

## Standards Based Education-Priority Standards

## CTE IB Computer Science and Game Design-Python

PS 1 Explain and model concepts in design/problem solving using multiple communication modes (including, for example, oral descriptions, written descriptions, pictures, flowcharts, example code, and pseudocode).

PS 2 Plan, design and create products/solutions using iterative design techniques, problem-solving, creativity, and reasoning skills.

PS 3 Write programs that conform to stylistic conventions for syntax, structure, identifier selection, and commenting.

PS 4 Understand and incorporate programming elements (conditionals, flow control, variables, data types, and data structures, algorithms) into programs.

PS 5 Use reasoning, problem-solving and decision-making skills to identify, analyze and correct errors (debugging).

PS 6 Evaluate a product/solution against a design specification in an objective manner based on testing and other feedback..

PS 7 Choose appropriate methods to implement a solution to a specific problem; describe the trade-offs among the solutions in terms of clarity, readability, efficiency, and ease of use.

PS 8 Evaluate a product/solution's impact on life, society and/or the environment. Explain how a product could be improved.

PS 9 Identify career options in computer science. Relate importance of workplace expectations to career development. Identify, understand and apply workplace readiness skills such as perseverance, cooperation, and independence.

PS 10 9-10.RST.4 Determine the meaning of symbols, key terms, and other domain specific words and phrases as they are used in a specific scientific or technical context relevant to grades 9–10 texts and topics.

PS 11 9-10.RST.7 Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.

PS 12 9-10.WHST.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.

PS 13 9-10.WHST.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation