

**Departmental BPC Plan**  
**Department of Computer Science**  
**Georgia State University (Atlanta, GA)**



**Effective dates of Departmental BPC Plan:** 10/03/2024- 10/03/2026

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**1. Context**

Georgia State University (GSU) is an R1 public research university, with over 52,000 students. It is a national leader in graduating students from myriad backgrounds, ranking 1<sup>st</sup> among non-profit, non-HBCU U.S. universities to confer bachelor’s degrees to students who identify as Black or African American. The main campus is located in downtown Atlanta, where the population is 47.55% Black or African American.

The Department of Computer Science (CS) hosts two undergraduate majors (Computer Science and Data Science) and offers Master’s and Ph.D. degrees. Enrollments for Fall 2024 (as of 9/18/2024) are shown in the table below. The CS program is the most popular undergraduate major on campus in terms of total enrollment. Pre-majors must achieve a certain GPA in a specific set of CS and Math classes to advance to the major. Previous data shows that over 55% of our undergraduate pre-majors and majors are Pell- eligible, reflecting exceptional financial need and 21% of students being first-generation.

Fall 2024 Data	Undergraduate Enrollment		Graduate Enrollment	
	Female	Male	Female	Male
Hispanic	79	219	≤5	≤5
Non-Hispanic	711	1,881	136	208
American Indian	≤5	10	≤5	≤5
Asian	300	895	116	171
Black / African Americans	337	735	6	14
Native Hawaiian / Pacific Islander	≤5	≤5	≤5	≤5
White	92	320	11	23
2 or more races	39	87	≤5	≤5
Not reported	25	66	≤5	≤5
Total	~797	~2131	~139	~218
<b>TOTAL</b>	<b>2930</b>		<b>357</b>	

When looking closer at the retention/graduation data, we see inequities across demographics and when compared to overall GSU graduation data. Black students have a 46.7% and 21% 1st- and 2nd-year retention rate respectively, compared to a 62% and 40% for all CS students. The following are 6-year graduation rates for CS students compared to GSU students: 26% vs 57.8% for female students; 16% vs 53.6% for Black students; 35% vs 58.7% for Hispanic students; 27% vs 48.8% for White students; and 34% vs 55.1% for Asian students.

For the purpose of this plan, under-represented groups (URG) in computing include students who identify as women, American Indian or Alaska Native, Black or African American, Hispanic or Latino, Native Hawaiian or Pacific Islander. Over half of students belong to one or more URGs. 63% of students from URGs are Pell-eligible.

## **2. Goals, Activities, and Evaluation**

**G1: Data collection.** By Fall 2025, design and implement a data plan that will allow us to collect, report, and regularly discuss findings from data with respect to our BPC plan to monitor progress, help identify issues, and gain insight as to why we are not retaining and graduating our Black and female students at a comparable rate as White and Asian males. We will also assess our retention and graduation status of low-income students by race, ethnicity, and gender.

**A1a:** The BPC Committee works with administrative staff to collect, process, and analyze course enrollments, pre-major and major matriculation numbers, along with demographic data. (Bourgeois)

**A1b:** Faculty will review reports generated by staff to determine retention/performance across demographic groups for their own classes and submit a synopsis in their annual report. (Jang)

**M1:** Track faculty involvement in data collection and analysis process.

**G2: Undergraduate Student Experience.** By Fall 2027, collect and increase participation rates by 20% in research and affinity group participation for students from URGs.

**A2a:** Faculty proactively recruit and mentor students from URGs in undergraduate research. (Akbas)

**A2b:** Faculty visit with BPC-focused student affinity groups and help them reach more students by relaying information to their classes. (Kuzmin)

**M2:** CRA's annual Data Buddies survey, data related to student participation, and number of students engaging in funded research.

**G3: Graduate Student Diversity.** By Fall 2027, we will increase the enrollment of graduate students from racial/ethnic URGs from 6.7% to 9%.

**A3a:** Faculty budget funding in research proposals to support undergraduate research with students from URGs, as early research experience increases likelihood to pursue graduate studies. (Akbas)

**A3b:** Faculty hold seminars to increase recruiting from our undergraduate students to our graduate programs. Our undergraduate programs have a higher representation of students from racial/ethnic URGs than our graduate programs. (Liu)

**A3c:** Faculty engage in collaboration efforts with nearby HBCUs and identify students for potential recruitment into the graduate program. (Zhang)

**M3:** Year-to-year demographic data for various cohorts – applicant pool, research participation, and specific faculty collaboration outreach.

**G4: Inclusive Teaching.** By 2027, 70% of faculty and teaching assistants will learn about inclusive teaching practices, and faculty will engage in developing materials to reach non-computing students to broaden participation in computing.

**A4a:** The department will host meetings for faculty and TAs that address diversity and inclusion and train TAs to practice responsive pedagogy. (Venkateswara)

**A4b:** Faculty will develop modules to incorporate ethics, socially responsive computing, and foundational computing for students without computing backgrounds. (Tiwari)

**M4:** Track data related to faculty and TA participation and modules developed. Include faculty BPC efforts as part of annual evaluations.

**G5: K-12 Outreach.** Develop a collaborative partnership with GSU (CS and other units) and local public K-12 schools to create sustainable CS education outreach programs, reaching at least 25 students from URGs yearly.

**A5:** Participate in and/or host outreach programs that expose K-12 students from URGs to computing topics towards inspiring interest in computing. (Tiwari)

**M5:** Review student surveys to measure satisfaction and learning outcomes.