



**NATIONAL K-12
CYBERSECURITY PIPELINE
CAE-C-001-2020 CFDA 12.905**

MORaine VALLEY COMMUNITY COLLEGE

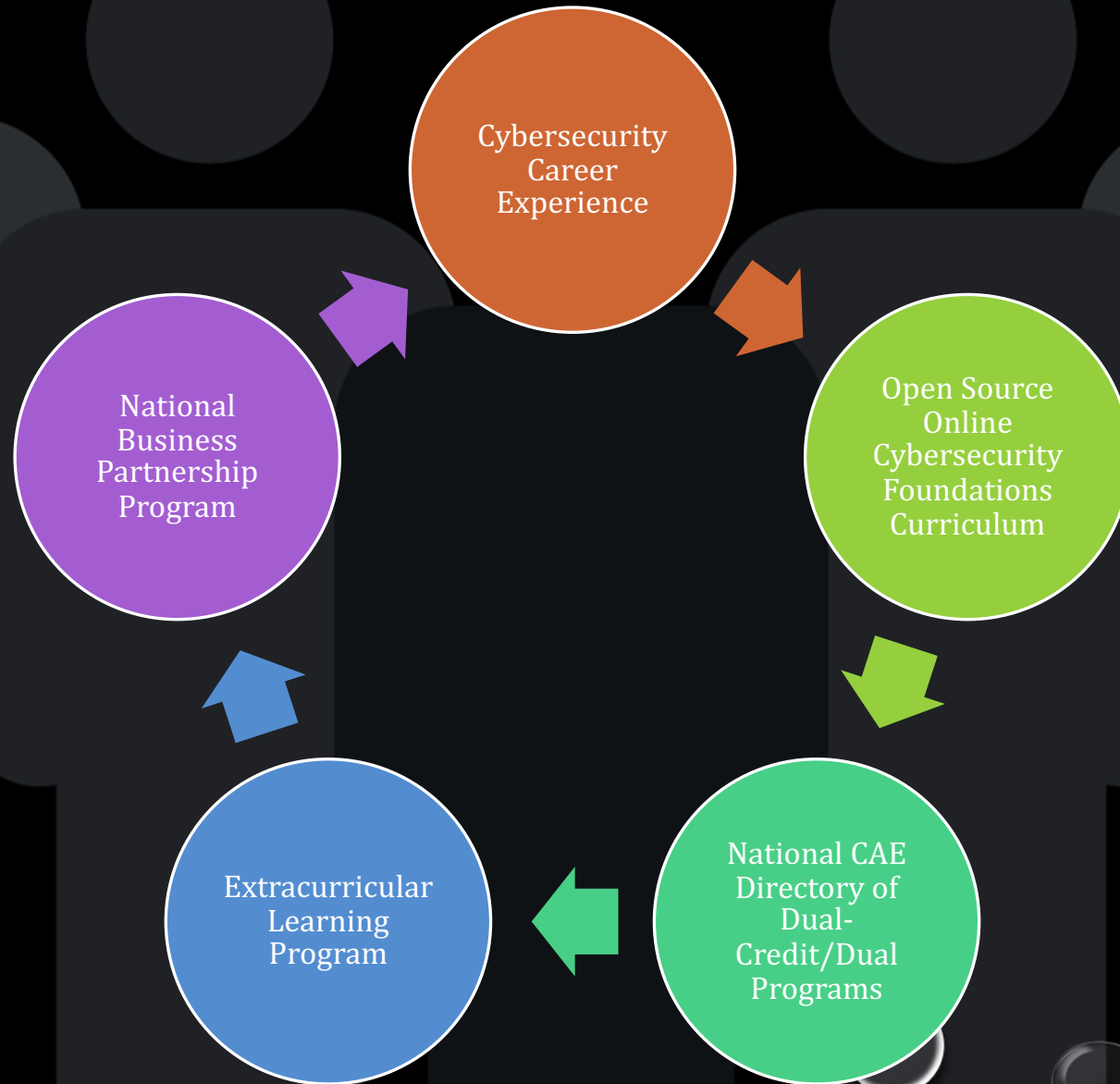


RATIONALE

OUR PROPOSED **NATIONAL K-12 CYBERSECURITY PIPELINE** INITIATIVE WOULD PROVIDE SEVERAL BENEFITS TO THE NATION AND CAE-C COMMUNITY:

- INCREASED NUMBER OF STUDENTS INTERESTED IN CYBERSECURITY CAREER PROGRAMS
- PROVIDE NEW OPPORTUNITIES FOR K-12 STUDENTS INTERESTED IN CYBERSECURITY CAREERS
- ESTABLISH AN EARLIER START PROGRAMS FOR STUDENTS PURSUING A CYBERSECURITY PROGRAM OF STUDY
- PROVIDE TUITION SAVINGS FOR STUDENTS AND PARENTS (ELIMINATE ENROLLMENT REPETITION BETWEEN K-12 AND COLLEGE COURSEWORK)
- INCREASED MATRICULATION AND RETENTION BETWEEN K-12 AND COLLEGE CYBERSECURITY PROGRAMS
- CREATE A MORE DIVERSE NATIONAL K-12 CAE-C PIPELINE

PROGRAM INITIATIVES

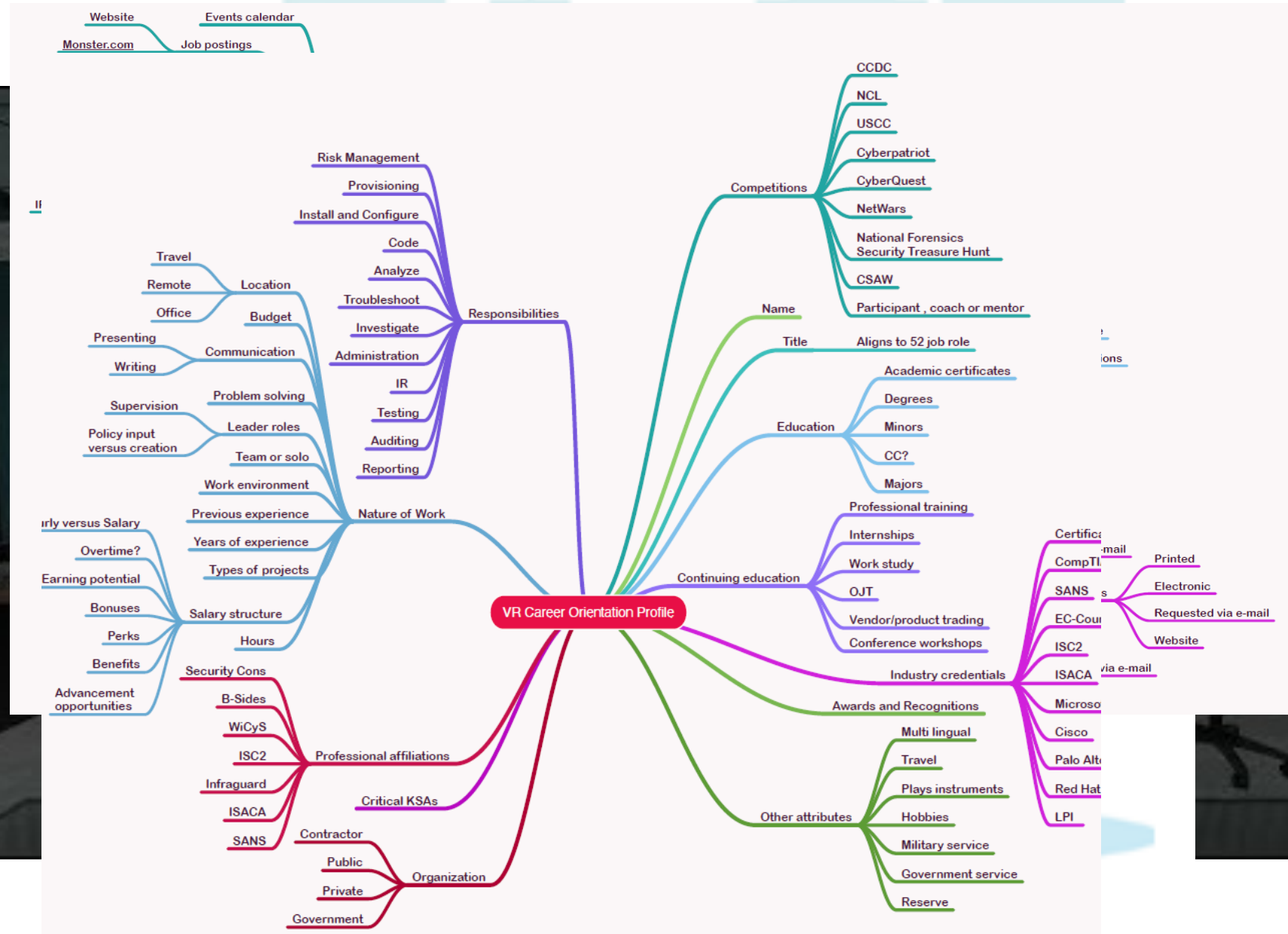


The Environment

Cyber Hero Avatars

Challenges/Easter Eggs

VR Demo



CYBERSECURITY FOUNDATION COURSE

FOUNDATIONAL KUs

- Cybersecurity Foundations
- Cybersecurity Principles
- IT Systems Components

FULLY COVERED

TECHNICAL CORE KUs

- Basic Cryptography
- Basic Networking
- Basic Scripting & Programming
- Network Defense
- Operating Systems Concepts

PARTIALLY COVERED - INTRO LEVEL

NON-TECHNICAL CORE KUs

- Cyber Threats
- Cybersecurity Planning & Management
- Policy, Legal, Ethics, & Compliance
- Security Program Management
- Security Risk Analysis

PARTIALLY COVERED - INTRO LEVEL

High School Cybersecurity Curriculum Guidelines - An Introduction

Watch later Share

HIGH SCHOOL CYBERSECURITY CURRICULUM GUIDELINES

AN OVERVIEW

WWW.CRYPTOLOGICFOUNDATION.ORG

NATIONAL CRYPTOLOGIC MUSEUM FOUNDATION
CYBER CENTER FOR EDUCATION & INNOVATION
HOME OF THE NATIONAL CRYPTOLOGIC MUSEUM

Cybersecurity-infused Computer Science Modules

- Cybersecurity and Society
- Cybersecurity Principles
- Cyber Threats & Countermeasures
- Securing Data from Risk
- Applied Cryptography
- Secure Scripting
- Responsible Software Development

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Community Colleges Catholic Colleges and Universities

Download icon

Access Control

Click on each button to see how rule-based access control works.

Time	Address	Transaction
9:00AM	192.168.1.20	CMS
4:00PM	192.168.12.2	LSM
8:00PM	192.10.1.30	SAP
12:00PM	192.168.1.50	PAYROLL

User Request Access

Hours 8am-5pm

Address 192.168.1.*

Request Access to CMS

User Denied Access

User Granted Access

Restart

Rule-based access control uses criteria or rules defined by the custodian or system administrator. If an organization wants to limit access during certain hours of the day, make sure employees are using in-house systems, or to perform a specific transaction, rule-based access control fits the bill. Rules are typically sequential. Once a condition is checked, the permission is granted or denied.



NATIONAL DIRECTORY OF DUAL CREDIT/DUAL ENROLLMENT PROGRAMS



National Directory of colleges and universities currently offering high school articulation programs.

Institutions interested in providing Dual Credit/Enrollment opportunities in the future.

Promoted to all student participants and CAE institutions with a focus on students or youth in rural and under-resourced school systems, home-schooled students, and those attending schools without a cybersecurity program.

After-school Programs

Honors Programs

Competitions

NATIONAL CYBERSECURITY EXTRA-CURRICULAR PORTAL AND BI-WEEKLY LIVE WEB SHOW

Student Organizations

Cybersecurity Events

Workforce Opportunities

BUSINESS AND INDUSTRY PARTNERSHIP

- BUSINESS PARTNERS
- CISCO SYSTEMS, PALO ALTO NETWORKS, EMC DELL, VMWARE, LINUX PROFESSIONAL INSTITUTE (LPI), COMPTIA, ISC2, NDG, AND OTHERS
- PROVIDE THE STUDENTS PARTICIPATING IN THIS PROGRAM WITH A WEALTH OF SUPPORT AND RESOURCES:
 - INSTRUCTIONAL MATERIALS
 - SPONSORED EXAM VOUCHERS
 - ACCESS TO PRODUCTS AND SERVICES
 - SUBJECT MATTER EXPERTISE AND JOB FAIRS
 - FREE ACCESS TO THEIR EXTENSIVE PORTFOLIO OF ONLINE CYBERSECURITY CURRICULUM
 - ACCESS TO VIRTUAL CYBER RANGES, SIMULATORS AND WORKFORCE EXPERIENCES IN THE CYBERSECURITY INDUSTRY