

# KeyCode: Grades 7-8 (2023)

**Determine and discuss the value of professionalism and involvement in professional, academic, and leadership activities.** 1

**1 Recognize and discuss the academic and professional benefits of participating in a CTSO.** 1.1

- 1 Discuss Career and Technical Student Organizations (CTSO) such as FBLA and DECA. 1.1.1
- 2 Investigate CTSO competitive events and identify sources to help prepare for success in competitive events. (If you have an active middle level chapter). 1.1.2
- 3 Understand the importance of professional dress and evaluate appropriate dress for CTSO conferences. 1.1.3

---

**2 Develop personal traits for success.** 1.2

- 1 Identify effective communication skills by comparing personal vs. business communication. (e.g., text messages, emails). 1.2.1
- 2 Comprehend and explain the importance of punctuality and attendance. 1.2.2
- 3 Identify traits important to success. (e.g., initiative, positive attitude, enthusiasm, self-confidence). 1.2.3
- 4 Discuss integrity and ethical leadership. 1.2.4
- 5 Identify and practice fundamental etiquette skills. (e.g., introductions, handshakes, and eye contact) 1.2.5
- 6 Participate in soft skill evaluations. 1.2.6

---

**3 Understand and demonstrate the concept and importance of one's digital presence.** 1.3

- 1 Compare and contrast positive and negative social media presence. 1.3.1
- 2 Critique one's own digital presence. 1.3.2

---

**Demonstrate the operation and management of equipment in the classroom.** 2

**1 Understand and identify computer hardware and software.** 2.1

- 1 Practice proper care of computer equipment. (e.g., headphones, mouse, keyboard, etc.). 2.1.1
- 2 Demonstrate and maintain proper use of computer equipment. 2.1.2
- 3 Identify computer hardware and software. (e.g., peripherals, computer and audio settings, etc.). 2.1.3

---

**2 Utilize proper computer management practices. 2.2**

- 1 Establish effective file and password management. (e.g., Cloud Storage, Networks, etc.). 2.2.1
  - 2 Access a gradebook program to develop accountability. 2.2.2
- 

**Demonstrate and operate the alphanumeric keyboard using the touch typing method. 3****1 Demonstrate and apply the proper touch typing techniques. 3.1**

- 1 Demonstrate the proper techniques necessary for operation of the keyboard (e.g., seating, body posture, finger placement, etc.). 3.1.1
  - 2 Demonstrate correct touch typing techniques and spacing rules (e.g., punctuation marks, one space after a period, etc.). 3.1.2
  - 3 Key documents while applying proper keyboarding techniques. 3.1.3
- 

**2 Understand and identify proper data entry techniques. 3.2**

- 1 Understand proper 10-key techniques using numeric keypad on a keyboard. 3.2.1
  - 2 Identify careers utilizing the 10-key techniques. 3.2.2
- 

**Create simple documents using proper formatting features. 4****1 Utilize text and document formatting features. 4.1**

- 1 Determine and utilize the proper text formatting features. (e.g., font type, font style, color and case). 4.1.1
  - 2 Utilize paragraph formatting functions. (e.g., line spacing, tabs, paragraph spacing, and columns). 4.1.2
  - 3 Apply page formatting features. (e.g., borders, numbering, bullets, etc.). 4.1.3
- 

**2 Construct properly formatted documents. 4.2**

- 1 Key business documents using appropriate formatting guidelines. (e.g., memo, email, letters, reports). 4.2.1
  - 2 Edit documents using appropriate proofreaders' marks. 4.2.2
  - 3 Key documents from handwritten samples. 4.2.3
- 

**Demonstrate proficiency in the Arkansas Computer Science Coding Block standards. (Minimum 5 Weeks) 5****1 Computational Thinking and Problem Solving – Students will analyze and utilize problem-solving strategies. 5.1**

- 1 Examine traditional programming algorithms, including searches and sorts. 5.1.1
- 2 Describe the steps needed to efficiently solve a problem. 5.1.2
- 3 Manually test algorithms with simple data to observe accuracy of anticipated output. 5.1.3
- 4 Demonstrate appropriate collaborative behaviors (e.g., integrating feedback, providing useful feedback, understanding and accepting multiple perspectives) when solving problems 5.1.4

---

## **2 Data, Information, and Security – Students will analyze and utilize concepts of cybersecurity.** 5.2

- 1 Apply strategies to protect personal digital footprints (e.g., game profiles, shares on social media, other online accounts) and the responsibilities and opportunities of living, learning, and working in a digitally connected world 5.2.1
- 2 Research and describe real-world cybersecurity problems (e.g., identity theft) as they relate to personal cybersecurity, and how to apply digital and physical methods for protecting and securing personal information 5.2.2

---

## **3 Algorithms and Programs – Students will create, evaluate, and modify algorithms.** 5.3

- 1 Explain the logic involved in how a computer program executes (e.g., flow charts, program flow) 5.3.1
- 2 Discuss and apply best practices of backend program design (e.g., comments, documentation, whitespace) 5.3.2
- 3 Test a computer program with data and evaluate output for accuracy 5.3.3
- 4 Find and debug errors in a computer program 5.3.4

---

## **4 Algorithms and Programs – Students will create programs to solve problems.** 5.4

- 1 Implement the following programming concepts: 5.4.1
  - a data types 5.4.1.A
  - b variables creation 5.4.1.B
  - c variable assignment 5.4.1.C
  - d conditional branching (e.g., if, if-else, multi-branch) 5.4.1.D
  - e iteration (e.g., for, while) 5.4.1.E
  - f functions 5.4.1.F
- 2 Create a program using a text-based programming language. 5.4.2

---

## **5 Computers and Communication – Students will analyze communication methods and systems used to transmit information among computing devices.** 5.5

- 1 Identify major components and functions of computer systems (e.g., hardware, software) and networks (e.g., network components, wired, wireless) and recommend methods to secure computer systems and networks. 5.5.1

---

## **6 Professionalism and Impacts of Computing – Students will analyze the impacts of technology and professionalism within the computing community.** 5.6

- 1 Research diverse careers and career opportunities that are influenced by computer science and the technical and soft skills needed for each. 5.6.1