

# STEAM

## Science Technology Engineering Art Math

In the Sehome Design Lab Science, Technology, Engineering, Art and Math combine to bring us full STEAM into the future. Learn to connect both sides of your brain to solve design problems. Unlock your creativity and start innovating. Computing has opened up wonderful new ways for people to connect, design, research, play, create, and express themselves. However, just using a computer is only a small part of the picture. The real transformative and empowering experience comes when one learns how to translate ideas into reality. This pathway introduces students to the maker movement through project based learning. With projects centered on application of the Design Loop, students will learn collaboration skills, presentation skills and hone an ability to bring a product from concept to completion.

### Visual Communication

Start your STEAM journey here. This course combines photography, art, digital imaging technology, and communication with special emphasis on computer graphics while exploring careers. Digital media has exploded all around us; learn the skills that move you from media user to media producer; including interactive art, graphical user interface, the Internet, and mobile phones.

### Computer Programming

From the time you wake up in the morning until you go to sleep at night, technology is all around you. This course will help you learn to talk to computers using the Python language.

#### AP Computer Science Principles

Introduction to the foundational concepts of computer science. Explore how computing and technology can impact the world. Focus on creative problem solving and real-world applications.

#### AP Computer Science A

Learn to code in Java with an emphasis on data abstraction, object-oriented programming, design methodology, algorithms, and data structures.

### Video Game Design

Turn your passion for video games, art/graphic design or technology into a future in the multi-billion-dollar video game industry. You will use both halves of your brain to design and program games. Explore the field of computer science with an emphasis on games.

#### Video Production

Through video creation, we will explore the impact and power of media, develop an ability to critique various productions and apply ethical standards for public viewing.

### Interior Design

Apply your passion for art to improving interior spaces. You'll apply the elements and principles of design along with design styles on floor plans.

#### Architecture

From the outside in you'll discover the art of architecture through technical sketches, models and creating your own 3D homes. As designers, you will create well thought out floor plans. We will consider environmental factors in our designs and learn how to accommodate those factors in intelligent ways.