Princess Anne High School

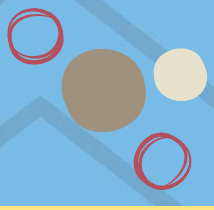
presents

AP COMPUTER SCIENCE PRINCIPLES

Creative Thinkers Wanted!

Creativity

Computing is a creative activity. In this course, you will use the tools and techniques of computer science to create interesting and relevant digital artifacts (e.g., a video, animation, infographic, audio recording or program) with characteristics that are enhanced by computation.

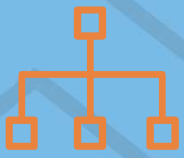


Abstraction

Abstraction is a central problem-solving technique in computer science. In this course, you'll use abstraction to model the world and communicate with people and machines.

Data and Information

Data and information facilitate the creation of knowledge. Managing and interpreting an overwhelming amount of raw data is part of the foundation of our information society and technology. In this course, you will work with data to better understand the many ways in which data is transformed into information and knowledge.



Algorithms

Algorithms are used to develop and express solutions to computational problems. They are fundamental to even the most basic everyday task. In this course, you will work with algorithms in many ways: You will develop and express original algorithms, implement algorithms in a language, and analyze algorithms analytically and empirically.

Programming

Programming enables problem solving, human expression, and creation of knowledge. It results in the creation of software, and it facilitates the creation of computational artifacts, including music, images, and visualizations. In this course, you'll learn the fundamental concepts of programming that can be applied across a variety of projects and languages. You will create programs, translating human intention into computational artifacts.

The Internet

The Internet and systems built on it have a profound impact on society. It pervades modern computing. In this course, you will: gain insight into how the Internet operates; study characteristics of the Internet and systems built on it; and analyze important concerns, such as cybersecurity.

Global Impact

Computation has changed the way people think, work, live, and play. In this course, you'll become familiar with many ways in which computing enables innovation. You will analyze the potential benefits and harmful effects of computing in a number of contexts.