School of EECS

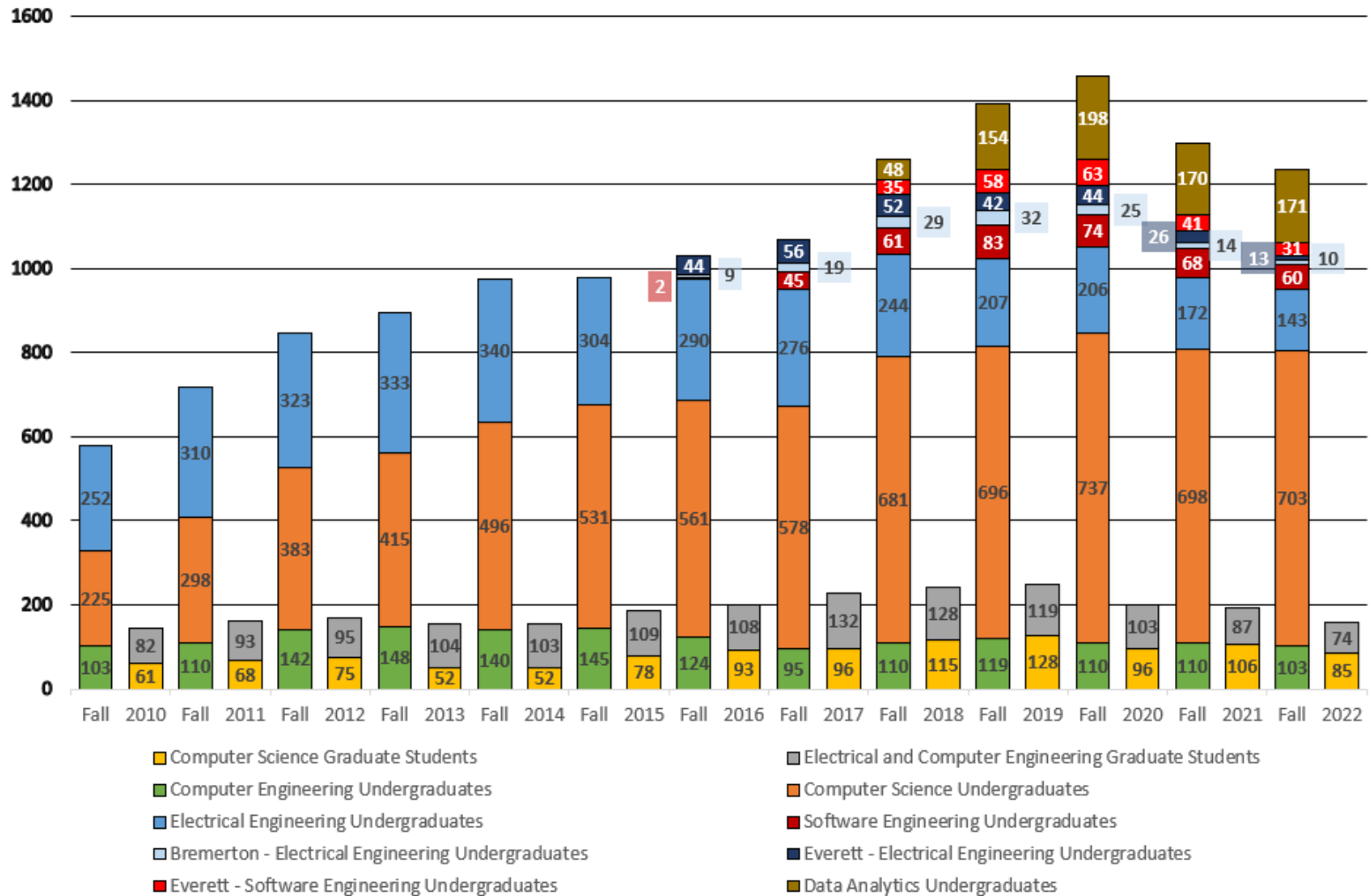# State of Undergraduate and Graduate Programs

22nd May 2023

ACADEMIC PROGRAMS IN EECS
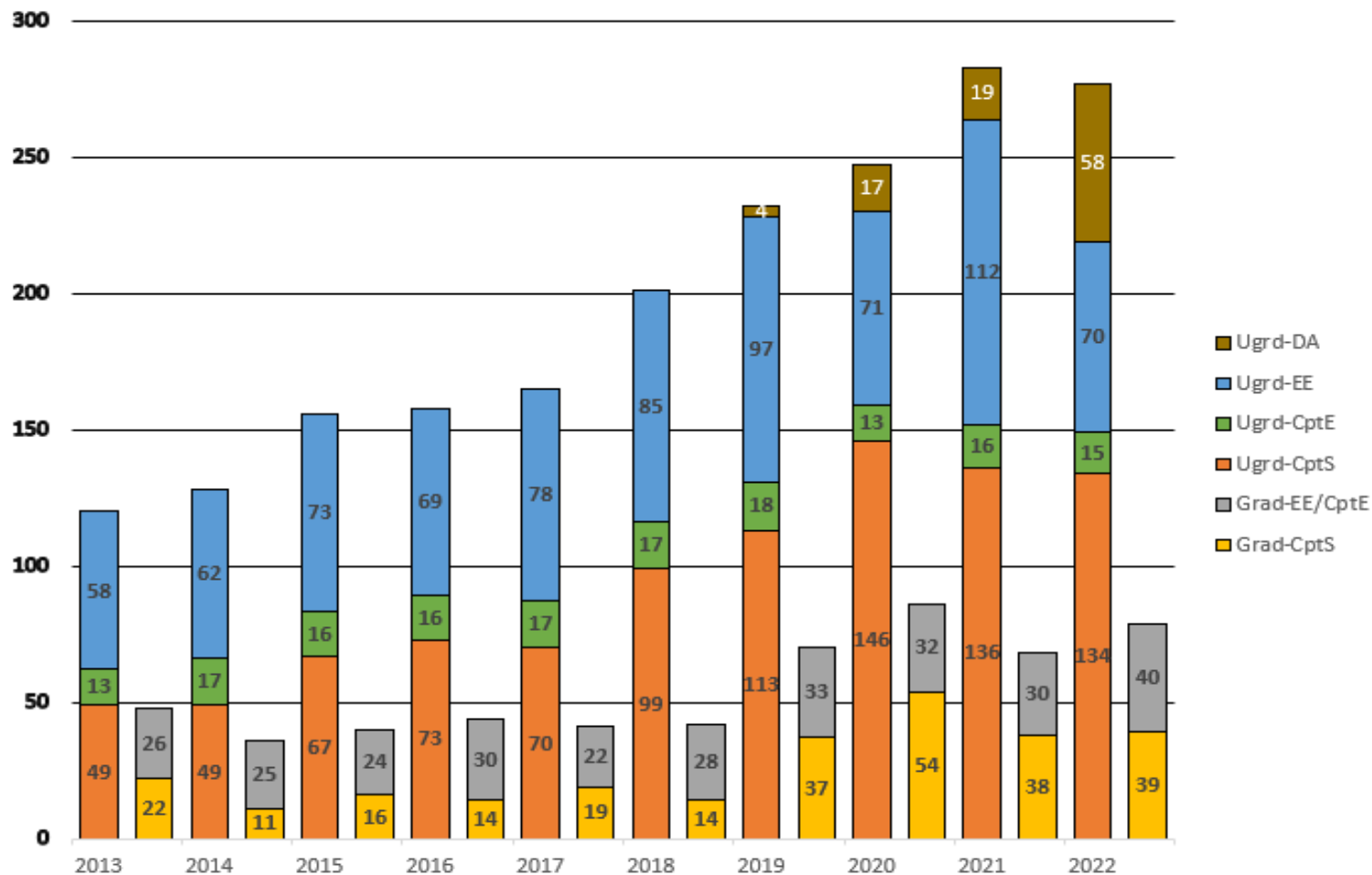
❑ Computer Science

❑ Computer Engineering

❑ Electrical Engineering

❑ Software Engineering

❑ Data Analytics (University Wide Program)

❑ Cybersecurity (New)

STUDENT POPULATION: STATISTICS

3

GRADUATION: STATISTICS

Degrees Granted by Fiscal Year

ACCREDITATION (ABET)

❑ All programs in EECS accredited by ABET, but by two different commissions:

- o Engineering Accreditation Commission (EAC): EE, CptE, SE
- o Computing Accreditation Commission (CAC): BA & BS CptS

MULTIPLE NEW FACULTY

- Multiple new faculty to support the cybersecurity program
  - Four new faculty in Pullman
  - One new faculty in Everett
  - One new faculty in TC

CYBERSECURITY CURRICULUM UPDATES

- ❑ Approved at all levels as of March 30th 2023 including NWCCU
- ❑ 4-year degree plan is live
- ❑ Credits Required: 120
- ❑ First two years very similar to BS in Computer Science; last two years heavy on cybersecurity courses
- ❑ Cybersecurity degree highlights:
  - o Focuses on cyber operations
  - o Emphasizes hands-on coursework, experiential learning
- ❑ Has synergy with the VICEROY Institute for Cybersecurity Education and Research (CySER) - https://cyser.wsu.edu/

CYBERSECURITY COURSES

❑ Required <u>existing</u> courses
- o CPTS 327: Fundamentals of Cyber Security & Cryptography
- o CPTS 427: Cyber Security of Wireless and Distributed Systems
- o CPTS 428/528: Software Security & Software Reverse Engineering
- o CPTS 455: Introduction to Computer Networks and Security
- o CPTS 439: Cyber Security of Critical Infrastructure Systems

❑ Required <u>new</u> courses
- o CPTS 426: Hardware, Firmware Security & Hardware Reverse Engineering
- o CPTS 432: Cybersecurity Capstone Project

❑ Elective <u>new</u> courses
- o CPTS 424: Cyber Law, Ethics, Rights, and Policies
- o CPTS 425: Cyber Forensics and Anti-Forensics
- o CPTS 429: Virtualization and Offensive Cyber Operations
- o CPTS 431: Security Analytics and DevSecOps

CAPSTONE PROJECTS

Fall 2022 – Spring 2023 CS capstone cohort details:

Total projects: 43

Industry projects: 37

Industry projects percentage: 86%

Sponsors:

1. SEL
2. Dell
3. Boeing
4. Microsoft
5. F5 Networks
6. Luckmon Games
7. Dearien Games
8. Naval Undersea Warfare Center
9. Parchment Desktops
10. Colfax Council on Aging
11. Wahkiakum School District
12. Pullman School District
13. Disability Action Center – Northwest
14. Latah Alliance on Mental Illness
15. Psychology Clinic at WSU
16. School of Biological Sciences at WSU
17. School of Global Health at WSU