

Departmental BPC Plan
Department of Computer Science (CS)
Virginia Commonwealth University (VCU)



Effective dates of Plan: 07/31/2023 - 07/31/2025

Contact: Debra Duke, Professor of the Practice, s2dmduke@vcu.edu

Fall 2022	VCU	CS
American Indian/Alaskan	0%	0%
Asian	14%	28%
Black/African American	21%	19%
Hawaiian/Pacific Islander	0%	0%
Hispanic/Latino	11%	8%
International	2%	3%
Two or More Races	8%	7%
Unknown	3%	1%
White	41%	34%
Men	35%	72%
Women	64%	28%
Gender not reported	1%	< 1%

Context

Virginia Commonwealth University (VCU) is an urban, public research university located in Richmond, Virginia. VCU offers comprehensive undergraduate, master’s, doctoral and professional programs and encompasses one of the largest academic health centers in the nation. In Fall 2022, the Department of Computer Science at VCU enrollment consisted of approximately 700 undergraduate and 70 graduate students taught by 20 tenure/tenure-track faculty and 6 teaching faculty. The table shows the student population demographics for all VCU and the students in the CS undergraduate bachelor’s degree program.

Goals, Activities, and Measures

G1: By 2024, 50% of faculty will have engaged in 2+ hours of BPC learning each year and document their participation in the annual self-appraisal. This training will help faculty identify changes they have made in their teaching to improve student outcomes and/or expand the use of effective **pedagogical strategies** that have been shown to have a positive impact for students from **HURG**: Historically Underrepresented Racial/Ethnic Groups (i.e., people who identify as Hispanic, Latina/o/x, Black, African American, Native American, Native Alaskan, Native Hawaiian, and/or Other Pacific Islander) and students from **HUGG**: Historically Underrepresented Gender Groups (e.g., people who identify as women).

- A1: Faculty will participate in training activities on BPC using resources such as: College of Engineering monthly meeting for instructors to discuss best practices for inclusive teaching, or the National Center for Women & Information Technology (NCWIT) self-paced online course, NCWIT 101. Contact person: Preetam Ghosh

G2: Each year, faculty will identify, on their annual faculty report, a BPC goal for the year and the activities that will help them achieve this BPC goal.

- A2a: Faculty work to change the annual faculty report process to require BPC goals, including appropriate rubric/guidelines that will be applied during annual faculty reviews and leading the change through approvals to become policy.
- A2b: Faculty will support their colleagues in selecting and preparing to achieve at least one BPC goal each year. Goals could include integrating inclusive teaching strategies or learning about BPC or inclusive teaching (e.g., through workshops, reading, etc.). Contact person: Preetam Ghosh

G3: Every year, our department will collect, analyze, and discuss BPC-focused data.

- A3a: Faculty facilitate student participation in the Data Buddies Survey and disseminate insights in the department climate for students from HUGGs.
- A3b: Every year at a department meeting, a faculty member will lead a review of representation among undergraduate student graduates from the department in comparison to peer institutions.
- A3c: Faculty analyze data related to continuance in the program from the previous five years disaggregating data for students from **HURG** and students from **HUGG**, which will include (1) rates for CMSC 255 & CMSC 256 earning a D, F, or withdrawing from the course, (2) attrition rates after CMSC 255, and (3) attrition rates after CMSC 256. Contact person: Debra Duke

G4: By 2024, the department will establish a regular schedule of having students and faculty visit area elementary, middle and high schools to support computing each year. Each year, at least 50% of faculty will participate in BPC-focused outreach activities.

- A4a: Faculty will attend one or more events in the College of Engineering supported outreach programs that aim to increase awareness of CS career opportunities for middle and high school students from populations typically underrepresented in computer science with a long-term goal of increasing the diversity of the tech talent workforce in Virginia. All participating students and faculty will be trained on using best practices for BPC.
- A4b: Faculty will partner in BPC-related activities with [CodeVA](#), which is an advocacy organization to expand CS K-12 CS education access within Virginia. Contact person: Caroline Budwell

G5: Beginning in 2024, at least 90% of all new undergraduate TAs will complete inclusive tutoring training prior to beginning work.

A5: Faculty will attend and/or lead TA training that includes learning strategies to mitigate stereotype threat through 1) explaining that intellectual growth happens with effort and practice, and 2) using self-affirmation and panel discussions with experienced TAs on inclusive tutoring. Contact person: Debra Duke