1 OVERVIEW

This was a very active and productive year in the College of Engineering. Our year was highlighted by our strategic planning process resulting in the 2025 Strategic Planning—a document describing our mission, vision, values, and the four pillars comprised of outlooks including blueprints for success. We also had an outstanding faculty recruiting season, showed impressive improvements in student success, re-imagined and rebuilt our Development Office, created a Fundamentals of Supervision Certification program for our senior departmental staff, organized the engineering student groups in the E-Council (now formerly recognized by the Student Government), created a Engineering Career Certification program working with our departmental senior administrators, among many other activities.

A careful analysis of the College of Engineering was performed to see how we compared nationally to the top engineering colleges. We discovered that (essentially) the top 30 public college of engineering and the public AAU members were the same group. We also established that our college (ranked 64th among publics) was competitive—we were in the game as seen in Figure 1. In terms of research expenditures, we are near the trend line, but because our faculty numbers are too low, our overall research expenditures are limited. On the other hand, the number of undergraduates to T/TT faculty is an outlier—much too high—and that is evident in the data. To guide our strategic planning process we then determined that we must double our faculty to 220 and increase our students number much less aggressively. This analysis informs all of our planning. The 2025 Strategic Plan recommends $300M investment over 10 years.

![Figure 1 AAU Comparisons](image)
Our U.S. News & World Report ranking of engineering graduate programs remained steady, and the trend line for USF is positive, as illustrated in the Figure 2. While we are pleased with the USF engineering graduate ranking trend, we aim to achieve a much higher overall ranking. Our strategic investment strategy is geared to lead the college toward even greater recognition. Once again, our M.S. in Engineering Management Program was ranked #20 by USNWR. It is also the top online graduate program in Florida.

![Figure 2 Graduate Engineering Programs USN&WR Rankings](image)

A few highlights of our outstanding year in research.

Dr. Bob Frisina and his research team in the Global Center For Hearing And Speech Research (GCHSR) Center received $9M from the NIH to develop strategies to treat age-related hearing loss. Amazingly, the team obtained a perfect score on their 5-year NIH Program proposal! GCHSR now has a guaranteed attraction of over $13M of grant support in the next 5 years—and the expectation is that this amount will increase if we can find space in which they can grow.

Dr. Yogi Goswami received the 2016 Boer Solar Energy Award for reducing costs and developing efficient, effective storage methods for solar energy as well as harnessing solar energy as a catalyst to address environmental problems. He is just the 13th recipient of the medal that comes with a $60,000 award. Dr. Goswami was also inducted into the National Academy of Inventors.

We continued our trend of receiving NSF CAREER Awards. The year Dr. Dr. Yao Liu received the NSF CAREER Award in the amount $499,950 for her proposal entitled “A Pathway towards Channel Camouflage and Manipulation Techniques for Wireless Security”. She joins a group of 25 engineering faculty that have received the NSF CAREER Award—more than any other engineering college in Florida.
Dr. Sanjukta Bhanja and her research team investigated new methods of computing with interaction-dependent state change of nanomagnets. This has the potential of increasing computing speeds by 1,000%. Her work was featured in *Nature Nanotechnology*.

Dr. Norma Alcantar and her research team showed that the muselage of the prickly pear cactus can be used to purify water and remove harmful contaminants. Her work was featured in *Newsweek*. Dr. Alcantar was also the first female faculty to start as an assistant professor in the College of Engineering and successfully reach the rank of full professor.

As we consider our next steps forward, we organize our thoughts around people, programs, and places. First and foremost, our success depends on the people in our organization, including the students, staff, and faculty. We must recruit, support, and retain world-class faculty and staff. To this end, we have had a very active recruiting season. After a national search we successfully attracted Dr. Robert Bertini as the new CUTR Director. For the first time, we will have CUTR Director that also holds a tenured position as a Full Professor in Civil & Environmental Engineering. We are demonstrating with Dr. Bertini (and other outstanding recruits) that we can compete on a national level. Consider that Dr. Bertini received his Ph.D. in Civil Engineering from the University of California at Berkeley, was an NSF CAREER Awardee, has federal experience within the U.S. DOT programs, including overseeing the University Transportation Center (UTC) program, has personally attracted $17.8 million in external funding, inaugurated and directed a new Intelligent Transportation Systems Laboratory, launched a campus-wide multidisciplinary transportation center, and founded and led a statewide four-campus National University Transportation Center known as OTREC. We also successfully attracted a new Senior Development Officer with exceptional skills and demonstrated record of fund-raising at Georgia Institute of Technology. Other exceptional faculty offers have been extended and we await the decisions.

We remained firmly rooted in the vision and values encompassed in the four guiding principles:

1. Contribute to improving the overall student educational experience—both undergraduate and graduate;
2. Provide faculty and staff access to key technological areas and systems at the forefront of engineering;
3. Build stronger relationships between research and teaching; and
4. Create opportunity for innovation.

We determine the priority of our investments in direct correlation to the intensity of their alignment with USF’s and the College of Engineering’s strategic priorities. In particular, our investments support our continued contribution to the ten Tier 1 Performance Metrics upon which the Performance Based Funding is based, and when applicable, to increased influence on the Tier 1 Performance Metrics. We also seek to fundamentally shift our attention in a dramatic way to the Preeminence, Carnegie, and AAU metrics. The Engineering Discovery Tower is the
key missing component that limits our ability to achieve the USF goals. More importantly, we are currently unable to meet the needs of industry in providing engineers and innovators upon which the engine of our economy depends. We are space limited, both in quantity and quality.

Programmatic excellence is an attribute of great academic programs. Our objective is to create a landscape where the boundaries between industry and academia are blurred and where the educational obstacles imposed by historical customs of separating students in the various disciplines are removed. The continued expansion of our research enterprise bonds the creation of learning environments (wherein students learn by doing) to our research enterprise (wherein students learn by doing the real thing). Our ability to compete more successfully requires re-thinking of our places and spaces for impactful discovery.

Great universities have wonderful physical spaces in which to learn, teach, and work. We know that the form of our dwellings matter—the places where we spend considerable time. We recognize that creating opportunities for intellectual collisions to materialize in the space between traditional academic silos will ultimately enrich and inform our reach for programmatic excellence. However, we know that practically speaking, the magnitude of our currently available strategic investment is insufficient to positively impact our existing learning environments, specifically our teaching and research laboratories. Without significant project funds established for the sole purpose of creating the Engineering Discovery Tower, the College of Engineering cannot meet the expectations of industry for work force development in a timely fashion. Our College of Engineering Strategic Plan delineates the overall plan in which the Engineering Discovery Tower plays a key role.

The College of Engineering is in the process of recruiting a substantial number of new faculty with research interests in the emerging growth areas. The College has renovated and redeveloped its resources to the fullest extent possible, but cannot keep pace with growing demands for research and instructional space. Recently hired faculty are developing their research and will continue to demand specialized laboratories, as well as space for a rapidly growing cadre of new graduate students. The College is currently unable to provide adequate, functional research space for newly hired faculty, and planned growth will inevitably produce additional pressure on services, including increased student and staff support, development activities and administrative functions.
The Engineering Discovery Tower is envisioned as a 250,000ft² facility devoted to impactful discovery. To be launched with no discernable internal departmental boundaries, the integrated laboratories and teaching spaces will be devoted to solving pressing challenges of the times—starting with environmental issues around water, cybersecurity, automation and rehabilitation robotics, medical devices and health care, secure and renewable energy, safe and efficient transportation—but readily transitioning to new challenges as they arise. This will be an iconic locale where intellectual collisions occur between engineers, scientists, doctors, nurses, business, artists, and any others that are needed to address the problems of interest and concern.

We must also engage our alumni and friends. We had a very active year with our alumni engagement. We continued our alumni engagement activities by hosting over events at football games, hockey games, receptions (in Florida and California), fund-raising events, and much more. Being more visible in the community was a primary goal for us this year. The response to our efforts has been overwhelmingly positive and encouraging.

We completely reconfigured our Eminent Scholars Lecture Series to focus on engineering deans. The strategy of engaging engineering deans is a key element of our aggressive approach to inform the academic community about the wonderful work underway in our college. Given that national ranking is 25% peer assessment (by deans), this strategy makes good sense. This year we invited four deans:

**DR. JOHN ENGLISH**
Dean, Irma F & Raymond F Giffels Endowed Chair in Engineering, University of Arkansas

**DR. GARY MAY**
Dean and Southern Company Chair, College of Engineering, Georgia Institute of Technology

**DR. GREGORY WASHINGTON**
Dean, Henry Samueli School of Engineering, University of California, Irvine

**DR. RANU JUNG**
Interim Dean Of Engineering, Florida International University

In additional, we have become much more active in the ASEE Engineering Deans Institute Annual Meeting. This year, in addition to being a key sponsor of the event (all the badge lanyards were USF COE logos), we also moderated one of the four main panel sessions. Our session was entitled “What is Innovation?” Our panelists included the Director of Engineering at Apple, the Director of MIT’s Center for Bits and Atoms, the author of *Invent To Learn: Making, Tinkering, and Engineering in the Classroom*, and a professor at Stanford University School of Medicine previously selected as one of the world’s top 35 young innovators under the age of 35 by the MIT Technology Review.
Our students continue to excel both in and out of the classroom. In August, we sent three teams of engineering students to NASA Johnson Space Center in Houston to participate in the MicroG Challenge. Only 19 teams were selected nationwide and three of those teams were from USF Engineering and they were the only teams from Florida. Read more about these extraordinary students later in this report.

It is important to note that two projects that consumed considerable time and effort—but which ultimately were not successful—were the proposal development for a STEM campus in Georgia and the proposal and due diligence report for an ‘Engineering at the Mall’ facility.
2 USF Goal 1: USF will produce well-educated, highly skilled global citizens through its continuing commitment to student success

2.1 Engineering Student Services
The first, second, and third year retention rates for undergraduate engineering students has continued to increase. Increased advising contacts have been shown to increase retention among students. Advising contacts continue to increase each year for the pre-engineering students, as illustrated in Figure 4. During the fall 2014 semester alone, there were over 5,440 advising contacts of pre-engineering students compared to fall 2010 of just 2,229, an increase of over 244%. Expansion of the learning teams continue as they are showing higher retention rates for students participating in the teams.

![Figure 4 Total Advising Contacts](image-url)
Advising contacts with students continue to increase and the College invested in a new advisor last summer.

1) Course-based Learning communities more than doubled the number of teams offered in 2012 to 20 in 2015, now serving 318 Students

2) Engineering Living Learning Community, serves 149 students is at maximum capacity as there are no more rooms is available in housing to expand the Engineering Living Learning Community

3) In addition the learning teams, the first semester ‘Engineering Orientation’ Course for all new students (transfer and first year students) continues to be one of our most important activity for our retention efforts. This courses helps to:
   - Familiarize students with University of South Florida and the College of Engineering
   - Provide students with knowledge of resources to help you succeed at USF
   - Help students become familiar with the engineering disciplines offered at USF
   - Students are required to complete a graduation plan, semester plan, weekly study plan
   - Students are required to meet with an advisor in the first two weeks of classes
   - Students develop career management skills and tools, including a resume and they attend the career fair
   - Additional assignments and requirements include:
     - Meet their advisor within the first 2 weeks of the semester to review their weekly study plan, semester plan, get to know their advisor, and for the advisor to do a welfare assessment.
     - Weekly updates on how they are adjusting to College and course work

Combination of doubling the learning teams to 20 and the intensive advising from our early warning systems has helped to reduce the number of students who received less than a 2.00 by 40% 94 (Fall 2014) to 56 (Fall 2015).

To work on continuing to improve students’ success, the College expanding their tutoring resources:

- Introduced helps rooms for calculus and statics
- Supplemental Instruction was added for calculus classes and both physics sections for Spring 2016
- Created an Academic Strategies course for at-risk students for the Spring 2016 semester
- Assign advisors to meet with at risk students weekly
• Meet their advisor within the first 2 weeks of the semester to review their weekly study plan, semester plan, get to know their advisor, and for the advisor to do a welfare assessment.
• Weekly updates on how they are adjusting to College and course work

Combination of doubling the learning teams to 20 and the intensive advising from our early warning systems has helped to reduce the number of students who received less than a 2.00 by 40% 94 (Fall 2014) to 56 (Fall 2015).

To work on continuing to improve student success, the College expanding their tutoring resources:

• Introduced helps rooms for calculus and statics
• Supplemental Instruction was added for calculus classes and both physics sections for Spring 2016
• Created an Academic Strategies course for at-risk students for the Spring 2016 semester
• Assign advisors to meet with at risk students weekly

Total Number of Fall Advising Visits

![Graph showing total number of fall advising visits from F2010 to F2015]

- Total # of Advisor Meetings
*Numbers reflect students not in Honors and/or the ELLC

Students in course based learning teams are still retained at a higher rate than those who are not in the learning teams.
*Honors students and students in the LTMs are removed from both groups for a better comparison
First Year Retention Rates in Engineering Based on First Math Course

First Fall Semester Math Class for First Year Students

Percent Retained in Engineering

- Calculus I
- Precalculus

2008 2009 2010 2011 2012 2013 2014
First Year Retention Rates at USF Based on First Math Course

First Fall Semester Math Class for First Year Students

Student to Faculty Ratio

*2015-2016 preliminary benchmark*
2.2 Student Awards and Fellowships
A sampling of the many student awards includes the following:
• Francesca Moloney CSE awarded NSF Graduate Research Fellowship
• Emma Lopez CEE Awarded first place at the Tampa Bay STEM Summit
• Shamaria Engram CSE Awarded GEM PhD Fellowship
• William Serrano-Garcia EE Awarded national lab internship at New Mexico’s Air Force Research Lab
• Francesca Moloney CSE Awarded Mickey Leland Energy Fellowship for National Energy Technology Lab in Morgantown, WV.
• Matthew Verbyla CEE Awarded 2016 W. Wesley Eckenfelder Graduate Research Award from AAEES
• Gregory Hinds CSE Won AAEES William Brewster Snow Award
• Juan De Dios-Castro B Awarded MTT-S Graduate Fellowship
• Anna Hayes ChBME Awarded Engineering Leadership Scholarship from Chassis Plans
• Gerardo Sanchez CSE Named HENAAC Scholar
• Trang Luong CEE Receives Outstanding Graduate Award
• Joshua Bohorquez Received MOACC Scholarship
• Joel Cooper CEE Awarded NSF Fellowship
• Juan De Dios Castro Received Phi Kappa Phi Award
• Joseph Bonivel – Awarded AAAS Fellowship

2.3 Student Conferences and Competitions
Examples of the student conferences and competitions include the following:

Micro-g NExT challenges students to work in teams to design and build prototypes of tools that will address authentic, current space exploration problems. The three student teams were part of the Bioastronautics class, a mixed graduate and undergraduate course taught by Mechanical Engineering Assistant Research Professor, Stephanie Carey. Each team prepared a proposal for the NASA’s Micro-G competition as a class assignment, and several teams expanded their projects to meet the constraints of the proposal and submitted their proposals to the competition. More than 100 teams from across the nation entered the competition, but only 19 were selected for the test operations, and three of the 19 are teams from USF, and the only teams from a Florida university.

• Biomedical Engineering Society USF was the host university this year as this large annual event was located in Tampa. The College hosted an evening alumni and faculty reception at the conference.

• 2014 Water Environment Federation’s Annual Technical Exhibition and Conference A student team from the environmental engineering capstone design class took first place in the Florida Water Environment Association (FWEA) 2015 Student Design Competition. They are adding to USF’s four-year streak of first place finishes in this competition both in Florida and nationally.
• **NXP Internet of Things** USF hosted the semi-truck interactive display and event drawing hundreds of students to see the Internet of Things.

• **SOAR Society of Aeronautics and Rocketry** Competed competitively Marshall Space Center in the Student Launch

2.4 **Faculty Awards**
The faculty received many awards this year, among which we have the following:

- Yogi Goswami – 2016 winner of the Karl W. Boer Energy Medal Merit
- Yogi Goswami – Elected to the Florida Inventors Hall of Fame
- Dennis Hinebaugh - Appointed chair of Public Transportation Group
- Yu Zhang – Elected president of COTA
- Sal Morgera – Selected Bell Labs Prize finalist
- Venkat Bhethanabotla – Awarded AAAS Fellow
- Huseyin Arslin – Elevated to IEEE Fellow
- Ashok Kumar – Elected to Fellow ASME
- Sylvia Thomas – Received 2015 Outstanding Graduate Faculty Mentor Award
- Kyle Reed – Received USF Research and Excellence Award
- Norma Alcantar – Licensed Cactus Water Purification
- Sarina Ergas – Named WEF Fellow

3 **USF GOAL #2: USF will generate new knowledge and solve problems through high-quality research and innovation to change lives, improve health, and foster positive societal change**

3.1 **NSF CAREER Awards**
Three engineering faculty members received National Science Foundation NSF CAREER Awards in 2015:

- Yao Liu, Computer Science & Engineering Yao Liu received an NSF CAREER award for 5 years totaling $499,950. The grant is titled: “CAREER: A Pathway towards Channel Camouflage and Manipulation Techniques for Wireless Security.”

3.2 **Research Expenditures Six-Year Trend**
Without a doubt the last decade has seen the engineering faculty and researchers perform very well. As illustrated in Figure 12, from 2010 to 2015 the total research expenditures of the college increased almost 30%, in what has been a very challenging period in competing for contracts and grants.
Figure 12 Total Research Expenditures
4 USF GOAL #3: USF will provide a first-class, higher educational institution that drives the economic engine of Tampa Bay.

4.1 Real World Experience for Engineering Students

4.1.1 BEST Program
The Bulls Engineering Success Training (BEST) program provides selected undergraduate students in the College of Engineering an interdisciplinary industry-based capstone design experience. A BEST team of six students will complete an industry-contributed project in two semesters and will earn 6 credit hours. The BEST program will prepare students for their first job in industry and enable them to hit the ground running. All BEST students are supervised by a College of Engineering faculty member and mentored by an industry partner. Being part of the BEST program is a great way for companies to help prepare the next generation of practicing engineers. Participating companies benefit directly from having a project completed and gain recruiting advantages in hiring new engineers. There are currently seven BEST programs with the following companies:
1. CAE
2. Leap Doctor
3. Leap Doctor

4.1.2 Mini Circuits Design for X Laboratory
In the past year, we have fully equipped the Mini Circuits Design for X Laboratory through a grant from Mini Circuits and the Harvey and Gloria Kaylie Foundation. The lab provides maker space a collaborative, fun environment for undergraduate students at USF to safely pursue meaningful multidisciplinary engineering projects that expand their creative design and project management skills. The project teams are made up of engineering students, with the opportunity to collaborate with non-engineering students, under the guidance of supportive faculty. Through these projects, students gain experience with teamwork, industry design and safety procedures.

4.2 Global Engagement
The college currently has agreements with many overseas universities to provide our students with a global education and perspective as well as reciprocal agreements with universities abroad (i.e., Universidad Del Norte, Barranquilla, Colombia) for their students complete their engineering education here. Other notable agreements include Universidad Politecnica de Valencia in Spain and the recent meeting with the Republic of Georgia to establish an educational agreement.

4.3 Community Outreach
Our college is very active in the local community. Key examples include:
USF Aviation Club sponsored a booth at the MacDill Air Show to interested potential students in STEM

USF National Society of Black Engineers (NSBE) - Chapter members provided weekly on campus tutoring for underrepresented and economically K-12 students in the USF Urban Scholars Outreach Program.

Tampa Middleton High School - Professor Kingsley Reeves (Industrial and Management Systems Engineering) teaches two on-campus course, "Probability and Statistics" for Engineers in the Fall semester and "Engineering Economics" in the Spring semester, for students enrolled at Middleton Magnet High School STEM program.

Great American Teach-In (November 2014) - Students and faculty visited local K-12 schools to provide personal testimonials and hands-on STEM demonstrations. A primary focus of our College is to partner with schools that have a significant enrollment of minority students and inspire to pursue STEM careers.

NSF Research Experiences for Teachers - Water Awareness Research and Education -WARE. This initiative is led by Professors Maya Trotz and Sarina Ergas, in the Department of Civil and Environmental Engineering. Each summer, the project projects five-week summer research experiences for Hillsborough County School District and pre-service teachers. A primary goal of the program is to help teachers at schools with a significant enrollment of URM students integrate new STEM content and methods related to their USF experience into their classroom practice.

USF BULLS-EYE (Engineering Youth Experience) Mentoring Program. USF College of Engineering received a grant from the Motorola Foundation to partner with Hillsborough County Public Schools (HCPS) to establish a STEM mentoring program for 48 rising fifth and sixth graders transitioning into an ongoing STEM pipeline at Bartels Middle School (31% - Hispanic/Latino; 23% - African-American/Black). Led by PI/PD Jonathan Gaines in the Department of Mechanical Engineering this program is employing 12 black or Hispanic engineering student mentors as near peer mentors and a curriculum targeted at underrepresented youth in Tampa, Florida.
4.4 Producing STEM Graduates

The total degrees awarded over the last nine years both in both the engineering undergraduate and graduate program are shown in Figures 15 and 16. The number of bachelor’s degree awarded is rising in correlation with rising enrollment.

![Figure 15 Ten-Year Trend of Bachelor’s Degrees Awarded](image1)

![Figure 16 Ten-Year Trend of Graduate Degrees Awarded](image2)
5  **USF Goal #4 USF will ensure sound financial management to establish a strong and sustainable economic base in support of USF’s continued academic advancement.**

Fundraising by the college is used to supplement its programs to enrich the academic environment. A two year comparison is presented in Section 4.3. We consider three types of gifts: Endowment, Operational (without in-kind), and In-kind. All three types of gifts are important to the college. We have done particularly well with the Keysight Technologies in-kind software gift.

### Section 4.3 Philanthropy

#### 4.3.a Annual Fundraising

<table>
<thead>
<tr>
<th></th>
<th>Fiscal Year 2014</th>
<th>Fiscal Year 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Annual Goal</strong></td>
<td>$0</td>
<td>$96,000,000</td>
</tr>
<tr>
<td><strong>% Goal Reached</strong></td>
<td>0%</td>
<td>50.25%</td>
</tr>
<tr>
<td><strong>Donor Count</strong></td>
<td>949</td>
<td>736</td>
</tr>
<tr>
<td><strong>Total Commitment</strong></td>
<td>$70,018,765</td>
<td>$92,211,881</td>
</tr>
<tr>
<td><strong>Outright Gifts</strong></td>
<td>$68,391,648</td>
<td>$42,401,642</td>
</tr>
<tr>
<td><strong>Pledges</strong></td>
<td>$423,422</td>
<td>$354,501</td>
</tr>
<tr>
<td><strong>Planned Gifts</strong></td>
<td>$201,440</td>
<td>$375,068</td>
</tr>
<tr>
<td><strong>State Match Pledges</strong></td>
<td>$1,955</td>
<td>$170</td>
</tr>
<tr>
<td><strong>Private Research Grants</strong></td>
<td>$0</td>
<td>$80,000</td>
</tr>
</tbody>
</table>

Source: University Advancement

### 4.3.b Endowment

<table>
<thead>
<tr>
<th>Department</th>
<th>Endowment Market Value FY 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENCMR</td>
<td>$1,196,784</td>
</tr>
<tr>
<td>ENCTR</td>
<td>$134,852</td>
</tr>
<tr>
<td>ENECH</td>
<td>$268,892</td>
</tr>
<tr>
<td>ENEGE</td>
<td>$293,688</td>
</tr>
<tr>
<td>ENEGR</td>
<td>$260,829</td>
</tr>
<tr>
<td>ENEGS</td>
<td>$373,529</td>
</tr>
<tr>
<td>ENEGX</td>
<td>$4,213,539</td>
</tr>
<tr>
<td>ENENR</td>
<td>$2,478,271</td>
</tr>
<tr>
<td>ENEib</td>
<td>$2,406,910</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>$11,527,174</strong></td>
</tr>
</tbody>
</table>

Source: University Advancement
Engineering Excellence Awards

In 2015, we held the Engineering Excellence Awards Dinner that honored 10 outstanding alumni as well as a former dean. The event was a tremendous success in terms of alumni relations and will now be a permanent event every spring.

Our alumni engagement was very active. A partial list of activities for Fiscal Year 2015/16 attended by the Dean or Development Staff:

- July 31- Aug 1 – Florida Engineering Reception, Fort Lauderdale
- September 16 – Heart of Gold Donor Reception
- October 10 – Homecoming - hosted suite at the football game
- November 5 – Dean’s Advisory Board meeting held
- November 13 – Jim Mihelcic public lecture and reception in recognition of Flom Endowed Chair
- January 22 – Keysight Lab Naming Event
- Feb. 11 – Met with Daytona Speedway president and NASCAR driver at SAE garage
- Feb. 12 – Hosted alums in a suite at Lightning Game
- Feb. 19 – Engineering EXPO
- Feb. 19 – Foundation Board Back School Event – Hosted 10 board members at EXPO
- March 5 – Annual EAS fundraiser for scholarships and travel grants
- March 29 – Alumni reception in San Jose, CA.
### US News and World Report Best Engineering Schools Rankings (Grad)

**Ranking Metrics for University of South Florida College of Engineering**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank</td>
<td>99</td>
<td>100</td>
<td>DOWN 1</td>
</tr>
<tr>
<td>Public Rank</td>
<td>64</td>
<td>64</td>
<td>NO CHANGE</td>
</tr>
<tr>
<td>Score</td>
<td>22</td>
<td>20</td>
<td>DOWN 2</td>
</tr>
<tr>
<td>Total graduate engineering enrollment</td>
<td>977</td>
<td>1,041</td>
<td>UP 64</td>
</tr>
<tr>
<td>Research expenditures per faculty member</td>
<td>$282,654</td>
<td>$309,101</td>
<td>UP $26,447</td>
</tr>
<tr>
<td>Engineering school research expenditures</td>
<td>$31,092,000</td>
<td>$33,383,000</td>
<td>UP $2,291,000</td>
</tr>
<tr>
<td>Average quantitative GRE score of new entrants in both master's and doctoral programs</td>
<td>708</td>
<td>760</td>
<td>UP 52</td>
</tr>
<tr>
<td>Overall acceptance rate</td>
<td>45.7%</td>
<td>48.8%</td>
<td>Up 3.1%</td>
</tr>
<tr>
<td>Faculty membership in National Academy of Engineering</td>
<td>.90%</td>
<td>.90%</td>
<td>NO CHANGE</td>
</tr>
<tr>
<td>Peer assessment score (5.0=highest)</td>
<td>2.2</td>
<td>2.1</td>
<td>DOWN 0.1</td>
</tr>
<tr>
<td>Recruiter assessment score (5.0=highest)</td>
<td>2.5</td>
<td>2.7</td>
<td>Up 0.2</td>
</tr>
<tr>
<td>Ph.D. students/faculty</td>
<td>3.1</td>
<td>2.9</td>
<td>DOWN 0.2</td>
</tr>
<tr>
<td>Ph.D.’s granted</td>
<td>49</td>
<td>57</td>
<td>Up 8</td>
</tr>
<tr>
<td>Fall FT TT Faculty</td>
<td>108</td>
<td>112</td>
<td>UP 4</td>
</tr>
<tr>
<td>Fall FT Master's Students</td>
<td>484</td>
<td>571</td>
<td>UP 87</td>
</tr>
<tr>
<td>Master's students/faculty</td>
<td>4.48</td>
<td>5.10</td>
<td>UP 0.62</td>
</tr>
<tr>
<td>Tuition</td>
<td>In-state, full-time: $10,428 per year</td>
<td>In-state, full-time: $10,428 per year</td>
<td>NO CHANGE</td>
</tr>
<tr>
<td></td>
<td>Out-of-state, full-time: $21,126 per year</td>
<td>Out-of-state, full-time: $21,126 per year</td>
<td></td>
</tr>
</tbody>
</table>

*Source: U.S. News & World Report 2017 Rankings Engineering Graduate Programs*
### 2016 Rankings of Florida Universities with Graduate Engineering Programs

<table>
<thead>
<tr>
<th>University</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Florida</td>
<td>30</td>
<td>30</td>
<td>35</td>
<td>38</td>
<td>42</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>University of Central Florida</td>
<td>73</td>
<td>70</td>
<td>72</td>
<td>72</td>
<td>81</td>
<td>85</td>
<td>82</td>
</tr>
<tr>
<td>Florida State University/Florida A&amp;M University</td>
<td>102</td>
<td>92</td>
<td>102</td>
<td>112</td>
<td>102</td>
<td>117</td>
<td>118</td>
</tr>
<tr>
<td>University of South Florida</td>
<td>119</td>
<td>112</td>
<td>109</td>
<td>105</td>
<td>110</td>
<td>99</td>
<td>100</td>
</tr>
<tr>
<td>University of Miami</td>
<td>116</td>
<td>122</td>
<td>121</td>
<td>116</td>
<td>116</td>
<td>111</td>
<td>122</td>
</tr>
<tr>
<td>Embry Riddle</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
</tr>
<tr>
<td>Florida Atlantic University</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
</tr>
<tr>
<td>Florida Institute of Technology</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
</tr>
<tr>
<td>Florida International University</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
<td>RNP</td>
</tr>
</tbody>
</table>

| Total Ranks                         | 137  | 138  | 144  | 143  | 140  | 140  | 139  |
| Total Schools Ranked                | 143  | 151  | 150  | 147  | 145  | 147  | 145  |
| Total Schools                       | 198  | 198  | 198  | 211  | 215  | 215  |

*Source: U.S. News & World Report 2017 Rankings*


<table>
<thead>
<tr>
<th>Program</th>
<th>USF Rankings*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering - Overall</td>
<td>110</td>
</tr>
<tr>
<td>Engineering - Biomedical Engineering / Bioengineering</td>
<td>NR</td>
</tr>
<tr>
<td>Engineering - Chemical</td>
<td>NR</td>
</tr>
<tr>
<td>Engineering - Civil</td>
<td>NR</td>
</tr>
<tr>
<td>Engineering - Computer Engineering</td>
<td>77</td>
</tr>
<tr>
<td>Engineering - Electrical / Electronic / Communications</td>
<td>102</td>
</tr>
<tr>
<td>Engineering - Environmental / Environmental Health</td>
<td>59</td>
</tr>
<tr>
<td>Engineering - Industrial / Manufacturing</td>
<td>58</td>
</tr>
<tr>
<td>Engineering - Mechanical</td>
<td>132</td>
</tr>
<tr>
<td>Sciences - Computer Science</td>
<td>101</td>
</tr>
<tr>
<td>Information Technology</td>
<td>N/A</td>
</tr>
</tbody>
</table>
AAU Public University Performance Comparison *(Source 2015 ASEE Survey)*

USF & Public AAU Colleges of Engineering
Doctoral Enrollment/Tenure Track Faculty, 2007-2015

- Maximum
- 75th Percentile
- Median
- 25th Percentile

USF & Public AAU Colleges of Engineering
Masters Degrees/Tenure Track Faculty, 2007-2015

USF & Public AAU Institutions
Total Expenditures/Tenure Track Faculty, FY 2007-2015