



PennState
College of Engineering



JUNE 2022

EQUITY ACTION TABLES

Fostering Equity and Inclusion
in the Penn State College of
Engineering

6

Stakeholders, Leaders, and Groups Responsible for Specific Equity Action Project Guidance and Execution

Every member of the Penn State College of Engineering community has a role to play in advancing equity and inclusion efforts.

While the Equity Action Tables are organized by the group targeted by the actions, many others may be able to contribute to and support the action projects for other stakeholder groups.

- A staff member working in graduate program administration will support equity action projects for graduate students.
- Faculty members may facilitate conversations or lead affinity groups for other faculty, but also have key roles to play in equity projects targeting students and postdoctoral scholars.
- Graduate and undergraduate students serve as mentors, teaching and learning assistants, peer advisors, allies, and ambassadors for the college and can engage in providing input and leadership in many equity action projects.

Therefore, all community members are encouraged to peruse the full set of action tables to find the opportunities most suited to their position, skills, and passions.

About the Equity Action Plan

“The EAP is designed for action. Serving as both a map for all members of the College of Engineering community and a model for equity in engineering education across the country, we are focused on inclusive approaches that advance inclusivity. By meeting community members where they are, it offers a real and actionable onramp in the pursuit of equity in engineering, organized under four main ideas: 1) engagement and mentorship; 2) deepening individual knowledge and leadership by participating in ongoing learning activities, including acknowledging and rectifying biases; 3) using data-driven, people-focused activities to support equitable retainment and advancements; and 4) supporting equitable recruitment.”

Justin Schwartz

Harold and Inge Marcus Dean, Penn State College of Engineering

This legend identifies the positions and roles that are defined in the action project tables that follow. These individuals and teams serve as key leaders who should be supporting the inventory, design, implementation, and assessment of the interventions recommended for the different engineering stakeholder groups.

STAKEHOLDER GROUPS

E	Executives
F	Faculty
P	Post Docs
S	Staff
G	Graduate students
U	Undergraduate students

POSITIONS, ROLES, AND TEAMS

Dean Harold and Inge Marcus Dean, College of Engineering

Associate and Assistant Deans

ADE	Associate Dean for Education
ADEI	Associate Dean for Equity and Inclusion
ADF	Associate Dean for Faculty
ADI	Associate Dean for Innovation
ADR	Associate Dean for Research
SAD	Senior Associate Dean
ADASGP	Assistant Dean for Academic Support and Global Programs
ADCIPA	Assistant Dean for Curricular Innovation and Program Assessment
ADFE	Assistant Dean for Faculty Equity
ADTL-LCD	Assistant Dean for Teaching and Learning & Leonhard Center Director

Other College Leaders

CAO	Chief Administrative Officer
DDAA	Director of Data Analysis and Assessment
DF	Director of Facilities
DHs	Department, School and Program Heads
DIT	Director of Information Technology
DODL	Director, Office of Digital Learning
EDCM	Editorial Director, Communications and Marketing
EMC	Engineering Management Committee
FO	Financial Officer
HRSP	Human Resources Strategic Partner
SDCIE	Senior Director of Corporate and Industry Engagement
SDDAR	Senior Director of Development and Alumni Relations
SDMC	Senior Director of Marketing and Communications
UEC	Unit Executive Committee (Dean, Associate Deans, DHs)

Other College Leaders

Dept DEI Leads	Department DEI Leads
DGS	Directors of Graduate Studies
EEIT	Equity, Excellence, Impact Team
EFC	Engineering Faculty Council
GC C	Graduate Council Engineering Caucus
Ombuds	Faculty Ombudsperson(s)
Senate C	Faculty Senate Engineering Caucus
UPC	Undergraduate Program Coordinators
ASGP	Academic Support and Global Programs
CEOI	Center for Engineering Outreach and Inclusion
CRER	Career Resources and Employer Relations
DSE	Director of Student Engagement
EAC	Engineering Advising Center
ECP	Engineering Connect Program
GEE	Global Engineering Engagement
IEP	International Engineering Programs
LLC Advisors	Living and Learning Communities Advisors
MEP	Multicultural Engineering Programs
PPFP	Presidential Postdoc Fellowship Program
SRGE	Student Research and Graduate Equity
STPCP	Student Transitions and Pre-College Programs
WEP	Women in Engineering Programs
ASAs	Administrative Support Assistants
SAC	Staff Advisory Committee
SAC-EIC	Staff Advisory Committee, Equity and Inclusion Subcommittee
DRT	Diversity Round Table
EA	Engineering Ambassadors
EGEC	Engineering Graduate Enrollment Coordinator
EGSC	Engineering Graduate Student Council
EUC	Engineering Undergraduate Council
GradWIE	Graduate Women in Engineering
MEGA	Multicultural Engineering Graduate Association

Boards

CEOI – AB	Center for Engineering Outreach and Inclusion Advisory Board
IPAC	Industrial Professional Advisory Council
PSEAS	Penn State Engineering Alumni Society

6.1 Prioritized Actions to Advance Executive Equity Leadership

Table 6.1.1 Executive Engagement with EAP					
EA1: Engage College of Engineering Administrators in Continuous Equity Action Process					
Issues raised by administrators	Critical Intervention				Persons Responsible
Expanding executive buy-in and ownership of climate improvement strategies	EA1.1 Initiate regular/ongoing assessment – both quantitative and qualitative				Dean, Associate Deans, CAO
Building trust that the college will address issues raised by leaders	EA1.2 Communicate how actions are mapped to identified growth opportunities and lingering challenges; Seek feedback on progress				Dean, Associate Deans, CAO
DEI Education and Leadership	EA1.3 Define a structure to provide a common databank of ongoing DEI efforts and resources across departments				ADEI, ADFE, CAO, SDMC, EDCM, DDAA, ADTL-LCD, DIT
DEI Education and Leadership	EA1.4 Provide guidelines, toolkits, and information to support Unit-level DEI Efforts				Dean, Associate Deans, CAO
Transparency and Equity in Policies and Rewards	EA1.5 Identify if there are opaque processes and develop transparent communication around each				EMC
Improving Processes for addressing inequities and needed policy changes	EA1.6 Revise and update COE Constitution				EFC, ADFE, SAD, ADF, ADE, ADEI
Expanding executive buy-in and ownership of climate improvement strategies	EA1.7 Work with Unit leaders to benchmark diversity, equity, inclusion, and belonging metrics and key performance indicators with peer institutions including American Society of Engineering Education data from the Dean’s Diversity Initiative as well as Big10++ Institutions				Dean, Associate Deans, CAO, DDAA, ADTL-LCD, IPAC, CEOI-AB
Metrics	Mechanisms for executive input of equity concerns and solutions, Equity Updates for UEC, EMC, Annual resource updates for Department and Unit leaders				
KPIs	% of executives engaged in qualitative input activities				
Mapping to COE and University Strategic Plans	F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Support and empower our outstanding faculty and staff, IS1: Infrastructure and Support-Prioritize investment in our people; COE SP Goal 1				
References and Resources	Aspire Alliance Institutional Change Resources, APLU INCLUDES ¹ , Gender & Diversity KPI Alliance ² , ASEE EDGE, 2020 National Gender Equity Indicators ³ , Michigan ADVANCE ⁴ , WEPAN Transforming Engineering Culture to Advance Inclusion and Diversity (TECAID) ⁵ , Penn State Strategic Plan—Our Commitment to Impact ⁶ , Additional resources to be identified in EA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	EA1.1, EA1.5	EA1.2, EA1.6	EA1.1-1.7	EA1.1-1.7	EA1.1-1.7



Table 6.1.2 Executive Educational and Professional Development

EA2: Provide educational and professional development opportunities for administrators to deepen knowledge and leadership to advance equity and inclusion within the college and in partnership with engineering professional communities.

Issues raised by administrators and other stakeholders	Critical Intervention	Persons Responsible
Inclusive Mentorship—Increasing capacity of communities to mentor, proliferating promising practices	EA2.1 Provide professional development, information and consultation to department heads and unit leaders to support unit-level mentorship plans	Dean, Associate Deans, ADFE, CAO, SAC-EIC
Inclusive Mentorship—Implementing nationally recognized models	EA2.2 Investigate and solicit support for mentorship development offerings from nationally recognized providers	SAD, ADF, ADEI, ADFE, CAO, SAC-EIC, IPAC, CEOI-AB
Affinity Groups and Peer Networks—how to begin	EA2.3 Provide professional development, information, and consultation to unit leaders regarding effective peer mentorship groups within COE and in ASEE and BTAA+ groups	SAD, ADF, ADEI, ADFE, CAO, SAC-EIC
Advancement and Professional Development	EA2.4 Provide workshops on using and documenting evidence in annual review material to demonstrate impact	SAD, ADF, DHs, HRSP, CAO
DEI Education and Leadership	EA2.5 Provide professional development on equity and inclusion as a component of leader credentialing and onboarding	Dean, Associate Deans, ADFE, CAO, SAC-EIC
DEI Education and Leadership	EA2.6 Provide continuing education to broaden and deepen DEI knowledge of administrators	Dean, Associate Deans, ADFE, CEOI, ADTL-LCD
Equitable and Inclusive Onboarding	EA2.7 Develop intentional onboarding for unit leaders	Dean, Associate Deans, ADFE, CAO, SAC-EIC
Community and Belonging; Lack of diversity and inclusivity	EA2.8 Educate leaders on the federally or institutionally required categories for broadening participation or affirmative action compliance to increase understanding of the benefits and challenges within equity audits	Dean, ADEI, ADFE, SDMC, EDCM, DDAA
Community and Belonging; Lack of diversity and inclusivity	EA2.9 Create a calendar of opportunities that highlights and affirms minoritized groups and points to opportunities for engagement in ways that are salient to the multiplicity of identities represented in the college	SAD, ADF, ADEI, ADFE, EDCM
Community and Belonging; Lack of diversity and inclusivity	EA2.10 Support leaders by providing community messages that affirm the dignity of all persons, stand against identity-based harassment and discrimination, and encourage inclusivity	EMC, UEC
More support for minoritized and inclusive leaders	EA2.11 Nominate minoritized and inclusive leaders for professional development opportunities such as the IAspire leadership academy, ELATES, BTAA Academic Leadership Program, Next Level Leadership, and other networks that support advancement	EMC
Post-Pandemic Equity	EA2.12 Discuss and develop mechanisms to monitor and address inequitable post-pandemic impacts, particularly regarding gender, race, and disability	CAO, SAD, ADF with EMC and UEC input, DIT, DF
Metrics	Unit level mentorship plans, Administrator Development Workshops for onboarding, Executive Development Curriculum and events	
KPIs	% of executive teams participating in inclusive mentoring workshops; Number of unit leaders allocating meeting time to discuss equity issues, mentorship plans, and development opportunities for unit members	
Mapping to COE and University Strategic Plans	F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Support and empower our outstanding faculty and staff, IS1: Infrastructure and Support-Prioritize investment in our people; COE SP Goal 1	

Table 6.1.2 Executive Educational and Professional Development (continued)

EA2: Provide educational and professional development opportunities for administrators to deepen knowledge and leadership to advance equity and inclusion within the college and in partnership with engineering professional communities.

References and Resources	UMass Amherst Mutual Mentoring ⁷ Minority Postdoc ⁸ , NCFDD ⁹ , Corporate models for affinity groups ¹⁰ , Affinity groups ¹¹ , Michigan Tech Affinity Group Resource ¹² , UC Davis STEM Faculty Resource Guide ¹³ , How to engage ¹⁴ , Penn State ADVANCE Wages project ¹⁵⁻¹⁸ , Additional resources to be identified in EA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	EA2.1-2.2, EA2.6, EA2.10- EA2.12	EA2.1- EA2.2, EA2.5, EA 2.9 - 2.12	EA2.1- EA2.12	EA2.1- EA2.12	EA2.1- EA2.12



Table 6.1.3 Executive Leader Retention and Advancement

EA3: Provide equitable and inclusive access to career advancement, engineering facilities, programs, resources, and services, by being responsive to the needs of diverse engineering constituents.

Issues raised by administrators and other stakeholders	Critical Intervention				Persons Responsible
Inclusive Mentorship—College-level support	EA3.1	Provide access to University-Level and Cross-Departmental Mentorship with topical coaching			UEC
DEI Education and Leadership	EA3.2	Support leaders in developing unit-level DEI leadership structures (DEI charges for each committee and/or DEI committees)			UEC, ADFE, Dept DEI Leads
Transparency and Equity in Policies and Rewards	EA3.3	Implement rewards for DEI activities recognizing the undue burdens on underrepresented and inclusive administrators (e.g., provide resources to support the career advancement for unit members to take on more DEI leadership roles within the units: equity advocates, recruiters, and managers)—Deans DEI Recognition			Dean, Associate Deans, CAO
Transparency and Equity in Policies and Rewards	EA3.4	Provide resources to help unit leaders examine equity in workloads, and work to find ways to adjust			Dean, Associate Deans, ADFE, CAO, DDAA, HRSP
Community and Belonging; Lack of diversity and inclusivity	EA3.5	Work with each unit to develop sub-cultures of appreciation for community members as Penn Staters			Dean, Associate Deans, ADFE, DHs, CAO
Community and Belonging; Lack of diversity and inclusivity	EA3.6	Provide inclusive spaces for “minoritized” executives to connect without the burden of having to share “traumas” with or educate majority peers			Dean, Associate Deans, ADFE, CAO, IPAC, CEOI-AB
More support for minoritized and inclusive leaders	EA3.7	Leverage senior faculty mentors to support COE leaders from groups underrepresented in STEM			Dean, SAD, ADF, ADEI, ADFE
More support for minoritized and inclusive leaders	EA3.8	Identify, endorse, and support affinity programs for minoritized leaders thereby enabling Penn State COE community member participation			Dean, SAD, ADF, ADEI, CAO
Metrics	Unit-level DEI structures; Annual Review Practices Report; Strategies for identifying and reporting impact; Deans level recognition for community members advancing DEI goals; community philosophies developed based on learnings from corporate models.				
KPIs	Executives can articulate an understanding of evaluation priorities; community survey data shows higher sense of belonging and perception of career opportunities				
Mapping to COE and University Strategic Plans	PS F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Support and empower our outstanding faculty and staff; IS1: Infrastructure and Support- Prioritize investment in our people; COE SP Goal 1				
References and Resources	NSF ADVANCE ¹⁹ , Enhancing Inclusive Mentorship by Developing Supportive Strategies and Removing Barriers ²⁰ , Inclusive Mentor Readings ²¹ , UNC ADVANCE ²² , U Michigan Review Assessment ⁴ , ACE Equity Minded Faculty Workload ²³ , ASEE Edge Dashboards ^{24, 25} , NSF ADVANCE workload and rewards project ²⁶ , FISH Philosophy ²⁷ , Disney Institute ²⁸ , UC San Diego ERG Model ²⁹ , Additional resources to be identified in EA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	EA 3.7	EA3.1, EA3.2, EA3.7	EA3.1-EA3.4, EA3.6-EA3.8	EA3.1-EA3.8	EA3.1-EA3.8

Table 6.1.4 Executive Leader Recruitment					
EA4: Recruit leaders who contribute to sustaining diverse and inclusive communities in all programs.					
Issues raised by administrators and other stakeholders	Critical Intervention				Persons Responsible
Inclusive Recruitment-- Processes	EA4.1 Adopt/develop COE recommendations for equitable and inclusive unit leader searches				Dean, Associate Deans, ADFE, CAO, HRSP
Inclusive Recruitment – Building talent pool	EA4.2 Continue COE support for continuous recruiting through invited seminar speakers, outreach, and partnerships with diverse constituents, and/or working with executive search firms				Dean, Associate Deans, ADFE, DHs
Inclusive Recruitment – Reviewing applications	EA4.3 Implement lessons from Search Committee Briefings and ADVANCE Best practices such as objective criteria and rubrics for each evaluation category (leadership, healthy workplace culture, teaching, research, service, and collaboration) with consideration of contributions to equity in those domains				Dean, Associate Deans, ADFE, Search Committee Members
Inclusive Recruitment	EA4.4 Provide concierge support for executive searches				ADFE, DHs, EEIT, SAC-EIC, ASAs who support searches
Developing diverse and inclusive leaders	EA4.5 Solicit applications from minoritized and inclusive leaders who have participated in professional development opportunities such as the IAspire leadership academy, ELATES, BTAA Academic Leadership Program, LEAADS and other networks that support advancement				Search Committee Members
Metrics	Search committee members participating in Annual Briefings from affirmative action office; search committees using rubrics for evaluation; searches connecting candidates with concierge resources; Visits or communications with programs that produce diverse and inclusive leaders				
KPI	Executive leadership applicant pools are more diverse; Leaders hired support equity goals				
Mapping to COE and University Strategic Plans	PS F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Support and empower our outstanding faculty and staff; IS1: Infrastructure and Support- Prioritize investment in our people; COE SP Goal 1				
References and Resources	Michigan ADVANCE ³⁰ , Michigan STRIDE ³¹ , Michigan Hiring ³² , Michigan Handbook ³³ , Michigan Ten Best Practices ³⁴ , Additional resources to be identified in EA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	EA4.1-EA4.2	EA4.1-EA4.5	EA4.1-EA4.5	EA4.1-EA4.5	EA4.1-EA4.5

6.2 Prioritized Actions to Advance Faculty Equity

Table 6.2.1 Faculty Engagement with EAP

FA1: Engage College of Engineering faculty in Continuous Equity Action Process.

Issues raised by faculty and administrators	Critical Intervention				Persons Responsible
Expanding faculty buy-in and ownership of climate improvement strategies	FA1.1 Initiate regular/ongoing assessment – both quantitative and qualitative				ADEI, ADFE
Building trust that the college will address issues raised by faculty	FA1.2 Communicate how actions are mapped to identified growth opportunities and lingering challenges; Seek feedback on progress				ADEI, ADFE, SDMC, EDCM, Dept DEI Leads
DEI Education and Leadership	FA1.3 Define a structure to provide a common databank of ongoing DEI efforts and resources across departments				ADEI, ADFE, SDMC, EDCM, DDAA, ADTL-LCD
DEI Education and Leadership	FA1.4 Provide guidelines and resources for department-level DEI Efforts				SAD, ADF, ADEI, ADFE
Transparency and Equity in Policies and Rewards	FA1.5 Identify if there are opaque processes and develop transparent communication around each (e.g., early tenure negotiation and parental leave)				SAD, ADF, ADEI, ADFE, All Faculty
Improving Processes for addressing inequities and needed policy changes	FA1.6 Communicate the role of the COE faculty ombudsperson(s)				SAD, ADF, ADEI, ADFE, SDMC, Ombuds
Improving Processes for addressing inequities and needed policy changes	FA1.7 Strengthen faculty governance by working with faculty governance and COE administration on faculty policies and practices				SAD, ADF, ADE, ADEI, ADFE, EFC, Senate C, GC C
Improving Processes for addressing inequities and needed policy changes	FA1.8 Revise and update COE Constitution				EFC, ADFE, SAD, ADF, ADE, ADEI
Metrics	Portal for faculty input of equity concerns and solutions, Fall and Spring Equity Updates from College, Annual resource updates for Departmental Leaders				
KPIs	% of faculty engaged in qualitative input activities				
Mapping to COE and University Strategic Plans	F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Support and empower our outstanding faculty and staff, IS1: Infrastructure and Support-Prioritize investment in our people; COE SP Goal 1				
References and Resources	WEPAN Transforming Engineering Culture to Advance Inclusion and Diversity (TECAID) ⁵ , Penn State Faculty Ombudspersons ³⁵ , Penn State College of Engineering Constitution ³⁶ , Additional resources to be identified in FA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	FA1.1, FA1.2, FA1.5	FA1.1-FA1.3, FA1.5, FA1.7, FA1.8	FA1.1-FA1.8	FA1.1-FA1.7	FA1.1-FA1.7

Table 6.2.2 Faculty Educational and Professional Development

FA2: Provide educational and professional development opportunities for faculty to deepen knowledge and leadership to advance equity and inclusion within the college and in partnership with engineering professional communities.

Issues raised by faculty and administrators	Critical Intervention	Persons Responsible
Inclusive Mentorship—Increasing capacity of communities to mentor, proliferating promising practices	FA2.1 Provide professional development, information and consultation to department heads, center directors and Dept DEI Leads to support unit-level mentorship plans	COE Associate Deans, ADFE
Inclusive Mentorship—Implementing nationally recognized models	FA2.2 Investigate and solicit support for mentorship development offerings from nationally recognized providers (e.g., CIMER, NCFDD)	SAD, ADF, ADEI, ADFE, CEOI
Affinity Groups and Peer Networks—how to begin	FA2.3 Provide professional development, information, and consultation to faculty for effective peer mentoring groups	SAD, ADF, ADEI, ADFE
Advancement and Professional Development	FA2.4 Provide workshops on using and documenting evidence in the dossier narrative to demonstrate impact	SAD, ADF, DHs
DEI Education and Leadership	FA2.5 Provide professional development on equity and inclusion as a component of leader credentialing and onboarding (e.g., chairs of P&T committees, search committee chairs, grad and undergrad program leaders.)	SAD, ADF, ADEI, ADFE
DEI Education and Leadership	FA2.6 Provide continuing education to broaden and deepen DEI knowledge of faculty	Dean, Associate Deans, ADFE, CEOI, ADTL-LCD
Improving processes for addressing inequities and needed policy changes	FA2.7 Provide professional development for ombudsperson role	SAD, ADF, ADFE, Ombuds
Equitable and Inclusive Onboarding	FA2.8 Expand Leonhard Center New Faculty workshop (identified as a “rose”) with intention on DEI education for the faculty role	ADTL-LCD, ADEI, ADF, ADE
Equitable and Inclusive Onboarding	FA2.9 Develop or direct new faculty to formal training on the use of Activity Insight	SAD, ADF, HRSP, DIT
Equitable and Inclusive Onboarding	FA2.10 Develop intentional onboarding for faculty who start in January	SAD, ADF, ADFE, HRSP
Equitable and Inclusive Onboarding	FA2.11 Provide just-in-time training and resources	SAD, ADF, ADFE,
Community and Belonging; Lack of diversity and inclusivity	FA2.12 Educate community members on the federally or institutionally required categories for broadening participation or affirmative action compliance to increase understanding of the benefits and challenges within equity audits	Dean, ADEI, ADFE, SDMC, EDCM, DDAA, DIT, DF
Community and Belonging; Lack of diversity and inclusivity	FA2.13 Provide opportunities for community members to identify groups and activities to connect in spaces that are salient to the multiple facets of identity	Dean, ADEI, ADFE
Community and Belonging; Lack of diversity and inclusivity	FA2.14 Create a calendar of opportunities that highlights and affirms minoritized groups and points to opportunities for engagement in ways that are salient to the multiplicity of identities represented in the college	SAD, ADF, ADEI, ADFE, EDCM
Community and Belonging; Lack of diversity and inclusivity	FA2.15 Pursue allyship by providing community messages that affirm the dignity of all persons, stands against identity-based harassment and discrimination, and encourages inclusivity	Dean, Associate Deans, ADFE, EDCM, DHs, ADTL-LCD, EEIT, SDMC, All faculty



Table 6.2.2 Faculty Educational and Professional Development (continued)

FA2: Provide educational and professional development opportunities for faculty to deepen knowledge and leadership to advance equity and inclusion within the college and in partnership with engineering professional communities.					
More support for minoritized and inclusive leaders	FA2.16 Nominate diverse and inclusive mid-career and senior faculty for professional development opportunities such as the IAspire leadership academy, ELATES, BTAA Academic Leadership Program, Next Level Leadership and other networks that support advancement				Dean, Associate Deans, ADFE, DHs, Senior Faculty
Metrics	Unit level mentorship plans, Faculty Development Workshops for onboarding, Faculty Development Curriculum and events				
KPIs	% of faculty and administrators participating in inclusive mentoring workshops; Number of unit leaders allocating meeting time to discuss mentorship plans and promote development opportunities				
Mapping to COE and University Strategic Plans	F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Support and empower our outstanding faculty and staff, IS1: Infrastructure and Support-Prioritize investment in our people; COE SP Goal 1				
References and Resources	CIMER ³⁷ , UMass Amherst Mutual Mentoring ⁷ , NCFDD ⁹ , Inclusive Mentor Readings ²¹ , UNC Advance ²² , Additional resources to be identified in FA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	FA2.2, FA2.6, FA2.15, FA2.16	FA2.1, FA2.2, FA2.5, FA2.6, FA2.9, FA2.10, FA2.14-FA2.16	FA2.1-FA2.16	FA2.1-FA2.16	FA2.1-FA2.16

Table 6.2.3 Faculty Retention and Advancement

FA3: Provide equitable and inclusive access to career advancement, engineering facilities, programs, resources, and services, by being responsive to the needs of diverse engineering constituents.

Issues raised by faculty and administrators	Critical Intervention	Persons Responsible
Post-Pandemic Equity	FA3.1 Monitor and address inequitable post-pandemic impacts, particularly regarding gender, race, and disability	Dean and Associate Deans, ADFE, ADTL-LCD, DHs, P & T Committees, DIT, DF
Inclusive Mentorship—Unit-level organized mentorship	FA3.2 Conduct an Inventory/Audit of Department Mentorship Plans and Implementation to Identify strengths and gaps	EEIT, SAD, ADF, ADEI, ADFE
Inclusive Mentorship—Informal peer mentoring	FA3.3 Sustain and expand support for informal mentorship via affinity groups (such as peer circle and leadership development for women faculty)	Dean, Associate Deans, ADFE, EEIT
Inclusive Mentorship—College-level organized mentorship	FA3.4 Provide College-Level and Cross Departmental Mentorship with topical mentoring and coaching to fill gaps	Dean, Associate Deans, DHs, EEIT
Affinity Groups and Peer Networks	FA3.5 Develop College-level mechanism for faculty-defined affinity groups	Dean, Associate Deans, SDMC,
Affinity Groups and Peer Networks	FA3.6 Continue Topical Conversation Circles	Dean, Associate Deans, SDMC, EEIT, All Faculty
Advancement and Professional Development	FA3.7 Adoption and Implementation of Revised College P&T guidelines	EFC, ADF
Advancement and Professional Development	FA3.8 Identify and Advocate for University-level Changes to P&T guidelines	Dean, Associate Deans, DHs, EFC, Senate C, GC C
Advancement and Professional Development	FA3.9 Continue to clarify Promotion guidelines for Teaching and Research Professors	SAD, ADF, ADEI, ADFE, ADE, EFC
Advancement and Professional Development	FA3.10 Conduct an Audit of annual review process for Tenure-Line Professors and Research or Teaching Professors	Dean, SAD, ADF, ADEI, ADFE
DEI Education and Leadership	FA3.11 Identify and share opportunities for DEI scholarship and contributions	SAD, ADF, ADEI, ADFE, EEIT, All Faculty
DEI Education and Leadership	FA3.12 Initiate Departmental level DEI leadership structures (DEI charges for each committee and/or DEI committees)	Dean, Associate Deans, ADFE, DHs, Dept DEI leads
Transparency and Equity in Policies and Rewards	FA3.13 Implement rewards for DEI activities recognizing the undue burdens on underrepresented faculty. (e.g., provide resources to support the career advancement for faculty serving in DEI leadership roles within engineering departments - equity advocates, recruiters, and managers)—Deans DEI fellows	Dean, Associate Deans, ADFE, DHs
Transparency and Equity in Policies and Rewards	FA3.14 Provide resources to help department heads examine equity in faculty workloads, and work to find ways to adjust	Dean, Associate Deans, ADFE, DHs
Improving Processes for addressing inequities and needed policy changes	FA3.15 Identify, nominate, and elect multiple faculty ombudspersons to support the scale of the College of Engineering community	SAD, ADF, EFC, Ombuds, All Faculty
Community and Belonging; Lack of diversity and inclusivity	FA3.16 Develop a culture of appreciation for community members as Penn Staters, perhaps with a customer service philosophy such as FISH	Dean, Associate Deans, ADFE, EEIT, DHs



Table 6.2.3 Faculty Retention and Advancement (continued)

FA3: Provide equitable and inclusive access to career advancement, engineering facilities, programs, resources, and services, by being responsive to the needs of diverse engineering constituents.					
Issues raised by faculty and administrators	Critical Intervention				Persons Responsible
Community and Belonging; Lack of diversity and inclusivity	FA3.17 Provide inclusive spaces for “minoritized” faculty to connect without the burden of having to share “traumas” with or educate majority faculty				Dean, Associate Deans, ADFE, EEIT
More support for minoritized and inclusive leaders	FA3.18 Leverage senior faculty mentors to support faculty from groups underrepresented in STEM				Dean, SAD, ADF, ADEI, ADFE
More support for minoritized and inclusive leaders	FA3.19 Identify, endorse, and support external affinity programs for minoritized faculty thereby enabling Penn State COE community member participation				Dean, SAD, ADF, ADEI, Dept DEI leaders, IPAC, PSEAS, CEOI-AB
Metrics	Update on Pandemic impacts; Departmental DEI structures; Affinity Group Structure; Faculty conversation circles, Revised P and P&T guidelines; Annual Review Practices Report; Strategies for identifying and reporting impact; DEI scholarship and reports; Deans-level fellow support for faculty advancing DEI goals; ombudsperson office expanded; community philosophy developed based on learnings from corporate models.				
KPIs	Time in rank disaggregated by gender and race shows equity or movement towards equity; faculty can articulate an understanding of evaluation priorities; community survey data shows higher sense of belonging and perception of career opportunities				
Mapping to COE and University Strategic Plans	PS F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Support and empower our outstanding faculty and staff; IS1: Infrastructure and Support- Prioritize investment in our people; COE SP Goal 1				
References and Resources	Corporate models for affinity groups ¹⁰ , Affinity groups ¹¹ , Michigan Tech Affinity Group Resource ¹² , FISH Philosophy ²⁷ , Additional resources to be identified in FA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	FA3.1, FA3.3	FA3.1-FA3.3, FA3.5- FA3.7, FA3.9, FA3.11 -FA3.12	FA3.1-FA3.7, FA3.9-FA3.13, FA3.15, FA3.17-FA3.19	FA3.1-FA3.19	FA3.1-FA3.19



Table 6.2.4 Faculty Recruitment

FA4: Recruit diverse and inclusive faculty in all programs.					
Issues raised by faculty and administrators	Critical Intervention				Persons Responsible
Inclusive Recruitment – Processes	FA4.1 Adopt/develop COE recommendations for equitable and inclusive faculty searches				Dean, Associate Deans, ADFE, DHs
Inclusive Recruitment – Processes	FA4.2 Initiate Open COE Faculty Searches				Dean, Associate Deans, ADFE
Inclusive Recruitment – Building talent pool	FA4.3 Establish Partnership for Faculty Diversity Postdoctoral Scholar Program				Dean, ADR, ADEI, ADFE
Inclusive Recruitment – Building talent pool	FA4.4 Establish relationships with scholar programs (Sloan, GEM, AGEPS, SREB) to identify diverse talent pools				ADR, ADEI, ADFE, CEOI, EEIT, Faculty, PSEAS, CEOI-AB
Inclusive Recruitment – Building talent pool	FA4.5 Continue COE support for continuous recruiting through invited seminar speakers, award winning graduate students, postdocs (in Partnership Programs) and faculty				Dean, Associate Deans, ADFE, DHs, Dept DEI Leaders, Faculty who teach seminars
Inclusive Recruitment – Reviewing applications	FA4.6 Implement lessons from Search Committee Briefings and ADVANCE Best practices such as objective criteria and rubrics for each evaluation category (teaching, research, service, leadership, and collaboration) with consideration of contributions to equity in those domains				Dean, Associate Deans, ADFE, DHs, Search Committee Members
Inclusive Recruitment	FA4.7 Provide concierge support for faculty searches				ADF, ADEI, EEIT, ASAs who support searches
Metrics	Postdoc program established; Search committee members participating in Annual Briefings from affirmative action office; search committees using rubrics for evaluation; searches connecting candidates with concierge resources; Visits or communications with scholar programs				
KPI	Faculty pools are more diverse; Faculty hired increases towards equity goals				
Mapping to COE and University Strategic Plans	PS F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Support and empower our outstanding faculty and staff; IS1: Infrastructure and Support- Prioritize investment in our people; COE SP Goal 1				
References and Resources	President’s Postdoctoral Fellowship Program ³⁸ , Additional resources to be identified in FA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	FA4.2, FA4.7	FA4.1-FA4.3, FA4.7	FA4.1-FA4.7	FA4.1-FA4.7	FA4.1-FA4.7

6.3 Prioritized Actions to Advance Postdoctoral Scholar Equity

Table 6.3.1 Postdoctoral Scholar Engagement with EAP

PA1: Engage College of Engineering postdoctoral scholars in Continuous Equity Action Process.

Issues raised by faculty and administrators	Critical Intervention				Persons Responsible
Expanding postdoc engagement with climate improvement strategies	PA1.1 Initiate regular/ongoing assessment – both quantitative and qualitative				ADEI, ADFE
Improving Processes for addressing inequities and needed policy changes	PA1.2 Communicate the roles of the COE ombudsperson(s) and Office of Postdoctoral Scholars				SAD, ADF, ADEI, ADFE, SDMC, Ombuds
DEI Education and Leadership	PA1.3 Provide guidelines and resources for postdoc DEI and development efforts				ADEI, ADR
Metrics	Portal for postdoc input of equity concerns and solutions, Fall and Spring Equity Updates from College, Annual resource updates for Departmental leaders				
KPIs	% of postdocs engaged in qualitative input activities				
Mapping to COE and University Strategic Plans	F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Support and empower our outstanding faculty and staff, IS1: Infrastructure and Support-Prioritize investment in our people; COE SP Goal 1				
References and Resources	President’s Postdoctoral Fellowship Program ³⁸ , Additional resources to be identified in PA1.3				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	PA1.1	PA1.1	PA1.1-PA1.3	PA1.1-PA1.3	PA1.1-PA1.3

Table 6.3.2 Postdoctoral Scholar Educational and Professional Development

PA2: Provide educational and professional development opportunities for postdocs to deepen knowledge and leadership to advance equity and inclusion within the college and in partnership with engineering professional communities.

Issues raised by faculty and administrators	Critical Intervention	Persons Responsible			
Inclusive Mentorship—Increasing capacity of communities to mentor, proliferating promising practices	PA2.1 Provide professional development, information to support postdoc mentorship plans	COE Associate Deans, ADFE			
Inclusive Mentorship—Implementing nationally recognized models	PA2.2 Investigate and solicit support for mentor development offerings from nationally recognized providers (e.g., CIMER, NCFDD)	SAD, ADF, ADEI, ADFE, CEOI, IPAC, CEOI-AB			
Affinity Groups and Peer Networks—how to begin	PA2.3 Support professional development, information, and consultation to postdocs for effective peer mentoring groups	SAD, ADF, ADEI, ADFE, Faculty Supervisors of Postdocs			
DEI Education and Leadership	PA2.4 Provide professional development on equity and inclusion as a component presidential postdoc mentor credentialing and onboarding	SAD, ADF, ADEI, ADFE			
Equitable and Inclusive Onboarding	PA2.5 Develop and/or Expand workshops with intention on DEI education for the postdoc role	ADTL-LCD, ADEI			
Community and Belonging; Lack of diversity and inclusivity	PA2.6 Educate community members on the federally or institutionally required categories for broadening participation or affirmative action compliance to increase understanding of the benefits and challenges within equity audits	Dean, ADEI, ADFE, SDMC, EDCM, DDAA, DIT, DF			
Community and Belonging; Lack of diversity and inclusivity	PA2.7 Create a calendar of opportunities that highlights and affirms minoritized groups and points to opportunities for engagement in ways that are salient to the multiplicity of identities represented in the college	SAD, ADF, ADEI, ADFE, EDCM			
Community and Belonging; Lack of diversity and inclusivity	PA2.8 Pursue allyship by providing community messages that affirm the dignity of all persons, stands against identity-based harassment and discrimination, and encourages inclusivity	Dean, Assoc Deans, ADFE, DHs, ADTL-LCD, EEIT, EDCM, Faculty Supervisors of Postdocs			
Metrics	Unit level mentorship plans, Postdoc Development Workshops for onboarding, Postdoc Development curriculum and events				
KPIs	% of faculty and administrators participating in inclusive mentoring workshops; number of faculty supervisors engaged in mentoring planning and discussions; increased participation of postdocs in prof development; increased sense of job satisfaction for postdocs				
Mapping to COE and University Strategic Plans	F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Support and empower our outstanding faculty and staff, IS1: Infrastructure and Support-Prioritize investment in our people; COE SP Goal 1				
References and Resources	NCFDD ⁹ , UNC Advance ²² , CIMER ³⁷ , President’s Postdoctoral Fellowship Program ³⁸ , Additional resources to be identified in PA1.3				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	PA2.2, PA2.8	PA2.2, PA2.8	PA2.1-PA2.8	PA2.1-PA2.8	PA2.1-PA2.8



Table 6.3.3 Postdoctoral Scholar Retention and Advancement					
PA3: Provide equitable and inclusive access to career advancement, engineering facilities, programs, resources, and services, by being responsive to the needs of diverse engineering constituents.					
Issues raised by faculty and administrators	Critical Intervention				Persons Responsible
Post-Pandemic Equity	PA3.1 Monitor and address inequitable post-pandemic impacts, particularly regarding gender, race, and disability				Dean and Assoc. Deans, ADFE, DHs, ADTL-LCD, DIT, DF, Faculty Supervisors of Postdocs
Inclusive Mentorship—unit-level organized mentorship	PA3.2 Complete an Inventory of Department Postdoc Mentorship Plans and Implementation to Identify strengths and gaps				EEIT, SAD, ADF, ADEI, ADFE
Inclusive Mentorship—mentoring postdoctoral scholars	PA3.3 Support opportunities for Postdocs to participate in career mentoring communities				ADR, ADEI, ADFE, Faculty Supervisors of Postdocs
Metrics	Update on Pandemic impacts; Inventory with respect to Postdoctoral Mentorship; DEI scholarship and reports; Deans-level fellow support for faculty advancing DEI goals through postdoc programs.				
KPIs	Faculty mentors and postdocs can articulate an awareness of postdoc professional development opportunities; survey data shows higher sense of belonging and perception of career opportunities				
Mapping to COE and University Strategic Plans	PS F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Support and empower our outstanding faculty and staff; IS1: Infrastructure and Support- Prioritize investment in our people; COE SP Goal 1				
References and Resources	NCFDD ⁹ , UNC Advance ²² , Additional resources to be identified in PA1.3				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	PA3.1-PA3.2	PA3.1-PA3.2	PA3.1-PA3.3	PA3.1-PA3.3	PA3.1-PA3.3



Table 6.3.4 Postdoctoral Scholar Recruitment					
FA4: Recruit diverse and inclusive postdocs in all programs.					
Issues raised by faculty and administrators	Critical Intervention				Persons Responsible
Inclusive Recruitment – Processes	PA4.1 Adopt/develop COE recommendations for equitable and inclusive postdoc searches				Dean, Associate Deans, ADFE, DHs
Inclusive Recruitment – Building talent pool	PA4.2 Establish Partnership for Faculty Diversity Postdoctoral Scholar Program				Dean, ADR, ADEI, ADFE
Inclusive Recruitment – Building talent pool	PA4.3 Establish relationship with scholar programs (Sloan, GEM, AGEPs, SREB) to identify diverse talent pools				ADR, ADEI, ADFE, CEOI, EEIT, Dept DEI Leads, Faculty
Inclusive Recruitment – Building talent pool	PA4.4 Continue COE support for continuous recruiting through invited seminar speakers, award winning graduate students, postdocs (in Partnership Programs) and faculty				Dean, Associate Deans, DHs, Seminar Leaders
Metrics	Postdoc program established; Investigators who are recruiting postdocs have access to inclusive recruitment information				
KPI	Postdoc community shows increases in underrepresented scholars				
Mapping to COE and University Strategic Plans	PS F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Support and empower our outstanding faculty and staff; IS1: Infrastructure and Support- Prioritize investment in our people; COE SP Goal 1				
References and Resources	President’s Postdoctoral Fellowship Program ³⁸ , Additional resources to be identified in PA1.3				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	PA4.2	PA4.2	PA4.1-PA4.3	PA4.1-PA4.4	PA4.1-PA4.4

6.4 Prioritized Actions to Advance Staff Equity

Table 6.4.1 Staff Engagement with EAP					
SA1: Engage College of Engineering Staff in Continuous Equity Action Process.					
Issues raised by staff and other stakeholders	Critical Intervention				Persons Responsible
Expanding staff buy-in and ownership of climate improvement strategies	SA1.1	Initiate regular/ongoing assessment – both quantitative and qualitative			Dean, Associate Deans, CAO, HRSP
Building trust that the college will address issues raised by staff	SA1.2	Communicate how actions are mapped to identified growth opportunities and lingering challenges; seek feedback on progress			EMC
DEI Education and Leadership	SA1.3	Define a structure to provide a common databank of ongoing DEI efforts and resources across units			ADEI, HRSP, CAO
DEI Education and Leadership	SA1.4	Provide Guidelines and Resources for unit-level DEI Efforts			ADEI, HRSP, CAO
Transparency and Equity in Policies and Rewards	SA1.5	Identify if there are opaque processes and develop transparent communication around each (e.g., awards nomination processes)			Dean, Associate Deans, CAO, HRSP, Supervisors of Staff
Improving Processes for addressing inequities and needed policy changes	SA1.6	Work with Staff Advisory Council Equity and Inclusion Committee and Unit leaders to identify issues that are impediments to equity for staff and design interventions			EMC, SAC-EIC, HRSP, Staff
Metrics	Portal for staff input of equity concerns and solutions, Fall and Spring Equity Updates from College, Annual resource updates for Departmental and unit leaders				
KPIs	% of staff engaged in qualitative input activities, portal for staff input of equity concerns and solutions, Fall and Spring Equity Updates from College				
Mapping to COE and University Strategic Plans	PS F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Support and empower our outstanding faculty and staff; IS1: Infrastructure and Support- Prioritize investment in our people; COE SP Goal 1				
References and Resources	Gender & Diversity KPI Alliance ² , 2020 National Gender Equity Indicators ³ , Penn State Strategic Plan—Our Commitment to Impact ⁶ , Additional resources to be identified in SA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	SA1.1, SA1.5, SA1.6	SA1.1, SA1.5, SA1.6	SA1.1-SA1.6	SA1.1-SA1.6	SA1.1-SA1.6



Table 6.4.2 Staff Professional Development					
SA2: Provide educational and professional development opportunities for staff to deepen knowledge and leadership to advance equity and inclusion within the college and in partnership with engineering professional communities.					
Issues raised by staff and other stakeholders	Critical Intervention				Persons Responsible
Inclusive Mentorship—Increasing capacity of communities to mentor, proliferating promising practices	SA2.1	Provide professional development, information, and consultation to support unit-level mentorship plans where there are large numbers of staff, and college-level professional staff mentorship for units where there are smaller numbers			ADEI, HRSP, CAO, SAC-EIC
Inclusive Mentorship—Implementing nationally recognized models	SA2.2	Investigate and solicit support for mentor development offerings from nationally recognized providers			ADEI, HRSP, CAO, SAC-EIC
Affinity Groups and Peer Networks—how to begin	SA2.3	Provide professional development, information, and consultation to staff for effective peer mentoring groups			ADEI, HRSP, CAO, SAC-EIC
Advancement and Professional Development	SA2.4	Encourage use of LRN and other development opportunities for staff			ADEI, HRSP, CAO, SAC-EIC, DODL, Supervisors of Staff
DEI Education and Leadership	SA2.5	Provide professional development on equity and inclusion as a component of leader credentialing and onboarding			ADEI, HRSP, CAO, SAC-EIC
DEI Education and Leadership	SA2.6	Provide continuing education to broaden and deepen DEI knowledge			ADEI, HRSP, CAO, SAC-EIC
Improving processes for addressing inequities and needed policy changes	SA2.7	Provide professional development for supervisors in handling annual reviews, grievance processes, and other supervisory roles			HRSP, CAO
Equitable and Inclusive Onboarding	SA2.8	Develop or direct new staff to formal training on the use of systems related to the job role (SIMBA, Lionpath, e-steward, iTwo)			EMC, DODL, Supervisors of Staff
Equitable and Inclusive Onboarding	SA2.9	Develop intentional onboarding for staff			EMC, Supervisors of Staff
Equitable and Inclusive Onboarding	SA2.10	Provide just-in-time training and resources			HRSP, CAO, Supervisors of Staff
Community and Belonging; Lack of diversity and inclusivity	SA2.11	Educate community members on the federally or institutionally required categories for broadening participation or affirmative action compliance to increase understanding of the benefits and challenges within equity audits			ADEI, HRSP, CAO, SAC-EIC
Community and Belonging; Lack of diversity and inclusivity	SA2.12	Provide opportunities for community members to identify groups and activities to connect in spaces that are salient to the multiple facets of identity			ADEI, HRSP, CAO, SAC-EIC, Supervisors of Staff
Metrics	Unit level mentorship plans, Staff Development Workshops for onboarding, Staff Development Curriculum, marketing, and events				
KPIs	% of staff and administrators participating in inclusive mentoring workshops; Number of unit leaders allocating meeting time to discuss entmorship plans and promote development opportunities				
Mapping to COE and University Strategic Plans	PS F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Support and empower our outstanding faculty and staff; IS1: Infrastructure and Support- Prioritize investment in our people; COE SP Goal 1				
References and Resources	Corporate models for affinity groups ¹⁰ , Affinity groups ¹¹ , Additional resources to be identified in SA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	SA2.4	SA2.2, SA2.4, SA2.11, SA2.12	SA2.1, SA2.2, SA2.4 -SA2.9, SA2.11, SA2.12	SA2.1-SA2.12	SA2.1-SA2.12



Table 6.4.3 Staff Retention and Advancement					
SA3: Provide equitable and inclusive access to career advancement, engineering facilities, programs, resources, and services, by being responsive to the needs of diverse engineering constituents.					
Issues raised by staff and other stakeholders	Critical Intervention				Persons Responsible
Post-Pandemic Equity	SA3.1 Monitor and address inequitable post-pandemic impacts, particularly regarding gender, race, and disability				EMC, Supervisors of Staff, DIT, DF
Inclusive Mentorship—unit-level organized mentorship	SA3.2 Conduct an Inventory of unit Mentorship Plans and Implementation to Identify strengths and gaps				ADEI, SAC-EIC, HRSP, CAO
Inclusive Mentorship—informal peer mentoring	SA3.3 Sustain and expand support for Informal Mentoring via ESAC-EIC programs				ADEI, SAC-EIC, HRSP, CAO
Inclusive Mentorship—college level organized mentorship	SA3.4 Provide College-Level mentoring for staff in smaller units				ADEI, SAC-EIC, HRSP, CAO
DEI Education and Leadership	SA3.5 Identify opportunities for DEI scholarship and contributions for staff				ADEI, SAC-EIC, HRSP, CAO, Supervisors of Staff
DEI Education and Leadership	SA3.6 Initiate unit level DEI leadership structures (DEI charges for each committee and/or DEI committees)				EMC
Transparency and Equity in Policies and Rewards	SA3.7 Implement rewards for DEI activities recognizing the undue burdens on underrepresented staff (e.g., provide resources to support the career advancement for staff serving in DEI leadership roles within engineering units - equity advocates, recruiters, and managers)				EMC
Transparency and Equity in Policies and Rewards	SA3.8 Provide resources to help department heads and other unit leaders examine equity in staff workloads and to inform adjustments to JRWs				ADEI, HRSP, CAO
Community and Belonging; Lack of diversity and inclusivity	SA3.9 Develop a culture of appreciation for community members as Penn Staters, perhaps with a customer service philosophy such as FISH				EMC
Community and Belonging; Lack of diversity and inclusivity	SA3.10 Provide inclusive spaces for “minoritized” staff to connect without the burden of having to share “traumas” with or educate majority staff				ADEI, SAC-EIC
Metrics	Update on Pandemic impacts; Unit DEI structures; Annual Review Practices Report; Strategies for identifying and reporting impact; DEI scholarship and reports; community philosophy developed based on learnings from corporate models, reduced bias incidents.				
KPIs	Staff can articulate an understanding of evaluation priorities; community survey data shows higher sense of belonging and perception of career opportunities				
Mapping to COE and University Strategic Plans	PS F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Support and empower our outstanding faculty and staff; IS1: Infrastructure and Support- Prioritize investment in our people; COE SP Goal 1				
References and Resources	FISH Philosophy ²⁷ , Disney Institute ²⁸ , Additional resources to be identified in SA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	SA3.3	SA3.1-SA3.4	SA3.1-SA3.8	SA3.1-SA3.8	SA3.1-SA3.10

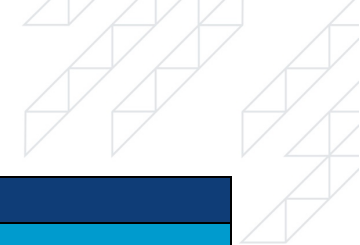


Table 6.4.4 Staff Recruitment					
SA4: Recruit diverse and inclusive staff in all programs.					
Issues raised by staff and other stakeholders	Critical Intervention				Persons Responsible
Inclusive Recruitment	SA4.1 Continue COE support for continuous recruitment				EMC
Inclusive Recruitment	SA4.2 Provide concierge support for staff searches				ADEI, HRSP, CAO, SAC-EIC, Staff
Metrics	Search committees using rubrics that include DEI for evaluation; searches connecting candidates with concierge resources; Committees reaching out to engage venues where diverse candidates engage				
KPIs	Candidate pools more diverse, increased hiring of diverse and inclusive staff				
Mapping to COE and University Strategic Plans	PS F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Support and empower our outstanding faculty and staff; IS1: Infrastructure and Support- Prioritize investment in our people; COE SP Goal 1				
References and Resources	Resources to be identified in SA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	SA4.1-SA4.2	SA4.1-SA4.2	SA4.1-SA4.2	SA4.1-SA4.2	SA4.1-SA4.2

6.5 Prioritized Actions to Advance Graduate Student Equity

Table 6.5.1 Graduate Student Engagement with EAP					
GA1: Engage College of Engineering Graduate Students in Continuous Equity Action Process.					
Issues raised by grad students and other stakeholders	Critical Intervention				Persons Responsible
Expanding buy-in and ownership of climate improvement strategies	GA1.1 Initiate regular/ongoing assessment – both quantitative and qualitative				ADEI, ADR, ADE, CCGE
Building trust that the college will address issues raised by grad students	GA1.2 Communicate how actions are mapped to identified growth opportunities and lingering challenges; Seek feedback on progress				ADEI, ADR, ADE, DGS
DEI Education and Leadership	GA1.3 Define a structure to provide a common databank of ongoing graduate DEI efforts and resources across departments				ADEI, ADR, ADE, CEOI
DEI Education and Leadership	GA1.4 Provide guidelines and resources for department-level graduate DEI Efforts				ADEI, ADR, ADE, CEOI, Dept DEI Leads
Transparency and Equity in Policies and Rewards	GA1.5 Identify if there are opaque processes and develop transparent communication around each				ADEI, ADR, ADE, GC C, Graduate Students, Grad Faculty, Grad Program Staff
Improving Processes for addressing inequities and needed policy changes	GA1.6 Communicate the roles of the Associate Dean for Graduate Student Affairs of the Graduate School, who serves as a university-wide ombudsperson for all graduate students, and of the Graduate and Professional Student Association				ADEI, ADR, ADE, DGS, GC C, Grad Faculty, Grad Program Staff
Metrics	Portal for graduate student input of equity concerns and solutions, Fall and Spring Equity Updates from College				
KPIs	% of graduate students engaged in qualitative input activities				
Mapping to COE and University Strategic Plans	F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Prepare our students for success in their careers and life; IS1: Infrastructure and Support- Prioritize investment in our people; COE SP Goal 2				
References and Resources	Graduate Student Roadmap ³⁹ , Institute for Broadening Participation Resource Toolbox ⁴⁰ , Additional resources to be identified in GA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	GA1.1, GA1.6	GA1.1, GA1.2, GA1.4-GA1.6	GA.1.1-GA1.6	GA.1.1-GA1.6	GA.1.1-GA1.6

Table 6.5.2 Graduate Student Education, Training, and Professional Development		
GA2: Provide educational and professional development opportunities for graduate students to deepen knowledge and leadership to advance equity and inclusion within the college and in partnership with engineering professional communities.		
Issues raised by graduate students	Critical Intervention	Persons Responsible
Inclusive Mentorship—Increasing capacity of communities to mentor, proliferating promising practices	GA2.1 Provide professional development, information and consultation to department heads, graduate coordinators, and research center directors to support unit-level mentorship plans	ADEI, ADR, ADE, CEOI, Dept DEI Leads



Table 6.5.2 Graduate Student Education, Training, and Professional Development (continued)

GA2: Provide educational and professional development opportunities for graduate students to deepen knowledge and leadership to advance equity and inclusion within the college and in partnership with engineering professional communities.

Issues raised by graduate students	Critical Intervention	Persons Responsible			
Inclusive Mentorship—Implementing Nationally recognized models	GA2.2 Investigate and solicit support for mentor development offerings from nationally recognized providers (e.g., CIMER, NCFDD)	ADEI, ADF, CEOI, CEOI-AB, IPAC			
Affinity Groups and Peer Networks—how to begin	GA2.3 Provide professional development, information, and consultation to graduate students for effective peer mentoring groups	ADEI, ADR, ADE, CEOI, Dept DEI Leads			
Advancement and Professional Development	GA2.4 Provide workshops on using documenting evidence in the CV and DEI statements for job applications to demonstrate impact	ADEI, CEOI, EGSC, MEGA, DGS			
DEI Education and Leadership	GA2.5 Provide professional development on equity and inclusion as a component of credentialing and onboarding for graduate students who mentor within the research lab	ADEI, CEOI, EGSC, MEGA, Dept DEI Leads, DGS			
DEI Education and Leadership	GA2.6 Provide continuing education in curricular and co-curricular settings to broaden and deepen DEI knowledge	ADEI, CEOI, DODL, EGSC, MEGA, Dept DEI Leads DGS, ADTL-LCD, ADCIPA			
DEI Education and Leadership	GA2.7 Provide professional development on equity and inclusion as a component of credentialing and onboarding for graduate students who will be TAs	ADEI, CEOI, ADTL-LCD, Dept DEI Leads, DGS			
Equitable and Inclusive Onboarding	GA2.8 Expand CEOI graduate student welcome with intention of building community across underrepresented populations	ADEI, CEOI			
Equitable and Inclusive Onboarding	GA2.9 Provide just-in-time training and resources	ADEI, CEOI, CCGE, Dept DEI Leads, DGS, Supervisors of Graduate Students			
Community and Belonging; Lack of diversity and inclusivity	GA2.10 Educate community members on the federally or institutionally required categories for broadening participation or affirmative action compliance to increase understanding of the benefits and challenges within equity audits	Dean, ADEI, ADR, ADE			
Community and Belonging; Lack of diversity and inclusivity	GA2.11 Provide opportunities for graduate students to identify groups and programs that enable connections that are salient to the multiple facets of identity	Dean, ADEI, ADR, ADE, CEOI, Supervisors of Graduate Students			
Metrics	Department mentorship plans, Graduate Student onboarding workshops, Graduate Student Development Curriculum, and events				
KPIs	% of graduate students participating in inclusive mentoring workshops; Number of grad program coordinators allocating seminar time to discuss DEI, mentorship plans, and promote development opportunities				
Mapping to COE and University Strategic Plans	F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Prepare our students for success in their careers and life; IS1: Infrastructure and Support- Prioritize investment in our people; COE SP Goal 2				
References and Resources	AGEP ⁴¹ , Sloan ⁴² , OGEEP ⁴³ , CIMER ³⁷ , Additional resources to be identified in GA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	GA2.2, GA2.5, GA2.7, GA2.8	GA2.2, GA2.4-GA2.8, GA2.11	GA2.1-GA2.11	GA2.1-GA2.11	GA2.1-GA2.11

Table 6.5.3 Graduate Student Retention and Advancement

GA3: Provide equitable and inclusive access to career advancement, engineering facilities, programs, resources, and services, by being responsive to the needs of diverse engineering graduate students.

Issues raised by graduate students	Critical Intervention	Persons Responsible
Post-Pandemic Equity	GA3.1 Monitor and address inequitable post-pandemic impacts, particularly regarding gender, race, and disability	ADEI, ADR, ADE, CEOI, DGS, Dept DEI Leads
Inclusive Mentorship—unit-level organized mentorship	GA3.2 Conduct an Inventory of Graduate Program Mentorship Plans and Implementation to Identify strengths and gaps	ADEI, ADR, ADE, DGS, SRGE, Dept DEI Leads
Inclusive Mentorship—informal peer mentoring	GA3.3 Sustain and expand support for Informal Mentoring via affinity groups (such as peer circle and leadership development for women graduate students and multicultural graduate students)	ADEI, CEOI, DGS, Dept DEI Leads
Inclusive Mentorship—college level organized	GA3.4 Provide College-Level and Cross Departmental Mentorship with topical mentoring and coaching to fill gaps (MEGA, GradWIE)	ADEI, CEOI, DGS, EGSC, MEGA, GradWIE, CEOI-AB, PSEAS, IPAC
Affinity Groups and Peer Networks	GA3.5 Initiate and grow orientation program for incoming graduate students	Dean, ADEI, ADR, ADE, DGS, CEOI
Affinity Groups and Peer Networks	GA3.6 Provide College-level mechanisms for additional graduate student affinity groups or topical conversation circles	ADEI, CEOI, DGS
Advancement and Professional Development	GA3.7 Conduct an audit of career advancement resources for graduate students.	ADEI, ADR, ADE, DGS, CEOI, CRER
Advancement and Professional Development	GA3.8 Encourage graduate students to create individual development plans	ADEI, ADR, ADE, DGS, CEOI, Supervisors of Grad Students
DEI Education and Leadership	GA3.9 Identify opportunities for DEI scholarship and contributions	ADEI, ADR, ADE, Dept DEI Leads
Transparency and Equity in Policies and Rewards	GA3.10 Implement rewards for DEI activities recognizing the undue burdens on underrepresented graduate students (e.g., provide resources to support the career advancement for graduate students serving in DEI leadership roles within engineering departments - equity advocates, recruiters, and mentors)	Dean, ADEI, ADR, ADE, CEOI, DGS
Transparency and Equity in Policies and Rewards	GA3.11 Develop a general awards nomination portal for current graduate students	ADEI, ADR, ADE, CEOI, CCGE
Community and Belonging; Lack of diversity and inclusivity	GA3.12 Provide inclusive spaces for “minoritized” grad students to connect without the burden of having to share “traumas” with or educate majority community members	Dean, ADEI, ADR, ADE
Community and Belonging; Lack of diversity and inclusivity	GA3.13 Establish a physical space for graduate students to congregate	EMC, UEC, CCGE, DF
Inclusive Retention	GA3.14 Improve internal communication system to alert OGEEP ⁴³ /CEOI when student is struggling	ADEI, CEOI, DGS, Dept DEI Leads
Metrics	Participation in peer networks, mentorship programs in departments, awards nomination portal	
KPI	Time to degree disaggregated by gender and race, graduate students can articulate an understanding of evaluation priorities, community survey data shows higher sense of belonging and perception of career opportunities	



Table 6.5.3 Graduate Student Retention and Advancement (continued)					
GA3: Provide equitable and inclusive access to career advancement, engineering facilities, programs, resources, and services, by being responsive to the needs of diverse engineering graduate students.					
Mapping to COE and University Strategic Plans	University Strategic Plan DEI Goal 4: Recruit, support, and advance a diverse student body; COE Strategic Plan Goal 2 (Action 7): Equitable Access for Students & Representative Student Body; F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Prepare our students for success in their careers and life; IS1: Infrastructure and Support- Prioritize investment in our people				
References and Resources	MEGA ⁴⁴ , GradWIE ⁴⁵ , Additional resources to be identified in GA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	GA3.1, GA3.4., GA3.5	GA3.1, GA3.4, GA3.5	GA3.1- GA3.9, GA3.11, GA3.12, GA3.14	GA3.1-GA3.14	GA3.1-GA3.14



Table 6.5.4 Graduate Student Recruitment					
GA4: Recruit diverse and inclusive graduate students in all programs.					
Issues raised by graduate students and faculty	Critical Intervention				Persons Responsible
Inclusive Recruitment	GA4.1 Create a timeline for actions and milestones for Inclusive graduate student recruitment				ADEI, ADR, ADE, CCGE
Inclusive Recruitment	GA4.2 Assess recruitment, admission, assistantship award, yield, and retention of underrepresented graduate students				ADEI, ADR, ADE, DGS, DDAA, Dept DEI Leads
Inclusive Recruitment	GA4.3 Provide DEI panels for graduate recruitment				ADEI, CEOI, EGEC, Dept DEI Leads
Inclusive Admissions	GA4.4 Work with Departments to implement holistic admissions review, address faculty bias, and include DEI representative in evaluation process				ADEI, EGEC, DGS, Dept DEI Leads
Inclusive Recruitment	GA4.5 Work with Minority Serving Institutions to develop pathway programs to graduate school at Penn State in collaboration with OGEEP ⁴³ and other campus partners.				ADEI, SRGE, DGS, Dept DEI Leads, Grad Faculty, Staff, Students
Inclusive Recruitment	GA4.6 Develop a college-level model for funding first-year graduate students				Dean, ADEI, ADR, ADE, FO, DGS
Inclusive Recruitment	GA4.7 Attend National Conferences that target URM populations in collaboration with OGEEP ⁴³ and other campus partners.				ADEI, ADR, CEOI, DGS, Graduate Faculty, Dept DEI leads
Inclusive Admissions	GA4.8 Increase number of touchpoints with applicants (webinars, emails, visit opportunities, etc.)				ADEI, CEOI, EGEC, SDMC
Inclusive Admissions	GA4.9 Create a centralized tracking/communication system for all applicants				ADEI, ADR, ADE, DGS, CEOI, SDMC, EGEC, DIT
Inclusive Recruitment	GA4.10 Offer application fee waivers				ADEI, ADR, SRGE, EGEC, DGS
Inclusive Recruitment	GA4.11 Review policies regarding graduate student stipends and benefits (e.g., students on external fellowships not eligible for same health insurance options)				ADEI, ADR, ADE, FO, CCGE, GC C
Metrics	Meet with all Department Heads and the Graduate Professors-in-Charge to discuss holistic review procedures; Submit Grant proposals to support graduate broadening participation activities; Create centralized tracking/communication system				
KPI	Increased application numbers, increased enrollment; size of graduate student body; demographics of student body show greater representation of historically “minoritized” groups				
Mapping to COE and University Strategic Plans	University Strategic Plan DEI Goal 4: Recruit, support, and advance a diverse student body; COE Strategic Plan Goal 2 (Action 7): Equitable Access for Students & Representative Student Body; F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Prepare our students for success in their careers and life; IS1: Infrastructure and Support- Prioritize investment in our people				
References and Resources	AGEP ⁴¹ , Additional resources to be identified in GA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	GA4.1-GA4.3, GA4.7, GA4.10	GA4.1-GA4.3, GA4.6-GA4.7, GA4.10	GA4.1-GA4.8, GA4.10	GA4.1-GA4.11	GA4.1-GA4.11

6.6 Prioritized Actions to Advance Undergraduate Student Equity

Table 6.6.1 Undergraduate Student Engagement with EAP					
UA1: Engage College of Engineering Undergraduate Students in Continuous Equity Action Process.					
Issues raised by undergraduate students and other stakeholders	Critical Intervention				Persons Responsible
Expanding buy-in and ownership of climate improvement strategies	UA1.1 Initiate regular/ongoing assessment – both quantitative and qualitative				Dean’s Academic Committee, DDAA, CEOI-AB, IPAC
Building trust that the college will address issues raised by undergraduate students	UA1.2 Communicate how actions are mapped to identified growth opportunities and lingering challenges; Seek feedback on progress				ADEI, ADE, ADASGP, SDMC, EDCM
DEI Education and Leadership	UA1.3 Define a structure to provide a common databank of ongoing DEI efforts and resources across departments and COE student support units				ADEI, ADE, ADASGP, ADTL, ADEI
DEI Education and Leadership	UA1.4 Provide Guidelines and Resources for department-level and unit-level DEI Efforts				ADEI, ADE, ADASGP, ADTL, ADCIPA, Dept DEI Leads
Transparency and Equity in Policies and Rewards	UA1.5 Identify if there are opaque processes and develop transparent communication around each.				Dean’s Academic Committee, UPC, faculty, staff, students
Improving Processes for addressing inequities and needed policy changes	UA1.6 Define and share purpose, mission statements, and goals for the Engineering Undergraduate Council (EUC), Diversity Round Table, University Park Undergraduate Association college representative and the Council of Commonwealth Student Governments to enhance/identify opportunities for collaboration related to the student experience				ADEI, ADE, ADASGP, ADTL, EDCM, DSE
Metrics	Materials developed to describe EAP efforts for undergraduate students, system for collection of information regarding Undergraduate-Focused DEI efforts, Material to describe roles of DRT, EUC and UPUA for action and collaboration				
KPIs	% of undergraduate students engaged in qualitative input activities, portal for undergraduate student input of equity concerns and solutions, Fall and Spring Equity Updates from College				
Mapping to COE and University Strategic Plans	F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Prepare our students for success in their careers and life; IS1: Infrastructure and Support- Prioritize investment in our people; COE SP Goal 2				
References and Resources	Community Information and Advocacy: How we define student success ⁴⁶ , Additional resources to be identified in UA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	UA1.1, UA1.5, UA1.6	UA1.1, UA1.2, UA1.5, UA1.6	UA1.1-UA1.6	UA1.1-UA1.6	UA1.1-UA1.6



Table 6.6.2 Undergraduate Student Education, Training, and Professional Development

UA2: Provide educational and professional development opportunities for undergraduate students to deepen knowledge and leadership to advance equity and inclusion within the college and in partnership with engineering professional communities.

Issues raised by undergraduate students and other stakeholders	Critical Intervention				Persons Responsible
Inclusive Mentorship—Increasing capacity of communities to mentor, proliferating promising practices	UA2.1	Provide mentor training, information and consultation to student organization and program leaders (EPALS, Career Envoys, MEPO, WEPO, EON, Impact Scholars, Global Engineering Fellows, Engineering Ambassadors, Department Ambassador programs)			ASGP, MEP, WEP, GEE, DSE, Dept DEI Leads
Inclusive Mentorship—Implementing nationally recognized models	UA2.2	Investigate and solicit programmatic and financial support for mentor development offerings from nationally recognized providers (which might include sending student and staff leaders to relevant workshops)			STPCP, GEE, MEP, WEP, SRGE, IEP, ASGP, SDDAR, SDCIE
Affinity Groups and Peer Networks—how to begin	UA2.3	Provide training, information, and consultation to undergraduate students for effective peer mentoring groups (keep learning resources)			ASGP, EAC, GEE, CEOI, DSE, Dept DEI Leads
Advancement and Professional Development	UA2.4	Provide workshops, and perhaps mechanisms (e.g., badging/micro-credential) for documenting evidence of DEI development and DEI impact in resumes and statements for job applications			ADE, ADEI, SRGE, DODL, DSE, Dept DEI Leads, CRER
DEI Education and Leadership	UA2.5	Provide professional development on equity and inclusion as a component of credentialing and onboarding for undergraduate students who mentor within the research lab, or lead student organizations			ADEI, SRGE, ASGP, DSE, Dept DEI Leads, Advisors of Student Orgs, Faculty Research Advisors, Graduate Research Mentors
DEI Education and Leadership	UA2.6	Provide continuing education to broaden and deepen DEI knowledge			ADEI, CEOI, ASGP, CRER, DODL
Equitable and Inclusive Onboarding	UA2.7	Refine the Dean’s welcome, Multicultural Engineering Program Orientation (MEPO), Women in Engineering Program Orientation (WEPO), Engineering Orientation Network (EON), Commonwealth Engineering Scholars Leadership Conference (CESLC) with intention of building community across student populations			ADEI, ADASGP, EAC, DSE, MEP, WEP, STPCP
Community and Belonging; Lack of diversity and inclusivity	UA2.8	Educate community members on the federally or institutionally required categories for broadening participation or affirmative action compliance to increase understanding of the benefits and challenges within equity audits			ADEI, ADASGP, CEOI, ASGP, EDCM, Dept DEI Leads
Community and Belonging; Lack of diversity and inclusivity	UA2.9	Provide opportunities for undergraduate students to identify groups and programs that enable connections that are salient to the multiple facets of identity			CEOI, ASGP, CRER, Dept DEI Leads, IPAC, CEOI-AB, PSEAS
Metrics	Department mentorship plans, mentoring workshops offered, DEI development and credentialing opportunities				
KPIs	% of undergraduate students participating in DEI workshops; Number of undergrad program coordinators allocating seminar time to discuss DEI, mentorship plans, and to promote development opportunities				
Mapping to COE and University Strategic Plans	University Strategic Plan DEI Goal 4: Recruit, support, and advance a diverse student body; COE Strategic Plan Goal 2 (Action 7): Equitable Access for Students & Representative Student Body; F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Prepare our students for success in their careers and life; IS1: Infrastructure and Support- Prioritize investment in our people				
References and Resources	CIMER ³⁷ , Additional resources to be identified in UA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	UA2.3, UA2.7	UA2.1-UA2.3, UA2.7, UA2.9	UA2.1-UA2.9	UA2.1-UA2.9	UA2.1-UA2.9



Table 6.6.3 Undergraduate Student Retention and Advancement

UA3: Provide equitable and inclusive access to career advancement, engineering facilities, programs, resources, and services, by being responsive to the needs of diverse engineering constituents.

Issues raised by undergraduate students and other stakeholders	Critical Intervention	Persons Responsible
Post-Pandemic Equity	UA3.1 Monitor and address inequitable post-pandemic impacts, particularly regarding gender, race, and disability; national origin may be important, as many countries were and still are disproportionately impacted	Dean’s Academic Committee, UPC, Dept DEI Leads
Inclusive Mentorship—unit-level organized mentorship	UA3.2 Conduct an Inventory of undergraduate Program Mentoring Programs to Identify strengths and gaps	Dean’s Academic Committee, Dept DEI Leads
Inclusive Mentorship—informal peer mentoring	UA3.3 Sustain and expand support for Informal mentoring via affinity groups and student organizations	CEOI, ASGP, CRER
Inclusive Mentorship—college level organized mentorship	UA3.4 Continue College-Level support for Diversity Round Table and Engineering Undergraduate Council	DSE, MEP, WEP, IEP, STPCP, CEOI-AB, IPAC, PSEAS
Provide Support for Gender Equity	UA3.5 Scale up intervention for gender inclusion such as WEPO, Facilitated study groups	DSE, WEP, MEP
Provide Support for student body diversity	UA3.6 Develop new interventions to reach students who would be uncomfortable in traditionally named groups MEP, WEP, Commonwealth Engineering Scholar (CES) groups	ADEI, Dept DEI Leads, DSE, CEOI-AB, IPAC, PSEAS
Provide support for students from underrepresented racial/ethnic groups	UA3.7 Scale up interventions that create welcome spaces for racially underrepresented students (such as MEPO, AEC)	CEOI, Dept DEI Leads
Community and Belonging; Lack of diversity and inclusivity	UA3.8 Develop a culture of appreciation for community members as Penn Staters, perhaps with a customer service philosophy such as FISH	CEOI, ASGP, CRER
Community and Belonging; Lack of diversity and inclusivity	UA3.9 Provide inclusive spaces for “minoritized” undergraduate students to connect without the burden of having to share “traumas” with or educate majority community members	CEOI, ASGP, CRER, UPCs, Dept DEI Leads
Community and Belonging; Lack of diversity and inclusivity	UA3.10 Establish physical space for students to congregate: First, for undergraduate programming, a space to accommodate 300. Second, to promote student connections, comfortable lounge spaces should be established for students	Dean’s Academic Committee, EMC
Community and Belonging; Lack of diversity and inclusivity	UA3.11 Intercultural training such as Cultural Intelligence Quotient (CQ) or Intercultural Development Index (IDI)	ADEI, ADE, ADCIPA, CEOI, GEE, ADTL-LCD

Table 6.6.3 Undergraduate Student Retention and Advancement (continued)

UA3: Provide equitable and inclusive access to career advancement, engineering facilities, programs, resources, and services, by being responsive to the needs of diverse engineering constituents.

Issues raised by undergraduate students and other stakeholders	Critical Intervention				Persons Responsible
Access	UA3.12 Launch a more open and inclusive Entrance to Major exception process				Dean’s Academic Committee
Access	UA3.13 Reduce cost barriers and provide financial support to participate in experiential learning opportunities such as internships, education abroad, and research.				Dean’s Academic Committee, SDDAR, SDCIE
Support of CWC students	UA3.14 Increase delivery of retention programming for first- and second-year students				CEOI, ASGP, CRER
Support of CWC students	UA3.15 Raise scholarship funds to offset the scholarship lost by leaving a CWC campus + tuition increase for upper-division in-major students 00 people is necessary.				ADEI, SDDAR, SDCIE
Retention	UA3.16 Develop better understanding of student experience related to the choice to participate in a Living Learning Community (LLC) –specifically URM students--and enhance marketing/outreach to increase participation.				ADEI, DSE, LLC Advisors, MEP, EDCM
Retention	UA3.17 Inventory/benchmark current participation rates of URM students in COE student organizations				DSE, ADEI, Advisors of Student Organizations
Retention	UA3.18 Successfully execute the Engineering Connect pilot to support the transition of first-year engineering students through equity minded interventions then expand to eventually implement at all campuses				ADASGP, ADEI, ECP
Retention	UA3.19 Develop additional proactive advising practices to identify and reach out to students who might be slipping through the cracks (ABC rate data, Canvas engagement data, Starfish flags, course repeat request details)				ADEI, ADE, ADASGP, ASGP, CEOI, DDAA
Retention	UA3.20 Expand offering of group advising sessions to reach students who might not come in for a 1-on-1 advising appointment				ASGP
Metrics	Increased offerings of mentor programs, facilitated study groups, affinity group structures				
KPI	Time to degree disaggregated by gender and race, undergraduate students can articulate an understanding of evaluation priorities, community survey data shows higher sense of belonging and perception of career opportunities, multifold increase in student participation in priority programs				
Mapping to COE and University Strategic Plans	University Strategic Plan Equity Goal 4: Recruit, support and advance a diverse student body, faculty and staff; COE SP Goal 2: Equitable Access for Students and Representative Student Body				
References and Resources	Cultural Intelligence (CQ) ⁴⁷ , Intercultural Development Inventory (IDI) ⁴⁸ , Thompson & Wu ⁴⁹ , Additional resources to be identified in UA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	UA3.1, UA3.3, UA3.5- UA3.7, UA3.11, UA3.14, UA3.16, UA3.18, UA3.19	UA3.1-UA3.7, UA3.9, UA3.11, UA3.14, UA3.16, UA3.18, UA3.19	UA3.1-UA3.9, UA3.11- UA3.19	UA3.1-UA3.20	UA3.1-UA3.20

Table 6.6.4 Undergraduate Student Recruitment

UA4: Recruit diverse and inclusive undergraduate students in all programs.					
Issues raised by undergraduate students and other stakeholders	Critical Intervention				Persons Responsible
Outreach	UA4.1 Expand and provide administrative support for pre-engineering and computer science camp offerings				CEOI, Dept Camp Directors, STPCP
Outreach	UA4.2 Expand PreK-12 Inclusive STEM curricula				STPCP, YES ⁵¹
Outreach	UA4.3 Develop strong collaborations for Engagement of P-12 communities				STPCP, Dept DEI Leads
Outreach	UA4.4 Build on successful outreach programs that develop students, staff and faculty as Engineering Ambassadors and affinity-based recruiting leaders				CEOI, EA, DRT, EUC, Students, Faculty and Staff engaged in outreach
Inclusive Recruitment	UA4.5 Create a 5-year timeline of actions and milestones for recruitment to Increase visibility of all PSU engineering opportunities across the state, highlighting the comprehensive set of engineering degrees offered at all campuses, with specific attention to opportunities for college of engineering students at the Commonwealth campuses				Dean’s Academic Committee, STPCP, ECP, EDCM
Inclusive Recruitment	UA4.6 Adopt/develop COE recommendations for equitable and inclusive recruitment				Dean’s Academic Committee, Dept DEI Leads
Inclusive Recruitment	UA4.7 Assess recruitment, admission, scholarship award, yield and retention of students, esp. underrepresented students				Dean’s Academic Committee, DDAA
Admissions and Scholarships	UA4.8 Increase amount of scholarship funding available for incoming students through philanthropy and corporate engagement				ADEI, SDDAR, SDCIE, FO
Gender Equity	UA4.9 Continue communications and programming to enhance gender equity				Dean’s Academic Committee, EDCM, SDMC, CEOI, Dept DEI Leads
Diversity of Student Body	UA4.10 Increase programming and outreach to URM students in the PA population				ADEI, DSE, STPCP, Dept DEI Leads
Metrics	Increased Offerings from COE of curricula to P-12, Structure and information for COE-led Camps implementation; Curriculum and policies for engineering outreach with faculty, staff, and students, Increase applications from URM, Increased admission of URM students, Increased applications from women, Increased admission of women				
KPI	Increased enrollment of URM students, increase scholarship funding for contributions to the diversity of the student body, Increased enrollment of women, Equity in semester grades (As and Bs) across groups. Increased retention at ETM; Graduation rates similar across all groups; Camp and curricular outreach participants report enhanced interests in promoting and/or pursuing STEM careers				
Mapping to COE and University Strategic Plans	University Strategic Plan DEI Goal 4: Recruit, support, and advance a diverse student body; COE SP Goal 2 (Action 7): Equitable Access for Students & Representative Student Body; F3: Engaging Principles of Inclusion, Equity, and Diversity; TE3: Prepare our students for success in their careers and life; IS1: Infrastructure and Support- Prioritize investment in our people				
References and Resources	Thompson & Wu ⁴⁹ , Cunningham et al ⁵⁰ , Youth Engineering Solutions (YES) ⁵¹ , Engineering Ambassadors ⁵² , Additional resources to be identified in UA1.4				
Implementation Timeline	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	UA4.1-UA4.3, UA4.7-UA4.10	UA4.1-UA4.4, UA4.7-UA4.10	UA4.1- UA4.10	UA4.1 - UA4.10	UA4.1 - UA4.10

References

- ¹ Griffin, K, Mabe A and Bennett (2021) "A Guidebook for a Campus Self-Assessment of Successes and Challenges in STEM Faculty Diversity and Inclusion" <https://www.aplu.org/library/guidebook-for-a-campus-self-assessment-of-successes-and-challenges-in-stem-faculty-diversity-and-inclusion/file> Accessed 08/18/2021
- ² Gender and Diversity KPI Alliance (2021) "KPIs That Provide a Universal Measurement for Gender & Diversity" <https://www.gdka.org/> Accessed 08/29/2021
- ³ ASEE EDGE "2020 National Gender Equity Indicators Deans' Focus Group Report" <https://edge.asee.org/wp-content/uploads/sites/20/2021/04/DeanFocusGroupReport3-30-21.pdf> Accessed 08/29/2021
- ⁴ University of Michigan ADVANCE (2021) "Resources" <https://advance.umich.edu/resources/> Accessed 08/29/2021
- ⁵ WEPAN (2021) "TECAID is Transforming Engineering Culture to Advance Inclusion and Diversity" <https://www.wepan.org/mpage/TECAID> Accessed 08/18/2021
- ⁶ Penn State Office of Provost (2021) "Our Commitment to Impact: The Pennsylvania State University's Strategic Plan for 2016 to 2025" <https://strategicplan.psu.edu> Accessed 08/18/2021
- ⁷ UMASS ADVANCE (2021) "ADVANCE Mutual Mentoring Team Grant Program Guidelines" <https://www.umass.edu/advance/mutual-mentoring-guidelines> Accessed 08/28/2021
- ⁸ A.I. Roca (2011) We Are All Minorities, so Let's Help Each Other: Introducing DiverseScholar. <https://www.minoritypostdoc.org/articles/2011-2-0-roca-welcome> Accessed 08/28/2021
- ⁹ National Center for Faculty Development and Diversity (2021) "On-demand access to the mentoring, tools, and support you need to be successful in the Academy" <https://www.facultydiversity.org> Accessed 08/28/2021
- ¹⁰ Paterno-Taylor (2019) "Today's Affinity Groups: Risks and Rewards" <https://www.shrm.org/resourcesandtools/legal-and-compliance/employment-law/pages/affinity-groups-risks-rewards.aspx> Accessed (08/28/2021)
- ¹¹ California State University, Bakersfield (2021) "Affinity Groups" <https://www.csub.edu/equity-inclusion-compliance/affinity-groups> Accessed 08/28/2021
- ¹² Michigan Technological University (2021) "Advance Career Management (ACM) Affinity Groups" <https://www.mtu.edu/advance/initiatives/acm/affinitygroups/#:~:text=Affinity%20groups%20are%20peer%20to,20and%20Teaching%20Excellence%2C%20and%20Leadership> Accessed 08/29/2021
- ¹³ University of California, Davis (2021) "UC Davis STEM Faculty Resource Guide - For Faculty Starting to Learn about Equity, Inclusion, Justice and Anti-Racism" <https://docs.google.com/document/d/1reqEoPhe0rfyjk16Uwyy0aeJGA658fr4k228O1LcRE/edit> Accessed 08/29/2021
- ¹⁴ Julia Taylor Kennedy (2020) "What Majority Think about D&I and How to Engage Them In IT: Belonging Series 2" <https://pennstateoffice365.sharepoint.com/sites/DiversityEquityandInclusionResources/Shared%20Documents/DEI%20research/Belonging%20and%20Inclusion/Kennedy%20et%20al%20-%202020%20-%20What%20majority%20men%20really%20think%20about%20D&I.pdf?CT=1620864472015&OR=ItemsView> Accessed 08/29/2021
- ¹⁵ Shields, S.A. (2021) "Workshop Activity for Gender Equity Simulation" <https://wages.la.psu.edu/> Accessed 09/11/2021
- ¹⁶ Cundiff, J. L., Warner, L. R., McCormick-Huhn, K., & Shields, S. A. (in press; 2021). The Workshop Activity for Gender Equity Simulation (WAGES): An Evidence-Based Experiential Learning Tool for Educating about Gender Bias across Learning and Work Contexts. In A. Nordstrom & W. Goodfriend (Eds.), *Innovative stigma and discrimination reduction programs*. Abingdon, United Kingdom: Taylor & Francis Routledge.
- ¹⁷ McCormick-Huhn, K., Kim, L. M., & Shields, S. A. (2019). [Unconscious bias interventions for business: An initial test of WAGES-Business \(Workshop Activity for Gender Equity Simulation\) and Google's "re:Work" trainings](#). *Analyses of Social Issues and Public Policy*, 0, 1-40. DOI: 10.1111/asap.12191
- ¹⁸ Shields, S. A., McCormick, K. T., Diccio, E. C., & Zawadzki, M. J. (2018). Demonstrating the cumulative effects of unconscious bias with WAGES-Academic (Workshop Activity for Gender Equity Simulation): [Short and long-term impact on faculty and administrators](#). *Journal of Women and Minorities in Science and Engineering* 24(2):147-163. [10.1615/JWomenMinorScienEng.2018014113](https://doi.org/10.1615/JWomenMinorScienEng.2018014113)
- ¹⁹ NSF ADVANCE (2021) "Faculty Equity in a Time of COVID - Panel Discussion March 10, 2021: Recommended Resources" <https://docs.google.com/document/d/1-wHKIDFcGExATjNEhXFbuTOMe9xqvclJ/edit> Accessed 08/29/2021
- ²⁰ Ebony McGee and Chris Pfund (2021) "Aspire Equity in Action Series: Enhancing Inclusive Mentorship by Developing Supportive Strategies and Removing Barriers" https://drive.google.com/file/d/1oelk8lr3nKiUh_F0gLCaR6eKctPaKDAP/view Accessed 08/29/2021
- ²¹ Aspire Alliance (2021) "Aspire Equity in Action Series - Inclusive Mentoring Readings" <https://drive.google.com/file/d/1VvOM0icXtDlly5-Wu3gI56rrWwvncHvX/view> Accessed 08/29/2021
- ²² UNC Center for faculty excellence (2021) "Targeting Equity in Access to Mentoring (TEAM) ADVANCE" <https://cfe.unc.edu/team-advance/> Accessed 08/29/2021

- ²³ American Council on Education (ACE) (2021) “Equity-Minded Faculty Workloads: What We Can and Should Do Now” <https://www.acenet.edu/Documents/Equity-Minded-Faculty-Workloads.pdf> Accessed 08/29/2021
- ²⁴ ASEE (2021) “Engineering Deans Gender Equity (EDGE) Initiative: Using Dashboards To Foster Equitable Faculty Workloads” https://resources.asee.org/course_catalog/egde_initiative/ Accessed 08/29/2021
- ²⁵ ASEE (2021) “Engineering Deans Gender Equity (EDGE) Initiative: Using Dashboards To Foster Equitable Faculty Workloads Webinar” <https://www.youtube.com/watch?v=fmqLr7PFgUA> Accessed 08/29/2021
- ²⁶ University of Maryland (2019) “The Faculty Workload and Rewards Project” <https://advance.umd.edu/fwrp/home> accessed 08/29/2021
- ²⁷ Charthouse Learning (2021) “The Four Practices of The FISH! Philosophy” <https://www.fishphilosophy.com/fish-philosophy-story/#four-practices> Accessed 08/29/2021
- ²⁸ Disney Institute (2021) “Discover Our Core Expertise: Disney Institute Fundamentals Work Together as a System” <https://www.disneyinstitute.com/about/expertise/> Accessed 08/29/2021
- ²⁹ University of California San Diego (2021) “Staff Associations at UC San Diego” <https://blink.ucsd.edu/HR/services/associations/index.html> Accessed 08/29/2021
- ³⁰ University of Michigan ADVANCE (2021) “DOCUMENTS AND RESOURCES DEVELOPED TO SUPPORT THE ADVANCE MISSION” <https://advance.umich.edu/wp-content/uploads/2018/09/DOCUMENTSANDRESOURCESforDEI.pdf> Accessed 08/29/2021
- ³¹ University of Michigan ADVANCE (2021) “STRIDE Recommended Readings” <https://advance.umich.edu/stride-readings/#> Accessed 08/29/2021
- ³² University of Michigan ADVANCE (2021) “Faculty Recruitment Workshop for Diversity and Excellence” https://advance.umich.edu/wp-content/uploads/2021/04/STRIDE_Remote-FRW_102620.pdf
- ³³ University of Michigan ADVANCE (2021) “Handbook for Faculty Searches and Hiring” <https://advance.umich.edu/wp-content/uploads/2018/10/Handbook-for-Faculty-Searches-and-Hiring.pdf> Accessed 08/29/2021
- ³⁴ University of Michigan ADVANCE (2021) “STRIDE Faculty Recruitment Workshop WHAT CAN WE DO? TOP 10 BEST PRACTICES” <https://advance.umich.edu/wp-content/uploads/2019/09/STRIDE-Ten-Best-Practices072119.pdf> Accessed 08/29/2021
- ³⁵ Penn State Faculty Ombudspersons <https://senate.psu.edu/faculty/faculty-ombudspersons/> Accessed 10/4/2021
- ³⁶ Penn State College of Engineering Constitution (1999) <https://senate.psu.edu/faculty/unit-constitutions/college-of-engineering-constitution/> Accessed 10/4/2021
- ³⁷ Center for the Improvement of Mentored Experiences in Research <https://cimerproject.org/> Accessed 10/4/2021
- ³⁸ University of California (2021) “President’s Postdoctoral Fellowship Program: Advancing excellence through faculty diversity” <https://ppfp.ucop.edu/info/about-ppfp/partnerships.html> Accessed 08/22/2021
- ³⁹ MIT (2021) Graduate Student Roadmap. <https://ovc.mit.edu/graduate-student-roadmap/> accessed 08/28/2021
- ⁴⁰ Institute for Broadening Participation (2018) Resource Toolbox <https://www.pathwaystoscience.org/toolbox.aspx#Graduate%20School> accessed 08/28/2021
- ⁴¹ National Science Foundation (2022) “Alliances for Graduate Education and the Professoriate (AGEP)” <https://beta.nsf.gov/funding/opportunities/alliances-graduate-education-and-professoriate-agep> Accessed 05/02/2022
- ⁴² The Pennsylvania State University (2022) “Penn State Sloan Scholars” <https://gradschool.psu.edu/diversity/sloanscholars/> Accessed 05/02/2022
- ⁴³ The Pennsylvania State University (2022) “Diversity” <https://gradschool.psu.edu/diversity/> Accessed 05/02/2022
- ⁴⁴ MEGA (2021) <https://sites.psu.edu/mega/> accessed 08/28/2021
- ⁴⁵ Graduate Women in Engineering (2022) <https://sites.psu.edu/gradwie/> Accessed 08/28/2021
- ⁴⁶ Student Success Center “Community Information and Advocacy: How we define student success” <https://success.psu.edu/community-information-and-advocacy> Accessed 05/02/2022
- ⁴⁷ Cultural Intelligence Center (2022) “Blog” <https://culturalq.com/about-cultural-intelligence/blog/> Accessed 05/02/2022
- ⁴⁸ IDI, LLC “Intercultural Competence Using the IDI” <https://idiinventory.com/generalinformation/> Accessed 05/02/2022
- ⁴⁹ Thompson, L. D., & Wu, Z. (2021, January), *Increasing the Enrollment, Retention, and Graduation of Undergraduate Women Majoring in Computing* Paper presented at 2021 CoNECD, Virtual. <https://peer.asee.org/36100>
- ⁵⁰ Cunningham, C.M., Lachapelle, C.P., Brennan, R.T., Kelly, G.J., Tunis, C.S.A., Gentry, C.A., “The impact of engineering curriculum design principles on elementary students’ engineering and science learning,” <https://doi.org/10.1002/tea.21601>
- ⁵¹ Youth Engineering Solutions--YES (2022) <https://www.yes.psu.edu/index.aspx> , Accessed 5/3/2022
- ⁵² Penn State Engineering Ambassadors (2022) <https://www.leonhardcenter.psu.edu/engineering-ambassadors/index.aspx> , Accessed 5/3/2022