

**Departmental BPC Plan
Computer Science and Engineering
Pennsylvania State University**



Effective dates of Plan: 08/06/2024 - 08/06/2026

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1. Context

Computer Science and Engineering (CSE) in the School of Electrical Engineering and Computer Science (EECS) at Penn State offers three undergraduate degrees (Computer Science, Computer Engineering, and Data Science), three graduate degrees (MS, M.Eng. and Ph.D.). Based on the 2023-2024 data, women and students from populations underrepresented in computing (including Black/African Americans, Hispanic, students with disabilities) make 14% and 7% of the undergraduate enrollment and 23% and 2% of the graduate enrollment in CSE, respectively. The corresponding College of Engineering (CoE) numbers are 22% women and 11% students from populations underrepresented in computing for undergraduates and 26% and 3% for graduate students. Aligned with the university diversity, equity, inclusion and belonging (DEIB) plan, CoE has launched a comprehensive equity and inclusion initiative with an ambitious goal of achieving proportional representation of women and all underrepresented groups in computing. In this context, the goal of this BPC plan is to increase the participation of women and students from populations underrepresented in computing, to close the equity gap across the student body in education and research, and to foster a BPC-supporting work environment.

2. Goals

G1: Annually increase enrollment of undergraduate and graduate women and students from populations underrepresented in computing in CSE aligned with the CoE equity and inclusion goals.

3. Activities and Measurement

- A1: [**Collaborative effort with the CoE/University:**] Focus on actively recruiting women and students from populations underrepresented in computing by working with the College and university admissions office. The department will work in close collaboration with the Associate Dean for Equity and Inclusion in the CoE in all of these areas. (Contact: Chita Das)
- A2: [**Engaging professional organizations**] Use resources from various BPC-aligned organizations such as the National Association of Multicultural Engineering Program Advocates (NAMEPA), Sloan University Centers of Exemplary Mentoring, and Women in Engineering Program Advocates Network (WEPAN), NCWIT, CRA-WP, and Northeastern's CIC, to learn how to improve recruiting and retention. (Contact: Chita Das, John Sampson)
- A3: [**PreK-12 efforts**] Engage in CS specific pre-college outreach programs with the local school district for stimulating early interest in computing. Specific activities include EECS run summer camp for girls, Penn State's STEM Open House, Summer Research

Opportunities Program (SROP) programs for recruiting and CS Ambassador program, each of which has a BPC focus. (Contact: Jack Sampson)

- A4: [**Customized Graduate recruiting**] We will recruit and retain graduate women and students from populations underrepresented in computing, collaborate with the Multicultural Engineering Graduate Student Association (MEGA) and Graduate Women in Engineering (GradWIE) programs. MEGA encompasses several programs such as the Multicultural Engineering Program (MEP), Black Graduate Student Association (BGSA), Society of Hispanic Professional Engineers (SHPE), and National Society of Black Engineers (NSBE). Moreover, the CoE is a partner with the National GEM Consortium that leads the Grad Lab, which facilitates the participation of populations underrepresented in computing for graduate studies in engineering and science. In addition to working with the GEM/Grad lab, two of our faculty members have developed a partnership with the Black in AI (BAI) group to attract more students from populations underrepresented in computing to our graduate program and we hope to develop recruiting relationships with HBCUs. (Contact: Abhinav Verma, Kiwan Maeng)
- A5: [**Inclusive teaching**] (a) Discuss and include the university inclusivity mission statement in the course syllabus. (b) Engage and encourage faculty to adopt inclusive teaching and mentoring practice by attending seminars offered by the Leonhard Center for Enhancement of Engineering and Schreyer Institute for Teaching Excellence. Further, we will (c) appoint faculty members for various BPC functions. (Contact: Catherine Murphy)
- A6: [**TALA training**] Train undergraduate LAs and graduate TAs in inclusive teaching and equitable grading practices. (Jack Sampson)
- A7: [**Respond to climate survey**]: Collect student, faculty and staff survey data through EECS DEIB committee for improving the educational environment. Analyze the survey results and take corrective actions. (Contact: EECS DEIB committee)
- M1: [**Assessment of Goal 1 Activities and Achievements**]
- (i) Track the recruiting trend (increase in female and underrepresented student numbers) and retention data through our proposed action plans in the undergraduate and graduate programs on an annual basis.
 - (ii) Track the benefits of working with various organizations/programs.
 - (iii) Track faculty, staff and TA/LA participation in various DEIB related activities.

 - (iv) Check that the inclusive teaching practices are being implemented.