



CCCTC WEBSITE PREVIEW



Students work individually and in teams to write computer software using the latest software design techniques. Students learn to program in C++, Python and Java. Students learn about computer algorithms, data structures and design strategies. Students learn how to install and manage an operating system. Students write programs that communicate over networks and that communicate with a database. Students also learn how to create web sites using HTML, CSS, and Javascript.

COLLEGE CREDITS AND CERTIFICATIONS:

- Earn articulated college credits through Carroll Community College, Penn College of Technology, and The Community Colleges of Baltimore County.

CLASSES YOU WILL TAKE (4 credits)

A Project Lead the Way © Program

- Digital Electronics
- AP Computer Science Principles
- AP Computer Science A
- Cyber Security

MAJOR UNITS OF STUDY:

- Elements of a Java Program: General Coding, Arrays, Interfaces, Strings
- Impact of technology, Information and the Internet, Develop Programming Tools, Data Acquisition, Manipulation, Data Visualization
- Analog and digital fundamentals, number systems and binary addition, logic gates and functions, Boolean algebra and circuit design, decoders, multiplexers and de-multiplexers
- Security landscape, elements that comprise a modern security system, system-wide security, security domains, lifecycle management, risk management, KPIs, continuity planning, and certification/ accreditation approach to cybersecurity

PROFESSIONAL AFFILIATIONS:

- Project Lead The Way©
- College Board—Advanced Placement



SCHEDULE:

Computer Tech I (2 credits) junior year
Computer Tech II (2 credits) senior year

Want to know more? Check out our website at:

www.carrollk12.org/ctc

"Meet the Instructor"

College & Career Opportunities

Watch Program Video

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