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. This pathway is designed to give students experience in a large variety of career opportunities. Students begin learning fundamentals and progress in many directions.

Visual Communication

Usually this is the first course in the pathway. 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. Computer graphics has become a basic element in digital media technology. This class provides students with opportunities to explore the field of visual communication with an emphasis on digital media including interactive art, graphical user interface, the Internet, and mobile phones.

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Computer Programming

Learn how to code computer programs and design algorithms that make computers more efficient, and discover what a career in computing could be.

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.

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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. A wide range of skills will be developed in the class including storyboarding, logical thinking, app design, and programming using a variety of software. You will use both halves of your brain to design and program your own apps, animations and games. Explore the field of computer science with an emphasis on games.

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Video Production

Client-based projects allow you to experience the complete design process. Students operate prosumer cameras, digital editing systems, compositing software, audio gear, and lighting instruments. Through video, students will explore the impact and power of multimedia presentations, develop an ability to critique various productions and apply an ethical standard to all work created for public viewing. Integrated throughout the course we will practice employability skills related to communication, problem-solving, teamwork, and time management.