

# COMPUTER SCIENCE

## **Technology Proficiency Portfolio**

**Grade level: 10-11 (not available for Class of 2024 or after)**

Students may demonstrate their technology proficiency through a portfolio-based system using a modified version of the ISTE-NETs. With the help of an advisor, students complete a narrative linking current and past course work to the technology standards in the areas of creativity, communication, critical thinking and problem solving, innovation, research literacy, digital citizenship, and technology troubleshooting.

## **Introduction to Computer Science**

**Grade level: 9-12 Elective**

**Prerequisite: Algebra 2 (concurrent or completed)**

Intro to Computer Science is designed to offer a hands-on introduction to computer science and how it impacts our everyday lives. Students learn fundamental concepts of how software works and how to apply those concepts to solve real problems. The course will cover topics like creating computer programs, building games, and discussing technology's influence in today's world.

## **AP Computer Science Principles (offered next in 2021-22)**

**Grade level: 10-12 Elective**

**Prerequisite: Algebra 1 (10th grade students require instructor approval)**

AP Computer Science Principles is a rigorous, entry-level course that introduces high school students to the foundations of modern computing. The course covers a broad range of foundational topics such as programming, algorithms, the internet, big data, digital privacy and security, and the societal impacts of computing. The curriculum assumes no prior knowledge of computing, is written to support students who are new to the discipline, and is accessible to all students, especially those in groups typically underrepresented in computing.

**AP Computer Science A (offered next in 2020-21)**

**Grade level: 10-12 Elective**

**Prerequisite: Algebra 1 (10th grade students require instructor approval)**

This course is designed as a first course in programming with the Java language, with the assumption that students have done some programming in another language before taking the course. The focus is on programming theory and fundamentals, as well as the mastery of the basics of the Java language. By the end of the course, students will be able to write useful programs in Java, using good style, design and debugging approaches, and problem-solving methods.