

DIVERSITY PLAN
College of Engineering and Applied Science
University of Colorado at Boulder
Approved 11 September 2006 by the Administrative Council
Updated 11 March 2008 with Assessment of Progress

1. Our Commitment to Diversity

Diversity is a natural and enriching hallmark of life. Diversity includes, but is not limited to, ethnicity, race, gender, age, socioeconomic class, sexual orientation, religion, disability, veteran status, and political affiliation. A climate of healthy diversity is one in which people value individual and group differences, respect the perspectives of others, and communicate openly.

The College of Engineering and Applied Science is committed to fostering an environment of inclusion and respect in which students, faculty, and staff can excel, and where the exchange of ideas, knowledge, and perspectives is an active part of learning. Promoting diversity of students, faculty and staff provides an enriched experience for all members of the College and helps prepare students for their future careers. The value of diversity extends beyond the walls of the campus, as a diverse population of engineers is needed to address global issues and to improve society. The importance of diversity echoes throughout the mission and values statements of the College of Engineering and Applied Science, as described in our strategic plan:

http://engineering.colorado.edu/facultystaff/Strategic_Plan.htm).

The mission of the College of Engineering and Applied Science at the University of Colorado at Boulder is *to provide education and training in engineering and related fields to prepare students as future leaders and responsible citizens and to generate new knowledge in engineering and technology to assist individuals and improve society.*

The College embraces the following core values and skills, which we seek to impart to our students as outcomes of their education:

- *Technical excellence and knowledge in modern engineering, mathematics and science*
- *Ability to think critically, analyze data, and solve complex engineering problems*
- *Ability to communicate effectively to diverse groups*
- *Ability to contribute effectively as individuals and in multidisciplinary teams*
- *Knowledge of contemporary issues and preparation for professional practice and global and societal leadership and citizenship*
- *High ethical standards and character, including integrity, responsibility, honesty, and respect for others*
- *Desire and skills for life-long learning and personal and professional development*

In strong support of our mission and values, the College has three broad objectives for diversity:

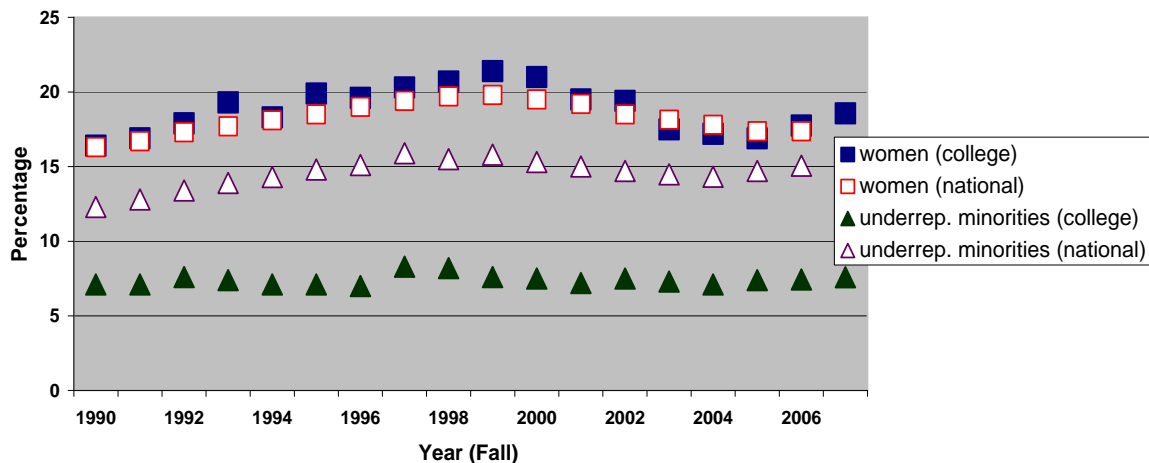
- *To attract diverse and talented students, faculty, and staff to the College*
- *To retain these students and provide them an outstanding education, and provide an environment where all students, faculty and staff excel*
- *To engage the entire faculty, staff and students in promoting diversity and in developing a climate for success*

2. Current Status and Needs

2.1 Student Diversity

The student population of the College of Engineering and Applied Science in Fall 2005 was 2739 undergraduate students, growing to 2755 in Fall 2006 and 2914 in Fall 2007. The undergraduate population has been growing steadily from 2133 undergraduate students in 1980. The graduate student population grew significantly from 1980 (485 students) through 1995 (1165 students), and subsequently declined slightly to 1055 MS and PhD students (including degree-seeking, professional-studies students in Interdisciplinary Telecommunications and Engineering Management programs) in 2005, before growing again to 1091 in Fall 2006 and 1173 in Fall 2007.

The figure below shows that the percentage enrollment of female undergraduates in the College rose steadily throughout the 1990s, reaching a peak of 21.4% in 1999, but has declined to 16.9% in 2005, mirroring the national data, before increasing to 17.7% in Fall 2006 and 18.6% in Fall 2007. The percentage enrollment of students from underrepresented minority groups (African American, Hispanic, Native American) has been nearly steady over this period and was 7.6% of the undergraduate students in Fall 2007, which is about one half of that for the nation as a whole. Asian Americans represented 8.4% of the undergraduates in the College in Fall 2007, and are not included among the underrepresented students.



Sources: Student Census Data Collected by Assistant Dean for Students (College) and the Engineering Workforce Commission of the American Association of Engineering Societies (AAES EWC) (National)

The following tables show that the diversity measures of undergraduate students have large variations by department. The percentage of women varies from a low of 6.8% to a high of 37.7% among the different departments or programs, while the percentage of underrepresented minorities varies from 2.7% to 11.0%, for Fall 2007.

Dept/	# enrolled				
Prog	F03	F04	F05	F06	F07
AES	386	429	455	405	391
ChBE	201	231	265	278	363
CEAE	350	373	435	484	527
CS	432	319	270	233	235
ECE	409	388	351	319	316
ME	536	639	631	640	589
APPM	59	71	72	80	74
EPEN	60	68	70	91	108
EVEN	38	47	39	53	72
Open	196	171	151	172	239
Total	2667	2736	2739	2755	2914

Dept/	% women					% underrep. min.				
Prog	F03	F04	F05	F06	F07	F03	F04	F05	F06	F07
AES	17.0	20.0	18.9	20.0	19.2	6.7	7.4	6.6	6.4	6.9
ChBE	36.8	35.1	33.6	33.5	37.7	9.9	7.8	9.1	5.8	6.6
CEAE	23.4	22.0	23.7	24.2	23.9	7.1	6.4	8.0	9.9	11.0
CS	12.9	9.7	7.7	8.2	7.7	5.3	5.0	5.9	8.2	8.5
ECE	11.5	9.3	6.8	5.6	9.5	9.8	8.8	7.7	6.0	6.3
ME	13.6	11.1	11.4	10.0	9.7	7.8	8.4	8.9	8.1	7.5
APPM	35.6	35.2	27.7	33.8	27.0	3.3	1.4	4.2	5.0	2.7
EPEN	16.6	11.7	10.0	13.2	10.2	5.0	2.9	1.4	4.4	4.6
EVEN	28.9	36.1	33.3	41.5	34.7	7.9	10.6	5.1	5.7	6.9
Open	14.3	19.3	19.2	20.9	17.6	5.6	5.2	5.3	8.1	6.7
Total	17.5	17.2	16.9	17.7	18.6	7.3	7.1	7.4	7.4	7.6

Source: Student Census Data collected by the Assistant Dean for Students and maintained on the CU-Boulder Planning, Budget and Analysis web site

The percentage of female graduate students in the college has increased substantially, from 15.0% in Fall 1992 to 22.4% in Fall 2005 and to 24.0% in Fall 2007, while the percentage of underrepresented minority graduate students during this period has increased from 3.9% to 4.4%. The most recent (2006) national data show 22.2% women and 5.3% underrepresented minorities among engineering graduate students. The CU data by degree program are shown in the tables below. The top table includes 128 engineering management (EMP) and 35 telecommunications (ITP) masters students enrolled through the Division of Continuing Education and Professional Studies (CEPS) in Fall 2007; it does not include 33 masters students in other majors, enrolled through CEPS. The percentages in the bottom table do not include students enrolled through CEPS.

Dept/	MS/PhD enrolled				
Prog	F03	F04	F05	F06	F07
AES	58/71	54/79	57/80	52/78	41/69
ChBE	2/84	2/89	2/85	1/92	1/90
CEAE	137/89	153/88	123/79	113/69	107/71
CS	45/85	63/83	57/82	57/86	72/96
ECE	145/109	127/112	111/107	128/99	128/105
ME	74/47	62/49	49/58	37/64	33/62
EMP	141/0	116/0	116/0	151/0	148/0
ITP	198/0	122/0	85/0	96/0	150/0
Total	627/485	658/500	563/491	475/488	680/493

Dept/	% women					% underrep. min.				
Prog	F03	F04	F05	F06	F07	F03	F04	F05	F06	F07
AES	24.0	23.3	21.2	20.0	21.8	3.1	5.3	3.6	3.1	3.6
ChBE	38.4	33.0	37.9	39.8	44.0	3.5	5.5	6.9	9.8	8.8
CEAE	31.4	32.8	30.7	28.6	29.3	4.0	5.0	3.0	7.1	4.8
CS	25.4	20.5	23.0	25.2	23.2	5.4	4.1	6.5	7.0	4.2
ECE	16.9	17.6	15.6	18.1	18.9	4.3	4.2	2.8	3.1	2.1
ME	13.2	16.2	16.8	16.8	12.6	3.3	7.2	5.6	4.0	5.3
EMP	30.3	13.8	12.9	5.6	10.0	12.1	4.2	5.2	22.2	15.0
ITP	15.0	11.2	19.5	11.3	22.6	10.0	5.6	8.0	4.3	2.6
Total	23.6	21.8	22.4	23.4	24.0	5.0	5.0	4.6	5.6	4.4

Source: Student Census Data collected by the Assistant Dean for Students and maintained on the CU-Boulder Planning, Budget and Analysis web site

Retention of students in engineering and graduation rates are important goals for the College. The undergraduate retention and graduation data for the College are shown below, based on tracking individual students. Comparable national data are not available.

Year of Start in Engineering	3rd Semester	5th Semester	7th Semester	6th Year Graduation Rate
94-95	78%	62%	54%	49%
95-96	80%	68%	61%	55%
96-97	82%	67%	61%	55%
97-98	84%	70%	62%	55%
98-99	81%	65%	54%	47%
99-00	81%	66%	58%	53%
00-01	79%	65%	59%	54%
01-02	81%	67%	60%	55%
02-03	78%	65%	58%	--
03-04	80%	66%	60%	--
04-05	82%	68%	56%	--
05-06	78%	64%	--	--
06-07	83%	--	--	--
Overall	81%	66%	58%	53%
URMs	71%	61%	54%	46%
Women	81%	65%	57%	55%

Source: CU-Boulder Planning, Budget, and Analysis Office

2.2 Student Programs

The College has several programs and activities that are focused on increasing the diversity of the engineering student population and providing a supportive climate. They include:

- **Integrated Teaching and Learning (ITL) Program** – The ITL Program includes a shared undergraduate learning environment of 35,000 square feet and is dedicated to team-based, hands-on learning, outreach, and enhancement of undergraduate curricula and student learning.
- **Multicultural Engineering Program (MEP)** – The MEP provides a community dedicated to academic excellence in recruiting and supporting multicultural and first-generation students historically underrepresented in engineering and applied science.
- **Women in Engineering Program (WIEP)** – The WIEP provides mentoring, support and community activities to promote the recruitment and success of female engineering students and to increase the awareness of engineering and applied science among prospective female students
- **K-12 Outreach Programs** – Key programs (numbers are for AY06-07 and Summer 2007) include:
 - Admitted Students Day, 216 students
 - Engineering Ambassador Tours - part of the CU Student for a Day Program, approximately 400 HS students
 - Discover Engineering Day at CU, 139 HS students
 - Engineering Open House, 299 HS students
 - High School Honors Institute (Summer, 4 days), 262 students
 - Summer Bridge (Summer, 5 weeks), 24 entering freshmen
 - IBM Exploring Interests in Technology and Engineering (EXITE) Camp (Summer, 1 week), 26 female middle school students
 - Lafayette ES Robotics Engineering Camp in Lafayette (Summer, 2 weeks), 25 K-5th grade students
 - MESA Fall Fling Day for HS students, 200 students
 - Pre-Collegiate Engineering Summer Programs in the ITLL (Summer, 5 weeks), 24 12th grade students
 - Ryan ES Engineering Camp in Lafayette (Summer, 2 weeks), 25 2nd-5th grade students
 - Dragon Discovery Engineering Program at Sanchez Elementary School (Summer, 3 weeks), 18 3rd-5th grade students
 - Girl Scout Badge Days, over 500 female K-12 students
 - Success Institute (Summer, 2 week-long sessions, one for 9th-10th and one for 11th-12th grade students), 87 students in total
 - Tomorrow's Engineers . . . creAte. iMagine. Succeed. (TEAMS), 1,800 students weekly in grades 3-12 at five Lafayette, CO neighborhood schools and the Denver School of Science and Technology
 - Upward Bound Nanosatellite Course (Summer, 2 weeks), 30 Native American students entering 10th grade
 - Butterfly Hope Educational Enrichment (Summer, 4 days), 37 3rd-6th grade students
 - Senior Day, 60 12th grade students
 - SHPE/IBM Camp (Summer, one week), 27 10th grade students

The following campus, university and national awards have been received in recognition of the strong contributions to education and diversity to education and diversity made by these programs:

- MEP – President's Diversity Award, 2004
- MEP – Chancellor's Diversity Service Award, 2004

- WIEP – CU Boulder Committee on Women Award, 2005
- Integrated Teaching and Learning (ITL) Program – Chancellor’s Diversity Service Award, 2006
- ITL Program – National Academy of Engineering Gordon Prize, 2008

2.3 Faculty and Staff Diversity

Faculty diversity in the College has seen gains for female faculty, from 11% to 15% women among tenured/tenure-track faculty over the past several years, while the number of underrepresented minorities has been essentially unchanged at 5% during this time. The most recent national data (2006) show 11.5% women and 5.9% underrepresented minorities among regular engineering faculty. Our representation of female engineering faculty is the highest among Big 12 schools. During the past five years there have been nine (5.1%) departures of faculty (one female, no underrepresented minorities) not associated with retirement, termination, or denial of tenure.

Tenured and Tenure Track Faculty	Female	Underrep. Minorities	Asian	Total (Headcount)	National Data
Fall 03	19 (0) 11.1%	9 (0) 5.3%	26 (0) 15.2%	171 (4)	Female: 11.0% Underrep. Min.: 6.2%
Fall 04	20 (2) 11.5%	8 (0) 4.6%	26 (0) 14.9%	174 (9)	Female: 11.5% Underrep. Min.: 6.3%
Fall 05	25 (5) 14.2%	9 (1) 5.1%	28 (2) 15.9%	176 (6)	Female: 10.6% Underrep. Min.: 5.7%
Fall 06	28 (3) 15.9%	9 (0) 5.1%	29 (1) 16.5%	176 (6)	Female: 11.3% Underrep. Min.: 5.9%
Fall 07	27 (0) 15.4%	9 (0) 5.1%	29 (2) 16.5%	176 (9)	
Numbers in parentheses are new starts that Fall or previous Spring					

Sources: College Faculty Data Base and ASEE Profiles of Engineering and Engineering Technology Colleges

The staff population of the College as of July 1, 2007 is given in the table below. During the past year, there have been 8 (10%) departures (1 male and 7 female, of which 1 was an underrepresented minority female) not associated with retirement or termination.

	Male		Underrep. Minorities		Asian		Total	
	2006	2007	2006	2007	2006	2007	2006	2007
Classified Staff	25	25	4	5	3	3	65	69
Professional Exempt	3	4	2	2	2	3	15	18

Source: College Staff Data Base

Programs and events aimed at building community among faculty and staff include monthly and annual performance awards, a college-wide faculty and staff meeting each semester, and a First-Friday faculty and staff social/informational event each month during the academic year. The College also hosts a Holiday Party in December, and a staff appreciation social in May.

For new faculty, the Dean conducts a New Faculty Orientation Program, covering topics such as the Faculty Teaching Excellence program, establishing research programs, and the tenure process. Each new faculty member is also assigned a faculty mentor.

2.4 Needs for Improvement

From the data provided above, and from input of the College's Diversity Task Force, the following areas for improvement have been identified:

- Enrollment of female students at both the undergraduate and graduate levels
- Enrollment of minority students at both the undergraduate and graduate levels
- Retention of all students in the College
- Hiring of female faculty
- Hiring of minority faculty
- Hiring of minority staff
- Engagement of faculty in diversity and outreach initiatives
- Identification of best strategies for success

Strategies and action plans to address these needs, along with metrics to measure progress, are described in the following section.

3. Action Plans and Metrics

To achieve the three objectives for diversity in the College of Engineering and Applied Science, the diversity plan has the following foci:

- **Expansion of the pipeline** of underrepresented minority and female students, including a focus on increasing the undergraduate enrollment of women in departments that are below the overall national average.
- **Improvement of the climate for diversity in the College**, with the goal increasing retention across the entire population.
- **Recruitment of diverse faculty and staff**, and **engaging all faculty and staff** in promoting diversity and developing a climate for success.

3.1 Expanding the Pipeline

Increasing the Pipeline of Students Interested in and Prepared for Engineering

The population of Colorado's K-12 students is diverse; our college is committed to engaging this population, preparing them to enter and succeed in engineering. To help prepare these students for an engineering education and to encourage and support their applying to and attending CU-Boulder, the College has set forward the general strategies listed below, followed by specific actions to achieve these goals, and metrics to measure performance success.

Strategies:

1. Very strong and deep partnerships with schools and school districts having high enrollment of underrepresented students.
2. Data analyses of the many pre-college and recruitment programs already active throughout our college to determine which are most successful and benchmarking other engineering colleges' diversity strategies and results to identify new programs and strategies to adopt by the College.
3. Expanded opportunities for recruitment and matriculation into our college.

Action 1.1:

Expand the partnership with the Denver School of Science and Technology (DSST) and the Centaurus Pre-Engineering Academy (PEA), as identified in the I-CUE proposal, "Mining the Diverse Engineering Student Populations on our Doorstep," and seek campus support for expansion of this initiative.

Metrics:

- 16 underrepresented DSST students enroll in the College in Fall 2008 (1st DSST class graduates in June 2008)
- 10 underrepresented Centaurus PEA students enroll in the College in Fall 2007, and 16 enroll in Fall 2008
Result: 14 Centaurus PEA students enrolled in Fall 2007, including 3 women and 2 Hispanics (both male); 8 of these students (7 male, 1 female) have financial need (based on FAFSA) and 6 (5 male, 1 female) have parents who are not college graduates
- \$100K in continuing campus funds received in FY08
Result: Proposal submitted to, but not funded by, campus

Action 1.2:

Launch a rural engineering education program to increase the number of students from Colorado rural communities.

Metrics:

- \$300K raised by June 2007 to launch the program
Result: \$400K raised from private sources
- School district selected and agreement in place by AY07-08
Result: Mesa County Valley School District 51 selected but launch delayed to AY08-09

Action 1.3:

Develop a database of student participation in K-12 outreach activities and their recruitment, enrollment, and retention to identify effective programs and factors for success in the engineering program. Benchmark these programs against other institutions.

Metrics:

- By December 2007, the decision made to expand at least one outreach program and restructure or eliminate at least one program, based on database analysis
Result: The database has been set up, but data entry and analysis are delayed
- By Fall 2008, 10% increase in enrollment over Fall 2006 of students who have participated in selected outreach programs
Result: The High School Honors Institute (HSHI) is the first program selected for tracking (the Success Institute will be added next); 59 past HSHI participants enrolled in the College in Fall 2007, down from 61 in Fall 2006

Action 1.4:

Increase the recruitment of diverse undergraduate students by expanding entrance opportunities, by offering a summer program for students lacking standard preparation and by partnering with community and four-year colleges.

Metrics:

- 20 students lacking standard preparation admitted in Fall 2008 and provided pre-chemistry, pre-calculus, and/or pre-physics instruction in the summer before freshman year
- 20 transfer students matriculate in Fall 2009, after completing two years of pre-engineering at a partner community college or four-year college

Action 1.5:

Further expand the diversity of the entering class of undergraduate students by increasing scholarships, personally contacting students who have participated in

outreach programs, and each department personally contacting students admitted to its major(s).

Metrics:

- College scholarships increased from \$1.0 million in FY06 to \$1.2 million in FY08 and \$1.5 million by FY10
Result: Over \$1.3 million in scholarships awarded in FY08
- Number of first-year underrepresented minority (URM) undergraduates increased by 10% in Fall 2008 over Fall 2006
Result: The number of new freshman URMs increased 18%, from 49 in Fall 2006 to 58 in Fall 2007
- Number of first-year female undergraduates increased by 10% in Fall 2008 over Fall 2006, including increases in first-year representation to
 - 22% in Aerospace Engineering Sciences
 - 39% in Chemical and Biological Engineering
 - 27% in Civil, Environmental, and Architectural Engineering
 - 12% in Computer Science
 - 12% in Electrical and Computer Engineering
 - 15% in Mechanical Engineering*Result: The number of new freshman women increased 37%, from 104 in Fall 2006 to 143 in Fall 2007; the representation in this class by department is AES – 24%, ChBE – 44%, CEAE – 29%, CS – 19%, ECE – 15%, ME – 8%*

Action 1.6:

Expand the diversity of the graduate population by targeted recruitment efforts and offering of fellowships and assistantships.

Metrics:

- 20 top-quality new graduate students accept offers of \$5,000 Dean's Fellowships to enroll in Fall 2007, with 20 more in Fall 2008, including at least one-third women or URMs
Result: 28 new graduate students, including 9 women, accepted Dean's Fellowships for Fall 2007
- 10 top-quality new graduate students accept offers of \$15,000 Dean's Assistantships, matched by the departments, to enroll in Fall 2007, with 10 more in Fall 2008, including at least one-third women or URMs
Result: Seven new graduate students, including 4 women, accepted Dean's Assistantships for Fall 2008
- Number of female graduate students increased by 10% in Fall 2008 over Fall 2006
Result: The number of female graduate students (on-campus only) increased 8%, from 225 in Fall 2006 to 242 in Fall 2007
- Number of underrepresented minorities increased by 10% in Fall 2008 over Fall 2006
Result: The number of URM graduate students (on-campus students only) decreased 19%, from 54 in Fall 2006 to 44 in Fall 2007. The representation of women in this class by department is AES – 24%, ChBE – 44%, CEAE – 29%, CS – 19%, ECE – 15%, ME – 8%

3.2 Improving the Climate

Building a College Climate Conducive to Student Success

Entering students arrive with a wide range of academic and social preparation for the first-year curriculum. This diversity in preparation affects student learning, relationships between students and faculty, and, ultimately, retention. To help build a climate that supports success and retention of students from diverse backgrounds, the College has established the general strategies listed below, followed by specific actions to achieve these goals and metrics to measure performance success.

Strategies:

1. Enhanced teaching methodology, course structure, and student support for first-year courses such as calculus, chemistry, physics, and computing, with the aims of enhanced student problem-solving skills, support of different learning styles, increased engagement of students, and increased student success.
2. Increased student community and peer support.
3. Improved formal and informal advising by faculty.

Action 2.1:

Improve the success of students taking General Chemistry for Engineers course (CHEN 1211). Undertake student assessment to identify student preparedness, and course assessment to identify course changes, and pilot changes in AY06-07, with full implementation in AY07-08.

Metrics:

- Increased FCQs in course ratings and instructor ratings from an average during Fall 2002 through Spring 2006 of 3.5 and 4.0, respectively, to 3.75 and 4.25 in AY07-08, with the long-term goals of 4.0 and 4.5 (on the new 1-6 scale)
Result: The average FCQ scores increased to 4.9 instructor rating and 4.1 course rating in AY06-07
- 85% of students achieve grades of C- or better in FY07-FY08, up from 83% over the past three years, with the long-term goal of 90%, while not changing the grading scale
Result: 90% of students in CHEN 1211 received a grade of C- or better in AY06-07

Action 2.2:

Pilot an Engineering Honors Program, starting in Fall 2006. Establish a peer mentoring program for the first-year students entering into the Honors Program in Fall 2007, with the Engineering Fellows and upper-division honors students as mentors. Expand the program in Fall 2008, based on the experience from the AY07-08 program.

Metrics:

- 20 honors students in AY06-07, growing to 40 participants in AY07-08
Result: There were 21 honors students in Fall 2006, increasing to 66 in Fall 2007
- Honors Program demographics of at least 12 (30%) female and 5 (12%) underrepresented minorities in AY07-08
Result: There were 22 (33%) female and 4 (6%) URM honors students in Fall 2007
- 90% of Honors Program participants rate the mentoring program as a valuable activity and cite the mentoring program as one of the contributors to their decision to continue in Engineering

Action 2.3:

Expand discovery/service/professional (D/S/P) learning opportunities for students.

Metric:

- By FY08, one-third of undergraduates participate annually in D/S/P learning
Result: In FY07, 962 (35%) of undergraduates participated in D/S/P learning

Action 2.4:

Increase participation and foster involvement in the MEP and WIEP programs.

Metric:

- By AY07-08, 10% increase in the number of MEP and WIEP participants over AY05-06

Result: MEP participation increased 15%, from 602 in AY05-06 to 692 in AY06-07, and WIEP participation increased 245%, from 543 in AY05-06 to 1331 in AY06-07, where "participation" refers to the number of participants summed over all events

Action 2.5:

Each department will formally identify faculty advisors and define their responsibilities for faculty advising as distinct from staff advising. Each department will host an advising fair during AY06-07 where faculty talk with students about career opportunities.

Metrics:

- Increase in senior survey responses on value of faculty advising from AY05-06 values of 73% satisfied with career advising and 81% satisfied overall with faculty advising to 80% satisfied with career advising and 85% satisfied overall with faculty advising by AY09-10

Result: For AY06-07, the senior survey shows 77% of students satisfied with faculty career advising and 86% satisfied overall with faculty advising

Action 2.6:

Develop a database to track individual student retention through graduation and undertake assessment to identify factors that contribute positively and negatively to retention.

Metrics:

- By Fall 2008, at least one retention project identified for expanded support
 - By Fall 2008, 3rd-semester retention increased from 81% to 85%
- Result: 3rd-semester retention increased to 83% in Fall 2007*
- By Fall 2010, 7th-semester retention increased from 58% to 65%

3.3 Engaging the Faculty and Staff

Building a Diverse and Engaged Faculty and Staff

A key contributor to a climate of support for all students is a faculty and staff population that is diverse and that is accessible to students. The College has set the following general strategies for faculty and staff diversity, and for engaging faculty and staff in mentoring, recruiting, and outreach.

Strategies:

1. Increased faculty and staff diversity by employing best practice to identify candidates and providing incentives to attract those candidates to accept positions in the College.
2. Strong participation by faculty and staff in college and departmental outreach and recruitment programs and increased accessibility to students for informal mentoring.
3. Social and informational events to encourage faculty and staff engagement in the achievement of strategic goals of the College.

Action 3.1:

Actively recruit URM and women faculty, by networking, attending national conferences, visiting colleges with high minority enrollments, tracking/contacting our former students, and communicate the college's support of partner- and family-friendly career options.

Metrics:

- All faculty searches include women and underrepresented minorities among finalist pools for interviews
- Result: For AY06-07, 75% (9 of 12) of the successful searches had women and/or URMs among the finalists*

- New faculty hires include at least one-third women and/or underrepresented minorities
Result: Offers were made to three women and two URMs in AY06-07, and one of the URMs (and none of the women) accepted the offer

Action 3.2:

Advertise staff vacancies broadly to increase the diversity of the candidate pool.

Metric:

- New staff hires include at least 10% underrepresented minorities
Result: Of 16 staff hires in AY06-07, two (12%) are underrepresented minorities

Action 3.3:

Investigate best practices for diversity training for faculty and invest in faculty training.

Metric:

- Training program for faculty piloted in AY07-08 as part of the College's New Faculty Program, and all faculty participate by end of AY08-09
Result: Workshop on community and diversity planned for New Faculty Program on 4/16/08

Action 3.4:

Increase the number of faculty engaging in K-12 outreach programs.

Metric:

- K-12 outreach activity code established in the FRPA, and at least 30% of faculty list activity for CY2007, increasing to 40% by CY2008
Result: 20% of faculty listed outreach activity (code 630) for CY2007

Action 3.5:

Assess and adjust, if necessary, the service and advising loads of faculty to ensure equity across the faculty population.

Metric:

- Service and advising loads of women and URM faculty similar to all faculty, as measured by FRPA data for CY2007 and beyond
Result: In CY2007, service loads of women averaged eight internal committees, whereas both men and URMs averaged five internal committees; on average, female faculty advised nine undergraduates, while male faculty advised eight undergraduates, and URMs reported no undergraduate advising

Action 3.6:

Increase faculty mentoring of undergraduates in research and independent study.

Metric:

- By CY2007, 50% of faculty are mentoring 2 or more undergraduate students, up from 43% in CY2005, as measured by FRPA data
Result: 37% of faculty mentored two or more undergraduates in research in CY2007

Action 3.7:

Re-invigorate the campus-funded undergraduate initiative program that provides funds for informal opportunities for faculty-student interactions.

Metric:

- In FY06-07, and beyond, each department fully utilizes its \$5,000 per year on faculty-student interactions
Result: Four of the six departments fully utilized their \$5000 allotments in FY06-07, and the other two departments spent about \$4500 each

Action 3.8:

Host an annual meeting for all staff in the College, beginning in Spring 2007, dialog on college strategic initiatives and goals, and discuss how staff can contribute to meeting these goals. Include a social event with this meeting to foster networking.

Metric:

- At least 80% of staff attend the first meeting and recommend continuing the program in the future
Result: First college-wide staff meeting held 4/6/07, with approximately 80% of all staff attending and full consensus to continue the program

Action 3.9:

Continue to host First Friday and faculty and staff meetings as venues for recognizing faculty and staff and communicating college goals and accomplishments, and encourage increased participation.

Metric:

- Average attendance of 85 at these events in FY06-07, up from 60-70 in FY05-06
Result: Average attendance reached 85 in FY06-07, except it was double that amount in December for Holiday Party

4. Concluding Remarks

This plan was written with considerable faculty, staff, and student input from a college-wide Diversity Task Force, and I am grateful to all who participated as well as to the Administrative Council of chairs and deans, which serves as the college Diversity Committee and provides the necessary leadership in promoting diversity across the College of Engineering and Applied Science.

Diversity is important, not just because an engineering education will help improve the social and economic outlook for those students from underrepresented backgrounds, but because the involvement of diverse students, faculty and staff enriches the experience of all. Moreover, the continued success of our nation, and the world, will depend on our ability to attract top talent into engineering and technology, by drawing broadly from all population groups.

-- Robert H. Davis, Dean and Tisone Chair