

Departmental BPC Plan
School of Computing and Information Science
The University of Maine



Effective dates of Plan: 10/05/2023-10/05/2025

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1. Context

The University of Maine is the major research university in the state of Maine, a state that has relatively little racial and ethnic diversity. We have developed elements of this plan to increase participation and success of students from the following minoritized groups: women, minoritized racial and ethnic groups (persons who identify as American Indian, Black/African American, and/or Hispanic/LatinX), and persons with disabilities. We expect these activities to also increase the participation and success of Maine's relatively high percentage of students from rural, low-income, and first-generation backgrounds. Demographics of the Computer Science undergraduate program (part of the School of Computing and Information Science (SCIS)) are 13% women, 6% students from minoritized racial and ethnic groups, 35% from rural backgrounds, and 30% first generation. University-wide, 78% of students return for their second year, 42% graduate in four years, and 56% graduate in six years. Historically, in the Computer Science major, 57% of students return for their second year, 22% graduate in four years (with an additional 11% graduating in other majors), and 25% graduate in six years (with an additional 22% graduating in other majors). More recently, retention has been an emphasis and early indicators show an impact. Statistics on the participation and success of low-income students and those with disabilities are not currently readily available.

2. Goals (G), Activities (A), and Measures (M)

The BPC Coordinator will coordinate all activities, supported by faculty.

G1. By 2027, increase participation of students from minoritized populations in research, community-building, and academic support events/activities by 50%.

A1a. Faculty assist in supporting students from minoritized groups through promoting and participating in student community events and affinity group meetings and events, including ACM-W.

A1b. Faculty mentor minoritized students in research labs following the inclusive mentoring tips from CRA-WP.

A1c. Faculty participate in engaging minoritized students in pre-professional development panels, advising the ACM-W chapter, and interacting with minoritized students in the Computing and Design Living-Learning Community (LLC). The BPC coordinator will coordinate events and programs to support minoritized students and our faculty will engage to improve the value and participation in these community-building activities.

M1. The BPC coordinator will track the participation of students in research and student participation in the events and an annual report will be produced.

G2. By 2027, double the percentage of women and increase the percentage of students from other minoritized groups to meet or exceed the percentage in the Maine K-12 population.

A2. Recruit women using inclusive practices in the following high school outreach opportunities: (a) Visit CS and math courses at area HS (especially high schools with a computing requirement), (b) participate in University of Maine CLAS Explorations program for undecided majors, (c) partner with NCWIT to invite high school female students for on-campus activities such as the capstone showcase and other events, (d) collaborate with University of Maine TRIO Upward Bound and Maine 4-H to reach high school students from rural, low-income, and first-generation backgrounds with an interest in Computer Science, (e) Collaborate with Project>Login to reach potential students from minoritized groups.

M2. We will evaluate the efforts by tracking the number of students we have interacted with across the outreach process. We will track the demographic composition of the major and retention rates.

G3. By 2027, measure and increase the number of minoritized students taking CS introductory classes by 25%.

A3a. Faculty will engage in curriculum design and teaching sections of COS121: Coding for Everyone in order to recruit minoritized students with interdisciplinary interests.

A3b. Faculty will engage in curriculum development efforts in combined majors with a range of partner disciplines to recruit minoritized students with broad interests and create new integrative courses to draw together themes from both partner disciplines.

M3. We will track the number of minoritized students taught in introductory courses and the number of students who move on to CS courses in subsequent semesters.