

Departmental BPC Plan
Computer and Information Science and Engineering
University of Florida

Effective dates of Plan: 02/13/2024 - 02/13/2026

Contact: Dr. Kyla McMullen - Associate Professor - drkyla@ufl.edu



1. Context

The University of Florida (UF) is a large, public R1 University with over 55,211 students in the suburban city of Gainesville, FL. In the 2022-2023 academic year (AY), 5% of UF's students were African American, 24% were Hispanic, 56% were women, and 12% were persons with disabilities. In the 2022-2023 academic year (AY), there were 34,552 undergraduate (UG) students and 20,659 graduate (G) students. In the 2022-2023 AY, the CISE department was in the top 20 Computer Science departments at US public universities. In 2022-23 AY, within the CISE department, 3% of the UG and 8% of G students were African American, 23% of the UG and 8% of the G students were Hispanic, and 23% of the UG students and 23% of G students were women.

2. Goals

G1: **[Local Community Engagement]** Provide BPC-focused programs and outreach efforts for high school students each year.

G2: **[Faculty Development]** Equip CISE Faculty with the tools and knowledge to teach and mentor students from various backgrounds that are underrepresented in computing. Measure and annually increase faculty participation in relevant training.

G3: **[Student Retention & Development]** – We aim to measure and annually increase the retention of underrepresented students who identify as African American, Hispanic, and/or women in the CISE undergraduate and graduate programs, and increase their program satisfaction.

G4:**[Increase Involvement in Computing Research]** – We aim to measure and annually increase the number of students who identify as African American, Hispanic, and/or women who are engaged in Computer Science Research.

3. Activities and Measurement

A1: **[Rhythm in Bytes Workshop (G1)]** – Contact: Dr. Kyla McMullen – Dr. David James will conduct a "Rhythm in Bytes" workshop as an outreach activity for students who identify as African American and/or Hispanic. The workshop's success will be measured by the number of attendees and the change in their attitudes towards computing as a result of participating in the program.

A2: **[Code IT Day Support (G1)]** – Contact: Dr. Juan Gilbert - Faculty can provide resources for and support the Code IT Day event, allowing students to learn about Computer Science in a fun and hands-on environment. The goal of the event is to recruit students who identify as women, African American and/or Hispanic to form teams and learn to build and program interactive applications and two different robots. Code-IT day facilitators represent the same communities as the students it aims to recruit.

A3: **[Data Collection (G3)]** – Contact: Dr. Kyla McMullen - To establish baseline numbers, we aim to create and implement a systematic, departmental data collection and reporting plan. We will design and administer a "temperature check" amongst CISE students, faculty, and staff to assess structural barriers to equity in the department and compare the results with national surveys (e.g., from NCWIT). Data will be disaggregated by gender, race, and ethnicity.

A4: **[Townhalls (G3)]** Contact: Kristina Sapp - To understand the issues that are leading to the representation issues, a series of townhalls will be held for students who identify as African American, Hispanic, and/or women to voice concerns and inform future activities. The success will be measured by a post-townhall survey assessing the usefulness of the townhall.

A5: **[Support Community (G3)]** A faculty member will serve as the faculty mentor for a specific underrepresented demographic group (e.g., women, African Americans, Latino/a/x, Indigenous populations, students with disabilities) and attend their national conference. Funds will be allocated to help these groups attend their demographic-specific national conference (e.g., Grace Hopper, NSBE, SHPE, AISES, SIGACCESS). Success will be measured by a short survey assessing the impact of the conference on students' abilities to create community & self-efficacy.

A6: **[Faculty and Staff Training (G2, G3)]** Faculty and staff participate in workshops and training modules offered by the Center for Inclusion and Multicultural Engagement on topics such as: Foundational Diversity, Anti-racism Education, Allyship and Action, Inclusive Leadership, and Understanding Bias. Success will be measured by the number of faculty and staff who report taking one or more of these modules. Faculty can also complete nationally verified modules, such as NCWIT's *Introduction to Diversifying Undergraduate Computing Programs* Course. In addition, the department can host a "*Holistic Critical Mentoring*" workshop for all interested faculty, which focuses on inclusive mentoring practices.

A7: **[Increasing Diversity of Computing Research Involvement (G4)]** – Faculty mentor potential graduate students who identify as African American, Hispanic, and/or women. Undergraduates will be recruited from the UF MACHEN Florida Opportunity Scholars (MFOS) program, whose mission is to provide individual support for graduating first-generation, low-income undergraduate students. We will also recruit using the University Scholars Program (USP), which supports undergraduate students working with faculty in research. In the summer, faculty will recruit students from the DREU (Distributed Research Experiences for Undergraduates) program to gain research experience in their labs. We will work with fellowship programs like the McNair/McKnight programs designed to encourage students from underrepresented groups to pursue graduate school. Faculty can also volunteer to be a CSGrad4US faculty coach, in which they will provide individual help with graduate application development and identification of Ph.D. programs matching the student's interest and background. Assessment will be conducted by comparing the number of underrepresented students participating in research with faculty to previous years' data.