



The IT: Cybersecurity Virtual Academy

2024-2025 School Year

The IT: Cybersecurity Academy is an opportunity for high school juniors and seniors to earn six (6) college credits toward three different IT associate degree programs at Western Technical College: Computer Support Specialist, Cybersecurity & Network Administration, and Web and Software Developer. Four of the six credits work towards the Industrial Internet of Things degree program as well. These credits can be combined with more than 10 credits of potential transcribed credit courses in various school districts. This academy helps shorten the time between high school and the workplace and deepen students' understanding of IT careers. This year's academy will be held virtually and asynchronously. Western will offer the courses in our new 7-Week format during the Fall Term and on the HS calendar during the second. This means students will take one class each 7-week session during the fall. They will take one course for 18 weeks in the Spring.

This academy is ideal for motivated and engaged students who are interested in exploring skills in Information Technology. Upon completion of the Academy and graduation from high school, students can enroll at Western or another technical college and earn a technical diploma or an associate degree.

Courses Offered

Tomah Regional Location

Term	Course	Credits
S1- Fall	Introduction to Cybersecurity	1
S2- Fall	Cybersecurity Essentials	2
Spring	CISCO I	3
	Total Credits	6

*Virtual/Asynchronous Courses

Western will host an orientation day for students who enroll in the academy. The date is TBD, but will occur in mid to late August.

During the CISCO I portion of the academy, students will be asked to come to campus at least twice to work directly with their instructor. Due to the course's nature, some hands-on hardware work is needed to fully master the competencies.

Western Technical College will provide CISCO racks to districts participating in the academy.

Course Descriptions

Introduction to Cybersecurity: Introduction to Cybersecurity explores the field of cybersecurity, specifically the importance of cybersecurity, data confidentiality, best practices for using the internet and social media safely, and potential career opportunities in this growing field.

Cybersecurity Essentials: Cybersecurity Essentials develops foundational understanding of cybersecurity and how it relates to information and network security. Students are introduced to characteristics of cyber crime, security principles, technologies, and procedures to defend networks and implement data confidentiality, integrity, availability and security controls on networks, servers and applications. This includes security principles, policies, e-discovery and cybersecurity laws.

CISCO I: This course introduces the student to computer network fundamentals, including network terminology and protocols, network standards, the OSI model, IP addressing, cabling, networking components, and basic LAN design. The course is delivered using a combination of lectures, lab projects, and the Internet. PLEASE NOTE: A Windows operating system is recommended for this course. Required software used in this course is not compatible with Mac operating system.