Florida Educational Equity Act Report July 2016 – June 2017	UF Office of Human Resource Services UNIVERSITY of FLORIDA

I. Equal Opportunity Compliance

We strive to have all areas of operation focus on inclusion. We have many programs at all levels focused around creating greater diversity. Initiatives launched over the last few years include: (1) undergraduate research programs, (2) international program activities, (3) establishment of a new Director for Graduate Recruiting, and (4) establishment of the position of Dean's Fellow for Diversity and Inclusion.

II. Equity Accountabilities

Dean's Advisory Board – Committee on Diversity and Inclusion

- Biannual meetings of the Committee in conjunction with the Dean's Advisory Board. Meetings focus on best practices and feedback for the college.
- The committee is being leveraged for assistance in identifying top candidates for an open advertisement for a new position of Director for Diversity and Inclusion in the Herbert Wertheim College of Engineering.

Dean's Fellow for Diversity and Inclusion

- Represented HWCOE at oSTEM 2016 conference in Denver, CO and was honored for national activities and activities within OSTEM with the Partner Excellence award.
- Worked with the President's Diversity Council at UF on the interpretation of the presidential climate survey results. Organized 1 forum for HWCOE and attended 2 central UF fora. Guided HR and Vice president with formulation of UF diversity structure: inclusive excellence.
- Added inclusive options for student recruiting in ENGINE.
- Reconnected the UF disability resource office with the diversity efforts on campus. Disability is now included as part of diversity in the provost's office. I introduced the university to the concept of neurodiversity for students with mental health challenges.
- Helped expand the diversity education and research at UF via name change and programmatic aid in the cementer for women studies, gender and sexualities.
- Serve as elected chair of the Presidential LGBTQ+ advisory committee of the University of Florida for 2016-2018 and was instrumental in UF's response to the worst terror attack in the US after 9.11. The Pulse night club shooting had impacted our students, faculty and staff in Orlando, Gainesville, and Jacksonville in an unprecedented way. I co-organized a mourning ceremony on campus and provided guidance for positive email messages across campus.
- Received the National Award from AAAS-NOGLSTP of GLBT Engineer of the Year 2017.
- Received Outstanding Service Award from Division of Student Affairs, UF.
- Provide lectures and workshop to UF faculty, staff, and students on diversity and inclusion.

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Faculty:

- All faculty search committees meet with the Associate Dean of Academic Affairs to discuss hiring and building a diverse pool
- Search Committees receives a recruiting presentation developed in conjunction with the NSF ADVANCE grant.
- Candidate pools are reviewed for diversity before on-campus visits start
- Female and African American Faculty Lunch meetings to hear concerns and develop new approaches

A review of the current diversity of our faculty (245 in total) and our recruitment of new faculty hires (8 in total for the reporting period) are shown below. Overall, our engineering faculty are presently 18% female, with the highest proportion in Biomedical Engineering (32%), Computer & Information Science & Engineering (29%), and Materials Science & Engineering (26%). The one department with female faculty below 10% is Chemical Engineering (5%). In the past reporting year, 8 faculty were hired by the college including 1 Hispanic male and 1 black female faculty members.

HW College of Engineering - Faculty as of March 2017 (Total 245)

	Total		African-American		Hispanic		Native American		Asian		Multiple		Nonresident Alien		Causian		
Department / School	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	% Female
Biomedical	13	6			1				2			1			10	5	32%
Chemical	19	1			1				7						11	1	5%
Computer & Information Sci.	29	12	1	4	2				11	4	1				14	4	29%
Electrical & Computer	41	6	1	1	3	1			14	1			1		22	3	13%
Eng Sch Sustain Infrst Env	29	5	3		2				4	2			1	1	19	2	15%
Industrial	9	2			1				3	1					5	1	18%
Materials Science	20	7		2	1				4		1		1	1	13	4	26%
Mechanical & Aerospace	40	6	2						14	3					24	3	13%
TOTAL	**200**	**45**	**7**	**7**	**11**	**1**	**0**	**0**	**59**	**11**	**2**	**1**	**3**	**2**	**118**	**23**	**18%**
% by Race			**6%**		**5%**		**0%**		**29%**		**1%**		**2%**		**58%**		

HW College of Engineering - Faculty Hired - July 2016 to March 2017 (Total 8)

	Total		African-American		Hispanic		Native American		Asian		Multiple		Nonresident Alien		Causian		
Department / School	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	% Female
Biomedical	1	0													1		
Chemical	0	0															
Computer & Information Sci.	1	1			1											1	50%
Electrical & Computer	0	2								1						1	100%
Eng Sch Sustain Infrst Env	1	0													1		
Industrial	0	0															
Materials Science	0	1												1			100%
Mechanical & Aerospace	1	0													1		
TOTAL	**4**	**4**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**3**	**2**	**50%**
% by Race			**0%**		**0%**		**0%**		**13%**		**0%**		**0%**		**63%**		

Florida Educational Equity Act Report July 2016 – June 2017	UF Office of Human Resource Services UNIVERSITY of FLORIDA

Staff:

A review of the current diversity of our college staff (259 in total) and our recruitment of new staff hires (16 in total for the reporting period) are shown below. Our college staff is 62% female on average, with percentages ranging from a low of 36% in auxiliaries to 100% in the Departments of Biomedical Engineering and Industrial Engineering. Black and Hispanic staff members comprise 12% and 9%, respectively, of all college staff. There were 16 new college staff hires in the reporting period – 6% black, 19% Hispanic, and 50% female.

HW College of Engineering - Staff as of March 2017 (Total 259)

	Total		Not Reported		African-American		Hispanic		Native American		Asian		Multiple		Nonresident Alien		Causian		
Department / School	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	% Female
Administration	36	62		1	4	5	4	7				4	1				27	45	63%
Auxiliaries	16	9				1	2	2				1			2	1	12	4	36%
Biomedical	0	10				1		2				1						6	100%
Chemical	3	4															3	4	57%
Computer & Information Sci.	5	8				1	1					1	1				3	6	62%
Electrical & Computer	16	21	1			2		2		1		3	1	1			14	12	57%
Eng Sch Sustain Infrst Env	10	18			2	3		1						1			8	13	64%
Industrial	0	6				2												4	100%
Materials Science	6	6				3											6	3	50%
Mechanical & Aerospace	7	16			1	6	2										4	10	70%
TOTAL	**99**	**160**	**1**	**1**	**7**	**24**	**9**	**14**	**0**	**1**	**0**	**10**	**3**	**2**	**2**	**1**	**77**	**107**	**62%**
% by Race			**1%**		**12%**		**9%**		**0%**		**4%**		**2%**		**1%**		**71%**		

HW College of Engineering - Staff Hired - July 2016 to March 2017 (Total 16)

	Total		Not Reported		African-American		Hispanic		Native American		Asian		Multiple		Nonresident Alien		Causian		
Department / School	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	% Female
Administration	4	4		1	1		1	2									2	1	50%
Auxiliaries	1	1										1					1		50%
Biomedical	0	1																1	100%
Chemical	1	1															1	1	50%
Computer & Information Sci.	0	1										1							100%
Electrical & Computer	0	0																	
Eng Sch Sustain Infrst Env	2	0															2		0%
Industrial	0	0																	
Materials Science	0	0																	
Mechanical & Aerospace	0	0																	
TOTAL	**8**	**8**	**0**	**1**	**1**	**0**	**1**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**6**	**3**	**50%**
% by Race			**6%**		**6%**		**19%**		**0%**		**13%**		**0%**		**0%**		**56%**		

Undergraduate Students:

- New Student Welcome Program - At the start of each fall term, the New Student Welcome introduces incoming students to engineering staff, faculty, administration and students. Student organizations and major departments are also represented. The program objective is to assist students in feeling connected to the College and the campus at large.
- Peer Advisors Program - Created during the Fall 2012 semester, the Academic Advising Office trained a team of engineering students to serve as peer advisors for first and second year engineering students. Peer Advisors are trained to recognize and support students with issues such as fitting in to the university environment, LGBT questions and support, and other social concerns.
- Centralized Advising Module - A centralized academic advising module was adopted by the College during the Fall of 2012 in efforts to promote a positive, effective, common advising experience for all engineering students.
- Individual sessions to assist students in addressing transition issues, improving study skills, and/or provide program specific information
- Special programming for first-generation and multi-cultural students that connect this population to additional campus resources.
- STEPUP/EFTP - Two Corporate funded, Freshmen Summer-Bridge programs (Successful Transition and Enhanced Preparation for Undergraduates Program – STEPUP, and The Entering Freshmen Program - EFTP) – to promote the successful transition of Freshmen students entering the College.
- Project Design Course/Competition – Students were enrolled in a project design course during the Summer 2016. Students gained skills using engineering software (AutoCAD & LabVIEW).
- The Transfer Student Transition Program (TSTP) is held during the fall and spring semesters and is designed to help incoming transfer students successfully transition into the University. The program connects incoming transfer students with previous transfer students as a means of providing them with important advice about making the transition to a large university, information about co-ops and internships and valuable information about College of Engineering resources
- Transfer Student Orientations – A program intended to assist transfer students in becoming acclimated to the College and campus resources
- Career Showcase Preparation Workshop – A workshop tailored to assist transfer students in preparing themselves for the Career Showcase event hosted by the Career Resource Center.

A review of the college's total undergraduate enrollments is given in the table below for all college majors. In Fall 2016, the college had a total enrollment of 7182 undergraduates. Overall, some 27% of our engineering undergraduates are female. The programs with the highest percentage of female students are Environmental Engineering and Digital Arts with over 50% female students. The programs with the lowest percentage of females are our Computer Engineering programs with only 59% to 55% female students. Black and Hispanic students comprise 4% and 23% of the total undergraduate engineering student population. The very

low percentage of black undergraduates is a concern and an area for focus in our high school outreach and recruiting programs.

HW College of Engineering - Undergraduate Students Fall 2016 - Total 7182																			
	Total		African-American		Hispanic		Native American		Asian		Pacific		Unknown		Nonresident Alien		Causian		
Major	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	% Female
Aerospace Engineering	390	80	12	3	82	18	2		44	9			5	3	7	2	238	45	17%
Agricultural Engineering	1	1				1											1		50%
Biological Engineering	67	48	2	1	13	12	1		9	7				2	1	2	41	24	42%
Biomedical Engineering	206	188	8	9	40	40	1	1	42	36			7	7	4	2	104	93	48%
Chemical Engineering	414	199	14	15	86	41	2	1	51	27			10	5	7	7	244	103	32%
Civil Engineering	397	144	16	6	96	38	3		25	8			10	5	21	6	226	81	27%
Computer Engineering	477	74	32	5	113	18	2		63	14	1		17	2	10	2	239	33	13%
Computer Science/EG	521	118	20	4	123	29	1		93	31	1		12	3	13	3	258	48	18%
Computer Science/LS	212	48	14	1	45	8		1	31	10			5	2	7	2	110	24	18%
Digital Arts	30	37	1	1	6	5			4	13				3			19	15	55%
Electrical Engineering	495	95	34	7	121	24	1		69	14	1		9	2	13	3	247	45	16%
Environmental Engineering	91	132	5	5	16	33		1	10	12			2	2	1		57	79	59%
Exploring Engrg Studies	371	192	11	9	83	53	1	1	44	26			7	4	5		220	99	34%
Industrial & Systems Eng.	264	238	5	8	69	58	1		25	17			5	11	4	2	155	142	47%
Materials Science & Eng.	122	81	3	1	28	17		1	12	15			6	3	1	3	72	41	40%
Mechanical Engineering	1096	258	33	15	215	66	10		126	22			26	7	14	2	672	146	19%
Nuclear Engineering	79	14	1	1	21	3			4	2			3	1	3		47	7	15%
Nuclear & Radiological Sciences	0	2				1												1	100%
TOTAL	**5233**	**1949**	**211**	**91**	**1157**	**465**	**25**	**6**	**652**	**263**	**3**	**0**	**124**	**62**	**111**	**36**	**2950**	**1026**	**27%**
% by Race			**4%**		**23%**		**0%**		**13%**		**0%**		**3%**		**2%**		**55%**		

Graduate Students:

- Attended National Society of Black Engineers Regional and National Meetings with a booth to recruit students
- Attended Society of Hispanic Professional Engineers National Meetings with a booth to recruit students
- Attended Society of Women Engineers Regional and National Meetings with a booth to recruit students
- Attended the National Collegiate Undergraduate Recruiting Conference, Big10 Grad Expo to get outreach to more domestic students
- Focused Graduate School Fellow Awards on domestic students, encouraged diverse candidates and recipients

A review of the college's total graduate student enrollment is given in the table below for all college majors. In Fall 2016, the college had a total enrollment of 3067 MS and PhD students. Overall, some 25% of our engineering graduate students are female. The programs with the highest percentages of female students are Human Centered Computing and Agricultural Engineering at 67% and 55%, respectively. The programs with the lowest percentage of female graduate students are Nuclear, Aerospace, Mechanical, and Electrical Engineering at 15%, 14%, 12%, and 10%, respectively. Black and Hispanic students comprise 2% and 5% of the total graduate engineering student population. The difference in the percentage of Hispanic undergraduates (22%) to Hispanic graduate students (5%) is remarkable and is viewed as an area for further recruiting, especially in regards to the introduction of faculty research opportunities to our existing Hispanic undergraduates.

HW College of Engineering - MS and PhD Students Fall 2016 - Total 3067																			
	Total		African-American		Hispanic		Native American		Asian		Pacific		Unknown		Nonresident Alien		Causian		
Major	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	% Female
Aerospace Engineering	85	14	1		8	1	1		11	2			5	1	17	3	42	7	14%
Agricultural Engineering	19	23		1	2	2			2	1					9	11	6	8	55%
Biomedical Engineering	106	71	2	3	8	9			8	4			4	1	43	28	41	26	40%
Chemical Engineering	137	40	3		2	1			8	2			2		96	32	26	5	23%
Civil Engineering	130	37	3	2	6	2		1	2	3			3	1	81	19	35	9	22%
Coastal & Oceanographic	16	5			1	1			2				1		10	3	2	1	24%
Computer Engineering	82	21	1	1	3				3	1			3		51	16	21	3	20%
Computer Science/EG	390	128	1	1	3				2	3			2		366	124	16		25%
Computer Science/LS	137	47							1				1		132	46	3	1	26%
Digital Arts	3	2													3	1		1	40%
Electrical Engineering	9	1			1					1					1		7		10%
Electrical & Computer	431	118	7		14	3	1		14	2			4		319	111	72	2	21%
Environmental Engineering	89	67	3	1	6	8	1		5	5			5	2	30	27	39	24	43%
Human-centered Computing	10	20	4	9	2	2		1	1						1	3	2	5	67%
Industrial & Systems Eng.	124	38	2	1	20	5	1		4	3			6		36	14	55	15	23%
Materials Science & Eng.	174	72	3	3	7	4			9	3			8		112	40	35	22	29%
Mechanical Engineering	330	45	6	1	15	5	1		8	3			6	1	191	23	103	12	12%
Nuclear & Radiological Sciences	39	7			7				2				4	1	8	1	18	5	15%
TOTAL	**2311**	**756**	**36**	**23**	**105**	**43**	**5**	**2**	**82**	**33**	**0**	**0**	**54**	**7**	**1506**	**502**	**523**	**146**	**25%**
% by Race			**2%**		**5%**		**0%**		**4%**		**0%**		**2%**		**65%**		**22%**		

III. Diversity in Services

Academic Advising Center

The centralized advising model for first year and exploratory students was expanded to include additional majors, with the goal of serving all first year engineering students by fall 2016. New programs and workshops were implemented to provide transition support, improve academic study skills, and enhance professional development opportunities for undergraduate students. There were over 5,000 unique visits to the Engineering Advising Center between March 1, 2016 and March 1, 2017. In addition;

- AIM workshops are held twice per semester, reaching out to pre-engineering students who may need additional support and resources.
- First year advising has actively supported LGBTQ students via further training for advisors and efforts to make office spaces more welcoming.
- Academic Power Tools classes and other professional development resources are now available online, opening them up to a greater number of first year students, particularly those in need of additional support
- Last year at least 180 individual engineering students attended live professional development workshops.
- Peer Advisor training has been further expanded in the areas of cultural diversity and recognizing students in distress.
- Last year, Peer Advisors provided individualized support to more than 120 students.
- Last year, Peer Advisors provided information sessions and/or tours to an average of 80 prospective students/family members (from diverse backgrounds) per month.

Engineering Freshman Transition Program (EFTP)
The Engineering Freshmen Transition Program (EFTP) is a Summer B program open to all first-year engineering students. EFTP is comprised of intense courses offered during summer B to assist students in adjusting to the level, speed and style of college instruction. Additionally, students will also receive the following benefits:

- Participating in an engineering design class,
- Gaining skills in computer programming with engineering related software,
- Interacting with peers who become part of your support network throughout your experience at UF,
- Engaging in academic and professional development activities,
- Meeting engineering faculty and staff, including advisors,
- Becoming familiar with UF academic policies, including the UF Honor Code and those involving academic integrity,
- Learning how to work on a team, an essential skill for all engineers.

EFTP continues throughout the fall and spring semesters of the student's first year. Along with their regular classes, selected students spend the fall and spring semesters acclimating to the demands of being engineering students within the college. Our studies indicate that engineering students tend to have a difficult transition from high school to college therefore; we are taking this opportunity to allow students to become familiar with UF's level, speed and style of instruction, as well as, the resources and facilities that are available to support them.

Successful Transition and Enhance Preparation for Undergraduate Programs (STEPUP)
The Successful Transition and Enhanced Preparation for Undergraduates Program (STEPUP) approaches the concept of student preparation from a holistic perspective. In addition to the intensive academic course load and the project design/programming component offered by its sister program, EFTP, STEPUP includes a professional development component. Students are provided the opportunity to tour major engineering company sites such as Lockheed Martin, Raytheon, Disney, Kraft, GRU, Exactech, the Nielsen Corporation and numerous others, in efforts to see engineering in action and to meet with a diverse array of engineers. Students get a glimpse into the real world of an engineer, and begin developing a personal network of resources that may prove beneficial in the future.

In 2016, there were a total of 108 participants in the EFTP and STEPUP Programs. Of this total, 78% were Male, 22% Female, 71% White (Caucasian), 10% African American, 17% Hispanic-Latino, 8% Asian.

Transfer Student Transition Program
All engineering transfer students admitted to the Herbert Wertheim College of Engineering are invited to attend our Transfer Student Transition Program. This Herbert Wertheim College of Engineering program connects prospective students with engineering faculty, staff, and fellow classmates. It also provides them with an introduction to common engineering courses, co-op and internships, important advice on making the transition to our university, and valuable

information on Herbert Wertheim College of Engineering resources and student societies. This program has a proven record of success—students who attend consistently out-perform students who do not. In fact, those who attend out-perform students who started at UF as freshmen.

The Transfer Student Transition Program is held each year at the beginning of the Fall and Spring semesters. New students are paired with peer mentors – experienced engineering students who also transferred in from other schools and are ready, willing and able to assist students in making a successful transition to the University of Florida and the upper division engineering program. Students starting at the University of Florida during the summer semester are invited to attend the Fall event.

Gator Outreach

Nearly eighteen years ago, Exxon Mobile and the University of Florida's Herbert Wertheim College of Engineering established a collaborative partnership in an effort to create a K-12 initiative that would introduce school-aged youth to the world of engineering. The result of this collaboration was the creation of a program called Gator Outreach (GO). Since its inception, the Gator Outreach program has served nearly 15,000 students.

The Gator Outreach Program provides participating schools with:

- Funding for one bus for up to 50 students
- Boxed lunches for up to 50 students plus chaperones
- Tours of Engineering labs
- Hands on or interactive experiences for the students

The Gator Outreach Program works collaboratively with University of Florida faculty, staff, and engineering student organizations to share engineering experiences with potential gator engineers of the future. During the 2016-2017 academic year, over 300 students from diverse backgrounds and underserved communities participated in the Gator Outreach program.

The Gator Outreach initiative sponsors programs that reach out to schools and community organizations outside of the traditional Gator Outreach Program. This includes, onsite visits, career fairs and UF engineering recruitment events such as GEE Day and Florida Days.

Gator Engineering @ Santa Fe

Gator Engineering @ Santa Fe is a first-of-its-kind program designed by the College of Engineering, in collaboration with Santa Fe College and the UF Offices of Admissions, Dean of Students, the Registrar, and Student Financial Affairs for students seeking an ABET-certified B.S. degree in engineering. Students invited into this program begin coursework at Santa Fe College and, upon successful completion of specified classes, continue their study at UF. Unlike a transfer program, students are admitted to the University of Florida after the first fall semester at Santa Fe College provided they have met the performance standards established by the program. Once they are UF students, they are able to enjoy the enriching and varied resources offered for students by the University of Florida.

The 2016 GE@SF program started its fifth year and includes environmental engineering sciences, computer engineering, computer science, digital arts and sciences, electrical engineering, materials science engineering and nuclear engineering. From their first day at Santa Fe College, these students are connected to the Gator Engineering family, which includes graduate students, teaching assistants, an engineering design and programming class taught by UF faculty, as well as, advising by UF engineering staff. Students are also introduced to Gator Engineering research and study abroad opportunities, in addition to many other Gator Engineering programs.

The first GE@SF cohort began the Fall of 2013 with 32 students. Twenty-three of the 32 students were admitted to the University of Florida after the fall semester. Twenty five students either completed or remain in the program, for a 78% retention rate.

The second cohort involved 41 students enrolled in Fall 2014. Thirty nine students (95%) either completed or remain in the program after 1 year. Thirty one students (76%) were admitted to UF within 2 semesters.

The third cohort has 65 students enrolled in the program. In 2016, invitations to participate in the program were extended to 193 students. For all cohorts currently at UF, the students are 16% Asian, 7.1% African-American, 23.2% Hispanic, and 7.1% female.

Undergraduate Research Programs

The position of Director of Undergraduate Research transitioned as a shared appointment with the Director of Graduate Recruiting in May of 2016. An overhaul of all college-wide efforts and implementation of many new initiatives took place over Summer 2016:

- Creation and maintenance of a Herbert Wertheim College of Engineering Database of Undergraduate Research Projects. 129 projects were gathered and posted on the website from 104 engineering faculty members.

  https://www.eng.ufl.edu/graduate/about-us/undergraduate-research/2016-2017-research-projects/

Dept	Faculty	Projects
ABE	4	4
BME	8	12
CHE	10	12
CCE	7	8
CISE	14	17
ECE	24	28
EES	6	8
ISE	2	4
MSE	9	14
MAE	16	18
NES	4	4
Total	**104**	**129**

- HWCOE coordination, marketing and overhaul of the Emerging Scholars Program. This program focuses on Freshman and Sophomores engineering student participation. The 2017 program tripled engineering student participation. 7 of the 12 student participants were female (58%) and 2 of the 12 participants were underrepresented minority students (17%).

  https://www.eng.ufl.edu/graduate/about-us/undergraduate-research/emerging-scholars-program/

Student Applications	12	4	
Emerging Scholars slots	6	4	$500 UF; $500 faculty
HWCOE paid slots	6	0	$0 UF; $1,000 faculty
Total Positions	**12**	**4**	

- HWCOE coordination, marketing and overhaul of the University Scholars Program. This program focuses on Junior and Senior engineering student participation. The 2017-2018 program increased participation from 39 to 59 students (51%). 24 students are female (41%) and 13 are underrepresented minority students (22%).

  https://www.eng.ufl.edu/graduate/about-us/undergraduate-research/university-scholars-program/

	2017	**2016**	**2015**	**2014**
Student Applications	167	65	81	73
University Scholars slots	35	35	35	36
HWCOE paid slots	24	4	11	10
Total Positions	**59**	**39**	**46**	**46**

All HWCOE students participating in any type of undergraduate research with a faculty member are required to register for EGN 4912. This chart summarizes the history of the course and showcases the large increase from 2015 to 2016 of 260 additional students participating (64%). In 2016 we had 224 females participating (34%) and 181 underrepresented minority students participating (26%).

Dept	2013	2014	2015	2016	2017	Total
ABE	10	20	14	12	5	61
BME	21	61	63	117	53	315
CCE	14	7	3	9	3	36
ChE	48	78	86	105	47	364
CISE	5	23	41	61	23	153
DAS	1	0	0	8	0	9
ECE	27	26	27	75	21	176
EES	9	15	8	28	6	66
ISE	5	4	0	6	4	19
MAE	37	100	83	149	66	435
MSE	30	65	42	53	10	200
Non-Eng/Undecided	18	42	30	26	14	130
UCE	2	4	12	39	15	72
Total	**227**	**445**	**409**	**688**	**267**	**2036**

International Program Activities

Another role of the coordinator is to provide information and service for UF students looking to study abroad, international degree-seeking students, as well as non-degree exchange students. In addition, the coordinator also assists faculty members in establishing reciprocal and cooperative agreement with overseas partner institutes to benefit the college and university. Among the tasks of the international programs coordinator are:

1. Identify study abroad programs for engineering students and help them establish course equivalencies and to plan their academic progress towards graduation
2. Coordinate efforts with UF International Center (UFIC) to ensure incoming exchange students are enrolled in the right classes and that enrolment spaces are available for them when they arrive at UF
3. Serve as a liaison with UFIC to manage MOUs with international universities and ensure compliance
4. Serve as a point of contact for international and exchange students at UF COE to ensure the success of their experience as a Gator Engineer.
5. Serve as faculty advisor for UF Engineers Without Borders (EWB), a service organization that is part of a global network that is dedicated to improving the quality of life in communities around the world through their engineering skills

HWCOE is a member of the Institute for International Education's Global Engineering Education Exchange program. It is a consortium of leading universities from around the world. Global E3 allows engineering students at member universities to gain a rewarding study abroad experience. Through participation in the program, Global E^3 graduates gain the necessary foreign language ability, cross-cultural skills, and professional experience to excel in the multinational/multicultural business environment of the 21st century. Student participation in Global E3 has been promising and student feedback from their study abroad experience has

been encouraging. In 2015, HWCOE became an exchange partner with Universidad Carlos III Madrid in Spain to increase study abroad opportunities for engineering students.

However, the participation rate of engineering students in study abroad is currently very low. In order to increase the participation rate and to promote the idea of a Global Gator Engineer, the number of viable exchange institutions have to be expanded and course equivalencies established so that students can still graduate on time. Info sessions and workshops will be held to promote study abroad among the engineering students. Peer mentoring and advising will be expanded to encourage more students to study abroad.

A collaboration with the UF International Center is underway for a new short-term study abroad program to target under-represented engineering students. In conjunction with this program, systematic advising and programming will be provided to assist the students in making the decision and planning for study abroad.

Current Student Participation

- Engineering students comprised 6% of all study abroad students at University of Florida in 2014-2015.
- Within the HWCOE, only 2% of all enrolled undergraduate engineering students have participated in a credit-bearing international academic experience. The number at UF HWCOE has held steady within the last 5 years and it is apparent that a big programmatic and cultural change has to occur in order to increase student participation.

Comparison with Peer Institutions

- At other leading engineering institutions such as Purdue University, 10% of undergraduate engineering students have studied abroad.
- The national average for undergraduate engineering students who have studied abroad at least once during their studies is 4% of the total enrolled undergraduate engineering student population.

Participation of Under-Represented Students

- Study abroad participants are predominantly Caucasian students in Engineering
- Hispanic students are the second largest group of engineering students who studied abroad
- In 2015-16, only 5% of undergraduate engineering students who studied abroad are African-American students

Ph.D. Student Recruiting

HWCOE efforts for recruiting a diverse Ph.D. cohort for fall 2017 continue to showcase significant gains for 3 straight years with signs of stabilizing. The following chart highlights the increases in Ph.D. applications, admission and enrollment for domestic students (U.S. Citizens, Permanent Residents), female students, and underrepresented minority students.

HWCOE Ph.D. Enrollment	FA11	FA12	FA13	FA14	FA15	FA16	FA17*	%
Ph.D. Applications	2,115	1,761	1,359	1,257	1,374	1,612	1,400	11%
Domestic	250	271	231	217	388	533	523	141%
Female	74	58	56	67	120	147	166	148%
Underrepresented Minority	46	53	56	49	126	136	155	216%
Cumulative Undergraduate GPA	3.49	3.55	3.53	3.55	3.60	3.62	3.63	0.08
Ph.D. Admissions	567	319	268	264	334	340	368	39%
Domestic	135	168	149	137	213	310	306	123%
Female	24	37	35	36	73	87	109	203%
Underrepresented Minority	18	30	34	26	55	74	87	235%
Cumulative Undergraduate GPA	3.55	3.61	3.57	3.62	3.67	3.71	3.71	0.09
Ph.D. Enrollment	195	164	174	171	196	196	127	-26%
Domestic	77	87	97	94	109	118	94	0%
Female	18	19	19	21	20	33	34	62%
Underrepresented Minority	8	13	18	22	23	29	32	45%
Cumulative Undergraduate GPA	3.49	3.55	3.53	3.58	3.61	3.66	3.71	0.13
FY17* non official enrollment data								

These results are achieved from a combination of efforts including HWCOE founding and managing a national consortium for engineering prospective graduate students called the Engineering National Graduate Institutional Name Exchange (ENGINE), https://engine.eng.ufl.edu/. This national consortium gathered information on more than 7,500 female engineering prospects and more than 2,150 engineering underrepresented minority student prospects for recruitment by UF.

Junior Preview – October 2016

HWCOE continued with the second year of Junior Preview in fall of 2016. The program brought 47 prospective Ph.D. students for fall 2018 consideration to campus to visit the college and a department of interest, learn about admissions, fellowships, research institutes, meet current graduate students and see Gainesville. This cohort included 26 female students (55%) and 29 URM students (62%). A new Preferred Ph.D. Admissions Program was launched assigning a faculty mentor and current Ph.D. student mentor to each visiting student as a pre-graduate school advisor. The students were also promised future Ph.D. application fee waivers, priority consideration for admission/fellowship and a future Spring Visit invitation. There were 16 Ph.D. applications for fall 2017 from the previous Junior Preview cohort. 15 of the 16 received Ph.D. admission and 12 received significant funding offers. 3 chose Florida for their final engineering Ph.D. enrollment.

Spring Visit – February 2017

HWCOE hosted the annual Spring Visit program on February 22-26, 2017. The program hosted 168 students for 2-4 days who were all admitted to engineering Ph.D. programs for fall 2017 and many with full fellowship offers in-hand. This year's program showcased an average 3.72 cumulative undergraduate GPA with 62 female students (37% and 53 URM students (32%). The final yield for enrollment was the highest too date with 39% of the attendees enrolling UF for their Ph.D. institution.

IV. New Initiatives

Gator Engineering @ State College of Florida

With the launch of the UF Innovation Station Sarasota County in March 2016, the Florida Engineering Experiment Station (FLEXStation) will be creating the Gator Engineering @ State College of Florida program, an innovative B.S. engineering degree program similar to Gator Engineering @ Santa Fe that allows a students to begin their coursework at State College of Florida, gain admission to UF as early as after the first semester, continue coursework at State College of Florida until completion of critical tracking courses, and matriculate to UF to continue their engineering study in their chosen major. This program is made possible by a generous gift from the Charles & Margery Barancik Foundation based in Sarasota, FL. The Gator Engineering @ State College of Florida program is scheduled to begin accepting students with the Fall 2017 admission class and students applying to UF in the fall of 2016 will compose the first cohort of this program. For its inaugural year, the degree programs being offered in Gator Engineering @ State College of Florida will include computer science, computer engineering, digital arts and sciences, and electrical engineering. There are 10 students who will start the program in Fall 2017. FLEXStation is working with the Sarasota County School Board to provide programs to students focused on STEM fields and will promote the GE@SCF program to under-represented K-12 students through these programs.

Summer Undergraduate Research at Florida (SURF)

The third prong of our new HWCOE graduate student recruiting strategy includes a comprehensive college-wide summer research program. Funding was acquired to launch SURF for Summer 2017. The inaugural program includes 40 student participants among 4 Colleges (HWOCE, Pharmacy, CLAS, CALS). The students will spend 8-10 weeks on campus in a residential program each working directly in a laboratory setting with one faculty mentor and one Ph.D. student mentor. The first cohort of fall 2018 Ph.D. prospects has truly outstanding academic credentials. The cohort averages a 3.72 cumulative undergraduate GPA with 23 female students (58%) and 30 URM students (75%). The program also includes several enhancement activities such as a GRE Test Prep course, weekly seminars, workshops, social events and a culminating SURF student video on their summer research project and/or experience. The Engineering Graduate Student Council comprised of current Ph.D. students will also be actively assisting with SURF.

Salesforce CRM and New Graduate Admissions Application for HWCOE Implementation

The University of Florida Admissions Office is moving towards a modern graduate admissions application platform with a College Net/People Soft product available fall 2017 for student applying for the fall 2018 term. This also includes a customer relationship management tool via Salesforce. HWCOE is the pilot College for UF which includes attending/contributing to bi-weekly meetings from Sept. 2016 to present for fall 2017 rollout. The meetings provide HWCOE an opportunity to streamline some of the features that best meet the needs of the College and Departments including marketing, recruiting and tracking all activity with underrepresented minority prospective engineering graduate students.

University of Puerto Rico Mayaguez (UPRM)

A special emphasis has taken place for the recruiting of underrepresented minority Ph.D. students at the University of Puerto Rico Mayaguez. The following charts outlined the concrete results. All of these students are Hispanic minority students carry a 3.50+ GPA. HWCOE is also working closely with the Graduate School to waive the TOEFL requirement for future UPRM applicants who are all U.S. Citizens. The trend is very encouraging for those enrolling HWCOE Ph.D. from UPRM with 1 students in 2014; 3 students in 2015; 5 students in 2016; and 6 students in 2017.

Recruiting HWCOE Ph.D. Students from UPRM			
First Name	**Last Name**	**Dept**	**Year**
Bethsymarie	Soto-Morales	BME	2017
Seaska	Perez-Aviles	Civil	2017
Sofia	Roman-Echevarria	Civil	2017
Carlos	Soler-Ayoroa	Civil	2017
Jorge	Torres-Alamo	Civil	2017
Adail	Rivera-Nieves	Coastal	2017
Angelie	Rivera-Rodriguez	BME	2016
Pedro	Adorno-Maldonado	Civil	2016
Legna	Torres-Garcia	Coastal	2016
Wesley	Cuadrado-Castillo	MSE	2016
Sujeily	Soto	MSE	2016
Christian	Rojas-Vazquez	Civil	2015
Glenda	Diaz-Acosta	Civil	2015
Keisha	Castillo-Torres	ECE	2015
Pedro	Fernandez Caban	Civil	2014

Additionally, we admitted 10 engineering Ph.D. students from UPRM for fall 2017, our highest too date! 12 students attended our Junior Preview in October 2016 from UPRM and 6 are participating in our inaugural SURF program.

Fall 2017 Admitted Ph.D. Students			
Isamar	Amador Diaz	ABE	2017
Wilfredo	Mendez Ortiz	BME, CHE	2017
Bethsymarie	Soto Morales	BME, CHE	2017
Seaska	Perez-Aviles	Civil	2017
Christian	Flores Carreras	Civil	2017
Sofia	Roman Echevarria	Civil	2017
Carlos	Soler Ayoroa	Civil	2017
Jorge	Torres-Alamo	Civil	2017
Adail	Rivera Nieves	Coastal	2017
Cesar	Nieves-Sanabria	ECE	2017
2017 SURF Program, Summer Undergraduate Research at Florida			
Oscar	Lafontaine	Civil	2018
Hector	Crespo-Febles	ECE	2018
Xaimarie	Hernández-Cruz	ISE	2018
Jessica	Gonzalez-Vargas	ISE	2018
Hazel	Rivera	MAE	2018
Monica	Diaz	MSE	2018
Attended fall 2017 Junior Preview			
Yarelis	Gonzalez	BME	2018
Paola	Baldaguez	CHE	2018
Anaeli	Shockey	CHE	2018
Gabriella	Buono	Civil	2018
Miguel	González	Civil	2018
Oscar	Lafontaine	Civil	2018
Hector	Crespo-Febles	ECE	2018
Xaimarie	Hernández-Cruz	ISE	2018
Jessica	Gonzalez-Vargas	ISE	2018
Gabriela	Garcia	MAE	2018
Hazel	Rivera	MAE	2018
Monica	Diaz	MSE	2018

V. Accolades - None to report