

# Computer Science and Engineering Pathway

## Lynnwood High School



The Computer Science and Engineering STEAM pathway is designed for students interested in pursuing high demand, high wage jobs in Computer Science and Engineering Fields, and:

- ✓ Enjoy using Math, Science and Technology to solve problems.
- ✓ Enjoy designing and creating applications or devices.
- ✓ Enjoy analyzing and testing various solutions to problems.
- ✓ Are curious about how things work.

### PATHWAY REQUIREMENTS

#### Science (3 credits)

- Biology (1 cr.)
- Chemistry (1 cr.)
- Advanced Science options (1 cr.)
  - Physics or AP Physics
  - AP Environmental Science
  - AP Biology
  - AP Computer Science
  - Biotechnology

#### English (4 credits)

- English 9 (1 cr.)
- English 10 (1 cr.)
- English 11 or AP (1 cr.)
- English 12 Capstone (1 cr.)

#### Math (4 credits in grades 9-12)

- Algebra (1 cr.)
- Geometry (1 cr.)
- Algebra 2 (1 cr.)
- Advanced Math options (1 cr.)
  - Honors Pre-Calculus
  - AP Calculus AB
  - AP Calculus BC
  - AP Statistics
  - AP Computer Science A (if not taken as a Pathway Specialty course)

#### Arts (2 credits)

- Any combination of Arts classes

#### Pathway Specialty courses (2 credits)

- Robotics (.5 cr.)
- Computer Science Principles (.5 cr.)
- AP Computer Science A or Intro to Engineering Design (1 cr.)

#### Electives (3 credits)

- World Language or other electives based on student pathway (2 cr.)
- Other Electives (1 cr.)

#### Other Requirements (6 credits)

- Social Studies (3.5 cr.)
- Health and PE (2 cr.)
- Personal Finance (.5 cr.)

**Total Credits: 24**

### SAMPLE PLAN WITHOUT 4 YEARS PERFORMING/VISUAL ARTS

Grade 9	
English 9	
Math – Algebra 1 or higher	
Science - Biology	
World Hist. 9 or Honors	Health
PE	Art
World Language Year 1 or Other Electives	
Grade 10	
English 10	
World History 10 or AP	
Math – Geometry or higher	
Science - Chemistry	
Pathway Specialty Course	Pathway Specialty Course
World Language Year 2 or Other Electives	
Grade 11	
English 11 or AP	
US History or AP	
Math – Algebra 2 or higher	
Advanced Science – From Menu of Choices	
Pathway Specialty Course	
PE	Art
Grade 12	
English – English 12 Capstone	
Advanced Math – From Menu of Choices	
Civics/CWP, Ethnic Studies, or AP Government	
Art	Art
Personal Finance	PE
Elective	Elective

### SAMPLE PLAN WITH 4 YEARS OF PERFORMING/VISUAL ARTS

Grade 9	
English 9	
Math – Algebra 1 or higher	
Science - Biology	
World Hist. 9 or Honors	Health
Performing/Visual Arts Class(es)	
World Language Year 1 or Other Electives	
Grade 10	
English 10	
World History 10 or AP	
Math – Geometry or higher	
Science - Chemistry	
Performing/Visual Arts Class(es)	
World Language Year 2 or Other Electives	
Grade 11	
English 11 or AP	
US History or AP	
Math – Algebra 2 or higher	
Performing/Visual Arts Class(es)	
Pathway Specialty Course	Pathway Specialty Course
Advanced Science – From Menu of Choices	
Grade 12	
English – English 12 Capstone	
Advanced Math – From Menu of Choices	
Civics/CWP, Ethnic Studies, or AP Government	
Pathway Specialty Course	
Performing/Visual Arts Class(es)	
Personal Finance	PE

### Where can this Pathway take me after high school?

Jobs you can get right after High School:	Jobs you can get with 2-years continued education:	Jobs you can get with 4 years continued education:
<ul style="list-style-type: none"> <li>▪ Web Developer</li> </ul>	<ul style="list-style-type: none"> <li>▪ Computer Programmer</li> <li>▪ Full Stack Developer</li> <li>▪ Engineering Technicians</li> <li>▪ Computer Support Specialist</li> </ul>	<ul style="list-style-type: none"> <li>▪ Electrical Engineer</li> <li>▪ Computer Engineer</li> <li>▪ Software Developer</li> <li>▪ Systems Analyst</li> </ul>

#### Notes:

- 1 credit of PE waived/substituted for students pursuing a plan with 4 years of Performing Arts
- Adjustments to Pathway Science, English, and Mathematics courses can be made for EL and Special Education students based on their IEP and recommendations of the IEP Team.