THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

2018 Strategic Plan

The Ohio State University

Mission/Vision Statement

VISION

The Ohio State University is the model 21st-century public, land grant, research, urban, community engaged institution.

MISSION

The University is dedicated to:

• Creating and discovering knowledge to improve the well-being of our state, regional, national and global communities;
• Educating students through a comprehensive array of distinguished academic programs;
• Preparing a diverse student body to be leaders and engaged citizens;
• Fostering a culture of engagement and service.

We understand that diversity and inclusion are essential components of our excellence.

VALUES

Shared values are the commitments made by the University community in how we conduct our work. At The Ohio State University we value:

• Excellence
• Diversity in people and of ideas
• Inclusion
• Access and affordability
• Innovation
• Collaboration and multidisciplinary endeavor
• Integrity, transparency, and trust

CORE GOALS

Four institution-wide goals are fundamental to the University's vision, mission and future success:

Teaching and Learning: to provide an unsurpassed, student-centered learning experience led by engaged world-class faculty and staff, and enhanced by a globally diverse student body.

Research and Innovation: to create distinctive and internationally recognized contributions to the advancement of fundamental knowledge and scholarship and toward solutions of the world's most pressing problems.

Outreach and Engagement: to advance a culture of engagement and collaboration involving the exchange of knowledge and resources in a context of reciprocity with the citizens and institutions of Ohio, the nation, and the world.

Resource Stewardship: to be an affordable public university, recognized for financial sustainability, unparalleled management of human and physical resources, and operational efficiency and effectiveness.

We aspire to be the leader in discovery, innovation, and education in engineering and architecture among public land grant universities, recognizing that diversity, equity, and inclusion are essential components of our excellence.

Mission
We seek to develop solutions to important global problems through our discovery and innovation and to prepare leaders in engineering and architecture through our education and outreach programs to enhance economic competitiveness regionally, nationally and globally.

Core Values
Our core values are: excellence; diversity in people and of ideas; inclusion; access and affordability; innovation; collaboration and multidisciplinary endeavor; and integrity; transparency and trust.

Foundations
This strategy document is a revision of the 2014-2020 College of Engineering Strategic Plan and antecedent documents cited there. This revision has been made in response to significant evolution of the college and its environment over the past two years.

Strategic Goal
A top ten Engineering Program with a distinctive and enabling environment for teaching, learning, discovery, innovation and creative expression that transforms and enriches individuals and society.

Strategic Plan Goals by Area

Research
1) Provide scientific and technological leadership in the 4M's, and address the biggest challenges for the State of Ohio, the Nation, and the World through collaborative solutions.
2) Invest in engaged scholarship, and grow the impact and reputation of the College's research, translational and education programs.
3) Conduct commercially viable research, and become the national and international leader in collaborating with industry to drive significant advances for critical societal and economic changes.

Education for Career Development
4) Provide a world-class undergraduate engineering and architecture education maintaining our stature as a top-ten producer of BS engineering degrees.
5) Grow participation in undergraduate research and cultivate internal research talent.
6) Be a national leader in graduate education.
7) Be a national leader in graduate student and postdoctoral scholar professional and career development
8) Professional and Distance Education Programs (PDEP) office will provide a centralized unit for the administration and marketing of college professional programs and degrees offered both online and in-person to support the career advancement of engineers and architects.

Advancement

9) Create and sustain a top-performing, diverse and inclusive Advancement organization that will attract and retain first-rate talent within the framework of an integrated infrastructure and a highly collaborative culture, in order to optimize constituent engagement, alumni loyalty, and philanthropic revenues.

10) Foster awareness of and advocacy for the College in order to enhance revenue, reputation and rankings.

11) Broaden and deepen constituent engagement with the College, developing more meaningful and loyal relationships that can be leveraged towards increasing philanthropic support

12) Increase and strengthen corporate/industry partnerships with the College in order to optimize philanthropic revenues and research grants, as well as to increase experiential learning and career opportunities for students.

13) Optimize and maximize philanthropic support for the College of Engineering towards attaining and sustaining $100M in private funds raised annually by or before the end of the University's next comprehensive campaign.

Diversity and Inclusion for Excellence

14) Achieve a more diverse and inclusive undergraduate and graduate student body, faculty and staff.

15) Create and sustain an organizational environment that intentionally values inclusive excellence and advances equity.

16) Become recognized as a state, national and international leader advancing diversity, inclusion and equity in engineering.

Faculty, Staff and Facilities

17) Build a world-class faculty and staff for world-class education, research and outreach programs.

18) Grow and transform our physical spaces to drive learning and innovation.

Technology Services

19) Design and implement a secure high-performance network to support inter-disciplinarity appointments and reduce associated costs of operating 24 networks down to a few.

20) Promote universal core services that support a shared service model and reduces equipment and personnel costs.

Finance, Business Operations and Human Resources

21) Implement a college-centric organizational structure in business operations, human resources, and finance to support the strategic goals of the college including growth in faculty, research growth and academic excellence. Ensure services are provided efficiently with a focus on customer service while also ensuring compliance.

22) Using robust reporting tools and data analysis, ensure unit and college leadership has financial and human resources data to inform strategic decisions.

Background and current conditions

From automobiles to spaceships, cities to computers, the modern world's built environment, and its constructive interaction in a sustainable way with the world's natural environment, are the result of generations of research, applications, and work by countless architects and engineers. The current breadth of The Ohio State University's College of Engineering and Knowlton School of Architecture reflects this essential role our expertise has provided to nearly every facet of modern society. This current strategic plan articulates our proposed path forward, to continue this critical contribution to society, here in Ohio and across the globe. We seek to pursue this path in order to maintain the cutting-edge leadership of The Ohio State University in the development of positive social, economic, educational, and quality of life outcomes for all people everywhere.

Furthermore, the ability of The Ohio State University's College of Engineering and Knowlton School of Architecture to continue their leadership roles depends as much on the constructive integration of multiple and disparate disciplines, as it does on the strength of any of these individual disciplines themselves. Therefore, in addition to a plan that fortifies traditional core-strengths (e.g., "mechanical engineering," "chemical engineering," or "optical engineering"), this plan also brings strong focus to the interdisciplinary nature of the work required to contribute beneficially to modern society. The strength of connectivity among disciplines is required as a result of the deeper integration of the world itself, made possible through advancements in information technology, communications, transportation, supply chains, and many other engineering and architecture-related activities.

The following additional factors are high-level drivers that have shaped the current strategic plan.

Meeting the demand for engineers. Sustainable growth and increased standards of living for our global society requires high quality, work place- and market place-ready engineering and architecture talent be produced in significant quantity. As a result, the national and global demand for engineering and architecture talent continues to increase. At the same time, the college-age population in the U.S. is decreasing. The higher education market place is becoming increasingly competitive and engineering programs must deepen the quality of the academic programming, faculty, facilities and infrastructure and open access to new pools of incoming students.

Faculty Growth. To assure high quality education and robust research, we are growing our faculty to 340 tenure track faculty members and 60 clinical faculty members by 2021. This campaign is being supported by investments in associated faculty, staff, graduate students and facilities.

Globalization of engineering. Engineering and architecture are international endeavors. Our students must be prepared for the international dimension of the profession they are training for.

Diversity and inclusion. Diversity in culture, ethnicity and background and inclusion of all perspectives is essential to ensure maximum effectiveness and health of the engineering and

architecture professions. Diverse and inclusive environments where teaching and research occurs is essential to ensure that the knowledge created and the students produced are relevant and connected to the needs of our changing global society.

Distinguishing areas of research strength. While continuing to build the Ohio State brand in our recognized strengths in Materials, Manufacturing, Mobility and Engineering for Medicine (4M's), we will strategically invest in areas that directly address what matters most to the State of Ohio, the Nation and the Global community. Ohio State's recognized capabilities in the 4M's differentiate us from other universities and allows us to capitalize on our asymmetric advantages in these areas. To enhance our state, national, and global impact, we will also foster and expand our network of collaborators and customers in the key research areas and industries, including: energy, transportation, aerospace, automotive, manufacturing, medical devices, defense, cybersecurity, robotics, data analytics, and water and environmental management.

New modes of teaching and learning. The centuries-old model for creating learning communities by aggregating teachers and learners in the same place at the same time is now being extended in our massively connected electronic world. High-bandwidth communications, data storage and rendering that span the globe allow us to port the traditional classroom experience across distance and time. This enables us to reach new kinds of students and develop educational programs that go far beyond traditional degree programs.

Supporting expanded undergraduate degree programs. Undergraduate enrollment has increased by over 60% since 2008. This growth has placed significant demands on faculty, staff, space and fiscal resources. The college has not yet fully adapted to this growth and elements supporting undergraduate educational programs must be reinforced and modified.
Dispersed location. The college operates on main campus, west campus locations, the OSU Airport and the Transportation Research Center. It must develop the methods and culture to operate effectively across these physical separations.

Communication. Efficient communication across the large and dispersed organization has natural challenges. Reliable channels of communication, electronic connectivity, and electronic workflow must be developed, refined and used regularly to ensure efficiency and effectiveness.

Focus. The profile of the college has increased in recent years. The range of opportunities for the college has increased accordingly. A solid strategy, well-conceived, broadly adopted and closely followed is needed to know which opportunities to pursue and which to let pass

Research

Goal: Provide scientific and technological leadership in the 4M's, and across the 4M's, addressing successfully the biggest challenges for the State of Ohio, the Nation, and the World through collaborative solutions.

Strategy	Metric
Make strategic investments in faculty, researchers, graduate students, equipment and space to grow capability of major interdisciplinary research centers aligned with signature research in the 4M's.	• 5 major College Centers with greater than $5M/yr. external funding.
Promote interdisciplinarity through joint faculty appointments and establishing formalized partnerships with other colleges at OSU that focus on major cost sharing investments in infrastructure, technology and faculty support.	• 20% joint appointment faculty. • Establish 3 new inter-college research facilities by FY20.
Consolidate research and operations best practices developed by the COE research centers, and create a framework for all COE units to accomplish more streamlined operations.	• Reduction in processing time, simpler logistics, more nimble operations.
Utilize the Proposal Development Office and COE's research expertise to capture major research programs aligned with signature research areas, and grow the size and the scope of the Proposal Development Office to increase the faculty's effectiveness in securing external research funding.	• 10% increase in the number of major research awards (>$1M/yr) • Total annual research expenditures of $160M by FY20. • Annual research expenditures per faculty member of $500K/TTF by FY20.
Capitalize on the OSU's Corporate Engagement Office and the Industry Liaison Office to connect industry funded research with Federal and State programs.	• Secure $20-40M in new opportunities with industry collaboration.

Goal: Invest in engaged scholarship, and grow the impact and reputation of the College's research, translational and education programs.

Strategy	Metric
Increase the level of the COE faculty's engagement with the National Research Council committees and Federal Agencies who drive the National research agenda, through a coordinated nomination process by the NAE members, Society Fellows and COE distinguished senior faculty.	• Increased presence of OSU faculty on National committees.
Increase financial support beyond the research project-based funding by creating bridge funding through strategic partnerships with industry, alumni and other stakeholders to grow the number of Ph.D. students and increase yield of highly-qualified PhD graduates.	• # of new graduate fellowships. • 4 Ph.D. students/TTF/year by FY20. • 1 Ph.D. graduate/TTF/year by FY20. • # of PhD graduates placed in top tier academic institutions, national labs and Fortune 500 industry.
Increase the quality and quantity of our scholarly output by focusing on faculty success through enhanced use of technology, incentivized engagement in cross-disciplinary research centers, and creating college-wide seed grant program.	• Aggregate annual publication profile (papers, books, citation index, etc.). • International and National Awards. • Society Fellows. • NAE faculty.
Create a fund that can be utilized to provide a path for Discovery to Deployment with industry and the VC community with a focus on managed efforts to execute this program from business validation to prototype development, leading to pre-production of OSU technology that is deployed with industry involvement or VC startup creation.	• Raise $5-10M dollars in funds from investment firms, individual donors and industry which yield future revenue growth in the $70 to $100M range.

Goal: Conduct commercially viable research, and become the national and international leader

in collaborating with industry to drive significant advances for critical societal and economic changes.

Strategy	Metric
Exemplify best practices in innovative and impactful research for our peers across the nation and around the world by creating an effective framework that will incentivize faculty's entrepreneurship and involvement in industry-driven translational research.	• Realignment in administrative structure completed by FY20.
Improve the process and opportunities for licensing, commercialization, and startup companies from research activities by creating templates and streamlined processes for modern contract and IP terms.	• # of disclosures filed, patents issued. • Increase in licensing revenue. • # of startup companies by faculty, students, and recent graduates.
Drive the COE and OSU culture change to develop and market industry-ready facilities and services based on the Center for Design and Manufacturing Excellence model.	• 10% increase in industry research funding by FY20. • Workforce development aligned with industry needs.
Develop cross-disciplinary teams that focus on major industry challenges that link to the fundamental research goals/strengths of OSU.	• Increase key industry initiatives relating to the 4M's. • # of graduates hired by the key industrial partners.
Establish partnerships with state agencies to leverage our impact and facilitate combined Federal and industry funding to more successfully influence the economic growth of Ohio.	• OSU-based R&D funded by industry per $1K of GDP. • Positive impact on economic growth in Ohio.

Education and Student Development

Goal. Provide a world-class undergraduate engineering and architecture education maintaining our stature as a top-ten producer of BS engineering degrees.

Strategy	Metric
Deploy world-leading first-year engineering programs.	• All students will have an authentic team-based, design/build project experience in the first year. • Students will achieve student learning outcomes to enable success in chosen major. • All students will have the opportunity to develop entrepreneurial mindset through the first-year programs.
Continuously innovate major curricula.	• Curricula continuously accredited • New programs responsive to current demand (analytics, cybersecurity, manufacturing, public policy, energy).
Develop opportunities in collaboration with departments and programs to enable experiential learning across the 4-year curriculum.	• All undergraduates in COE and KSA will participate in one or more of the following high-impact practices: co-op/internship, education abroad, research, student organizations, competitive project teams, K12 outreach, learning communities, service learning.
Maintain a supportive advising structure to retain and graduate a diverse student body.	• Implement centralized undergraduate holistic admit to major process. • Maintain enrollment/admission processes to create student/faculty ratio near median of peer group. • Graduate at least 21% of the undergraduate engineering enrollment each year. (25% for KSA). • Move towards student/advisor ratios in alignment with national professional standards.
Enhance external partnerships to enable rapid integration of students into diverse, global engineering careers.	• More than 2000 companies recruiting students. • Integrate contacts between industrial liaison office and student services.

Promote and support effective, innovative and inclusive teaching. Develop and report on effective teaching measures at the college level.	• Reorganize academic administrative structure to formalize dissemination of engineering education research results, innovative and inclusive teaching practices to the faculty.
Collaborate with departments and programs to address affordability through need-based financial aid.	• Refocus scholarship and grant awarding to improve graduation outcomes. • Increase communication and visibility. • Implement best-practices in awarding from endowments. • Targeted training for faculty and staff.

Goal: Grow participation in undergraduate research within and across disciplines, and cultivate internal research talent.

Strategy	Metric
Create initiatives to engage 1st, 2nd, and 3rd year students in undergraduate research.	• 10-15% participation in UG research.
Engage all engineering undergraduates about benefits of and career opportunities available with a graduate degree.	• 10-15% of our UG's pursue advanced degrees.
Increase the percentage and diversity of students participating in undergraduate research.	• 10-15% participation in UG research.

Goal: Be a national leader in graduate education.

Strategy	Metric
Create strategic collaborations and partnerships with internal units and external institutions and organizations to increase our graduate applications, particularly from domestic and diverse students.	• Increase the number of applications and admits from domestic and diverse students such that we become leaders among peer institutions. • Create two strategic MSI partnerships that lead to an increase in applications and admission of diverse graduate students.

Increase our research capacity and productivity.	• Grow our graduate programs and increase our PhD/faculty ratio such that we are among the leaders of our peer institutions. • Increase the number of publications/PhD student by one • Achieve a ratio of Graduate/Undergraduate engineering enrollment that is at or above the median of our peer institutions.
Create initiatives to advance and support diversity and inclusion and provide a competitive advantage to our students, faculty and staff.	• 50-60% of faculty, staff and students engaging in implicit or unconscious bias or active bystander trainings/facilitated discussions, or other diversity and inclusion activities. • 60-70% of faculty participate in mentor development workshops to increase their effectiveness of mentoring graduate students and postdoctoral scholars. • 50-60% of our graduate students participating in mentoring programs particularly female and diverse students.
Create new funding streams for graduate students.	• 25-50 first and second year graduate students receiving external fellowships. • Create 10-15 new fellowship opportunities for graduate students to be used on an ongoing basis. • Increase the number of students supported by fellowships to 150.

Goal: Be a national leader in graduate student and postdoctoral scholar professional and career development

Strategy	Metric
Create comprehensive career and professional development opportunities for graduates and postdoctoral scholars (postdocs).	• Develop a graduate-focused component within the ECS career fair(s) by 2019. • Have 80% of graduate students registered with ECS and 50%-60% of graduates and postdocs participating in career and professional development by 2020.
Develop a business and project management course for graduate students.	• Have all graduate students complete these courses by 2020.
Enhance external partnerships with employers hiring master and doctoral students and postdocs.	• More than 1000 employers recruiting scholars and/or graduate students. 10-20% of graduate students participating in internship opportunities by 2020.

Goal. Professional and Distance Education Programs (PDEP) office will provide a centralized unit for the administration and marketing of college professional programs and degrees offered both online and in-person to support the career advancement of engineers and architects.

Strategy	Metric
Develop, manage, and market professional education and certificate programs in online or in-person format with revenue sharing for participating college departments.	• Operate at least ten programs by 2020.
Grow enrollment of MGEL degree.	• Enrollment of 40 students by 2020.
Manage the MGEL degree so it's delivered with the highest quality to promote enrollment growth.	• US News and World Report online engineering degree programs ranking is within top 25.
Increase the number of technical tracks in the MGEL degree by increasing the number of graduate level courses offered in distance learning format to promote enrollment growth.	• Add two new technical tracks by 2020.

Establish a Distance Learning Advisory Group to support distance learning and the PDEP office in the development of graduate courses in DE format and the growth of distance education in the college.	• Form Advisory Group that will consist of faculty, staff, and ODEE. Group to meet quarterly during each FY and each person serves at least one year.
Launch a Master's Engineering Management (MEM) degree.	• Degree begins enrollment in Autumn 2020.

Advancement

Goal: Create and sustain a top-performing, diverse and inclusive Advancement organization that will attract and retain first-rate talent within the framework of an integrated infrastructure and a highly collaborative culture, in order to optimize constituent engagement, alumni loyalty, and philanthropic revenues.

Strategy	Metric
Continue to seek ways to improve operational efficiencies of team.	
Focus on staff retention and training: • Advancement leadership to work with College and Foundation leadership to ensure that compensation standards accurately reflect the current marketplace, relevant benchmarks are considered, and pay incentives are appropriate and effective. • Encourage all staff to consider, set, and work towards future career goals, and provide support for same. • Be alert to promotion and growth opportunities internally to incentivize best performance and retain experienced staff. • Utilize training from outside and within the University. • Provide funding for staff to attend external professional development opportunities • Encourage staff to consider becoming active as leaders in relevant professional associations and/or presenters at relevant conferences.	• Sustain a staff attrition rate of turnover at or below 5% annually over the course of the campaign.

Develop and implement a plan for increasing diversity amongst the Advancement staff and towards furthering an inclusive culture. Utilize and leverage the resources of our colleagues in the COE Office of Diversity, Outreach and Inclusion.	• Achieve racial/ethnic diversity that is roughly equivalent to population of the State of Ohio by end of campaign.
In hiring, apply the highest standards for skills, experience, commitment, and fit.	• Our ability to sustain the various performance metrics and objectives stated in this plan should reflect our success in this area.
Continually seek to improve and refine the collaborative nature of the team, Sustain and promote a team culture as a leading value. Ensure that performance incentives along with evaluation structures and policies are oriented towards a supportive team culture, while also recognizing and rewarding individual effort and initiative.	
Promote the College's Advancement team as a collaborative partner within the university, with special attention to building strong lines of communication and collaboration with our colleagues in University Advancement as well as in other colleges and units.	• Periodic surveys of University partners including University Advancement to demonstrate whether we are viewed as collaborative and establish strong effective channels for communication.

Goal: Foster awareness of and advocacy for the College in order to enhance revenue, reputation and rankings.

Strategy	Metric
Create ongoing partnerships with University marketing and communication offices, as well as College department communication efforts.	• Assigned liaisons that meet regularly and communicate effectively with partners and constituent departments.
Expand and improve content development and delivery strategies to emphasize College's status as a top-tier research and teaching College of Engineering.	• Increased placement of top priority College messages and releases in broad range of media with high quality and broad and/or targeted exposure.
Enhance audience segmentation and analytics to deliver the right messages to the right people.	• Regular and consistent utilization of analytics tools acquired for this purpose.

Sustain the circulation and saturation of positive stories in regional, national, and international media, including philanthropy stories.	• Demonstrable regular utilization of ambassadors and other key leaders as the drivers of communication • The impact of philanthropy on the College is incorporated and emphasized in all relevant stories and media.
Develop tools and tactics to support the College's pursuit of increased industry partnerships and philanthropy.	• Industry partners consistently report they feel very positive about their relationship with the College across a range of critical areas, including talent recruitment.
Create custom and unique communications updates for key volunteers and donors.	• Conference calls with the dean, live web stream of state of the College, etc.

Goal: Broaden and deepen constituent engagement with the College in order to develop more meaningful and loyal relationships that can be leveraged towards increasing philanthropic and other means of support.

Strategy	Metric
Fulfill a strategic Engineering alumni engagement plan that is sustainable, meaningful, and impactful for alumni and the College.	
Design local and regional event programming that supports engagement efforts of key constituencies.	• Demonstrable use of data and analytics to strategically target cities and constituents with meaningful engagement activities and good potential for return on investment; and • Increased attendance (generally double FY16) to signature engagement events including: the Roadshow, Cbus+, and O-H-I-O on the Road.
Engage alumni and friends through various affinity groups to maximize the impact of outreach and materially strengthen the connection back to the university/college/ department/organization.	• Enhanced deployment of a broad range of College leadership. • Build and leverage key industry partnerships.
Build loyalty and commitment to the College and University at the student level and nurture this throughout each student's collegiate career.	• Create meaningful opportunities for students to engage with alumni, the alumni office, the advancement team, and to learn about the importance and impact of philanthropy - during each year of their college career.

Establish a robust student and young alumni engagement program to enhance the relationship with the College within the first 10 years of graduation.	• Design and implement a strategy that renews, better defines, and invigorates the young alumni ambassador program; establish agreed regular program goals and priorities including annual giving goals.
Create synergy and alignment between engagement and philanthropy.	• Tracked giving from event attendees with goal of increased giving and participation over time.
Continue to work with and leverage our partners at the OSU Foundation/Alumni Association for innovative programming, multi-unit collaboration.	• Partner with the Foundation/Alumni Association on at least 2 events annually.
Establish volunteer outreach efforts in conjunction with the Office of Volunteer Relations.	• Demonstrate consistent and continuing year over year increase in volunteer participation from alumni of the College; and • Demonstrate consistent and continuing year over year increase in the number of volunteer opportunities available for alumni of the College.
Pursue establishment of a robust reunion program based on unit affiliation over the next several years.	• Targeted reunion activities will be regularly held for at least one class year (or cluster e.g., 10th, 25th, or 50th) before the end of the next comprehensive campaign.
Create multi-generational opportunities to engage alumni with the college.	• Establish programming that allows for alumni of different years/eras to connect, including for example a summer camp for alumni and their children/grandchildren to expose them to engineering; a mentoring program; networking nights.

Goal: Increase and strengthen corporate/industry partnerships with the College in order to optimize philanthropic revenues and research grants, as well as to increase experiential learning and career opportunities for students.

Strategy	Metric
Build a systematic and collaborative approach to foster strong and sustained industry partnerships and philanthropy. Identify critical stakeholders and partners within the College and across the University, establish good open lines for communication, determine areas of interest and overlap, foster collaboration, agree on primary responsibility where overlap occurs, and leverage strengths of each internal partner: Corporate Engagement (University), Corporate Relations (Advancement), Industry Liaison Office (College/Research), Career Services (College).	• Strategy designed and implemented with input and ongoing involvement of Career Services, Corporate Engagement, Corporate Relations, and ILO to identify key COE partners/employers and establish direct affinity based partnerships; and • Fundraising results to reflect a broad-based and ever-increasing support for the College from corporates/industry including but not limited to research.
Focus on enhancing knowledge of and partnership with key College faculty and administrative leaders to open doors, enhance and enrich relationships, and to cement ongoing ties • Automotive industry: leverage relationships long established through Center for Automotive Research (CAR) as well as Transportation Research Center (TRC). • Oil/gas and chemicals. • Aerospace. • High Tech/Electronics. • Biomedical. • Financial.	• Develop and implement a compelling case for corporate partnership with the College in each of these areas, with specificity around ROI for each.
Highlight industry partners through regional engagement events, as well as Cbus+ events series.	• Produce at least two events annually that highlight a corporate or industry partner (e.g., AEP and NetJets in 2017).
Assess need for additional resources within the College required in order to drive progress towards maximizing this goal.	• Deliver proposal for increased resources by close of FY18.

In FY 18 identify top 10 current industry partners and top 25 prospects for enhanced cultivation, solicitation, stewardship and outreach efforts.	• Updated or new strategic plan for each partner and prospect by close of CY 2018
Emphasize and incentivize outreach to alumni in key corporate leadership positions in order to help optimize relationships. • Expand on executive leadership roundtable initiative.	• Included as part of DO evaluation annually.
Publicize and promote mutual benefits of recently completed or ongoing partnership initiatives.	

Goal: Optimize and maximize philanthropic support of the College of Engineering towards attaining and sustaining $100M in private funds raised annually by or before the end of the University's next comprehensive campaign.

Strategy	Metric
Concentrate on mega and principal ($10M+) gifts through collaboration with the OSU Foundation and seek to fund 'big ideas' from our faculty that will deliver a sustained impact and clear ROI.	• Over the next five years ramp up fundraising activity to achieve and sustain $100M+ on a regular annual basis by 2024.
Maximize fundraising totals by counting all viable revenue streams.	
Grow a more reliable and larger pipeline of major gift prospects using data mining and prospect research.	• Increase assigned major gift prospects for the College from 400 to 600 through portfolio management and discovery work.
Meet and surpass philanthropic fundraising goals for capital projects, including the new OSU Airport terminal and the Biomedical and Materials Engineering Complex (BMEC).	• Airport- $2.5M. • BMEC Phase 1- $10M. • BMEC Phase 2- $20M.
Increase collaboration with corporate relations and foundation relations at the OSU Foundation in order to increase gifts to the College.	• Meet on a regular basis (at least monthly) with representatives of corporate and foundation relations teams and agree on joint strategy plans for top prospects at least annually.

Increase annual giving participation and revenue with more targeted appeals and deployment of leadership annual giving (LAG) program.	• In first year (FY18) LAG program to yield $500K in new annual fund commitments, $100K cash • By end of the campaign we will (a) double the number of donors to the College to 7800; (b) increase annual giving revenue to the College to $5M annually; and (c) increase Annual Fund donor retention rate to 65% and first-time donor retention rate to 50%.
Focus increased stewardship efforts on principal gift prospects, creating unique impact experiences for our most generous donors.	• Develop customized written stewardship plans for top 10 prospects by end of FY18 • Develop endowment reporting format that becomes the gold standard for other Colleges and units by end of FY19.
Improve overall donor retention through focused donor relations and stewardship strategies, with the view that donors are investors in the College who will maximize their investment when they understand and feel they have realized the promised return on their investment (ROI).	• Create a college branded and specific impact report for all donors. • Adjust comprehensive stewardship plan on an annual basis to accommodate donor preferences and to complement and leverage University/Foundation efforts. • Develop and work towards consistently delivering a ROI that inspires and delights our donors.

Diversity and Inclusion for Excellence

Goal: Achieve a more diverse and inclusive undergraduate and graduate student body, faculty and staff.

Strategy	Metric
Implement academic department holistic enrollment process to increase the number and diversity (women, African American, Hispanic/Latino, Native American Indian/Alaskan Native) of undergraduate and graduate student body.	• Develop centralized undergraduate holistic admit to major process and holistic graduate admission process. • Establish 5 mutually beneficial dual degree programs or bi-directional advanced degree programs through collaboration with WSI, HBCUs, HSIs, and TSIs. • Measureable increase in first year women and URM student retention. • Enhance K-12 programs that educate, energize, and inspire all students about careers in engineering.
Expand utilization of recruitment and retention "Best Practices" to increase the number and diversity of faculty, staff and leaders.	• Measurably increase the number of women and diverse faculty, staff, and senior leaders in interview pools. • Significant increase in the number of women and diverse faculty, staff, and leaders hired, retrained, and promoted. • Establish 5 strategic partnerships with faculty development and recruitment programs and organizations. • Fully utilize university resources to attract and retain diverse talent. • Implement a professional development fund for staff that inspires talent and achievement of full potential.
Improve affordability through increased college and departmental need based scholarship and grant resources, rewarding diverse highly engaged students.	• Partner with advancement and corporate foundations to develop and implement a fundraising campaign with a goal of $5M by 2022. • Create centralized holistic review process for college and departmental scholarships raised from individuals and industry partners.

Goal: Create and sustain an organizational environment that intentionally values inclusive excellence and advances equity.

Strategy	Metric
Engage students, faculty, and staff in discovering the history and contributions of women and diverse engineers to the engineering discipline, social justice and society.	• 100% of CoE leaders complete executive leadership development program that examine bias, privilege, discrimination and provide strategies to be leadership champions for diversity, inclusion and equity. • 100% of faculty and staff complete diversity and inclusion training sessions. • Develop and implement curriculum and co-curricular initiatives that increase first year student cultural intelligence and capacity to apply it effectively in the academic, workplace and social environment.
CoE leaders, faculty, staff and students participate in a COE sponsored Climate Survey to assess the level of stakeholder engagement and cultural transformation. Create and sustain a culture that inspires our workforce to live the University's values, innovate, take action and be accountable.	• Work with key stakeholders to ensure a high response rate from faculty, staff, and students. • Enact high impact recommendations from the climate survey.
Provide curricular, research and intergroup relations incentives to CoE student, staff and faculty to experience the meaning, value, contributions and impact of national and international diversity to the future of engineering.	• Establish a CoE Inclusive Excellence grant program of grant proposals submitted by students, faculty and staff and funded. • Measureable increase the participation rate of CoE leaders, faculty and staff in annual diversity and inclusion programming. • Number of faculty who include diversity, inclusion and equity components in their research proposals.
Provide faculty incentives and recognition that promotes innovative teaching and research that engages and advances "Inclusive Excellence" in the classroom and engineering discipline.	• Expand CoE faculty diversity and inclusion awards categories to include recognition for innovative teaching and research. • Measureable increase in the participation and recognition of faculty advancing diversity and inclusion.

Integrate diversity and inclusion performance measures into the hiring, promotion and tenure criteria for faculty and annual performance and compensation review process for college leadership and managers.	• Infuse diversity and inclusion measurements into the new APT. • Develop and implement diversity and inclusion leadership performance measures for CoE leaders and manager annual review process.

Goal: Become recognized as a state, national and international leader advancing diversity, inclusion and equity in engineering.

Strategy	Metric
Improve retention and graduation rates of undergraduate and graduate women and diverse students. Increase the hire and promotion of talented women and diverse faculty.	• Measurable increase in the number/percentage of women and diverse undergraduate and graduate students as compared to our peer institutions. • Measurable increases in the number/percentage of women and diverse faculty hired and promoted in tenure and non-tenure positions.
Expand University, corporate, governmental, non-profit, professional and community partnerships and engagement.	• Number, quality and outcomes of partnerships and collaborations. • University and external recognition of CoE progress advancing inclusive excellence. • Recognition from state, national, international engineering societies, higher education diversity organizations and corporations.
Develop and sustain a proactive communication plan that highlights and celebrates students, faculty, staff achievements, diversity programs, initiatives, progress made, challenges, and recognition.	• Number of appearances and references in publications, on social media, conference presentations and participations. • Recognition of students, faculty and staff achievements. • Notoriety of diversity based programs, student organizations and corporate partnerships • Proactively share progress with relevant constituents.

Develop and grow a college-wide Supplier Diversity Program based on College's participation and decision-making capacity.	• Establish baseline of 2015 and 2016 contracts with women, minority-owned, veteran, LGBTQ, and Ability-owned companies. • Coordinate with University Office that has responsibility for implementing University Supplier Diversity Program. • Adapted university policies and procedures to contracts that the college is responsible for or have decision making capacity. • Create college-wide infrastructure, policies and processes to implement a college-wide supplier diversity program. • 10% increase in the utilization and spend with women, diverse, veteran, LGBT, veteran and persons with disabilities owned businesses.

Faculty, Staff and Facilities

Goal: Build a world-class faculty and staff for world-class education, research and outreach programs.

Strategy	Metric
Hire to faculty goals focused on manufacturing, materials, mobility and medicine, emphasizing discovery themes and diversity.	• 340 tenure track faculty by end of FY21 • Attain record value diversity recruitment 2 of 3 years to FY21. • 10% DTI faculty appointments by FY21 • 20% Joint appointment faculty by FY21
Develop recruiting best practices to attract rising stars and NAE caliber faculty.	• One successful senior faculty recruitment per year.
Embed professional development and professional success programs to enhance faculty and staff effectiveness.	• 100% participation in instructional training.
Promote the success of newly recruited faculty and staff.	• Institutionalize the Faculty Professional Development Program by the end of FY19; Staff Professional Development by FY21
Promote faculty leave programs for faculty enrichment.	• > 5% participation rate in FPL and SA programs.
Formalize extramural awards nomination process for faculty	• produce 30 national or international awards or career recognitions per year by FY21.

Goal: Grow and transform our physical spaces to drive learning and innovation.

Strategy	Metric
Complete Phase I and Phase II of the Airport Enhancements plan at the Don Scott Airport to integrate education, research and outreach in support of the University's mission and the region's economic growth.	• Complete Phase I and Phase II by FY19.
Initiate development of a corporate airpark at Don Scott Field.	• Complete leasing and construction of the lead corporate hangar by the end of FY20.
Initiate Phase II of the Advanced Materials Corridor plan, consistent with the College's facilities master plan and University Discovery Themes.	• Secure 25% of the project budget to initiate design by FY20.
Complete Phase I of the Advanced Materials Corridor plan to create modern research and teaching facilities for materials programs and a central campus home for Biomedical Engineering.	• Occupy Phase I facilities by FY21.
Renovate, upgrade and modernize the College space on Central Campus, West Campus, the Airport and the Transportation Research Center to support the Strategic Investment in Faculty initiative.	• Create 10,000 ASF equivalent per year through FY21.
Develop flexible and collaborative space to enhance experiential learning and shared space for research and education that supports the undergraduate curriculum.	• Create 3 new learning laboratory or collaboration spaces by end of FY21.
Draw upon and implement smart mobility concepts to connect engineering on central campus to its various remote locations.	• Develop regular transit to West Campus; develop transit options to Airport and TRC.
Defragment academic units dispersed in multiple locations.	• Achieve one colocation move per year.

Technology Services

Goal: Design and implement a secure high-performance network to support interdisciplinary appointments and reduce associated costs of operating 24 networks down to a few.

Strategy	Metric
Transition departments, centers and program areas to the new network, which over time will reduce capital and operating costs associated with duplicative equipment and support services.	• All units with the exception of CEMAS complete March 2018, CEMAS to be completed by August 2018.
Design and validate Phase 2 network upgrade. This will update building edge switches to remediate outdated building equipment, bring into Internal Audit compliance and establish infrastructure to support VoIP.	• Phase 2 plan to be completed by October 2018.

Goal: Promote universal core services that support a shared service model and reduces equipment and personnel costs.

Strategy	Metric
Services considered essential and standard operations for any unit will be identified as a core service.	• Initial core service offering identified as of March 2018. Complete service portfolio review and refinement by August 2018.

Implement the new Active Directory and migrate small departments/centers first followed by centers and larger units. As a unit is moved into the new AD, their existing AD and server will be decommissioned.	• Complete by August 2018.
Establish NIST 800-171 compliant virtualized storage and computing infrastructure to ensure stability and growth of the College's Export Controlled research.	• Make service available to researchers by August 2018.
Transition virtualized services and storage services to the College's central platform to reduce capital and operating costs associated with duplicative equipment and support services.	• Ongoing through May 2019.

Finance, Business Operations and Human Resources

Goal: Implement a college-centric organizational structure in business operations, human resources, and finance to support the strategic goals of the college including growth in faculty, research growth and academic excellence. Ensure services are provided efficiently with a focus on customer service while also ensuring compliance.

Strategy	Metric
Implement an HR and fiscal service delivery model managed at the college level that supports HR and fiscal operations and administration. Ensure model supports the business transformation initiative and service delivery requirements at the university level.	• Complete by end of FY19
Implement the Enterprise Project/Workday as specified by the University. Actively participate at the university level in planning, preparation and implementation of Workday along with associated organizational changes.	• Complete by end of FY20
Develop workforce planning strategies to assess the implications on the current workforce, including talent development and skills required. Ensure highly skilled individuals are in the appropriate positions.	• Complete by end of FY20

Goal: Using robust reporting tools and data analysis, ensure unit and college leadership has financial and human resources data to inform strategic decisions.

Strategy	Metric
Implement long range budgeting and financial scenario modeling at the unit level to support unit leadership and strategic decisions.	• Complete by end of FY19
Develop a training program for department leadership, including business managers, chairs and associate chairs that covers budget and financial management and reporting.	

Resource Stewardship

Our goals will be supported by the strategic investment of our resources, including financial resources, human capital and infrastructure.

- The strategic plan is based on focusing our resources on a robust financial plan emphasizing multi-year investments in support of our mission

- We will develop diversified revenue streams and maximize our opportunities to leverage our resources across the College, the University and external collaborations

- We will offer robust mentoring and retention programs for our entire faculty and staff, especially underrepresented minorities

- We will support all faculty and staff through a strong merit-based compensation program and professional development opportunities.

- We will ensure our operations are efficient and streamlined to maximize our effectiveness.

- We will ensure our staff is highly trained in financial analysis and planning and works in collaboration with department chairs and college administration to manage the financial resources the college.

Scorecard

	2011	2013	2015	2017	2020
Education for Talent Development					
Courses utilizing e-learning or web-based resources					> 99%
Online degree programs	1	1	2	2	4
International learning partnership agreements	15	22	35	38	40
Students learning abroad	196	227	260	314	200
Six-year undergraduate graduation rate	55.7%	61.7%	62.3%	61%	70%
Degrees Awarded					
Bachelor's	1106	1294	1631	1806	1400
Master's	435	490	543	560	550
PhD	122	157	173	183	200
Research for Innovation					
Facilities condition index	72%	72%			80%
Faculty size					
tenure track	280	277	288	313	300
research track	7	9	11	18	25
clinical track	10	21	37	43	35
Total research expenditures	$126.9M	$113.0M	$120.5	$153.0	$200M
Industrial research funding	$38.7M	$34.4M	$39.6	$58.5	$70M

Diversity in faculty	Female	17.5%	18.6%	17.3%	24.1%	22%
	Underrepresented minority	4.4%	4.2%	4.5%	6.1%	6%
Diversity in undergraduate students	Female	19.5%	20.5%	22.1%	23.9%	25%
	Underrepresented minority	7.3%	7.2%	7.6%	6.7%	10%
Diversity in graduate students	Female	22.3%	25.4%	24.8%	24.4%	30%
	Underrepresented minority	3.2%	3.7%	3.7%	4.6%	6%
Students completing an internship		70%	72%			80%
Engineering Endowment		$163m	$180m	$192m		$250m
Annual Giving		$19m	$23.5m		$48.6m	$35m
Alumni Participation		3.50%	3.50%	6.32%	5.75%	12%