Departmental BPC Plan
Department of Computer Science
North Carolina State University

Effective dates of plan: 12/14/2022- 12/14/2024
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Context: The North Carolina State University Computer Science (CSC) department's mission includes establishing a joyful environment that reflects our values of innovation, diversity, collaboration, and lifelong learning. NC is the 17th most racially diverse state in the U.S. (2021, US Census Bureau), and most of NC State's undergraduates are NC residents (88.6%). The CSC department is committed to increasing enrollment, retention, and graduation of women, Black, and Hispanic students.

	NCSU Computer Science Enrollment Fall 2021				NCSU College of Engineering Enrollment			NCSU CS degrees awarded (IPEDS, 2021)			NC CS degrees awarded (IPEDS, 2021)		
	Total	Women	Black	Hisp.	Women	Black	Hisp.	Women	Black	Hisp.	Women	Black	Hisp.
Undergraduate	1329	299	49	61				50	8	12	317	173	124
%	100%	22.5%	3.7%	4.6%	25.9%	3.8%	6.5%	20.5%	3.3%	4.9%	19.0%	10.4%	7.4%
Graduate	718	198	10	9				76	0	0	627	13	4
%	100%	27.6%	1.4%	1.3%	26.0%	2.1%	2.0%	28.0%	0.0%	0.0%	29.8%	2.1%	0.8%

Goal G1: **Student body Diversity**: To increase the diversity of our computer science student population, specifically those who identify as women and/or Black/Hispanic to match or surpass NCSU College of Engineering participation rates, or to identify barriers to this goal, by December 2025.

   Activity A1a: The department will work with The Engineering Place at NCSU to recruit and host K-12 students from targeted groups to camps, research/internship programs, and events. (Cateté, Battestilli)
   Activity A1b: We will establish and support identity/diversity-focused student organizations and partner with diversity-focused organizations such as NSBE, SHPE, and Juntos to strengthen relationships with Black and Hispanic community members. (MacNeil)
   Activity A1c: We will attend NC Louis Stokes Alliance For Minority Participation Undergrad Research Conference (LSAMP URC) to recruit potential Black and Hispanic graduate students. (Stallmann)
   Activity A1d: The department will create marketing materials intentionally for HBCU, HSI, and non-doctoral institutions to highlight inclusive practices and opportunities in CS. (Tate)

Evaluation E1: The Diversity in Admissions and Matriculation committee will implement new recurring evaluation metrics to better understand the current admissions, retention, and matriculation of diverse undergraduate students into Computer Science (Heckman). The department graduate office will continue to collect and report demographic data about the computer science graduate population (Rouskas). Event organizers will report the number of persons reached and demographic data when available.

Goal G2: Undergraduate Research and Mentorship: To establish a baseline for the diversity of undergraduate research students by December 2023, and to increase the research participation of computer science undergraduates identifying as women and/or Black, Hispanic by December 2025.

Activity A2a: We will routinely track the number of undergraduate students participating in research through department and college classes or funding. Faculty will also report undergraduate research mentorship on an annual BPC engagement survey. (Heckman, Reaves)

Activity A2b: The department will host summer REU site(s) focusing recruiting efforts toward Black and Hispanic students via events like the STARS Celebration and the Tapia Celebration of Diversity in Computing, and through academic networks such as the NC Louis Stokes Alliance For Minority Participation STEM Pathways and Research Alliance. (Cateté)

Activity A2c: In addition to advertising to all CS undergraduate students via electronic announcements, the department will advertise academic year REU opportunities in-person to WMEP First Year Engineering (E144/145) and CS intended students. (Cateté)

Activity A2d: The department will host research mentor training workshops annually for graduate students and faculty who will be or are interested in mentoring undergraduates. (Barnes)

Evaluation E2: Research course demographic information will be incorporated with faculty reported research mentor data from the annual BPC engagement survey and REU PI-reported application and participation rates disaggregated by demographic groups. (Heckman)

Goal G3: Inclusive Teaching and BPC Learning: to have all faculty reporting they have learned about inclusive teaching or mentoring by 2025 and at least 60% to report increased adoption of these practices.

Activity A3a: The department will consider diversity and inclusion training programs and certificates (e.g. Reflective Educational Design Core Teaching, Inclusive Excellence, Strategic Practice, GLBT Advocate) as part of service contributions by May 2025. (Stallmann).

Activity A3b: At monthly department meetings, the BPC committee will share upcoming external workshops and online resources available to faculty including offerings such as the 3C Fellows program, CS Teaching Tips and the RESPECT conference. (Barnes)

Activity A3c: The department hosts an Inclusivity and Diversity in TA Training task force, which creates and reviews TA training materials to address diversity, equity, and inclusion. This task force will regularly review best practices in teaching and update the materials accordingly. (MacNeil)

Evaluation E3: Faculty engagement will be tracked in an annual BPC survey including participation in DEI learning opportunities and enacted practices. (Reaves)

Goal G4: Student Satisfaction: To establish a baseline for student satisfaction by December 2023, and report participation rates and data at the annual faculty retreat.

Activity A4a: We will begin participating in the Data Buddies survey program. We will share results with students and faculty to encourage participation before each reporting deadline. (Battestilli)

Activity A4b: We will engage with alliances including AGEP, NSF BPC Alliances (e.g. NCWIT, STARS, AccessComputing) and NSF INCLUDES (Alliance for Identity-Inclusive Computing Education) to adopt best and promising practices, including interventions, surveys, and infrastructure. (Stallmann)

Activity A4c: The department DEI council will regularly hold focus groups with students and student organizations each semester to gain a deeper understanding of survey results (MacNeil).

Evaluation E4: The BPC committee will measure improvements in student satisfaction with the Data Buddies survey item "Overall, I am satisfied with the computing program at my institution," and will track response rates and responses (Domínguez)