Departmental BPC Plan
School of Computer Science and Computer Engineering
University of Southern Mississippi

Effective Dates of Plan: 02/13/2023- 02/13/2025
Contact: Dr. Dara Jaiyeola-Ajayi, Assistant Professor of Computer Science,
mercy.jaiyeola@usm.edu

1. Context

The University of Southern Mississippi (USM) is a R1 doctoral research university located on two campuses, Hattiesburg and Long Beach, Mississippi. Part of the USM Mission states "The University nurtures student success by providing distinctive and competitive educational programs embedded in a welcoming environment, preparing a diverse student population to embark on meaningful life endeavors."

Enrollment figures from Fall 2022 for the University are as follows:
- Of 10,212 undergraduate students, 65% overall were women, and 28% total were Black/African American
- Of 3272 graduate students, 66% overall were women, and 25% total were black/African American

The School of Computer Sciences and Computer Engineering (CSCE) offers bachelor's degrees in computer science (CS), applied CS, information technology, computer engineering, and cybersecurity. At the graduate level, CSCE offers a master's degree in CS, and a PhD degree in computational science. Fall 2022 School enrollment totaled 565. Representation across that enrollment included: among 477 undergraduates (17.6% total women, 25% black/African American); among 88 graduate students: (34% total women, 4.5% black/African American). Of 19 faculty, one is a Hispanic/Latinx male, four are Black or African American, and five are women (three are Black/African American women).

The School of CSCE commits faculty and staff resources to increasing the number of females and Black/African American students at the undergraduate level and supporting the transition of those students to graduate school and/or the workforce. School leadership is committed to increasing enrollment to reflect the diversity of Mississippi. In the Mississippi K-12 public schools, half of the students are black/African American and half of all students are female.

2. Goals

In the USM School of CSCE, we seek to maintain a student-engaged learning environment in which all persons, including racial minorities, persons with disabilities, and persons who identify with the LBGTQ+ community are welcomed and encouraged to achieve excellence on their educational and career pathways. We listen to and celebrate all voices.

Specific, measurable goals are noted below:

G1:   Increase the number of undergraduate females across CSCE undergraduate majors to 27% by 2025.

G2:   Increase the number of undergraduate black/African American students across CSCE majors to 34% by 2025.

G3:   By 2025, we will implement a process for assessing effectiveness of interventions and activities designed to recruit and retain women and students from historically minoritized racial/ethnic groups in computing majors in the School.

3. Activities and Measurements

A1:   Activities to Support Student Recruitment and Engagement (G1, G2)

    a. Cyber to The Top K-12 Outreach program to engage diverse K-12 students with computing and cybersecurity, Contact Person: Dr. Sarah B. Lee, sarah.b.lee@usm.edu
Measurement: survey of participants following activity; tracking of participants who matriculate to the School of CSCE using NCWIT's Entry Survey for College Majors

    b. Mississippi Aspirations in Computing Award Program, in Collaboration with the National Center for Women and Information Technology to engage high school women, genderqueer and nonbinary students, Contact Person: Dr. Dara Jaiyeola-Ajayi, mercy.jaiyeola@usm.edu
Measurement: survey of participants following awards event; tracking of participants who matriculate to the School of CSCE using NCWIT's Entry Survey for College Majors

    c. Launch and promote student groups including Women in Cybersecurity, ACM-W, Society of Black Engineers, Contact Person: Dr. Aleise McGowan, aleise.mcgowan@usm.edu
Measurement: maintain numbers of faculty and student participants and the number of events by semester to track growth

    d. Maintain an active community of student participants in the Louis Stokes Mississippi Alliance for Minority Participation, Contact Person: Ms. Soundra Newson, soundra.newson@usm.edu
Measurement: maintain records of participation to track growth, tracking transitions to industry and graduate school following graduation

A2:   Providing support for CSCE students who are part of or identify with under-represented groups (G1, G2)

    a. Provide access to mentors for students among staff and/or faculty who represent one or more group that is historically underrepresented in computing, Contact Person: Dr. Sarah B. Lee, sarah.b.lee@usm.edu

    b. Implement a tutoring program that includes paid peer-tutors who represent one or more group that is historically underrepresented in computing, Contact Person: Dr. Sarah B. Lee, sarah.b.lee@usm.edu
Measurement: Require tutor and mentors s to keep a list of tutoring/mentoring meetings to track volume; annual survey of students to determine level of access to and quality of tutoring and mentoring services

A3:   Data Driven Continuous Improvement of BPC Activities (G3), Contact Person: Mr. Abiodun Ajayi, abiodun.ajayi@usm.edu

    a. Increase marketing of the CRA Data Buddies survey among students to increase data input about departmental climate

    b. Implement surveys to gain input from students' participation in activities to measure impact
Measurement: Annual report to the faculty with BPC activities assessment and evaluation of BPC goals, setting new ones as appropriate.