The College of Engineering (COE) is committed to the goals outlined in the OSU Strategic Plan 3.0: 1) providing a transformative educational experience for all learners, 2) demonstrating leadership in research, scholarship and creativity while enhancing preeminence in the three signature areas of distinction, and 3) strengthening impact and reach throughout Oregon and beyond. The College's efforts to positively affect each of these goals are addressed below. In addition, the College is dedicated to the OSU key initiatives of student success, enhancing diversity, stewardship of resources, and using technology as a strategic resource as described below. Finally, college performance metrics, as prepared by OSU Institutional Research, are presented in the attached tables.

1. Goal: Provide a transformative educational experience for all learners.

   Describe impactful programs that:

- Enhance the learning environment to raise and equalize student success
  - Fall 2016 saw the opening of the School of Chemical, Biological, and Environmental Engineering's (CBEE's) new home, Johnson Hall. This state-of-the-art facility is a place of collaboration and innovation in education and research. In addition, Johnson Hall serves as a hub for COE's first year advising program, experiential learning programs, undergraduate research, Leadership Academy, and Women and Minorities in Engineering program.
  - COE Schools have hired writing professionals to assist in educating students in professional communication and professionalism. Across our undergraduate programs, the senior capstone class serves as our writing intensive courses, and students practice communicating with real clients and the broader community. The extensive work of the team in the School of Mechanical, Industrial, and Manufacturing Engineering (MIME), was recognized in fall 2016 with the OSU Student Learning and Success Teamwork Award.
  - Together with the College of Business (COB), COE created the DAMlab Makerspace in Hawley-Buxton Hall, the home of the COE and COB Living-Learning Communities. The DAMLab is open to all residents and student clubs around the clock in order to support innovation and exploration.
  - COE made tutors available in the Hawley-Buxton Living-learning community on topics such as Chemistry, Math and Physics after hours to support students in their environment.
- Make high-impact learning a hallmark of undergraduate education (resulting in responsible citizenship and global competitiveness)
  - Over 1100 students working in 200 teams showcased their senior capstone projects with both industrial and research themes at the 18th Annual Engineering Expo in May. This event also serves as a significant outreach opportunity to Oregon High School students.
  - Data from the College's experiential learning survey shows the following engagement:
    - Record number of MECOP/CECOP internships with 450 students participating this year
    - Leadership academy: 175 students
    - Non-MECOP/CECOP internships: 600 students
    - College sponsored clubs: 1,600 students
    - Student workers within the College (e.g., undergraduate TAs, ambassadors): 200
    - Students engaged in undergraduate research with COE faculty: 380
  - An important aspect of experiential learning in the College involves competitions in which students apply the essential aspects of sound engineering practice: Design, Build, and Test. Examples of the success of students in these competitions over the last year include:

        - The team of Nathan Jones and Alessandra Hossley took 1st place, earning the Mohr-Circle Award in the 2017 GeoPrediction competition at the annual meeting of the American Society of Civil Engineers (ASCE) Geo-Institute. OSU also won 1st place in 2014 and 2016.
        - At the Associated Schools of Construction Student Competition, the mixed-use team won 1st place and the concrete solutions and project management teams both took 3rd place.
        - The OSU ASCE student chapter placed 1st overall in the 2017 ASCE Pacific Northwest Student Conference.
        - Global Formula Racing, a collaboration between OSU and the Duale Hochschule Baden-Wuerttemberg Ravensburg, placed 2nd out of 120 teams at the FSAE Michigan competition in May and 2nd out of 44 teams FSAE Italy in July. The success of this student team has raised the visibility of COE among leading technical universities worldwide.
        - The Baja-SAE team that builds off-road style race cars placed 2nd out of 100 teams at the Illinois competition in June.
        - The Design Build Fly team placed 5th out of 80 teams in Tuczon, AZ in April.
        - OSU sent two teams to the Spaceport America Cup rocketry competition in June. The 30,000 ft. altitude competition team placed 3rd and won the Team Leadership and Sportsmanship Award out of 110 teams.
    - This year's survey of graduating COE undergraduate students (n=651, 37% response rate) showed broad engagement in experiential learning:
        - 66% of graduates had at least one paid internship, externship, or professional experience
        - 29% of graduates had a research experience
        - 12% had an international experience (including conference travel)
        - 40% engaged in volunteering while at OSU
        - 56% participated in a student club or leadership experience
    - The Humanitarian Engineering program has supported undergraduate and graduate students in using science- and technology- based solutions to address basic human needs. This year, 24 students completed international field research. In addition faculty member, Nordica McCarty, led the team that won the Impact Invention Award from the Lemelson Foundation at the 2017 Elevating Impact Summit for their work with InStove.
    - The reported average starting salary for this year's BS graduating cohort (US only, but across all sectors) was: $62,232 indicating high demand.
- Advance learning through course design, assessment and faculty development (in degree programs as well as the BACCORE)
    - COE implemented a robust analysis of eSET scores that identified underperforming courses (bottom quartile in terms of scores across COE), many of which are now being redeveloped. The analysis removes some of the bias shown against women and underrepresented groups in evaluations and has provided guidance to P&T committees and for performance reviews.
    - COE carried out its first new faculty boot camp, aimed at onboarding new faculty. The goal is to smooth the transition into OSU, ensure shared values and understanding, and ultimately support our faculty in being successful. COE also organized a series of workshop for faculty on topics ranging from grant writing, student mentoring, innovative pedagogical approaches, and P&T processes, to set them on the path for success.
    - In the second year of the 5-year $2M NSF Revolutionizing Engineering Departments (RED) grant "Shifting Departmental Culture to Re-Situate Learning", CBEE faculty continued curricular redesign of nine core courses aimed at bringing realistic, consequential work into the studio experience for students.
    - Led by faculty specializing in Engineering Education research, the School of Civil and Construction Engineering (CCE) dramatically expanded and improved the teaching evaluation

process to improve the implementation of evidence-based teaching practices. The new process includes a holistic examination of the course, focusing on improving student engagement and improving clarity of learning outcomes.
    - All Schools engage in continuous improvement of the curriculum through ABET accreditation, including annual evaluation of all degree programs with plans for improving student learning.
- Grow online education and explore new pedagogical models
    - In Fall 2016, the College hired Carley Ries as Assistant Dean for Online Learning to lead and support COE online programs and initiatives. She has created a program review process that will be applied to the postbacc Computer Science degree in fall 2017. She also initiated the OSU/EdAssist partnership proposal to offer online education to over 170 corporations who have identified at least $1M annual for employee tuition reimbursement.
    - In the 2016-2017 academic year, the online postbacc computer science program graduated 342 students, a 7% growth over last year. This program has increased access for students from across the country and the world and sees a higher degree of student diversity compared to the on-campus program, especially in terms of gender diversity (23% vs. 13%).
    - The online MEng degree in Engineering Management celebrated its first graduates this year. The program continues to provide access to working professionals, including those in companies such as Boeing Portland, Xerox, Nike, and Intel.
    - A graduate TA training seminar series was introduced to augment early fall training already in place. In addition, undergraduate "Learning Assistants" (LAs) are now being trained and used in multiple studios courses to both facilitate instruction and develop professional skills.
- Enhance and ensure the success of international students
    - The Schools in COE are supporting international students through social activities, dedicated graduate advisors, new professional seminars, and making connections within the OSU and Corvallis communities. COE continues to work with INTO to improve the Pathway program for international students, and has redesigned much of the coursework to remove unnecessary roadblocks, and more quickly give students meaningful engineering experiences.
- Enhance our comprehensive Healthy Campus Initiative
    - COE advisors work closely with the engineering living-learning community to deliver seminars and support activities around the Healthy Campus Initiative.
- Expand strategies to recruit diverse and high-achieving students (Corvallis, Cascades, Ecampus)
    - COE expanded its scholarship offerings to reach more diverse student populations through Student Success Initiative scholarships. The population reached includes a significantly higher number of women, URMs, and 1st generation students.
    - COE continues to work closely with Honors College (HC) to recruit and retain high-achieving students. COE has increased the number of honors classes offered, and the capacity of said classes. In addition, COE worked to recruit high-achieving students by offering programs such as Leadership Academy, undergraduate research, and the Living-Learning Community.
    - The College is working to increase the number of fellowships available to diverse and high-achieving graduate student. COE is making investments in graduate-level Underrepresented Minority (URM) recruiting at SACNAS 2017, the National GEM Consortium, and a URM recruiting event at UW in Seattle.
    - The Leadership Academy program, currently engaging 175 students, is a seminar series aimed at helping students network, explore careers, and start the transition into professional life through events with alumni and local industry and company visits. The program provides a critical option for early career alumni looking to remain engaged with OSU and the COE.
    - COE continued its leadership in the Louis Stokes Alliance for Minority Participation (LSAMP), a program that has significantly increased the recruitment and retention of URM and Women

in Engineering and STEM disciplines more generally. LSAMP will be housed in the new Division of Student Affairs in Fall 2017.

- In other ways advance student success.
  - Over 1,600 COE students participate in, and on many occasions, have initiated, student clubs. Many clubs are multi-disciplinary and participate in national and international competitions. COE students have formed an Engineering Student Council to take an active part in managing the allocation of funds and govern the constellation of COE sponsored student clubs.
  - Responding to student demand, the Aerospace Engineering minor began in Fall 2016, with approximately 100 students. The program is designed to provide experiential learning that will prepare students for careers or graduate programs in astronautics and aviation.
  - COE has a number of programs to help prepare students for job interviews, MECOP/CECOP interviews and undergraduate research. For example, the OSU Society of Manufacturing Engineering (SME) students worked with Director of Leadership & Professional Development, Scott Paja, to host the annual OSU SME Mock Interviews with the COE Suit Camp.

2. Goal: Demonstrating leadership in research, scholarship and creativity while enhancing preeminence in the three signature areas of distinction.

   Describe impactful programs/efforts across foundational areas as well as signature areas to:

   - Attract and retain high quality faculty
     - The college recruited 12 tenure track faculty, including seven women.
     - In support of the College's performance goal to become a recognized model as an inclusive and collaborative community, all faculty searches have a search advocate outside of the unit, and all search chairs are trained as search advocates. In many search committees this year, the majority of the committee had received the search advocacy training.
     - The Associate Deans in COE enhanced the new faculty development/success program by adding a boot camp. New faculty hires report that this program makes a significant difference in their feelings of success as they begin their career at OSU.
     - COE hired and external proposal writing coaching group to work with assistant professors and co-hosted NSF's CAREER proposal writing workshop in Portland.
   - Expand and cultivate transdisciplinary research (on campus or through partnerships)
     - OSU launched the Collaborative Robotics and Intelligent Systems (CoRIS) Institute to build on the success of two internationally recognized programs in Robotics and Artificial Intelligence. The Robotics program is ranked 4th nationally, and 1st on the west coast.
     - Investments in advanced manufacturing and robotics have resulted in three new competitively awarded Manufacturing USA Institutes (NNMIs):
       - In partnership with Pacific Northwest National Laboratory (PNNL), OSU will co-direct the Rapid Advancement in Process Intensification Deployment (RAPID) Institute. RAPID is one of 4 major academic nodes focused on process intensification, housed in ATAMI. This $70 million grant will help efficiency in the U.S. chemical industry.
       - The Advanced Robotics Manufacturing (ARM) Institute, with a federal award of $80 million, will seek ways to integrate robotic technology in advanced manufacturing, increasing the competitiveness of manufacturing in the United States.
       - The Clean Energy Smart Manufacturing Innovation Institute (CESMII) will work to accelerate Smart Manufacturing adoption through $70 million dollars of federal investment in five regions across the US. COE is a member of the Pacific Northwest node of this NNMI, to be housed in ATAMI in collaboration with the RAPID institute.
     - OSU partnered with the state, industry, Portland State University and Oregon Tech to

build and launch the Oregon Manufacturing Innovation Center (OMIC), a collaboration bringing together industry, universities and government to address near-term manufacturing challenges through applied research and advanced technical training.
    - COE started building a new Engineering for Health initiative by seeding grants and collaborations with the College of Public Health and Human Sciences and Oregon Health Sciences University, including the Center for Early Cancer Detection (CEDAR).
- Increase the quality, capacity and impact of graduate programs
    - COE hired Dorthe Wildenschild as Associate Dean for Graduate Programs to support program and policy development. She is focused on developing data analytics in support of quantitative decision-making; implementing an annual review process for graduate students; leading URM recruiting efforts; facilitating a Graduate Student Success Series that addresses diversity and inclusivity; advocating for graduate students and postdocs; and supporting graduate faculty.
    - COE hosted the 3rd annual Grad Research Showcase where nearly 150 graduate students presented their research to the campus community, alumni, and industry partners, with top students also presenting their work at the Portland Oregon Staters Award event.
    - The MS in Computer Science Software Innovation Track, a cooperative effort between COE and COB, officially began accepting students. The track will focus on software innovation for students seeking careers as software designers and architects.
- Expand and increase high-profile programs in the arts and humanities.
- In other ways advance leadership in research, scholarship and creativity.
    - Launched in Fall 2016, the Engineering Out Loud podcast promotes the impact of COE's research and innovation. As of July 2017, the 16 episodes received an average of 563 downloads/episode (more than 9,000 downloads from 10 countries). In addition to receiving positive feedback from leaders at peer institutions and other listeners, the National Science Foundation's Science360 Radio now carries the podcast and promotes episodes that include NSF-funded research on their homepage.
    - COE faculty continue their remarkable success in NSF CAREER and Department of Defense Young Investigator (YIP) awards. In 2017, our faculty had a noteworthy 30% success rate out of 17 submitted proposals. The total number of such awards among all faculty in the School of Electrical Engineering and Computer Science (EECS) is now 25, an extraordinarily high number.
    - COE faculty reached over $49M in sponsored research leading colleges across the university and a record for the College.
    - Investments in the COE's Research Administration office have directly contributed to the record success in garnering research funding. In an effort to continue this pace, COE expanded this office by hiring a program administrator and a third proposal manager.

3. Goal: Strengthen impact and reach throughout Oregon and beyond.

Provide a brief summary of key initiatives that:

- Position OSU's outreach and engagement programs as learning laboratories that promote high-impact learning and effectively utilize university research
    - The OSU Industrial Assessment Center (IAC) received a $1.58 million award from the US Dept. of Energy to conduct student-led industrial energy and productivity assessments. The IAC serves as a hands-on learning laboratory for undergraduate and graduate students.
    - Skip Rochefort continued his leadership of numerous student success and outreach programs that span the College and the university, with both pre-college and undergraduate students.

- Grow rural and urban regional centers to advance social progress
- Drive economic development
  - Agility Robotics, a COE spinout led by Jonathan Hurst, located its headquarters in Albany, Oregon. The company's latest creation – a bipedal robot named "Cassie" – is poised to revolutionize robot mobility by traversing any awkward footings that come naturally to humans, but not typically to robots. Hurst and Cassie were invited to the Amazon's exclusive Machine-Learning Automation, Robotics and Space Exploration (MARS) conference.
  - The Northwest National Marine Renewable Energy Center received a $35 million award from the US Dept. of Energy to construct and commission the Pacific Marine Energy Center South Energy Test Site, (PMEC-SETS), intended to serve as the premier wave energy test facility for the United States. Executive Associate Dean, Belinda Batten, is the project lead.
  - COE acquired an ambient-pressure X-ray photoelectron spectroscopy system, the first instrument of its kind in the United States capable of imaging surfaces with atomic resolution, vital to the development of new and better materials for semiconductors, solar energy, batteries, catalysis and various environmental applications. The instrument will serve as part of a user facility within the NSF's National Nanotechnology Coordinated Infrastructure program.
- Increase study abroad and strategic international research partnerships
  - Faculty member David Porter, oversaw a 10-week summer internship program sponsored by Meyer International Limited in Thailand for the 3rd year. Since 2015, 3 undergraduate students and 15 graduate students have participated in this program.
  - Four engineering students from the University of Sheffield were awarded fully funded internships by OSU to study small modular reactor technology at OSU's NIST prototype and NuScale Power's nuclear test facilities. This is the 2nd year of this jointly operated collaboration between the School of Nuclear Science and Engineering (NSE) and NuScale.
  - Caitlyn Clark, graduate student in Mechanical Engineering, was awarded a Fulbright Scholarship to conduct research on wave energy at the Aalborg University in Denmark.
  - Fifteen students from COE represented OSU at the Formula Student competitions in Austria and Germany. The collaboration between OSU and the Duale Hochschule Baden-Wuerttemberg Ravensburg provides a unique learning experience that culminates with the cultural deep dive that they experience through the international competition.
- Engage alumni and other external partners to advance our goals
  - The 2017 Oregon Stater Awards, the college's signature alumni event, drew a record 230 attendees and industry members including A-dec, Daimler Trucks North America, ESCO Corporation, Perlo Construction, Swinerton Builders, and The Oregonian Media Group.
  - Each School in the College has an Industrial Advisory Board that meets at least once per year. The boards collaborate and advise on issues such as curricular reform, key disciplinary knowledge for students, and industry expectations for new hires.
  - The Industry Networking Night and the Industry receptions hosted by EECS brought together 83 industry representatives from 30 companies operating in the Pacific Northwest to interact with over 500 students.
  - The Construction Engineering Management program celebrated their 50th anniversary by inviting graduates to campus to continue to connect with alumni to advance the program.
- Advance impact and reach in other ways.
  - The PRISM group continues as the official source of weather and climate data for the US crop insurance program, which insures $130 billion in crop value in the US each year.
  - The bi-annual career showcase brought together more than 100 online Computer Science post-bacc students and alums from across the country. The showcase featured alumni and

industry panels, tips from faculty and graduates, a network lunch, and one-on-one interviews with employers.
    - Oregon State hosted the 2017 ASCE AISC National Student Steel Bridge Competition with 43 teams and approximately 450 students from throughout the world competing.

4. In addition to these goals the Strategic Plan also establishes a commitment to three essential features our OSU.

   Please provide a summary of key initiatives that align with these commitments:

- Enhancing diversity
    - Increasing diversity of faculty, staff and students
        - COE undertook a number of actions in the last year to increase diversity and to improve the awareness of diversity-related issues including the following:
            - The College hired Joe McGuire to fill a new associate dean position in faculty advancement. Joe is empowered to provide leadership and support for implementation of college goals for increased diversity, inclusion and equity.
            - COE revised its tenure track faculty search processes to monitor the demographic impact of committee screening processes to ensure impartiality. Search advocacy standards were extended to include professional faculty and staff searches.
            - COE delivered two new faculty development workshops to promote inclusive, equitable and just practices in our mission-specific activities, and built capacity to take ownership of our own learning around these issues by establishing, training and charging a 20-member Faculty/Staff Change Team.
            - The College identified P&T practices out of alignment with its goals for increased diversity, inclusion and equity, and is implementing steps to improve P&T processes.
            - Twelve COE faculty, including 3 from the leadership team, completed the 60-hour ADVANCE training, and two faculty completed the 60-hour DPD academy.
        - The CBEE RED team continued work focused on cultivating an inclusive culture in which students engage in realistic, consequential work. This effort has included professional development opportunities aimed at enhancing faculty members' awareness of institutionalized systems of inequality and privilege. By fall 2017, half of the faculty with significant teaching responsibilities will have completed a 60-hour educational experience that encourages examination of how unequal distribution of social, political and economic power becomes enacted in day-to-day personal interactions and through our curricula.
    - Developing comprehensive work-life balance programs
        - COE staff received the option to adopt alternative schedules in summer 2017 as a pilot. Assessment of this program will inform future adoption.

- Stewardship of resources
    - Enhancing resources through private philanthropy
        - COE has focused on supporting the OSU's Student Success Initiative with a clear emphasis on expanding our abilities to impact the goals of the university around first year retention and improved graduation rates.
            - The *Eric and Janice Hoffman Engineering Opportunity Scholarship,* created in spring 2017, will be an important contributor in advancing COE's student success goals – specifically around improving graduation rates. These current use awards will be

given to COE students who are in good academic standing and one to three terms from graduation, yet are at risk of not completing their degree for financial reasons.
        - The recently committed *Stevan Garlick Civil Engineering Scholarship Endowment* seeks to help engineers graduate without significant debt. This generous commitment will ensure a high level of support for civil engineering students for generations to come.
        - The *Richard E Hatchard Environmental Engineering Endowment Fund* helps juniors and seniors in environmental engineering complete their degrees. COE was able to secure a significant commitment to add to this endowment, expanding scholarships to include undergraduate and graduate students at any point in their education.
    - Develop an integrated infrastructure recapitalization plan
        - The college has a multi-year renovation/rehabilitation plan to allow the utilization of existing facilities, including Merryfield, Graf, Batcheller and Covell Halls.
    - Promote sustainable built and natural environments
    - Balance economic and environmental improvements in the region
- Technology as a strategic asset
    - Share relevant information to make effective decisions
    - Invest in information technology to enable educational innovation
        - COE began working with various campus data sources (e.g., CORE and IR/Data Warehouse) to establish new dashboards and customized data analytics in Tableau in support of data-informed decision making.
        - COE has begun significant post-processing of eSET scores in order to provide more meaningful and actionable information to instructors, school heads, P&T committees, and college. The college is working with other STEM colleges to share our approach.
        - The School of EECS worked closely with the Business and Engineering Business Center to develop a tool for hiring and processing student HR appointments. This comprehensive new tool improves hiring efficiency and facilitates communication to all stakeholders.
    - Enhance the quality of service in administrative processes

5. The OSU Office of Institutional Research provided the college-level metrics included below. Generally, the trends in these metrics are positive. Both faculty FTE and enrollment at the undergraduate and graduate levels have grown. First-year retention and graduation rates have held steady since FY15. The junior transfer four-year graduation rates for the college have declined this year, and the Associate Dean for Undergraduate Programs will analyze possible causes and act to remediate this trend.

   The numbers of U.S. minority students increased over the last three years from roughly 20 to 23 percent, while the numbers of international students have held steady. The number of high-achieving Oregon students in the college has topped 55%.

   The number of awarded college degrees increased nearly 27% percent over the FY16, reaching 1762. Baccalaureate degrees increased 45% over FY16 and a record number of PhD and Masters students graduated, with 342 Masters and 75 PhD degrees. This represents 46.8% and 23% increases over FY16 numbers, respectively.

   The number of new research contracts awarded in FY17 lower than in FY16, however the total dollar amount is 32.5% higher. Several large multidisciplinary awards (particularly the NNMIs discussed above) account for the increase in dollars.

Oregon State University

College of Engineering

Annual Academic Program Review 2016-17

PART 1

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% Change '15 - '17
Faculty FTE																
Professorial	117.4	109.6	116.3	121.1	123.1	125.3	131.4	136.1	131.6	138.2	152.1	165.6	181.1	189.8	209.1	15.5%
Non-Professorial	59.2	56.6	65.4	71.4	74.6	73.3	69.0	76.6	84.2	93.6	93.7	113.6	129.0	131.7	133.7	3.6%
Total Faculty FTE	**176.6**	**166.2**	**181.7**	**192.5**	**197.7**	**198.6**	**200.4**	**212.7**	**215.8**	**231.8**	**245.8**	**279.2**	**310.1**	**321.5**	**342.8**	**10.5%**
E&G Tenured/Tenure Track	90.4	87.5	91.4	97.5	99.3	96.3	96.3	99.8	100.6	107.0	120.2	132.2	146.4	155.7	158.1	8.0%
Faculty Headcount																
Professorial	126	119	128	129	131	132	147	143	138	146	159	174	191	196	217	13.6%
Non-Professorial	65	70	74	86	86	85	79	88	97	106	103	123	138	141	147	6.5%
Total Faculty Headcount	**191**	**189**	**202**	**215**	**217**	**217**	**226**	**231**	**235**	**252**	**262**	**297**	**329**	**337**	**364**	**10.6%**
E&G Tenured/Tenure Track																-
0% E&G Funded	3	1	2	4	2	2	4	4	5	2	1	1	0	0	1	-
1%-33% E&G Funded	3	1	2	1	0	2	0	3	2	1	1	3	2	2	0	-100.0%
34%-66% E&G Funded	4	3	2	3	3	3	6	9	5	3	3	4	5	7	4	-20.0%
67%-99% E&G Funded	4	5	5	6	6	9	11	6	14	11	15	16	8	6	8	0.0%
100% E&G Funded	87	84	89	92	94	89	87	92	88	99	108	118	138	147	154	11.6%
Total Tenured/Tenure Track	**101**	**94**	**100**	**106**	**105**	**105**	**108**	**114**	**114**	**116**	**128**	**142**	**153**	**162**	**167**	**9.2%**
SCH (Academic Year)																
Undergraduate	62725	63400	63544	61149	59411	59985	64014	69368	74896	79740	87507	94130	97644	106928	114674	17.4%
Lower Division	24366	23528	21330	19876	21371	22197	23626	26833	28503	29203	32819	33771	34769	36196	36849	6.0%
Upper Division	38359	39872	42214	41273	38040	37788	40388	42535	46393	50537	54688	60359	62875	70732	77825	23.8%
Graduate	19372	18496	16642	16535	18256	19074	20042	23054	25304	26117	27276	27452	31567	34841	35757	13.3%
First Professional	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
TOTAL SCH	**82097**	**81896**	**80186**	**77684**	**77667**	**79059**	**84056**	**92422**	**100200**	**105857**	**114783**	**121582**	**129211**	**141769**	**150431**	**16.4%**
Duplicated Major Count																
Undergraduate	3161	3155	3087	3064	3142	3221	3449	3764	4217	4463	5114	5836	6565	7120	7480	13.9%
Graduate	601	626	551	525	569	583	657	733	842	900	975	1094	1230	1304	1377	12.0%
First Professional	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
TOTAL Major Count	**3762**	**3781**	**3638**	**3589**	**3711**	**3804**	**4106**	**4497**	**5059**	**5363**	**6089**	**6930**	**7795**	**8424**	**8857**	**13.6%**

Oregon State University

College of Engineering

PART 1

STRATEGIC PLANNING METRICS 2016-17

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Goal 1. Provide a Transformative Educational Experience for all Learners.															
1.3 First Year Retention Rate (College/University)	67.5/ 83.7	68.8/ 85.4	70.0/ 84.7	64.0/ 82.0	68.5/ 81.5	70.0/ 84.5	68.4/ 80.9	71.7/ 85.6	72.7/ 84.6	70.4/ 84.2	73.2/ 85.5	72.5/ 85.7	72.1/ 84.7	72.6/ 85.4	71.7/ 85.2
1.4 6-Year Graduation Rate (College/University)	39.6/ 63.0	44.0/ 62.2	45.0/ 62.7	44.7/ 66.9	41.5/ 65.1	45.2/ 66.0	45.6/ 66.5	44.2/ 63.8	43.5/ 63.3	43.6/ 63.4	45.1/ 62.3	44.4/ 62.5	45.8/ 65.6	47.6/ 66.1	46.7/ 62.6
1.5 Junior Transfer 4-Year Graduation Rate (College/University)	63.4/ 70.5	69.8/ 77.8	58.4/ 65.3	46.6/ 59.1	64.9/ 70.2	69.1/ 61.7	63.6/ 68.8	63.6/ 55.8	61.5/ 53.8	62.5/ 67.0	59.4/ 65.6	50.0/ 59.8	53.5/ 62.8	58.2/ 65.7	44.9/ 60.3
1.6 % US Minority Students	13.8%	13.4%	13.0%	13.6%	14.2%	13.3%	14.2%	14.8%	15.2%	16.6%	17.6%	17.9%	19.9%	21.4%	22.8%
1.7 % International Students	14.0%	11.0%	9.0%	8.0%	8.0%	9.0%	9.0%	10.0%	13.0%	15.0%	18.0%	20.0%	20.0%	19.8%	19.7%
1.8 % High Achieving Oregon High School Graduates	-	35.0%	36.7%	42.3%	39.0%	37.5%	41.5%	42.3%	43.6%	44.9%	43.1%	46.9%	53.1%	48.7%	55.4%
Goal 3. Strengthen Oregon State's Impact and Reach throughout the state and beyond.															
3.2 Invention Disclosures	23	17	23	22	24	0	23	18	41	29	33	23	26	24	35

Oregon State University

College of Engineering

PART 2

Annual Academic Program Review 2016-17

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% Change '15 - '17
Resources (Fiscal Year)																
E&G - Ending Budget ($)	24,109,254	26,401,873	28,406,997	27,035,244	26,159,176	31,102,409	32,173,327	28,479,182	34,352,668	37,190,807	45,646,274	54,867,800	61,680,596	68,832,311	71,653,233	16.2%
Total R&D Expenditures ($)	16,872,297					19,421,598	23,138,091	24,861,292	27,373,771	29,419,952	32,844,215	30,304,621	36,593,030	40,298,186	FEB 2018	-
Awards from Grants and Contracts* (#)	231	205	226	197	236	270	177	317	275	215	204	206	308	356	285	-7.5%
Awards from Grants and Contracts ($)	15,910,384	15,150,490	24,403,525	19,450,969	18,264,422	22,869,878	24,575,119	36,673,037	33,905,767	30,963,305	29,656,248	38,193,403	37,382,242	32,876,082	49,521,973	32.5%
Private Giving ($)							9,357,350	11,521,200	12,665,771	18,492,346	11,168,468	23,948,757	24,019,998	20,624,771	17,366,583	-27.7%

Oregon State University

College of Engineering

PART 3

Annual Academic Program Review 2016-17

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% Change '15 - '17
Degrees (academic year)																
Bachelor	520	559	531	597	588	505	539	576	583	664	690	851	928	1055	1345	44.9%
Master	142	181	188	135	112	127	140	169	177	208	188	235	233	290	342	46.8%
Doctorate	24	30	25	32	35	27	36	43	40	47	62	71	61	45	75	23.0%
First Professional	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Total Degrees	686	772	744	764	735	660	715	788	800	919	940	1157	1222	1390	1762	44.2%