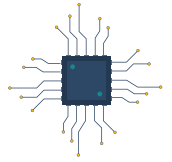# Computer Science Pathway

Teays Valley Local Schools

$86,320
Median annual salary for computer and information technology professions

12%
Projected growth in the field by 2028 stems from greater emphasis on cloud computing, the collection & storage of big data and information security

546,200
New jobs across the nation in the computer and information technology field by 2028

Pathway Course Descriptions

IT Essentials (IE) - 1 year
Topics covered include computer component assembly, computer hardware, computer networking and security. Upon successful completion of this course students will be eligible to take the Comptia A+ certification exam. (CTAG Credit Eligible)

Web Technologies (WT) - 1 year
Students will learn to how to design, create, and maintain web pages. Projects will include Dreamweaver, Notepad and Photoshop. The emphasis will be on utilizing features in HTML5, JAVA SCRIPT and CSS3. (CTAG Credit Eligible)
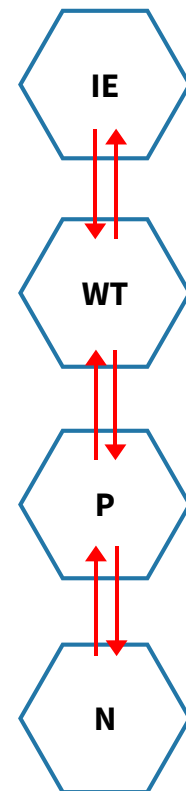
Programming- 1 year
Using Python as a primary tool, students explore career paths that utilize computing, discover tools that foster creativity and collaboration, and use what they've learned to tackle app design and integration (CTAG Credit Eligible)

Network Pro - 1 year
Network Pro replicates $35,000 of computer hardware and software and challenges students with real-world scenarios. From connecting a cable modem to configuring NIC teaming, students will gain real skills they will use in their jobs.

Year 1, 2, 3 or 4

*Courses do not need to be taken in sequence

IE
WT
P
N

Computer Science vs. Information Technology

Computer Science degree holders typically work in jobs that focus more on programming and software development. This type of work involves a fair amount of math, theory and creativity, but often offers the potential to work remotely. Those in **Information Technology** tend to work in roles where they're responsible for the design, configuration and maintenance of network hardware and servers. By nature, this is much more of hands-on field. Entry level jobs in information technology (support specialists) that do not require a college degree are in high-demand in Central Ohio. In 2018, there were 1,458 postings in Central Ohio and only 755 completions from programs designed to prepare students for these jobs. The gap is nearly 2 to 1.

Pathway Instructors

Kelly O'Dell

Career-Technical Credit Transfer

ODE and the Department of Higher Ed has established criteria, policies, and procedures to transfer agreed-upon technical courses from high school to college. Courses marked as "CTAG Credit Eligible" are currently available for CTAG credit for students who successfully complete the course and receive a qualifying/passing score on the end of course exam. See your instructor or counselor for specific details.

Internship Opportunities

Students who have Computer and IT Pathway experience have the opportunity to apply for a **year-long internship** with the TV Technology Department. In addition to assisting students and teachers with technology needs, interns will be required to complete and maintain several running projects that address problems or solutions in educational technology integration. Students applying for the position should possess strong communication and critical thinking skills needed for the customer service related position.

Certifications

Students in IT Essentials and Network Pro have the opportunity to take TestOut Pro certification exams to earn industry recognized credentials. Students can use the certifications to strengthen a resume or application.

Information Technology students participating in a virtual meeting with employees at Google.

According to students in the Computer and IT Pathway

"I learned the basics of computer hardware. This has already benefited me because I recently built my own computer. So far in programming I have learned the procedure for writing code efficiently and in an organized manner."