Departmental BPC Plan
Computer and Information Sciences (CIS)
University of Delaware (UD)

Effective dates of Plan: 03/20/2024 - 03/20/2026
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1. Context

UD is a private-public land-grant research university located in Newark, DE, and is the largest university in the state (approximately 19,000 undergraduates and 4500 graduate students). CIS@UD resides in the College of Engineering. CIS offers BS and BA in CS, BS in Information Systems, MS and PhD degrees and several graduate certificates. BS in CS students choose from 7 concentrations or customize one to specialize their degree.

As of Fall 2023, CIS@UD demographics are: (where URG refers to Black and Hispanic students in CIS)

• 617 total undergraduates in CIS majors (26% women;18% URG)
• 108 graduate Ph.D. students (28% women; 5% URG); 29 MS students (38% women; 0% URG)
• 28 Tenured/Tenure-track faculty (18% women; 0% URG)
• 7 Teaching Faculty (43% women; 0% URG)

Furthermore, departmental surveys and round-table events have continued to reveal several issues with women's experiences in the program.

2. Goals

G1: By March 2027, collect information and increase participation rates in data gathered to assess BPC efforts and learn about issues affecting recruitment, student community, feelings of belonging, and retention of students, particularly those from populations that are underrepresented in computing.
G2: Annually increase by 3% the number of undergraduate and graduate women and students from URG who are recruited into the program.
G3: By March 2030, eliminate demographic differences in perceptions of the program.

3. Activities and Measurement

A1: Faculty support participation of women and students from URGs in undergraduate research.
    A1a: Faculty recruit women and students from URG for research opportunities such as UD Summer Scholars Program, DE INBRE, NSF REU supplements, CRA's DERU Programs, etc. (G2, G3)
    A1b: Faculty support student attendance at technical conferences such as Grace Hopper and Tapia. (G2, G3)
Measurement: number and demographics of students participating in research; number and demographics of students attending conferences

A2: Faculty assemble data and report on recruitment, student community, feelings of belonging, and retention of students.

> **A2a:** Faculty conduct annual reports on applications, admissions, and acceptances, particularly on populations that are underrepresented in computing. (G1)
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> **A2b:** Faculty conduct annual entry surveys (such as NCWIT's entry survey) in introductory courses for feedback on department recruiting efforts. (G1)
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> **A2c:** Faculty conduct semesterly two community surveys (otherwise called "Pathways" surveys) in courses for feedback on feelings of belonging, success, and self-efficacy in the department. (G1, G3)
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> **A2d:** Faculty report data on students' experience within the program (G1, G3) including:
> - Key culture questions on course evaluations
> - Focus Group student events
> - Anonymous student experience forms
>
> **A2e:** Faculty report annual data on student participation in REUs. (G1, G2)

Measurement: checklist of which data is gathered each year; track survey response rates

A3: Faculty participate in and/or contribute to Delaware-based outreach activities and/or K-12 education efforts intended to broaden participation in computing.

> **A3a:** Faculty participate in/contribute to programs such as Partner4CS, CS4DE, 4-H, Project BrainLight, CSTA, E-Week, STEAM Day, Pi-Day, STEM Week, CIS Research day, and/or UD MAKER Gym Summer Camp. (G2)
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> **A3b:** Faculty participate in departmental recruitment events, e.g., presenting on their research to increase interest in computing among a broader range of students and to encourage undergraduate research involvement. (G2)

Measurement: track faculty, staff, and current student engagement in the above recruitment activities; track the number and demographics of students reached by recruiting activities

A4: Faculty participate in and/or contribution to departmental efforts to build a diverse, equitable, and inclusive community

> **A4a:** Faculty participate in diversity, inclusion, and equity-related faculty and/or student events/training, specifically partnering with the Office of Diversity & Inclusion. (G2, G3)
>
> **A4b:** Faculty advise/advocate for/or contribute to student-led groups (CPUs, ACM-W) to increase membership, impact, and effectiveness in building a welcoming and inclusive community. (G2, G3)
>
> **A4c:** Faculty participate in CERAD committee leadership, identifying programmatic cultural barriers that affect our target groups and increasing explicit buy-in from faculty for this mission as a department. (G2, G3)

Measurement: track faculty, staff, and current student engagement in the above community-building, diversity, equity, and/or inclusion efforts; track data (from A2) on students' experience of the program

Note: The CERAD Committee is the contact for faculty who want to get involved in each of these activities for G1, G2, and G3. The committee changes annually, so we believe it is best not to designate individual faculty contact for each activity.