## Engineering Students 2022-2023

## First-Year Engineering Students Class of 2026

- 6,438 applicants
- 594 admitted ( $\sim 9 \%$ admit rate)
- $41 \%$ identify as women, comparted to national average of $\sim 22 \%$
- One-third identify as students of color
- $28 \%$ are Pell Grant-eligible (WashU: 20\%)
- 20\% are first-generation students


## 60\%

First-year undergraduate students are women or underrepresented minorities

## Women \& Engineering Center

- First full-time director - Fall 22 Christine Dearmont
- Year 1 goal: Identify and execute programs previously managed by the W\&E Initiative, and build community
- Women \& Engineering Leadership Society
- Received over 200 applications- more than $2 x$ the previous standard
- Opened enrollment to master's and Ph.D. students for the first time- great response and participation
- Nearly doubled the number of mentors needed
- Women \& Engineering Leadership Summit, March 4, 2023



## Center for Women's Health Engineering

## Women's Health Technologies Initiative

- Engineering-led, partnering with Ob/Gyn in the medical school
- Advances novel engineering approaches to prevention, diagnosis and treatment of women's health issues, including maternal health and cancers of the reproductive system


## Core faculty:

- Michelle Oyen - BME
- Christine O'Brien - BME
- Quing Zhu - BME
- Yong Wang - Ob/Gyn \& ESE
- Chuan Wang - ESE



## McKelvey Engineering research: Secure AI and Cyberphysical Systems

Fundamental questions:

1) How can you guarantee safety of control systems when the controllers are learned from data?
2) How do you secure systems that learn?


## The tsunami of CS education - Fall 2022

| CS-related Program | TOTAL | McK | M\% | Not <br> McK | NM\% |
| :--- | ---: | ---: | ---: | ---: | ---: |
| B.S. IN BUSINESS AND COMPUTER SCIENCE | 54 | 54 | $100 \%$ | 0 | $0 \%$ |
| B.S. IN COMPUTER ENGINEERING | 81 |  |  |  |  |
| B.S. IN COMPUTER SCIENCE | $\mathbf{5 3 2}$ |  |  |  |  |
| B.S. IN COMPUTER SCIENCE + ECONOMICS | $\mathbf{3 8}$ |  |  |  |  |
| B.S. IN COMPUTER SCIENCE + MATHEMATICS | $\mathbf{7 2}$ |  |  |  |  |
| B.S. IN DATA SCIENCE | 25 |  |  |  |  |
| MINOR IN BIOINFORMATICS | 42 | 26 | $62 \%$ | 16 | $38 \%$ |
| MINOR IN COMPUTER SCIENCE | 207 | 65 | $31 \%$ | 142 | $69 \%$ |
| MINOR IN HUMAN-COMPUTER INTERACTION | 70 | 62 | $89 \%$ | 8 | $11 \%$ |
| SECOND MAJOR IN COMPUTER SCIENCE | 75 | 18 | $24 \%$ | 57 | $76 \%$ |
| SECOND MAJOR IN COMPUTER SCIENCE + <br> MATHEMATICS | 7 | 0 | $0 \%$ | 7 | $100 \%$ |
| SECOND MAJOR IN DATA SCIENCE | 2 | 0 | $0 \%$ | 2 | $100 \%$ |

## But we're moving the gender needle - Fall 2022

| CS-related Program | TOTAL | Female | F\% |
| :--- | :---: | :---: | :---: |
| B.S. IN BUSINESS AND COMPUTER SCIENCE | 54 | 17 | $31 \%$ |
| B.S. IN COMPUTER ENGINEERING | 81 | 17 | $21 \%$ |
| B.S. IN COMPUTER SCIENCE | $\mathbf{5 3 2}$ | 165 | $31 \%$ |
| B.S. IN COMPUTER SCIENCE + ECONOMICS | $\mathbf{3 8}$ | 11 | $29 \%$ |
| B.S. IN COMPUTER SCIENCE + MATHEMATICS | $\mathbf{7 2}$ | 22 | $31 \%$ |
| B.S. IN DATA SCIENCE | 25 | 8 | $32 \%$ |
| MINOR IN BIOINFORMATICS | 42 | 27 | $64 \%$ |
| MINOR IN COMPUTER SCIENCE | 207 | 77 | $37 \%$ |
| MINOR IN HUMAN-COMPUTER INTERACTION | 70 | 46 | $66 \%$ |
| SECOND MAJOR IN COMPUTER SCIENCE | 75 | 27 | $36 \%$ |
| SECOND MAJOR IN COMPUTER SCIENCE + <br> MATHEMATICS | 7 | 1 | $14 \%$ |
| SECOND MAJOR IN DATA SCIENCE | 2 | 1 | $50 \%$ |
|  | $\mathbf{1 2 0 5}$ | $\mathbf{4 1 9}$ | $\mathbf{3 5 \%}$ |

