

Departmental BPC Plan
College of Information Sciences and Technology
Penn State University



Effective dates of Plan: 09/20/2023 - 09/20/2025

Contact: Jocelyn Bennett Garraway, Assistant Dean for Diversity, Equity, and Inclusion, jmb15@psu.edu; Carleen Maitland, Associate Dean for Research, cfm12@psu.edu

1. Context

The Pennsylvania State University (PSU) is a land-grant institution serving Pennsylvania with twenty-four campuses and internationally with the World Campus. Penn State's College of Information Sciences and Technology (IST) offers several undergraduate and graduate degree programs in computing. This BPC Plan supports IST at University Park, Penn State's largest campus, and IST's World Campus, Penn State's online program.

From 2017 to 2021, IST's percent of women graduate students increased from 26.5% (n=36) to 37% (n=68). At the same time, the women undergraduate student population increased from 22.7% (n=340) to 25.1% (n=432). In contrast, the population of Pennsylvania is 50.6% women. IST student population data includes a percentage of students from underrepresented populations in computing (UPiC) including Black/African American, Hispanic/Latinx and Indigenous/Native American groups. From 2017 to 2021, IST saw a change in percent of all students from UPiC from 14.4% (n=183) to 14.2% (n=244) for undergraduate students; graduate student percentages increased in the same time span but are under 5% (specific numbers withheld to preserve anonymity). An overarching aim of our BPC plan is to increase the representation of all these groups. We aim to redefine, build, and boost inclusive research, teaching, learning, and work environment for faculty, staff, and students.

2. Goals for the BPC Plan Period (Taken from the IST Strategic Plan)

G1: Cultural Consciousness: Build a culturally conscious and competent work environment within IST to improve the college climate from baseline data collected in October 2020 in which 18% of students reported feelings of exclusion based on some aspect of their identity. By December 2024, data will be collected to measure improvements in college climate.

G2: Increased representation of women and students from UPiC: By August 2027, we will increase the percentages of women graduate and undergraduate students to 40% and 28%, respectively; increase the percentage of undergraduate and graduate students from UPiC to 17% and 5%, respectively; and increase the number of faculty and postdocs from UPiC.

G3: Engagement of the next generation of scholars: By August 2027 IST and its faculty will engage in twenty activities to develop a diverse pipeline for the future STEM workforce. These activities will target several existing external K-12 programs and organizations wherein at least half of the participants are girls and/or students from UPiC.

3. Activities

A1: IST Inclusion and BPC Awareness Training [G1, G2; E1], Jocelyn Bennett Garraway: Faculty will complete cultural competency training offered by Penn State, such as the Advancing Meaningful Diversity in the Workplace module, or another on-or-off-campus BPC-related training.

A2: President's Postdoctoral Fellowship Program (PPFP) [G2; E2, E3], Jeff Bardzell: As a participating College in the President's Postdoc Fellowship Program, which focuses on BPC-related research, teaching, and service, faculty will recruit postdoc scholars and leverage the University's inclusive hiring training.

A3: Undergraduate and Graduate Student Training [G1, G2; E4], Lisa Lenze: Training for undergraduate and graduate teaching assistants includes resources to develop their understanding and professional abilities in inclusion. Faculty can supplement this training by implementing specific activities with teaching assistants in the classroom.

A4: Be You In Tech Conference [G1; E2, E3], Madhavi Kari: IST will offer an annual conference for IST's students on bringing their authentic selves to the workplace with a focus on being inclusive and welcoming to all. Faculty will attend and participate as speakers and moderators during the conference.

A5: Women in IST (WIST)/ Women, International, Racial Ethnic Diversity Intercultural Network (WIRED IN) [G1; E2, E3], Tyler Estright, Madhavi Kari: WIST/WIRED IN spearheads several initiatives to support diversity in the College including **(A8a)** an annual Wikipedia Edit-a-Thon detailing contributions of women in computing, **(A8b)** travel to the Grace Hopper and Tapia conference, and the **(A8c)** IST Insiders in Tech recruiting event. Faculty will participate in these events.

A6: Inclusive Teaching Articles and Training [G1, G2; E1, E4], Chris Gamrat: IST faculty have published several articles and resources for inclusive teaching. This effort will continue and be bolstered through additional faculty partnerships, training sessions, and teaching pilots. Faculty will continue to implement the insights reflected in these peer publications.

A7: HBCU/Hispanic-Latinx Serving Institutions Partnerships [G2; E2], Jocelyn Bennett Garraway: Faculty can participate in the partnership programs which connect faculty to students at HBCU/HSI institutions.

A8: PA Space Grant [G2; E2, E3], Vasant Honavar, Aron Laszka, John Miller, Urjaswala Vora and James Wang: PSU runs a set of programs to encourage first-year undergraduates to engage in research, with an emphasis on including women and students from UPiC (defined as African American, Hispanic, Native American, or Pacific Islander students). To participate, faculty register with PA Space Grant as mentors and propose a project for students.

A9 Millennium Scholars [G2; E2, E3], Amy Freeman: IST participates in a university-wide program to recruit undergraduates interested in a Ph.D. after completing their undergraduate degree, emphasizing recruiting students "who are committed to increasing the diversity of professionals in STEM-related disciplines." Faculty participate as interviewers and research advisors.

A10: K-12 Student and Teacher Engagement [G3; E1], Chris Gamrat: Faculty will accompany staff on visits to external programs (i.e., Girl Scouts of the USA, PA school districts, wherein at least half of the participants are girls and/or students from UPiC) to engage in hands-on IST activities and partner with schools and provide resources for teachers to disseminate cutting-edge research demonstrating real-world implications. Activities and materials are designed to increase the appeal of computing to a broad range of students.

4. Measurement

E1: Track faculty and staff participation in activities.

E2: Track student and postdoc participation in activities.

E3: Track advertisement of opportunities.

E4: Track metrics that indicate success toward cultural goals assessed in the climate survey and student evaluations in classes where inclusive teaching practices have been implemented.