CyberPDX is an annual professional development program hosted at Portland State University. Since 2016, over 70 middle and high school teachers have participated in the STREAM program, which offers interdisciplinary instruction in programming, cryptography, personal security, policy, literature, and arts. Our unique curriculum equips participating teachers to identify connections between cybersecurity and the variety of subjects that they teach (e.g., Biology, Government, Language Arts, Social Studies). By meaningfully integrating cybersecurity in their biology or social studies classroom, these teachers have the chance to spark the interest of a diverse range of students who might never have opted in to a specialized computing elective.

Portland State University offers a comprehensive set of cybersecurity courses as part of its undergraduate and graduate curriculum, including a Cybersecurity Graduate Certificate. As a result of generous support from the National Science Foundation, the vast majority of the security courses are built around Capture-the-Flag exercises and codelabs that allow students to develop valuable skills that are required in practice.

CURRENT AND RECENT SPONSORED RESEARCH PROJECTS

- Fei Xie (PI), NSF CNS Core: Small: Collaborative Research: Scalable Penetration Test Generation for Automotive Systems, $244,972 (2019-22).
- Andrew Tolmach (PI), Advanced New Hardware Optimized for Policy Enforcement, DARPA SSITH program, $428,808 (2017-20).
The Department of Computer Science offers a broad range of courses in our undergraduate and graduate programs that are relevant to cybersecurity. Some core classes in this area include:

- Internet, Web, and Cloud Systems
- Cryptography
- Introduction to Computer Security
- Malware Reverse Engineering
- Digital Forensics
- Internetworking Protocols
- Web and Cloud Security
- Network Security
- Top: Blockchain Development & Security
- Top: Topics in Software Validation
- Top: Theorem Proving and Program Verification

The Department also offers a Cybersecurity Graduate Certificate that requires a 6 credit core and an additional 15 credits in approved electives.