



Cyber Security Career Pathway

Course Offerings:

IT Essentials 1 & 2

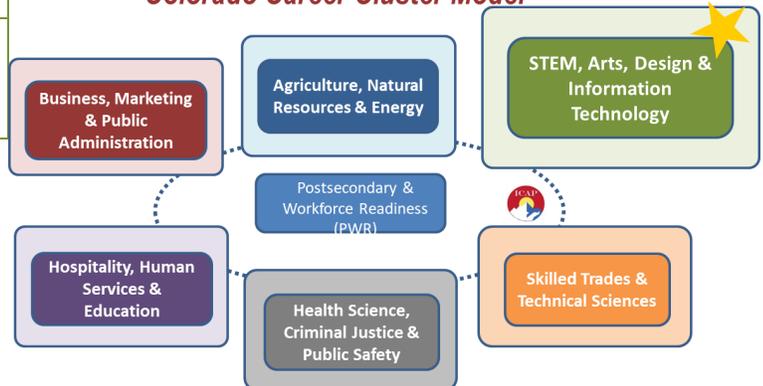
LINUX Essentials

Networking Essentials

Cybersecurity 1-4



Colorado Career Cluster Model



Contact Us

Leilani Mullins—Career Pathways Counselor
 leilani.mullins@d11.org
 (719)328-2053
 Roy J. Wasson Academic Campus
 2115 Afton Way
 Colorado Springs, CO 80909
<https://www.d11.org/earlycollege>

CTE INSTRUCTOR: BILL TOMEO
 PHONE: 719-328-2048
 EMAIL: WILLIAM.TOME0@D11.ORG

Outside the Classroom

sudocYBER offers students the chance to gain exposure to and explore the range of careers available to them in cybersecurity while building skills that complement their classroom learning. They will discover the important roles played by non-IT elements within organizations and begin to understand how workers at all levels of businesses and organizations contribute to the maintenance of safe security postures.

Students to participate in the **CyberPatriot** AFA National Competition



IT Essentials 1&2

10th-12th Grades

Credits:

HS Electives (2 per semester)
PPCC CNG 121 (4) and CNG 122 (4)

Industry Certifications:

CompTIA A+ 220-901, 220-902

IT Essentials a Cisco Networking Academy® course, covers the fundamentals of computer hardware and software and advanced concepts such as security, networking, and the responsibilities of an IT professional.

Students who complete this course will be able to:

- Select the appropriate internal components of a computer for specific applications,
- Assemble a computer system
- install and configure an operating system
- Troubleshoot using system tools and diagnostic software
- Connect to the Internet and share resources in a networked environment
- Configure, maintain and troubleshoot printers

The course includes mobile operating systems, OS X, Linux, and client side virtualization.

Students gain real-world experience in Microsoft operating systems, security, networking, and troubleshooting through hands on labs.



Why choose the Cyber Security Career Pathway?

- High Demand for Cybersecurity & Information Technology Skilled Employees
- Earn College Credits
- Participate in Paid Internship Opportunities
- Complete D11 Funded Industry Certification Exams
- Experience the “Best-in-Class Lab” for hands-on skills development



LINUX Essentials

10th-12th Grades

Credits:

HS Electives (1)

Linux Essentials a Cisco Networking Academy® course, teaches students the fundamentals of the Linux operating system and command line, and basic open source concepts.

Students will:

- Understand how Linux is used and the basics of the command line.
- Apply skills using Linux virtual machine with step-by-step and hands-on lab activities.
- Build foundational knowledge for progressively mastering Linux commands.

Networking Essentials

10th-12th Grades

Credits:

HS Electives (1)

Networking Essentials introduces students to networking, network service and device configuration, routers and switches.

Students will be able to:

- Explain how end-user devices and local networks interact with the global Internet.
- Build a small network using an integrated network router.
- Explain how the protocols of the TCP/IP suite enable network communication.
- Configure an integrated wireless router and wireless clients to connect securely to the Internet.
- Configure basic network security.
- Troubleshoot common network issues.

Cyber Security 1-4

10th-12th Grades

Credits:

HS Electives (2 per semester)
PPCC CNG 132 (3) and CNG 257 (3)

Industry Certifications:

CompTIA Security+
TestOut SecurityPro

Cyber Security 1-4 is a series of four courses, serving as a year-long capstone to the IT Career Pathway, that provide students with practical and relevant skills in the field of cyber security, information technology, and computer networking.

Topics covered include:

- Cybersecurity threats and the techniques to mitigate and defend against computer and network attacks.
- Cryptography.
- Installing and configuring systems to secure applications, networks and devices.
- Access control strategies and technologies.
- Security legal regulations, compliance & investigations.
- Security governance and risk management.
- Business continuity and disaster recovery planning

Participate in CyberPatriot competitions