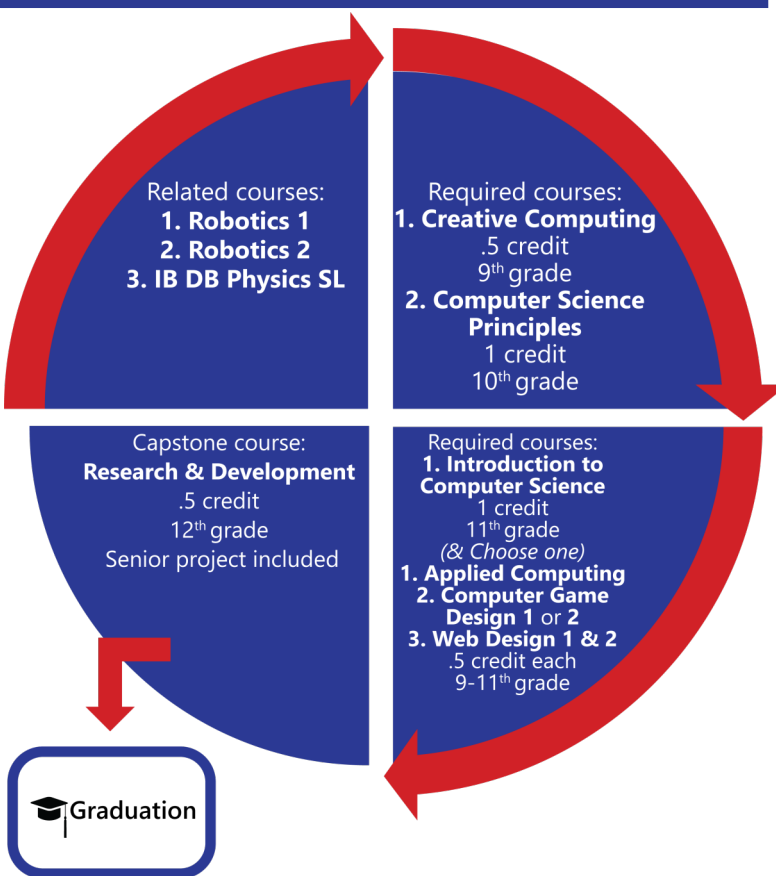# HILLSBORO HIGH SCHOOL
## COMPUTER SCIENCE

**INSTRUCTOR:**
**TERRY ALEXANDER**
**alexandt@hsd.k12.or.us**

## For students interested in:

- Programming
- Web design
- Computer game design
- Engineering
- Robotics
- Electronics
- Computer science
- Video game design

## SEQUENCE OF COURSES

*Please refer to HSD course catalog for more information*



Related courses:
**1. Robotics 1**
**2. Robotics 2**
**3. IB DB Physics SL**

Required courses:
**1. Creative Computing**
.5 credit
9th grade
**2. Computer Science Principles**
1 credit
10th grade

Capstone course:
**Research & Development**
.5 credit
12th grade
Senior project included

Required courses:
**1. Introduction to Computer Science**
1 credit
11th grade
*(& Choose one)*
**1. Applied Computing**
**2. Computer Game Design 1** or **2**
**3. Web Design 1 & 2**
.5 credit each
9-11th grade

Graduation

## PATHWAY TEACHES STUDENTS TO:

- Create computer games through the use of a game engine, such as Game Maker or Unity
- Use basic computer coding and computational thinking
- Build and program robots that use sensors to accomplish tasks
- Solve complex problems both individually and as a team
- Create and maintain web pages using HTML, CSS and other web authoring tools
- Use Photoshop Creative Suite to create web graphics
- Learn to use industry standard software development tools and project management skills

## CAREER POSSIBILITIES & SALARY RANGES

| Career | Salary Range |
|---|---|
| Computer and Info Systems Manager | $103,064- $223,496 |
| Computer Software Engineer | $71,594- $181,064 |
| Web Developer | $52,770- $124,779 |
| Database Administrator | $57,221- $154,710 |
| Network Administrator | $68,744- $140,754 |
| Software App developer | $64,563- $159,619 |
| Computer Systems Analyst | $84,552– $168,854 |

*Salary ranges shown are from the 10th to 90th percentile*

## SOME LOCAL COLLEGES & MAJORS

- **PCC**– Associate of Applied Science: Website Development and Design, Network Administration or Computer Info Systems, One-year Certificate: Website Development and Design, Career Pathway certificate: Web Assistant
- **OSU**– Bachelors of Science: Computer Science
- **PSU**– Bachelors of Science: Computer Science or Computer Engineering
- **U of O**– Bachelors of Science: Computer and Information Science

## POTENTIAL LOCAL EMPLOYERS

- **Intel**
- **Qorvo**
- **Fujitsu Computer Products of America**
- **Oracle America**
- **Axiom Electronics**
- **Enli Health Intelligence**
- **Aero Drone Corporation**
- **Cabot Microelectronics Corporation**
- **McAfee Lab**
- **Nvidia Corporation**
- **Synopsys**

*To learn more about career and college opportunities, make an appointment with your counselor 503-844-1988*