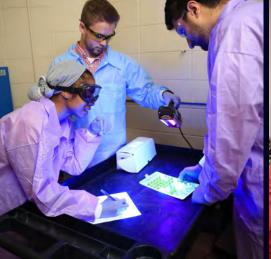
SCHOOL OF ENGINEERING STRATEGIC PLAN FOR ACHIEVING

### INCLUSIVE EXCELLENCE

2021-2024









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### UNIVERSITY OF DAYTON SCHOOL OF ENGINEERING

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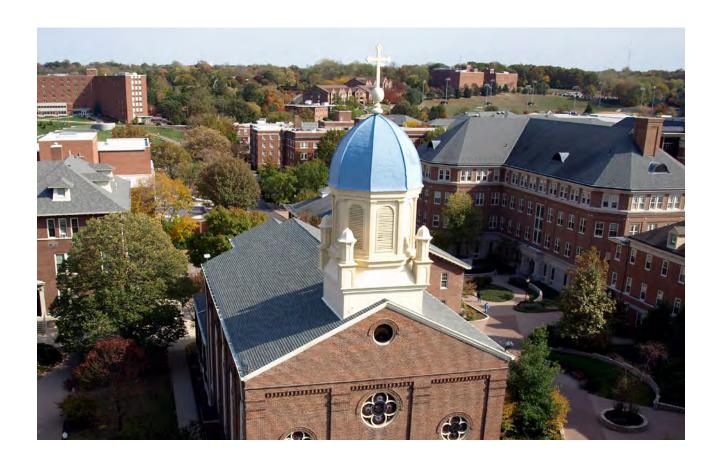
Karen Updyke - Editor/Designer November 23, 2021



### **SECTION 1. INTRODUCTION**

A core belief of the Catholic Marianist tradition is that each person is created in the image and likeness of God. Furthermore, our tradition calls us to denounce all that degrades or oppresses the human person. It is this belief in the dignity of all people that requires all members of the University of Dayton community to embrace and value the unique gifts that come from our diverse faculty, staff and students (*Characteristics of Marianist Universities*, 2006). Further, we believe that we cannot achieve true excellence unless we value and embrace a diverse community that welcomes, supports and encourages all members to contribute their voice and to achieve their personal best. Research identifies diversity as essential to enhancing creativity, research, innovation, and problem solving; strengthening teamwork and institutional culture; and promoting student learning (Milem, Chang, & Antonio, 2005; Paige, 2007; Thomas, 2004; Bagchi-Sen, 2001; Platt, 2013; Wulf, 2001). Achieving inclusive excellence in the School of Engineering is the responsibility of every member of the University of Dayton School of Engineering community.

We believe that we cannot achieve true excellence unless we value and embrace a diverse community that welcomes, supports and encourages all members to contribute their voice and to achieve their personal best.



### 1.1 Background

In 2015, the School of Engineering underwent a comprehensive strategic planning process. The strategic planning process involved numerous stakeholders including faculty, staff, students, alumni, university and community members and partners, and industry. Recognizing the value that diversity, equity and inclusion (DEI) brings to our School, as well as the inextricable linkage of DEI to the Catholic and Marianist mission of the University of Dayton, DEI emerged as an important component throughout the resultant five-year comprehensive *School of Engineering Strategic Plan* (2015–2020). In 2017, an updated *Strategic Plan* was published to provide a framework for how the activities and initiatives identified could support and build upon the then recently published *University Vision*. (https://udayton.edu/vision/index.php) The modified *School of Engineering Strategic Plan* was organized into four areas of impact: (1) Cultural, (2) Societal, (3) Organizational and (4) Experiential. Additionally, in 2017 metrics were developed to measure progress in these four areas of impact.

In 2020, the University published, *The Flyer's Plan for Community Excellence: The University of Dayton's Diversity, Equity and Inclusion 2020–24 Strategic Plan.* Goal 4 of this plan called for each unit to "develop, implement, assess and report on unit-based strategic plans to advance inclusive excellence." (https://udayton.edu/diversity/initiatives/plan.php) In particular, Objective 4.1 calls for the development of "permanent unit-based organizational infrastructure to provide leadership in guiding efforts to advance strategic goals and objectives relating to DEI." A key performance indicator for this objective is that each unit develop or adapt unit-level plans.

Since the School of Engineering has DEI embedded throughout its current comprehensive *Strategic Plan* (2015–2020) and is currently undergoing a transition in leadership, the School of Engineering developed a three-year DEI plan that will be revisited when a permanent dean is appointed.

The three-year *Strategic Plan* was developed with input from the School of Engineering faculty and staff. Recognizing the financial constraints of the University, the plan provides contingencies for three levels of support (high, medium and low). These contingencies are provided as notes in the *Strategic Plan* provided in Section 3.









### 1.2 DEI Components of Existing School of Engineering Strategic Plan (2015–2020)

The Vision, Mission and Values of the School of Engineering as articulated in the Strategic Plan:

### **Vision**

Igniting passion. Engineering the future. Making a difference.

### **Mission**

Rooted in the Catholic, Marianist tradition of educating the whole person, we guide the transformation of students into engineering professionals who excel technically, embrace innovation and collaboration, possess an entrepreneurial spirit, demonstrate social and global awareness, and lead the communities for the betterment of all.

### **Values**

**Community:** We cultivate a learning community founded in teamwork, trust, collaboration, diversity, equity, inclusion, respect and accountability.

**Innovation:** We foster innovation by providing real-world, hands-on educational research and service opportunities that shape dynamic, agile, and inquisitive problem solvers.

**Excellence:** We advance engineering excellence through responsible scholarship, knowledge creation and lifelong learning.

**Engagement:** We embrace a culture of servant leadership and stewardship that instills engagement in our students, faculty, staff, University partners, and external stakeholders.

**Service:** We embrace our Marianist heritage through character building, a commitment to service for the common good and guardianship for the Earth as our common home.

### **Areas of Impact**

The 2015 School of Engineering Comprehensive Strategic Plan identifies four areas of impact:

- Societal: The School of Engineering is emerging as a recognized leader in research and innovation for the common good.
- Organizational: The School of Engineering is developing a dynamic educational environment that provides the greatest benefit to our students, faculty, staff, alumni, and external partners.
- Experiential: The School of Engineering is creating an ecosystem that encourages and supports entrepreneurial thinking and experiential learning both inside and outside the classroom.
- Cultural: The School of Engineering fosters a culture that values diversity and inclusive
  excellence.

Although DEI is embedded throughout all four areas of impact within the *Strategic Plan*, it is explicitly called out in the area of Cultural Impact. Details of this area of impact:

### **Cultural Impact**

The School of Engineering fosters a culture that values diversity and inclusive excellence. Diversity enriches community, enhances learning and magnifies the ability to innovate. DEI are at the core of who we are as educators, engaged citizens and members of a Catholic Marianist institution.

To better equip our students for successful participation in a professional community, we work to foster an inclusive and intercultural learning environment. This requires a full commitment to develop a diverse student, faculty and staff community; to embrace diversity; to integrate diversity within authentic learning experiences; and to recognize our social responsibility as an engineering profession. We realize the power of diversity in preparing graduates for leadership and service in an inclusive and intercultural community.













### **Objectives**

**Cultural Impact Objectives** 

- Proactively and vigorously recruit diverse and expert faculty and staff to enrich our welcoming and inclusive environment.
  - Expand hiring pools by more broadly defining faculty and staff positions where possible.
  - o Work with Provost's office to offer competitive start-up packages.
  - Work with Provost's office and regional institutions to consider dual career strategies.
  - Document and standardize best practices for hiring in a *Hiring Handbook*. Ensure
    that search committees and people involved in hiring give appropriate attention to
    diversity throughout the entire hiring process.
  - Provide ongoing training for faculty and staff on issues related to the value of a diverse workforce and implicit bias, particularly as it relates to the hiring process.
  - Survey faculty and staff applicants and new hires to assess effective and ineffective recruitment and hiring strategies and use that data to focus and tailor future recruiting efforts.
  - Re-envision the P&T process to recognize a broader range of faculty activities, to
    encourage inclusive teaching practices, to specifically acknowledge scholarship on
    diversity, equity and inclusion, and to provide for a more equitable, fair, robust and
    consistent evaluation process.
- Lead peer institutions in the recruitment, retention, and successful graduation of underrepresented populations including women and domestic minority students.
  - Strengthen infrastructure to assess and evaluate SoE student climate related to diversity.
  - Work proactively with Enrollment Management and the Office of Multicultural Affairs to recruit women and underrepresented minority undergraduate students.
  - Work collaboratively with University Advancement and Enrollment Management to provide competitive financial support for women and underrepresented minority students.
  - Utilize institutional support programs and improve School of Engineering academic and social support programs for underrepresented students to maximize academic success, persistence to graduation and placement.
  - o Incentivize faculty and staff participation to support diversity programming.
  - Work collaboratively with campus partners to implement an intercultural competence assessment for students, faculty and staff.
- Enhance the intercultural competence of our faculty, staff, and students through
  educational and experiential opportunities aimed at helping them understand the value
  of diversity.
  - Articulate the School of Engineering messaging on diversity and communicate those messages to faculty, staff and other stakeholders.
  - Integrate academic components to educate students about diversity and leverage that learning to maximize personal, professional and team effectiveness.
  - Integrate and leverage professional development programs for faculty and staff showcasing the value of diversity to realize our inclusive learning community and to maximize personal and professional effectiveness.









### **SECTION 2. SELF-ASSESSMENT**

### 2.1 Progress made on DEI Components of the 2015 Strategic Plan

Progress on the School of Engineering Strategic Plan, including the DEI components of this plan was tracked using multiple measures including quantitative and qualitative data. A detailed report of the progress made on the Strategic Plan (2015–2020) can be found in the School of Engineering Five-Year Impact Report and in the application submitted to the ASEE Diversity Recognition Program (ADRP), which is available upon request.

- Proactively and vigorously recruit diverse and expert faculty and staff to enrich our welcoming and inclusive environment: Since 2014, two-thirds of all new faculty hires have been women or persons of color. Some initiatives that have been taken to help achieve this goal include:
  - The Academic Research Colloquium (ARC) for upper-level Ph.D. students was developed and facilitated. The goal of ARC is for these students to come to UD to present their research, engage in professional development sessions and learn about UD. This is used as a faculty recruitment tool. Targeted recruitment of underrepresented populations in engineering is done for the ARC.
  - Each year the School of Engineering sends faculty and staff to affinity-based conferences where we hand out fliers summarizing open positions.
  - The School of Engineering employs a coordinated approach to advertising of open faculty positions with an emphasis on advertising to a broader and more diverse pool of candidates.
  - $\circ~$  The School of Engineering Equity Advisor serves as a resource for hiring and also in the promotion and tenure process.
  - The School of Engineering requires faculty and staff who serve on search committees participate in a workshop that addresses issues of equity, and best practices in hiring. This augments the University required workshop on implicit bias for search committees.
  - The Office of the Dean has developed a Google drive that provides resources on the hiring process, bias in hiring and best practices for a more equitable search.
     Additionally, the Office of the Dean aids search committees allowing them to focus on evaluating the candidates as opposed to spending time on logistical matters.
  - The School of Engineering developed a new promotion and tenure process that specifically acknowledges scholarship on DEI and provides for a more equitable, fair, robust and consistent evaluation process.
  - The School of Engineering requires all faculty serving on promotion and tenure committees to participate in a workshop that addresses issues of equity, bias and best practices in evaluating faculty.
- Lead peer institutions in the recruitment, retention and successful graduation of
  underrepresented populations including women and domestic minority students.
   While only small gains have been made with regards to recruitment and retention of
  underrepresented populations in engineering, significant strides have been made to
  develop the infrastructure and activities to realize future success in this area.
  - The Diversity in Engineering Center (DEC) was created in 2016 to develop a
    focused, consistent culture of diversity within the SoE and to recruit, retain and
    graduate female and minority engineering students. The DEC includes the MultiEthnic









Engineering Program, the Women Engineering Program and programming and resources for international students through the International Engineering Student Engagement Program. It advises student chapters of affinity-based professional organizations, various living learning communities and special interest houses (e.g., Women in Science and Engineering). Additionally, it collaborates and coordinates with various departments, centers and programs across the University such as enrollment management, International Student and Scholar Services, and the Multi-Ethnic Education and Engagement Center for greater collective impact.

- The School of Engineering leverages a variety of internal and University programs and resources to help with retention of all students such as Enrichment Workshops, Student Success Network, Office of Learning Resources, School of Engineering Office of Student Success, UD Sinclair Academy, etc.
- The School of Engineering worked with enrollment management and financial aid to provide scholarships to women and minority students in engineering.
- Undergraduate student recruiting events were overhauled to reach a greater number of underrepresented populations in engineering and to modify the programming to include research-based best practices for attracting females and minority students to engineering.
- Since 2015, the School of Engineering has been offering faculty and staff professional
  development opportunities that focus on DEI, including workshops, book reads and
  webinars for faculty and staff. These offerings are meant to complement what is being
  offered by the University. The annual performance review forms for faculty and staff were
  modified to encourage faculty and staff to participate in these professional development
  opportunities.
- The Faculty Ambassador Program was created in 2018. The DEC and Faculty Ambassadors
  work together to implement best practices that impact female and minority students
  throughout the School of Engineering. The Faculty Ambassadors work extensively with
  their department chairs and faculty to disseminate for broaden impact.
- Enhance the intercultural competence of our faculty, staff and students through educational and experiential opportunities aimed at helping them understand the value of diversity.
  - Since 2015, the School of Engineering has offered faculty and staff professional development opportunities that focus on DEI, including workshops, book reads and webinars. This support is meant to complement University offerings. The annual performance review forms for faculty and staff were modified to encourage faculty and staff to participate in these professional development opportunities. Additionally, faculty and staff are recognized for participating in these opportunities through a certificate.
  - The School of Engineering provides financial support for faculty, staff and students to attend affinity-based conferences.
  - The School of Engineering created the Vision Awards for faculty and staff. Among these
    four awards is the Community award, which recognizes faculty and staff who have made
    significant contributions to enhancing the climate for diversity and inclusion within the
    School for students, faculty and/or staff.
  - The Diversity in Engineering Center is creating an electronic "took-kit" of resources related to intercultural competence for faculty and staff education, use and implementation.
  - The School of Engineering is partnering with the Multi-Ethnic Education and Engagement Center to implement DEI content in engineering seminars, beginning with first-year and sophomore seminars.





### **Results from Spring 2021 Survey**

In February 2021, the School of Engineering facilitated a selfassessment survey using a slightly modified version of a survey instrument provided by the Office of Diversity and Inclusion. The survey consisted of open-ended questions as well as Likert scale (yes, no, somewhat, don't know, not applicable) responses to statements. The survey was facilitated via Qualtrics, sent out to all faculty and staff in the School of Engineering, and was open for two weeks (February 1-15). There were 101 survey responses (~65% response rate), including 53 faculty, 14 administrative assistants, 19 professional staff and 15 administrators' responses.

Results of the survey suggest that the faculty and staff believe that the School of Engineering vision, leadership and messaging show strong support for DEI.

Results of the survey suggest that the faculty and staff believe that the School of Engineering vision, leadership and messaging show strong support for DEI. However, responses also indicate that the School needs to enhance the demographic diversity of our faculty, staff and administrators by improving our recruitment, hiring, and advancement practices. Additionally, although most faculty and staff view the School as supportive and welcoming, improvements are needed to help faculty and staff feel more comfortable and more knowledgeable about working in a diverse environment. Furthermore, opportunities for mentoring and professional development related to diversity, equity and inclusion could be enhanced.

With regards to students, responses suggest that the School values and seeks to enroll diverse students and that our Diversity in Engineering Center employs targeted practices for attracting diverse populations of students. Responses also suggest that most faculty and staff in the School of Engineering are unaware of efforts taken by enrollment management to attract a diverse pool, are unsure if the applicant and admit pool reflect or exceed the diversity of the available pool, and do not know if the success rates of students is comparable across all identity groups and backgrounds. Faculty and staff were either unaware or identified the need for improvement with regards to how much our students engage in scholarly inquiry related to diversity, equity and inclusion, and to what degree our students are mentored both academically and professionally. Although the survey reveals that most faculty and staff in the School of Engineering perceive that students of all identities are welcomed and treated equitably, anecdotal evidence suggests that not all students feel this to be true.

### SECTION 3. SCHOOL OF ENGINEERING DEI STRATEGIC PLAN

As noted in section 2, significant progress has been made in promoting diversity, equity and inclusion in the School of Engineering over the past six years. This progress is the result of the dedication,  $commitment\ and\ contributions\ made\ by\ our\ faculty,\ staff,\ students\ and\ external\ stakeholders.\ Although$ progress has been made, there is still more work to be done. The School of Engineering's three-year Strategic Plan for diversity, equity and inclusion will leverage the tremendous progress that has been made to achieve our vision of developing a culture in the School of Engineering where all faculty, staff and students feel a sense of belonging; are valued for their difference; are empowered to achieve their personal best; and are engaged and able to contribute fully and freely as their authentic selves. The Plan is centered on five overarching strategic goals. Realization of these goals will enable the School of Engineering to achieve its vision, promote innovation and excellence, prepare our students to make a positive difference in their profession and in the world, and allow the School to continue to advance the mission of the School and the University.

It is well understood that accomplishing the goals and objectives outlined in the School of Engineering's Diversity, Equity and Inclusion Strategic Plan will require resources and time. As such, the resources and personnel needed to accomplish these are identified throughout the Plan. Furthermore, given the uncertainty of the availability of these resources, notes are provided to indicate three levels of implementation: full implementation (all resources are provided), partial implementation (a portion of the resources provided) and minimal implementation (limited resources provided). It is also noted that there are many key performance indicators that could be implemented more efficiently and have greater collective impact if the School of Engineering strategically collaborates with other units or if these key performance indicators are implemented at the University level.

During the School of Engineering's DEI strategic planning open sessions and electronic feedback sessions with faculty and staff, a common theme emerged regarding concern over the capacity of faculty and staff to implement the goals and objectives of the Plan. As such, a key resource that is needed to accomplish this Plan is human capital. Understanding this, the School of Engineering proposes two new positions: a DEI leadership position (Goal 2) and an outreach position (Goal 1). It is strongly believed that these two new positions are critical to ensuring full implementation of the five overarching strategic goals without adding to the workload of current faculty and staff.

In the development of the five overarching strategic goals, the School of Engineering intentionally placed assessment into a separate goal (Goal 5) to highlight both the importance of assessment and resources needed. The success of Goals 1, 2, 3 and 4 all depend on the realization of Goal 5.

Develop a culture in the School of Engineering (SoE) where all faculty, staff, and students feel a sense of belonging; are valued for their difference; are empowered to achieve their personal best; and are engaged and able to contribute fully and freely as their authentic selves.

## VISION

### GOAL #1

Strengthen the recruitment, retention and advancement of diverse faculty, staff and students through the development and use of equitable practices and processes.

### **GOAL #2**

Inspire, strengthen and sustain a shared responsibility and participation for advancing diversity, equity and inclusion.

### **GOAL #3**

Provide incentives, resources and professional development opportunities to help faculty and staff build on, integrate and grow student curricular and co-curricular learning and development opportunities that enhance student understanding and practice of diversity, equity and inclusion.

### **GOAL #4**

Develop and enhance relationships with SoE stakeholders (e.g., suppliers, community partners, industry partners, advisory boards, invited speakers) within the Dayton community and beyond whose overall combined composition advances our commitment to diversity, equity, and inclusion practices and education.

### **GOAL #5**

Establish an impactful and effective SoE infrastructure to support transparent continuous qualitative and quantitative assessment of SoE measurable outcomes to advance diversity, equity and inclusion.



**OVERARCHING STRATEGIC GOAL 1** 

# STRENGTHEN THE RECRUITMENT, RETENTION AND ADVANCEMENT OF DIVERSE FACULTY, STAFF AND STUDENTS THROUGH THE DEVELOPMENT AND USE OF EQUITABLE PRACTICES AND PROCESSES.

### **Rationale**

Although the SoE has made some progress in enhancing the demographic diversity of its faculty, staff, students and administrators, we still have a long way to go. A demographically diverse community is critical to achieving excellence in research, teaching and service and to creating a climate of inclusion and fostering a sense of belonging for our underserved and underrepresented students. This goal supports Goal 2 of the *Flyers Plan for Community Excellence* (Achieve and sustain greater diversity, equity and inclusion throughout the University community, specifically Objectives 2.1 and 2.3).

STRENGTHEN THE RECRUITMENT, RETENTION AND ADVANCEMENT OF DIVERSE FACULTY, STAFF AND STUDENTS THROUGH THE DEVELOPMENT AND USE OF EQUITABLE PRACTICES AND PROCESSES.

### **⇒ OBJECTIVE 1.1**

Help cultivate the pipeline for future engineering students through strategic engagement with the K-12 community.

### **KEY PERFORMANCE INDICATOR 1.1.1**

Create a part-time or full-time position to coordinate and help facilitate K-12 engineering outreach strategy.

RESPONSIBLE DEC Executive Director

**PARTIES:** 

TIMELINE: Initiate search March 2022, position filled by

August 2022

**RESOURCES:** Financial resource to support position

STATUS: N/A

Note: If a full-time position is approved, the SoE will build extensive relationships with area and target schools and coordinate the facilitation of outreach activities, including virtual and in-person summer camps for a broader age range of students and with a special focus on under resourced schools and schools that have a large number of students underrepresented in STEM. Additionally, this person will assist faculty in identifying opportunities to connect their technical research with the community for broader impact, coordinate with campus partners (e.g., Teacher Education and Fitz Center, etc.), provide training for faculty and students wishing to engage in K-12 outreach, coordinate research sharing with K-12 schools, etc. If a part-time position is approved, this person will focus on camp facilitation for a broader range of students and coordinate and facilitate outreach activities during the school year. If neither a partnor a full-time position is approved, all but KPI 1.1.2 of this objective will be eliminated from the plan. KPI 1.1.2 will be pursued with a limited scope. This KPI could also be accomplished through a partnership with other units engaged in STEM by creating a STEM Outreach Coordinator.

STRENGTHEN THE RECRUITMENT, RETENTION AND ADVANCEMENT OF DIVERSE FACULTY, STAFF AND STUDENTS THROUGH THE DEVELOPMENT AND USE OF EQUITABLE PRACTICES AND PROCESSES.

### **⇒ OBJECTIVE 1.1 CONTINUED**

### **KEY PERFORMANCE INDICATOR 1.1.2**

Develop close partnerships with key schools in target areas through innovative activities and programs (e.g., EGR 103 offerings, STEM programming, SURE outreach, etc.)

RESPONSIBLE Associate dean for experiential learning and PARTIES: student success, outreach coordinator

TIMELINE: EGR 103 extended to three additional schools

by the spring 2025 (looking at one per year starting in spring 2023, 2024, 2025). STEM programming and partnerships developed as determined by the outreach coordinator.

**RESOURCES:** Tuition waiver for high school students

taking EGR 103, financial support for EGR 103 coordinator to provide professional development for HS teachers facilitating EGR

10, budget for programming

STATUS: The SoE currently facilitates EGR 103 at DECA,

CJ, and Lehman, piloted with DPS for summer camp, and identified additional schools to

approach with EM.

**Note:** If no resources are provided this KPI will be eliminated from the Plan, if partially funded (e.g., tuition waiver for HS students taking EGR 103 and support for EGR 103 coordinator to provide PD for teacher facilitators) then the SoE can pursue additional partnerships with schools for EGR 103. If fully funded, and if the SoE is able to hire an outreach coordinator, then the SoE will accomplish all of the activities identified in this KPI.

STRENGTHEN THE RECRUITMENT, RETENTION AND ADVANCEMENT OF DIVERSE FACULTY, STAFF AND STUDENTS THROUGH THE DEVELOPMENT AND USE OF EQUITABLE PRACTICES AND PROCESSES.

### **⇒ OBJECTIVE 1.1 CONTINUED**

### **KEY PERFORMANCE INDICATOR 1.1.3**

Create a UD School of Engineering "roadshow" for K-12 students with particular emphasis on reaching underrepresented and underserved student populations and key markets.

RESPONSIBLE Outreach coordinator

**PARTIES:** 

TIMELINE: Roadshow developed and piloted by March

2023 (begin August 2022)

**RESOURCES:** Financial support for regional travel, support

for student ambassador's time materials and

supplies

STATUS: N/A

**Note:** This KPI is dependent on hiring an outreach coordinator. If this KPI is only partially funded, the Roadshow would be facilitated without student ambassadors. If minimal funding is provided for this KPI, then the Roadshow would be limited to local schools only and material and supply costs would be minimized.

### **⇒ OBJECTIVE 1.2**

Building on the success of the past five years, continue to implement those practices with the greatest impact in successfully recruiting underrepresented and underserved undergraduate and graduate students to the SoE, support the retention and graduation of these students, and research and implement additional research-based, high-impact practices.

### **KEY PERFORMANCE INDICATOR 1.2.1**

Examine and enhance UD partnerships to build on recruitment strategies for underrepresented and underserved engineering undergraduate students (e.g., Admission - admittance criteria and traditional and alternative pathways, Financial Aid, Advancement, College of Arts and Sciences - alternative pathways, develop relationships with HBCUs / HSIs /etc. for 2+ programs).

RESPONSIBLE Associate dean for experiential learning and

PARTIES: student success, Diversity in Engineering

Center

**TIMELINE:** Examine and explore partnership opportunities

fall 2022, with initial list developed by spring 2023, implement strategies August 2024

RESOURCES: Staff and faculty time; travel funds for visiting

potential partner schools\*

STATUS: N/A

**Note:** If travel funds are not provided, work would be limited to local schools. Some outcomes of this KPI are also tied directly to working internally with campus partners on potential modifications to current processes.

**Comment:** It will be essential to define what the SoE has direct control over, which areas require collaboration, and which areas are out of SoE control, and to measure and set realistic goals.

Comment: \* this can be done synergistically with KPI 1.2.2 and KPI 1.3.2

STRENGTHEN THE RECRUITMENT, RETENTION AND ADVANCEMENT OF DIVERSE FACULTY, STAFF AND STUDENTS THROUGH THE DEVELOPMENT AND USE OF EQUITABLE PRACTICES AND PROCESSES.

### **⇒ OBJECTIVE 1.2 CONTINUED**

### **KEY PERFORMANCE INDICATOR 1.2.2**

Develop a coordinated recruitment strategy for underrepresented and underserved engineering graduate students (e.g., developing partnerships with HBCUs / HSIs / etc. for 3+2 programs, the GEM Consortium, Sloan Foundation, increased participation in BPM program, etc.)

RESPONSIBLE Associate dean for research and innovation

**PARTIES:** 

**TIMELINE:** Examine and explore partnership

opportunities fall 2022, with initial list

developed by spring 2023, implement strategies

August 2024

**RESOURCES:** Faculty and staff time, travel to potential

partners\*

STATUS: N/A

**Note:** If travel funds are not provided, work would be limited to local schools. Some outcomes of this KPI are also tied directly to working internally with campus partners on potential modifications to current processes.

**Comment:** It will be essential to define what the SoE has direct control over, which areas require collaboration, and which areas are out of SoE control, and to measure and set realistic goals

Comment: \* this can be done synergistically with KPI 1.2.1 and KPI 1.3.2

STRENGTHEN THE RECRUITMENT, RETENTION AND ADVANCEMENT OF DIVERSE FACULTY, STAFF AND STUDENTS THROUGH THE DEVELOPMENT AND USE OF EQUITABLE PRACTICES AND PROCESSES.

### **⇒ OBJECTIVE 1.2 CONTINUED**

### **KEY PERFORMANCE INDICATOR 1.2.3**

Examine current SoE undergraduate and graduate student retention practices and research / implement best practices for retention of underrepresented and underserved populations (e.g., enhance student sense of belonging in SoE, examine current policies and practices, early interventions and partnership on remedial courses, create SoE "Air Team," examine dismissal policies, sophomore curriculum, seminars, advising practices for DEI)

 $\label{lem:RESPONSIBLE} \textbf{Associate dean for experiential learning and}$ 

PARTIES: student success, associate dean for research

and innovation, assistant dean / director of Office of Student Success, Diversity in

**Engineering Center** 

TIMELINE: Examine and explore partnership

opportunities fall 2022, with initial list

developed by spring 2023, implement strategies

August 2024

RESOURCES: Faculty and staff time; summer faculty stipend

STATUS: N/A

**Note:** If summer faculty stipend not provided, this would delay progress on this KPI

### **⇒ OBJECTIVE 1.3**

Building on the success of the past five years, continue to implement those practices with the greatest impact in successfully recruiting, retaining and advancing underrepresented and underserved faculty and staff to the SoE, while also researching and implementing additional research-based, high-impact practices.

### **KEY PERFORMANCE INDICATOR 1.3.1**

Conduct a thorough "review" of all School of Engineering faculty and staff practices and policies and modify those as needed to ensure that they equitably help promote the retention and advancement of underrepresented and underserved faculty and staff.

 $\begin{tabular}{ll} \bf RESPONSIBLE & Dean, associate dean for faculty and staff \\ \end{tabular}$ 

PARTIES: development, SoE equity advisor, committee

made up of faculty and staff

TIMELINE: Start review spring 2022, recommend or

implement strategies starting fall 2022

**RESOURCES:** Faculty and staff time

STATUS: N/A

Note: N/A

**Comments:** The SoE does not have full control over numerous policies and practices. This KPI would have a greater impact if coordinated with other units on campus.

STRENGTHEN THE RECRUITMENT, RETENTION AND ADVANCEMENT OF DIVERSE FACULTY, STAFF AND STUDENTS THROUGH THE DEVELOPMENT AND USE OF EQUITABLE PRACTICES AND PROCESSES.

### **⇒ OBJECTIVE 1.3 CONTINUED**

### **KEY PERFORMANCE INDICATOR 1.3.2**

Improve recruitment efforts for recent Ph.D. and post-docs for faculty positions by developing partnerships with key institutions (e.g., HBCUs / HSIs / etc.) and programs (e.g., Sloan Minority Ph.D. Program) and working with faculty on strategies to broaden their professional networks.

**RESPONSIBLE** Associate dean for faculty and staff development

**PARTIES:** 

TIMELINE: Examine and explore partnership opportunities

fall 2022, with initial list developed by spring 2023, implement strategies August 2024

RESOURCES: Financial support for travel to potential partner

institutions\*

STATUS: N/A

**Note:** If travel is funded, then this KPI can be fully realized; if only partially funded, we will target fewer schools; if not funded, we will attempt to make connections virtually, but this will likely impact the SoE's ability to accomplish this KPI.

Comment: \* this can be done synergistically with KPI 1.2.1 and KPI 1.2.2

STRENGTHEN THE RECRUITMENT, RETENTION AND ADVANCEMENT OF DIVERSE FACULTY, STAFF AND STUDENTS THROUGH THE DEVELOPMENT AND USE OF EQUITABLE PRACTICES AND PROCESSES.

### **⇒ OBJECTIVE 1.3 CONTINUED**

### **KEY PERFORMANCE INDICATOR 1.3.3**

Leverage the expertise of Associate Director of Workforce Diversification to refine hiring practices, including enhanced professional development and ongoing coaching of search committees, and work with HR and the Office of the Provost to assess the demographics of the candidate pools.

RESPONSIBLE Associate dean for faculty and staff

PARTIES: development, equity advisor, department chairs,

center directors

TIMELINE: Initiate work spring 2022, start implementing

changes in hiring cycle of 2022-2023 (August

2022)

**RESOURCES:** Continued support for faculty and staff

development to provide professional development and ongoing coaching for search committees and for the procedural monitor. Assistance from HR and the Office of the Provost to get timely data regarding demographics of candidate pools through

PageUp or through other means.

STATUS: The SoE already provides training and support

for search committees.

**Note:** No new funds are sought to support this, however, if the faculty and staff development budget is reduced significantly, this may impact the ability to provide professional development and coaching for search committees and the procedural monitor including resources and external speakers.

**Comment:** This KPI would have a greater impact if coordinated with other units on campus.



**OVERARCHING STRATEGIC GOAL 2** 

## INSPIRE, STRENGTHEN AND SUSTAIN A SHARED RESPONSIBILITY AND PARTICIPATION FOR ADVANCING DIVERSITY, EQUITY AND INCLUSION.

### **RATIONALE**

In order to make real and sustainable change and to achieve true excellence in the SoE, faculty, staff, students and administrators must have the skills, knowledge and commitment to advance diversity, equity and inclusion and to create a culture and climate that empowers everyone to achieve their personal best. This goal also supports action item #1 of the University's Anti-Racism Action Plan: Set the expectation that every faculty and staff member will engage in education about bias and privilege; systemic racism; the value of diversity, equity, and inclusion; and the role we each must play to advance these values at the University of Dayton.

### INSPIRE, STRENGTHEN AND SUSTAIN A SHARED RESPONSIBILITY AND PARTICIPATION FOR ADVANCING DIVERSITY, EQUITY AND INCLUSION.

### **⇒ OBJECTIVE 2.1**

Implement a leadership structure to oversee and monitor implementation of DEI Strategic Plan activities in the School of Engineering.

### **KEY PERFORMANCE INDICATOR 2.1.1**

Create a position or redistribute responsibilities of a current position to provide leadership and oversee the coordination, advancement, facilitation and assessment of DEI activities in the School of Engineering.

RESPONSIBLE Dean

**PARTIES:** 

TIMELINE: Seek approval and initiate search spring 2022,

position filled by August 2022

RESOURCES: Financial support for position or redistribution

of duties

STATUS: N/A

**Note:** If a full-time position is approved, this will allow the SoE to make significant progress on the DEI Strategic Plan as noted below, particularly in the area of assessment and professional development without creating a significant burden on overworked faculty and staff. If only a part-time position is approved (or redistribution of duties), the SoE will make some progress on this plan as noted above. If a full- or part-time position is not approved, the DEI Plan will be cut significantly.

### **KEY PERFORMANCE INDICATOR 2.1.2**

Create a School of Engineering DEI Strategic Plan Implementation Team (associate deans, the diversity leadership position in KPI 2.1.1, the executive director of the Diversity in Engineering Center) to monitor the implementation of the plan.

RESPONSIBLE Dean

**PARTIES:** 

TIMELINE: Initiate team spring 2022, with full team built

and functioning by summer / fall 2022

RESOURCES: Faculty and staff time

STATUS: N/A

### INSPIRE, STRENGTHEN AND SUSTAIN A SHARED RESPONSIBILITY AND PARTICIPATION FOR ADVANCING DIVERSITY, EQUITY AND INCLUSION.

### **⇒ OBJECTIVE 2.2**

Provide an innovative, unique and comprehensive plan to allow all faculty and staff to craft a personalized approach to DEI professional development that is flexible and meets the growth needs of the faculty and staff.

### **KEY PERFORMANCE INDICATOR 2.2.1**

Develop and launch a comprehensive DEI platform for SoE faculty, staff and students that includes internal and external professional development opportunities, information, resources, advocacy opportunities and an assessment dashboard.

RESPONSIBLE Associate dean for faculty and staff

PARTIES: development, and/or DEI leadership position,

SoE webmaster

**TIMELINE:** Initiate work in spring 2023, launch platform

spring 2024

**RESOURCES:** Financial support for student or external

entity to create platform, and/or time for SoE webmaster to develop and maintain this

platform

STATUS: N/A

**Note:** If the position in Objective 1 is approved and there is adequate support for an internal or external person to create the platform, this KPI can be fully met. If the position in Objective 1 is not approved this KPI will be only partially met (created with limited resources that may only be updated occasionally). If no resources are available, this KPI will be eliminated.

**Comment:** This KPI would have greater impact if coordinated with UIEC.

### **KEY PERFORMANCE INDICATOR 2.2.2**

Identify advocacy opportunities and existing internal and external resources for professional development and resources to include on the platform. Identify the gaps and create new SoE specific professional development opportunities and resources as needed for the platform.

RESPONSIBLE Associate dean for faculty and staff

PARTIES: development, and/or DEI leadership position,

committee made up of SoE faculty and staff

**TIMELINE:** Initiate work spring 2023, with initial resources

completed by fall 2023 (and then continually

updated)

RESOURCES: Faculty and staff time, potentially funds for

materials such as short videos.

STATUS: N/A

**Note:** If KPI 2.2.1 is eliminated, these resources will be placed on a Google drive or Isidore site, or shared in the monthly faculty and staff development newsletter.

### INSPIRE, STRENGTHEN AND SUSTAIN A SHARED RESPONSIBILITY AND PARTICIPATION FOR ADVANCING DIVERSITY, EQUITY AND INCLUSION.

### **⇒ OBJECTIVE 2.2 CONTINUED**

### **KEY PERFORMANCE INDICATOR 2.2.3**

Incentivize participation for faculty and staff in professional development and internal advocacy initiatives. The incentives will acknowledge faculty and staff time constraints and ensure overall faculty and staff wellness.

RESPONSIBLE Associate dean for faculty and staff

PARTIES: development, and/or DEI leadership position,

committee made up of SoE faculty and staff

TIMELINE: Incentives identified by spring 2023 and

implemented starting fall 2023

RESOURCES: Faculty and staff time

STATUS: Currently, SoE faculty and staff are asked

to describe what professional development opportunities related to DEI they participated in as part of their annual performance review. Participation in DEI professional development is also embedded in our newly approved P&T

document.

**Comment:** It is suggested that the SoE coordinate with other units to implement a University-wide reward system such as digital badges or certificates.

### **⇒ OBJECTIVE 2.3**

Develop and facilitate an Inclusive Excellence Leadership Program for faculty and staff in supervisory roles to help them implement, inspire, assess DEI best practices in their department, center or office and to empower them to reward and recognize those efforts among their direct reports.

### **KEY PERFORMANCE INDICATOR 2.3.1**

Create a leadership community of practice including development of immersive leader training sessions and intentional DEI training for leaders.

RESPONSIBLE Associate dean for faculty and staff

PARTIES: development, and/or DEI leadership position

TIMELINE: Initiate planning fall 2022, pilot leadership

program starting spring 2023 and continue

thereafter

RESOURCES: Faculty and staff time

STATUS: N/A

**Note:** This KPI will be partially impacted if the DEI leadership position is not approved (e.g., assessment of the program, quality of leadership professional development included). If no funding is provided for additional materials such as books and speakers, this will impact this KPI.

### INSPIRE, STRENGTHEN AND SUSTAIN A SHARED RESPONSIBILITY AND PARTICIPATION FOR ADVANCING DIVERSITY, EQUITY AND INCLUSION.

### **⇒ OBJECTIVE 2.3 CONTINUED**

### **KEY PERFORMANCE INDICATOR 2.3.2**

Develop a library of resources for leaders that includes books, webinars, papers, etc.

RESPONSIBLE Associate dean for faculty and staff

 $\textbf{PARTIES:} \quad \text{development, and/or DEI leadership position,}$ 

committee made up of SoE faculty and staff

**TIMELINE:** Initiate compilation of resources starting fall

2022, continue thereafter

RESOURCES: Possible financial resources for materials such

as books, webinars, speakers, etc.

STATUS: N/A

**Note:** If no funding is provided, this will limit the resources in this library to articles and free webinars and online videos.

### **KEY PERFORMANCE INDICATOR 2.3.3**

Incentivize participation for leaders.

**RESPONSIBLE** Dean and DEI leadership position

**PARTIES:** 

TIMELINE: Initiate planning fall 2022, begin with program

launch spring 2023, continue thereafter

RESOURCES: Staff time to research best practices for

incentivizing participation

STATUS: N/A

**Comment:** This would be more impactful if this were a University-wide initiative. We could leverage Chairs Collaborative and other leadership meetings and review processes to implement.



**OVERARCHING STRATEGIC GOAL 3** 

PROVIDE INCENTIVES, RESOURCES AND PROFESSIONAL DEVELOPMENT OPPORTUNITIES TO HELP FACULTY AND STAFF BUILD, INTEGRATE AND GROW STUDENT CURRICULAR AND CO-CURRICULAR LEARNING AND DEVELOPMENT OPPORTUNITIES THAT ENHANCE STUDENT UNDERSTANDING AND PRACTICE OF DIVERSITY, EQUITY AND INCLUSION.

### **RATIONALE**

In order to support Goal #3 of the *Flyers Plan for Community Excellence* (Create a robust curricular and co-curricular architecture to advance diversity, equity and inclusion), the School of Engineering needs to ensure that diversity, equity and inclusion topics and best practices are embedded in their various engineering learning experiences. However, many faculty, staff and students need resources, enhanced understanding, knowledge and skills in order to successfully accomplish this. This strategic goal will focus on providing those opportunities.

PROVIDE INCENTIVES, RESOURCES AND PROFESSIONAL DEVELOPMENT OPPORTUNITIES TO HELP FACULTY AND STAFF BUILD, INTEGRATE AND GROW STUDENT CURRICULAR AND CO-CURRICULAR LEARNING AND DEVELOPMENT OPPORTUNITIES THAT ENHANCE STUDENT UNDERSTANDING AND PRACTICE OF DIVERSITY, EQUITY AND INCLUSION.

### **⇒ OBJECTIVE 3.1**

Provide training and resources to make it easier for faculty and staff to integrate topics of DEI, identity, power, privilege, biases, etc. and inclusive teaching pedagogy into engineering courses.

### **KEY PERFORMANCE INDICATOR 3.1.1**

Provide financial support, internal and external professional development and informational resources to facilitate the coordinated inclusion of DEI (content and teaching pedagogy) into key identified classes (e.g., Engineering seminars in years 1, 2, 3 and 4; EGR 103 Engineering Innovation / first-year course; courses involving COIL, etc.).

**RESPONSIBLE** DEI leadership position, associate dean for **PARTIES:** experiential learning and student success,

director of Innovation Center and Design and

Manufacturing Clinic

TIMELINE: Initiate conversations spring 2022, identify

faculty and staff to develop content summer

2022, implement fall 2023.

RESOURCES: Funds for faculty stipends to develop or identify

content

**STATUS:** Some collaboration ongoing with MEC to

implement DEI to a limited extent in firstand second-year seminars; there is some DEI content intentionally included in EGR103

**Note:** If no funding is available for faculty stipends, then the DEI leadership will develop the content and provide internal professional development. This will impact the timing of this KPI. If the DEI leadership position is not approved, this will significantly impact this KPI.

### **KEY PERFORMANCE INDICATOR 3.1.2**

Create a paid DEI "fellows" program to provide professional development and to facilitate idea sharing to help faculty and instructional staff incorporate topics and practice of DEI into their courses.

RESPONSIBLE Associate dean for faculty and staff development

**PARTIES:** 

TIMELINE: August 2022 - ongoing

RESOURCES: Financial support for participant stipends and

funds to support cohort facilitators

STATUS: Financial support for this program has already

been requested in the FY 22 faculty and staff

development budget

**Note:** This KPI is dependent upon financial support.

PROVIDE INCENTIVES, RESOURCES AND PROFESSIONAL DEVELOPMENT OPPORTUNITIES TO HELP FACULTY AND STAFF BUILD, INTEGRATE AND GROW STUDENT CURRICULAR AND CO-CURRICULAR LEARNING AND DEVELOPMENT OPPORTUNITIES THAT ENHANCE STUDENT UNDERSTANDING AND PRACTICE OF DIVERSITY, EQUITY AND INCLUSION.

### **⇒ OBJECTIVE 3.1 CONTINUED**

### **KEY PERFORMANCE INDICATOR 3.1.3**

Create a series of "plug and play" modules that faculty and instructional staff can incorporate into their courses as an integral part of the course (facilitated by instructor, not just online modules), or for when the course facilitator might otherwise have to cancel class (explore partnerships with MEC/Diversity Peer Educators, KEEN, ODI, The Brook Center, etc.)

RESPONSIBLE DEI leadership or associate dean for faculty and

PARTIES: staff development

TIMELINE: Offer spring 2023, content generated by

summer 2024

RESOURCES: Stipend for faculty and staff to create modules

STATUS: N/A

Note: This KPI is dependent upon financial support.

### **⇒ OBJECTIVE 3.2**

Encourage faculty and staff to engage in research (for publication, continuous improvement, etc.) on DEI in engineering and/or engineering education

### **KEY PERFORMANCE INDICATOR 3.2.1**

Provide competitive seed grants for faculty and staff to engage in DEI and/or engineering education research.

**RESPONSIBLE** Associate deans and DEI leadership

**PARTIES:** 

**TIMELINE:** Offer/competitive proposal process in place by

fall 2024, ongoing

 $\textbf{RESOURCES:} \quad \textbf{Financial support for seed grants}$ 

STATUS: N/A

**Note:** This KPI is dependent upon financial support.

PROVIDE INCENTIVES, RESOURCES AND PROFESSIONAL DEVELOPMENT OPPORTUNITIES TO HELP FACULTY AND STAFF BUILD, INTEGRATE AND GROW STUDENT CURRICULAR AND CO-CURRICULAR LEARNING AND DEVELOPMENT OPPORTUNITIES THAT ENHANCE STUDENT UNDERSTANDING AND PRACTICE OF DIVERSITY, EQUITY AND INCLUSION.

### **⇒ OBJECTIVE 3.2 CONTINUED**

### **KEY PERFORMANCE INDICATOR 3.2.2**

Foster collaborative relationships with faculty and staff from other units (example social science) to enrich the outcome of DEI and engineering education research (see KPI 3.2.1).

RESPONSIBLE DEI leadership

PARTIES:

TIMELINE: Spring 2023

**RESOURCES:** Financial support for seed grants

STATUS: N/A

Note: This KPI is dependent upon having the DEI leadership role.

### **KEY PERFORMANCE INDICATOR 3.2.3**

Provide support for students to engage in summer research on DEI and/or Engineering Education

RESPONSIBLE Associate deans, Judy Grant

**PARTIES:** 

TIMELINE: Summer 2024, ongoing RESOURCES: Student SURE support

STATUS: N/A

**Note:** If no additional financial support is provided, this will be supported through the SURE budget.

### **⇒ OBJECTIVE 3.3**

Integrate DEI into cocurricular, experiential learning opportunities.

### **KEY PERFORMANCE INDICATOR 3.3.1**

Provide DEI professional development opportunities for club and organization advisors (partner with CSI), and leaders, and create the expectation that DEI is embedded in their activities.

**RESPONSIBLE** DEI leader, SoE Club Advisors, partner with CSI

**PARTIES:** 

TIMELINE: Spring 2023 - ongoing

RESOURCES: N/A STATUS: N/A

Note: This initiative is dependent on approval of the DEI leadership role.

PROVIDE INCENTIVES, RESOURCES AND PROFESSIONAL DEVELOPMENT OPPORTUNITIES TO HELP FACULTY AND STAFF BUILD, INTEGRATE AND GROW STUDENT CURRICULAR AND CO-CURRICULAR LEARNING AND DEVELOPMENT OPPORTUNITIES THAT ENHANCE STUDENT UNDERSTANDING AND PRACTICE OF DIVERSITY, EQUITY AND INCLUSION.

### **⇒ OBJECTIVE 3.3 CONTINUED**

### **KEY PERFORMANCE INDICATOR 3.3.2**

Sponsor DEI student awards for individual students and organizations.

RESPONSIBLE Dean's office, DEI leadership

**PARTIES:** 

TIMELINE: Spring 2023 - ongoing

RESOURCES: Financial support for plaques/awards, faculty

and staff time to serve on selection committee

STATUS: N/A

### **KEY PERFORMANCE INDICATOR 3.3.3**

Create an interorganizational DEI committee made up of representatives from the various engineering clubs and organizations to meet each semester to brainstorm and plan DEI initiatives in the SoE (ensure that all engineering clubs and organizations share responsibility and that affinity-based groups are included but not overtaxed with this responsibility).

RESPONSIBLE Visioneering Center and DEI leadership

PARTIES: position

TIMELINE: Fall 2023 - ongoing

**RESOURCES:** Financial support for refreshments during

meetings

STATUS: N/A



**OVERARCHING STRATEGIC GOAL 4** 

DEVELOP AND ENHANCE RELATIONSHIPS WITH SOE STAKEHOLDERS (E.G., SUPPLIERS, COMMUNITY PARTNERS, INDUSTRY PARTNERS, ADVISORY BOARDS, INVITED SPEAKERS) WITHIN THE DAYTON COMMUNITY AND BEYOND WHOSE OVERALL COMBINED COMPOSITION ADVANCES OUR COMMITMENT TO DIVERSITY, EQUITY, AND INCLUSION PRACTICES AND EDUCATION.

### **RATIONALE**

This goal will complement action item #11 of the *University's 11-Step Anti-Racism Action Plan*: Expand the University's utilization of women- and minority-owned businesses, including black-owned businesses with an emphasis on locally-owned enterprises. Additionally, this goal recognizes that the School of Engineering cannot achieve true excellence without collaboration with, and input and guidance from, diverse people and organizations that demonstrate a commitment to diversity, equity, and inclusion practices, policies, and education.

DEVELOP AND ENHANCE RELATIONSHIPS WITH SOE STAKEHOLDERS (E.G., SUPPLIERS, COMMUNITY PARTNERS, INDUSTRY PARTNERS, ADVISORY BOARDS, INVITED SPEAKERS) WITHIN THE DAYTON COMMUNITY AND BEYOND WHOSE OVERALL COMBINED COMPOSITION ADVANCES OUR COMMITMENT TO DIVERSITY, EQUITY, AND INCLUSION PRACTICES AND EDUCATION.

### **⇒ OBJECTIVE 4.1**

Assess the demographic diversity of, and commitment to, DEI of key SoE stakeholders and evaluate how these compare to School of Engineering and University goals.

### **KEY PERFORMANCE INDICATOR 4.1.1**

Define key SoE stakeholder groups to be assessed.

**RESPONSIBLE** DEI leadership position and ALC members

**PARTIES:** 

TIMELINE: Summer 2023

RESOURCES: Faculty and staff time to develop key

stakeholder list, categories and names

STATUS: N/A

Note: If the DEI leadership position is not approved, this will delay the progress of this KPI, but not stop it.

### **KEY PERFORMANCE INDICATOR 4.1.2**

Assess diversity of identified key stakeholders and commitment to DEI where possible.

RESPONSIBLE DEI leadership position and the ALC

**PARTIES:** 

TIMELINE: Fall 2023-spring 2024

**RESOURCES:** Faculty and staff time; student worker time to

research company websites and interview SoE faculty/staff and/or stakeholder representatives regarding stakeholder diversity and company commitment to DEI and compile report

STATUS: N/A

DEVELOP AND ENHANCE RELATIONSHIPS WITH SOE STAKEHOLDERS (E.G., SUPPLIERS, COMMUNITY PARTNERS, INDUSTRY PARTNERS, ADVISORY BOARDS, INVITED SPEAKERS) WITHIN THE DAYTON COMMUNITY AND BEYOND WHOSE OVERALL COMBINED COMPOSITION ADVANCES OUR COMMITMENT TO DIVERSITY, EQUITY, AND INCLUSION PRACTICES AND EDUCATION.

### **⇒ OBJECTIVE 4.2**

Seek out and develop new relationships with diverse stakeholders and stakeholders with a demonstrated commitment to DEI to proactively address gaps identified in KPI 4.1.2.

### **KEY PERFORMANCE INDICATOR 4.2.1**

Host an annual summit for minority-, women- and veteran-owned businesses to create networking opportunities for faculty/staff and to create opportunities for class projects, guest speakers, community-engaged learning and capstone design projects.

RESPONSIBLE DEI leadership position

**PARTIES:** 

TIMELINE: Summer-fall 2024

RESOURCES: Faculty/staff time; event \$ for supplies and food

STATUS: N/A

**Note:** SoE capacity to do this KPI is dependent on DEI leadership position. If the DEI leadership position is not approved, this KPI will be eliminated.

**Comment:** This event would be effective as a University-level initiative.

### **KEY PERFORMANCE INDICATOR 4.2.2**

Leverage community assets such as the Greater West Dayton Incubator to foster reciprocal partnerships for experiential learning opportunities, capstone design projects, and other curricular and cocurricular student learning experiences.

RESPONSIBLE DEI leadership position, executive director

PARTIES: of ETHOS, director of community relations,

director of industry relations, director of

**Innovation Center** 

TIMELINE: Start identifying and developing reciprocal

partnerships in fall 2022 and ongoing

RESOURCES: Faculty/staff time; reciprocity for community

partner if they do not have direct tangible

benefit.

STATUS: N/A

DEVELOP AND ENHANCE RELATIONSHIPS WITH SOE STAKEHOLDERS (E.G., SUPPLIERS, COMMUNITY PARTNERS, INDUSTRY PARTNERS, ADVISORY BOARDS, INVITED SPEAKERS) WITHIN THE DAYTON COMMUNITY AND BEYOND WHOSE OVERALL COMBINED COMPOSITION ADVANCES OUR COMMITMENT TO DIVERSITY, EQUITY, AND INCLUSION PRACTICES AND EDUCATION.

### **⇒ OBJECTIVE 4.2 CONTINUED**

### **KEY PERFORMANCE INDICATOR 4.2.3**

Work to diversify the demographic diversity on all advisory councils and similar groups by revising the policies and procedures for succession planning, term limits, selection process, etc.

RESPONSIBLE Director of industry relations and ALC

**PARTIES:** 

TIMELINE: Initiate spring 2022, new policies implemented

spring 2023

**RESOURCES:** Faculty/staff time

STATUS: N/A

### **⇒ OBJECTIVE 4.3**

Develop reciprocal relationships with our stakeholders to exchange knowledge, skills and practices related to DEI.

### **KEY PERFORMANCE INDICATOR 4.3.1**

Host annual workshop to bring key stakeholders and SoE faculty/staff together to engage in conversations centered around DEI to promote advocacy and to exchange ideas and best practices.

**RESPONSIBLE** DEI leadership position

**PARTIES:** 

TIMELINE: Summer-fall 2024

RESOURCES: Faculty/staff time; event \$ for supplies and

food\*

STATUS: N/A

**Note:** SoE capacity to do this KPI is dependent on DEI leadership position and financial support for the workshop.

**Comment:** \*This could also be held in conjunction with KPI 4.2.1 as one event, added bonus of connecting our existing stakeholders to the minority-, women-, veteran-owned businesses and including these businesses in conversations above.

DEVELOP AND ENHANCE RELATIONSHIPS WITH SOE STAKEHOLDERS (E.G., SUPPLIERS, COMMUNITY PARTNERS, INDUSTRY PARTNERS, ADVISORY BOARDS, INVITED SPEAKERS) WITHIN THE DAYTON COMMUNITY AND BEYOND WHOSE OVERALL COMBINED COMPOSITION ADVANCES OUR COMMITMENT TO DIVERSITY, EQUITY, AND INCLUSION PRACTICES AND EDUCATION.

### **⇒ OBJECTIVE 4.3 CONTINUED**

### **KEY PERFORMANCE INDICATOR 4.3.2**

Research and document best practices of industrial partners and other key stakeholders for DEI.

**RESPONSIBLE** DEI leadership position, director of industry

PARTIES: relations

TIMELINE: Initiate research fall 2024 and ongoing RESOURCES: Faculty/staff time; student worker time to

research and document

STATUS: N/A

**Note:** SoE capacity to do this KPI is dependent on DEI leadership position

and financial support for the workshop.

**Comment:** This can be a continuation of the research in KPI 4.1.2 as well as documentation of conversations/best practices in KPI 4.3.1.



**OVERARCHING STRATEGIC GOAL 5** 

# ESTABLISH AN IMPACTFUL AND EFFECTIVE SOE INFRASTRUCTURE TO SUPPORT TRANSPARENT CONTINUOUS QUALITATIVE AND QUANTITATIVE ASSESSMENT OF SOE MEASURABLE OUTCOMES TO ADVANCE DIVERSITY, EQUITY AND INCLUSION.

### **RATIONALE**

Continuous improvement requires robust and strategic qualitative and quantitative assessment. This assessment is far more effective when done by an assessment professional in a coordinated manner. The outcomes of this assessment need to be effectively communicated with the School of Engineering community to foster a continued commitment to this work. Additionally, this goal supports Goal 4 of the *Flyers Plan for Community Excellence* (Develop, implement, assess and report on unit-based strategic plans to advance inclusive excellence). While the assessment outlined in Goal 5 of this *Strategic Plan* will directly evaluate KPIs identified in Goals 1–4, we also recognize the importance of continual evaluation of the SoE culture and climate from the perspective of students, faculty, and staff and recognize the numerous internal and external factors that influence the SoE culture and climate.

ESTABLISH AN IMPACTFUL AND EFFECTIVE SOE INFRASTRUCTURE TO SUPPORT TRANSPARENT CONTINUOUS QUALITATIVE AND QUANTITATIVE ASSESSMENT OF SOE MEASURABLE OUTCOMES TO ADVANCE DIVERSITY, EQUITY AND INCLUSION.

### **⇒ OBJECTIVE 5.1**

Facilitate robust and impactful assessment of DEI efforts in the SoE.

### **KEY PERFORMANCE INDICATOR 5.1.1**

Identify the DEI processes, programs, and initiatives to assess and determine how to measure success.

RESPONSIBLE DEI leadership position

**PARTIES:** 

TIMELINE: Fall 2022-spring 2023

**RESOURCES:** DEI leadership position, faculty/staff time

STATUS: N/A

**Note:** This cannot be done without the DEI leadership position.

**Comment:** Collaboration with UIEC would strengthen this KPI.

### **KEY PERFORMANCE INDICATOR 5.1.2**

Develop an assessment system and method for reporting outcomes related to DEI processes, programs and initiatives.

RESPONSIBLE DEI leadership position

**PARTIES:** 

TIMELINE: Spring 2023-fall 2023

RESOURCES: DEI leadership position, faculty/staff time

STATUS: N/A

Note: This cannot be done without DEI leadership position.

### **KEY PERFORMANCE INDICATOR 5.1.3**

Assess outcomes related to DEI process, programs and initiatives.

RESPONSIBLE DEI leadership position

**PARTIES:** 

TIMELINE: Fall 2023 and thereafter

RESOURCES: DEI leadership position and faculty/staff time

STATUS: N/A

Note: This cannot be done without DEI leadership position.

ESTABLISH AN IMPACTFUL AND EFFECTIVE SOE INFRASTRUCTURE TO SUPPORT TRANSPARENT CONTINUOUS QUALITATIVE AND QUANTITATIVE ASSESSMENT OF SOE MEASURABLE OUTCOMES TO ADVANCE DIVERSITY, EQUITY AND INCLUSION.

### **⇒ OBJECTIVE 5.2**

Develop a robust plan for integrating DEI into key internal and external communications, to recognize faculty, staff and student success in this area, to share our DEI values with internal and external stakeholders, and to share success and progress in this area.

### **KEY PERFORMANCE INDICATOR 5.2.1**

Coordinate with University marketing and communications to establish a communications and implementation strategy to accomplish objective 2.

**RESPONSIBLE** University marketing and communications and **PARTIES:** associate dean for faculty and staff development

TIMELINE: Spring 2022 and ongoing RESOURCES: Faculty and staff time

STATUS: N/A

**Note:** Would need significant marketing and communications support on this as SoE no longer has a marketing and communications director



### **SECTION 4.** IMPLEMENTATION PLAN

### 4.1 Oversight Structure

The SoE DEI Strategic Plan Team, composed of the associate deans, the proposed diversity leadership position and the executive director of the Diversity in Engineering Center, will provide oversight and monitor the implementation of the plan. The individuals and teams identified as "responsible parties" for each Key Performance Indicator will be responsible for actualizing the Key Performance Indicators.

### 4.2 **Coordinated Timeline**

The timeline for each Overarching Strategic Goal and Key Performance Indicator is shown in the Gantt Chart Appendix.

### **Schedule for Regular Check-ins**

The Key Performance Indicator "Responsible Parties" will provide monthly updates to the SoE DEI Strategic Plan Team. The Team will meet monthly to monitor the plan's progress and assess needs, provide updates twice a semester to the School of Engineering Academic Leadership Council, assist in connecting with other units/departments doing similar work to promote synergy, and minimally check-in with the Office of Diversity and Inclusion once per semester.

### 4.4 Tracking Mechanism

The SoE DEI Strategic Plan Team will develop a tracking system to monitor the progress, deliverables and metrics for each Goal / Objective / KPI. The Team will document the resources developed and used to fulfill the Plan goals.

### APPENDICES FOR "COORDINATED TIMELINE"

		2021	2022	1	2023		1	2024		2025
		Fall	Spring Summer Fall	Spring		Fall	Spring		Fall	
Aspirational Goal 1	Strengthen the recruitment, retention and advancement of diverse faculty, staff and students through the development and use of equitable practices and processes.									
KDI 4 4 4	Create a part time or full time position to coordinate and help facilitate									
KPI 1.1.1	K-12 engineering outreach strategy.  Develop close partnerships with key schools in target areas through								<u> </u>	
KPI 1.1.2	innovative activities and programs (eg: EGR 103 offerings, STEM Programming, SURE outreach, etc)									
KPI 1.1.3	Create a UD School of Engineering "roadshow" for K-12 students with particular emphasis on reaching underrepresented and underserved student populations and key markets.									
KPI 1.2.1	Examine and enhance UD partnerships to build on recruitment strategies for underrepresented and underserved engineering undergraduate students (e.g., Admissions - admittance criteria and traditional and alternative pathways, Financial Aid, Advancement, College of Arts and Sciences - alternative pathways, develop relationships with HBCUs / HSIs /etc. for 2+ programs).									
KPI 1.2.2	Develop a coordinated recruitment strategy for underrepresented and underserved engineering graduate students (e.g.: developing partnerships with HBCUs / HSIs / etc. for 3+2 programs, the GEM Consortium, Sloan Foundation, increased participation in BPM program, etc.)									
KPI 1.2.3	Examine current SoE undergraduate and graduate student retention practices and research / implement best practices for retention of underrepresented and underserved populations (e.g.: enhancing student sense of belonging in SoE, examining current policies and practices, early interventions and partnership on remedial courses, create SoE "Air Team", examine dismissal policies, sophomore curriculum, seminars, advising practices for DEI)									
KPI 1.3.1	Conduct a thorough "review" of all School of Engineering faculty and staff practices and policies, and modify those as needed to ensure that they equitably help promote the retention and advancement of underrepresented and underserved faculty and staff.									
KPI 1.3.2	Improve recruitment efforts for recent Ph.D. and Post-docs for faculty positions by developing partnerships with key institutions (eg: HBCUs / HSIs / etc.) and programs (ex: Sloan Minority Ph.D. Program) and working with faculty on strategies to broaden their professional networks.									
KPI 1.3.3	Refine hiring practices, including enhanced professional development and ongoing coaching of search committees and working with HR and the Provost office to assess the demographics of the candidate pools.									
Aspirational Goal 2	Inspire, strengthen and sustain a shared responsibility and participation for advancing diversity, equity and inclusion.									
KPI 2.1.1	Create a position or redistribute responsibilities of a current position to provide leadership and oversee the coordination, advancement, facilitation and assessment of DEI activities in the School of Engineering.									
KPI 2.1.2	Create a School of Engineering DEI Strategic Plan Team (Associate Deans, the Diversity Leadership position in KPI 2.1.1, the Executive Director of the Diversity in Engineering Center) to monitor the implementation of the plan.									
KPI 2.2.1	Develop and launch a comprehensive DEI platform for SoE faculty, staff, and students that includes internal and external professional development opportunities, information, resources, advocacy opportunities, and an assessment dashboard.									
KPI 2.2.2	Identify advocacy opportunities and existing internal and external resources for professional development and resources to include on the platform, Identify the gaps and create new SoE specific professional development opportunities and resources as needed for the platform.									

**Note:** Highlighted areas in gray denote the "ongoing period of the KPI, the main color denotes the main "work."

### APPENDICES FOR "COORDINATED TIMELINE" CONTINUED

		2021		2022			2023			2024		2025
		Fall	Spring		Fall	Spring	Summer	Fall	Spring		Fall	Spring
KDI 2 2 2	Incentivize participation for faculty and staff in professional development and internal advocacy initiatives. The incentives will acknowledge faculty and staff time constraints and ensure overall											9
KPI 2.2.3	faculty and staff wellness.  Create a leadership community of practice including development of											
KPI 2.3.1	immersive leader training sessions and intentional DEI training for leaders.											
KPI 2.3.2	Develop a library of resources for leaders that includes books, webinars, papers, etc.											
KPI 2.3.3	Incentivize participation for leaders.						1			1		
Aspirational Goal 3	Provide incentives, resources and professional development opportunities to help faculty and staff build on, integrate and grow student curricular and cocurricular learning and development opportunities that enhance student understanding and practice of diversity, equity and inclusion.											
KPI 3.1.1	Provide financial support, internal and external professional development and informational resources to facilitate the coordinated inclusion of DEI(content and teaching pedagogy) into key identified classes (eg. Engineering seminars in years 1, 2, 3 and 4; EGR 103 Engineering Innovation / first-year course; courses involving COIL, etc.).											
KPI 3.1.2	Create a paid cohorted DEI "fellows" program to provide professional development, and to facilitate idea sharing to help faculty and instructional staff incorporate topics and practice of DEI into their courses.											
KPI 3.1.3	Create a series of "plug and play" modules that faculty and instructional staff can incorporate into their courses as an integral part of the course (facilitated by instructor, not just online modules), or for when the course facilitator might otherwise have to cancel class (explore partnerships with MEC/Diversity Peer Educators, KEEN, ODI, etc.).											
KPI 3.2.1	Provide competitive seed grants for faculty and staff to engage in DEI and/or Engineering Education research.											
KPI 3.2.2	Foster collaborative relationships with faculty and staff from other units (example social science) to enrich the outcome of DEI and Engineering Education research (see KPI 3.2.1).											
KPI 3.2.3	Provide support for students to engage in summer research on DEI and/or Engineering Education.											
KPI 3.3.1	Provide DEI professional development opportunities for club and organization advisors (partner with CSI), and leaders, and create the expectation that DEI is embedded in their activities.											
KPI 3.3.2	Sponsor DEI student awards for individual students and organizations											
KPI 3.3.3	Create an interorganizational DEI committee made up of representatives from the various engineering clubs and organizations to meet on a semesterly basis to brainstorm, and plan DEI initiatives in the SoE (ensure that all engineering clubs and organizations share responsibility and that affinity-based groups are included but not overtaxed with this responsibility).											
Aspirational Goal 4	Develop and enhance relationships with SoE Stakeholders (e.g suppliers, community partners, industry partners, advisory boards, invited speakers) within the Dayton community and beyond whose overall combined composition advances our commitment to diversity, equity and inclusion, practices, and education.											
KPI 4.1.1	Define key SoE stakeholder groups to be assessed.											
KPI 4.1.2	Assess diversity of identified key stakeholders and commitment to DEI where possible.											
KPI 4.2.1	Host an Annual Summit for minority, women and veteran owned businesses to create networking opportunities for faculty/staff, and to create opportunities for class projects, guest speakers, community engaged learning and capstone design projects.											

**Note:** Highlighted areas in gray denote the "ongoing period of the KPI, the main color denotes the main "work."

### APPENDICES FOR "COORDINATED TIMELINE" CONTINUED

		2021	2022			2023			2024			2025
		Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring
KPI 4.2.2	Leverage community assets such as the Greater West Dayton Incubator to foster reciprocal partnerships for experiential learning opportunities, capstone design projects, and other curricular and co- curricular student learning experiences.											
KPI 4.2.3	Work to diversify the demographic diversity on all advisory councils and similar groups by revising the policies and procedures for succession planning, term limits, selection process, etc.											
KPI 4.3.1	Host annual workshop to bring key stakeholders and SoE faculty/staff together to engage in conversations centered around DEI to promote advocacy and to exchange ideas and best practices.											
KPI 4.3.2	Research and document best practices of industrial partners and other key stakeholders for DEI.											
	Establish an impactful and effective SoE infrastructure to support transparent continuous qualitative and quantitative assessment of SoE measurable outcomes to											
Aspirational Goal 5	, I											
KPI 5.1.1	Identify the DEI processes, programs and initiatives we would like to assess and determine how to measure success.											
KPI 5.1.2	Develop an assessment system and method for reporting outcomes related to DEI processes, programs and initiatives.											
KPI 5.1.3	Assess outcomes related to DEI process, programs and initiatives.											
KPI 5.2.1	Coordinate with Marketing and Communications to establish a communications strategy and implementation strategy to accomplish objective 2.											

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