Esports are being integrated into CTE programs through curriculum, competitions, programs of study. The following objectives are compiled from several existing state program of study standards. States and districts are advised to develop their state/district standards as per their current process, ensuring they are data-driven and industry-approved.

Course Description:

Emerging Technologies are transforming our industry sectors. This course is designed to address the esports revolution and guide students to careers in Science, Technology, Engineering, and Technology (STEM) sectors or other esports orbital careers. Students will be exposed to a wide variety of academic applications that are applicable in game development careers, computer programming careers, arts and audio-visual (AV) careers, marketing careers, and a plethora of additional STEM careers. The content of a CTE Esports Pathway allows students to apply academic principles in a comprehensive project-based learning (PBL) environment. Students will investigate and compete in gaming opportunities that are healthy, ethical, and driven by teamwork and problem-solving skills, and critical thinking. This course is recommended for grades 9-12: prerequisite Year 1.

- 1. OBJECTIVE 1.0: Students will be able to demonstrate professional/employability skills as required by business and industry. The student is expected to:
 - 1.1. Apply concepts of the various work behaviors and qualities that enhance employability in STEM careers such as regular attendance, maintenance of a safe work environment (in person or virtually), teamwork, flexibility, and initiative.
 - 1.2. Cite evidence of effective verbal and non-verbal communication skills.
 - 1.3. Cite evidence of effective technical reading and writing skills in creating career portfolios and work samples.
 - 1.4. Summarize the legal and ethical responsibilities in relation to esports, gaming, and emerging technology fields.
 - 1.5. Investigate and compare employment opportunities in the esports industry.
 - 1.6. Summarize the basic concepts of intellectual property laws in esports including copyright and media.
 - 1.7. Organize and implement time-management skills in relation to being a player and attending official esports activities at your school.
- 2. OBJECTIVE 2.0: Students will be able to demonstrate problem-solving, critical thinking, and computational thinking skills in relation to video games. The student is expected to:
 - 2.1. Create objectives and outcomes for a complicated in-game task or set play.
 - 2.2. Cite evidence of problem-solving and troubleshooting strategies in maintaining focus and participating in healthy gaming.
 - 2.3. Synthesize optimizations for gameplay by analyzing raw data like player statistics, item attributes, or meta-analysis.
 - 2.4. Analyze patterns and various play styles of pro players and recognize how application of these skills and patterns improves game play.

- 2.5. Compare and contrast statistical data changes from game updates; hypothesize how game play would be affected.
- 3. OBJECTIVE 3.0: Students will be able to identify various employment opportunities and orbital careers in the esports industry. The student is expected to:
 - 3.1. Compare employment opportunities as well as job tasks and expectations in game creation, game use and game entertainment.
 - 3.2. Create a sample resume and portfolio for gaming, esports, technology, or orbital careers related to esports.
 - 3.3. Recognize and relate the various roles and skills necessary to support the esports ecosystem and industry.
 - 3.4. Investigate the impact of potential barriers that exist within the esports ecosystem and develop a logical argument that proves the benefits of an inclusive environment.
 - 3.5. Recognize (Investigate) the skills required in the esports industry and infer what skills might be transferable to other industry sectors and professions.
 - 3.6. Connect transferable skills to personal career goals.
- 4. OBJECTIVE 4.0 Students will be able to identify and differentiate healthy gaming behaviors and habits. The student is expected to:
 - 4.1. Cite evidence of how various physical syndromes associated with gaming can affect gaming activities (ex. Tendonitis, carpal tunnel, tenosynovitis, etc.).
 - 4.2. Analyze and implement time management techniques for productive and healthy gaming practice associated with transferable skills.
 - 4.3. Predict how components of gaming skills apply and support other subject areas (i.e. organizing, storytelling, literacy, detailing artistic components, coding, etc).
 - 4.4. Create a plan to maintain mental and physical health for esports athletes.
 - 4.5. Summarize the behavior components and importance of good etiquette, sportsmanship, and teamwork in esports.
 - 4.6. Cite evidence to support the claim that esports and gaming promote a "growth mindset."
 - 4.7. Analyze how teamwork and in-game communication affect game and match outcomes.
- 5. OBJECTIVE 5.0 Students will be able to investigate and compare the scientific research regarding the actions and reactions of esports gamers. The student is expected to:
 - 5.1. Recognize and interpret the variety of human mind and body reactions to gaming stimuli.
 - 5.2. Investigate the research on the societal and individual effects of violence in video games.
 - 5.3. Investigate the research on the discrepancies in gender biases in the esports industry.
 - 5.4. Investigate the research contributions related to the development of gaming and understanding terms such as virtual reality, biometrics, augmented reality, etc.
 - 5.5. Predict how biometrics, interactions, and game control techniques will improve future gaming and esports experiences. Recognize the parameters of biometrics in real-time in gaming.

- 6. OBJECTIVE 6.0 Students will investigate how game development affects strategy, sequencing, and logical outcomes in esports and gaming. The student is expected to:
 - 6.1. Assess and document the development process in smaller parts such as graphics, sequencing, coding, design, sound, and design concepts.
 - 6.2. Investigate the components of the game development process and how they connect to the seamless game experience (ex. game mechanics, visuals, narrative).
 - 6.3. Connect and apply game development to how gameplay is affected based on the game's characteristics and mechanics.
 - 6.4. Cite evidence of visualization as a problem-solving technique for creating video games.
- 7. OBJECTIVE 7.0 Students will be able to assess the corresponding impact of related influences such as media and technology in the development of esports events. The student is expected to:
 - 7.1. Cite evidence of media related skills involved in esports events preparations such as: streaming, recording, broadcasting, graphic design components, video editing, shout casting, etc.
 - 7.2. Differentiate the media and technology components of gaming events that need to be incorporated for a successful competition.
 - 7.3. Cite evidence of emerging technologies related to gaming and esports opportunities.
 - 7.4. Create the pre and post event promotional media products related to the event.
- 8. OBJECTIVE 8.0 Students will summarize the process and plan an esports event to include pre-event, game day, and post-event activities. The student is expected to:
 - 8.1. List the steps of pre-event planning and create a document of all components involved in the planning phases.
 - 8.2. Create a timeline, document, and spreadsheet of the event day activities. Categorize the multitude of team roles and duties which are essential to operating (initiating, planning, executing, monitoring, and controlling) a successful esports event.
 - 8.3. Assess the technical and non-technical issues that may arise during the event and develop solutions that may curtail any difficulties.
 - 8.4. Summarize the process of collecting data from the end-user experience and how feedback will be gathered.
 - 8.5. Analyze and critique a successful esports event and highlight areas for improvement.
 - 8.6. Compare and contrast a variety of competitive games and their implications for competition.
 - 8.7. Investigate the similarities and differences between a Local Area Network (LAN) and a virtual competition and identify a situation when each would be utilized.
- 9. OBJECTIVE 9.0 Students will connect with businesses and industries to promote community outreach. The student is expected to create a model to promote esports as a business.
 - 9.1. Investigate the marketing and promotional aspects of executing an esports event.
 - 9.2. Investigate the sponsorship opportunities and various industry partners available to esports teams and draft a sponsorship proposal.

- 9.3. Analyze the cost associated with a LAN and/or virtual esports event.
- 9.4. Design a spreadsheet differentiating the costs of an event (ex.all staffing, rentals, promotion).
- 10. OBJECTIVE 10.0 Students will implement strategies that help them develop long and short-term goals associated with gameplay and SEL skills. The student is expected to:
 - 10.1. Reflect on your performance with an analysis of your problem-solving and troubleshooting strategies that led to game improvement.
 - 10.2. Compare and contrast appropriate long-term and short-term goals in gaming.
 - 10.3. Create and implement a long-term and short-term plan for self-improvement.
 - 10.4. Distinguish between productive and unproductive gaming habits.
 - 10.5. Create a plan for improvement from a fundamental to an advanced level of play.
- 11. OBJECTIVE 11.0 Students will demonstrate an understanding of psychological principles in gameplay and design. The student is expected to:
 - 11.1. Define and identify user-centric design.
 - 11.2. Identify and categorize patterns in players' personalities, game strategies, and game construction. Including but not limited to Bartle's taxonomy of player types.
 - 11.3. Assess the dangers of gaming addiction and how to avoid it.
 - 11.4. Differentiate between a fixed and growth mindset in gaming.
 - 11.5. Differentiate between positive and negative influences in the esports field.
 - 11.6. Compare and contrast the pillars of mind, body, and heart within gamers. Identify the level of which of these categories are most applicable to you.
- 12. OBJECTIVE 12.0 Students will connect with an organization that promotes emerging technologies. The student is expected to:
 - 12.1. Participate in an extracurricular gaming club to acquire additional skills in collaboration, critical communication skills, critical thinking, and problem-solving skills.
 - 12.2. Demonstrates leadership strategies in inclusive behaviors while advocating activities and competitions for the gaming club.
 - 12.3. Summarize activities and events hosted by the club (including meeting initiatives).
 - 12.4. Organize the extracurricular club in a manner consistent with Career and Technical Student Organizations (CTSO) by-laws and activity expectations.