

College of Engineering Annual Report April 16, 2014

OVERVIEW

Although this is a transition year for the College as the search for a new permanent dean is underway, the accomplishments of the College have been significant.

By far, the most important accomplishment has been a successful ABET accreditation review and visit. Self-studies for seven BS programs in engineering and computer science were submitted to a ninemember ABET team in early July 2013. A three-day on-campus visit by the team was completed on October 1. When they left campus, the ABET team had found no weaknesses or deficiencies in any of the programs. We expect that when we receive the final report from ABET, sometime in August 2014, all of our programs will be accredited for the maximum six years. Successful ABET accreditation provides our students and prospective employers assurance that our programs meet the same rigorous criteria that other similar engineering and computer science programs across the country and the world must meet. It is a clear indication of the dedication of our faculty and staff to provide our students with a high quality education.

Our College, along with the College of Business and the College of Arts and Sciences, was awarded a Targeted Educational Attainment (TEAm) grant funded by the Florida Legislature. USF is partnering with the University of Central Florida and Florida International University on the \$4.9 million project. The funds will allow our College to expand course offerings in computer science, computer engineering and information technology to meet the student demand placed on these disciplines.

The number of undergraduate students who select engineering as a major at USF continues to increase. Engineering's undergraduate headcount for fall 2013 was up by 13% over fall 2012 while MS student headcount was up 14%. PhD student headcount has remained virtually unchanged during the same time period. Undergraduate sch production in the college has increased by 7% over last academic year, while Grad I sch production increased by nearly 10% and Grad II production decreased by ~ 5%.

The retention rate for undergraduate engineering students has shown a significant increase of 6.6% over previous years' retention rates. The College's addition of course-based learning communities and early warning system, along with expansion of living learning communities are likely responsible for these improvements in retention.

The research accomplishments of the college continue on an upward trend. Two faculty from the Dept. of Electrical Engineering, Selcuk Kose and Gokhan Mumcu, received NSF CAREER Awards. For the first time in the college's history research expenditures exceeded \$30M for the year with an increase of more than \$2.2M from the previous year.

Following on the heels of the NSF \$3.9M PIRE wastewater grant awarded last year, Professor Jim Mihelcic is the PI for a \$2.22M grant from the U.S. Environmental Protection Agency to establish a national research center to tackle a dire issue plaguing waterways in Florida and across the country: nutrient pollution from wastewater and storm water runoff. The USF Center for Reinventing Aging Urban Infrastructure for Nutrient Management (*RAINmgt*) will develop integrated research and

demonstration projects focused on nutrient pollution management technologies while also developing regional models that determine appropriate solutions from the household to city levels.

The National Center for Transit Research (NCTR) was selected as a Tier 1 University Transportation Center with a two year designation of \$2.8+M awarded by the U.S. Department of Transport

ation.

The Center for Urban Transportation Research was awarded \$4.5M by the Florida Department of Transportation to implement Florida's Bicycle and Pedestrian Safety Program.

The overall research outlook reinforces our dedication to support the university's research enterprise and we will continue to seek collaborative and focused opportunities in various sectors to diversity the faculty research portfolio.

Lastly, the Alfred P. Sloan Foundation announced this week that it will partner with University of South Florida to create a University Center of Exemplary Mentoring (UCEMs). Initiated through the Foundation's Minority Ph.D. program, the new partnerships are designed to identify universities with a proven track record of successfully educating underrepresented minority graduate students in STEM disciplines and empower these universities to expand, strengthen, and institutionalize efforts aimed at minority recruitment, mentoring, educational support, and professional development. USF is one of only five centers to be established nationwide.

Ensure Academic and Future Professional Success for our Students

ABET Accreditation Visit

The following BS programs in our College underwent an ABET accreditation review this academic year: Chemical Engineering, Civil Engineering, Computer Engineering, Computer Science, Electrical Engineering, Industrial Engineering, and Mechanical Engineering. The ABET teams came on campus September 29 for three days. Prior to the campus visit, the ABET accreditation teams assigned to our engineering and computer science programs had reviewed the self-studies from each of our seven programs throughout the summer.

By the time they left campus, the ABET team had found no weaknesses or deficiencies in any of the programs. We expect that when we received the final report from ABET, sometime in August 2014, all of our programs will be accredited for the maximum six years.

Successful ABET accreditation provides our students and prospective employers assurance that our programs meet the same rigorous criteria that other similar engineering and computer science programs across the country and the world must meet. It is a clear indication of the dedication of our faculty and staff to provide our students with a high quality education.

One-Year Retention Rate

The college retention rate increased 6.62% from 2011. The university overall first-year retention rate is 87% for the 2012 cohort.

		Engr	Engr	Remained@ USF
		TOTAL (BEGIN)	TOTAL (END)	% RETENTION (TOTAL)
summer/fall 2012 cohort	FULL TIME	635	571	89.92
summer/fall 2011 cohort	FULL TIME	497	414	83.3

*Infomart - Final Benchmark: USF calculates their retention using the final benchmark for full-time, FTIC, summer/fall populations.

Significant changes occurred in the way first semester engineering students were introduce to the college between the 2011 and 2012 cohorts, which we think can be attributed to the retention improvement. These include the way we advise and how much we advise, the addition of course-based learning communities, the implementation of an early warning system, the required foundations/orientation course, and the expansion of living learning communities.

Real World Experience: BEST Program

Each BEST project employs five students and the companies pay \$25,000 for the program. Current companies include: CAE, Harris Corporation, OSCOR, and one high profile company that prefers to remain anonymous.

Internships

The following companies have provided the top internship placements during the past academic year:

MOSAIC	Aerosonic Corporation West F	Pharmaceutical Services	
CAE	Sparton Electronics	EarthLinked Technolog	ies
TECO	Duke Energy	Seminole Electric	
Boyd Industries	Raytheon	Microsoft	Apple
Jabil	JP Morgan Chase & Co	Syniverse	

Recognition, Awards and Fellowships

The college ranked in the top five nationally for conferring minority PhDs, according to Diverse Issues in Higher Education's annual listing of top 100 minority graduate degree producers.

The USF student chapter of INFORMS received the 2012-2013 *Summa Cum Laude INFORMS Student Chapter Annual Award*, again this year after winning it last year (2011-2012). This is the highest recognition among all INFORMS Student Chapters worldwide.

Andrea Sanchez, a doctoral candidate in the Department of Civil and Environmental Engineering, is the recipient of a Society of Hispanic Professional Engineers (SHPE) dissertation fellowship award.

Associate Director of Student Services and Diversity Programs Director, **Bernard Batson** received the Sloan Mentor of the Year Award at the 20th Institute of Teaching and Mentoring.

Trang Luong, a third-year civil engineering student and **Melissa Butcher**, an Accelerated Program graduate student, were recently named as two of 10 New Faces of Civil Engineering – College Edition by the American Society of Civil Engineers (ASCE). This recognition program promotes the achievement of young civil engineers by highlighting their academic success, volunteerism, and dedication to making a positive impact on society through their chosen profession. The University of South Florida is the only school with two New Faces this year.

Tylar Murray, doctoral student in electrical engineering has been awarded the Draper Fellowship. The Draper Laboratory Fellow (DLF) Program typically sponsors 50–60 graduate students each year through a Research Assistant position at the student's university.

Michael Grady, a Ph.D. student in the Department of Electrical Engineering, has been selected as one of two winners from a nationwide pool of applicants to receive the IEEE Microwave Theory and Techniques (MTT-S) Graduate Fellowship for Medical Applications for 2014.

Ileana Wald, a junior in the Department of Civil of Environmental Engineering, has been selected to participate in the National Science Foundation (NSF) funded Research Experiences in Undergraduate (REU) Water and Health in Limpopo (WHIL) program. She will spend two months during the summer conducting research on water quality and sanitation in Limpopo, South Africa.

Adrian Johnson, a doctoral candidate in the Department of Computer Science and Engineering, has been accepted into the prestigious 2014 IEEE Virtual Reality (VR) Doctoral Consortium. The purpose of the doctoral consortium is to help prepare participants to succeed in their research careers and strengthen their ability to effectively lead the VR community in the future.

Students throughout the Southeastern United States and Puerto Rico met on the University of South Florida Tampa campus for three days as the USF Civil and Environmental Engineering Dept. hosted the annual American Society of Civil Engineers **2014 Southeast Student Conference**.

Achieve and Sustain National Recognition in Research

NSF CAREER Awards

Electrical Engineering Assistant Professor **Gokhan Mumcu** received a CAREER Award from the National Science Foundation for his proposal: "Microfluidically Loaded Highly Reconfigurable Compact RF Devices." The four-year award totals \$400,000.

Electrical Engineering Assistant Professor **Selcuk Kose** has been awarded a five-year CAREER Award from the National Science Foundation. Kose's award totals \$450,000 over the five years.

Other Awards

Richard Gitlin, professor in the Electrical Engineering Dept. and member the National Academy of Engineering received the Distinguished University Professor honor.

Professor **Babu Joseph** and Assistant Professor **John Kuhn**, both of the Chemical and Biomedical Engineering Dept., received the Excellence in Innovation Award.

Arash Takshi, assistant professor in the Electrical Engineering Dept. received the Outstanding Undergraduate Teaching Award.

Srinivas Katkoori, professor in the Computer Science and Engineering Dept., received the Jerome Krivanek Distinguished Teacher Award.

Autar Kaw, professor in the Mechanical Engineering Dept. received the Kosove Distinguished Undergraduate Teaching and Service Award.

David Eddins, interdisciplinary biomedical engineering professor from the Dept. of Communication Sciences and Disorders, received the Outstanding Faculty Research Achievement Award.

Distinguished University Professor, **Yogi Goswami**, PhD, PE, was granted Fellow of the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE). Fellow ASHRAE is a membership grade that recognizes members who have attained distinction ad made substantial contributions in HVAC&R and the built environment such as education, research, engineering design and consulting, invention, engineer executive on significant projects, publications, presentations and mentoring.

Laura Byrnes-Blanco, a senior in the Department of Mechanical Engineering, has been awarded a prestigious NSF Graduate Research Fellowship. NSF received over 14,000 applications for the 2014 Graduate Research Fellowship Program (GRFP) competition, and made 2,000 fellowship award offers.

Michael Esteban, a fourth-year student in the Department of Civil and Environmental Engineering, has been awarded a summer internship position in the 2014 Re-Inventing the Nation's Urban Water Infrastructure (ReNUWIt)'s Research Experiences for Undergraduates (REU) program at the Colorado School of Mines.

The **USF Wastewater Design Team** received a first place win in the Florida Water Environment Association (FWEA) design competition, which was held at the Florida Water Resources Conference in Orlando

Significant Research Grants

The University of South Florida's Center for Urban Transportation Research (CUTR) has successfully competed for a two year, \$2.8 million federal grant to continue work done through its National Center for Transit Research (NCTR). USF is one of only 35 universities to be selected to receive a University Transportation Center grant from the U.S. Department of Transportation in 2013. The grant allows for the continuation of a program that started at USF in 1991, but requires recipients to be selected through a national competition from more than 100 universities throughout the United States. USF has prevailed in all four competitions conducted for Tier I University Transportation Center grants since 2002, and is the only university in the country to have done so.

Christopher Passaglia, associate professor in the Department of Chemical and Biomedical Engineering, is the recipient of a \$388,769 grant from the National Eye Institute/National Institutes of Health.

Establish Essential Operational Infrastructure to Achieve the College's Vision

Significant Gifts to the College

The College's Development Office continues to engage with organizations and alumni around the country. In addition to these significant contributions listed, the development team has met with engineering alumni groups in Atlanta and San Francisco.

Endowment

Delbert Kimbler, PhD, a 1976 USF graduate in industrial engineering, created a \$250,000 endowment which established the Del and Beth Kimbler Lecture Series in Industrial and Management Systems Engineering. Dr. Kimbler is a professor emeritus at Clemson University. Standing with Dr. Kimbler is one of his former USF graduate students, Professor Tapas Das, who is now chair of the Industrial and Management Systems Dept.

Faculty Research and Engagement Grant

YAHOO!

Associate Professor of Computer Science and Engineering, **Anda Iamnitchi**, received the Yahoo Faculty Research and Engagement Program Grant for her proposal "Understanding and Mitigating the Social Contagion of Unethical Behavior in User-Generated Content Systems."

New Scholarships

Alvin and **Jennifer Agana**, along with **Bijan Barrera**, present a check to interim Dean Rafael Perez to establish the Michael Agana Memorial Scholarship Fund.



The American Society of Mechanical Engineers established a scholarship for Mechanical Engineering Students

USF Alum **Myra Cooley '72** and her husband, Mack, established the Myra and Mack Cooley Scholarship Fund

METRICS

US News and World Report Best Engineering Schools Rankings Ranking Metrics for University of South Florida

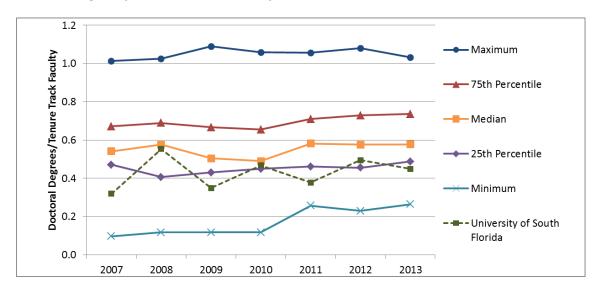
	2014	2015	Change (20)14-2015)
Rank	105	110	DOWN	5
Public Rank	69	73	DOWN	4
Score	20	20	NO CHANGE	
Total graduate engineering enrollment	822	865	UP	43
Research expenditures per faculty member	\$269,790	\$285,766	UP	\$15,976
Engineering school research expenditures	\$28,327,966	\$30,577,000	UP	\$2,249,03 4
Average quantitative GRE score of new entrants in both master's and doctoral programs	739 (old) 156 (new)	730 (old) 158 (new)	DOWN UP	9 2
Overall acceptance rate	47.60%	50.3%	UP	2.7%
Faculty membership in National Academy of Engineering	.93 %	.90 %	DOWN	0.03%
Peer assessment score (5.0=highest)	2.2	2.2	NO CHANG	ìΕ
Recruiter assessment score (5.0=highest)	2.4	2.5	UP	.1
Ph.D. students/faculty	3.1	3.0	DOWN	0.1
Ph.D.'s granted	53	49	DOWN	4
Fall FT TT Faculty	107	110	UP	3
Fall FT Master's Students	280	327	UP	47
Master's students/faculty	2.6	2.97	UP	.37
Tuition	In-state, full-time: \$10,410 per year Out-of-state, full- time: \$20,600 per year	In-state, full-time: \$10,428 per year Out-of-state, full- time: \$21,126 per year	In-state, f UP \$18 p Out-of-state UP \$526	ber year e, full-time:

Source: U.S. News & World Report 2015 Rankings Engineering Graduate Programs

2015 Rankings of Florida Universities with Graduate Engineering Programs

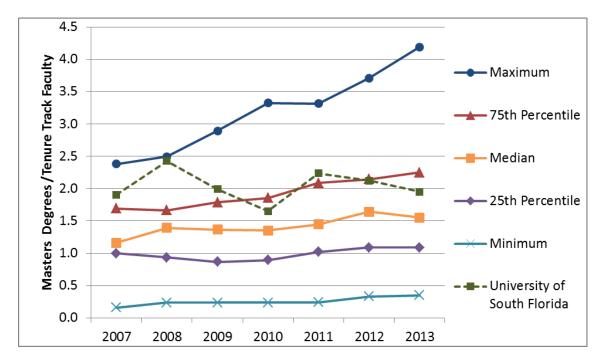
		Rank				
	2010	2011	2012	2013	2014	2015
University of Florida	25	30	30	35	38	42
University of Central Florida	86	73	70	72	72	81
Florida State University/Florida A&M University		102	92	102	112	102
University of South Florida		119	112	109	105	110
University of Miami		116	122	121	116	116
Embry Riddle		RNP	RNP	RNP	RNP	129
Florida Atlantic University		RNP	RNP	RNP	RNP	RNP
Florida Institute of Technology		RNP	RNP	RNP	RNP	RNP
Florida International University		RNP	RNP	RNP	RNP	RNP
Total Ranks	90	137	138	144	143	140
Total Schools Ranked	95	143	151	150	147	145
Total Schools	198	198	198	198	199	211
From 2013 to 2014						
Schools USF moved above:						
University of Maryland-Baltimore County		107	118	119	105	116
Wichita State University		94	107	102	105	116
Schools USF moved down to tie with:						
Tulane University-New Orleans		107	112	102	105	110
CUNY-City College (Grove)		129	102	109	105	110
Schools that moved up to tie with USF:						
Oklahoma State University		109	112	109	112	110
University of Alabama		107	122	109	112	110
George Mason University		121	125	114	112	110
ı - '						

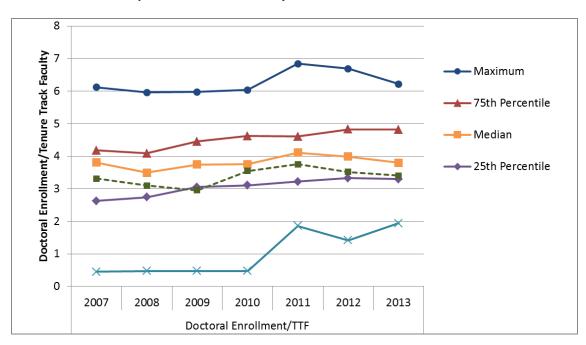
Source: U.S. News & World Report 2015 Rankings



Doctoral Degrees per Tenure Track Faculty

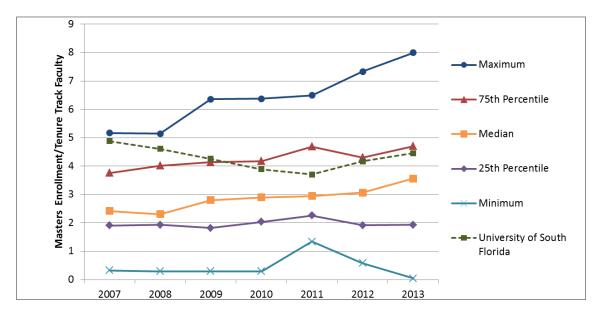
Master's Degrees per Tenure Track Faculty



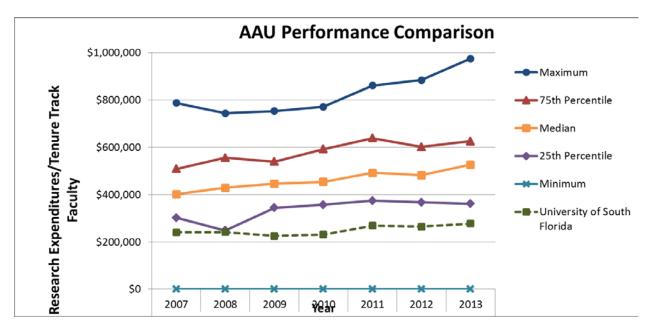


Doctoral Enrollment per Tenure Track Faculty

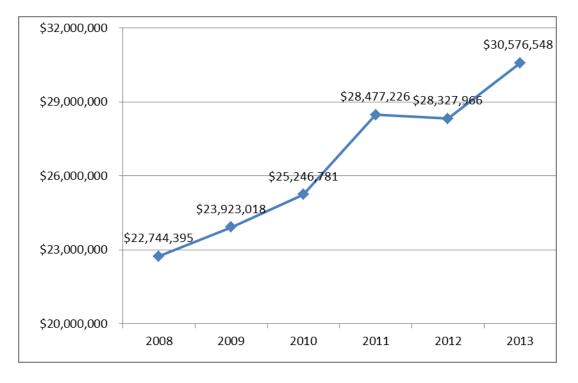
Master's Enrollment per Tenure Track Faculty



Research Expenditures per Tenure Track Faculty



Research Expenditures



1. Student Enrollment

		AY		SCH			AY		SCH			AY		SCH			Y
	SCH	FTE		2011-2012		SCH	FTE		2012-2013		SCH	FTE	Current v)14) - Actual	SCH	FTE*
			Summer	Fall	Spring			Summer	Fall	Spring			Summer	Fall	Spring		
	2010/2011	2010/2011	2011	2011	2012	2011/2012	2011/2012	2012	2012		2012/2013	2012/2013	2013	2013	2014	2013/2014	2013/2014
			Final	Final	Final			Final	Final	Final			Final	Final	Preliminary		
Engineering																	
Lower Level	4,126	103	663	1,773	1,746	4,182	105	459	1,515	1,663	3,637	91	387	1,497	1,416	3,300	83
Upper Level	41,119	1,028	5,983	17,632	18,429	42,044	1,051	6,381	18,799	20,544	45,724	1,143	6,257	21,270	21,797	49,324	1,233
Grad I	7,464	233	791	3,193	2,857	6,841	214	858	3,489	2,894	7,241	226	760	3,545	3,653	7,958	249
Grad II	6,999	219	1,188	2,924	2,916	7,028	220	1,084	2,866	2,691	6,641	208	825	2,842	2,689	6,356	199
Total	59,708	1,583	8,625	25,522	25,948	60,095	1,589	8,782	26,669	27,792	63,243	1,668	8,229	29,154	29,555	66,938	1,763
Internal %																	
Lower Level	6.9%	6.5%	7.7%	6.9%	6.7%	7.0%	6.6%	5.2%	5.7%	6.0%	5.8%	5.5%	4.7%	5.1%	4.8%	4.9%	4.7%
Upper Level	68.9%	64.9%	69.4%	69.1%	71.0%	70.0%	66.1%	72.7%	70.5%	73.9%	72.3%	68.5%	76.0%	73.0%	73.8%	73.7%	69.9%
Grad I	12.5%	14.7%	9.2%	12.5%	11.0%	11.4%	13.5%	9.8%	13.1%	10.4%	11.4%	13.6%	9.2%	12.2%	12.4%	11.9%	14.1%
Grad II	11.7%	13.8%	13.8%	11.5%	11.2%	11.7%	13.8%	12.3%	10.7%	9.7%	10.5%		10.0%	9.7%	9.1%	9.5%	11.3%
Total	100%		14.4%	42.5%	43.2%	100%		13.9%	42.2%	43.9%	100%		12.3%	43.6%	44.2%	100%	
Change from Prior																	
Lower Level	-4.8%		-7.9%		5.0%	1.4%		-30.8%	-14.6%	-4.8%	-13.0%		-15.7%	-1.2%	-14.9%	-9.3%	
Upper Level	2.4%		-3.6%		3.5%	2.2%		6.7%	6.6%	11.5%	8.8%		-1.9%	13.1%	6.1%	7.9%	
Grad I	-20.0%		-15.9%	-7.0%	-7.5%	-8.3%		8.5%	9.3%	1.3%	5.8%		-11.4%	1.6%	26.2%	9.9%	
Grad II	52.8%		23.4%	-4.3%	-2.2%	0.4%		-8.8%	-2.0%	-7.7%	-5.5%		-23.9%	-0.8%	-0.1%	-4.3%	
Total	2.2%		-2.3%	0.7%	1.6%	0.6%		1.8%	4.5%	7.1%	5.2%		-6.3%	9.3%	6.3%	5.8%	

Fall Student Headcount by Residency

		Und	dergradua	te		Graduate					Total				
	In-Sta	te	Out-St	ate		In-State		Out-St	ate		In-State		Out-State		
	Headcount	%	Headcount	%	Total UG	Headcount	%	Headcount	%	Total Grad	Headcount	%	Headcount	%	Total
Fall 2009	2,766	95%	132	5%	2,898	490	64%	277	36%	767	3,256	89%	409	11%	3,665
Fall 2010	2,766	95%	146	5%	2,912	485	59%	335	41%	820	3,251	87%	481	13%	3,732
Fall 2011	2,795	94%	164	6%	2,959	447	56%	350	44%	797	3,242	86%	514	14%	3,756
Fall 2012	3,125	93%	220	7%	3,345	436	53%	391	47%	827	3,561	85%	611	15%	4,172
Fall 2013	3,399	91%	329	9%	3,728	425	49%	449	51%	874	3,824	83%	778	17%	4,602

Fall Student Headcount Trends

	Undergraduate	Masters	Doctoral Research	Total
Fall 2009	2,898	452	315	3,665
Fall 2010	2,912	431	389	3,732
Fall 2011	2,959	395	402	3,756
Fall 2012	3,345	452	375	4,172
Fall 2013	3,728	500	374	4,602

						-			
	ر ب	InderGraduate			Graduate	Total			
	Full-Time	Part-Time	Total	Full-Time	Part-Time	Total	Full-Time	Part-Time	Total
Fall 2009	2,252	646	2,898	474	293	767	2,726	939	3,665
Fall 2010	2,322	590	2,912	527	293	820	2,849	883	3,732
Fall 2011	2,378	581	2,959	531	266	797	2,909	847	3,756
Fall 2012	2,679	666	3,345	520	307	827	3,199	973	4,172
Fall 2013	2,940	788	3,728	531	343	874	3,471	1,131	4,602

Fall Student Headcount Percentages (Full-Time/Part-Time)

	UnderGr	aduate	Grad	luate	Total		
	% Full-Time % Part-Time		% Full-Time % Part-Time		% Full-Time	% Part-Time	
Fall 2009	78%	22%	62%	38%	74%	26%	
Fall 2010	80%	20%	64%	36%	76%	24%	
Fall 2011	80%	20%	67%	33%	77%	23%	
Fall 2012	80%	20%	63%	37%	77%	23%	
Fall 2013	79%	21%	61%	39%	75%	25%	

Tuition and Waiver

Engineering	Gross Revenue	Total Waivers	Net Revenue
FY 11			
Total Undegraduate	\$ 6,001,211	\$ (166,292)	\$ 5,834,919
Total Graduate	\$ 4,517,588	\$ (1,692,229)	\$ 2,825,359
Grand Total	\$ 10,518,800	\$ (1,858,521)	\$ 8,660,278
FY 12			
Total Undegraduate	\$ 6,653,086	\$ (85,595)	\$ 6,567,491
Total Graduate	\$ 5,282,760	\$ (1,761,189)	\$ 3,521,570
Grand Total	\$ 11,935,846	\$ (1,846,785)	\$ 10,089,061
FY 13			
Total Undegraduate	\$ 8,062,671	\$ (129,728)	\$ 7,932,943
Total Graduate	\$ 6,135,412	\$ (1,951,775)	\$ 4,183,637
Grand Total	\$ 14,198,084	\$ (2,081,503)	\$ 12,116,580
FY 14 (Estimated)			
Total Undegraduate	\$ 8,592,386	\$ (138,251)	\$ 8,454,135
Total Graduate	\$ 6,306,896	\$ (2,006,327)	\$ 4,300,569
Grand Total	\$ 14,899,282	\$ (2,144,578)	\$ 12,754,704
FY 15 (Estimated)		· · ·	
Total Undegraduate	\$ 8,351,603	\$ (134,377)	\$ 8,217,226
Total Graduate	\$ 6,130,159	\$ (1,950,104)	\$ 4,180,055
Grand Total	\$ 14,481,762	\$ (2,084,481)	\$ 12,397,281

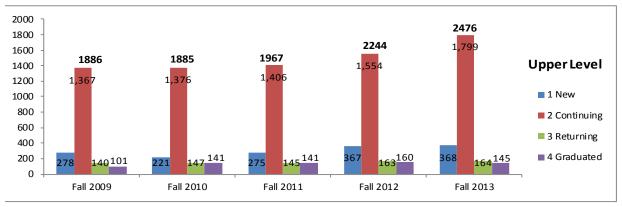
Student Flow

Engineering

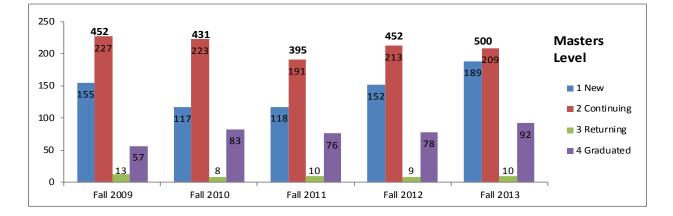
		2009-10	2010-11	2011-12	2012-13	2013-14*
	Undergraduate	3,051	3,076	3,247	3,799	4,126
Annual Unduplicated	Master	574	575	539	580	699
Headcounts	Research Doctoral	363	433	445	412	415
	Total	3,988	4,084	4,231	4,791	5,240

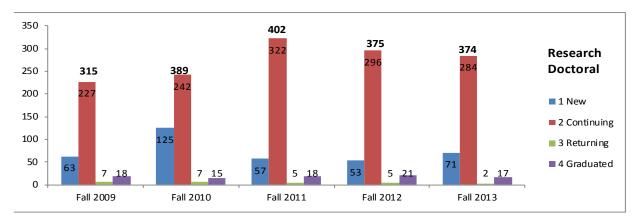
Source: USF InfoCenter

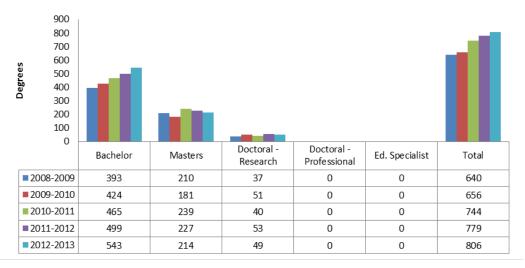
*For 2013-14 annual unduplicated headcounts, spring 2013 data is based on preliminary benchmark



Student Flow Pivot Chart for Each Degree Level





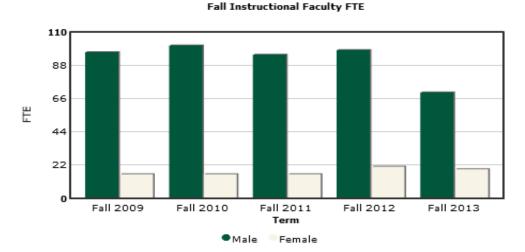


Degrees Awarded Trends

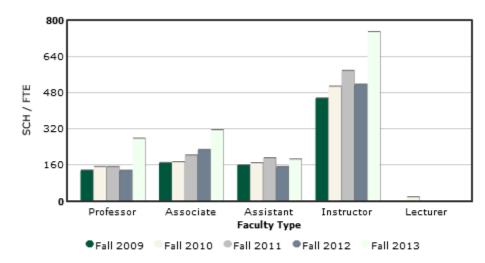
Degree Awarded by Areas of Strategic Emphasis

Strategic	Strategic Emphasis Group		2009-2010	2010-2011	2011-2012	2012-2013
	Bachelor	393	424	465	499	543
STEM	Doctoral - Research	37	51	40	53	49
	Masters	210	181	239	227	214

2. Instructional Productivity

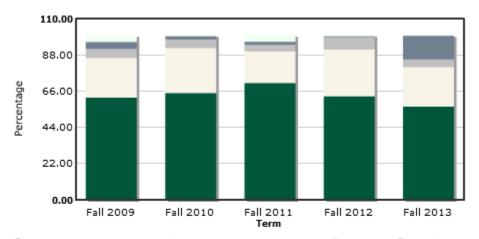


TERM MALE FEMALE TOTAL DETAIL FALL 2009 96.63 16.00 112.63 DETAIL FALL 2010 100.97 16.00 116.97 DETAIL FALL 2011 94.92 16.00 110.92 DETAIL FALL 2012 97.89 21.00 118.89 DETAIL FALL 2013 69.96 19.22 89.18 DETAIL



Fall SCH Per Ranked Instructional FTE

TERM	PROFESSOR	ASSOCIATE	ASSISTANT	INSTRUCTOR	LECTURER
FALL 2009	136.04	169.10	158.54	453.48	0.00
FALL 2010	151.69	172.35	168.19	505.64	18.00
FALL 2011	151.50	202.67	189.99	575.00	0.00
FALL 2012	134.35	226.76	151.26	514.20	0.00
FALL 2013	275.91	313.57	184.69	746.51	0.00



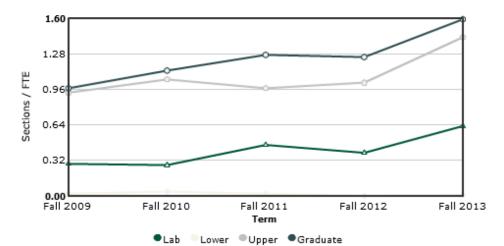
Percentage of SCH by Instructor Type

Faculty - Tenured/Earning Faculty - Non Tenure Earning Adjuncts GA Others

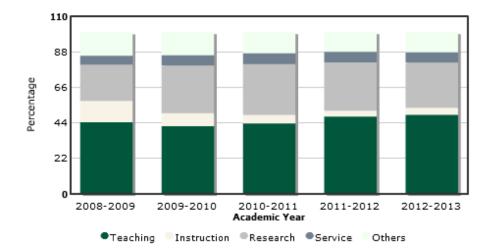
TERM	TEN/EARN	NON TEN	ADJUNCTS	GA	OTHER
FALL 2009	61.94	24.04	5.55	4.20	4.27
FALL 2010	64.68	27.42	5.21	1.79	0.90
FALL 2011	70.84	19.32	3.85	1.75	4.24
FALL 2012	62.75	28.34	7.62	0.51	0.78
FALL 2013	56.49	23.95	4.72	14.36	0.47

21-Engineering		Fall 2011			Fall 2012			Fall 2013	
Department	Total UG SCH	UG SCH by FT Faculty	Percent by FT Faculty	Total UG SCH	UG SCH by FT Faculty	Percent by FT Faculty	Total UG SCH	UG SCH by FT Faculty	Percent by FT Faculty
2101 College Of Engineering	933	804	86.2%	490	490	100.0%	69	69	100.0%
2103 Industrial & Mgmt Systems	3,082	2,537	82.3%	3,446	2,895	84.0%	3,852	2,864	74.4%
2104 Civil & Environmental Engr	4,081	3,970	97.3%	3,673	3,055	83.2%	7,696	3,382	43.9%
2105 Mechanical Engineering	3,231	2,988	92.5%	3,371	3,336	99.0%	3,816	3,663	96.0%
2106 Electrical Engineering	3,571	3,247	90.9%	3,706	3,529	95.2%	3,563	3,263	91.6%
2107 Chemical & Biomedical Engnmg	1,901	1,901	100.0%	2,194	2,066	94.2%	3,677	3,677	100.0%
2108 Computer Science Engineering	3,981	3,858	96.9%	4,439	4,369	98.4%	4,319	4,319	100.0%
2111 Engineering Research							14		0.0%
2114 Engr Diversity & Outreach	47		0.0%						
2116 Engineering Academic Advising							27		0.0%
2117 Ctr For Urban Transportation							108	108	100.0%
21-Engineering Total	20,827	19,305		21,319	19,740		27,141	21,346	
* Tampa Only									

Fall Sections Per Tenured/Earning Faculty FTE



TERM	LAB	LOWER	UPPER	GRAD	TOTAL
FALL 2009	0.29	0.02	0.93	0.97	2.21
FALL 2010	0.28	0.04	1.05	1.13	2.49
FALL 2011	0.46	0.02	0.97	1.27	2.72
FALL 2012	0.39	0.00	1.02	1.25	2.65
FALL 2013	0.63	0.01	1.43	1.59	3.66



Percentage of Activity for Ranked Faculty by Activity Type

ACADEMIC YEAR	TEACHING	INSTRUCTION	RESEARCH	SERVICE	OTHER
2008-2009	44.35	13.19	22.46	5.54	14.45
2009-2010	41.96	8.07	29.49	6.28	14.20
2010-2011	43.55	5.42	31.36	6.69	12.98
2011-2012	47.89	3.66	29.88	6.46	12.11
2012-2013	48.92	4.47	28.00	6.23	12.38

Faculty Activity Groupings

Teaching	Credit bearing course delivery, supervision of teaching and interns, directed study, thesis, dissertation
Instruction	Advising, course prep, curriculum development, non-credit instruction, co-op and teaching medical residents
Research	Funded Research, departmental research
Service	Public service, state mandated service, clinical service
Other	University governance, academic administration, release, paid patient care, release UFF, leave of absence

3. Space Utilization, Class Size and Sections by Start Time

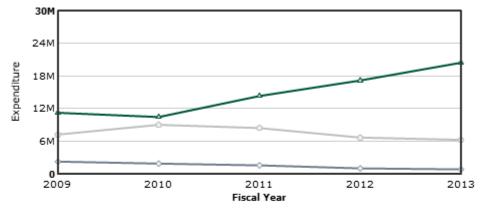
Class Size - Fall 2013

Sections – Class, Lab, and Discussion									
Enrollment	0 - 9	10 - 19	20 - 29	30 – 39	40 - 49	50 - 99	100 +	Total Sections	Mean Enrollment
Undergraduate	12%	19%	15%	11%	13%	24%	5%	182	50.52
Graduate	55%	30%	11%	2%	1%	0%	0%	92	17.9
TOTAL	26%	23%	14%	8%	9%	16%	3%	275	39.54

Classroom Sections by Start Time - Fall 2013

Effective Sect	ions Offe	ered														
Day and Time	8 AM	9 AM	10 AM	11 AM	Morning Sections	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	Afternoon Sections	6 PM	7 PM	8 PM	Evening Sections
Monday	3	5	4	12	24	5	0	10	13	9	2	39	8	0	0	8
Tuesday	11	18	0	14	43	20	0	14	9	1	5	49	4	0	0	4
Wednesday	3	5	4	11	23	6	0	9	14	8	1	38	5	0	0	5
Thursday	11	19	0	13	43	21	0	13	8	1	4	47	7	0	0	7
Friday	4	9	4	7	24	2	0	8	2	0	0	12	1	0	0	1
Total	32	56	12	57	157	54	0	54	46	19	12	185	25	0	0	25

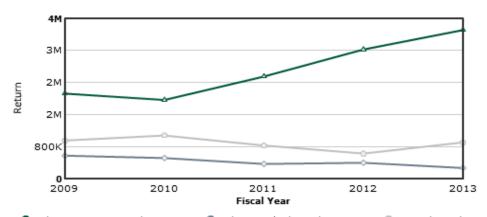
4. Research Productivity



Federal and Non-Federal R and D Expenditures

Federal Competitive R and D Expenditures
 Non-Federal R and D Expenditures

FISCAL YEAR	FEDERAL COMPETITIVE AMOUNT (\$)	FEDERAL EARMARKED AMOUNT (\$)	NON-FEDERAL AMOUNT (\$)	TOTAL R AND D AMOUNT (\$)
2009	11,246,674	2,277,623	7,236,450	20,760,747
2010	10,469,166	1,896,216	9,008,102	21,373,485
2011	14,312,552	1,585,540	8,446,532	24,344,624
2012	17,147,539	1,024,286	6,671,013	24,842,838
2013	20,412,951	842,848	6,253,059	27,508,858



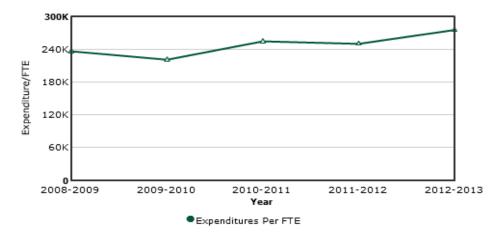
F and A Returns

 Fed Competitive F and A Returns
 Fed Earmarked F and A Returns
 NonFed F and A Returns

FISCAL YEAR	FED COMPETITIVE AMOUNT (\$)	FED EARMARKED AMOUNT (\$)	NON FED AMOUNT (\$)	TOTAL F AND A AMOUNT (\$)
2009	2,125,750	577,939	953,244	3,656,933
2010	1,965,434	518,291	1,080,192	3,563,917
2011	2,553,308	370,644	827,577	3,751,529
2012	3,222,050	397,728	627,044	4,246,822
2013	3,712,103	268,903	908,215	4,889,221

Percentage of	Percentage of F&A within R&D							
Fiscal Year	Fed Comp Amount (%)	Fed Earmarked Amount (%)	Non-Fed Amount (%)	Total Amount (%)				
2009	18.90	25.37	13.17	17.61				
2010	18.77	27.33	11.99	16.67				
2011	17.84	23.38	9.80	15.41				
2012	18.79	38.83	9.40	17.09				
2013	18.19	31.90	14.52	17.77				

R and D Expenditures Per Tenured/Tenure Earning Faculty FTE



YEAR	EXP/FTE (\$)
2008-2009	236,237.45
2009-2010	220,827.61
2010-2011	254,278.50
2011-2012	249,726.96
2012-2013	275,250.70

Proposals and Awards

Fiscal year	Proposals	Proposals % Change	roposals % Change Awards	
2009	309	0%	88	0%
2010	344	11%	92	4%
2011	327	-4%	102	10%
2012	313	-4%	101	0%
2013	326	4%	93	-7%
* 2014	263	-19%	86	-7%

Fiscal year	Requested Amount (\$)	Req % Change	Awarded Amount (\$)	Awards % Change
2009	115,238,287	0%	21,273,102	0%
2010	107,710,956	-7%	22,282,334	5%
2011	154,870,830	44%	27,912,588	25%
2012	152,253,506	-2%	28,939,262	4%
2013	116,502,480	-23%	55,726,727	93%
* 2014	108,223,597	-7%	24,170,497	-57%

5. Post-Doctoral Appointments

Postdocs:

	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013
Engineering	19	15	13	15	10

6. National Academy Members and Faculty Awards

Faculty	Award	Award Year	College	Award Type
Sudeep Sarkar	AAAS Fellow	2013-2014	Engineering	AAU, NRC
Gokhan Mumcu	NSF CAREER Award	2013-2014	Engineering	AAU, TARU, NRC
Selcuk Kose	NSF CAREER Award	2013-2014	Engineering	AAU, TARU, NRC
Alex Savachkin	IIE Annual Award for Excellence in the Teaching of Operations Research	2013-2014	Engineering	Others
Gray Mullins	C. William Bermingham Innovation Award	2013-2014	Engineering	Others
Sudeep Sarkar	IEEE Fellow	2013-2014	Engineering	Others
Yogi Goswami	ASME Technical Communities Globalization Medal	2013-2014	Engineering	Others
Kalanithy Vairavamoorthy	Water Hero	2012-2013	Engineering	AAU
Lawrence Hall	AAAS Fellow	2012-2013	Engineering	AAU, NRC
Nagarajan Ranganathan	AAAS Fellow	2012-2013	Engineering	AAU, NRC
Yicheng Tu	NSF CAREER Award	2012-2013	Engineering	AAU, TARU, NRC
Venkat Bhethanabotla	American Institute of Chemical Engineers Fellow	2012-2013	Engineering	NRC
Autar Kaw	U.S. Professor of the Year	2012-2013	Engineering	Others
Carlos Smith	Fulbright Specialist	2012-2013	Engineering	Others
Lawrence Hall	Norbert Wiener Award	2012-2013	Engineering	Others
Rajan Sen	Jefferson Science Fellow	2012-2013	Engineering	Others
Richard Gitlin	NAI Fellow	2012-2013	Engineering	Others
Yogi Goswami	NAI Fellow	2012-2013	Engineering	Others
Yogi Goswami	AAAS Fellow	2011-2012	Engineering	AAU, NRC
Craig Lusk	NSF CAREER Award	2011-2012	Engineering	AAU, TARU, NRC
Nathan Gallant	NSF CAREER Award	2011-2012	Engineering	AAU, TARU, NRC
Abraham Kandel	Fuzzy Systems Pioneer Award	2011-2012	Engineering	Others
Autar Kaw	ASEE National Outstanding Teaching Medal	2011-2012	Engineering	Others
Daniel Yeh	Bill and Melinda Gates Foundation Award	2011-2012	Engineering	Others
Yogi Goswami	ISES Special Service Award	2011-2012	Engineering	Others

7. Fund Raising

GOAL vs. ATTAINMENT - FY 2012, FY2013, FY 2014 To Date

		FY 2012			FY 2013		FY 2014 to Date			
College	Goal	Attainment	% Achieved	Goal	Goal Attainment		Goal	Attainment	% Achieved	
Engineering	\$27,058,000	\$27,319,233	101.0%	\$26,827,500	\$ 28,082,631	104.7%	\$ 22,400,000	\$27,789,681	124%	

FISCAL YEAR COMPARISON - FY 2013 & FY 2014

	FY 2013	FY 2014	
College	as of 3/22	as of 3/22	% Change
Engineering	\$ 27,232,339	\$ 27,789,681	2.05%

UNSTOPPABLE CAMPAIGN PROGRESS TO DATE

	Campaign	Progress	% of Goal	
College	Goal	to Date	Achieved	
Engineering	\$ 213,250,559	\$ 129,040,240	61%	

Source: USF Foundation, College Fundraising Reports as of 3/22/14

8. Budget

Engineering, Fall Employee Headcount

	F2009	F2010	F2011	F2012	F2013
Instructional Faculty					
Professor	43	49	46	46	48
Associate Professor	22	21	27	30	32
Assist Professor	35	35	30	30	27
Instructor	11	10	8	14	14
Lecturer	2	2			
Ranked Instructional Faculty	113	117	111	120	121
Other & Non-Instructional Faculty	57	59	55	53	57
Faculty Adjunct	17	11	9	14	13
Graduate Assistant	337	382	340	314	334
A&P	40	46	48	51	53
USPS	52	55	55	54	47
OPS Other	39	42	51	74	62
Student Assistant	133	145	135	216	211
Total	788	857	804	896	898

College of Engineering 2014 Review

2011-12 Operating Budgets College of Engineering						
College of Engineering			College of Enginee	ring		
Combined E&G and CF	Budget	AA Pending Transfers	Expenses Actual & Planned	RSA	Expense Change	2
SALARIES (w/o benefits) Instructional Faculty	14,728,519	0	14,481,624	246,895	898,085	7%
Instructional Adjunct	442,700	0	329,283	113,417	8,987	3%
GA	2,605,106	0	2,143,692	461,414	(625,342)	-23%
Non-Instructional Faculty	0	0	0	0	0	
Non Instructional Staff	3,782,796	0	3,929,887	(147,091)	154,390	4%
Non Instructional OPS Other	436,843	<u>0</u>	539,448	(<u>102,605</u>)	(<u>46,876</u>)	-8%
Subtotal	21,995,964	0	21,423,934	572,030	389,244	29
Fringe & Awards/Bonus CF ONLY						
Subtotal	4,754,124	0	4,574,302	179,822	(435,968)	-9%
EXPENSE Other Operating Expense	1,237,069	0	1 350 508	(112 520)	(77,783)	-5%
Travel	358,405	0	1,350,598 347,399	(113,529) 11,006	24,983	-37
Equipment -OCO	511,265	0	405,244	106,021	(466,900)	-54%
Library Resources	12,125	0	8,925	3,200	8,925	
Financial Aid/Scholarships	362,962	0	129,675	233,287	4,093	3%
Other	2,670,700	0	2,104,695	566,004	1,136,711	117%
Subtotal	5,152,526	0	4,346,538	805,989	630,028	17%
TOTAL E&G and Carryforward	31,902,615	0	30,344,774	1,557,841	583,305	2%
2012 12 Operating Budgets						
2012-13 Operating Budgets						
College of Engineering			College of Engineering			
		AA Pending	Expenses			
Combined E&G and CF	Budget	Transfers	Actual & Planned	RSA	Expense Change	2
SALARIES (w/o benefits)						
Instructional Faculty	14,670,485	0	13,718,784	951,701	(762,840)	-5%
Instructional Adjunct	315,711	0	339,689	(23,978)	10,406	3%
GA Non-Instructional Faculty	1,891,866	0	2,049,958	(158,092)	(93,733) 0	-4%
Non Instructional Staff	3,346,384	0	3,520,008	(173,624)	(409,879)	-10%
Non Instructional OPS Other	443,292	0	551,976	(108,684)	12,528	2%
Subtotal	20,667,739	0	20,180,415	487,323	(1,243,519)	-6%
Fringe & Awards/Bonus CF ONLY Subtotal	4,480,811	0	4,071,406	409,405	(502,896)	-11%
Subtotal	4,460,811	0	4,071,406	409,403	(302,890)	-11%
EXPENSE						
Other Operating Expense	1,173,365	0	937,313	236,052	(413,286)	-31%
Travel	180,969	0	256,540	(75,570)	(90,860)	-26%
Equipment -OCO	299,815	0	218,506	81,309	(186,739)	-46%
Library Resources	4,500	0	0	4,500	(8,925)	-100%
Financial Aid/Scholarships	295,202	0	108,916	186,286	(20,759)	-16%
Other Subtotal	(<u>87,171</u>) 1,866,681	<u>0</u> 0	<u>245,028</u> 1,766,302	(<u>332,198</u>) 100,379	(<u>1,859,667</u>) (2,580,235)	-88%
		0	1,700,302			-337
TOTAL E&G and Carryforward	27,015,230	0	26,018,123	997,107	(4,326,650)	-14%
2013-14 Operating Budgets						
College of Engineering						
			College of Engineering			
Combined E&G and CF	Budget	AA Pending Transfers	Expenses Actual & Planned	RSA	Expense Change	2
SAI ARIFS (w/o benefits)						
	14 266 775	0	13,545 762	546 353	(173 022)	-1%
Instructional Faculty	14,266,775 383,158	0	13,545,762 520,536	546,353 (137,378)	(173,022) 180,848	
	383,158	0	13,545,762 520,536 1,957,137	(137,378)	180,848	55%
Instructional Adjunct		0	520,536			55%
Instructional Faculty Instructional Adjunct GA	383,158 1,628,993	0	520,536 1,957,137	(137,378) (328,144)	180,848 (92,821)	55% -4%
Instructional Faculty Instructional Adjunct GA Non-Instructional Faculty	383,158 1,628,993 0	0 0 0	520,536 1,957,137 18,000	(137,378) (328,144) (18,000)	180,848 (92,821) 18,000	-1% 55% -4% -8% -14%

153,655 4,400 89,195 549,946 1,703,154	0 0 0 0 0	70,239 0 102,757 <u>367,746</u> 1,597,406	83,416 4,400 (13,562) 392,773 262,321	(148,267) 0 (6,159) 122,718 (168,896)	
153,655 4,400 89,195 549,946	0 0 <u>0</u>	70,239 0 102,757 <u>367,746</u>	4,400 (13,562) 392,773	0 (6,159) 122,718	-37% 0% -5% 6%
153,655 4,400	0	70,239 0	4,400	0	-37% 0%
153,655	-	70,239		(148,267)	-37%
	0		83,416	(148,267)	-37%
33,201					
93 287	0	185,902	(92,615)	(70,637)	-20%
812,671	0	870,762	(112,091)	(66,551)	-5%
4,149,134	0	4,495,081	(345,947)	423,675	9%
20,134,992	0	19,718,290	120,129	(462,126)	-2%
	<u>0</u>			· · · · · · · · · · · · · · · · · · ·	-14%
3,218,552	0	3,202,401		(317,608)	-8%
0	0	18,000	(18,000)	18,000	
	3,218,552 637,514 20,134,992 4,149,134 812,671	3,218,552 0 637,514 0 20,134,992 0 4,149,134 0 812,671 0	3,218,552 0 3,202,401 637,514 0 474,453 20,134,992 0 19,718,290 4,149,134 0 4,495,081 812,671 0 870,762	3,218,552 0 3,202,401 (105,762) 637,514 0 474,453 163,061 20,134,992 0 19,718,290 120,129 4,149,134 0 4,495,081 (345,947) 812,671 0 870,762 (112,091)	3,218,552 0 3,202,401 (105,762) (317,608) 637,514 0 474,453 163,061 (77,523) 20,134,992 0 19,718,290 120,129 (462,126) 4,149,134 0 4,495,081 (345,947) 423,675 812,671 0 870,762 (112,091) (66,551)

			Unique	Person					Research		Term Salary
Instructor Grouping	Term Grouping	Faculty Group	Record	Years (FTE)	SCH	%	SCH/FTE	Sal/SCH	Expenditures	Rsch/FTE	w/ benefits
Instructional Faculty	FL-SP	Professor	51	34	14,552	29.9%	427	\$510	6,264,566	183,766	7,420,555
		Associate	22	15	6,532	13.4%	450	\$337	1,976,829	136,052	2,198,152
		Assistant	38	27	11,093	22.8%	411	\$340	3,167,546	117,491	3,771,825
		Instructor	15	9	12,538	25.7%	1384	\$78	19,752	2,180	976,772
		Lecturer	2	1	36	0.1%	40	\$1,494	0	0	53,788
		Adjunct	14	2	2,626	5.4%	1313	\$47	6,369	3,185	123,888
		Grad Asst	416	116	1,366	2.8%	12	\$3,974	0	0	5,428,663
	FL-SP Total		558	204	48,744	100.0%	239	\$410	11,435,062	56,170	19,973,643
	SUMM	Professor	42	8	1,574	20.7%	207	\$1,008	0		1,585,692
		Associate	18	3	631	8.3%	195	\$817	0		515,733
		Assistant	31	6	439	5.8%	77	\$1,767	0		775,582
		Instructor, Lect	11	2	2,199	28.9%	1116	\$82	0		179,374
		Adjunct	9	1	1,225	16.1%	1571	\$42	0		51,838
		Grad Asst	227	23	1,544	20.3%	68	\$607	0		936,581
	SUMM TOTAL		338	42	7,612	100.0%	182	\$531	0		4,044,800
	AY TOTAL		604	245	56,356		230	\$426	11,435,062		24,018,443
NonInstructional Faculty	AY TOTAL	All	558	201	9,557		48	\$1,403	12,592,358		13,406,437

College of Engineering - 2010-2011

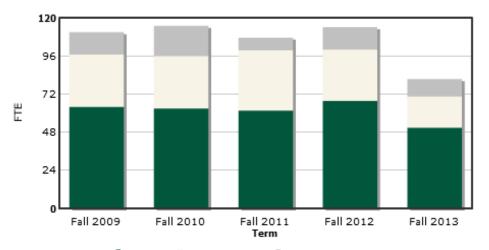
College of Engineering - 2011-2012

Instructor Grouping	Term Grouping	Faculty Group	Unique Record	Person Years (FTE)	SCH	%	SCH/FTE	Sal/SCH	Research Expenditures	Rsch/FTE	Term Salary w/ benefits
Instructional Faculty	FL-SP	Professor	50	34	15,343	31.3%	449	\$486	6,264,566	183,335	7,452,420
		Associate	27	20	11,129	22.7%	544	\$291	2,690,725	131,640	3,236,799
		Assistant	30	22	8,989	18.3%	416	\$335	2,252,014	104,115	3,011,208
		Instructor	11	7	9,934	20.3%	1503	\$68	0	0	679,678
		Adjunct	16	2	1,892	3.9%	901	\$60	0	0	114,417
		Grad Asst	375	95	1,209	2.5%	13	\$4,343	0	0	5,251,639
		Misc Other	1	0	549	1.1%	1484	\$69	0	0	37,702
	FL-SP Total		510	180	49,045	100.0%	272	\$403	11,207,305	62,180	19,783,863
	SUMM	Professor	44	8	1,749	24.2%	230	\$908	0		1,586,791
		Associate	17	2	313	4.3%	130	\$1,184	0		371,157
		Assistant	29	5	184	2.6%	34	\$3,804	0		699,940
		Instructor, Lect	7	1	2,025	28.1%	1500	\$65	0		130,660
		Adjunct	8	1	1,316	18.2%	2437	\$35	0		46,634
		Grad Asst	213	21	1,626	22.5%	78	\$589	0		957,826
	SUMM TOTAL		318	38	7,213	100.0%	189	\$526	0		3,793,008
	AY TOTAL		551	218	56,258		258	\$419	11,207,305		23,576,871
NonInstructional Faculty	AY TOTAL	All	541	175	9,838				12,191,677		13,024,863

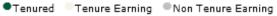
College of Engineering 2014 Review

College of Engineering - 2012-2013											
Instructor Grouping	Term Grouping	Faculty Group	Unique Record	Person Years (FTE)	SCH	%	SCH/FTE	Sal/SCH	Research Expenditures	Rsch/FTE	Term Salary w/ benefits
Instructional Faculty	FL-SP	Professor	46	33	12,854	24.6%	384	\$556	7,139,106	213,235	7,145,504
		Associate	31	23	12,122	23.2%	528	\$281	2,713,795	118,094	3,403,414
		Assistant	30	21	7,946	15.2%	374	\$366	2,090,114	98,405	2,909,657
		Instructor	14	10	14,101	27.0%	1362	\$80	0	0	1,131,942
		Adjunct	23	3	3,933	7.5%	1261	\$49	0	0	191,906
		Grad Asst	351	91	1,251	2.4%	14	\$4,165	0	0	5,209,408
	FL-SP Total		495	182	52,207	100.0%	287	\$383	11,943,015	65,653	19,991,831
	SUMM	Professor	39	7	1,923	24.4%	283	\$769	0		1,478,079
		Associate	21	4	579	7.3%	152	\$986	0		570,984
		Assistant	27	4	235	3.0%	60	\$2,993	0		703,291
		Instructor, Lect	7	1	1,463	18.6%	1161	\$84	0		123,556
		Adjunct	17	1	1,798	22.8%	1536	\$63	0		112,866
		Grad Asst	180	18	1,887	23.9%	103	\$492	0		928,323
	SUMM TOTAL		291	35	7,885	100.0%	223	\$497	0		3,917,099
	AY TOTAL		539	217	60,092		277	\$398	11,943,015		23,908,930
NonInstructional Faculty	AY TOTAL	All	506	165	11,785				13,774,338		12,932,349

9. Hiring Plan



Fall Faculty FTE by Tenure Status



TERM	TENURED	TENURE EARNING	NON TENURED	TOTAL	DETAIL
FALL 2009	63.79	33.00	14.00	110.79	DETAIL
FALL 2010	62.75	32.99	19.13	114.87	DETAIL
FALL 2011	61.50	37.98	7.99	107.47	DETAIL
FALL 2012	67.59	32.35	14.00	113.94	DETAIL
FALL 2013	50.66	19.68	11.00	81.34	DETAIL