

Cybersecurity Career Cluster
Intro to Digital Technology
Pacing Guide
1st Semester/ Fall 2021

Week	Activities/Projects	Standards
Week 1 Aug 4-6	Appropriate Email Use Communication Skills Create a Business Card and a Flyer Create a Presentation Create and Format a Letter Format a Research Paper Parts of an Email Message Teamwork and Collaboration Word Processing Software Basics Create a Professional Portfolio Compare and Contrast Careers in IT Create a Professional Portfolio Lifelong Learning Skills The Four Areas of Information Technology Employment Communication Skills Copyright and IP Diversity in the Workplace Ethical Issues on the Internet IT Legal and Ethical Issues Positive Personal Qualities in the Workplace Positive Work Ethic	IT-IDT-1: Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities. Demonstrate creativity with multiple approaches to ask challenging questions resulting in innovative procedures, methods, and products. Exhibit critical thinking and problem-solving skills to locate, analyze, and apply information in career planning and employment situations. Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.
Week 2 Aug 9-13	Positive Personal Qualities in the Workplace Teamwork and Collaboration Communication Skills Positive Personal Qualities in the Workplace Create a Web Page HTML Basics Investigate Web Design Publish to the Web Use CSS to Design a Web Page Web Pages Communication Skills Teamwork and Collaboration	IT-IDT-1: Apply the appropriate skill sets to be productive in a changing, technological, and diverse workplace to be able to work independently, interpret data, and apply teamwork skills. Present a professional image through appearance, behavior, and language. IT-IDT-2: Develop technical reading and writing skills to follow instructions. Work in a team to solve problems and share knowledge.
Week 3 Aug 16-20	Compare and Contrast Careers in IT The Four Areas of Information Technology Employment Communication Skills Teamwork and Collaboration	IT-IDT-2: Explore the impact of digital technology on careers including non-traditional technology fields and careers in each of the Georgia Career Clusters. Use collaborative tools to communicate

	<p>Compare and Contrast Careers in IT Entrepreneurship The Four Areas of Information Technology Employment Compare and Contrast Careers in IT Lifelong Learning Skills The Four Areas of Information Technology Employment</p>	<p>with team members. Describe how computing enhances traditional careers and enables new careers. Research post-secondary options for continuing education in IT field.</p>
<p>Week 4 Aug 23-27</p>	<p>Compare and Contrast Careers in IT The Four Areas of Information Technology Employment Compare and Contrast Careers in IT Create a Professional Portfolio Create a Web Page Information Technology Investigate Web Design The Four Areas of Information Technology Employment Web Pages</p>	<p>IT-IDT-2: Research IT credentials needed and job requirements in various occupations. Describe the impact of having web design skills to build skills for chosen career. Explore the game design industry for design, creation, and career options.</p>
<p>Week 5 Aug 30 – Sep 3</p>	<p>Communication Skills Positive Personal Qualities in the Workplace Positive Work Ethic Teamwork and Collaboration Presentation Software Software Overview Spreadsheet Basics Spreadsheets and Data Management</p>	<p>IT-IDT-3: Recognize the importance of all customers to a business. Demonstrate ability to assist customers in a professional manner. Determine the best method to maintain a customer list and communication platform. Demonstrate understanding of word processing, spreadsheet, presentation, and database software as a communication tool for business.</p>
<p>Week 6 Sep 6-10</p>	<p>Hardware Input and Output Sound, Graphics, and Network Cards Upgrade Computer Hardware Software Overview Computing Basics Hardware Input and Output Software Overview</p>	<p>IT-IDT-4: Identify hardware device functions, including peripherals devices, input devices, and portable hardware appropriate for specific tasks and emerging hardware as it impacts information technology. Demonstrate understanding of set up a basic computer workstation. Describe and explore current and emerging software, including operating systems and application software.</p>
<p>Week 7 Sep 13-17</p>	<p>Computing Basics Hardware Input and Output History of the Internet Information Technology</p>	<p>IT-IDT-5: Develop a working IT vocabulary. Describe trends in emerging, evolving, and future computer technologies and their</p>

	<p>Sound, Graphics, and Network Cards</p> <p>Upgrade Computer Hardware</p> <p>Wireless IT</p> <p>Improving Network Security</p> <p>Risks on the Internet</p> <p>Search on the Internet</p> <p>System Maintenance</p>	<p>influence on IT practices.</p> <p>Recognize online risks and dangers in order to take appropriate actions to protect the business and self while using digital tools and resources.</p>
<p>Week 8</p> <p>Sep 20-24</p>	<p>Search on the Internet</p> <p>Web Browsers</p> <p>File Management</p> <p>File Management Tools</p> <p>Computer Operating Systems</p> <p>Evolution of Networks</p> <p>Network Administration</p> <p>Network Basics</p> <p>Wireless Networks</p>	<p>IT-IDT-5: Demonstrate ability to access, navigate and use online resources and technologies. Define and demonstrate folder and file management and the importance of data back-up procedures.</p> <p>IT-IDT-6: Develop a working networking vocabulary including networking media, topologies, network operating systems, models and protocols, codes and standards, addressing, diagnostics, routing, WAN services, network security networking software, tools, and equipment. Illustrate and describe the functions of various types of networks including wireless.</p>
<p>Week 9</p> <p>Sep 27 – Oct 1</p>	<p>Evolution of Networks</p> <p>Improving Network Security</p> <p>Network Administration</p> <p>Network Basics</p> <p>Wireless Networks</p> <p>Wireless IT</p> <p>Wireless Networks</p>	<p>IT-IDT-6: Explain key issues in data transmission. Characterize the purposes, features and functions of the following network components: Switches, Bridges, Routers, Gateways, CSU / DSU, NICs, ISDN adapters, WAPs, Modems, Transceivers, Firewalls. Identify factors which affect the range and speed of wireless service. Explore networking trends and issues affecting business and personal use.</p>
<p>Week 10</p> <p>Oct 4-8</p>	<p>Hardware Input and Output</p> <p>Software Overview</p> <p>System Maintenance</p> <p>The Evolution of the Computer</p> <p>Upgrade Computer Hardware</p> <p>Information Technology</p> <p>Software Overview</p>	<p>IT-IDT-7: Apply strategies for identifying routine hardware and software problems current to everyday life. Identify compatibility issues and describe operational problems caused by hardware errors. Explain how technology can be used to solve problems.</p>
<p>Week 11</p> <p>Oct 11-15</p>	<p>Software Development</p> <p>Using Flowcharts and Pseudocode</p> <p>Add Images to a Web Page</p> <p>Create a Web Page</p> <p>HTML Basics</p> <p>Investigate Web Design</p>	<p>IT-IDT-7: Explain software development process used to solve problems. Explore commonly used documentation tools for design specifications.</p>

	<p>Publish to the Web Use CSS to Design a Web Page Web Pages</p>	<p>IT-IDT-8: Understand and apply design principles to create professional appearing and functioning web pages. Understand elements of web design.</p>
<p>Week 12 Oct 18-22</p>	<p>Add Images to a Web Page Audio Editing Techniques Create a Web Page Create and Edit Images Digital Audio Digital Images Digital Video HTML Basics Investigate Web Design Publish to the Web Use CSS to Design a Web Page Web Pages Wireless IT</p>	<p>IT-IDT-8: Design simple webpages incorporating media elements (e.g., sound, video, graphics, text, motion graphics), navigation, and linking. Explain the impact of mobile sites on the development of business. Explore the trends and emerging issues for websites.</p>
<p>Week 13 Oct 25-29</p>	<p>Programming Design Algorithms</p>	<p>IT-IDT-9: Utilize drag and drop software to develop programs. Understand and use objects. Explain how sequence, selection, iteration are building blocks of algorithms. Explore mobile devices/emulators to design develop and implement mobile computing applications.</p>
<p>Week 14 Nov 1-5</p>	<p>Debugging a Program Testing and Fixing Code Programming Overview Add Images to a Web Page Create a Web Page Create and Edit Images Digital Audio Digital Images Investigate Web Design</p>	<p>IT-IDT-9: Use various debugging and testing methods to ensure program correctness. Describe a variety of programming languages used to solve problems. Incorporate music and art to enhance creativity in projects.</p>
<p>Week 15 Nov 8-13</p>	<p>IT Legal and Ethical Issues Positive Work Ethic Digital Images Copyright and IP Ethical Issues on the Internet Risks on the Internet Search on the Internet</p>	<p>IT-IDT-10: Demonstrate positive cyber citizenry by applying industry accepted ethical practices and behaviors. Recognize the ethical and legal issues while accessing, creating, and using digital tools and resources in order to make informed decisions. Exercise digital citizenship as a lifelong learner.</p>
<p>Week 16 Nov 15-19</p>	<p>Copyright and IP Ethical Issues on the Internet Search on the Internet Risks on the Internet</p>	<p>IT-IDT-10: Understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Describe personal and legal consequences of inappropriate use of resources and online content. Identify security issues and trends affecting computers and information privacy.</p>

<p>Week 17 Nov 29 – Dec 3</p>	<p>Ethical Issues on the Internet Improving Network Security Risks on the Internet</p>	<p>IT-IDT-10: Describe the use of computer forensics to prevent and solve information technology crimes and security breaches. Identify criminal activity in relationship to cybercrime, the Internet, and Internet trafficking.</p>
<p>Week 18 Dec 6-10</p>	<p>Career and Technical Student Organizations</p>	<p>IT-IDT-11: Explain the goals, mission and objectives of Future Business Leaders of America. Explore the impact and opportunities a student organization (FBLA) can develop to bring business and education together in a positive working relationship through innovative leadership and career development programs. Explore the local, state, and national opportunities available to students through participation in related student organization (FBLA) including but not limited to conferences, competitions, community service, philanthropy, and other FBLA activities.</p>
<p>Week 19 Dec 13-17</p>	<p>Career and Technical Student Organizations</p>	<p>IT-IDT-11: Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development. Explore the competitive events related to the content of this course and the required competencies, skills, and knowledge for each related event for individual, team, and chapter competitions.</p>
<p>Ongoing</p>	<p>Employability Skills FBLA Integration</p>	<p>IT-IDT-1 Demonstrate employability skills required by business and industry. IT-IDT-11 Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events.</p>

