

## SYSTEMS PROGRAMMING PATHWAY

### Program Description

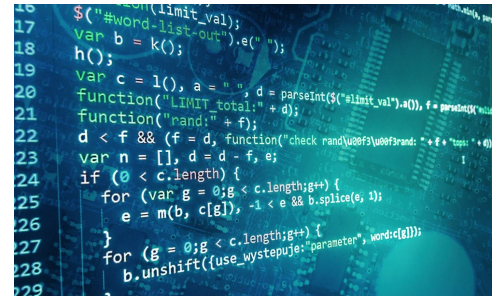
Students trained in the Systems Programming Pathway will develop an overview of the opportunities, creativity, and versatility of the computer programming world. Students selecting this pathway will gain in-depth knowledge of the fundamentals of programming using algorithms and programming languages such as Python, HTML and JavaScript. Students selecting this pathway will engage in an instructional program that integrates academic and technical preparation combined with hands-on contextual learning, including the processes of designing mobile apps and web pages. Students will explore and develop their innate creative talents to implement designs of their own. The students will have the capability to pursue a computer programming career with continued specialized training. Further post-secondary education is highly recommended.

For more information go to:

- [www.onetonline.org](http://www.onetonline.org)
- [www.bls.gov/ooh/](http://www.bls.gov/ooh/)
- [www.careeronestop.org](http://www.careeronestop.org)
- [www.virtualjobshadow.com](http://www.virtualjobshadow.com)
- <https://www.collegegrad.com/>
- [www.cacareerzone.org/](http://www.cacareerzone.org/)

### Interview Ready Portfolio

- Job Application
- Resume
- Cover Letter & Thank You Letter
- Letters of Recommendation
- Certificates of Achievement / Awards



### CTE PATHWAY CORD REQUIREMENTS

#### Introductory Course (optional):

- Computer Applications

The following courses and program components are required for the pathway graduation cord and require a grade of "C-" or better:

#### Concentrator Course:

- \*Computer Science Essentials (CSE)

#### Capstone Course:

- \*AP Computer Science Principles (CSP)

\*course offered at RVHS campus

#### Experiential Learning (20 hours):

- Projects require prior approval from instructor and instructor grade upon completion

#### Interview Ready Portfolio:

- Complete the Interview Ready Portfolio; including a final interview with a business partner

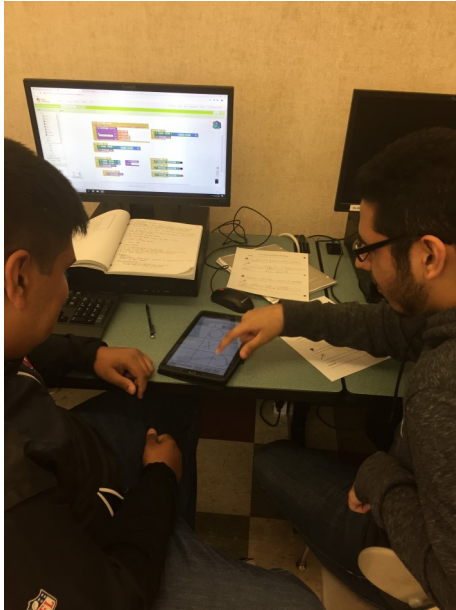
Upon completion of the program requirements, a certificate and graduation cord will be awarded.



## CTE Pathways to the Future



# SYSTEMS PROGRAMMING PATHWAY



### TECHNICAL SKILLS

AP Computer Science Principles is a College Board approved Advanced Placement (AP) course



### REAL WORLD LEARNING

Students will apply their acquired knowledge and skills in real world simulations



### CAREER EXPLORATION

Students will explore career options and post high school requirements needed to transition to employment or additional education and training



### STUDENT LEADERSHIP

Leadership training is an integrated component of the Systems Programming Pathway

### Careers in this Pathway include:

- System Programmer
- System Analyst
- Software Engineer
- Software Support Specialist
- Systems Administrator
- IT Specialist

### Systems Analyst

**2016 Employment**  
79,200

**2026 Employment**  
88,600

**Percent Change**  
(2016-2026)  
11.9%

**Annual Projected  
job openings**  
6,220

**Median Hourly Wage**  
\$47.81

**Median Annual Wage**  
\$99,455

**Entry Level Education**  
Bachelor's Degree

Source: EDD/LMID, California  
Projections 2016-2026