

## COMPUTER PROGRAMMING 2

*This course introduces students to more advanced programming concepts. Students will learn to create more powerful programs within a specific programming language such as Java, Python, C++, or C#.*

- Students will demonstrate static (array), dynamic (vector, ArrayList, etc.) list structures, and strings.
- Students will properly use sequential files.
- Students will create user defined functions using top-down design and functional decomposition.
- Students will properly demonstrate object-oriented programming techniques.
- Students will properly demonstrate code comprehension and debugging techniques.
- Students will apply appropriate programming skill as an effective member of a team demonstrating the ability to collaborate with others ([www.p21.org](http://www.p21.org)).
- Students will demonstrate knowledge of current ethical issues dealing with computers and information in a global society using 21st Century Skills.
- Students will be aware of career opportunities in the Computer Programming/ Software Engineering industry and its history.

