

Departmental BPC Plan
Department of Computer Science (CS)
University of Texas at Dallas (UT Dallas)



Effective Dates of Plan: 12/06/2023 - 12/06/2025

Contact: Prof. Ovidiu Daescu

Context: UT Dallas is a public, research intensive, university located in Richardson, Texas. Computer science has become the most popular undergraduate major on campus.

In the 2020-2021 academic year, 668 students earned a bachelor's degree in computer science. About 20.1% of these graduates were women, while 79.9% were men. The percentages of these graduates for different races are 43.1% Asian, 31.5% White, 14.3% Hispanic, and 2.5% African American. In comparison, of the 4,881 students who earned a bachelor's degree at the university level, 53.5% are male, and 46.5% are female. The percentages of these graduates for different races are 40.0% Asian, 30.1% White, 17.8% Hispanic, 5.3% African American, and 6.8% other races/ethnicities.

The department has made efforts to improve the participation of underrepresented groups. Over the past seven years, the [Grace Lecture Series](#) at UT Dallas has featured a large number of inspiring female technology community members from both industry and academia. The department and the UT [Dallas ACM student chapter](#) hosted one of the largest [hackathons](#) in Texas for its 9th iteration in Fall'22, with approximately 1000 participants and a special focus on beginners and underrepresented groups in computing. The Department also helped launch [WEhack](#), a hackathon organized specifically for women and underrepresented students. The first WEhack was held virtually in 2020, then in person in 2022, and again in Spring of 2023. The department also ran in-person and online summer camps for 180+ middle & high school students to work with professors on research projects. The CS Department has been organizing summer coding camps for K-12 students since 2013, with approximately 1000 middle/high school students and 500 elementary school students being exposed each year to computing and its joys during school breaks (<https://utdallas.edu/k12>). In addition, we organize events for Women in Cyber Security (since 2015) and Women in Data Science (since 2018).

Goals, Activities, and Metrics: Our BPC plan aims to substantially improve the enrollment, retention, and graduation rates of undergraduate and graduate students from historically underrepresented groups (students who identify as women, Black, Native American, Alaskan Native, Native Hawaiian, Pacific Islander, Hispanic, and other underrepresented groups) over the next five years. The following three specific goals will be pursued:

Goal 1: Increase Undergraduate Enrollment of Women and Underrepresented Students:

The key performance indicator (KPI) will be the percentage increase in the number of underrepresented students and women. Our goal is to raise both these numbers by at least 1-2% each year.

[A1] Increasing successful community college transfer: Over the next 2 years, in collaboration with existing funded research activities, we will organize at least one workshop per

year to recruit, academically advise, and guide community college students through the transfer process.

[A2] Summer camps, workshops, and internships: Over the next 5 years, we will provide additional need-based scholarships for middle/high-school students to attend the summer camps, workshops, and internships.

[A3] Evaluation: The student participants in these outreach activities and their feedback will be collected annually and analyzed by the Department's Center for Computer Science Education and Outreach in coordination with the Director of Computing Initiatives and Student Enrichment (CISE).

Goal 2: Increase Graduate Enrollment of Women and Underrepresented Students: Increase the enrollment of women and underrepresented groups in our graduate population. KPI will be the percentage increase in the number of underrepresented and women students. Our goal is to increase both numbers by 1-2% each year.

[B1] Undergraduate research: We will expand our Academic Bridge Program to support undergraduate students from women and underrepresented groups to participate in research projects supervised by faculty. We will work with on-campus organizations of underrepresented groups to advertise the research opportunities.

[B2] Fast Track Baccalaureate/Master's Degree Program: We will use our fast track program to promote participation of well-qualified undergraduate students, including women and underrepresented groups, into our MS degree programs.

[B3] Evaluation: We will collect annual statistics for the number of graduate students recruited through these initiatives and use them to improve the process and for additional outreach.

Goal 3: Increase undergraduate and graduate graduation and retention rates: We will work on increasing 4-year graduation rates for our students. The key performance indicator for broadening participation is the percentage increase in graduate rates of women and underrepresented students. Our goal is to achieve 1-2% increase each year.

[C1] Tutoring support: The department has a [computer science mentor center](#) (CSMC) that is open seven days a week and offers a variety of services designed to enhance and reinforce classroom activities by engaging students in an immersive environment. We will encourage participation of underrepresented and/or women students in CSMC activities, as mentors and mentees. KPI: An increase in participation as student mentors.

[C2] Student Orgs: In the last 10 years, the CS Department has actively encouraged students to form computer science and software engineering focused student orgs under the umbrella of the [Student Chapter of the ACM](#). Nearly a dozen organizations ranging from the [AI Society](#), the [Computer Security Group](#) to [Women Who Compute](#) have been formed during this period. The organizations are actively nurtured by the CS Department faculty. We will work with students from underrepresented groups to engage in the various CS student organizations and in organizing activities (e.g., hackathons, invited speakers, mentoring sessions) for students in that group. KPI: 3 activities from underrepresented student organizations per semester.

[C3] Evaluation: We will conduct an annual survey on participation in these tutoring and internship sessions and on how they impact students' graduation/degree completion rates.