CodeHS

Foundations of Secure Information Systems
Georgia

Computing Ideas	
	The Computing Ideas course is a first computer science course introducing the basics of programming with Karel the Dog, the basics of designing a web page, and how information and images are represented with computers. Students will learn to code using blocks to drag and drop, but they can switch between blocks and text as desired. Students will create a portfolio on the web of projects they build throughout the course.
	Georgia Foundations of Secure Information Systems Standards Addressed
Grades 6-8	**MS-CS-FSIS-1:** Demonstrate employability skills required by business and industry to explore, research, and present careers in information technology. **MS-CS-FSIS-2.2:** Demonstrate an understanding of key functional components (input devices, output devices, processor, operating system, software applications, memory, storage, Wi-Fi and/or Ethernet ports, and IP addresses). **MS-CS-FSIS-2.4:** Explain the interrelation of the operating system software, application software, and utility software, citing specific examples of each. **MS-CS-FSIS-2.5:** Develop a basic vocabulary of networks including the Internet, wired, wireless, cellular, WiFi, messages, packets, connections, bandwidth, broadband, firewall, hacking, cybersecurity, encryption, local area network (LAN), wide area network (WAN), and OSI model. **MS-CS-FSIS-2.6:** Demonstrate an understanding of the fundamental concepts for how computers process programming commands (hex, binary language, sequence of commands, conditional structures, and looping structures). **MS-CS-FSIS-3.1:** Identify characteristics of computational thinking (decomposition, pattern recognition, algorithmic thinking, and abstraction). **MS-CS-FSIS-3.5:** Explain how technology can create ethical and legal issues in the business world and a technology-based society and how it can be used to solve & manage those issues. **MS-CS-FSIS-7.4:** Draw conclusions illustrating a basic understanding of internet protocol (IP) packets, ports and network transmission.

Introduction to Cybersecurity	
	As our world becomes increasingly dependent on technology, cybersecurity is a topic of growing importance. It is crucial that companies and individuals take precautions to protect themselves from the growing threat of cyber attacks. This course prepares students with crucial skills to be responsible citizens in a digital future. This is the first online blended K12 cybersecurity course. Students will learn foundational cybersecurity topics including

	networking fundamentals, software security, and basics of cryptography, all through the CodeHS web-based platform.
	Georgia Foundations of Secure Information Systems Standards Addressed
Grades 6-8	**MS-CS-FSIS-6.1:** List and define the elements of the confidentiality, integrity, and availability (CIA) triad. **MS-CS-FSIS-6.2:** Identify the characteristics of strong vs. weak passwords in data and identity security. **MS-CS-FSIS-8.1:** Explain the differences between an ethical (white hat) hacker and an unethical (black hat) hacker **MS-CS-FSIS-8.2:** Cite evidence regarding the practice of ethical digital decision-making, including plagiarism, copyright law, and software licensing types (freeware, public domain, shareware, etc.). **MS-CS-FSIS-8.3:** Summarize and provide examples regarding security and privacy laws and their impact on society, citing recent cases. **MS-CS-FSIS-8.4:** Collect and compare cyberbullying evidence, including legal and social consequences, and develop guidelines to prevent cyberbullying.