

Course Name: Cyber Security PLTW

Duration: 1 Semester Full Year

Grade Level: 9th 10th 11th 12th (check all that apply)

Are there any prerequisites for the course?

Completion of High School Algebra

WHAT this course is about:

PLTW Cybersecurity gives students a broad exposure to the many aspects of digital and information security, while encouraging socially responsible choices and ethical behavior. It inspires algorithmic thinking, computational thinking, and especially, “outside-the-box” thinking.

WHY take this course:

Careers in cybersecurity are fast-growing. The Bureau of Labor Statistics has projected the demand for information security analysts will increase by 37 percent between 2012 and 2022, but industry demand is quickly outpacing the supply of workers with the necessary skills and expertise. In a recent article, Yahoo’s Chief Information Officer Alex Stamos described it as “pretty much impossible to hire” people with the background in cybersecurity that his company needs.

WHAT you’ll learn:

Whether seeking a career in the emerging field of cybersecurity or learning to defend their own personal data or a company’s data, students in PLTW Cybersecurity establish an ethical code of conduct while learning to defend data in today’s complex cyberworld.

WHAT you’ll do:

Identify cybersecurity threats and protect against them. Detect intrusions and respond to attacks. Begin to examine your own digital footprint and better defend your own personal data. Learn how organizations protect themselves in today’s world.

WHERE this could take you:

Learn how to protect your personal data and computer or pursue a career in Cyber Security.

OPTIONAL Course Outline (“scope and sequence”, sequence chart, etc.)

Unit 1 Personal Security
Unit 2 System Security
Unit 3 Network Security

Unit 4 Applied Cybersecurity