

Departmental BPC Plan
Oregon State University (OSU)
School of Electrical Engineering and Computer Science (EECS)



Effective dates of Plan: 09/20/2024 - 09/20/2026

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1. Context

The School of EECS resides in OSU's College of Engineering (COE). COE's Center for Diversity & Inclusion is committed to increasing the number of students from underrepresented groups (URGs) (i.e., women, and students from a racial or ethnic group that is underrepresented in computing: African American, Black, Hispanic, American Indian, Native Alaskan, Native Hawaiian, and/or Pacific Islander) pursuing and completing degrees and careers in engineering and computer science (CS), while fostering their advancement, success, and sense of community. Computer science degrees are offered at our main campus in Corvallis, OSU-Cascades in Bend, and in our highly successful online programs. The OSU computer science degree programs strive to create and offer inclusive opportunities for students from underrepresented groups to engage in compelling research and professional development activities outside of coursework.

Undergraduate Students: As of Fall 2023, OSU's School of EECS is home to 4631 undergraduate students pursuing primary or secondary majors in computer science with the following distribution of underrepresented groups: women (23%) and domestic students from a racial or ethnic group that is underrepresented in computing (20%).

Graduate Students: As of Fall 2023, OSU's School of EECS is home to 442 graduate students pursuing primary or secondary majors in computer science with the following distribution of underrepresented groups: women (24%) and domestic students from a racial or ethnic group that is underrepresented in computing (16%).

Faculty: As of November 2023, OSU has 64 full time instructional faculty members in computer science. 34 are tenured/tenure-track faculty and 30 are full time instructors. Of the 64, women represent 33% and faculty from a racial or ethnic group that is underrepresented in computing represent 6%.

2. Goals, Activities, and Evaluation

Goal 1: Research Experiences for Undergraduates: Each year, involve at least 10 undergraduates from URGs in CS (~40-50% of REU cohort) in research experiences in EECS topic areas.

Activity 1: Faculty mentor research by CS undergraduates from URGs through established programs e.g., CRA's DREU and OSU's Undergrad Research, Scholarship, & the Arts Engage. Faculty with funded REU students participate in EECS Summer REU Cohort weekly community activities e.g., research talks, seminars, graduate student panels, and REU student presentations. (Undergraduate Research Committee)

Evaluation 1: Track faculty involvement and demographics of students participating in research experiences. (Undergraduate Research Committee).

Goal 2: Graduate Recruiting: By 2026, increase CS graduate student population by 22 women (20% increase) and 7 (47% increase) students from a racial or ethnic group that is underrepresented in computing.

	CS Graduate Students as of Fall 2023
Women	24% (107)
Black, African American, Hispanic, American Indian, Native Alaskan, Native Hawaiian, and Pacific Islander (domestic)	16% (15)

Activity 2a: The graduate admissions committee and advising faculty emphasize holistic evaluation of applicants using a candidate evaluation rubric designed to not disadvantage students from URGs in CS. (Graduate Admissions Committee)

Activity 2b: Faculty recruit and nominate talented, high-achieving students from URGs via established programs e.g., EECS Outstanding Scholars program and the National GEM Consortium. (EECS Graduate Coordinator)

Evaluation 2: Track recruitment efforts. Report representation among applicants, admitted students, and accepted admissions annually to the Graduate Admissions Committee and the faculty-at-large in the School of EECS. (Assistant Director and the Associate Head of Graduate Programs)

Goal 3: Faculty Hiring, Recruitment and Retention: Each year, demonstrate increases in numbers of faculty recruited and retained from URGs in computer science.

Activity 3a: Faculty lead recruiting efforts implementing OSU's recruitment toolkit, developed by the President and Provost's Leadership Council for Equity, Inclusion and Social Justice in 2020, and using NCWIT resources to write inclusive job ads. (EECS School Head)

Activity 3b: Faculty include a Search Advocate trained in implicit cognitive and structural biases, diversity, and inclusive search and selection on faculty hiring committees. (EECS School Head)

Activity 3c: Junior and experienced faculty are paired for mentoring in a program designed to share experiences, expertise, and advice on research and teaching, and provide general guidance. Research suggests faculty from URGs receive less informal mentoring and particularly benefit from formal mentoring programs. (EECS School Head)

Evaluation 3: Human Resources demographic data is tracked and shared with EECS. Mentoring pairs are documented internally. (Office of Institutional Research, EECS School Head)

Goal 4: Integrating Inclusive Computing: By 2026, faculty will integrate materials on the GenderMag method into course curricula/courseware, to teach and practice making technology inclusive, in a set of undergraduate and graduate courses ensuring that all students encounter the material at least once before graduation.

Activity 4a: Participating faculty complete GenderMag training to learn how to use and to teach GenderMag via in-person workshops at OSU or on-line workshops. (Burnett, Letaw)

Activity 4b: Faculty download and use inclusive computing modules/homeworks/activities from the GenderMag-Teach online community. (Burnett, Letaw)

Activity 4c: Participating faculty implement the GenderMag tool suite to assess courseware and locate "inclusivity bugs". (Sarma)

Evaluation 4: Track faculty involved, GenderMag use in courses, and data collected through the PULSE survey as part of eSET. (Effective and Inclusive Teaching Committee)