Computer Programming and Software Development Career Pathway

What High School Courses Should I take?

Course selection always involves the student, school counselor and parent. Newtown High School courses listed below include specific skills for this pathway. This is not a mandatory listing, nor does it indicate the level of any course. It is provided to raise awareness of the wide variety of options available to NHS students.

Suggested Courses:

English: 4 years
Math: 4 years to include Pre-Calculus
Science: 4 years
Social Studies: 4 years
World Language: 4 years
B.E.A.T.: Personal Financial Literacy
Electives:

- ☐ Honors JAVA 1 and 2
- ☐ Connecticut Technology Innovation Academy
- ☐ Computer Applications
- ☐ Web Design
- ☐ App Inventor 1 and 2
- ☐ Computer Repair – Hardware
- ☐ Computer Repair – Operating Systems
- ☐ Computer Repair II and III: NewTek-An Enterprise
- ☐ AP Computer Science

Junior/Senior Project: In this course, students work with a community professional to develop and present a project. Besides allowing students to determine their course content, it is an opportunity for students to learn time management skills prior to college. An example of a students' projects include "3D Modeling of Electric Automobile."

NHS Programs/Activities:

Career Center Programs utilize community volunteers to provide career information to students. Programs include:

- Career Speakers: open to all students with permission of their teacher(s).
- Career Tours: open to sophomores, juniors, and seniors.
- Career Shadowing: This program allows sophomores, juniors, and seniors one excused day per semester to spend time in a career field of their interest with a community volunteer.
- Internships: Junior and senior students spend 30 hours at a workplace to gain knowledge about a career. Internships occur outside of the school day and may be either paid or unpaid.

Current Community Volunteers include: Gartner, Inc. and IBM.

Sample Scholarship Opportunities related to the Computer Programming and Software Development Field:

Society of Women Engineers National Scholarship
Addeco Engineering and Technical Future Engineers Scholarship

Sample Careers

Applications Analyst
Applications Engineer
Business Analyst
Computer Engineer
Data Modeler
Game Developer
Mobile Applications Developer
Operating System Designer/Engineer
Program Manager
Programmer
Programmer Analyst
Project Lead
Software Applications Specialist
Software Applications Tester
Software Design Engineer
Systems Administrator
Systems Analyst
Test Engineer
Tester

Updated 11/24/15