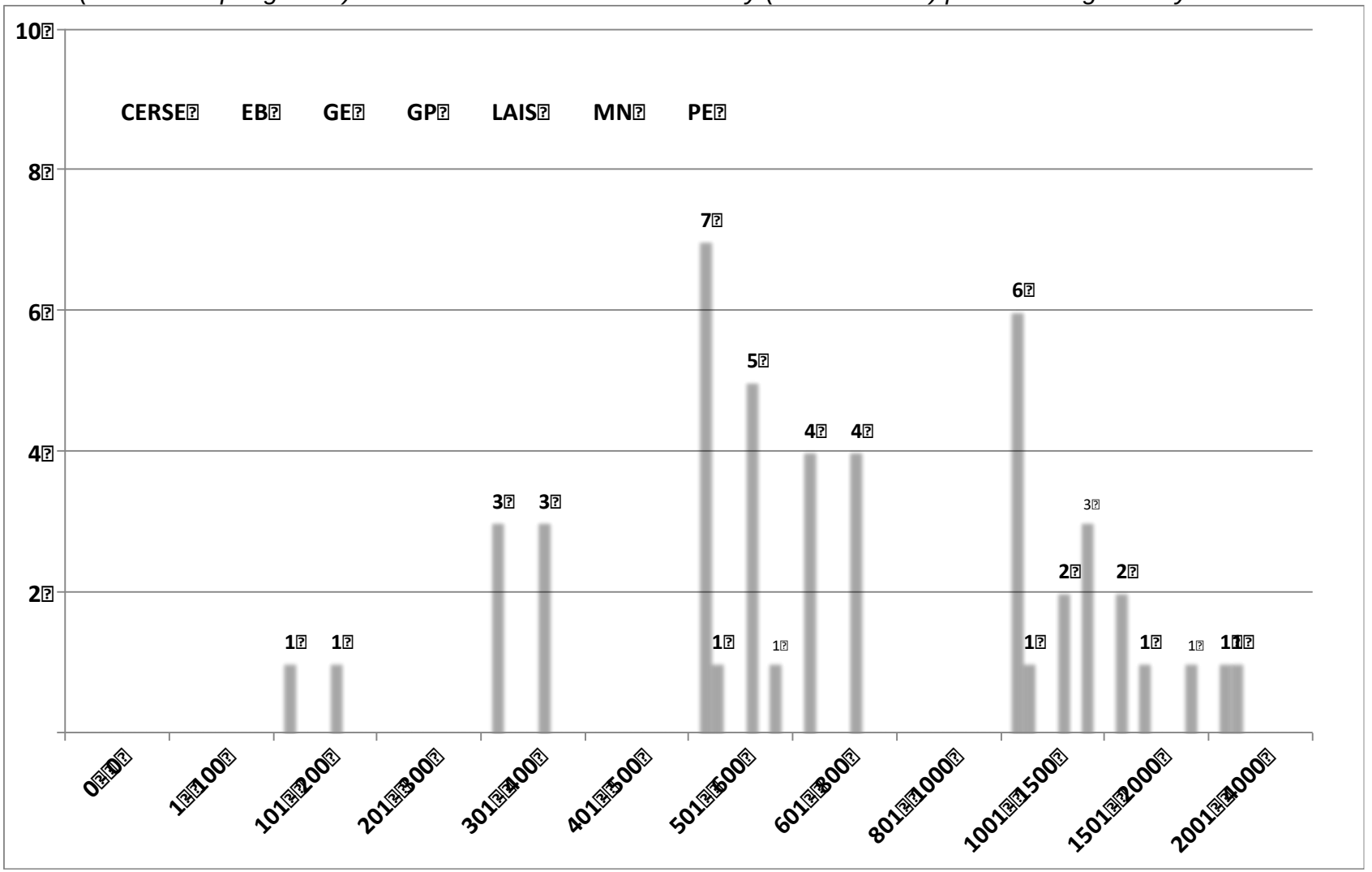
Notes: *Data was obtained from ODS HR Schedule Hybrid View and from Academic Affairs Planner Spreadsheet for FY16. Faculty FTE's were counted depending on their % of effort for the year. All faculty that were on sabbatical leave are counted as a full FTE. Run Date: Feb 10, 2016. (Census for Spring and End of Term for Fall)*

CERSE (Fall 2015-Spring 2016) Distribution of Credit Hour Delivery (100-600 level) per Tenured and Tenure-Track Faculty



Notes: *Data was obtained from ODS HR Schedule Hybrid View and from Academic Affairs Planner Spreadsheet for FY16. Faculty FTE's were counted depending on their % of effort for the year. All faculty that were on sabbatical leave are counted as a full FTE. Run Date: Feb 10, 2016. (Census for Spring and End of Term for Fall)*

CERSE (Fall 2015-Spring 2016) Distribution of Credit Hour Delivery (100-600 level) per Teaching Faculty



Notes: *Data was obtained from ODS HR Schedule Hybrid View and from Academic Affairs Planner Spreadsheet for FY16. Faculty FTE's were counted depending on their % of effort for the year. All faculty that were on sabbatical leave are counted as a full FTE. Run Date: Feb 10, 2016. (Census for Spring and End of Term for Fall)*

CSM Sponsored Research Awards and Expenditures by Department per T/TT for Fiscal Year 16 (FY16)

Departments	FY16 T/TT FTE	FY16 Research Awards	FY16 Awards / T/TT Faculty	FY16 Expenditures	FY16 Expenditures / T/TT Faculty
Applied Science & Engineering (CASE)	***65***	**27,749,375.79**	**426,913.47**	**25,324,007.23**	**389,600.11**
Chem and Biological Eng	15	6,193,261.99	412,884.13	6,663,385.42	444,225.69
Chemistry and Geochemistry	16	7,528,047.56	470,502.97	4,437,308.94	277,331.81
Metallurgy and Materials Eng	16	8,934,379.38	558,398.71	7,980,749.32	498,796.83
Physics	18	4,633,186.46	257,399.25	5,390,805.38	299,489.19
Earth Resource Sci & Engineering (CERSE)	***68***	**13,030,215.13**	**191,620.81**	**15,129,513.79**	**222,492.85**
Econ and Business Div	10	479,146.52	47,914.65	746,746.17	74,674.62
Geology and Geological Eng	18	2,800,464.20	155,581.34	3,484,326.65	193,573.70
Geophysics	10	4,948,302.00	494,830.20	4,919,302.04	491,930.20
Liberal Arts and Intl Studies	11	453,315.40	41,210.49	151,473.24	13,770.29
Mining Eng	9	2,242,580.53	249,175.61	2,020,411.66	224,490.18
Petroleum Eng	10	2,106,406.48	210,640.65	3,658,900.99	365,890.10
Engineering/Computational Science (CECS)	***73***	**16,041,214.62**	**221,258.13**	**12,943,283.33**	**178,528.05**
Applied Math and Statistics	12	1,034,899.47	86,241.62	705,994.83	58,832.90
Civil and Environ Eng	18.5	7,050,986.42	381,134.40	4,853,154.83	262,332.69
Electrical Eng and Comp Sci	19	2,487,948.84	130,944.68	1,385,694.82	72,931.31
EPICS	0	29,901.48		26,839.18	
Mechanical Eng	23	5,437,478.41	236,412.10	5,971,599.67	259,634.77
Other Areas		**3,453,448.11**		**3,792,945.15**	
CO Geological Survey		966,523.11		340,373.92	
Strategic Enterprises		140,000.00		329,786.44	
VP Research and Tech Transfer		1,313,056.00		2,328,502.58	
Academic Affairs		1,033,869.00		794,282.22	
Grand Total	**206**	**60,274,253.65**		**57,189,749.50**	
Additional research support:					
Research development funds and gifts supporting research				5,034,999.00	
Total research and sponsored project expenses				**62,224,748.50**	

Note: Data obtained from CSM Office of Research Administration (9/21/16). Fiscal Year 16's Number of Faculty were used in this table to calculate awards and expenditures per T/TT. Fiscal Year 16 (FY16) is defined as July 1, 2015 – June 30, 2016.

Undergraduate Students Ethnicity (Fall 2016)

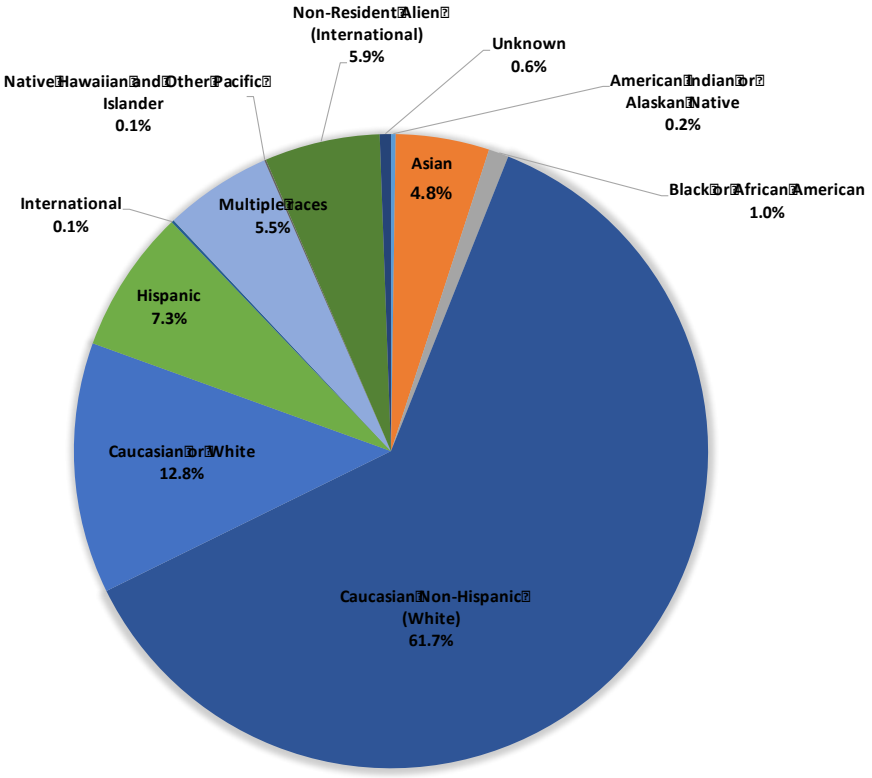
Department	American Indian or Alaskan Native	Asian	Black or African American	Caucasian Non-Hispanic (White)	Caucasian or White	Hispanic	International	Multiple races	Native Hawaiian and Other Pacific Islander	Non-Resident Alien (International)	Unknown	Grand Total
Engineering/Computational Science (CECS)	***0.3%***	***5.3%***	***1.0%***	***64.8%***	***12.5%***	***7.3%***	***0.0%***	***6.0%***	***0.1%***	***1.9%***	***0.6%***	***100.0%***
Applied Mathematics and Statistics	0.0%	0.0%	0.0%	68.1%	18.6%	3.5%	0.0%	6.2%	0.9%	0.9%	1.8%	100.0%
Civil & Environmental Engineering	0.3%	6.1%	0.6%	62.3%	15.5%	7.6%	0.0%	6.4%	0.0%	1.2%	0.0%	100.0%
Electrical Engineering & Comp Sci	0.5%	8.5%	2.4%	60.0%	12.3%	7.3%	0.0%	6.2%	0.0%	2.1%	0.7%	100.0%
Computer Science	0.3%	10.8%	2.4%	60.5%	10.1%	6.8%	0.0%	6.1%	0.0%	2.4%	0.7%	100.0%
Electrical Engineering	0.7%	6.0%	2.5%	59.4%	14.6%	7.8%	0.0%	6.4%	0.0%	1.8%	0.7%	100.0%
Mechanical Engineering	0.2%	4.1%	0.6%	67.6%	11.1%	7.6%	0.0%	5.8%	0.2%	2.2%	0.7%	100.0%
Earth Resource Sci & Engineering (CERSE)	***0.1%***	***3.8%***	***1.8%***	***50.1%***	***13.3%***	***7.1%***	***0.4%***	***3.0%***	***0.0%***	***19.8%***	***0.5%***	***100.0%***
Economics and Business	0.0%	13.0%	4.3%	60.9%	8.7%	4.3%	0.0%	4.3%	0.0%	4.3%	0.0%	100.0%
Geology and Geological Engineering	0.0%	0.8%	0.0%	60.8%	16.7%	9.2%	0.0%	3.3%	0.0%	9.2%	0.0%	100.0%
Liberal Arts and International Studies	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Geophysics	0.7%	3.6%	1.4%	57.9%	12.1%	7.9%	0.0%	3.6%	0.0%	12.9%	0.0%	100.0%
Mining Engineering	0.0%	4.5%	2.3%	67.0%	8.0%	9.1%	0.0%	2.3%	0.0%	6.8%	0.0%	100.0%
Petroleum Engineering	0.0%	4.0%	2.0%	43.8%	13.8%	6.5%	0.6%	2.9%	0.0%	25.5%	0.8%	100.0%
Applied Science & Engineering (CASE)	***0.3%***	***4.7%***	***0.4%***	***65.6%***	***12.8%***	***7.1%***	***0.2%***	***6.4%***	***0.1%***	***1.8%***	***0.5%***	***100.0%***
Chemical and Biological Engineering	0.4%	6.8%	0.3%	62.0%	12.8%	7.5%	0.3%	6.9%	0.1%	2.5%	0.4%	100.0%
Chemistry	0.0%	1.4%	0.0%	60.8%	17.6%	9.5%	0.0%	9.5%	0.0%	0.0%	1.4%	100.0%
Metallurgical and Materials Engineering	0.6%	3.1%	0.6%	70.6%	13.1%	5.0%	0.0%	5.0%	0.0%	0.6%	1.3%	100.0%
Physics	0.0%	0.4%	0.8%	74.9%	11.1%	6.6%	0.0%	4.9%	0.0%	1.2%	0.0%	100.0%
Undecided	0.0%	3.1%	0.8%	62.0%	14.0%	10.9%	0.0%	7.0%	0.0%	1.6%	0.8%	100.0%
Total	**0.0**	**0.0**	**0.0**	**0.6**	**0.1**	**0.1**	**0.0**	**0.1**	**0.0**	**0.1**	**0.0**	**1.0**

Graduate Students Ethnicity (Fall 2016)

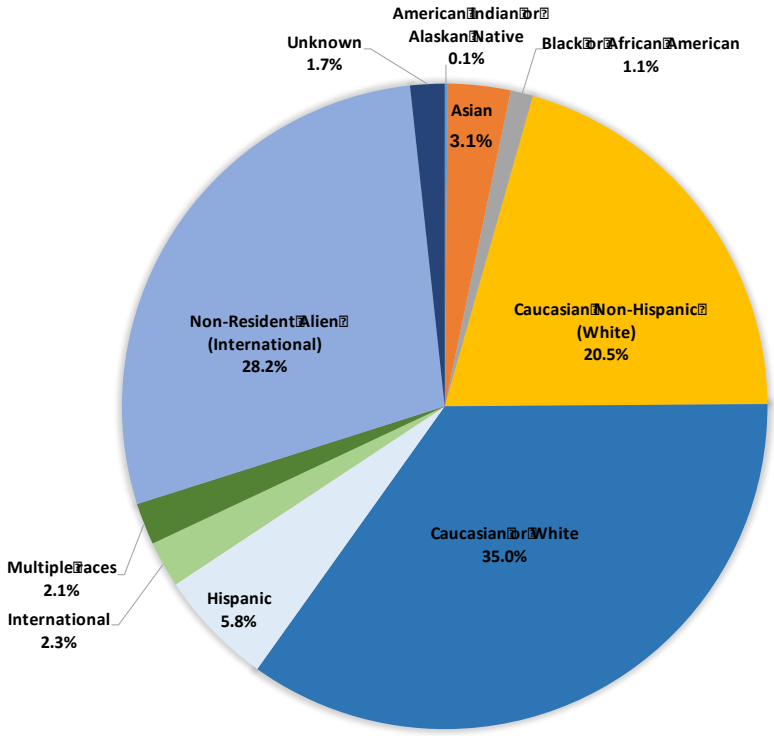
Department	American Indian or Alaskan Native	Asian	Black or African American	Caucasian Non-Hispanic (White)	Caucasian or White	Hispanic	International	Multiple races	Native Hawaiian and Other Pacific Islander	Non-Resident Alien (International)	Unknown	Grand Total
Engineering/Computational Science (CECS)	***0.0%***	***4.7%***	***0.7%***	***25.0%***	***34.4%***	***6.3%***	***0.7%***	***3.8%***	***0.0%***	***23.0%***	***1.6%***	***100.0%***
Applied Mathematics and Statistics	0.0%	0.0%	3.0%	24.2%	54.5%	6.1%	0.0%	6.1%	0.0%	3.0%	3.0%	100.0%
Civil & Environmental Engineering	0.0%	5.6%	0.0%	21.7%	49.7%	4.9%	0.0%	2.8%	0.0%	14.0%	1.4%	100.0%
Electrical Engineering & Comp Sci	0.0%	6.2%	0.9%	27.4%	15.0%	5.3%	1.8%	2.7%	0.0%	38.1%	2.7%	100.0%
Electrical Engineering	0.0%	5.1%	0.0%	27.1%	15.3%	8.5%	1.7%	3.4%	0.0%	37.3%	1.7%	100.0%
Computer Science	0.0%	7.8%	2.0%	25.5%	13.7%	2.0%	2.0%	2.0%	0.0%	41.2%	3.9%	100.0%
Mechanical Engineering	0.0%	3.7%	0.6%	27.2%	30.2%	8.0%	0.6%	4.9%	0.0%	24.1%	0.6%	100.0%
Earth Resource Sci & Engineering (CERSE)	***0.4%***	***2.4%***	***1.5%***	***16.1%***	***31.5%***	***6.0%***	***4.4%***	***0.7%***	***0.0%***	***35.2%***	***1.8%***	***100.0%***
Economics and Business	0.0%	3.0%	3.8%	18.9%	32.6%	6.1%	1.5%	0.0%	0.0%	30.3%	3.8%	100.0%
Geology and Geological Engineering	0.5%	1.6%	1.1%	16.6%	51.3%	7.5%	2.1%	1.6%	0.0%	16.0%	1.6%	100.0%
Geophysics	1.4%	2.8%	0.0%	21.1%	15.5%	4.2%	7.0%	1.4%	0.0%	46.5%	0.0%	100.0%
Liberal Arts and International Studies	0.0%	0.0%	0.0%	0.0%	33.3%	33.3%	0.0%	0.0%	0.0%	33.3%	0.0%	100.0%
Mining Engineering	0.0%	1.9%	0.0%	19.2%	19.2%	7.7%	3.8%	0.0%	0.0%	46.2%	1.9%	100.0%
Petroleum Engineering	0.0%	3.0%	1.0%	6.9%	10.9%	3.0%	10.9%	0.0%	0.0%	63.4%	1.0%	100.0%
Applied Science & Engineering (CASE)	***0.0%***	***2.0%***	***0.7%***	***21.5%***	***43.3%***	***5.5%***	***1.3%***	***2.0%***	***0.0%***	***22.8%***	***1.0%***	***100.0%***
Chemical and Biological Engineering	0.0%	1.4%	1.4%	11.4%	32.9%	1.4%	2.9%	4.3%	0.0%	42.9%	1.4%	100.0%
Chemistry	0.0%	3.2%	0.0%	14.3%	63.5%	6.3%	0.0%	1.6%	0.0%	11.1%	0.0%	100.0%
Metallurgical and Materials Engineering	0.0%	1.7%	0.9%	29.9%	40.2%	6.0%	0.9%	0.0%	0.0%	19.7%	0.9%	100.0%
Physics	0.0%	1.8%	0.0%	24.6%	40.4%	8.8%	1.8%	3.5%	0.0%	17.5%	1.8%	100.0%
Undecided	0.0%	5.4%	5.4%	21.6%	24.3%	0.0%	0.0%	2.7%	0.0%	32.4%	8.1%	100.0%
Grand Total	**0.1%**	**3.1%**	**1.1%**	**20.5%**	**35.0%**	**5.8%**	**2.3%**	**2.1%**	**0.0%**	**28.2%**	**1.7%**	**100.0%**

Note: Data obtained from Cognos Report: Registrar's Student Demographic Information 10/13/16.

Undergraduate Students' Ethnicity (Fall 2016)



Graduate Students' Ethnicity (Fall 2016)



Note: Data

Notes: Data obtained from Cognos Report: Registrar's Student Demographic Information 10/13/16.

Strategic Plan and Strategic Scorecard Measures

Colorado School of Mines' Board of Trustees approved the Colorado School of Mines' Strategic Plan 2014-2024 on December 2013. The Plan is included in Appendix A.

Colorado School of Mines' Strategic Scorecard, which measures progress on the strategic plan, was presented to the Colorado School of Mines Board of Trustees in October 2014. These metrics are still under discussion. Some of the 5-Yr and 10-Yr Targets noted as to be determined (TBD) on the basis of further financial analysis. This presentation is included in Appendix B.