



Implementation Plan At A Glance

College of Engineering stakeholders and leaders recommended actions to support the Key Priorities of the college's Strategic Plan: Culture & Climate, People, Curriculum & Research and Infrastructure & Organization.

This Implementation Plan provides a detailed roadmap for the College's growth and impact in the areas of education, research and service while upholding our values of respect, creativity, integrity and engagement. The plan will evolve as projects are implemented and new ideas are set into motion.

40 PROJECTS

15 TOP PRIORITIES
5 QUICK WINS

INVESTMENT REQUIRED

FINANCIAL	PERSONNEL	
\$	🕒	Low
\$ \$	🕒 🕒	Medium
\$ \$ \$	🕒 🕒 🕒	High

QW = QUICK WIN

CULTURE & CLIMATE

LIVE OUR VALUES

Clearly identify and amplify our values & fundamental behaviors. (QW) \$ 🕒

Consistently communicate our diversity, equity and inclusion values and ensure students, faculty and staff recognize these values as central to our culture.

STRENGTHEN OUR INCLUSIVITY

Expand our inclusivity training and support. \$ 🕒 🕒

Build upon existing work by faculty to develop training materials on evidence-based presenting techniques to encourage an inclusive classroom environment.

EMPOWER GREATER CREATIVITY

Spark more creative thinking among our students early in their program. \$ \$ 🕒 🕒

Introduce more tools and techniques that teach lateral thinking in first-year courses.

CONNECT OUR COMMUNITY

Revive the College-level alumni awards program. (QW) \$ \$ 🕒 🕒

Celebrate and promote the accomplishments of our alumni, providing diverse examples of leadership and innovation.

PEOPLE

ELEVATE OUR RECRUITMENT

Implement a College-level comprehensive undergraduate recruitment strategy. \$ \$ \$ 🕒 🕒

Develop new methods to reach potential students in partnership with UD Admissions.

SUPPORT OUR TALENT

Improve data-driven support systems for students. \$ \$ \$ 🕒

Invest in programming for underrepresented students, building upon the success of our Resources to Inspire Successful Engineers (RISE) Program.

STRENGTHEN OUR PARTNERSHIPS

Support faculty and staff efforts to do outreach. \$ \$ 🕒 🕒

Demonstrate workload support for non-traditional service activities such as community engagement.

CURRICULUM & RESEARCH

BUILD INTELLECTUAL NEIGHBORHOODS

Clarify the purpose and aims of the intellectual neighborhoods, and revisit their intended impact. (QW) \$ 🕒 🕒

Determine areas of focus and resource allocation.

ENHANCE OUR PARTNERSHIPS

Partner with HBCUs. \$ \$ \$ 🕒 🕒 🕒

Build on existing collaborations and develop new opportunities for impact.

EXPAND OUR IMPACT

Assess our potential to contribute to the local and regional economy. \$ \$ 🕒 🕒

Ensure that our curriculum meets workforce needs.

PIONEER NEW CURRICULA

Develop new interdisciplinary programs. \$ \$ \$ 🕒 🕒 🕒

Build upon our successes, such as the master's in robotics and PhD in engineering and public policy, and launch new partnerships.

INFRASTRUCTURE & ORGANIZATION

OPTIMIZE OUR OPERATIONS

Develop and communicate best practices, processes and reporting mechanisms. (QW) \$ 🕒

Assess processes and streamline systems.

Reorganize college staffing to maximize efficiency and effectiveness. \$ \$ 🕒 🕒

Examine where centralization or decentralization could yield efficiencies in a variety of functional areas.

UPGRADE OUR FACILITIES

Develop long-term facilities plan for the college. (QW) \$ \$ 🕒

Build a roadmap for a world-class facilities footprint.

Renovate existing college spaces to encourage collaboration and creativity. \$ \$ \$ 🕒 🕒 🕒

Create more open collaboration spaces like the iSuite in Evans Hall, where electrical and computer engineering students to gather, prototype, and practice cybersecurity skills.



UNIVERSITY OF DELAWARE
ENGINEERING

IMPLEMENTATION PLAN

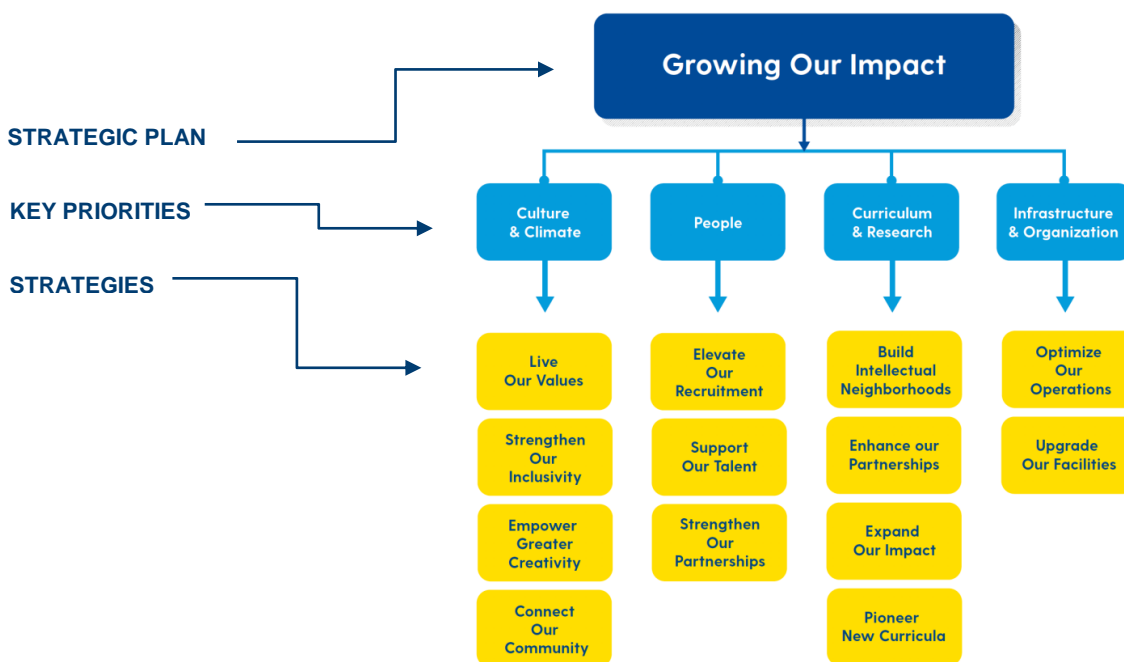
College of Engineering | Highlights & Recommendations

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Executive Summary

Shortly after Dean Thompson's arrival in Fall 2018, the college began a strategy formulation process that included data analysis, stakeholder surveys and interviews, listening and brainstorming sessions and a strategic planning retreat. The College of Engineering released a Strategic Plan in December 2019, outlining the key priorities and strategies to guide the college over the next five years.



The College convened teams of faculty and staff in Summer 2020 to develop an actionable implementation plan. Participants put forward more than 100 ideas which were distilled into 40 recommended projects. Of these, 15 high-priority projects were recommended as first steps the College should take to advance the strategies outlined in the Strategic Plan. Five projects were identified as “quick wins”—that is, projects that can begin immediately, conclude quickly, and require minimal investment of resources.

This Implementation Plan outlines the recommended tasks, champions, contributors and metrics for each project, with particular emphasis on high-priority projects and quick wins.

Process and Timeline

Our strategic planning and implementation planning process was inspired by the Kotter Model of Change management pioneered by John Kotter, the [Konosuke Matsushita](#) Professor of Leadership, Emeritus, at the Harvard Business School (see diagram below). The goals are to realize short-term wins, sustain acceleration and institute change.



Source: www.kotterinc.com

The group that convened in Summer 2020 is our Guiding Coalition—individuals who were recommended by department chairs and associate deans as some of the most influential faculty and staff in the College. Through a series of collaborative large and small group meetings, the Guiding Coalition developed and prioritized a list of project ideas in the following Key Priority areas: Culture and Climate, People, and Curriculum and Research. Appendix A lists those who participated in the Guiding Coalition activities. Discussions were led by the Facilitation Team, with the Metrics and Dashboard Teams providing insight and recommendations for setting benchmarks and measuring progress of the implementation plan.

A similar process was followed to gather and prioritize ideas for the final key priority, Infrastructure and Organization, in consultation with the Engineering Leadership Team and University Architect. Appendix A lists these participants.

The following timeline summarizes the key strategic planning and implementation planning activities in the college:

<p>2018</p> <p>October New Dean begins</p> <p>November–January 2019 Key priorities identified via data collection, stakeholder surveys, Strategy Formulation retreat</p>	<p>2020</p> <p>March–April Additional Working Groups identified short-, mid- and long-term needs and opportunities presented by COVID-10</p> <p>June–July Guiding Coalition met to prioritize action items for Culture & Climate, People, and Curriculum & Research key priority areas/metrics working group established</p> <p>August–September Engineering Leadership Team reviewed action items recommended by Guiding Coalition and met to prioritize action items for the Infrastructure & Organization key priority area</p> <p>October Implementation Plan completed</p>
<p>2019</p> <p>July–November Information gathered on peer and aspirational institution performance, industry partner potential, faculty research and outreach impact, and campus resources</p> <p>August–October Intellectual neighborhoods identified through faculty surveys and a Red Team retreat</p> <p>October–November Stakeholders engaged further through staff, faculty and student interviews and focus group discussions</p> <p>December Draft Strategic Plan released</p>	

Highlights and Recommendations

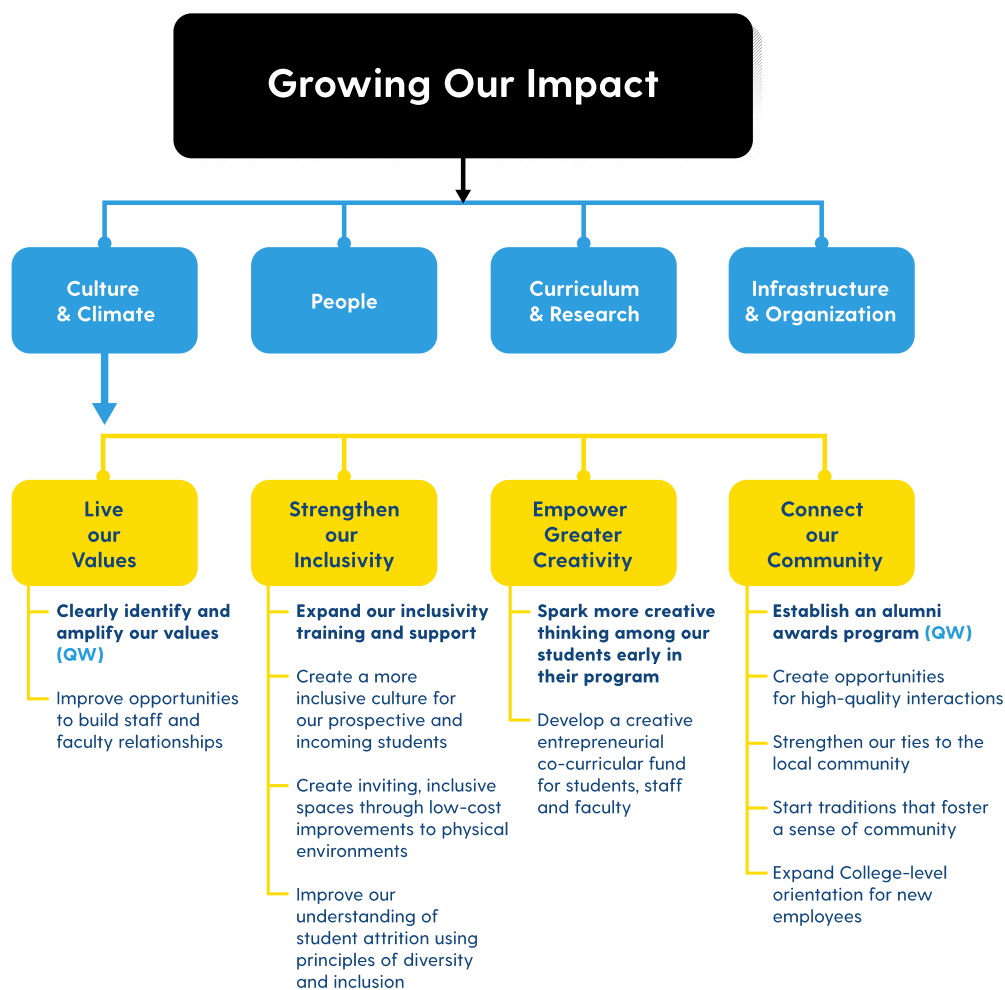
This report summarizes the 40 recommendations, highlights the 15 highest-priority projects and introduces five “quick wins.” Project charters, including recommended tasks, champions and metrics, for all projects appear in Appendix C. For the highest-priority projects highlighted in each section, a clickable link directs the reader to the relevant project charter in the appendix. Details of these project charters will evolve as projects are implemented and new ideas are set into motion.

CULTURE & CLIMATE: WELCOMING, BELONGING

GOAL

Foster welcoming, actively inclusive and collaborative classrooms and workplaces to foster a sense of belonging that helps everyone at the University excel.

The following figure represents all of the projects that were recommended for the Culture & Climate priority area. Bold type connotes the highest-priority project within a strategy, as determined by the Guiding Coalition. “QW” connotes a quick win—that is, a project that can begin immediately, conclude quickly and require minimal investment of resources.



This page presents recommended champions, or project sponsors, and a brief assessment of the resources required to implement the highest-priority projects for each strategy in the Culture & Climate priority area. Project names provide a clickable link to the related charter from Appendix C.

STRATEGY

LIVE OUR VALUES | Emphasize a respectful and inclusive environment with personal responsibility and accountability for living the University of Delaware values.

PROJECT

CLEARLY IDENTIFY AND AMPLIFY OUR VALUES & FUNDAMENTAL BEHAVIORS. ^{QW}

- Champion – Chief Diversity Advocate & AD Graduate and Postgraduate Education
 - Investment Required – Personnel: Low | Financial: Low
-

STRATEGY

STRENGTHEN OUR INCLUSIVITY | Instill an inclusive, supportive climate in which all members of the community can thrive.

PROJECT

EXPAND OUR INCLUSIVITY TRAINING AND SUPPORT.

- Champion – Chief Diversity Advocate
 - Investment Required – Personnel: Medium | Financial: Low
-

STRATEGY

EMPOWER GREATER CREATIVITY | Foster empowerment and the development of breakthrough thinking and creative problem solving within the College of Engineering.

PROJECT

SPARK MORE CREATIVE THINKING AMONG OUR STUDENTS EARLY IN THEIR PROGRAM.

- Champion – AD Undergraduate Education
 - Investment Required – Personnel: Medium | Financial: Medium
-

STRATEGY

CONNECT OUR COMMUNITY | Improve channels and opportunities for sharing information within the college community and with internal and external partners to expand our network for success.

PROJECT

REVIVE THE COLLEGE-LEVEL ALUMNI AWARDS PROGRAM. ^{QW}

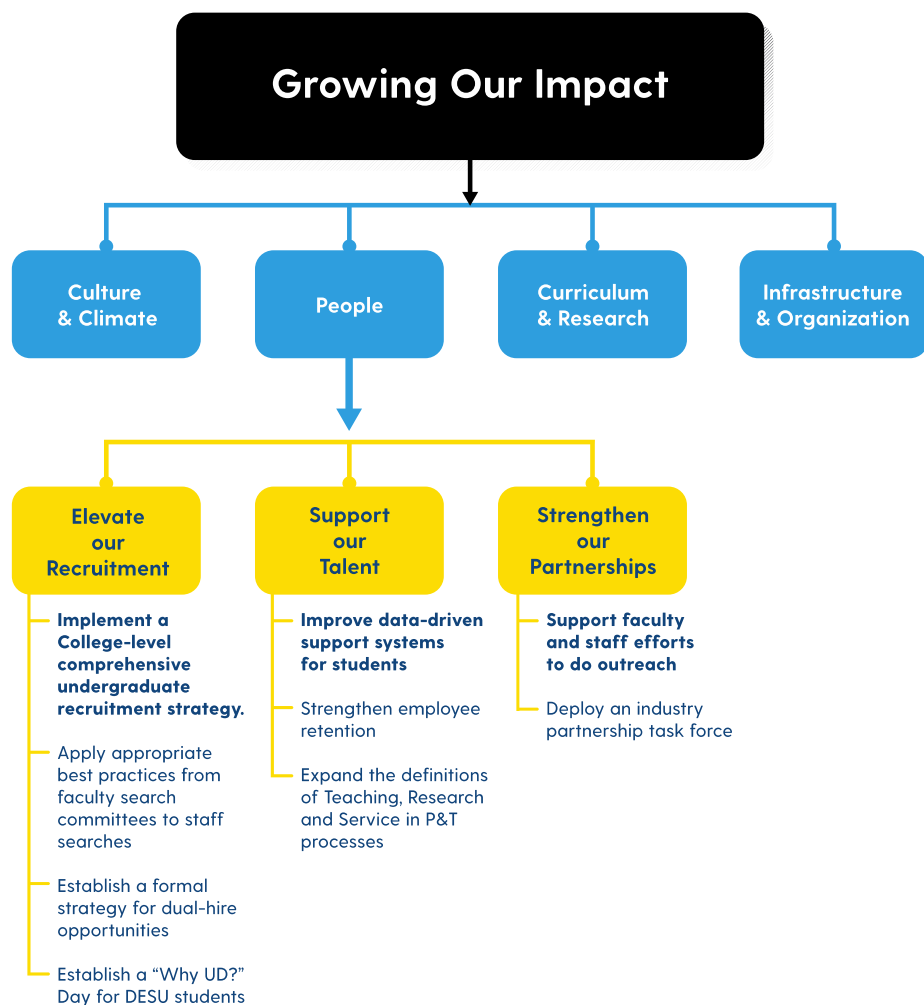
- Champion – Director of Development
- Investment Required – Personnel: Medium | Financial: Medium

PEOPLE: INNOVATIVE, INFLUENTIAL

GOAL

Cultivate a community of innovative, influential thinkers to expand the success of the College of Engineering and the entire University of Delaware.

The following figure represents all of the projects that were recommended for the People priority area. Bold type connotes the highest-priority project within a strategy, as determined by the Guiding Coalition.



This page presents recommended champions, or project sponsors, and a brief assessment of the resources required to implement the highest-priority projects for each strategy in the People priority area. Project names provide a clickable link to the related charter from Appendix C.

STRATEGY

ELEVATE OUR RECRUITMENT | Recruit a diverse group of talented individuals to the College community, drawing on the full talent pool and ensuring appropriate student-faculty-staff proportions.

PROJECT

IMPLEMENT A COLLEGE-LEVEL COMPREHENSIVE UNDERGRADUATE RECRUITMENT STRATEGY.

- Champion – AD Undergraduate Education
 - Investment Required – Personnel: Medium | Financial: High
-

STRATEGY

SUPPORT OUR TALENT | Ensure that all members of the College community have the resources, opportunities and support they need to reach their goals and achieve their potential.

PROJECT

IMPROVE DATA-DRIVEN SUPPORT SYSTEMS FOR STUDENTS.

- Champion – AD Undergraduate Education
 - Investment Required – Personnel: Low | Financial: High
-

STRATEGY

STRENGTHEN OUR PARTNERSHIPS | Develop meaningful opportunities for alumni and partners from industry, the community and across campus to actively engage with the College.

PROJECT

SUPPORT FACULTY AND STAFF EFFORTS TO DO OUTREACH.

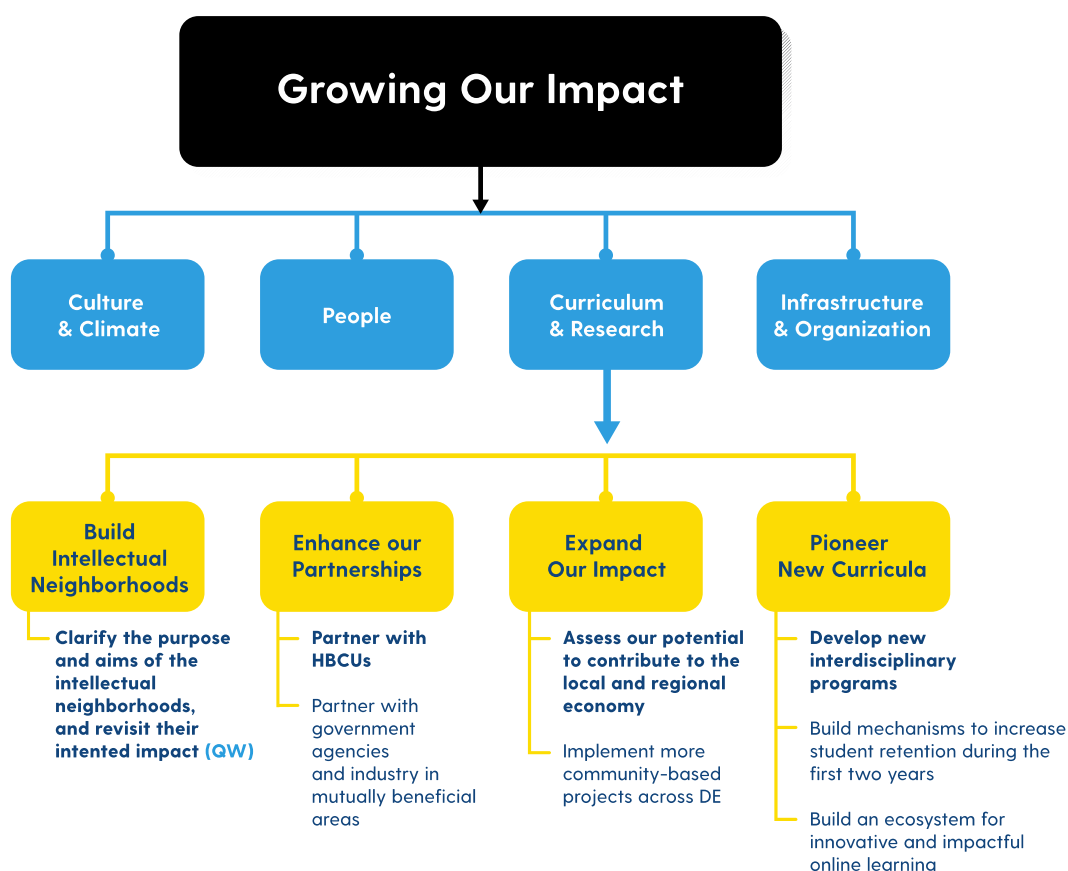
- Champion – AD Faculty Affairs & Chief Financial and Administrative Officer
- Investment Required – Personnel: Medium | Financial: Medium

CURRICULUM & RESEARCH: LOCALLY IMPACTFUL, GLOBALLY RELEVANT

GOAL

Be the economic and innovation engine to provide the talent, solutions and expertise that benefit the state of Delaware, the region and communities all over the world.

The following figure represents all of the projects that were recommended for the Curriculum & Research priority area. Bold type connotes the highest-priority project within a strategy, as determined by the Guiding Coalition. “QW” connotes a quick win—that is, a project that can begin immediately, conclude quickly and require minimal investment of resources.



This page presents recommended champions, or project sponsors, and a brief assessment of the resources required to implement the highest-priority projects for each strategy in the Curriculum & Research priority area. Project names provide a clickable link to the related charter from Appendix C.

STRATEGY

BUILD INTELLECTUAL NEIGHBORHOODS | Define the structure, organization and resources for intellectual neighborhoods, including leadership and local and global challenges to be addressed through curriculum and research.

PROJECT

CLARIFY THE PURPOSE AND AIMS OF THE INTELLECTUAL NEIGHBORHOODS AND REVISIT THEIR INTENDED IMPACT. ^{QW}

- Champion – AD Research and Entrepreneurship
 - Investment Required – Personnel: Medium | Financial: Low
-

STRATEGY

ENHANCE OUR PARTNERSHIPS | Develop strategies for sustainable partnerships with funding agencies, industry sponsors, research collaborators and prospective donors.

PROJECT

PARTNER WITH HBCUs.

- Champion – AD Graduate and Post Graduate Education
 - Investment Required – Personnel: High | Financial: High
-

STRATEGY

EXPAND OUR IMPACT | Analyze markets to identify growth opportunities for traditional and online offerings in undergraduate, graduate, professional, certificate, workforce development, K-12 pipeline and teacher development programs.

PROJECT

ASSESS OUR POTENTIAL TO CONTRIBUTE TO THE LOCAL AND REGIONAL ECONOMY.

- Champion – AD Research and Entrepreneurship
 - Investment Required – Personnel: Medium | Financial: Medium
-

STRATEGY

PIONEER NEW CURRICULA | Establish core competencies and practices within the curriculum and experiential learning in project management, strategic thinking and communication to ensure students are prepared to enter a competitive market upon graduation.

PROJECT

DEVELOP NEW INTERDISCIPLINARY PROGRAMS.

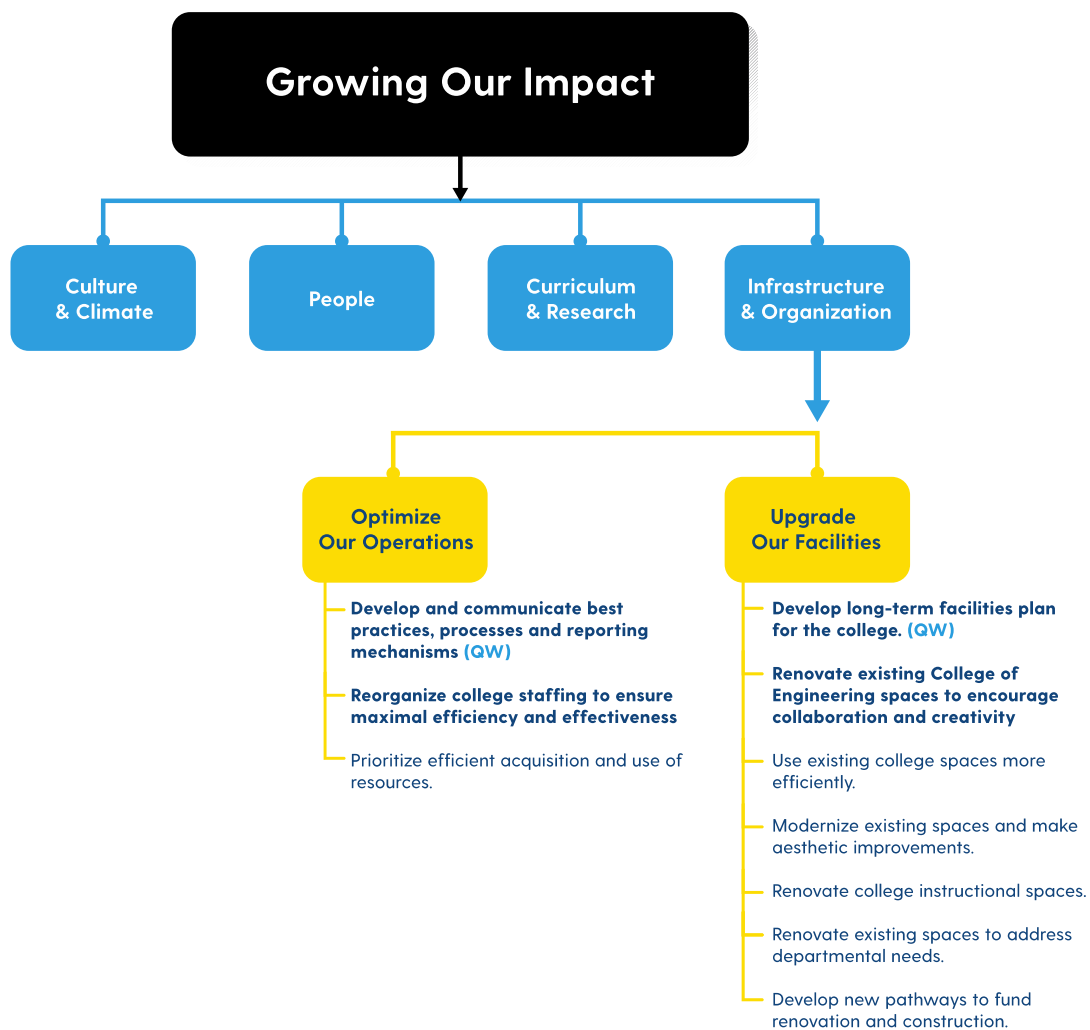
- Champion – AD Graduate and Post Graduate Education
- Investment Required – Personnel: Medium | Financial: Medium

INFRASTRUCTURE & ORGANIZATION: STUDENT-CENTERED, DISCOVERY-DRIVEN

GOAL

Provide student-centered, discovery-driven facilities and operations to advance the mission of the College of Engineering and University of Delaware.

The following figure represents all of the projects that were recommended for the Infrastructure & Organization priority area. Bold type connotes the highest-priority projects within a strategy, as determined by the Engineering Leadership Team. “QW” connotes a quick win—that is, a project that can begin immediately, conclude quickly and require minimal investment of resources.



This page presents recommended champions, or project sponsors, and a brief assessment of the resources required to implement the highest-priority projects for each strategy in the Infrastructure & Organization priority area. Project names provide a clickable link to the related charter from Appendix C.

STRATEGY

OPTIMIZE OUR OPERATIONS | Organize our administrative structure to maximize efficiency, effectiveness and impact.

PROJECT

REORGANIZE COLLEGE STAFFING TO ENSURE MAXIMAL EFFICIENCY AND EFFECTIVENESS.

- Champion – Chief Financial and Administrative Officer
- Investment Required – Personnel: Medium | Financial: Medium

PROJECT

DEVELOP AND COMMUNICATE BEST PRACTICES, PROCESSES AND REPORTING MECHANISMS. ^{QW}

- Champion – Chief Financial and Administrative Officer
 - Investment Required – Personnel: Low | Financial: Low
-

STRATEGY

UPGRADE OUR FACILITIES | Develop new infrastructure and renovate or repurpose current facilities, as necessary, to achieve the College's priorities and maximize space utilization.

PROJECT

RENOVATE EXISTING COLLEGE OF ENGINEERING SPACES TO ENCOURAGE COLLABORATION AND CREATIVITY.

- Champion – Space Committee Chair
- Investment Required – Personnel: High | Financial: High

PROJECT

DEVELOP LONG-TERM FACILITIES PLAN FOR THE COLLEGE. ^{QW}

- Champion – Dean
- Investment Required – Personnel: Low | Financial: Medium

Appendix A: Key Participants of Strategic Planning Process

GUIDING COALITION

Facilitation Team

Kim Bothi (lead)
Jill Higginson
Ann Lewandowski

Don Linsenmann
Crystal Maccari
Jennie Saxe

Joy Smoker
Julie Stewart
Adam Wickenheiser

Guiding Coalition

Megan Argoe
Tom Buchanan
Jenni Buckley
Emily Day
Rudi Eigenmann
Josh Enszer
Arde Faghri
Jack Gillespie
Jason Gleghorn
Kris Graves
Kristi Kiick
Julius Korley

LaShanda Korley
Stephanie Law
Li Liao
Andreas Malikopoulos
Cyndi McLaughlin
Chris Meehan
Mark Mirotznik
Laura Mohr
Sarah Palmer
Lori Pollock
Dennis Prather
Chris Price

Jack Puleo
Ismat Shah
Chuck Shermeyer
Chrissy Shinn
Millie Sullivan
Bert Tanner
Dion Vlachos
Norm Wagner
Cathy Wu
Ryan Zurakowski

Metrics Team

Megan Argoe
Kim Bothi
Ken Bright
Laura Mohr (lead)
Ismat Shah
Bert Tanner

Dashboard Team

Kim Bothi (support)
Ben Chapman
Laura Mohr (support)
Julie Stewart (lead)
Matt Toner
Seth Turner

ENGINEERING LEADERSHIP TEAM

Rachel Davidson
Dawn Elliott
Eric Furst
Kris Graves
Jill Higginson
Ann Lewandowski
David Martin

Kathy McCoy
Jamie Phillips
Darrin Pochan
Ajay Prasad
Jack Puleo
Joseph Ryan
Tripp Shenton

Julie Stewart
Levi Thompson

WORKING GROUPS FOR EDUCATION, RESEARCH & SERVICE

Education

Jonathan Busch (co-lead)
Terry Harvey
Jill Higginson (lead)
Ann Lewandowski

Raul Lobo
Jennie Saxe
Chuck Shermeyer
Adam Wickenheiser

Research

Thomas Epps
Jack Gillespie
LaShanda Korley
Stephanie Law
Raul Lobo

David Martin (lead)
Chris Meehan
Mark Mirotznik
Dennis Prather
Jack Puleo

Chris Roberts
Bert Tanner
Norm Wagner
Bingqing Wei
Cathy Wu

Service

Kim Bothi
Monique Head
Mel Jurist
Andy Novocin

Lori Pollock
Julie Stewart (co-lead)
Michael Vaughan (lead)

STRATEGIC PLANNING

Team Co-Leads

Kim Bothi
David Martin
Helen Stimson

Red Team

Jenni Buckley
Heather Doty
Rudi Eigenmann
Josh Enszer
Jack Gillespie
Jason Gleghorn
Terry Harvey

Feng Jiao
LaShanda Korley
Julius Korley
Ann Lewandowski
Chris Meehan
Mark Mirotznik
Yu Ping-Chin

Chris Price
Jack Puleo
Hagit Shatkay
Bert Tanner
Bingqing Wei
Cathy Wu
Joshua Zide

Key Informant Interviews, Focus Groups & Work Sessions

Allie Andrews
Louise Bank
Ken Barner
Heather Barron
Jenni Buckley
Rachel Davidson
Mark Dobbins
Dawn Elliott
Nancy England
Samantha Fowle
Eric Furst
Kris Graves

Jill Higginson
Terrie Kalesse
Julius Korley
David Martin
Mike Matthews
Kathy McCoy
Sue McNeil
Laura Mohr
Ann Nann
Debbie Nelson
Sarah Palmer
Darrin Pochan

Ajay Prasad
Chuck Shermeyer
Chrissy Shinn
Levi Thompson
Michael Vaughan
Confidential interviewees
(CoE staff & faculty,
alumni, donors,
prospective industry
partners)

Data Collection & Logistics

Megan Argoe
Kim Bothi
Ken Bright
Anita Brown
Ann Connor
Lisa Henriksen
Susan LaMedica

Ann Lewandowski
Crystal Maccari
Cyndi McLaughlin
Laura Mohr
Nicole Murphy
Alaina Norvell
Mayra Ortiz

Michele Schwander
Julie Stewart
Seth Turner
Robin Wray
Sue Zatto

Appendix B: Strategic Plan

The College of Engineering shared the Strategic Plan with the college community in December 2019, leading with the following mission, vision, key priorities and strategies. [Click here](#) to read the full Strategic Plan.

Mission

The College of Engineering, a community of scholars driven by discovery and design, is devoted to education, research and socially responsible innovation. We are committed to generating new knowledge, inspiring invention and pursuing vexing challenges with a much better future in mind. We foster an inclusive and globally oriented culture aimed at engaging our diverse faculty, staff and students in vertically integrated education and interdisciplinary research. We seek meaningful connections with partners who extend our reach from campus to the community and to the world at large. Together, we strive for engineering excellence.

Vision

We aim to be the destination of choice for talented students, faculty and staff who seek to build a healthier and more prosperous future for the people of Delaware and the world. Through our exceptional educational offerings, innovative research, entrepreneurial activities and community engagement, we will use engineering to solve the most vexing issues facing humanity. We are driven by an empowered, inclusive, collaborative culture. We are growing, and so is our impact.



Appendix C: Project Charters

The following pages present Project Charters for each of the projects recommended by the Guiding Coalition and Engineering Leadership Team. These recommended tasks, champions and metrics will guide champions as they initiate projects; details of each project plans will evolve as actionable ideas are implemented and new ideas are set into motion.

Each Project Charter contains the following informational elements:

- *Specific tasks.* These are discrete action items that advance an Idea.
- *Key champions and contributors.* *Champions* are individuals who would have a high-level responsibility for the idea and related tasks. Champions ensure that tasks are prioritized, resourced, and that progress is made. Project Champions would recruit leaders for individual tasks, giving them the authority and responsibility to implement specific tasks. *Contributors* are not responsible for resourcing tasks but may be appropriate as leaders of or contributors to individual tasks.
- *Metrics of success.* Potential metrics for tracking progress are identified in this section. Work by a CoE metrics team to enable tracking of meaningful metrics is underway.

Some Project Charters also include:

- *Gaps in knowledge or missing details.* This section identifies any known unknowns, issues that may need to be resolved, or other information required to enable progress on specific tasks. Answers or responses will be tracked in the *Answers* section of the table.
- *Who may be able to provide assistance/knowledge?* This section identifies those that may be able to help provide context or fill in knowledge gaps.
- *Resources needed.* Staffing, expertise, and financial resources are noted in this section.
- *Notes.* Other important comments related to an idea are noted here. For more information on the origin or intent of ideas, readers may want to also refer to the report appendices.

KEY PRIORITY

CULTURE & CLIMATE: WELCOMING, BELONGING

PROJECT CHARTERS

Project charters begin on the next page.

Culture & Climate ► Live Our Values ►

Clearly identify and amplify our values.

Specific Tasks:

- Consistently communicate UD engineering's diversity, equity and inclusion values and make sure every incoming student, staff and faculty recognizes it as central to UD CoE's culture
- They not only need to agree with those values, they need to become a promoter of those values while on campus (the racist-non-racist – anti-racist theory)
 - Create and embrace a College-specific Code of Conduct among staff, faculty and students
 - Building on the framework provided by General Counsel for an employee Code of Ethics, this would be a clear, concise set of statements that could be widely shared among the college and used as a reference point for trainings on values, etc.
 - Code of Conduct would emphasize the importance of an inclusive environment in the workplace, amplifying efforts such as the College Honor Code under development for student academic integrity
 - Develop clear guidance for staff or faculty to report instances of not supporting an inclusive environment
 - Establish an Ombudsperson's office in CoE (trained person to read, respond and instigate action that is complementary to the Title IX process)
 - Advertise the availability of the ombudsperson and process for reporting and action
 - Mechanisms from Corporate America could be used here as it pertains to anonymity
 - Set up Instagram or dedicated website similar to "Speak-up Delaware" for students, faculty, staff to share positive or negative experiences, monitored by a trained, confidential staff member
 - Establish a culture where people are comfortable "whistleblowing" - calling out things that you don't see or like, i.e., are you empowered to do anything about comments or actions that are against our values? (Conversely, what are the consequences for not living these values?)
- Consistently advertise our values internally
- Develop a tagline and icon for CoE values
 - Share this tagline and icon with students, staff, and faculty as an optional email signature
 - Print laptop/water bottle stickers for students and others to make the values visible to them and those they interact with
- Every month pick a value/theme and put up flyers, etc.
 - In a meeting that month take ~10 minutes (faculty meeting, staff meeting, courses) to devote to a discussion of that value, e.g., tie it to current events, one of the Grand Challenges, or a case study
 - Idea is that everyone in COE has a single value on their minds to spark discussion and reflection

<ul style="list-style-type: none"> Establish more formal and informal occasions to celebrate our values <ul style="list-style-type: none"> Develop a mini-scholarship contest to encourage undergrad and grad students to address a prompt (1-2 paragraph blog entry, 1-2-minute video, etc.) and post the best on our website and recognize at awards day or graduation/etc. 15 min sessions at both faculty and staff meetings where staff and faculty can come together to learn about workflows, workloads and expectations across various aspects of our “operations” in order to build understanding, empathy and respect between staff and faculty Create an idea drobox via a link on the CoE newsletter for organizing and hosting new events that promote College values and greater inclusion, and offer individuals a small gift card for taking the lead to organize 	
Gaps in knowledge or missing details:	Answers:
<ol style="list-style-type: none"> No internal to COE process or place where COE Community can lodge complaints or report behavior contrary to COE diversity, equity and inclusion values. How to get the message out (what's the baseline)? Where do we stand with respect to other colleges and other departments at aspirational Universities? 	<ol style="list-style-type: none"> Creation of Ombudsperson office <ol style="list-style-type: none"> Create a website where anonymous complaints can be deposited. Identify the person(s) who would monitor this site and report (what can/should be reported) to the Dean and to the general COE community at a 1-per semester open meeting. Regularly assess the diversity, equity and inclusion climate. Clearly display the process available to students, staff and faculty. (Posters all over CoE) Do a survey of the methodologies in Departments that have been successful in diversity, equity & inclusion processes. Adopt those strategies.
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> Dean Advisory Council 	
Metrics of success:	
<ul style="list-style-type: none"> % follow-up of total complaints Increased level of satisfaction with the diversity, equity and inclusion climate of the college Reduction of cases/complaints related to diversity, equity & inclusion matters 	
Key champions and contributors:	
<ul style="list-style-type: none"> Chief Diversity Advocate Diversity Committee Communications Team Human Resources (Chrissy Shinn) Guiding Coalition 	
Resources needed:	

Personnel: Low | Financial: Low

Notes: This idea has links to C&C>Connect our community>opportunities for high-quality interactions.

Culture & Climate ► Live Our Values ►	
Improve opportunities to build staff and faculty relationships.	
Specific Tasks:	
<ul style="list-style-type: none"> • Improve ways for faculty and staff to understand respective job roles and responsibilities (e.g., 15 min at start of faculty meetings to learn about a role, like a grants liaison, and exchange ideas on functions, expectations and overcoming common miscommunications between the staff and faculty) • Identify & facilitate scenarios where staff and faculty could be brought together for Dean's Office-driven events to strengthen the sense of common mission (e.g., semesterly faculty and staff meetings, Dean's Office Coffee Talk) • Initiate anonymous reporting mechanisms as the current reporting structure makes it difficult to address concerns related to staff-faculty divides, recognizing staff rarely share common supervisors with faculty • Initiate mandatory bystander and sensitivity training for faculty and staff • Make people aware of the presence of workplace conflict, what it looks like, and what we're doing to improve the culture (raise awareness of policies & procedures) <ul style="list-style-type: none"> ○ Do chairs need to send a message to their faculty to create awareness? 	
Gaps in knowledge or missing details:	Answers:
1. Does the recent survey on culture/climate reflect more common bad players or environments?	1. Continued periodic (yearly) anonymous surveys of staff about interactions with the faculty. (see Staff climate survey) <ul style="list-style-type: none"> a. Follow-up on the outcome of these surveys. b. Develop policies & procedures for dealing with bad players between appropriate unit administrator and HR.
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> • UD HR Talent Development • ADVANCE 	
Metrics of success:	
<ul style="list-style-type: none"> • Improved perception-based surveys on culture and climate between staff and faculty • Increased participation from Faculty and Staff in diversity, equity & inclusion events. • Reduced staff turnover rate by department/unit 	
Key champions and contributors:	
<ul style="list-style-type: none"> • AD for Academic Affairs, CFAO • Staff and faculty diversity chairs 	
Resources needed:	
Personnel: Medium Financial: Low	

Notes: Reporting mechanisms may synergize with Idea on identifying and amplifying values.

Culture & Climate ► Strengthen Our Inclusivity ►

Expand our inclusivity training and support.

Specific Tasks:

- Expand the series of presentations offered (Buckley/Rooney in 2019/2020) on evidence-based presenting techniques to encourage an inclusive classroom environment
- Solicit volunteers to share their experiences implementing these activities at another round of faculty meetings in the 2020-2021 academic year
- Develop TA-focused training modules to help our graduate students become more respectful and inclusive in their interactions with undergraduate students
 - Modules should consider the cross-cultural experiences (international vs. domestic student interactions)
 - Modules should involve role playing and real classroom/study session scenarios
 - Explore other units across the University who might already be using this kind of training
- Make TA modules and other trainings available to faculty advisors to help with respect and inclusivity among research group members
- Use these tools and audiences to institute implicit bias training for both faculty and staff
 - Develop required online implicit bias training just as we do for IT training
 - Make implicit bias training mandatory for everyone annually (e.g., in order to activate their procurement cards)
 - Add trainings relevant to inclusivity and implicit bias to New Student Orientation, EGGG101/FYE courses
 - Incorporate deliberate training where EGGG101 students learn about teamwork early on in their course; Haritha and Josh could share how they are incorporating these concepts with other faculty to be introduced in other parts of engineering curriculum for reinforcement
 - Develop ways to demonstrate specialized training by staff and faculty to let students know who to go to for support (e.g., badging/icons on faculty and staff directories to indicate who has taken specialized trainings, such as an engineering mentoring workshop, culturally aware mentoring, safe zone training, Diversity, equity & inclusion certificate -- see UNC GMB for examples)

Gaps in knowledge or missing details:

1. What mechanisms can be used to embed training in existing ecosystems or make completion mandatory?
2. What inclusivity trainings are available outside of the College?

Answers:

1. Tie to procurement systems, ability to get s-contracts or P&T.
2. Trainings: Bystander intervention, lists at [OEI](#), [HR](#); Identify what worked at other institutions

Who may be able to provide assistance/knowledge?

- Office of Equity & Inclusion
- Communications and IT (for badging/icons)

Metrics of success:
<ul style="list-style-type: none"> • Increased # of trainings developed on inclusive teaching • Increased # of students, faculty and staff completing inclusive teaching and UD diversity, equity & inclusion trainings • Increased # of training modules developed for TAs
Key champions and contributors:
<ul style="list-style-type: none"> • Chief Diversity Advocate • CoE Diversity committee • CTAL
Resources needed:
Personnel: Medium Financial: Low

Culture & Climate ► Strengthen Our Inclusivity ►	
Create a more inclusive culture for our prospective and incoming students.	
Specific Tasks:	
<ul style="list-style-type: none"> • Seek input from experienced practitioners on best practices to improve diversity, equity and inclusion in STEM at both the undergraduate and graduate levels (note: in addition to outside expertise, review the recommendation provided by the UG Diversity Committee - Buckley/Rooney) • Improve our understanding of why unwelcoming perceptions exist • Improve coordination with the Admissions office, including better understanding of local and global targeted recruitment processes • Use a range of coordinated approaches (K-12 Outreach, RSOs, inclusive spaces, etc.) in authentic and genuine ways, using best practices developed by practitioners with a real understanding of this space 	
Gaps in knowledge or missing details:	Answers:
<ol style="list-style-type: none"> 1. Not clear who are the experienced practitioners the input of whom is needed 2. Not clear how our understanding of unwelcoming perceptions will be improved 	<ol style="list-style-type: none"> 1. Contact Diversity Committees for input. 2. Improved perceptions: <ol style="list-style-type: none"> a. Part of this project involves developing strategies and approaches for implementation and should include corresponding mechanisms to evaluate our effectiveness. b. Involve students in the process of "Inclusive Education" by first making clear to them (and their parents) our diversity, equity & inclusion values and then give them opportunity to practice, promote and prosper from these values.
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> • UG Diversity Committee • UD Admissions • Graduate College • OISS • Assistant Dean for Undergraduate Services 	
Metrics of success:	
<ul style="list-style-type: none"> • Increase in satisfaction rating on campus inclusivity from undergraduate and graduate students • Increased awareness of diversity, equity & inclusion values throughout the engineering community 	
Key champions and contributors:	

- ADs for Undergraduate Education and Graduate & Postgraduate Education
- Chief Diversity Advocate
- Department chairs and undergraduate advisors

Resources needed:

Personnel: Medium | Financial: Low

Culture & Climate ► Strengthen Our Inclusivity ►	
Create inviting, inclusive spaces through low-cost improvements to physical environments.	
Specific Tasks:	
<ul style="list-style-type: none"> • Evaluate graduate and undergraduate common spaces and offices to make sure they are inviting to a variety of students • Evaluate set-up of spaces on a routine basis • Make low-cost investments (e.g., add plants, paint walls inviting colors) to improve the environment of common spaces • Consider making pop-up hangout spaces rotating between buildings to test user interest and design preferences or to change up appearance routinely (see collaborations with Art, Landscape Architecture program) • Establish ground rules for respect in these shared spaces 	
Gaps in knowledge or missing details:	Answers:
<ol style="list-style-type: none"> 1. Do we have building renovation restrictions during the pandemic, even if renovations are minor? 2. Is there a way to create outdoor spaces around DuPont, McKinley, Spencer, Gore? 	<ol style="list-style-type: none"> 1. Must be a business-critical expense for financial consideration. From the Facilities/PPD side, it depends on their capacity. 2. Requires more exploration w/ PPD.
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> • UD Project Planning & Delivery • CANR Landscape Architecture faculty (Anna Wik, Jules Bruck) • Art department (Ashley Pigford, Jon Cox) • Art in Science (contact John Slater) 	
Metrics of success:	
<ul style="list-style-type: none"> • Number of new indoor and outdoor common spaces • Perception-based surveys on user experiences 	
Key champions and contributors:	
<ul style="list-style-type: none"> • CFAO (Joseph Ryan) • Facilities manager 	
Resources needed:	
Personnel: Low Financial: Medium	

Culture & Climate ► Strengthen Our Inclusivity ►	
Improve our understanding of student attrition using principles of diversity and inclusion.	
Specific Tasks:	
<ul style="list-style-type: none"> • Revisit the UG Diversity Committee report • Identify evidence-based practices to improve student retention among a diverse community of students, inclusive of race, gender and sexual orientation • Develop strategies for both undergraduate and graduate students <ul style="list-style-type: none"> ○ Perform exit interviews of all students who leave before finishing to identify causes that made them leave and determine whether there are any correctable issues that can be identified to help retain students in the future ○ Individuals conducting exit interviews must have diversity and inclusion training 	
Gaps in knowledge or missing details:	Answers:
<ol style="list-style-type: none"> 1. Is this done in any departments or through RISE in the case of URM students? 2. Who is the best point person(s) to conduct exit interviews? 	<ol style="list-style-type: none"> 1. No. There is also a stigma associated with changing majors or colleges, and students often feel shame. Need to help students overcome this perception early in their programs so that we can understand the causes and manage attrition better. 2. Initial thoughts are the undergraduate advisors and graduate coordinators in each department with standardized processes.
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> • CoE Diversity Committee • UD Center for Academic Success, Office of Academic Enrichment 	
Metrics of success:	
<ul style="list-style-type: none"> • Increased retention of under-represented or traditionally marginalized students • Improved perception-based survey results on student climate • Increased # of exit interviews conducted with students changing Colleges or departing UD 	
Key champions and contributors:	
<ul style="list-style-type: none"> • ADs for Undergraduate Education and Graduate & Postgraduate Education • Departmental curriculum advisors 	
Resources needed:	
Personnel: Medium Financial: Low	

Culture & Climate ► Empower Greater Creativity ►	
Spark more creative thinking among our students early in their program.	
Specific Tasks:	
<ul style="list-style-type: none"> Find more opportunities for creative thinking in the first year of the undergraduate program - currently the majority of their time and energy are devoted to foundational STEM courses outside of engineering <ul style="list-style-type: none"> Introduce tools and techniques that teach lateral thinking Consider developing a signature weekend “creativity & innovation bootcamp” during freshmen orientation immediately before classes begin Engage design-focused RSOs to specifically recruit more first-year students (using the best practices of those already doing this, e.g., EWB) Encourage faculty to offer more Study Abroad programs or novel experiential learning opportunities, such as global virtual internships 	
Gaps in knowledge or missing details:	Answers:
<ol style="list-style-type: none"> No existing mechanism to promote creative activities. No formal encouragement and incentive to offer Study Abroad programs. No inclusion of staff in Study Abroad/internship program set-up/direction/organization. 	<ol style="list-style-type: none"> A committee of senior students, faculty, and staff dedicated to organizing creative activities; Encourage programs relevant to the students’ majors and to places not on the typical Study Abroad circuit. Encourage staff and CT faculty to organize (or help organize) new programs. Give workload credit to Staff for participation in these activities; P&T credit for Faculty involved in Study Abroad programs.
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> Kim Bothi UD Institute for Global Studies, Honors Program, Student Services 	
Metrics of success:	
<ul style="list-style-type: none"> Increase # of new creative activity programs that can be offered on a yearly basis Increase # of new engineering-based study abroad programs Publicizing interdisciplinary and creative activities as a part of P&T documents 	
Key champions and contributors:	
<ul style="list-style-type: none"> AD Undergraduate Education Director of First-Year Engineering CT faculty-led committee (open opportunities) 	

Resources needed:

Personnel: Medium | Financial: Medium

Culture & Climate ► Empower Greater Creativity ►	
Develop a creative entrepreneurial co-curricular fund for students, staff and faculty.	
Specific Tasks:	
<ul style="list-style-type: none"> • Develop the fund to ensure that our co-curricular programs are indeed inclusive, follow best practices, and do not advance privilege-based biases • Support nimble launch of activities with minimal constraints except that they promote the strategic goals of the college • Provide cost-sharing for REU, UG research programs, and high school research programs • Promote discussions between staff and faculty on lessons learned and problem-solving • Highlight individuals and initiatives that embrace creative risk-taking through communications and showcasing at College gatherings 	
Gaps in knowledge or missing details:	Answers:
<ol style="list-style-type: none"> 1. Not clear how funds can contribute to co-curricular program inclusivity. 2. Not clear what activities promoting strategic goals of the college fall under the purview of this aim. 	<ol style="list-style-type: none"> 1. Scholarships & internships for new student experiences, especially for those who are unable to afford it. 2. Activities that fall under experiential learning-related strategic goals.
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> • CoE Advisory Council 	
Metrics of success:	
<ul style="list-style-type: none"> • Increase # of student research programs or opportunities launched with COE cost-sharing (undergrad and high school) • Increase financial support from grants and donors directed to the co-curricular fund 	
Key champions and contributors:	
<ul style="list-style-type: none"> • Development & Alumni Relations (Heather Barron, Kris Graves) • Associate Dean for Research & Entrepreneurship • Director of Entrepreneurship & Strategic Initiatives • Communications Team 	
Resources needed:	
Personnel: Medium Financial: Medium	

Culture & Climate ► Connect Our Community ►	
Revive the College-level annual alumni awards program.	
Specific Tasks:	
<ul style="list-style-type: none"> Highlight the accomplishments of our alumni, providing diverse examples of leadership, innovation in their careers <ul style="list-style-type: none"> Many other universities give out yearly alumni awards that we can look toward for inspiration and best practices (e.g., Rice at BMES) Survey all the departments; see how they do this, and amplify/ improve so that the awards get more attention 	
Gaps in knowledge or missing details:	Answers:
1. CoE award committee to include this award	1. Give responsibility to the awards committee to establish and run this reward; Add a plaque for annual awardees to the "Hall of Fame"
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> Dean 	
Metrics of success:	
<ul style="list-style-type: none"> Increased # of new alumni award(s) Establishment of process to advertise, seek nomination, and set-up awards process Increase amount of funds allocated to an Alumni Award Fund 	
Key champions and contributors:	
<ul style="list-style-type: none"> Director of Development and the Development Team Events coordinator Chairs and Associate Chairs DAR AD for Academic Affairs 	
Resources needed:	
Personnel: Medium Financial: Medium	

Culture & Climate ► Connect Our Community ►	
Create opportunities for high-quality interactions.	
Specific Tasks:	
<ul style="list-style-type: none"> • Create materials and opportunities for staff, faculty and students to be our own brand ambassadors • Free up time for the COE community so that there is more room to 'breathe' and be creative, engaged, and open <ul style="list-style-type: none"> ◦ Identify activities for COE faculty/staff/students to STOP doing; Do we have to evaluate so much?; Do we have to record/report so much?; Replace low-value activities with high-meaning, high-impact activities ◦ Is a lot of this evaluation/recording/reporting because of ABET? ◦ Are there common tools that can guide units through a "triaging" process, considering the impact of decisions on other stakeholders (e.g., students, other units)? • Hold an all-college meeting once per semester to update faculty and staff on highlights and initiatives, sharing recordings/notes afterward. • Continue holding dean's office hours for faculty, staff and students to share their ideas via brief, informal discussion • Include faculty and staff and students together in community engagement activities and events • Hold a COE community-engagement day in which all are encouraged to participate in service/engagement projects with local partners/organizations • Provide opportunities for alumni to participate in all of the above, providing valuable external perspective • Task an ombudsperson to receive and respond to concerns from faculty and staff (see Live & amplify our values) 	
Gaps in knowledge or missing details:	Answers:
1. Are there particular inefficiencies or opportunities to remove redundancies in routine tasks?	1. This could benefit from a unit by unit assessment; we are seeing growth in use of tools like MS Teams and Planner among staff and faculty
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> • Chairs • Human Resources Talent Development 	
Metrics of success:	
<ul style="list-style-type: none"> • Longitudinal perception-based surveys to monitor changes in feelings about culture & climate • Increased # participation in routine gatherings involving both faculty and staff • # of staff and faculty who take a communications or DAR team training on College outreach 	
Key champions and contributors:	
<ul style="list-style-type: none"> • CoE Chief of Staff • Director of Communications 	

- CFAO
- AD for Academic Affairs

Resources needed:

Personnel: High | Financial: Medium

Notes: There are elements of several ideas here, including C&C>Connect our community>live and amplify our values.

Culture & Climate ► Connect Our Community ►	
Strengthen our ties to the local community.	
Specific Tasks:	
<ul style="list-style-type: none"> • Establish a working group of faculty and staff currently invested in community engagement activities that help support community, industry and alumni relationships • Survey existing community relationships directly linked to our teaching, research and service to identify strengths and opportunities • Find key partners working in the community engagement space (e.g., Community Engagement Initiative) • Invite community leaders to different open houses, design days and other events we organize in Engineering • Have community leaders take part in the convocation (University)/Graduation (Engineering) ceremony • Consider inviting a town official to take part in various advisory or steering committees • Identify any town leaders/employees who might want to engage with student groups as a project mentor • Increased community engagement on current issues, using COVID-19 as a starting point <ul style="list-style-type: none"> ○ Expand efforts like the Data Science Institute's "Data for Good" theme to connect local community with faculty working on COVID-19 related research ○ Identify ways for DE community members to engage in citizen science to support our efforts ○ Develop online DE community forums to ask questions to a panel of UD experts <ul style="list-style-type: none"> ■ E.g., Panel discussion on using data analytics to understand COVID-19 impacts on underserved communities with faculty from other parts of campus to discuss social implications 	
Gaps in knowledge or missing details:	Answers:
<ol style="list-style-type: none"> 1. Very little current community-college interaction. 2. Knowledge of the opportunities available to the college for working with the community 3. Database of the engineering graduates who are still in the community. 	<ol style="list-style-type: none"> 1. Work with CEI to explore options, as well as CoE RSOs. 2. Invite our local graduates in the community to help us identify areas we can work with the community. 3. Some areas can immediately contribute to the community (BME, CIEG, etc.).
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> • Town of Newark community volunteer coordinator • Community Engagement Initiative (Dan Rich and Lynette Overby) • UD Service Learning (Sue Serra) • Student Central and CoE Undergrad Education Office (RSOs with community partnerships) • Career Services (existing community relations) • Research Office (compile list of federally funded research to identify potential broader impacts initiatives) 	
Metrics of success:	

<ul style="list-style-type: none"> • Increase of # of local community leaders invited to participate in campus events • Achieve high satisfaction rates reported by the local community on level and quality of outreach and community engagements • New community-college programs (great place for interns)
Key champions and contributors:
<ul style="list-style-type: none"> • Chair of a CoE community engagement team (open opportunities) • Associate Dean for Research • Community Engagement Initiative (CEI)
Resources needed:
Personnel: Medium Financial: Medium

Culture & Climate ► Connect Our Community ►	
Develop traditions that foster a sense of community.	
Specific Tasks:	
<ul style="list-style-type: none"> • Combined faculty/staff awards and recognition and recognize faculty/staff/student teams that work well together, or that have worked together to build something inclusive or impactful for CoE/UD • Honor Code ceremony/induction for incoming engineering students, facilitated by Honor Committee of upperclass students • Events that bring RSOs together (e.g., “Bid Day” or a “Collaboration Day” or “Service Day”) • Hold regular (although not necessarily frequent) activities around a common purpose rather than around awards/recognition • Distribute of College spirit items • Use COE semester faculty meetings as a way to introduce collaborative research in a neighborhood, with the purpose of recruiting collaborators/participation, and not about listing accomplishments <ul style="list-style-type: none"> ○ Chairs could highlight activities/resources/classes in their department that are aligned with that theme, and then the college could talk about ways that we could increase our impact there ○ Seed grants or some other facilitation of good ideas that come from these meetings 	
Gaps in knowledge or missing details:	Answers:
1. Who could help coordinate the timing and density of events on a College calendar?	1. CoE Events Coordinator (Sue Zatto)
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> • ADs for Academic Affairs, Undergraduate Education, and Graduate & Postgraduate Education • Assistant Dean for Undergraduate Services (RSO contacts) 	
Metrics of success:	
<ul style="list-style-type: none"> • Improved perception-based survey results on College culture & climate • Increased participation at College social gatherings • Increase number of seed grants for ideas that come from these events that are tied to the intellectual neighborhoods 	
Key champions and contributors:	
<ul style="list-style-type: none"> • Chief of Staff • Assistant to the Dean • Human Resources 	
Resources needed:	
Personnel: High Financial: Medium	

Culture & Climate ► Connect Our Community ►	
Expand College-level orientation for new employees.	
Specific Tasks:	
<ul style="list-style-type: none"> Establish a “local” orientation for new staff, faculty and graduate students to meet key stakeholders, learn key internal procedures, and understand where to go for help Develop a “Go-To” guide that directs new staff, faculty and graduate students to College units and services to support their success (e.g., explaining the Research Administration and Business Offices, roles & responsibilities of College leadership, etc.) Support the development of CoE brand ambassadors and sense of community from day one Explore if there are ways to build in mentorship practices and connections upon arrival of new faculty, staff and graduate students 	
Gaps in knowledge or missing details:	Answers:
<ol style="list-style-type: none"> What is currently available for incoming employees and graduate students? Do we know what is needed? 	<ol style="list-style-type: none"> Onboarding with Central HR, then a brief College HR orientation started over the past few years (includes outline of what College does). Need to revisit. Suggest surveying some of our employees and graduate students who began in the past 1-2 years.
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> UD Human resources 	
Metrics of success:	
<ul style="list-style-type: none"> # of staff, faculty and graduate students set up with a mentor within first 30 days of start date Established “Go-To” guide Improved perception-based survey results on College culture & climate 	
Key champions and contributors:	
<ul style="list-style-type: none"> ADs for Academic Affairs, Graduate & Postgraduate Education, and Undergraduate Education CoE Human Resources Department Chairs and Associate Chairs Communications Team 	
Resources needed:	
Personnel: Low Financial: Low	

Notes: Mentorship is also highlighted in People > Support our Talent, and there may be overlap with other ideas in Culture & Climate such as Develop Traditions.

KEY PRIORITY

PEOPLE: INNOVATIVE, INFLUENTIAL

PROJECT CHARTERS

Project charters begin on the next page.

People ► Elevate Our Recruitment ►

Implement a college-level comprehensive undergraduate recruitment strategy.

Specific Tasks:

- Develop and share a college-wide recruitment strategy and mission statement tied with our values
 - Identify what Admissions is and isn't doing
 - Clearly identify our diversity, equity and inclusions policies (values) when we do the recruitment
 - Redevelop our recruiting methods and where/how we seek out potential students, taking more ownership of the process with Admissions
 - Develop a list of schools and outreach efforts by students and student-led groups; use national databases/Project Lead the Way; contacts with Teach for America program to identify schools and students in the mid-Atlantic region
 - Using best practices, bring some of UD's best innovations to targeted high schools in the DE-PA-MD-NJ area
 - In the short term, establish Middle/High School outreach through a "Why #Hengineering?" Day
 - In person or virtual introductions to engineering, through a UD CoE "lens" for middle school students, teachers, and guidance counselors
 - Virtual lab visits and recorded laboratory demos
 - Introduce different disciplines of engineering using interactive sessions and highlighting the unique work done by researchers at UD
 - Introduce technical skills and engineering disciplines for upper middle and high school students throughout the region
 - Offer developmental opportunities to graduate students to help develop and deliver these courses under the direction of a faculty member
 - Develop partnerships with alumni and industry professionals for development and delivery of these courses
 - In the longer term, use K-12 Outreach as a tool for student recruitment and enrollment across the region, capitalizing on existing expertise and partnerships available through CEHD
 - Clarify interpretation of Beau Biden Child Protection Act and its impact on K-12 Pipeline, which has resulted in fewer faculty taking on high school interns and doing other forms of K-12 outreach as critically important for effect
 - Establish an intentional partnership with the College of Education and Human Development, where CEHD provides guidance and facilitation in educational outreach while engineering faculty and staff operate as content experts and implementers
 - UD staffing in the K-12 unit as follows: 1 FTE on the CEHD partnership and programming and 1 FTE focused on recruitment (capitalizing on online databases and programs like Project Lead the Way)

<ul style="list-style-type: none"> ■ Using the expertise of a CEHD-structured guiding council, consisting of local and regional school district and non-profit representatives, amplify our partnerships and assess our needs and capabilities to improve regional recruitment ■ Expand our outreach and recruiting presence to include a strategic focus on regional schools beyond DE with large URM populations ○ Develop alternative recruitment strategies like high school outreach and recruiting through short courses <ul style="list-style-type: none"> ■ Develop, market, and deliver 1-credit UD CoE short courses introducing technical skills and engineering disciplines for high school students ■ Offer as transfer credit towards their degree/certificate at UD ■ Offer developmental opportunities to graduate students to help develop and deliver these courses under the direction of a faculty member ■ Develop partnerships with alumni, industry professionals, and possibly a new RSO for development and delivery of these courses ○ Increase engineering staff and faculty roles in undergraduate recruitment <ul style="list-style-type: none"> ■ Provide incentives and/or recognition to faculty, staff, and students to engage in diverse recruiting events ■ Seek out/train/cultivate people to be skilled recruiters consistently across CoE ■ Count recruitment contributions as part of faculty service load ■ Use market-based approaches to new program development directly tied to new hire opportunities ■ Provide support to faculty traveling abroad to connect with a local high school during their stay (Dean's office/department travel stipend to support) ■ Overlap with "Support our talent": recognize more types of good work 	
Gaps in knowledge or missing details:	Answers:
<ol style="list-style-type: none"> 1. How does Admissions conduct recruitment for engineering recruits (domestic and international)? 2. Are there individuals in CoE who do recruitment activities (with or without Admissions)? 3. What tools/databases/etc. do we currently have available to help with recruitment? 4. Do we still need background checks for virtual students' experiences under 18 years old? 	<ol style="list-style-type: none"> 1. General without a singular field/discipline in mind. International recruitment has been focused on China, although growing to other countries over the past 3 years. An International Enrollment Management Task Force presented a report to the Provost's Office in late 2017 (see Bothi for more info). 2. Use international recruitment not only as a money-making opportunity. This is another way of adding diversity to our campus. Look at developing African or Asian countries. 3. Create scholarship opportunities for international UG students from developing countries. There are informal recruitment opportunities, but this is not coordinated with Admissions or across the College. 4. Project Lead the Way is one. Buckley & Shermeyer may know others.
Who may be able to provide assistance/knowledge?	

<ul style="list-style-type: none"> • Key faculty might include J. Buckley & L. Pollock • Gary Henry (Dean of CEHD) • Additionally: Sharon Walpole (CEHD), Chrystalla Mouza (CEHD), Doug Zander (Admissions); Song Hoffman (Admissions)
Metrics of success:
<ul style="list-style-type: none"> • Increased # of quality applicants to engineering & computer science programs • Increased # of paid incoming freshman • Increased # of scholarships for international students from developing nations (Africa, Asia) • # of high school students enrolled in new pre-college and engineering preparatory short courses • Increased # of recruitment events led by CoE staff and faculty
Key champions and contributors:
<ul style="list-style-type: none"> • AD for Undergraduate Education • Assistant Dean for Undergraduate Services • Undergraduate Education Team • K-12 Affiliated Faculty • K-12 Outreach staff
Resources needed:
Personnel: Medium Financial: High

People ► Elevate Our Recruitment ►	
Apply appropriate best practices from faculty search committees to staff searches.	
Specific Tasks:	
<ul style="list-style-type: none"> • Implement trainings on implicit biases, holistic admissions for staff searches • Implement the databases for HR staff searches that was recommended by the diversity committee • Reassess position descriptions, salary grades and performance to ensure pay and titles are commensurate with the workload and effort in order to retain the best staff in the college • Promote more external candidate searches for staff <ul style="list-style-type: none"> ◦ Establish an external hiring goal for certain categories of staff positions 	
Gaps in knowledge or missing details:	Answers:
<ol style="list-style-type: none"> 1. How do searches for faculty compare with staff searches currently? 2. What are the diversity committee recommendations? 3. What are the best practices for assessing current descriptions and roles? 4. What are the best practices and outlets for external staff searches? 	<ol style="list-style-type: none"> 1. Staff searches typically internal on UD Jobs; Staff searchers would benefit from same faculty search committee training and resources 2. See Diversity Committee report (Davidson) 3. Manager specific, illustrating need for consistent guidance from HR 4. There is very little broad advertising for external staff searches; need to contact Chrissy Shin (how many external staff candidates do we even hire -- campus wide?)
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> • HR representatives from across campus 	
Metrics of success:	
<ul style="list-style-type: none"> • Improvement of diversity rates in COE staff • Improvement of retention rates in COE staff • Balance external vs internal recruitment • Increased # of external applicants for staff positions 	
Key champions and contributors:	
<ul style="list-style-type: none"> • CoE CFAO • CoE Human Resources • Chief Diversity Advocate 	
Resources needed:	
Personnel: Low Financial: Low	

Notes: Links to Idea on strengthening employee retention.

People ► Elevate Our Recruitment ►	
Establish a formal strategy for dual-hire opportunities.	
Specific Tasks:	
<ul style="list-style-type: none"> • Identify and implement efficient dual hire best practices to attract and retain the best talent as more colleges offer this to faculty candidates • Learn from more recent dual hires to highlight best practices that fit the UD engineering environment • Set aside 2 faculty hires per year for more nimble hiring in the case of two-body opportunities (Dean-level authority) • Develop competitively supported new opportunities for non-faculty hires (e.g., soft-money, cost-sharing with other campus units) that embraces new skills to grow strategic initiatives in the college • Establish mechanisms to coordinate with industry partners in dual hire scenarios • Empower hiring committees to let candidates know dual career hiring support is available early on in the hiring process 	
Gaps in knowledge or missing details:	Answers:
<ol style="list-style-type: none"> 1. How will hiring committees be informed of the dual hire strategies and available tools 2. How best to collaborate with other campus partners in dual hires? 	<ol style="list-style-type: none"> 1. Dual Hire Strategies and opportunities to be discussed when giving charge to the hiring committee. 2. Seek guidance from UD HR
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> • Dean • Human Resources Talent Development or Talent Solutions • Provost and Vice Provost for Academic Affairs 	
Metrics of success:	
<ul style="list-style-type: none"> • Increased # of examples of successful dual hires • Increase # of partnerships with industry/other institutions 	
Key champions and contributors:	
<ul style="list-style-type: none"> • Dean • Associate Dean of Academic Affairs • Chairs 	
Resources needed:	
Personnel: Low Financial: Low	

People ► Elevate Our Recruitment ►	
Establish a “Why UD?” Day for DESU students.	
Specific Tasks:	
<ul style="list-style-type: none"> Investigate best practices of universities with strong diversity recruitment programs (e.g., GATech, UMich, UMaryland) Identify interest from DESU leadership to support or strengthen appropriate event programming and delivery If this is an appropriate event to improve UD CoE-DESU engagement, follow best practices to: <ul style="list-style-type: none"> Develop a concerted effort across CoE to recruit students from Delaware State University to UD for graduate school Identify graduate students as ambassadors that can share their reasons for and experiences at UD Develop customized departmental or program-specific presentations under the “Why UD” umbrella, to be made available either in-person or virtually 	
Gaps in knowledge or missing details:	Answers:
<ol style="list-style-type: none"> Has this been tried by others across campus, and if so, what worked or did not? Do we have key champions within CoE and at DESU who could guide the process? Do we have the resources and systems in place to support an inclusive culture and student success if we succeed at attracting more DESU undergrads to our grad programs? 	<ol style="list-style-type: none"> McNair Graduate Fair (contact Sujata Bhatia); Vaughan established contacts UD CHARM faculty, Amy Slocum (EPSCOR), Michael Vaughan This is a work-in-progress that requires additional support as reflected by other prioritized ideas in the implementation plan.
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> Thomas Epps, LaShanda Korley; McNair Program; Office of E&I/VP for Diversity Existing students from DESU and other HBCUs (what made them come to UD, how has their experience been, what is needed) 	
Metrics of success:	
<ul style="list-style-type: none"> Increased # of DESU students applying to UD CoE graduate programs Increased # of DESU students matriculating into UD CoE graduate programs 	
Key champions and contributors:	
<ul style="list-style-type: none"> Associate Dean for Graduate and Postgraduate Education in conjunction with faculty with established ties to DESU 	
Resources needed:	
Personnel: Medium Financial: Medium	

Notes: This idea ties into several other important efforts around retention, student success, and diversity, equity & inclusion.

People ► Support Our Talent ►

Improve data-driven support systems for our students.

Specific Tasks:

- Develop coordinated efforts to engage specifically with our undergraduate students, particularly incoming students
 - Identify students without access to computers, internet and quiet spaces to study, and provide them with resources
 - Reassess how we measure student competencies using alternative rubrics that reflect the kinds of students we are training (e.g., cross-cultural competencies, interdisciplinary knowledge and experiences)
 - Develop methods of assessing student experience beyond course evaluations, to get overall sense of what dept., COE, UD could do better
 - Encourage mid-term evaluations
 - Conduct exit interviews for students who leave COE
- Invest in and develop our URM programming to better meet the needs of current and prospective students and trainees
 - Assess best practices inside and outside of our college, including revisiting the strategic plan on undergrad diversity
 - Improve financial competitiveness for URM recruitment and retention using the University of Maryland's Meyerhoff Program as an example of best practices
 - Expand recruitment of Black and Hispanic STEM scholars regionally (beyond Delaware)
 - Establish undergraduate and doctoral fellowships for Black and Hispanic scholars
 - Work with affinity groups in targeted professional societies to build alliances and use the networks for stronger graduate and postdoctoral recruitment
 - Strengthen support for medium- and high-risk students, especially first-generation and URM students. Connect them with communities on-campus (and off-campus?)
 - More deliberate connections with other UD programs (McNair, etc.)
 - Establish stronger postdoc-to-faculty pathways
 - Increase resources to strengthen (potentially restructure and rebrand) our support programs for historically underrepresented students
 - Support related curriculum and research goals to increase relationships with regional HBCUs and develop adaptable curriculum delivery models to support student success
- Improve support systems for graduate students
 - Establish the availability of graduate student scholarships
 - Develop physical spaces and mentoring programs for graduate students to encourage networking and sharing experiences across graduate students in a department
 - Develop these connections before students are “siloe” into research groups
 - Establish opportunities for our international students to connect with industry and other partners as an incentive to choose Delaware

Gaps in knowledge or missing details:	Answers:
1. Do these kinds of undergrad and grad services and survey processes happen in other parts of campus?	1. Need for a resource assessment.
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> • CRESP, UD Student Services, Admissions, Grad College • Honors Program for their best practices • Assistant Dean for Undergraduate Services (Shermeyer) 	
Metrics of success:	
<ul style="list-style-type: none"> • Increased # of graduate fellowships • Increased retention of students in the “murky middle” and high risk • Increased # of postdocs on academic pathways landing faculty positions • # of incoming undergraduate students surveyed per year and corresponding increase in financial, equipment (e.g., computer labs) or counseling support made available to students in need • Perception-based survey on student experience over time 	
Key champions and contributors:	
<ul style="list-style-type: none"> • ADs for Undergraduate Education, Graduate and Postgraduate Education, and Academic Affairs • Assistant Dean for Undergraduate Services • Chief Diversity Advocate • Student Diversity Committee • Academic Analyst 	
Resources needed:	
<p>Personnel: Low Financial: High</p> <ul style="list-style-type: none"> • Support longitudinal analysis of these particular metrics 	

Notes: Is there a way to explore the link between interdisciplinary curriculum and experiences (and novel instruction styles like block learning) with student success, especially among URM students in CoE programs? Literature exists, but can we evaluate this internally?

People ► Support Our Talent ►

Strengthen employee retention.

Specific Tasks:

- Increase professional development and informal learning opportunities for staff employees
 - Identify strategies for supporting career ladders within CoE, allowing staff to be promoted in place
 - Create a budget for professional development
 - Allow units to identify and attend professional development opportunities
 - Ensure staff are up to date on current technology via annual workshops
 - Develop a rotating team of staff to come up with new and innovative trainings for staff, including engagement with staff outside the college
- Improve faculty mentor/mentee pairing
 - Provide training to mentors to guide their interactions with mentees, including how to help build networks, learn how to use campus resources strategically, and advocate for their success
- Find ways to appreciate and recognize the important contributions of CT faculty
 - Use Senior leadership to regularly communicate the importance/value of all faculty—regardless of rank or track, but especially CT faculty—who are often taken for granted in their departments
 - Establish senior tenured faculty advocates to call out inequities and demeaning behavior demonstrated by other tenured faculty
 - Create opportunities (workload allowances) for CT faculty to help faculty in their departments and across the college improve curriculum and its delivery
 - Acknowledge and reward CT faculty for finding innovative ways to elevate the quality of instruction across their departments

Gaps in knowledge or missing details:

1. How to practically show appreciation to faculty and staff that are at “flight risk”
2. How to objectively establish the “market value” of an employee and provide our talent with incentives to stay
3. How to pair effectively a mentee to a mentor
4. Are there units or colleges on campus that have demonstrated strong employee retention?
5. What are the campus policy barriers to improving career ladders for employees?

Answers:

1. Currently zero flexibility at the College-level (central HR and Budget Office challenge); establish flexible work scheduled where appropriate; increase number of staff and faculty awards
2. Create opportunities for staff role innovation and contributions to workflow enhancements along with rank and salary increases (value institutional knowledge).
3. Allow mentors to come from external departments; develop common support guide for mentors departmental and college-levels
4. Central HR could provide from their snapshots
5. Mindset of ‘we only need what we need’; budget uncertainty and limitations; Requires a deeper dive.

Who may be able to provide assistance/knowledge?
<ul style="list-style-type: none"> • Could Chrissy Shinn survey the HR representatives council for campus best practices?
Metrics of success:
<ul style="list-style-type: none"> • Reduce turnover rates in faculty • Reduce turnover rates in staff
Key champions and contributors:
<ul style="list-style-type: none"> • Associate Dean for Academic Affairs • Key staff: Laura Mohr, Chrissy Shinn, Cyndi McLaughlin • Key faculty: Chris Price, Ryan Zurakowski
Resources needed:
Personnel: Medium Financial: Medium

People ► Support Our Talent ►	
Expand the definitions of Teaching, Research and Service in P&T processes.	
Specific Tasks:	
<ul style="list-style-type: none"> • The neighborhoods could be used as a model to reward multidisciplinary, collaborative efforts through P&T • Departments should initiate changes to P&T documents->COE changes->UD changes • Recognize publications in interdisciplinary journals as valuable contributions, including those on engineering scholarship • Recognize value of publications with many co-authors, a reflection of team science • Use the interdisciplinarity of neighborhoods to embrace changes in P&T when it comes to the contributions of different forms of broader impacts (like professional and community-based service) and entrepreneurship 	
Gaps in knowledge or missing details:	Answers:
<ol style="list-style-type: none"> 1. Need clarity in our understanding and interpretation of interdisciplinary activities 2. P&T does not clearly state how much COE values interdisciplinary activities. 	<ol style="list-style-type: none"> 1. Give examples in the P&T document. 2. Give the HoDs flexibility to weigh in interdisciplinary activities as a subset of Research, Teaching and/or Service.
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> • Dean • Provost's Office and Faculty Senate 	
Metrics of success:	
<ul style="list-style-type: none"> • Increase the percentage of promotions involving faculty engaged in multidisciplinary activities • Increase in the merit increase based on multidisciplinary activities for faculty 	
Key champions and contributors:	
<ul style="list-style-type: none"> • AD for Academic Affairs • College P&T and Department P&T committees 	
Resources needed:	
Personnel: Medium Financial: Low	

Notes: Linked to Idea on Formal support for faculty to build flexibility in workload distribution.

People ► Strengthen Our Partnerships ►	
Support faculty and staff efforts to do outreach.	
Specific Tasks:	
<ul style="list-style-type: none"> To reduce disparity among departments, the College could create a teaching policy for CT to recognize important service contributions <ul style="list-style-type: none"> Strict departmental 100% teaching load policies will need to be revisited; departments should have a minimum allocation for service Provide a College-level statement in contracts that demonstrates workload support for activities that promote non-traditional service such as community engagement and outreach across all levels and categories of faculty and staff <ul style="list-style-type: none"> Develop definitions and examples of outreach and community engagement Develop a reporting mechanism to demonstrate contributions <ul style="list-style-type: none"> Annual report by COE on what we are doing in these areas Shared with the community Provide flexibility to earn summer salary for administrative and service support via an admin supplement 	
Gaps in knowledge or missing details:	Answers:
<ol style="list-style-type: none"> What kinds of service are CT faculty contributing to despite full (100% assigned) teaching loads? How do we manage accountability for outreach or non-traditional service? 	<ol style="list-style-type: none"> Hiring committees, dean's office requests to participate in strategic planning, working groups, etc. Manage at the Chair level; Require some minimum percentage of all faculty and staff time to be dedicated to outreach and reward people who dedicate more than the required time.
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> Need for Dean commitment to drive this level of change CoE Faculty Diversity Committee Vice Provost for Faculty Affairs 	
Metrics of success:	
<ul style="list-style-type: none"> Increased service allocations for faculty and staff Increased outreach and community engagement projects led by all faculty and staff Increased recognition and rewards for people who are contributing to non-conventional service 	
Key champions and contributors:	
<ul style="list-style-type: none"> AD for Academic Affairs CFAO 	

<ul style="list-style-type: none"> • Department Chairs
Resources needed:
<p>Personnel: Medium Financial: Medium</p> <ul style="list-style-type: none"> • Need a formal way to track our faculty and staff outreach and community engagement

Notes: Linked to Idea on P&T definitions.

People ► Strengthen Our Partnerships ►

Deploy an industry partnership task force.

Specific Tasks:

- Develop a database of industry and alumni contacts
 - Create database overlaying corporate research partnerships, corporate philanthropy, and C-level/management alumni followed by establishing a unified strategy
 - industry contacts and alumni who have been or are willing to be guest speakers in classes, senior design clients, and be involved in other ways in our educational delivery
 - This is critical for providing industry contacts to students, maintaining relationships with alumni, and developing relationships with regional industry
 - Make a “map” of these relationships available digitally through UD log-in
- Establish more opportunities for local industries to connect with our students
 - Develop a for-credit junior/senior year internship
 - Establish an alumni and/or local industry mentorship program (there are companies in the area that may not contribute financially but have employees that want to share their expertise)
 - Encourage CoE RSOs to establish Technical Advisory Boards consisting of alumni and professionals from the region (e.g., EWB’s TAB)
- Expand our industry relationships in each program using internal best practices; ChemE’s relationship with DuPont, etc. has been the big driver of their high rankings - We need partners like that in every department
 - Start by assessing opportunities with privately held companies founded by alumni that work with or have the potential to work with UD programs
 - Establish a method to systematically cultivate these relationships
 - Build or actively engage in regional alliances (e.g., relationship CoE has with DelawareBio, NIIMBL)
 - Dean participation in increasing industry gatherings to advocate for College, interacting with as many VPs/Presidents/CEOs as possible
 - Examine existing best practices internally
 - Industry-research: CCM with due-paying collaborations
 - Industry-teaching: Construction Management donor-sponsored annual event; Senior Design
 - Engagement: DCT transportation forum convenes large group from govt/industry for posters and exhibits (participants charged a fee)
 - Establish an annual industry day in the college (e.g., Dan Rich did this a few years ago)
 - Host education-focused workshops in key new areas of industry expertise needs (i.e., academic and industry partners collaborate to identify new areas and skills and educational opportunities)
 - Align these efforts with the intellectual neighborhoods and incentivize collaboration (e.g., support one symposium per neighborhood that brings in industry experts)
 - Leverage expertise of Biden School in bringing together academia/industry/government

<ul style="list-style-type: none"> Build more tools for online exposure, including a website for Industry and website for alumni <ul style="list-style-type: none"> Identify what types of partnerships we're looking for w/industry and alumni Build out sites based on above 	
Gaps in knowledge or missing details:	Answers:
<ol style="list-style-type: none"> Identification of best practices for establishing and growing a network of industry partners. No existing credit bearing internships or a formal internship placement office/officer. 	<ol style="list-style-type: none"> Curriculum modification to include credit bearing internships; consider novel opportunities like global virtual internships (IGS partnership with Global Academic Ventures). Identify (or create) a person responsible for student internship placement, report collection, and industrial liaison.
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> Assistant Dean for Undergraduate Services 	
Metrics of success:	
<ul style="list-style-type: none"> Increase in # of students involved in industry internships Creation of new credit bearing internship courses Steady increase in "industry day" participation Robust database that identifies the internship opportunities Creating of an office that deals with internships and placements 	
Key champions and contributors:	
<ul style="list-style-type: none"> DAR (Heather Barron) Advisory Council (Don Linsenmann) Associate Dean for Research & Entrepreneurship 	
Resources needed:	
Personnel: Medium Financial: Low	

KEY PRIORITY

CURRICULUM & RESEARCH

PROJECT CHARTERS

Project charters begin on the next page.

Curriculum & Research ► Build Intellectual Neighborhoods ►

Clarify the purpose and aims of the intellectual neighborhoods and revisit their intended impact.

Specific Tasks:

- Is the nomenclature inclusive (e.g., neighborhood vs an ecosystem?)
 - Then can they be structures to foster inclusive collaboration for those who don't instinctively know how to fit?
- Clearly explain why we are adopting this model. Are INs supposed to highlight what we are good at now or what we are aspiring to? More clearly explain how will INs be used - do they inform/affect future decisions? Advertising? Training? New approved courses and content?
- What are INs, exactly? Do they work? Under what circumstances do they work? Best way to foster INs to grow and improve? How substantive are the fundamental changes, growths as a result of the creation/identification of INs? Did INs come before or after the actual areas of engineering colleges already existed? Do we have examples from other programs/universities? Studies in the literature? How do we measure their effectiveness (what metrics are used)? Focus on collaboration versus competition? (How do we prevent INs from getting "pit against" each other?)
- One way to reframe: What is the overarching problem we are trying to solve? Look at potential problems before addressing solutions. Another possibility: feed the past five years of all our faculty's publications into a program that mines for keywords/ideas, then use machine learning to identify how many clusters (INs) there really should be?

Gaps in knowledge or missing details:

Answers:

1. What are the existing intramural faculty networks and clusters?
2. What does the literature and market say about the IN model implementation and success?
3. What is UD-COE's rationale for adopting the IN model?
4. What does COE anticipate achieving with this model?

1. Data collection and use of analytical (e.g. machine learning) tools to expose existing vibrant cross-discipline collaborations.
2. Written report compiled and communicated to COE faculty
3. Clarification of COE messaging
4. Clarification of COE messaging

Who may be able to provide assistance/knowledge?

- Levi Thompson
- David Martin
- Members of Red Team

Metrics of success:

- Increased Faculty participation rates in internal outreach (IN marketing) events
- Satisfaction / adoption rates for the IN model from faculty surveys

Key champions and contributors:
<ul style="list-style-type: none"> • CoE AD for Research • Communications team
Resources needed:
Personnel: Medium Financial: Low

Notes: Critical ideas for INs shared by the Guiding Coalition

1. Better thinking through the idea of INs, what they should be, how they should be assessed
 - a. Conduct a study on the impact of INs at other institutions, how they were developed (e.g. organically or top-down), under what conditions they have succeeded. Do INs fundamentally change how collaboration is done, or is it mostly marketing?
 - b. Get input from all faculty on areas of research and future growth. Use e.g. Machine Learning to create a shortlist.
 - c. Develop a plan for creating new INs or reassessing outdated INs
2. Better building community, ways to bring faculty together organically (also falls under Culture & Climate, Infrastructure)
 - a. Record seminars, lightning talks, etc. to more broadly share research areas with potential colleagues
 - b. Create a COE dining hall/lounge to foster more socializing, community, sharing of interests

Curriculum & Research ► Enhance Our Partnerships ►	
Partner with HBCUs.	
Specific Tasks:	
<ul style="list-style-type: none"> • Conduct an audit of past and existing ties to HBCUs to identify relationships, synergies and potential obstacles to overcome. • Engage leadership at COE and UD level to make this a priority so we get the resources to begin exploring within the next semester. Money, hiring and effort need to be allocated to this so we can do it right and do it on a more efficient time scale. • Meet with counterparts at HBCUs, find out their needs and partnership goals to identify win-wins that benefit both students and faculty at both institutions. <ul style="list-style-type: none"> ○ Explore joint degrees, joint faculty positions, and exchange programs that bring together UD-HBCU students ○ Online classes/block learning that build in flexibility ○ Creative partnership models ○ UD Engineering committee to follow the progress of the students in the joint programs ○ UD Engineering committee to identify needs for the students in the joint programs • Develop a suite of fellowships and scholarships to attract top students & support success. • Engage policymakers and industry leadership who could become “champions” of this effort. • Hire more diverse faculty. • Create a seminar series with leadership from UD-HBCU for students, show them the benefits of this partnership. 	
Gaps in knowledge or missing details:	Answers:
<ol style="list-style-type: none"> 1. Do we clearly understand what has and hasn't worked in the past? 2. Contact information for existing collaborators 3. Curriculum and academic calendar mapping at undergrad and grad levels 4. Needs-based assessment highlighting win-wins between institutions 	<ol style="list-style-type: none"> 1. This will come from the audit. 2. This will come from the audit. 3. With the leadership of the two Universities in sync, a second level administration/faculty/staff joint team can be established to work out the logistics. 4. Will come from #3.
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> • Dean and chairs can help survey existing or past relationships with HBCUs • Michael Vaughan has working relationships with DESU leadership • Epps/Korley/Bothi: Future Faculty Academy, CHARM & EFRC diversity and outreach initiatives 	
Metrics of success:	
<ul style="list-style-type: none"> • # of joint academic programs • # UD and HBCU students enrolling, and successfully completing programs (standalone or joint) • # scholarships or fellowships for HBCU-UD students • # of jointly organized workshops, trainings, short-courses and other events offered with UD and HBCU faculty and staff • Establishment of a 1 cr. seminar series focusing on today's issues 	

<ul style="list-style-type: none"> • % growth in # of students applying to and matriculating into engineering grad programs • Increase # of diverse faculty • # of affiliated and joint faculty from HBCU partners • Growth of the program to include other nearby HBCUs (Lincoln, UMBC, etc.) • Create evaluation for students to measure program structure and overall student needs.
Key champions and contributors:
<ul style="list-style-type: none"> • ADs for Undergraduate Education, and Graduate & Postgraduate Education • AD for Research & Entrepreneurship • Director of Entrepreneurship & Strategic Initiatives, INBRe & NSF iCorps administrator (J. Korley) • CHARM/MRSEC, EFRC/DOE (T. Epps, L. Korley, K. Bothi) • EPSCOR Faculty • Vice Provost for Diversity & Inclusion
Resources needed:
<p>Personnel: High Financial: High</p> <ul style="list-style-type: none"> • Funding to support collaborator meetings, subsidize early workshops and other events; scholarship funds

Notes: Establish a long term program to create a bridge to UD for masters and PhD programs, allowing the best students to stay in our state and region. Prioritize collaboration with DESU and Lincoln University for maximum local impact. Some classes could be online to accommodate more flexible schedules.

Curriculum & Research ► Enhance Our Partnerships ►

Partner with government agencies and industry in mutually beneficial areas.

Specific Tasks:

- Develop an action plan for strategic opportunities and pathways for partnering with government and industry on retaining human capital in Delaware and the surrounding area
- Develop Professional master's and certificate offerings that are suited to corporate partners' needs, with an emphasis on experiential learning
 - Consider revival of the engineering technology degree? (Would there be conflict with DelTech or could it spark partnership? Build off of current relationships from 2+2 articulation agreements that some programs already have?)
- Develop workforce-relevant training (i.e., boot camps) to current students, high school students and working professionals in identified areas of need (e.g., in programming, robotics, etc.)
 - Engage Career Services to work with state agencies on position descriptions and to post opportunities on Handshake
 - Develop Internship programs for our students in government agencies
 - Identify a range of opportunities: shadowing to internships to co-ops
 - Expose state agencies to UD Engineering students & science; expose our students to public sector work
 - Resource needs are minimal - encourage students and state agencies to use Handshake
 - Partner with smaller institutions in Delaware and regionally
 - E.g., Liaison to Del State, Del Tech, Wesley; EPSCOR & INBRE (NIH) - both have partnerships with the above; CRADA with APG - Morgan State Univ. is part of CRADA; Exchange with USNA?
 - Establish centralized coordination of partnerships with other universities for student exchange and other student experiences (curriculum/education, research) centered around workforce preparedness
- Incorporate government and industry experiences in for-credit pre-college programming as avenues to student recruitment, community engagement and reputational enhancement

Gaps in knowledge or missing details:

Answers:

New programs:

1. Information on how the current certificate programs, professional master's programs, or any existing certificate programs are doing in UD.
2. Survey of the regional/national peer universities to see what programs are successful.

Partner with smaller institutions in Delaware & surrounding area:

1. Information about existing collaborations with Small Colleges.
2. What are the currently financially challenged small institutions?

1. Learn from the existing examples to create similar or new programs to address local and national needs.
2. Engage/reach out to Learner and George Irvine to help with survey / market research on that front.

1. This will help identify the strongest possible collaboration.
2. Buy the college or help them with collaborations and joint programs.

<p>Partnering with government and industry:</p> <ol style="list-style-type: none"> 1. What are the current and near future Priority Areas (Robotics, Big Data, Quantum materials, etc.) where industry and universities need workforce? 2. Does our education align with the industry demands in the fields identified in 1? 3. How can we involve the local legislature as a conduit to industry and national labs? 	<ol style="list-style-type: none"> 1. Work with NSF to get the information. 2. Internal analysis of our portfolio. 3. Curriculum modification to accommodate the needed change. 4. Workshop involving industry, national labs, and Delaware representatives.
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> • Federal funding agencies, including NSF, NIH, DOE, DOD • Offices of our senator and representatives • Angie Anderson, UD Legislative Affairs 	
Metrics of success:	
<ul style="list-style-type: none"> • New successful programs creation and maintenance. • Enhanced employment rate of the graduating students • Submission of action plan for strategic opportunities • # of MS degrees and certificates awarded • # of bootcamp participants • # of state agency job postings listed on Handshake • # of UD graduates placed (full-time) in local government and partner industries • # of UD students completing internships with government 	
Key champions and contributors:	
<ul style="list-style-type: none"> • ADs for Undergraduate Education, Research & Entrepreneurship, and Graduate & Postgraduate Education • Interim Associate Vice Provost, UD PCS - to discover new course delivery methodologies • CoE Advisory Council • Career Services • Regional political leaders 	
Resources needed:	
Personnel: High Financial: Medium	

Notes: Over the next year, develop winter and summer internship and shadowing programs (and potentially semester-long co-ops) for CoE students with Delaware state agencies (DelDOT, DNREC, others).

Curriculum & Research ► Expand Our Impact ►	
Assess our potential to contribute to the local and regional economy.	
Specific Tasks:	
<ul style="list-style-type: none"> Establish a College-level oversight team to ensure undergraduate, graduate and professional curriculum meets the needs of our local and regional workforce <ul style="list-style-type: none"> May use intellectual neighborhoods as a starting point Create a College-wide assessment method to evaluate how courses and entire programs are meeting the needs of 21st Century engineers, with reassessment occurring every 2-3 years Leverage our alumni network and locally-available expertise to bring in people with industry experience to teach electives on s-contracts, basing more weight on experience than on educational attainment Institute an incentive plan for departments to invest in novel graduate and professional curriculum <ul style="list-style-type: none"> The most impactful incentive is for transparent revenue-sharing plan (80:20 college:dept) to allow departments to reinvest what makes sense for their own programing An additional incentive might include making more teaching assistants available in the departments, but this should be secondary to a revenue-sharing plan 	
Gaps in knowledge or missing details:	Answers:
1. How does our research, teaching & service enhance the DE economy?	1. Map the strategic priorities and current activities of the college with the DE State economic plan. See UD Impact through Innovation 2018 report: https://ire.udel.edu/ir/financial-data/economic-impact-studies/
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> UD CRESP UD Institutional Research UD Research Office Angie Anderson, UD Legislative Liaison 	
Metrics of success:	
<ul style="list-style-type: none"> Completion of an impact assessment/mapping process (CoE:DE State) Development of a College assessment method Increased # of s-contracts with industry representatives Increased # of UD engineering graduates retained in the mid-Atlantic region Note: additional metrics will be developed from creation of appropriate assessment processes and tools 	

Key champions and contributors:

- AD for Research & Entrepreneurship
- Director of Entrepreneurship & Strategic Initiatives
- ADs for Graduate & Postgraduate Education and Undergraduate Education
- ABET Coordinators
- College P&T Committee
- Career Services liaison
- Department curriculum committees
- CTAL for assessment and survey guidance

Resources needed:

Personnel: Medium | Financial: Medium

Curriculum & Research ► Expand Our Impact ►	
Implement more community-based projects across Delaware.	
Specific Tasks:	
<ul style="list-style-type: none"> • Survey existing community efforts, including the implementation of broader impacts of federally-funded grants • Identify the best practices of other engineering institutions with strong community engagement, including how they measure impact • Identify local service projects and areas of need, with local communities driving the process or needs prioritization • Explore collaborations with students from partner institutions in this initiative (e.g., DESU, Del Tech) • Engage faculty and staff volunteers for this effort as needed (creating meaningful engagement for all involved: Students, Faculty, Staff, Community) • Change curriculum to give course credit for student efforts (could it be part of +1 program or an engaged engineers minor) • Involve alumni like Kara Odom Walker, Community Engagement Initiative, Osher Lifelong Learning (note: Kathy Matt of Health Sciences is doing something similar) • Promote community engagement activities as part of the UD CoE culture 	
Gaps in knowledge or missing details:	Answers:
<ol style="list-style-type: none"> 1. We don't have a complete picture of who is doing what across the College, and how those activities might fit in with campus initiatives. 2. A list of community organizations that can serve as potential partners 	<ol style="list-style-type: none"> 1. Need to conduct a survey of activities, including RSOs and faculty with federally-funded research (broader impacts). 2. Check with Dan Rich, Community Engagement Initiatives, as well as past PIs and faculty directors of State Dept-funded summer programs (e.g., Kim Bothi, Dan Bottomley, Nike Olabisi).
Who may be able to provide assistance/knowledge:	
<ul style="list-style-type: none"> • Dan Rich, Sue Serra (Community Engagement Initiative) • Kara Odom Walker (Alum, former secretary DHHS) 	
Metrics of success:	
<ul style="list-style-type: none"> • Increased # of community engagement activities across college • Increased # of faculty, staff, students and community members engaged in these activities each year, and human-hours invested in activities • Quantify the economic impact of community initiatives? • Increased # of academic programs for community engagement activities • Increased # of sponsored events around the community • Increased incentives for participation in community engagement • Increased amount of donor funds raised for community engagement activities 	

Key champions and contributors:
<ul style="list-style-type: none"> • Lori Pollock • Kim Bothi • Laura Mohr
Resources needed:
Personnel: Medium Financial: Low

Curriculum & Research ► Pioneer New Curricula ►

Develop new interdisciplinary programs.

Specific Tasks:

- Conduct a structured review of the merits of deploying interdisciplinary courses and programs, including demonstrated impacts on and best practices around student recruitment, retention, and preparedness, along with potential financial and visibility gains to both the College and campus.
- Establish a steering committee to oversee discussions and new partnerships on interdisciplinary programs consisting of both internal and external persons to the College of Engineering.
- Provide clarity on ABET flexibility and limitations for new models of engineering education (ASEE best practices?).
- Develop an incentive system for faculty and departments to develop, implement and assess these types of courses and programs, including incentives for benchmarking, successful development, and instruction. Incentives for faculty to develop, implement & assess these types of courses and programs must extend to the P&T process and associated documents.
- Conduct a needs-based assessment of all new initiatives as a prerequisite to ensure market-appropriateness.
- Explore the feasibility of block learning in new program development as a model of promoting more accessible learning for more diverse student communities.
- Explore establishing a summer prep program for incoming freshmen on interdisciplinary skill building.
- Establish a Graduate-level course on pedagogy (open to post docs and faculty!) run by faculty with expertise/exposure to the literature in engineering education
- Another direction – develop badging (“micro certificates”) - an ala carte way of learning exactly what you want and paying only for what you want/need through online learning offerings

Gaps in knowledge or missing details:

Answers:

1. What types of interdisciplinary programs are needed? (Engineering with Ethics, policy, sociology, languages, etc.).
2. How can faculty be incentivized to develop such programs?
3. How can students customize their degree?

1. There are some new interdisciplinary programs. Check how they are doing.
2. Faculty incentive:
 - a. Provost and Dean’s office
Commitment to stick with new programs for a reasonable period to see if the programs can become successful.
 - b. Give relief from teaching, recognition of the efforts in annual evaluation, etc., to incentivize faculty.
 - c. Create a team representing each engineering department (or give this task to the academic affairs committee) to come up with new interdisciplinary programs.
3. Student customization:
 - a. Establish a Graduate-level course on

	<p>pedagogy (consider open cross-colleges, e.g., engineering and education students).</p> <p>b. Have all courses in engineering available to all students to go along with strong advising.</p>
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> • Publicity and recruitment teams • Assistant Dean for Undergraduate Services • Utilize Engineering Outreach office to help with identifying new areas and potential opportunities for recruitment • Survey current ENGR students to see what interdisciplinary programs they would be interested in • Review current majors to see if there are ways to create a double major degree 	
Metrics of success:	
<ul style="list-style-type: none"> • Establishment of successful new interdisciplinary programs (#, how do we determine our success?) • Increase in the overall numbers of graduates from interdisciplinary programs • Increase # quality of students in engineering (upon admission: AP credits, GPA; at UD graduation: post-graduation job placements, GPA) • % of retention in the programs once they are established • Student evaluations with specific questions about interdisciplinary program • # of interdisciplinary senior design projects • # of interdisciplinary poster sessions • # of new special freshmen classes/seminars related to interdisciplinary programs/special projects 	
Key champions and contributors:	
<ul style="list-style-type: none"> • ADs for Undergraduate Education and Graduate & Postgraduate Education • Program Coordinators • Faculty and Staff with existing on and off-campus collaborations (steering committee opportunity) • ABET coordinators • College P&T committee to revise College-level P&T by-laws to lead by example • Education Activities Committee 	
Resources needed:	
Personnel: High Financial: High	

Curriculum & Research ► Pioneer New Curricula ►

Build course and program-specific mechanisms to increase student retention during the first two years of their program.

Specific Tasks:

- Establish and share a Dean-level statement to guide policy on freshman-sophomore retention efforts.
- Map instructors and courses to identify the gateway classes that are critical for advancement and retention for both CoE and non-CoE core courses (math, physics, chemistry).
 - Interview undergraduate curriculum advisors and faculty about the critical foundational courses that lead to higher attrition.
- Conduct Dean to Dean (or Associate Dean to Associate Dean) negotiations on improving the quality of teaching for CoE foundation courses taught outside of engineering.
 - Using course evaluations and retention metrics, identify deficiencies and opportunities for the best faculty to teach the most engineering students as possible.
 - In instances where teaching quality is not improved for non-CoE foundation courses over a 2 year probationary period, establish these courses in CoE.
- Assign the best instructors from each department to courses in the first four semesters of the undergraduate program.
 - In a lot of cases, this is your CT faculty. TT faculty should be focused on upper division coursework, in addition to technical electives. This would benefit the college by having more interdisciplinary electives and masters-level coursework for students at a lower risk for attrition. This shift must be driven by the Dean in a commitment to student success, faculty training and instructional consistency, normalizing course quality over the long-term.
 - Assess whether team-teaching might be appropriate for all programs, especially for early career or tenured faculty remedial training, using the CHEG model as an example.
- Establish a centralized mentorship and tutoring system for students in freshman and sophomore years, targeting gateway courses with a history of impacting retention. Any decision on team teaching model implementation (or not) will need to be supported by a Dean-level statement to guide instruction policy.
- Explore the potential for online-based, off-sequence material delivery and then evaluate the efficacy of such off-line delivery, ranging from effectiveness of student learning through optimization of instructor effort.
- Align student groups and project teams with intellectual neighborhoods and with experiential and service learning opportunities woven into coursework. (Would be a differentiator and a recruitment tool for UD.)
- Establish a backup plan (redundancy) for the instruction of each core course in a department to provide flexibility in the case of emergency situations and to ensure quality of delivery.
- Figure out how to better integrate/collaborate with the computer science department. Do we pull their students out of EGGG101 and let them take UNIV101? Have more engineering faculty collaborate with computer science to improve CISC106 (provide more authentic examples for students to be solving with their coding).
- How does being a student of a minority group factor in this attrition? (refer to People KP)

Gaps in knowledge or missing details:	Answers:
<ol style="list-style-type: none"> 1. Why the first two years and not years 1-4? 2. What are the critical foundational courses that have an impact on retention? 	<ol style="list-style-type: none"> 1. College data indicates that the greatest number of transfers or major changes happen in freshman and sophomore years. 2. To do this: <ol style="list-style-type: none"> a. Survey undergraduate curriculum advisors and faculty. b. Exit interviews of the students leaving the program
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> • Chuck Shermeyer • CTAL 	
Metrics of success:	
<ul style="list-style-type: none"> • % change in attrition/retention by department by year (and by other parameters, e.g., gender, URM status) • Improved course evaluation scores in first and second year courses • % change in number of core or sequential courses that have more than one offering per year • Appropriate proportion of CT vs TT/T faculty teaching specific years/levels • Number of online alternatives for core sequential courses 	
Key champions and contributors:	
<ul style="list-style-type: none"> • Dean • Chairs • Associate Dean for Undergraduate Education, Tripp Shenton • Assistant Dean for Undergraduate Education, Chuck Shermeyer • Undergraduate curriculum advisors • Michael Vaughn (URM metric) 	
Resources needed:	
Personnel: High Financial: Low	

Curriculum & Research ► Pioneer New Curricula ►

Build an ecosystem for innovative and impactful online learning.

Specific Tasks:

- Establish an online education faculty cadre in the college to expand access to existing and new UD CoE degrees or professional programs.
 - Establish a steering committee with advisory council members and CoE undergrad, graduate and professional education representatives to create a roadmap for enhancing UD Engineering's online offerings.
 - Seek industry or donor support to endow an online core within the College of Engineering that models best practices and resource needs of competing online engineering education units around the world.
 - Establish an endowed professorship for online engineering education. The faculty member in this role would lead the college's efforts in strengthening offerings and increasing enrollment online.
 - Leverage strengths of CT faculty to develop modes of instruction in online settings.
 - Require and support departments/programs to conduct needs-based assessments as a part of proposing new offerings; Conduct market study to identify areas of intersection between current offerings and market need.
 - Focus on opportunities to grow international enrollment through online master's programs.
 - Establish teaching fellowships in which graduate students set up and then teach online courses.
 - Provide departments or programs with a revenue-sharing model to encourage innovation and creativity in developing online offerings.
- Provide faculty support to build high quality online education
 - Make best practices broadly available from faculty and departments who handled the COVID-19 transition most effectively.
 - Identify whether faculty want internal (department faculty) or external support (CTAL, ATS) for training and support in transitioning material online. As good as CTAL and ATS are, faculty are responsive by working with those doing it well internally -- CT faculty as a strength in supporting transitions.
 - Provide all faculty and teaching assistants with the basic infrastructure necessary to successfully put courses in online or hybrid formats, including document cameras, webcams, and tablets.
 - Implement a common software system for faculty to conduct online exams fairly and securely. *Also a potential task for infrastructure & Organization*
 - Survey all students each year during the summer to assess potential barriers to their success and provide support as needed. For example, identify individuals without regular access to computers, internet and quiet spaces to study, in addition to highlighting time management needs. *This is also a task in supporting our talent under People*

Gaps in knowledge or missing details:

Answers:

1. Survey existing routine online offerings

1. Online search [here](#)

<p>(outside of COVID-19 impacted courses)</p> <ol style="list-style-type: none"> 2. Do we have alumni or other friends of CoE who might lend their expertise? 3. What is and isn't working currently in the College's online courses and programs? 	<ol style="list-style-type: none"> 2. High interest from Vance Kershner, CoE Advisory Council. 3. Disconnect between market demand and instructor interest/availability to teach on preferred subjects. Contact Jill Higginson for more insight.
Who may be able to provide assistance/knowledge?	
<ul style="list-style-type: none"> • Jill Higginson • Vance Kershner • CoE Development • Professional & Continuing Studies (PCS), Academic Technology Services (IT-ATS), Center for Teaching, Assessment & Learning (CTAL) • Committee of CoE stakeholders, CoE IT, Chairs, Assoc Dean undergraduate education, undergrad curriculum directors 	
Metrics of success:	
<ul style="list-style-type: none"> • Increased # of endowed professorship for online learning • Increased # of s-contracts or % change teaching loads dedicated to online learning • Increased # of teaching assistantships/fellowships for online learning • Increased # of online courses and programs available through engineering • Increased # of students enrolled in online courses 	
Key champions and contributors:	
<ul style="list-style-type: none"> • Assoc Dean for Undergraduate Education • Steering Committee 	
Resources needed:	
<p>Personnel: High Financial: High</p> <ul style="list-style-type: none"> • 1-2 endowed professorships • Faculty, TA training support for online environments • Funding to digitize courses through UD IT-ATS • Market analysis support • Communications & marketing funds 	

Notes: It is assumed that this will occur de facto as a result of fall instruction preparation, but continuous support of this mission needs to be established.

KEY PRIORITY

INFRASTRUCTURE & ORGANIZATION

PROJECT CHARTERS

Project charters begin on the next page.

Infrastructure and Organization ► Optimize Our Operations ►
Reorganize college staffing to ensure maximal efficiency and effectiveness.
Specific Tasks:
<ul style="list-style-type: none"> • Review and redistribute departmental staffing to ensure key elements exist in each department. • Decentralize some staff interactions. In particular, move procurement responsibilities back to department level. • Reorganize grant administration staff (grant pre-award consistency, grant post-award reorganization). • Reorganize engineering advising. Explore centralized academic advising.
Metrics of success:
<ul style="list-style-type: none"> • Essential staff positions identified and filled for each department • # staff/department • # staff/faculty • Timeliness of procurement and financial reporting • Quality of service as perceived by faculty • # Grants/Staff • \$/Staff • # Faculty/Staff
Key champions and contributors:
<ul style="list-style-type: none"> • Chief Financial and Administrative Officer
Resources needed:
Personnel: Medium Financial: Medium

Infrastructure and Organization ► Optimize Our Operations ►
Develop and communicate best practices, processes and reporting mechanisms.
Specific Tasks:
<ul style="list-style-type: none"> • Standardize best practices and develop best practices in reporting that are operationalized across the college. • Conduct a critical assessment of our internal processes (academic, HR, financial, etc.) to determine where there are inefficiencies and where improvements can be made to streamline our systems. • Create a web-based metrics dashboard/Update the Intranet to become the first place staff and faculty look for solutions. • Make the Guiding Coalition an ongoing part of the implementation process. • Create an intranet for intercollege distribution of materials. • Encourage the use of communications/organization tools like Teams and provide support/training.
Metrics of success:
<ul style="list-style-type: none"> • Matrix for consistency and accuracy • Schedule for assessment, reporting, and implementation • Pre- and post-implementation user survey for Intranet • Pageviews and time on page • Project timeline with milestones that include deliverables
Key champions and contributors:
<ul style="list-style-type: none"> • Chief Financial and Administrative Officer
Resources needed:
Personnel: Low Financial: Low

Infrastructure and Organization ► Optimize Our Operations ►
Prioritize efficient acquisition and use of resources.
Specific Tasks:
<ul style="list-style-type: none"> • Build stronger relationships with central units and advocate for the College of Engineering to receive resources (financial and staffing) that are proportional to our impact (in areas such as graduate recruiting, research). • Incentivize efficiency. When an employee develops a new process that saves time or cuts costs, reward them with an award, bonus, extra time off, etc. Consult academic literature on employee motivation to develop incentives that will keep people engaged and on target. • Study universities known for their operational efficiency, such as Miami University of Ohio, and consider adopting some practices that would allow us to run leaner.
Metrics of success:
<ul style="list-style-type: none"> • Productivity metrics TBD
Key champions and contributors:
<ul style="list-style-type: none"> • Chief Financial and Administrative Officer • Human Resources Manager
Resources needed:
Personnel: TBD Financial: TBD

Infrastructure and Organization ► Upgrade Our Facilities ►
Renovate existing college of engineering spaces to encourage collaboration and creativity.
Specific Tasks:
<ul style="list-style-type: none"> • Create an open collaboration space for all students, faculty and staff in the college. <ul style="list-style-type: none"> ○ Create welcoming, inviting spaces for students. ○ Develop a community space for graduate student offices and interactions. Collaborative spaces could help foster grad student collaboration, sense of community, and improve recruiting. ○ Create inviting, inclusive spaces through low-cost improvements to physical environments. • Create more creative spaces in our engineering buildings. • Intentionally think about spaces that all departments are excited about. • Create a co-working community in the College of Engineering by replacing 1:1 offices with flexible/schedulable workspaces and meeting rooms.
Metrics of success:
<ul style="list-style-type: none"> • New spaces created • Average user density • Project schedule and budget • Student recruiting and surveys
Key champions and contributors:
<ul style="list-style-type: none"> • Space Committee Chair • Space Committee
Resources needed:
Personnel: High Financial: High

Infrastructure and Organization ► Upgrade Our Facilities ►
Develop long-term facilities plan for the college.
Specific Tasks:
<ul style="list-style-type: none"> • Complete the FinTech Building. • Advance a comprehensive facility plan for the college building on findings from the Wilson AGA study. • Build on top of the back of Spencer Lab. • Explore move to STAR Campus. • Design/build new COE building(s).
Metrics of success:
<ul style="list-style-type: none"> • Funding • Project schedule and budget • Planned faculty moves • Spaces fitted out • Productivity of the faculty/students
Key champions and contributors:
<ul style="list-style-type: none"> • Dean
Resources needed:
Personnel: Low Financial: Medium

Infrastructure and Organization ► Upgrade Our Facilities ►
Use existing College of Engineering spaces more efficiently.
Specific Tasks:
<ul style="list-style-type: none"> • Identify and reassign underutilized spaces. • Identify temporary swing space for relocating offices/labs when existing spaces are being renovated or reconstructed. * <ul style="list-style-type: none"> ○ Metrics: Spaces identified and budgets established for relocating
Metrics of success:
<ul style="list-style-type: none"> • Square footage of space reassigned • Spaces identified and budgets established for relocating
Key champions and contributors:
<ul style="list-style-type: none"> • Space Committee Chair • Chief Financial and Administrative Officer • Director of Facilities
Resources needed:
Personnel: TBD Financial: TBD

Infrastructure and Organization ► Upgrade Our Facilities ►
Modernize existing college spaces and make aesthetic improvements.
Specific Tasks:
<ul style="list-style-type: none"> • Renovate and expand research infrastructure/upgrade and repurpose space per Wilson report. • Modernize existing infrastructure. Many buildings/facilities are outdated leading to inefficient use of space, lack of flexibility in using space, and barriers to collaboration. • Decorate hallways and conference rooms so they are not just white concrete block walls. They could be brighter and more inviting, include more images of people and new research. Make appearance upgrades. • Lab upgrades
Metrics of success:
<ul style="list-style-type: none"> • Space utilization • Number of workspaces and meeting rooms • Sq ft research space/faculty • COE sq. ft of "Quality" research space per Wilson report definitions
Key champions and contributors:
<ul style="list-style-type: none"> • Space Committee Chair • Chief Financial and Administrative Officer • Director of Facilities
Resources needed:
Personnel: TBD Financial: TBD

Infrastructure and Organization ► Upgrade Our Facilities ►
Renovate college instructional spaces.
Specific Tasks:
<ul style="list-style-type: none"> • Renovate the Design Studio in Spencer Lab. • Create studios for online teaching. Places where people could deliver lectures, or the infrastructure to develop online courses, material, etc. • <i>Convert SPL 010 (ECalc Room) into a large lab for one senior faculty hire or two new junior faculty hires. ECalc rooms are now a thing of the past with AppsAnywhere becoming commonplace. So it is time to decommission the ECalc room and convert it into a world class lab facility.</i> • Lab upgrades
Metrics of success:
<ul style="list-style-type: none"> • # projects in progress and completed • Use of facility; teaching ratings; Volume of online content offered
Key champions and contributors:
<ul style="list-style-type: none"> • Space Committee Chair • Chief Financial and Administrative Officer • Director of Facilities
Resources needed:
Personnel: TBD Financial: TBD

Infrastructure and Organization ► Upgrade Our Facilities ►

Renovate existing spaces to address departmental needs.

Specific Tasks:

- Create student innovation/collaboration spaces for each department.
- CIS lab space - CIS has SOME lab space for new faculty/grad students. Will need to clean out and reconfigure some of the existing spaces in Smith and potentially acquire some (1) new space in Smith (e.g., classroom 209) or (2) lab space in another building. This may be temporary until Fintech comes online.
- Remodel SPL 022 to accommodate ME graduate students who are currently occupying SPL 328. Relocating the 24 graduate students currently in SPL 328 to SPL 022 will allow SPL 328 to revert to a first-class 1000 sq. ft lab for a new faculty member.
- *Move BME faculty from the Spencer 301 suite to the 102 suite. This move will bring the BME CT faculty next to the ME CT faculty, and also place them near the Design Studio and Instructional Labs. The faculty currently located in SPL 102 will need to be moved to other offices in Spencer Lab. The vacated 301 suite will become the new home of our new Center for Autonomous and Robotics Systems (CARS) and we will relocate our key robotics faculty there.*
- Build on top of the back of Spencer Lab. Wilson agrees that this idea has good potential. It can generate another 15,000 sq. ft of lab space without expanding the footprint of the building.

Metrics of success:

- Sq Ft/ # UG students in program
- faculty with labs
- # students using the spaces
- Productivity of the participants.

Key champions and contributors:

- Space Committee Chair
- Chief Financial and Administrative Officer
- Director of Facilities

Resources needed:

Personnel: TBD | Financial: TBD

Infrastructure and Organization ► Upgrade Our Facilities ►
Develop new pathways to fund renovations and construction.
Specific Tasks:
<ul style="list-style-type: none"> • Reduce dependency on university support for facilities by partnering with industry to create on-campus or campus-adjacent spaces for research and collaboration. For example, partner with Chemours to host a research center or institute at their new Discovery Hub on STAR campus. • Develop creative new ways to engage donors so that they feel compelled to help us fund renovations of existing facilities. A task force could brainstorm specifics. For example, perhaps we could develop targeted strategies to ask alumni to pay to name their favorite classroom, their favorite professor's office, the lab where they did undergraduate research, etc.? Can we ask alumni in the construction field to donate equipment and supplies that would help us renovate? How can we get people excited and willing to help us make our spaces more functional and aesthetically pleasing?
Metrics of success:
<ul style="list-style-type: none"> • Number of labs, offices, faculty, students hosted at partner locations. • Donations to building projects
Key champions and contributors:
<ul style="list-style-type: none"> • Space Committee Chair • Director of Development • Chief Financial and Administrative Officer • Director of Facilities
Resources needed:
Personnel: TBD Financial: TBD