

# A TEACHER'S GUIDE FOR INTEGRATING CYBERSECURITY INTO THE CLASSROOM

In a world in which technology affects so many aspects of our lives, cybersecurity is more important than ever. Teachers, you inspire the next generation of cybersecurity professionals. They are sitting in your classrooms today! One guided step in the right direction could be all it takes to turn their interest in technology into a career in cybersecurity. We need your help!



## WHAT IS CYBERSECURITY?

Cybersecurity is the practice of protecting systems, networks, programs, and data against criminal or unauthorized use.

## WHY IS IT IMPORTANT?

- Cybersecurity crosses all industry sectors, organizations, and work roles. Citizens' personal information, patient data, company financial transactions, and much more needs protection. The nation needs your help to educate the next generation of cybersecurity professionals.
- We live in an interconnected society and everyone has a role to play in keeping information safe. As you learn about cybersecurity concepts and careers, be sure to share the information you learn with your friends, family, neighbors, and community members.

## WHAT IS THE PROBLEM?






- By 2022, there will be an estimated global workforce gap of 1.8 million qualified cybersecurity professionals<sup>1</sup>.
- This gap could leave America's networks, systems, and infrastructure vulnerable to cyberattacks.

## WHAT ARE THE EMPLOYMENT OPPORTUNITIES?

- The median salary of a cybersecurity professional is \$95,510<sup>2</sup>.
- As of November 2018, there are over 300,000 vacant cybersecurity positions in the United States<sup>3</sup>.
- Cybersecurity jobs are more than just software developers and ethical hackers. The field is also in need of problem-solvers, creative thinkers, graphic designers, and team players who are interested in helping protect our nation from threats.



## WE NEED YOUR HELP

-  Help students explore [Cybersecurity Career Profiles](#) to learn about career paths, salaries, and exciting opportunities.
-  Share cybersecurity career resources such as tip cards and posters to inspire your tech-savvy students.
-  Integrate cybersecurity concepts into your existing curricula at no cost. Download teacher guides, workbooks, and quizzes to easily [enhance your lesson plans](#).
-  Direct students to cybersecurity-related degree programs and scholarship opportunities available at designated colleges and universities across the country.
-  Brush up on your knowledge of cybersecurity careers and general concepts by signing up for [professional development workshops](#) for educators.



## HAVE QUESTIONS? NEED MORE INFORMATION?

Contact us at [cybersecurityworkforce@hq.dhs.gov](mailto:cybersecurityworkforce@hq.dhs.gov) if you have any questions or need additional cybersecurity-related information.

<sup>1</sup> <https://www.isc2.org/News-and-Events/Press-Room/Posts/2017/02/13/Cybersecurity-Workforce-Shortage-Continues-to-Grow-Worldwide>

<sup>2</sup> <https://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm>

<sup>3</sup> <https://www.cyberseek.org/heatmap.html>

