Departmental BPC Plan
Gianforte School of Computing
Montana State University

Effective dates of Plan: 9/27/2024 - 9/27/2026

Contact: John Paxton, Professor and Director, john.paxton@montana.edu

1. Context

Montana State University is an R1, public land grant university that serves approximately 17,000 students. The American Indian population is of special interest to Montana State University as American Indians are the largest minority population in the state.

	MSU CS	2023 Taulbee Survey – all respondents	MSU
Undergraduate Female	16.0%	23.1%	46.6%
MS Female	35.3%	30.4%	57.6%
PhD Female	25.5%	25.2%	57.6%
Undergrad American Indian / AK	1.0%	0.2%	5.0%
MS American Indian / Alaska Native	0%	0.1%	6.2%
PhD American Indian / Alaska Native	0%	0.1%	6.2%

Sources: 2023 Taulbee Survey for all respondents (Tables B8, M8, D7, D8), Montana State University Tableau (accessed on 7/17/2024) and Montana State University NavMSU (accessed on 7/17/2024).

Two recent developments offer exciting opportunities to increase student success and sense of belonging within our program. First, the Gianforte School of Computing (GSoC) received a $50 million dollar building gift in 2022 and will be the primary occupants of a building that is currently under construction and should open by Fall 2026. We are striving to create a building that is warm and welcoming and that features thematic spaces that help tell the stories of computing pioneers who come from historically underrepresented populations. Second, the GSoC is piloting a new seminar, Introduction to the School of Computing, during Fall 2024. The seminar serves first semester majors, and its purpose is to help students build community, create a sense of belonging and learn of helpful GSoC and MSU support services.

2. Goals

G1: Raise the representation of women-identifying Computer Science undergraduates by 2 percentage points by AY 2026-2027. Our overarching goal is to match the Taulbee Survey. Our long-term aspirational goal is to match the MSU population.

G2: Raise the representation of American Indian Computer Science undergraduates by 1 percentage point by AY 2026-2027. Our long-term goal is to match the MSU population.

G3: Raise the representation of American Indian Computer Science graduate students by 1 percentage point by AY 2026-2027. Our long-term goal is to match the MSU population.

3. Activities and Measurement

A1: Introduction to School of Computing Seminar (G1, G2). Faculty can participate in and/or develop content for this seminar that helps first-semester undergraduates build community and learn about relevant university and GSoC success resources. **Measurement**: Number of faculty who participate. Number of students impacted. Success rate in CS1 course. **Contact:** Mary Ann Cummings.

A2: Center for Inclusive Computing engagement (G1, G2, G3). Our School of Computing will engage with the CIC to learn about research-based best practices that help make progress towards our goals. Faculty can spearhead or participate in the selected initiatives. **Measurement:** Number of faculty who participate. Number of initiatives that are implemented. **Contact:** Iliana Castillon.

A3: Inclusive teaching (G1, G2, G3). Faculty can learn and adopt inclusive teaching practices (e.g., by engaging with the Center for Faculty Excellence) and can train their TAs and tutors to use inclusive practices. **Measurement:** Number of faculty engaging in training and implementing inclusive practices. Student course evaluation feedback. **Contact:** John Paxton

A4: Inclusive research (G1, G2, G3). Faculty can learn and adopt inclusive practices in their research and in their labs, and can train their GRAs and undergraduate researchers to use inclusive practices. **Measurement:** Number of faculty who participate. Number of students impacted. **Contact:** Brittany Fasy, Laura Stanley

A5: Inclusive service (G1, G2, G3). Faculty can engage in service that promotes inclusivity within the GsoC or within computer science more generally. Examples include participating in outreach or in-reach activities that impact K-12 students who are underrepresented in computing, adopting inclusive advising practices, advising a relevant student affinity group, or serving on a relevant committee. **Measurement:** Number of faculty who participate. Number of students impacted. **Contact:** Mary Ann Cummings, Keri Hallau.