Introduction to Software Technology Curriculum Map 2023-2024

1. Unit 6: Online Safety and Digital Citizenship

- A. Student Goal: Learn the impact of technology on society and the workforce and exhibit decision-making skills and critical thinking in the ethical use of digital resources.
- **B. Student Goal:** Learn about cyberbullying and its effects and handling digital communication in personal and professional lives.
- **C. Student Goal:** Understand the consequences of choices they make with their digital footprints, managing social media and protecting themselves.
- **D. Student Goal:** Demonstrate and maintain a safe environment while communicating online.

E. Assessment/Quizzes:

Daily Work/Quizzes	<u>Labs</u>	<u>Tests/Projects</u>
-2-		-2-

2. Unit 5: Emerging and Future Technology

- A. Student Goal: Describe and explore current and emerging software
- **B. Student Goal:** Learn how technology has evolved since the invention of 4th generation computers.
- C. Student Goal: Develop a working IT vocabulary.
- **D. Student Goal:** Describe trends in emerging, evolving, and future computer technologies and their influence on IT practices.

E. <u>Assessment/Quizzes:</u>

Daily Work/Quizzes	<u>Labs</u>	<u>Tests/Projects</u>
2		1

3. Unit 1&4: Employability Skills

A. Student Goal: Learn how to communicate effectively through writing, speaking,

listening, reading.

- **B.** Student Goal: Explain why effective communication is important.
- **C. Student Goal:** Learn collaboration as they identify communication styles, determine their own style, and how to plan, organize, and conduct a meeting.
- **D. Student Goal:** Identify and apply the appropriate skill sets to be productive in the workplace.

E. <u>Assessment/Quizzes:</u>

Daily Work/Quizzes	<u>Labs</u>	<u>Tests/Projects</u>
2		2

4. <u>Unit 3&12:</u> <u>Career Development</u>

- A. Student Goal: Learn to work in a team to solve problems and share knowledge.
- **B. Student Goal:** Explore the impact of digital technology on careers and careers in the Georgia Career Clusters.
- **C. Student Goal:** Research post-secondary options and IT credentials needed for various occupations.
- **D. Student Goal:** Describe the impact of having web design skills for chosen career.

E. <u>Assessment/Quizzes:</u>

Daily Work/Quizzes	<u>Labs</u>	<u>Tests/Projects</u>
-2-		-1-

5. Unit 2: Information Technology Career

- **A. Student Goal:** Learn about jobs that requires technology but are not considered information technology positions.
- **B. Student Goal:** Learn how women are playing a major role in the field of computer science.

C. Student Goal: Identify the game design industry for design, creation, and career options.

D. <u>Assessment/Quizzes:</u>

Daily Work/Quizzes	<u>Labs</u>	<u>Tests/Projects</u>
1		1

6. Unit 7: Problem Solving, Flowcharting, Algorithms, and Game Development

- **A. Student Goal:** Define computational thinking and identify the 6 steps in Computational thinking process
- **B. Student Goal:** Explain software development process used to solve problems.
- **C. Student Goal:** Learn about Algorithm and demonstrate how to construct a Flowchart.

D. Assessment/Quizzes:

Daily Work/Quizzes	<u>Labs</u>	<u>Tests/Projects</u>
-2-	-	-2-

7. Unit 9: Visual Programming

- A. Student Goal: Learn about object-orientation programming
- B. Student Goal: Utilize drag and drop software to develop programs.
- C. Student Goal: Understand and use objects.
- **D. Student Goal:** Explain how sequence, selection, iteration is building blocks of algorithms.
- **E. Student Goal:** Learn how to use various debugging and testing methods to correct programs.
- **F. Student Goal:** Know how to incorporate music and art to enhance creativity in projects.
- G. Assessment/Quizzes:

Daily Work/Quizzes	<u>Labs</u>	<u>Tests/Projects</u>
3		-1-

8. Unit 5 cont : Evaluating Online Resources

- A. Student Goal: Learn how to back up data.
- **B. Student Goal:** Describe how to conduct a web search to obtain accurate and relevant information.
- **C. Student Goal:** Learn how to secure and protect data from viruses and other intrusions.

D. <u>Assessment/Quizzes:</u>

Daily Work/Quizzes	<u>Labs</u>	<u>Tests/Projects</u>
-1-		

9. Unit 5 cont : Operating Systems & Binary Code

- **A. Student Goal:** Describe the purposes and functions of the operating systems.
- **B. Student Goal:** Explain how the operating system keep track of storage resources.

C. Assessment/Quizzes:

Daily Work/Quizzes	<u>Labs</u>	<u>Tests/Projects</u>
1		-1-

10. Unit 10: Networking Basics

- **A. Student Goal:** Learn how computer networks are classified.
- **B. Student Goal:** Explain key issues in data transmission.
- C. Student Goal: Identify and describe 4 types of network topologies.

D. Student Goal: Describe the purposes of at least 3 types of network components.

E. Assessment/Quizzes:

Daily Work/Quizzes	<u>Labs</u>	Tests/Projects
1		1

11. Unit 11: Cyber security & Legal Issues

- **A. Student Goal:** Demonstrate positive cyber citizenry.
- **B. Student Goal:** Describe how technology impacted the workplace and society.
- **C. Student Goal:** Identify security issues and trends affecting computers and information privacy.
- **D. Student Goal:** Understand issues related to technology and practice legal and ethical behavior.

E. <u>Assessment/Quizzes:</u>

Daily Work/Quizzes	<u>Labs</u>	<u>Tests/Projects</u>
-1		-1-

12. Unit 8: Web Design

- **A. Student Goal:** Identify and explain elements of web design.
 - **B. Student Goal:** Design simple webpages.
 - **C. Student Goal:** Differentiate between web authoring and coding when it comes to designing web pages.
 - **D. Student Goal:** Explore the trends and emerging issues for websites.

E. <u>Assessment/Quizzes:</u>

Daily Work/Quizzes	<u>Labs</u>	<u>Tests/Projects</u>
-3-		2

13. Unit 12 cont: FBLA

- **A. Student Goal:** Explain the goals, mission and objectives of Future Business Leaders of America.
- **B. Student Goal:** Explore and discuss the opportunities available through participation in FBLA.
- **C. Student Goal:** Describe how computing enhances traditional careers and enables new careers.
- **D. Student Goal:** Identify the game design industry for design, creation, and career options.

E. <u>Assessment/Quizzes:</u>

Daily Work/Quizzes	<u>Labs</u>	<u>Tests/Projects</u>
2		-1-