Departmental BPC Plan
Luddy School of Informatics, Computing, and Engineering
Indiana University

Effective dates of Plan: 07/18/2023-07/18/2025
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1. Context

Founded in 1820, Indiana University Bloomington (IUB) is a public research university and the flagship, residential, doctoral-extensive campus of Indiana University's (IU) seven campuses and two regional centers statewide. IUB has 16 degree-granting colleges and schools, offers over 200 majors, and has an enrollment of over 45,000 students. In Fall 2022, the Luddy School of Informatics, Computing, and Engineering consisted of more than 2,000 undergraduate and 1,700 graduate students with a demographic breakdown of 19.8% undergraduate women students, 13.3% undergraduate students from underrepresented populations (defined below), 34.2% graduate women students, and 2.7% graduate underrepresented students. This demographic breakdown is not consistent with the state of Indiana population demographics which includes 50.4% women and 18.4% underrepresented individuals. The demographics of the undergraduate population reflect those of the state and are overwhelmingly White. The graduate population is more diverse, and includes large numbers of international students from China, Korea, and India.

The vision of the Luddy School is of a community committed to diversity as a core strength and as a principle for maximum innovation, creativity, pedagogy, and scholarship. The Luddy School reaches inclusive excellence through an ongoing process of self-reflection analysis, engagement, and feedback. Through informal feedback and observations, we have learned that we need to improve our outreach, recruitment, and retention efforts to improve the diversity and inclusion of our student enrollment, matriculation, and graduation.

The Luddy School acknowledges that individuals who identify as women, Black/African American, Hispanic or Latino/a/x, American Indian, Alaska Native, Native Hawaiians, and Native Pacific Islanders and persons with disabilities are historically underrepresented in computing (abbreviated as "underrepresented populations"). Additionally, we recognize an opportunity to address the needs of other underserved populations in computing, which include first-generation students, students from lower socioeconomic backgrounds, and veterans.

2. Goals

G1: Provide a systematic data collection clearinghouse to gather and analyze data to measure outreach, recruitment, and retention statistics of Luddy School stakeholders **(faculty, students, and staff) from underrepresented populations.**

G2: Through expanding our recruitment of individuals who are from **underrepresented populations** via fostering partnerships with new markets we will increase the number of Luddy School stakeholders from underrepresented populations by 2028.

G3: Measure and improve retention of individuals who are from **underrepresented populations** by fostering an inclusive, supportive environment and providing academic and research support initiatives.

3. Activities and Measurement

A1: Data Collection (G1) – collect and analyze data to identify and understand student outreach, recruitment, and retention needs.

Measurement: # of applications, # enrolled, # retained from semester to semester, # retained from AY to AY, DFW rates, demographics of each data point **CONTACT: Dean's Office**

A2: Instructor training (faculty and student) to create inclusive classrooms and learning environments (G2, G3) - Provide on-going education and training on belonging, inclusion, and diversity topics as well as inclusive pedagogy, course design, and teaching practices. Additionally, we will provide opportunities and resources for creating inclusive classrooms and learning environments.

Measurement: # of participants, feedback surveys, course evaluations **CONTACTS: Associate Dean for Faculty Affairs**

A3: Professional development workshops for students (G3) – Provide culturally-sensitive support to increase belonging for students from underrepresented populations, including monthly professional development workshops and funded student participation in local, state, regional, and national professional conferences.

Measurement: # of participants, demographics of participants, feedback surveys **CONTACT: Associate Dean for Faculty Affairs**

A4: Encourage undergraduate student participation in research (G3) – Recruit and mentor undergraduate students, specifically students from underrepresented populations, in undergraduate student research opportunities like our UROC@Luddy (Undergraduate Research Opportunities in Computing) program which engages them in research projects with faculty and doctoral students.

Measurement: # of participants, demographics of participants, # of research projects, feedback surveys **CONTACT: Assoc. Dean for Undergraduate Education, Assoc. Dean for Research**

A5: Modifying the pedagogy (G2, G3) – Redesign introductory courses, specifically CS courses, to integrate inclusive and culturally relevant/sustaining pedagogy and teaching practices.

Measurement: DFW rates, course retention rates, course evaluations, demographic data, # of faculty attending inclusive teaching training workshops, # of Assistant and Undergraduate Instructors attending inclusive teaching training workshops **CONTACTS: Assoc. Dean for Undergraduate Education, Dir. Of Curriculum & Instruction**

A6: Summer camps for high school students (G2) – Provide exposure to opportunities in computing by hosting summer camps for high school students which will hopefully increase the pipeline of students from underrepresented populations. Specifically, we will provide intentional recruitment efforts and funding for schools with large populations of students from underrepresented populations.

Measurement: # of participants, demographics of participants, application pool, enrollment yield, feedback surveys **CONTACT: Outreach Coord.**

A7: Summer research experiences for undergraduate students (G2) - Provide exposure to research opportunities in computing by hosting summer REUs for students. Specifically, we will provide intentional recruitment efforts by leveraging our relationships with HBCUs and colleges and universities with large populations of students from underrepresented populations.

Measurement: # of participants, demographics of participants, feedback surveys, # of graduate applications, # of graduate enrollments **CONTACT: Associate Dean for Faculty Affairs**