

STANDARDS FOR CAREER READY PRACTICE

- Apply appropriate technical skills and academic knowledge
- Communicate clearly, effectively, and with reason
- Develop an education and career plan aligned with personal goals.
- Apply technology to enhance productivity.
- Utilize critical thinking to make sense of problems and persevere in solving them.
- Practice personal health and understand financial literacy.
- Act as a responsible citizen in the workplace and the community.
- Model integrity, ethical leadership, and effective management.
- Work productively in teams while integrating cultural and global competence.
- Demonstrate creativity and innovation.
- Employ valid and reliable research strategies
- Understand the environmental, social, and economic impacts of decisions.

The AC²E Vision

The Academy for College and Career Excellence, in partnership with our parents and community, strives to create a safe environment where students are empowered to discover their strengths and to achieve their maximum potential. Students are encouraged to become lifelong learners who are prepared to meet the challenges of a culturally diverse society along with the demands of current and future job markets.

ROP/CTE COURSES OFFERED

(Not all courses are offered each semester)

- 911 Communications Dispatcher*
- Private Security Guard*
- Criminal Justice
- Early Childhood Development
- Culinary Arts
- Woodworking Occupations
- Furniture & Cabinet Manufacturing
- Cyber Security*
- Unmanned Aircraft Systems*
- Pharmacy Technician*
- Medical Assistant
- Registered Dental Assistant*

*Open to adults

Populations Served

- Black Rock High School
- Twentynine Palms High School
- Yucca Valley High School
- Adult Learners

For More Information:

www.morongousd.com/CTEOfferings.aspx

Christy Bong, CTE Specialist
christy_bong@morongo.k12.ca.us
(760) 228-1162, ext. 3421

Gary Talley, Principal, ACCE
gary_talley@morongo.k12.ca.us
(760) 228-1162

Garrett Gruwell, Director of Secondary Curriculum
garrett.gruwell@morongo.k12.ca.us
(760) 367-9191, ext. 4223



Morongo Unified School District
Academy of College & Career Excellence

Cyber Security



Course Descriptions

Cybersecurity 1: Computing and Technologies

Prepares students for a career in information technology with a focus on cybersecurity. The course includes a series of technical subjects that provide hands-on knowledge and skills in computer hardware, operating systems, networking, and information security concepts. Hardware: Students cover eleven fundamental topics leading to the successful completion of the CompTIA A+ 220-901 examination. Software: Students cover twelve fundamental topics leading to the successful completion of the CompTIA A+ 220-902 examination and their CompTIA A+ Certification.

Cybersecurity 2: Server and Network Security

Students engage with studies of the history and implications of network communications; the network protocols which make the internet possible; how networks provide access to services and communicate with one another, methods used to increase scalability, reliability, and security in the modern network, and the Internet of Things (IOT). Prepares students for the CompTIA Network+ and CompTIA Security+ Certifications to meet DoD 8140 cyber security workforce requirements.

Cybersecurity 3: Linux Systems and Tools

Linux Systems and Tools provides students with in-depth knowledge and hands-on experience with Linux enterprise operating systems. Students learn the Linux file system, command line utilities, script editing, shell programming and text processing tools and develop industry knowledge in cyber security ethics offense and defense security concepts of penetration testing and security auditing. This course prepares students for the Linux and Kali Linux Professional exams.

Cybersecurity 4: Threat Analysis and Forensics

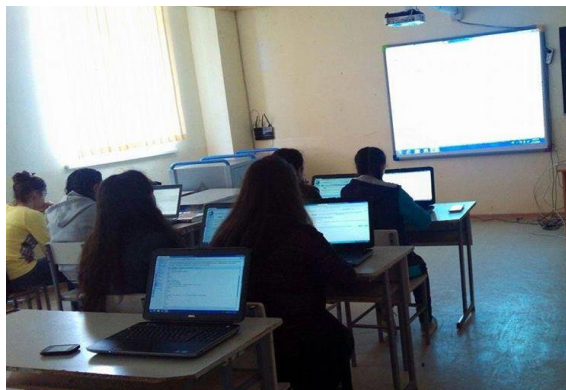
Threat Analysis and Forensics cover the fundamental principles of using analytic tools to identify, protect, detect, respond and recover computing systems and digital assets against cyber threats and vulnerabilities. Students learn how to apply ethical hacking practices to defend against nefarious activity. Students learn ethical cyber security practices incident response team roles, policies and procedures of a cybersecurity framework. This course prepares students to take the Cyber Security Analyst plus (CSA+) and Certified Ethical Hacker (CEH) exams which are high demand industry certifications across industry sectors.

Why Cybersecurity?



Cybersecurity professionals protect our most vital and private information, from financial accounts to sensitive military communications. However, there is a dangerous deficit in cybersecurity professionals in the United States that puts our digital privacy and infrastructure in jeopardy.

Cybersecurity professionals plan and carry out methods to guard organization's computer networks and systems. As threats became more common, their responsibilities will continue to increase. Positions in the field of cybersecurity are growing at twice the rate of other technology positions and there will be thousands of new positions.



Career Outlook

Continuing Education Opportunities*

Employment in computer and information technology occupations is projected to grow 11 percent from 2019 to 2029, much faster than the average for all occupations. These occupations are projected to add about 531,200 new jobs. Demand for these workers will stem from greater emphasis on cloud computing, the collection and storage of big data, and information security.

The median annual wage for computer and information technology occupations was \$91,250 in 2020.

Careers in Cybersecurity

Cyber Security Analyst
Computer Network Architect
Computer Systems Analyst
Network/Computer Systems Administrator
Systems Software Developer
Intelligence Analyst

Mean Annual Salaries

Software Developer	\$110,140
Computer Network Architect	\$116,780
Information Security Analysts	\$103,590
Computer Systems Analyst	\$93,730

Median Annual Earnings by Educational Attainment

Bachelor's Degree	\$99,010
Associate's Degree	\$66,601
Industry Certification	\$49,468
Some college, no degree	\$47,248

*Source: U.S. Bureau of Labor Statistics