



PISCES

Introducing High School Students to Real-World Cybersecurity

Cybersecurity represents one of the fastest growing threats to business, communities, and government. Despite an increasing demand for cybersecurity analysts, the job market lacks qualified talent to fill those positions. The Public Infrastructure Security Cyber Education System (PISCES) partners with academic institutions to prepare students for a future in cybersecurity. Now offered at a high-school level, PISCES provides an early introduction to cybersecurity skill sets and gives hands-on experience in this fast-growing career path.

Get an Early Start on Cybersecurity

The PISCES high school course features a flexible high-school-level curriculum that provides the students with foundational cybersecurity knowledge. Students experience what it is like to investigate real-world, streaming data to find attacks that actually happened. This course acts as a precursor to the college-level PISCES course where they are introduced to similar material but at a more advanced pace.

Learn with a Flexible Curriculum

The PISCES high school course aligns with the National Institute of Standards and Technology National Initiative for Cybersecurity Education framework and is designed for the school and the teacher to adjust the content based on other courses offered by the high school. The course offers 12 modules that can be adjusted to fit academic semester and quarter systems. Also included are videos, teacher notes, and slides to assist instructors implementing each module. Typical topics covered in the course include:

- History of networks and ethics
- Principles of networks
- Monitoring network traffic for security purposes
- Dashboards and visualization
- Documenting and researching a cyber event (how to write a ticket)
- Introduction to threat hunting and data visualization
- Digital forensics
- How to use Kibana to identify attacks and monitor networks.

Prepare for a Future in Cybersecurity

With a 33% expected growth between 2020 and 2030 for information security analysts, this job sector is listed among the top 20 fastest growing in the nation. Preparing students to excel in this career prepares them for career opportunities and job growth.



To learn more about PISCES or to bring PISCES to a school near you, contact steven.stein@pisces-intl.org or visit <http://pisces-intl.org>.

PISCES has been connecting communities and classrooms since 2017 with collaboration from Pacific Northwest National Laboratory.