



SERVITE HIGH SCHOOL

FORMING FAITH-FILLED LEADERS

SERVITE STEM COMPUTER SCIENCE PATHWAY

Servite High School is partnering with Project Lead the Way to provide students a computer science pathway. The program's interdisciplinary courses engage students in compelling, real-world challenges. As students work together to design solutions, they learn computational thinking – not just how to code – and become better thinkers and communicators. Students take from the courses in-demand knowledge and skills they will use in high school and for the rest of their lives, on any career path they take.

Freshman Year: Computer Science Essentials

- Students will experience the major topics, big ideas, and computational thinking practices used by computing professionals to solve problems and create value for others. This course will empower students to develop computational thinking skills while building confidence that prepares them to advance to Computer Science Principles and Computer Science A.

Sophomore Year: AP Computer Science Principles

- The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends.

Junior Year: AP Computer Science A

- Students collaborate to create original solutions to problems of their own choosing by designing and implementing user interfaces and Web-based databases, as well as creating a game for their friends or an app to serve a real need in their community. This course is aligned to the AP CSA framework.

Senior Year: Cybersecurity

- Whether seeking a career in the growing field of cybersecurity or learning to defend their own personal data or a company's data, students in Cybersecurity establish an ethical code of conduct while learning to defend data in today's complex cyberworld.

Pathway Requirements:

- Summer before freshman year: Complete a Fine Art course
- Eligible for Algebra 2/Trig by end of freshman year.
- Completion of a capstone project by end of senior year

Individuals will receive recognition and honors for successfully completing this pathway. If you are interested in starting this pathway, please indicate so on your Course Request Form by selecting the "Computer Science Essentials" course.

CONDUCTED BY THE ORDER FRIAR SERVANTS OF MARY