Computers and Technology

August 2021

For more information, contact:

Jason Shoemaker, Extension Specialist, Computers and Technology Brigitte Passman, Extension Agent I and County Director, Tipton County Jennifer Richards, Curriculum Specialist, University of Tennessee Extension Susan Craigo, Web Development Specialist, University of Tennessee Institute of Agriculture Brad Greenfield, Web Application Developer, University of Tennessee Institute of Agriculture

Information Technology

- Compare and contrast digital and face-to-face video hosting platforms.
- Research the purposes and future outlook of drones.
- Describe the process of obtaining a drone license.
- Generate a list of common problems and solutions that people experience when using computers.
- Research the pros and cons of purchasing a new, used or refurbished computer, gaming system or another electronic device.
- Generate a list of questions to ask prior to purchasing an electronic device.
- Create a buying guide to purchasing a computer, smart phone, gaming system or other electronic device.
- Collect user analytics data on a website.
- Research careers in information technology such as user support, programming and training.
- Identify the challenges facing information technology specialists.
- Start or participate in a technology club for younger 4-H members.

Computer Graphics and Visualization

- Identify opportunities to gain or improve videography skills.
- Compare and contrast games from a variety of gaming systems.
- Create computer graphics and visualizations.
- Create a video game.
- Explore careers and college programs in geometric modeling, computer graphics and visualization.

Software

- List the tools and processes a programmer utilizes when developing an application or website.
- Explain the role of a Content Management System (CMS) in website development and maintenance.





- Define the Learning Management System (LMS) and its role in education.
- Create an application or website.
- Identify educational and career requirements for software engineers and software developers.
- Solve given computer problems with digital tools.
- Describe financial applications such as mobile banking and digital tax filing.

Accessibility

- Identify training opportunities, certification and careers related to accessibility on WebAIM and IAAP.
- Create and share videos on multimedia outlets to teach others how to make their devices more accessible.
- Volunteer to provide technical support and knowledge to residents at an assisted living facility or nursing home.
- Setup a secure Wi-Fi network using a hotspot or connect to a free Wi-Fi network using a virtual private network (VPN).
- Explain how user experience contributes to the accessibility and usability of a website or application

Cybersecurity

- Compare and contrast the security measures of various social media platforms.
- Research current job offerings in the field of cybersecurity.

Cyberethics

- Explain the responsibility of people to act ethically online
- Describe the roles of Google Scholar, Creative Commons and Open Educational Resources in cyberethics.

Cryptography

- Research how different search engines use cryptography.
- Explore cryptography on different applications and/or websites such as Tynker, Kodable, Code.org, Codakid or Bitsbox.
- Research the programming languages (Java, Java Script, etc.) of specific electronic device(s).

August 2021 2



utia.tennessee.edu Real. Life. Solutions.™

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development. University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating. UT Extension provides equal opportunities in programs and employment.

August 2021 3