

# EXECUTIVE EDITION



**CAE**  
IN CYBERSECURITY  
COMMUNITY

## NATIONAL CENTERS OF ACADEMIC EXCELLENCE IN CYBERSECURITY

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**This guide highlights institutions within the  
NCAE-C program.**

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# INTRODUCTION

## Happy 25th Anniversary CAEs!

Think back to 1999. “The Matrix” was in theaters, IBM released the first (mechanical) Microdrive in 170MB and 340MB formats, nVIDIA released the first GeForce 256 graphics processing unit (introducing the “GPU”), and Apple built WiFi into the first iMacs. The Dell Inspiron had 128MB of RAM, battery life was 2.5-3 hours, and the “budget” version ran \$2150 (\$3900 in 2024 dollars). Most laptops weighed between 8.5 and 9.5 pounds; in 2024 the weight range is 2 to 5 pounds. About 51% of households owned a computer, and about 26.2% had access to the internet. By 2000, the first camera phone was introduced in Japan, Sony released the PlayStation, and USB drives were introduced. And NSA created the Centers of Academic Excellence (CAE) in Information Assurance with seven participating colleges and universities.

How far we’ve come in 25 years! As technology has raced to create the world we live in today, the CAE program has grown and evolved to not only reflect technology, but to respond to changes in national security, and to lead the development of academic programs and workforce development. The program has grown to over 480 academic institutions and is on track to reach 500 in 2024. We now recognize three unique designations (Cyber Defense, Research, and Cyber Operations), including higher education institutions offering programs from associate to graduate degrees and certificates, and now we’re building a secondary-level pathway for students from middle school to the post-secondary NCAE-C schools. A true educational pathway, accelerating the growth of the cyber workforce.

Collaboration remains the secret of our success. Working with government partners, industry, and academia, this collaboration has yielded significant results. Academic requirements (Knowledge Units), induction of new schools, competency development requirements and other governance decisions are a cooperative effort between the Program Management Office (PMO), government partners, and the CAE Community of schools. The PMO recognizes unequivocally that the schools are the experts on education and academic achievement and regards highly the professional expertise resident in the faculty. This partnership has not only underpinned the rapid growth of the program, but has attracted the appreciation and support of Congress, the White House, and innumerable industry leaders. Generous Congressional funding has allowed us to build resources expressly dedicated to support designated programs, to leverage NCAE-C expertise to lead workforce development, community development and education ecosystems, and to make education opportunities available to secondary schools, teachers, and students.

The future is bright. Even though we continue to race the clock to build a domestic workforce that meets projected demand, we remain dedicated to lead innovation and competency-based education on the cutting edge of technology for the security of our nation.

### **Lynne Clark**

Deputy Chief

National Centers of Academic Excellence in Cybersecurity Program Office

# HISTORY OF THE PROGRAM

NSA launched the National Centers of Academic Excellence in Information Assurance (IA) Education program in 1999. The program was envisioned to contribute to the growing demand for cybersecurity expertise in the intelligence community workforce. Over the years, as it became clear cyber defense would become an integral element of national security, the program's objectives expanded to support the nation's need for cybersecurity workforce development.

The program originally called for schools to map their information assurance curriculum to President's Committee on National Security Systems (CNSS) standards. The first created was CNSS 4011, which outlined the minimum knowledge required of IA professionals to execute their craft and served as the foundation for the CAE in IA Education Program. As the CNSS developed subsequent standards (CNSSIs 4012-6), institutions were given the opportunity to map to them.

Once successfully mapped, institutions received a certificate through the Information Assurance Curriculum Evaluation (IACE) program. Receiving IACE endorsement was the first step to CAE designation. The program began the transition from using CNSS standards to developing and implementing a new Knowledge Unit (KU) structure that more accurately reflected the state of cybersecurity and technology in 2012. Applicants began using the new KUs for designations in 2014 and by 2017, every academic institution in the program had made the transition.

From the beginning, the CAE designation was based on both curriculum and program criteria. The criteria speak to the institution's commitment to joining the NCAE-C program, practicing what they teach, maintaining quality faculty to ensure a lasting academic program, outreach to high schools and others in need of IA expertise, and commitment to developing the profession.



United States Naval Academy receiving their CAE-CD designation.

Once an institution received their IACAE endorsement, they continued in the second stage to document the program criteria. When the program evolved to using KUs, the two-stage process merged into one application.

The first seven institutions to receive the designation were James Madison University, George Mason University, Idaho State University, Iowa State University, Purdue University, University of California, Davis, and University of Idaho. These seven schools were instrumental in developing information assurance curriculum in its infancy. Textbooks had yet to be written on the topic, so these first seven schools formed a bond and shared resources to begin building a community that is expected to include 500 post-secondary academic institutions across the country.

Over the years, the NCAE Program Management Office has undergone many enhancements in order to keep up with the cyber landscape. Some of the more notable changes include the introduction of the DoD Cyber Scholarship Program (2001), the addition of DHS as a partner (2004), the addition of the Research designation (2008), and the Two-Year Education (2010) designation. In the 2017 National Defense Authorization Act (NDAA), Congress changed Information Assurance to Cyber Defense, thus changing the program name to CAE in Cyber Defense.

In collaboration with the CAE Community, the NCAE-C Program Office changed the process for curriculum mapping and titles of the designation in 2018. The Program Office and the designated schools met in a series of workshops to address an update of the program's Knowledge Unit (KU) structure and content, and in the process, reached consensus on changing the academic requirements for designation. This update was driven by the need to distinguish between bachelors and graduate degrees, as well as the relationship of types and numbers of KUs at each level of recognition. Instead of a government decree on standards, a productive collaboration between academia and government was established, resulting in growth in the number of cybersecurity programs and the number of graduates.



Montreat College receiving their CAE-CD designation.

Without substantive change to the KUs themselves, the program mapping requirements evolved. The new process gave all designating institutions the opportunity to individualize their programs and reflect their expertise within their designation. This also makes it easier for students, employers, and educators to identify the focus of each designated program and how those programs map to the National Initiative for Cybersecurity Education (NICE) Workforce Framework (NIST 800-181) categories and work roles. The program office implemented this new paradigm in the 2019 application cycle (October 2018 to May 2019).

In October 2019, the CAE-CD program merged with the CAE-CO program. Established in 2012, the CAE-CO program supports the President's National Initiative for Cybersecurity Education (NICE): Building a Digital Nation, aiming to broaden the pool of skilled workers for a cyber-secure nation. The CAE-CO program, a technical, interdisciplinary program grounded in computer science, computer engineering, and/or electrical engineering, complements the CAE-CD program with a focus on technologies and techniques for specialized cyber operations to enhance national security. Simultaneously, a formal partnership was forged with the FBI, and the program name was changed to the National Centers of Academic Excellence in Cybersecurity (NCAE-C).

As of February 2024, there are over 480 designated institutions across 48 states, the District of Columbia, and Puerto Rico. There are 153 associate programs and degrees, 243 Cyber Defense bachelors and graduate programs, 20 Cyber Operations bachelors and graduate programs, and 80 institutions hold the Research designation. Many designees hold multiple designations.

Though the program has evolved through the years, our focus has always been and will continue to be, to promote higher education and research in cybersecurity and produce professionals with cyber expertise in order expand to the cybersecurity workforce and to reduce vulnerabilities in our national infrastructure. Today, the NCAE program is a true success story in how academia, government, and industry can work together to solve a national problem, the shortage of cyber workforce.



Houston Community College  
receiving their CAE-CD designation.



Bradley University  
receiving their CAE-CD designation.



The 10th Anniversary CAE Annual Symposium  
was held in Seattle, Washington.



CAE workshop held at 2023 National  
Cybersecurity Education Colloquium (NCEC).

# THE NATIONAL CENTERS OF ACADEMIC EXCELLENCE IN CYBERSECURITY TODAY

## National Centers of Academic Excellence (NCAE) Mission

The mission of the National Centers of Academic Excellence in Cybersecurity (NCAE) program is to create and manage a collaborative cybersecurity educational program with community colleges, colleges, and universities that:

- Establishes standards for cybersecurity curriculum and academic excellence
- Includes competency development among students and faculty
- Values community outreach and leadership in professional development
- Integrates cybersecurity practice within the institution and across academic disciplines
- Actively engages in solutions to challenges facing cybersecurity education

## CAE Core Values and Guiding Principles

- **Ethics:** The institution encourages and supports ethical behavior by students, faculty, administrators, and professional staff.
- **Share:** The institution enables an environment for students, faculty, administrators, professional staff, and practitioners to share, interact, and collaborate with others in the cybersecurity field.
- **Lead by Example:** The institution demonstrates a commitment to address, engage, and respond to current and emerging cybersecurity issues both within the classroom and in the institution.

## CAE Designations

Academic institutions may choose from three designations.

- **The Cyber Defense (CAE-CD)** designation is awarded to regionally accredited academic institutions offering cybersecurity degrees and/or certificates.
- **The Research (CAE-R)** designation is awarded to DoD schools, PhD producing military academies, or regionally accredited, degree granting four-year institutions rated by the Carnegie Foundation Basic Classification system as either a Doctoral University – Very High Research Activity (R1), Doctoral University – High Research Activity (R2), or D/PU: Doctoral/Professional Universities.
- **The Cyber Operations (CAE-CO)** program is a deeply technical, inter-disciplinary, higher education program firmly grounded in the computer science, computer engineering, and/or electrical engineering disciplines, with extensive opportunities for hands-on applications via labs and exercises.

The designation process is a combination of elements related to the institution with a focus on outcomes for determining academic achievement. This combination assures that the institution meets the desired characteristics of a CAE institution, and that the academic delivery to students is producing the qualified workforce needed by the nation.

CAE-designated institutions must first complete validation of a Program of Study (PoS) which is a series of courses and experiences that a student can reasonably accomplish while attaining a degree or completing a certificate.

## CAE IN CYBER DEFENSE (CAE-CD)

There are four levels of the CAE-CD designation: Associate, Bachelor, Master, and Doctoral.

Institutions wishing to be designated a *Center of Academic Excellence in Cyber Defense (CD)* for a particular program of study apply in two parts.

The following process applies to both Program of Study Validation (PoS) and CAE Designation:

- **Program of Study Validation.** The process begins with the submission of elements pertaining to the academic program of study, including curriculum, faculty profiles and qualifications, and program maturity. An institution may opt to have multiple programs of study validated before pursuing designation or may achieve designation and return to have additional programs of study validated.
- **CAE Designation.** Once one program of study has been validated, the institution may pursue a designation. To be eligible for designation, academic institutions must hold a current regional accreditation as outlined by the Department of Education (<https://www.ed.gov/accreditation>).

## CAE IN CYBER OPERATIONS (CAE-CO)

The CAE-CO designation is awarded to four-year and graduate-level academic institutions.

Institutions wishing to be designated a Center of Academic Excellence in Cyber Operations (CO) for a particular program of study apply in two parts.

- **Program of Study Validation.** The process begins with the submission of elements pertaining to the academic program of study, including curriculum, faculty profiles and qualifications, and program maturity. The CAE-CO designation, while complementing the CAE Cyber Defense (CAE-CD) designation, provides an in-depth focus on technologies and techniques related to specialized cyber operations such as exploitation, reverse engineering, etc. The program being evaluated, while firmly grounded in the computer science, computer engineering, and/or electrical engineering disciplines, must educate students on cyber operations in an interdisciplinary manner. Applicant institution must demonstrate that it engages in significant community involvement, academic activities, and institutional practices in cybersecurity, and that the institution has a Program(s) of Study (PoS) under consideration meeting the requirements set forth in this document.
- **CAE Designation.** Once one program of study has been validated, the institution may pursue a designation. To be eligible for designation, academic institutions must hold a current regional accreditation as outlined by the Department of Education (<https://www.ed.gov/accreditation>).

## CAE IN CYBER RESEARCH (CAE-R)

All CAE in Cyber Research (CAE-R) applicants are either a DoD school, a PhD producing military academy, or a regionally accredited, degree-granting four-year institution. They are rated as either a Doctoral University – Very High Research Activity (R1), a Doctoral University – High Research Activity (R2), or D/PU: Doctoral/Professional Universities as determined by the Carnegie Foundation Basic Classification system (and/or other independent body to measure cyber) or provide a written justification outlining their significant cyber research.

The CAE-R criteria includes the demonstration of cyber research initiatives (faculty and student), publications, graduate-level production, and research funding.

## NCAE-C National Centers

The program office established the CAE National Centers between 2016 and 2020. The National Centers provide support and leadership required for the large number of schools, and for the myriad of grants focused on two particular lines of effort: Education Pathways and Careers Preparation. The sweeping success of the NCAE-C program is directly associated with this synergy between the NCAE-C PMO and the schools under the leadership and advocacy of the National Centers.

## CAE COMMUNITY NATIONAL CENTER

The CAE in Cybersecurity Community National Center (CNC) grant is administered through California State University, San Bernardino (CSUSB). Focused on the development of a robust cybersecurity workforce, the CAE Community National Center offers three primary functions to the 480+ CAE-C institutions and projects:

- Provide technical and logistical support for CAE events, activities, and curriculum
- Provide a portal of CAE resources for the community, geographic regions, and the Nation as a whole
- Engage and facilitate strategic initiatives for the Nation in the areas of research, student and faculty development, diversity, and other workforce development activities

The CAE Community National Center (CNC) has done an exceptional job cultivating a totally unique community of educators among the designated NCAE-C schools. It is a collaborative, energetic, creative, and innovative community, unique in the sense that faculty work together toward the betterment of the NCAE program, and for their students. They put aside the normal competitiveness of academia, and share expertise, curriculum, and other resources. This collaborative nature is the secret sauce driving the program's success. The CNC has also been responsible for several initiatives providing service and resources to the community.

- The NICE Challenge Project (now XPCyber) develops real-world cybersecurity challenges within virtualized business environments that bring students the workforce experience before the workforce. Since its inception, NICE Challenge/XPCyber has had the financial support of NICE, the NCAE-C program, CISA and DoD, and supports academic institutions nationwide. Developed and managed by the CNC, NICE Challenge runs about 8,000 challenge attempts per academic term month, and has served to date over 1,300 educators, over 24,000 students, and has over 650 educational institution users (K12-4Y). <https://nice-challenge.com>

- The CNC provides pioneering tools and inventive technical approaches to NCAE-C data management and communication needs. The CNC website, and particularly the map of schools is one example of this, providing geographic location, institution profile information, Minority Serving Institution (MSI) status, and GenCyber host information for users.
- The CNC provides support to many program including the NCAE Cyber Games. This competition is designed to attract students who would otherwise not participate in competitions with a focus on learning rather than competing. It teaches students the skills needed not only for future participation in traditional competitions, but technical job skills that will contribute to their future careers.  
<https://www.ncaecybergames.org>
- Three Communities of Practice (CoPs) are led by the CNC, each focusing on one of the three NCAE-C designations, with the goal to engage industry, academia, and government to help set a strategic direction for academia. <https://www.caecommunity.org/about-us/cae-communities-practice>

## CANDIDATES AND PEER REVIEW NATIONAL CENTERS

The CAE Candidates National Center (CCNC) acts as the entry point for all colleges and universities that plan to apply for either Academic Validation or NCAE-C Designation. The CAE Peer Review National Center works with the NCAE-C Program Management Office to train reviewers and execute peer reviews of applications for Academic Endorsement and/or NCAE-C Designation. Eastern New Mexico University-Ruidoso Branch Community College and Whatcom College collaborate to manage peer review panels based on readiness of Candidates to submit applications or Designated institutions to apply for re-designation.

<https://www.caecommunity.org/national-center/candidates-program> and  
<https://www.caecommunity.org/national-center/peer-review>

As awareness of the crisis in cybersecurity workforce began to grow, so did interest in the CAE-CD program. In the early years of the program, academic institutions were on their own to interpret designation requirements and successfully apply for designation. While the program office could answer specific questions, there was no concerted means that allowed interested institutions to get help in developing their programs or interpreting the application process. As a result, success in first time applications was about 57%.

In 2015, the National Science Foundation awarded the Catalyzing Computing and Cybersecurity in Community Colleges (C5) grant. As a co-PI on this grant, Whatcom Community College, Bellingham, WA, implemented a mentoring program to help community colleges pursue NCAE-C designation. In an effort to use CAE Program Office resources most effectively, maintain fiscal responsibility, and encourage the growth of exceptional cybersecurity education programs, the NCAE-C program introduced the CAE-CD Candidate Program in 2016 and expanded assistance to all schools seeking the Cyber Defense designation. The mentoring opportunities offered in the Candidates Program are based on the C5 model and lessons learned. As the program grew, the Candidates Program expanded to offer assistance and mentoring for the CAE-R and CAE-CO designation.

The NCAE-C Candidate Program ensures applicant institutions have adequate opportunity for program development and application assistance prior to application submittal. Following implementation of the Candidate Program, the applicant success rate rose to 87% in the first year.

## CAREERS PREPARATION NATIONAL CENTER

Norwich University leads a coalition of nine institutions of higher learning at the Careers Preparation National Center (CPNC) and is responsible for efforts to foster the development of college students with the knowledge, skills, and competencies required for government and industry employment. The CPNC team is addressing federal, state, and local government and industry requirements and student professional development (communication, critical thinking, and collaboration) to better prepare NCAE-C cybersecurity students for today's and tomorrow's work roles.

<https://caecommunity.org/national-center/careers-preparation-national-center>

- Another key role is to lead the integration of new competency development requirements for NCAE-C re-designation to ensure the highest quality of graduates prepared for the nation's workforce, and for their own careers. The team is managing the first re-designation cohort of schools re-designating in 2026 under the new process.
  - The team has developed a mechanism to help schools write competency statements to be associated with Programs of Study, and document the type of student and necessary knowledge and/or skills, the Task (according to the NICE Cybersecurity Workforce Framework (NCWF) or the Defense Cybersecurity Workforce Framework (DCWF)), the scenario, technology and limitations, the degree to which the task is to be completed, and if there is a time limitation.
- The next task is to create a database of the NCAE-C Credit Transfer Agreements, and facilitate development with focus on those between K12 schools and CAEs.

## EDUCATION PATHWAYS NATIONAL CENTER (EPNC)

Moraine Valley Community College leads this consortium of eleven (11) partners. The EPNC purpose is to establish an effective and sustainable national network of education-to-career pathways with three primary goals:

- Establish a national distribution network of Regions Investing in the Next Generation (RING) curriculum.

As of 2023:

- 2,400 teachers have been trained to use the RING curriculum, and an estimated 32,000 students were impacted
  - There have been 1,220 enrollments in the online version of RING, which is taught by certified teachers, with 11,500 assessments taken and 650 labs used
  - Teachers using RING are distributed nationwide, in the District of Columbia and Puerto Rico
  - EMATE Interactives help students learn difficult concepts using animation. (myEMATES)  
<https://d2hie3dpn9wvbb.cloudfront.net>
- Create a national pathway framework for K12 student to NCAE-C schools
    - Education Pathway Institutions (EPIs) in North Carolina, Texas, Nevada, California and Florida help the EPNC work closer with state governments and introduce RING
    - New EPIs in Louisiana, New Mexico, Ohio and Colorado will be added in 2024
  - Promote great diversity, equity, and success for underserved and underrepresented communities

The CAE National Centers will continue to provide specialty assistance and leadership to the CAE Community in the areas of resource management, standards development, and management, mentoring and peer review. The program office depends on the CNCs to provide feedback and input for strategic planning, standards currency, and review of applications. This structure ensures separation of advice and mentorship from evaluation and designation.

## DoD Cyber Service Academy (DoD CSA) (formerly the DoD Cyber Scholarship Program (DoD CySP))

Given our increasing reliance on cybersecurity, information technology (IT), and the growing threats to information and information systems and infrastructure, it is critical that the Department of Defense (DoD) protect itself. To do so, the DoD must be staffed with technically savvy personnel. To help achieve this task, the DoD Cyber Service Academy (DoD CSA) was established in 2001. Formerly the DoD Information Assurance Scholarship Program and the DoD Cyber Scholarship Program, the DoD CSA is sponsored by the DoD Chief Information Office and administered by the National Security Agency (NSA). The objectives of the program are to promote higher education in all disciplines of cybersecurity, to enhance the Department's ability to recruit and retain cyber and IT specialists, to increase the number of military and civilian personnel in the DoD with this expertise, and ultimately, to enhance the nation's cyber posture.



There are two scholarship opportunities within DoD CSA:

- **Recruitment Students/Scholarships (Non-DoD Employees, Reservists and National Guard):** As a recruitment tool, the DoD CSA sponsors students who currently are not DoD or other government employees who are enrolled in or applying to universities designated as a National Center of Academic Excellence in Cybersecurity (NCAE-C). Following graduation, students are eligible for full-time employment with various components and agencies across the DoD. Students are required to work for the DoD a minimum of one year for each year of scholarship support they receive.
- **Retention Students/Scholarships (DoD Civilians and Active-Duty Military):** The DoD CSA supports DoD civilians, military officers, and enlisted personnel who pursue Master's and Doctoral degrees in cyber-related fields of study. Typically, these retention students attend a DoD school designated as a NCAE-C and, depending on the program, may finish their graduate degree at a partnering university. For DoD civilian and military personnel, the service commitment following graduation is determined by their sponsoring component organization. DoD employees which to cross-train into a cyber position could pursue a two-year community college degree or certificate.

There is an additional option for NCAE-C's to apply for modest institutional capacity building. DoD CIO will outline the projects for each application cycle in the annual solicitation. The projects may be tied to two specific DOD-focused initiatives: DoD Partnerships and Outreach to K-12, Minority Institutions, Community Colleges; and technical schools. For more information visit: <https://public.cyber.mil/dcysp>

## Grants

Since fiscal year 2020, Congress has generously supported the NCAE-C program with funding for a variety of programs. In some cases, the CAE PMO was awarded funding to assign according to the needs of the program, and in other cases, funding was specifically allocated to programs and national requirements. There have been 75 research grants and 51 initiatives funded, most of which are assigned to coalitions of NCAE-C designated institutions. More information on any of these grants is available at <https://caecommunity.org/resources/national-cae-marketing-materials> or from the NCAE-C PMO at [caepmo\\_uwe@uwe.nsa.gov](mailto:caepmo_uwe@uwe.nsa.gov).

## Federal Partners

NCAE program success is due in large part to federal departments and agencies that are close partners in cybersecurity workforce education and development. In addition to the program office partnership with DoD CIO on DoD CySP, close partners include:

### **DEPARTMENT OF HOMELAND SECURITY (DHS), CYBERSECURITY AND INFRASTRUCTURE SECURITY AGENCY (CISA)**

CISA helps foster the growth of the program as part of their outreach to states and local communities. CISA also manages the National Initiative for Cybersecurity Careers and Studies (NICCS) and offers free online cybersecurity education to federal employees and military through the Federal Virtual Training Environment (VTE). Visit [niccs.us-cert.gov](https://niccs.us-cert.gov) for more information.

### **THE FEDERAL BUREAU OF INVESTIGATION (FBI)**

The FBI serves as a strategic advisor for the Cyber Operations Program. FBI participates in training and education conferences, symposia, and working groups to address cybersecurity education and training, and co-sponsor, as appropriate, events, working groups and principals' meetings. FBI provides subject matter expertise and participates in the review of college and university applicants for designation. Additionally, the FBI participates in the Summer Intern Program. Through the NSA CAE partnership initiative, the FBI provides technical liaisons to universities associated with the FBI and NSA's Centers of Academic Excellence in Cyber Operations schools. The intended purpose is to enhance relationships and identify potential partnerships on research and innovation.

### **THE NATIONAL INITIATIVE FOR CYBERSECURITY EDUCATION (NICE)**

As part of the National Institute of Standards and Technology (NIST) in the Department of Commerce, NICE focuses on efforts to close the hiring gap in the cybersecurity workforce. The Annual CAE Community Symposium is supported by a grant from NICE. The NICE Challenge Project, which develops real world cybersecurity tasks that are aligned to the NICE Cybersecurity Workforce Framework presented within virtualized business environments bring students the workforce experience before entering the workforce, is funded by NICE and the NSA College of Cyber. The NCAE-C program office participates with the NICE Interagency Coordinating Council, which offers opportunities for federal departments and agencies to

share information and collaborate on areas of common interest. NCAE-C KUs are mapped to the NICE Framework, and designated programs align to the NICE Framework Specialty Areas. Visit [nist.gov/nice](http://nist.gov/nice) for more information.

## THE NATIONAL SCIENCE FOUNDATION (NSF)

The NSF encourages and funds projects that will generate new knowledge about effective cybersecurity education, re-skill workers to meet cybersecurity education needs, prepare nontraditional students to reenter the educational system, increase the diversity of the cybersecurity workforce, use applied research experiences to build skills and [www.iad.gov/NIETP](http://www.iad.gov/NIETP) 27 competencies for real-world scenarios, and build effective collaborations between educational institutions, business, industry, and government. NSF and NCAE-C interests frequently align, and the NCAE-C program has benefited from the NSF investment on numerous occasions. For more information, visit [www.nsf.gov](http://www.nsf.gov). Most closely related to the NCAE-C are:

- The CyberCorps®: Scholarship for Service (SFS) program. The SFS program, co-sponsored by the U.S. Office of Personnel Management (OPM), and Department of Homeland Security (DHS), includes scholarship and capacity-building components that attract high-caliber students from institutions designated by the NCAE-C program and selected by NSF through a competitive process.
- NSF also manages the Advanced Technological Education (ATE) program, which is currently funding centers in eight major technology areas. Two ATE programs, the National Center for Systems Security and Information Assurance (CSSIA) and NCyTE are designated NCAE-Cs.

## Academic Institutions Offering CAE-C Designated Programs

Degree and certificate paths range from concentrations in cybersecurity to bachelors and masters in cybersecurity and cyber defense. Top research focus areas are Hardware Security, Cryptology, Digital Forensics, and Network Hardening. The following is an alphabetical list of designated programs by institution name, with their state, as well as minority serving institutions and profiles. For a listing of institutions by state, or for more information, visit: <https://caecommunity.org/cae-map>

# DESIGNATED PROGRAMS BY INSTITUTION

Air Force Institute of Technology	OH
Alamance Community College	NC
Alexandria Technical and Community College	MN
American Public University System	WV
Anderson University	SC
Anne Arundel Community College	MD
Arapahoe Community College	CO
Arizona State University	AZ
Assumption University	MA
Athens State University	AL
Auburn University	AL
Augusta Technical College	GA
Augusta University	GA
Baker College	MI
Baltimore City Community College	MD
Bay Path University	MA
Baylor University	TX
Bellevue University	NE
Binghamton University (SUNY at Binghamton)	NY
Bismarck State College	ND
Bloomsburg University of Pennsylvania	PA
Blue Ridge Community and Technical College	WV
Blue Ridge Community College	NC
Bluegrass Community and Technical College	KY
Boise State University	ID
Bossier Parish Community College	LA
Boston University	MA
Bowie State University	MD
Bradley University	IL
Brigham Young University	UT
Brookdale Community College	NJ
Butler Community College	KS
Calhoun Community College	AL
California State Polytechnic University, Pomona	CA
California State University San Marcos	CA
California State University, Sacramento	CA
California State University, San Bernardino	CA
Capella University	MN

Capitol Technology University	MD
Carnegie Mellon University	PA
Cecil College	MD
Cedarville University	OH
Central Connecticut State University	CT
Central Georgia Technical College	GA
Central Michigan University	MI
Century College	MN
Champlain College	VT
Chemeketa Community College	OR
Chippewa Valley Technical College	WI
City University of New York	NY
City University of Seattle	WA
Clark State College	OH
Clemson University	SC
Coastline Community College	CA
Cochise College	AZ
College of Coastal Georgia	GA
College of DuPage	IL
College of Eastern Idaho	ID
College of Southern Maryland	MD
College of Southern Nevada	NV
College of Western Idaho	ID
Collin College	TX
Colorado Mesa University	CO
Colorado School of Mines	CO
Colorado State University	CO
Colorado State University-Pueblo	CO
Colorado Technical University	CO
Columbia Basin College	WA
Columbus State Community College	OH
Columbus State University	GA
Community College of Rhode Island	RI
Cosumnes River College	CA
County College of Morris	NJ
Cypress College	CA
Dakota State University	SD
Dartmouth College	NH

# DESIGNATED PROGRAMS BY INSTITUTION

Davenport University	MI
Daytona State College	FL
Delta College	MI
DePaul University	IL
Des Moines Area Community College	IA
DeVry University	IL
Drexel University	PA
East Carolina University	NC
East Stroudsburg University	PA
Eastern Florida State College	FL
Eastern Iowa Community College	IA
Eastern Michigan University	MI
Eastern New Mexico University - Ruidoso Branch Community College	NM
Eastern Washington University	WA
ECPI University	VA
El Paso Community College	TX
Embry-Riddle Aeronautical University - Daytona Beach Campus	FL
Embry-Riddle Aeronautical University, Prescott Campus	AZ
Enterprise State Community College	AL
Estrella Mountain Community College	AZ
Excelsior University	NY
Fairleigh Dickinson University	NJ
Fayetteville Technical Community College	NC
Ferris State University	MI
Florida Agricultural and Mechanical University	FL
Florida Atlantic University	FL
Florida Institute of Technology	FL
Florida International University	FL
Florida Memorial University	FL
Florida State University	FL
Florida State University	FL
Fordham University	NY
Forsyth Technical Community College	NC
Fort Hays State University	KS
Franklin University	OH
Fullerton College	CA

Gallatin College MSU	MT
Gaston College	NC
George Mason University	VA
Georgetown University	DC
Georgia Southern University	GA
Georgia State University	GA
Germanna Community College	VA
Glendale Community College	AZ
Grand Canyon University	AZ
Grand Rapids Community College	MI
Great Falls College Montana State University	MT
Green River College	WA
Guilford Technical Community College	NC
Gwinnett Technical College	GA
Hagerstown Community College	MD
Hampton University	VA
Harford Community College	MD
Harrisburg University of Science and Technology	PA
Hennepin Technical College	MN
Henry Ford College	MI
Highline College	WA
Hill College	TX
Hinds Community College	MS
Hood College	MD
Houston Community College	TX
Howard Community College	MD
Howard University	DC
Hudson County Community College	NJ
Idaho State University	ID
Illinois Institute of Technology	IL
Illinois State University	IL
Indian River State College	FL
Indiana Institute of Technology	IN
Indiana State University	IN
Indiana University	IN
Indiana University of Pennsylvania	PA
Iowa State University	IA
Ivy Tech Community College	IN

# DESIGNATED PROGRAMS BY INSTITUTION

Jackson State Community College	TN
Jacksonville University	FL
James Madison University	VA
Jefferson State Community College	AL
John A Logan College	IL
Johnson & Wales University	RI
Johnson County Community College	KS
Kansas State University	KS
Kean University	NJ
Kennesaw State University	GA
Kent State University	OH
Klamath Community College	OR
Lakeland Community College	OH
Lansing Community College	MI
Laurel Ridge Community College	VA
Leeward Community College	HI
Lehigh Carbon Community College	PA
LeMoyne–Owen College	TN
Liberty University	VA
Long Beach City College	CA
Louisiana State University	LA
Louisiana Tech University	LA
Loyola University Chicago	IL
Macomb Community College	MI
Marquette University	WI
Marshall University	WV
Marymount University	VA
Maryville University	MO
McLennan Community College	TX
Mercy University	NY
Messiah University	PA
Metro State University	MN
Metropolitan Community College	NE
Metropolitan Community College - Kansas City	MO
Metropolitan State University of Denver	CO
Miami Dade College	FL
Michigan Technological University	MI
Middle Georgia State University	GA

Minot State University	ND
Mississippi Gulf Coast Community College	MS
Mississippi State University	MS
Missoula College	MT
Missouri University of Science and Technology	MO
Mohawk Valley Community College	NY
Montgomery College	MD
Montreat College	NC
Moraine Valley Community College	IL
Morgan State University	MD
Mount Aloysius College	PA
Mountain Empire Community College	VA
Mt. Hood Community College	OR
Murray State University	KY
National Defense University	DC
National University	CA
Naval Postgraduate School	CA
New England Institute of Technology	RI
New Jersey City University	NJ
New Jersey Institute of Technology	NJ
New Mexico Tech (New Mexico Institute of Mining and Technology)	NM
New River Community College	VA
New York Institute of Technology	NY
New York University	NY
Niagara University	NY
Norfolk State University	VA
North Carolina A&T State University	NC
North Carolina Central University	NC
North Carolina State University	NC
North Dakota State University	ND
Northampton Community College	PA
Northeast Community College	NE
Northeast Lakeview College	TX
Northeastern University	MA
Northern Kentucky University	KY
Northern Michigan University	MI
Northern Virginia Community College	VA
Northwest Arkansas Community College	AR

# DESIGNATED PROGRAMS BY INSTITUTION

Northwood Technical College	WI
Norwich University	VT
Nova Southeastern University	FL
Oakland University	MI
Ohlone College	CA
Oklahoma Christian University	OK
Oklahoma City Community College	OK
Old Dominion University	VA
Oregon State University	OR
Our Lady of the Lake University	TX
Owensboro Community and Technical College	KY
Pace University	NY
Palm Beach State College	FL
Palo Alto College	TX
Pennsylvania Highlands Community College	PA
Pennsylvania State University	PA
Pensacola State College	FL
Pikes Peak Community College	CO
Pima Community College	AZ
Pitt Community College	NC
Pittsburgh Technical College	PA
Polytechnic University of Puerto Rico	PR
Portland Community College	OR
Portland State University	OR
Prince George's Community College	MD
Pueblo Community College	CO
Purdue University	IN
Purdue University Global	IN
Purdue University Northwest	IN
Quinnipiac University	CT
Radford University	VA
Regent University	VA
Regis University	CO
Richmond Community College	NC
Riverside City College	CA
Roane State Community College	TN
Robert Morris University	PA
Rochester Institute of Technology	NY

Rock Valley College	IL
Rockland Community College	NY
Roger Williams University	RI
Roosevelt University	IL
Rose State College	OK
Rowan College at Burlington County	NJ
Rowan College of South Jersey	NJ
Sacred Heart University	CT
Saddleback College	CA
Saint Francis University	PA
Saint Leo University	FL
Saint Vincent College	PA
Sam Houston State University	TX
San Antonio College	TX
SANS Technology Institute	MD
Sierra College	CA
Simmons University	MA
Sinclair Community College	OH
South Carolina State University	SC
South Puget Sound Community College	WA
Southeast Missouri State University	MO
Southern Maine Community College	ME
Southern Methodist University	TX
Southern New Hampshire University	NH
Southern Utah University	UT
Spokane Falls Community College	WA
St. Cloud State University	MN
St. Cloud Technical & Community College	MN
St. John's University	NY
St. Louis Community College	MO
St. Mary's University	TX
St. Petersburg College	FL
St. Philip's College	TX
Stanly Community College	NC
Stark State College	OH
Stevens Institute of Technology	NJ
Stillman College	AL
Strayer University	VA

# DESIGNATED PROGRAMS BY INSTITUTION

Suffolk County Community College	NY
Syracuse University	NY
Talladega College	AL
Tallahassee Community College	FL
Tarrant County College District	TX
Temple University	PA
Tennessee Tech University	TN
Terra State Community College	OH
Texas A&M University	TX
Texas A&M University-Corpus Christi	TX
Texas A&M University-San Antonio	TX
Texas State Technical College	TX
The Citadel	SC
The College of Westchester	NY
The Community College of Baltimore County	MD
The George Washington University	DC
The Johns Hopkins University	MD
The State University of New York at Canton	NY
The University of Alabama	AL
The University of Alabama at Birmingham	AL
The University of Alabama in Huntsville	AL
The University of Arizona	AZ
The University of Tampa	FL
The University of Tennessee at Chattanooga	TN
The University of Texas at San Antonio	TX
Tiffin University	OH
Towson University	MD
Trident Technical College	SC
Tuskegee University	AL
United States Air Force Academy	CO
United States Coast Guard Academy	CT
United States Naval Academy	MD
University at Albany, the State University of New York	NY
University at Buffalo, the State University of New York	NY
University of Advancing Technology	AZ
University of Arkansas	AR
University of Arkansas at Little Rock	AR

University of California, Irvine	CA
University of Central Florida	FL
University of Central Missouri	MO
University of Cincinnati	OH
University of Colorado Denver	CO
University of Colorado, Colorado Springs	CO
University of Connecticut	CT
University of Dallas	TX
University of Dayton	OH
University of Delaware	DE
University of Denver	CO
University of Detroit, Mercy	MI
University of Findlay	OH
University of Florida	FL
University of Georgia	GA
University of Hawaii – West Oahu	HI
University of Hawaii at Manoa	HI
University of Hawaii Kapiolani Community College	HI
University of Hawaii Maui College	HI
University of Houston	TX
University of Idaho	ID
University of Illinois at Springfield	IL
University of Illinois at Urbana-Champaign	IL
University of Kansas	KS
University of Louisville, Kentucky	KY
University of Maine at Augusta	ME
University of Maryland	MD
University of Maryland Global Campus	MD
University of Maryland, Baltimore County	MD
University of Massachusetts Dartmouth	MA
University of Massachusetts Lowell	MA
University of Memphis	TN
University of Missouri - Columbia	MO
University of Missouri-St. Louis	MO
University of Nebraska, Omaha	NE
University of Nevada, Las Vegas	NV
University of Nevada, Reno	NV

## DESIGNATED PROGRAMS BY INSTITUTION

University of New Hampshire	NH
University of New Haven	CT
University of New Mexico	NM
University of New Orleans	LA
University of North Carolina, Charlotte	NC
University of North Carolina, Pembroke	NC
University of North Carolina, Wilmington	NC
University of North Dakota	ND
University of North Florida	FL
University of North Georgia	GA
University of North Texas	TX
University of Pittsburgh	PA
University of Puerto Rico	PR
University of Rhode Island	RI
University of San Diego	CA
University of South Alabama	AL
University of South Carolina	SC
University of South Carolina-Aiken	SC
University of South Florida	FL
University of Southern Maine	ME
University of Southern Mississippi	MS
University of Texas at Dallas	TX
University of Texas at El Paso	TX
University of the Cumberlands	KY
University of the Incarnate Word	TX
University of Tulsa	OK
University of Virginia	VA
University of Washington	WA
University of West Florida	FL
University of Wisconsin-Stout	WI
University of Wisconsin-Whitewater	WI
Utica University	NY
Valencia College	FL
Valley Forge Military College	PA
Vanderbilt University	TN
Vincennes University	IN
Virginia Commonwealth University	VA
Virginia Peninsula Community College	VA

Virginia State University	VA
Virginia Western Community College	VA
Volunteer State Community College	TN
Wake Technical Community College	NC
Walden University	MN
Wallace State Community College	AL
Walsh College	MI
Washtenaw Community College	MI
Waukesha County Technical College	WI
Wayne Community College	NC
Weber State University	UT
Webster University	MO
West Chester University of Pennsylvania	PA
West Virginia University	WV
Westchester Community College	NY
Western Colorado University	CO
Western Dakota Technical College	SD
Western Governors University	UT
Western Illinois University	IL
Western Washington University	WA
Whatcom Community College	WA
Wichita State University	KS
Wilkes Community College	NC
Wilmington University	DE
Worcester Polytechnic Institute	MA
Wright State University	OH
Xavier University	OH

Designated institutions were invited to provide profiles of their programs for this publication. Those who were able to do so according to the publication deadlines are profiled alphabetically in this section.



# AIR FORCE INSTITUTE OF TECHNOLOGY



AFIT Campus at Wright-Patterson AFB, Ohio

The **Air Force Institute of Technology (AFIT)** has a long and well-recognized history of providing cutting-edge, cyber-focused graduate education and research. Its education programs address both defensive and offensive operations, as well as acquisition and sustainment issues. AFIT awards an average of 32 cyber-related MS degrees and three PhD degrees annually; approximately half are MS of Cyber Operations and the remaining are Computer Science, Computer Engineering, and Electrical Engineering.

AFIT's Center for Cyberspace Research was established in March 2002 and conducts cyber operations research at the Master's and PhD levels. Research objectives are closely aligned with evolving and anticipated Department of the Air Force and Defense Department needs, with current lines of effort in human factors in cyber operations, multi-

domain operations, software defined networking, physical layer security, cyber physical and embedded systems, and cyber resilience in weapon systems.

In 2008, AFIT was designated as the Air Force Cyberspace Technical Center of Excellence (AF CyTCoE). AF CyTCoE's goal is to enhance the USAF's ability to develop cyber warriors capable of delivering strategic, operational and tactical effects by leveraging the most cutting-edge technologies and tactics available.

AFIT collaborates actively with other DoD and Federal government organizations, civilian universities, and industry. AFIT is a co-founder of the Cincinnati-Dayton Cyber Corridor (Cin-Day Cyber), whose long-term goals include advancing cybersecurity education (to include growing the number of CAE schools), promoting research collaboration among higher education schools, establishing government and industry (employer) partnerships, and developing the regional workforce.

## DESIGNATIONS

- CAE-Research

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AFIT's ROTC Cyber Ed Program



Main entrance to Alamance Community College campus

**Alamance Community College (ACC)** is a mid-sized, two-year college located along I-40/I-85 in North Carolina. It is one of the longest-operating community colleges in NC. ACC's location and demographics have motivated it to focus on how cybersecurity intertwines with its regional employers in the sectors of healthcare services and logistics.

Because the SOC Tier 1 Analyst position can be a great segue into a broader cybersecurity career, ACC's cyber degree emphasizes the CyberOps skillsets employed within a SOC: analyzing IDS alerts, inspecting suspicious emails, examining logs, and performing packet analysis. Our instructors teach students the skills to become triage specialists who monitor, manage, and configure security tools, review alerts, and escalate certain incidents when necessary.

In industry, companies are continually expanding connectivity across their people, assets, and systems. Naturally, this enables greater performance and efficiency, but it also widens the attack surface for would-be cybercriminals. Thus, ACC's IT Department is introducing students to key concepts such as VLAN network segmentation, firewall technologies, and endpoint security.

Students also learn how to create an incident response playbook, seeing how such a document helps staff to focus on essential and specific actions, greatly reducing the chance of a stress-induced meltdown. In all of the courses, ACC is intentional in emphasizing and cultivating critical thinking and creativity.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CyberSAFE Camp Participants



ATCC lies in the heart of lake country Minnesota.

Are you ready to tackle one of the greatest challenges of our time: securing the ever-expanding connected world? At **Alexandria Technical & Community College**, our Cyber Defense programs enhance students' expertise in key IT and cybersecurity domains, arming students with the hands-on skills needed to evaluate, secure, and remediate at-risk computer and networked systems. Graduates emerge ready to lead in the dynamic landscape of cybersecurity, primed for roles in cybersecurity, network security, information assurance, and incident investigation – areas seeing job growth of 20-30% annually.

We partner with industry experts to ensure our curriculum remains at the forefront of innovation. Going beyond theory, students take on real-world inspired threats and learn practical skills, building a robust portfolio of applied experience to showcase to

employers. Students can further hone their skills as part of our cyber defense competition team.

Located in central Minnesota, Alexandria College combines cutting-edge technology with small class sizes and instructors who get to know students as individuals—not just a seat in a lecture hall. Combined with several varsity athletics opportunities, vibrant student life, and ample student housing on campus, Alexandria College is a small college that feels big. Join us and become a part of the solution to safeguarding our interconnected world.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Esports and Cyber Teams @ ATCC



APUS Campus

Founded in 1991 as American Military University to serve the needs of a highly-mobile military, we are committed to serving our students and the broader community. Today, as **American Public University System (APUS)**, we serve more than 80,000 adult learners worldwide and offer more than 200 degree and certificate programs -- in cybersecurity and other specialized fields such as intelligence studies, the latter up to the doctoral level -- that prepare our students for leadership and service in a diverse, changing world.

APUS was the first 100% online institution to be recognized by the Online Learning Consortium for Best Practices in Online Education. In 2018 alone, our faculty published more than 700 contributions to their disciplines and received more than 250 awards for their scholarship and instruction. More than 60% hold a terminal degree, and currently hold leadership

positions with major companies and government agencies. In addition, since 2012, 43 APUS students have been finalists in the Presidential

Management Fellows program and, in 2018, we celebrated a record class of more than 11,000 graduates—the true measure of our success.

We strive to expand access to a quality higher education by keeping our programs affordable and leading-edge. APUS's online bachelor's programs have been recognized for quality and affordability by U.S. News & World Report and Washington Monthly, respectively. APUS is also building an advanced learning platform by investing in game-based learning and simulation to strengthen student engagement and learning outcomes.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Network Operations



Anderson University campus

Established in 1917 by the Church of God, **Anderson University** is a private liberal arts institution located in Anderson, Indiana. The university is committed to educating students for lives of faith and service within the church and broader society. The Security Studies program at Anderson University offers majors in Cybersecurity and National Security, aiming to prepare graduates equipped with practical knowledge, technical skills, and professional ethics, all grounded in a Christian-faith perspective. These graduates are trained to serve on the front lines, protecting the nation, communities, and various institutions from both foreign and domestic threats across physical and cyber domains. The cybersecurity curriculum at Anderson University is notably interdisciplinary, incorporating courses in cybersecurity, national security, mathematics, and Christian ethics.

The university also houses the Center for Security Studies and Cyber Defense (CSSCD), which provides a variety of security services to clients at rates below market cost. Services offered by the CSSCD include cyber audit assistance, co-managed SOC operations, curated intelligence and security research, penetration testing, security awareness training, and table-top exercises. Importantly, the CSSCD offers paid internships that allow students to deliver these client services under the guidance of CSSCD staff. Through these internships, students gain the necessary training for specific client needs, thereby enhancing the education received in their major curriculum. A distinctive advantage for students graduating from Anderson University is that they leave not only with a Bachelor's degree but also with the 2-3 years of experience most employers require, positioning them effectively for their future careers.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Training students at the CEL



# ANNE ARUNDEL COMMUNITY COLLEGE



AACC Main Entrance

## **Anne Arundel Community College (AACC)**

prioritizes learning, striving to meet the diverse needs of its community through high-quality, affordable, accessible, and innovative lifelong learning opportunities. As a pioneer in cybersecurity education, AACC was among the first community colleges to be designated a National Center of Academic Excellence in Cyber Defense by the National Security Agency (NSA).

It also led the way as the first institution to earn the title of National Center of Digital Forensics Academic Excellence (CDFAE) from the Defense Cyber Crime Center, highlighting its role in setting standards and best practices for digital forensics. Building on its reputation for excellence, AACC became one of the first two community colleges accredited by ABET in Cybersecurity, ensuring its programs meet the rigorous quality standards of the profession.

## **DESIGNATIONS**

- CAE-Cyber Defense

## **CONTACT INFORMATION**

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AACC offers two cutting-edge Associate of Applied Science (A.A.S.) degrees in Information Assurance and Cybersecurity, with concentrations in Security and Networking. These programs are designed to equip students with practical skills through real-world tools and scenarios, preparing them for careers in Cybersecurity, Networking, and Digital Forensics.

With access to the latest hardware and software, students receive comprehensive hands-on training, covering technical areas such as Advanced Network Defense, Network Intrusion Detection/Penetration Testing, Windows and Linux Server Administration, Digital and Network Forensics, and Networking. This robust training ensures graduates have the knowledge and skills needed for success in cybersecurity-related fields.

Recognized as a career degree by the state of Maryland, the A.A.S. aims to provide students with the necessary skills to enter the workforce immediately. AACC alumni can be found working for prestigious organizations such as the NSA, the Department of Defense (DOD), and various leading entities in the public and private sectors.

Moreover, AACC has established articulation agreements with select colleges, facilitating smooth transfer processes for students wishing to continue their education.



Arapahoe Community College Littleton, CO Campus

**Arapahoe Community College (ACC)** stands as a beacon of educational excellence with a mission to empower students through accessible, high-quality learning experiences. Established on a foundation of inclusivity and community engagement, ACC strives to foster academic success, career advancement, and personal growth.

With a mission centered on student empowerment, ACC's distinctiveness lies in its innovative programs, dedicated faculty, state-of-the-art facilities, and a commitment to community engagement. As a beacon of academic excellence, ACC prepares students for success in a rapidly changing world, fostering a culture of lifelong learning and contribution to society.

Unique in its commitment to student success, ACC distinguishes itself through a blend of innovative

programs, dedicated faculty, and a dynamic learning environment. The college embraces a learner-centered approach, ensuring that students of diverse backgrounds and aspirations find a supportive and enriching educational home.

At the heart of ACC's uniqueness lies a diverse range of programs spanning arts, sciences, business, and technology. The college's emphasis on hands-on learning, real-world applications, and industry partnerships ensures students graduate with both theoretical knowledge and practical skills, preparing them for a rapidly evolving job market.

Noteworthy highlights include state-of-the-art facilities equipped with cutting-edge technology, fostering an immersive and interactive learning experience. ACC takes pride in its faculty, comprised of experts in their fields, dedicated to nurturing students' intellectual curiosity and critical thinking abilities.

ACC's reputation extends beyond academic excellence, with a focus on sustainability and community impact. The college actively engages in initiatives that contribute to the well-being of the local community, aligning with its vision of education as a catalyst for positive societal change.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Assumption University Campus

The Bachelor of Science in Cybersecurity degree program at **Assumption University** is dedicated to nurturing the future generation of cybersecurity professionals and leaders. By instilling a strong foundation of professional ethics, critical thinking, and interpersonal communication, our students are equipped with the necessary skills to prevent, detect, respond, and recover from cybersecurity attacks.

Our program provides a comprehensive education that prepares graduates for employment in cybersecurity and related fields or advanced studies at the graduate level. Our cybersecurity graduates understand the importance of ethical and integrity-driven practices in their line of work, ensuring the security and sustainability of the cyberspace ecosystem.

At Assumption University, our Bachelor of Science in Cybersecurity degree program stands out with its technology-based approach that integrates computing and information science, engineering, social science, and technology management. We aim to cultivate innovation and entrepreneurship in the digital information economy, while engaging students with real-world solutions to emerging global cyber threats.

Our faculty comprises experts in different areas of cybersecurity, who provide students with practical training and technical expertise. With our program, Assumption University graduates will be the next generation of cybersecurity leaders and architects, equipped to secure, develop, and sustain the cyberspace ecosystem.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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[assumption.edu/undergraduate/cybersecurity](https://assumption.edu/undergraduate/cybersecurity)



AU Cyber Students at Annual Undergrad Symposium



Auburn University Campus

Chartered in 1856, **Auburn University (AU)** is a Carnegie R1 classified university located in Auburn, Alabama. The Auburn Cyber Research Center (ACRC) is a research center housed in AU's Department of Computer Science and Software Engineering that brings together faculty, researchers, and students working in the field of cybersecurity from departments within the College of Engineering and across campus. ACRC aims to excel in cyber research and address cyber needs by engaging with industry, government, and communities to educate a superior workforce, disseminate solutions to cybersecurity problems, and support state and regional economic development.

Our programs include a Ph.D. degree program, three master's degree programs, an accelerated Bachelor's/Master's degree, and a graduate certificate program. The Master of Science in

Cybersecurity Engineering program equips students with the advanced education required to analyze, develop, investigate, protect, and defend computer information systems. We offer a graduate certificate program in Cybersecurity Engineering focusing on analysis, development, investigation, protection, and defending of computer information systems. We also offer an undergraduate certificate program in Cyber Defense that equips students with the knowledge and skills preparing them to reduce the vulnerabilities in our national information infrastructure.

AU has had a National Science Foundation CyberCorps Scholarship for Service (SFS) program for many years, providing scholarships to both undergraduate and graduate students, in return for them serving a commensurate period in the public sector. It is run under the auspices of ACRC and has placed many graduates in cyber jobs in both the federal executive branch and national laboratories.

AU has a very active Ethical Hacking Club (EHC), where students with an interest in cyber gather for extracurricular activities including cyber tech talks, hands-on workshops, and honing their skills in cyber competitions including the Collegiate Cyber Defense Competition (CCDC), Department of Energy (DOE) Cyber Fire Puzzles and CyberForce competitions, Sandia National Laboratories' TracerFIRE workshop & competition, and Capture The Flag (CTF) competitions.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research
- CAE-Operations

## CONTACT INFORMATION

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cyber.auburn.edu



Augusta Technical College Campus

**Augusta Technical College** was initially designated as a Center of Academic Excellence in Cyber Defense (CAE-CD) in 2018 and was redesignated in 2023. The College has a long-standing tradition and successful history of producing quality IT graduates. Along with cybersecurity, we also offer degrees in computer programming, networking specialist, cloud computing and solution, and computer support, as well as diplomas and specialized Technical Certificates of Credit.

Our programs adopt a competency-based approach, offering an extensive range of innovative, hands-on labs, and practical exercises. These elements aim to equip students with practical skills that extend beyond foundational knowledge. Furthermore, our state-of-the-art facility and highly qualified faculty contribute to an enriching learning environment. Our cyber club, Phish and Chips,

has been instrumental in aiding our students in preparing for industry certifications and being job-ready by enhancing their knowledge and abilities by successfully competing in various Cyber competitions.

Located in Augusta, Georgia, Augusta Technical College resides in what is now known as “Cyber City.” Within the city limits, U.S. Army Fort Eisenhower houses the U.S. Army Cyber Command and the National Security Agency Georgia. Augusta Tech’s Cyber Institute operates within the Georgia Cyber Innovation & Training Center, offering an ideal environment for students to explore cybersecurity. Established by the state of Georgia, this state-of-the-art facility fosters collaboration between government, academia, and private industry. Its mission is to drive innovation, improve cybersecurity solutions, practices, and policies, while also developing professionals to ensure their effective implementation.

This facility also accommodates prominent government agencies, including the U.S. Army Cyber Command, the Cyber Crime Division of the Georgia Bureau of Investigation, and various private industry entities specializing in cybersecurity. The Augusta University School of Computer & Cyber Sciences, with which we have established numerous collaborative partnerships, is also housed within the center.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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The Georgia Cyber Innovation and Training Center

**Augusta University (AU)** is located in the center of many academic, governmental, and corporate partnerships critical to the nation's cybersecurity and technology enterprises, including the U.S. Army Cyber Command, National Security Agency Georgia, U.S. Army Cyber Center of Excellence, the Savannah River National Laboratory, and the Georgia Bureau of Investigation Cyber Crime Division. Our faculty bring valuable, practical skills into the classroom. Our students are innovators, doers, and thinkers.

AU offers several cyber-related degrees: six bachelor of science undergraduate degrees (Computer Science, Cyber Operations, Cybersecurity, Cybersecurity Engineering, Information Technology, Biomedical Systems Engineering), three masters degrees (Computer Science, Information Systems Management, Intelligence and Security Studies), and a PhD in Computer and Cyber Sciences.

AU has been a CAE-designated institution in Cyber Defense since 2016. As of 2023, 23 AU students have been selected for the DoD Cyber Scholarship Program. In 2021, AU was selected for the CyberCorps® Scholarship for Service program. AU has been the host for the Southeast Regional Collegiate Penetration Testing Competition (CPTC) since 2019.

AU students can participate in the Student Chapter of the Association for Computing Machinery (ACM). Our ACM Chapter students participate in annual competitions such as the Collegiate Cyber Defense Competition, National Cyber League, and the CPTC. AU participates in the GenCyber program and has hosted summer camps since 2015.

The opportunities are boundless for you to pursue lifechanging education at Augusta University!

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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[augusta.edu/ccs/bs-it-cybersecurity.php](http://augusta.edu/ccs/bs-it-cybersecurity.php)



Students at Augusta University



Baker College - Owosso Campus

The mission of **Baker College** is to provide an inclusive, innovative and transformative educational experience which allows students to positively impact their lives and the world around them.

Baker College is an independent, private, non-profit institution that grants associate, bachelor's, master's, and doctoral degrees on campuses across Michigan and online. Each of the six campus locations is special, with a unique culture, collection of academic programs, and landscape, and all built around a Student-First philosophy that is the cornerstone of the institution—it is our compass, guiding us and keeping us on course, ensuring that our students and their success are always our main priority.

Since its founding in 1911, Baker has always been committed to embracing technology, sparking innovation, and fostering a supportive learning

environment where students can get the real-world knowledge, skills, and experiences they need to pursue the life and career they want in a supportive and inclusive environment.

Our students learn how to analyze and respond to computer infrastructure problems, identify internal and external threats and other vital skills needed to keep up in the ever-changing world of information security. Our 2023 Internship Supervisors revealed that 100% of the supervisors at the internship sites indicated our students demonstrated the professional knowledge and skills needed in their fields of study. Among those internships, 100% of the supervisors indicated they would hire a Baker College student/graduate in the future.

Our students can elect to join our Cyber Defense Club, which has won many competitions since 2008, including:

- 11 State Championships (Michigan)
- 2 Regional Championships (Midwestern)
- 2 National Championships, back to back

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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2024 Michigan CCDC Champions



Liberty Heights Campus - Administration Building

**Baltimore City Community College (BCCC)**, adhering to a “Student First” philosophy, ensures that the needs of over 7,500 students from Baltimore City, Maryland, and various international locations are met through personal attention from dedicated faculty and staff. BCCC is a comprehensive, degree-granting institution offering associate degree programs and certificates tailored to high-demand fields, characterized by affordable tuition and flexible scheduling.

The educational experience at BCCC equips students with the necessary quality education and specialized training to secure job opportunities, transition to four-year institutions, and gain competitive new skills. Additionally, the Workforce Development and Continuing Education Division of the college serves nearly 3,000 students, providing opportunities for career advancement and skill acquisition.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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The mission of Baltimore City Community College is to provide quality, affordable, and accessible education that meets the professional and personal goals of a diverse population, thereby changing lives and building communities. As part of its vision, BCCC aims to be a leader in offering quality career pathways and educational opportunities that prepare a diverse body of learners to meet the challenges of a competitive workforce and evolving environment.

The core values of BCCC include integrity, with a commitment to moral and ethical standards; respect, which involves showing genuine concern for the dignity of others; diversity, recognizing and supporting individual differences; teaching, impacting essential knowledge and skills; learning, acquiring necessary knowledge and skills; excellence in teaching and customer service; leadership, which empowers and inspires individuals; and professionalism, adhering to high standards of customer service.

The Cyber Security and Assurance Program at BCCC highlights the pressing need to protect private information from cyber threats such as viruses, worms, and cyber-attacks that expose technological vulnerabilities. This program provides students with practical experience in understanding threats, conducting security analyses, and developing strategies to mitigate vulnerabilities. Utilizing state-of-the-art technology, students prepare for security certifications and can take advantage of opportunities provided by the NSA-CAE-CD, including webinars, internships, scholarships, career fairs, and more.



Bay Path University

**Bay Path University** is a mission driven institution; our learners come first! Established in 1897, Bay Path is a private, non-profit, institution for women at the undergraduate level and welcomes men and women at the master's and doctoral level. The American Women's College within Bay Path offers an online, affordable, and flexible B.S. in Cybersecurity: Digital Forensics and Incident Response. The program leverages cutting-edge technology and real-world scenarios enabling students to learn how to protect the digital assets of an organization. Courses are offered in a six-week accelerated model and students with an associate's degree are typically able to earn their bachelor's degree in about a year and a half.

Bay Path also offers a M.S. in Cybersecurity which is recognized as one of the top five such programs in the nation by Forbes in its Best Online Master's in Cybersecurity rankings for 2024. The 30-credit

program is flexible and customizable, offering three concentrations and allowing students to work while earning their degree. Courses are offered in an eight-week accelerated format allowing students to earn their degree in 1-2 years.

Bay Path is also a partner in the federally funded, \$1.5 million Union Station cyber range project in Springfield, MA. This state-of-the-art cyber range will mirror IT environments and allow students to gain experience through live-fire attacks, blue-team-red-team events, training modules, labs, assessments, and more. In addition, Bay Path is a member of MassCyber's training and education working group, giving students access to internships and real-world opportunities, the latest research, professional networks, and insight into best practices. Annually, Bay Path hosts a Cybersecurity Summit which is attended by cyber professionals throughout the country, exposing students to the best thinkers in the business and creating connections for future job prospects. At Bay Path, every learner's dreams of a better career, a richer life, and a brighter future, will be realized.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Baylor University Campus

**Baylor University** is designated as a National Center of Academic Excellence in Cyber Defense (CAE-CD) by the National Security Agency and the Department of Homeland Security. Baylor offers many programs that relate to cybersecurity including: a Master of Science in Information Systems (MSIS) with a Cybersecurity Concentration (designated program), and a PhD in Information Systems through the Hankamer School of Business; a BS in Computer Science with a Cybersecurity concentration, a PhD in Computer Science, and starting in fall 2024, a BS degree with a major in Cybersecurity through the School of Engineering and Computer Science.

Baylor's MSIS degree with a Cybersecurity Concentration combines current business management tools with a cutting-edge cybersecurity curriculum. Students should expect to explore foundational aspects of cybersecurity, how they

relate to organizations and businesses, and learn how to effectively mitigate information risks. The program prepares students for a variety of careers in areas such as threat analysis, cyber defense, and network security.

Baylor's PhD program in Information Systems provides training for future researchers to analyze and understand the multifaceted impact of information systems and technologies on individuals, organizations and society. Working with our cybersecurity faculty, students research behavioral and organizational impacts of cybersecurity threats and design interventions to mitigate risks and prevent cyber attacks.

Baylor's Computer Science cybersecurity programs combine foundational coursework in either computer science or data science with both theoretical work and applied experiences that ground students in the concepts, techniques, tools, tactics, and processes used to compromise and secure computer systems.

Baylor also houses the Central Texas Cyber Range (CTCR), a joint venture with McLennan Community College. The CTCR strives to further cybersecurity innovation through the education and training of cybersecurity leaders, transformational applied research, trusted analysis and consulting, and community engagement.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Bellevue University Campus

**Bellevue University** stands as a non-profit institution leading the way in applied cybersecurity education, dedicated to offering career-focused and cost-effective education with a deep commitment to the care and respect of its learners. This dedication is recognized through its reputation as one of the top institutions for military personnel and its accessibility.

The university provides an array of cybersecurity-focused programs, including bachelor's and master's degrees in cybersecurity, a graduate certificate in cybersecurity, and five other degree programs with an emphasis on cybersecurity. Its Center for Cybersecurity Education merges disciplines such as information assurance, business, and security management, offering a broad, interdisciplinary approach.

Bellevue University's faculty is comprised of qualified and passionate professionals with diverse experiences ranging from the U.S. military to Fortune 500 companies and startups, ensuring that students are well-equipped to meet real-world IT challenges.

The Courtnage Intelligence Systems Lab, located on the university's Nebraska campus, embodies the convergence of cybersecurity, systems and network administration, and data science. Since its establishment in 2019, the lab has become a premier site for security operations training, offering students hands-on learning experiences with both open-source and commercial tools in a virtualized environment. Further solidifying its excellence in cybersecurity education, Bellevue University holds the CAE-CD designation and is accredited by The Higher Learning Commission.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Intelligence Systems Lab



Binghamton University Campus.

**Binghamton University** is among the four doctoral-granting research universities in the State University of New York system.

Established in 1946, it has built a strong reputation for superb education and research. Rated as a “Doctoral University: Very High Research Activity (R1)” by the Carnegie Classification of Institutions of Higher Education, Binghamton University consistently ranks among the top 50 public universities in the nation by the U.S. News & World Report. The university has over 18,000 undergraduate and graduate students enrolled in the 2023-2024 academic year.

The Center for Information Assurance and Cybersecurity (CIAC) at Binghamton University aims to bring together the existing strengths of cybersecurity researchers and create synergies

greater than their individual research efforts. The center’s vision is to advance research and education in information assurance and cybersecurity across various domains, from securing critical digital infrastructure to protecting individuals’ personal data.

CIAC has 26 members conducting cybersecurity research related to hardware architecture, networks, the Internet of Things, malware detection, forensics, steganography, steganalysis, machine learning, social network analysis, and security policy compliance and governance. In 2020, Binghamton University was designated as a National Center of Academic Excellence in Cyber Defense Research (CAE-R) through CIAC.

Binghamton University offers a growing curriculum in cybersecurity, comprising 21 cybersecurity courses. Cybersecurity is also integrated into many required and elective courses across various disciplines.

The university offers multiple cybersecurity-focused programs, including graduate and undergraduate cybersecurity tracks within the Computer Science Department, an information assurance area of specialization within the Department of Electrical and Computer Engineering, and a graduate-level advanced certificate program in cybersecurity.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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Bismarck State College Campus

**Bismarck State College (BSC)** is North Dakota's innovative polytechnic college, overlooking the Missouri River in Bismarck. As the third largest institute of higher education in the state of North Dakota, BSC provides quality education, vital workforce training, and actionable enrichment programs to local, state, regional, national, and global communities.

BSC is proud to be a CAE-Cyber Defense school with its Associate in Applied Science in Cybersecurity and Computer Networks degree. Students gain hands-on experiences and learn highly-marketable technical skills. BSC's Cybersecurity program aims to provide the knowledge to adapt to, and master, the ever-changing technologies and security requirements of the world. Graduates are prepared to perform Information Technology tasks, such as installing operating systems, managing servers, configuring

networks, and administering other IT-related responsibilities, while applying state-of-the-art cybersecurity practices.

BSC's Cybersecurity and Information Technology Bachelor of Applied Science degree engages graduates, providing the knowledge and hands-on experience to secure network communications, configure the modern virtualized data center, manage cloud-based resources, identify and eradicate vulnerabilities, and perform critical cybersecurity-related tasks in IT environments.

In addition to the cybersecurity educational offerings, each year Bismarck State College hosts the CyberCon conference. Critical Infrastructure and Cybersecurity speakers from across the globe provide the latest in information, intelligence, and cybersecurity research.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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BSC Student Computer Admin



Blue Ridge CTC Main Campus Martinsburg, WV

**Blue Ridge Community and Technical College (BRCTC)** located in Martinsburg, WV mission is to provide our diverse student population with life-changing education, training, and services that drive economic development within the communities we serve.

In April 2022, BRCTC re-designated as a National Center for Academic Excellence (CAE) in Cyber Defense Education through the 2027 academic year. Kay Ogilvie, Cybersecurity Program Coordinator, said, "CAE designation by the NSA of the Cybersecurity Program at Blue Ridge CTC is a true honor. Receiving this re-designation validates that our students are prepared to address the critical shortage of professionals with cybersecurity skills needed to enter the workforce. This national recognition offers extensive benefits to our students, business and academic partners in the tri-state area."

The Center for Applied Cybersecurity at BRCTC provides the eastern West Virginia region with education, training, and resources to enhance the information assurance capabilities of area governments, schools, businesses, and individuals. The Center strives to provide the best-trained cybersecurity technicians and analysts for our region and nation through a comprehensive mix of theoretical and real-world educational opportunities.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Blue Ridge CTC Cyber Classroom



Blue Ridge Community College, North Carolina

In the heart of the Western North Carolina mountains, **Blue Ridge Community College** was founded in 1969 to serve area students in Henderson and Transylvania counties.

Today, Information Technology (IT) students can choose between five Associate in Applied Science (AAS) degree pathways and two certificates. Pathways include Computer Programming and Development, Network Management, IT Support and Services, Cybersecurity, and – our newest pathway – Artificial Intelligence. Students may also pursue Networking & Cybersecurity or Programming certificates. Upon completion, students will qualify for employment in entry-level positions within agencies that rely on information systems.

Blue Ridge has articulation agreements with four-year institutions allowing graduates of AAS degree

programs to fully transfer their course credits for further studies.

Blue Ridge incorporates the competencies of industry-recognized certification exams into the curriculum at no cost, including Cisco, Red Hat, and CompTIA, Microsoft, etc.

Blue Ridge recently opened a Makers Lab with state-of-the-art equipment allowing students to experience a unique hands-on learning environment. Blue Ridge’s student IT club “The Hive” is competitive in cyber competitions.

Blue Ridge is a part of the Carolina Cyber Network (CCN). The CCN’s mission is to strengthen North Carolina’s cybersecurity capabilities through a coordinated, work-ready talent development system connecting public and private institutions.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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IT Makers Lab



Bluegrass Community and Technical College Campus

**Bluegrass Community and Technical College (BCTC)** is one of sixteen colleges in the Kentucky Community and Technical College System (KCTCS), comprising 16 individually accredited comprehensive community and technical colleges. BCTC is a designated National Center of Academic Excellence (NCAE) and offers cybersecurity-focused degrees with embedded certificates through its Computer & Information Technologies and Cybersecurity curricula.

The Bluegrass Community and Technical College (BCTC) Computer and Information Technologies (CIT) program supports BCTC's mission "to enhance the quality of life and economic vitality of the Commonwealth by serving as the primary provider of college and career readiness, transfer education, and workforce education and employment training. This is reflected in our effort to support BCTC's mission

to transform "the Bluegrass Region-one student, one employer, and one community at a time. To accomplish this, the CIT program aspires to provide creative solutions to meet educational, economic, and community challenges to increase the number of skilled computer professionals in the Central Kentucky Region.

Through offering high-quality education and training, we provide core professional skills and continuing education that prepare students for employment and advancement in this vital and growing discipline. By helping students pinpoint their goals and identify resources that will aid in goal attainment and graduation, we strive to build an environment that creates opportunity for success.

To ensure our students receive the highest quality education possible, the CIT program maintains an active Advisory Board consisting of representatives from the professional community in the Bluegrass Region to guide and inform us of local standards and workforce needs.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Newtown Campus Map



Bloomsburg University Campus

**Bloomsburg University (BU)** offers the only digital forensics and cybersecurity bachelor's degree in the Pennsylvania State System of Higher Education and is Pennsylvania's Center for Digital Forensics. It is one of the top Digital Forensics and Cybersecurity Programs in the country. Classrooms and labs have professional digital forensics software and hardware installed. Courses cover all aspects of digital forensics and security.

The unique virtual environment for the BU's digital forensic curriculum provides access for the students to conduct a wide variety of labs by having dedicated servers to host virtual machines for the students. Every course includes hands-on labs.

BU considers participation in Cyber Defense and Forensics competitions an important part of student development. The University supports clubs

dedicated to cyber defense and digital forensics and hosts its own security conference, BloomCon, each year. BloomCon features an excellent mix of industry speakers and competitions for students and attendees. The conference includes competitions such as wireless network hacking, a lock pick village, and drone wars.

BU has excellent and well-known faculty members dedicated to teaching courses in this field of study. They come with practical experience and deep knowledge in digital forensics, criminal investigations, network security and forensics, system security, and penetration testing. BU Digital Forensics graduates have an extremely high placement rate. They work in law enforcement, government agencies, and the corporate world. Bloomsburg University accepts credits from over 1000 institutions.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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A Bloomsburg Digital Forensic Lab



Boise State Administration Building

**Boise State University** invites you to join its dynamic community and make a meaningful impact in the world through a career in cybersecurity, computer science, cyber operations, and more. With a comprehensive range of academic offerings, including four undergraduate options, seven graduate pathways, and four graduate certifications, Boise State is equipped to guide every individual along their chosen career path. Among its standout programs is the Bachelor's Degree in Computer Science with an Emphasis in Cybersecurity, recognized as an NSA Center for Academic Excellence program.

This specialized degree equips students with critical knowledge, focusing on the understanding that many cyber attacks exploit vulnerabilities in software. It is rooted in the belief that software designed with security risks in mind at each stage of the development process will inherently be more secure,

robust, and resistant to attacks. The program aims to instill correct computing ethics in students, arm them with comprehensive cybersecurity knowledge, and prepare them to design resilient software and computer systems. Graduates of this emphasis are primed for careers in software/IT security or further academic pursuits in cybersecurity.

Students in this program are expected to develop a range of skills, including software development in multiple languages, comprehension of cyber policies, regulations, and ethics, understanding of cryptographic algorithms, and awareness of common cyber vulnerabilities and their countermeasures. They will also enhance their communication skills for problem-solving both independently and in teams. Furthermore, students will become proficient in network monitoring and web traffic analysis, applying their computer science knowledge to tackle real-world issues and create software solutions across various domains.

Beyond the classroom, Boise State's Institute for Pervasive Cybersecurity stands at the forefront of cybersecurity innovation in Idaho. The institute champions competency programs that span the state, offering students opportunities to engage in practical, hands-on learning. One such initiative is the Cyberdome, a collaborative hub aimed at competency development. The Cyberdome not only focuses on mitigating risks for rural communities but also on cultivating a "Ready to Work" cybersecurity workforce, ensuring graduates are well-prepared to meet the challenges and opportunities in the field of cybersecurity.

## DESIGNATIONS

- CAE-Cyber Defense

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Bossier Parish Campus

**Bossier Parish Community College (BPCC)** is committed to the area of information assurance in the growing field of cybersecurity as it continues its efforts to meet the needs of the changing work force in the area of information assurance and cyber defense.

Since the start of our program, we have seen a steady growth in the demand in this area and in the number of students seeking credentials in the area of cybersecurity. Part of what makes our program desirable are the industry-based credentials (IBCs) that we have aligned with. This way our students are gaining national level certifications as they move through our program which in turn helps them to market their skills as they enter to workforce.

BPCC was originally recognized as a Center of Academic Excellence Two-Year (CAE2Y) under the

CNSS standards back in 2011. We have continued to update our program and align with the newer standards to maintain the Center of Academic Excellence in Cyber Defense (CAE-CD) designation. As well as maintaining our CAE-CD designation in 2017 BPCC was recognized, and maintains the designation, from the state of Louisiana as a Center of Workforce Excellence in Cyber Technology.

We hold both designations in high regard and feel they help to demonstrate to our students and employers that we have set a high standard of excellence in academic preparation, and we want to be sure the needed skills in cyber defense are being taught to truly prepare the cyber warrior of tomorrow.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Students working on labs



Boston University Campus

The mission of the **Boston University (BU)** Center for Reliable Information Systems & Cyber Security (RISCS) is to promote and coordinate research and education in system reliability and information security by emphasizing a multidisciplinary approach that includes fields as diverse as reliable and secure computations, data science, engineering, economics, ethics, and law. Through RISCS, BU has been recognized as a Center of Academic Excellence (CAE) in Cyber Defense since 2004 and in Cyber Defense Research since 2008.

RISCS draws on the expertise of over 20 faculty members and 100 graduate students from the College of Arts & Sciences, the College of Engineering, Questrom School of Business, and Metropolitan College. It provides opportunities for faculty and students from diverse fields to collaborate on interdisciplinary research problems, create new

knowledge, and develop innovative multidisciplinary curricula. Current research areas include cryptography, cloud security, data privacy, data science approaches to security, network and software security, trustworthy computing, database security, and algorithms and society among others.

BU has a comprehensive educational portfolio that ranges from robust undergraduate course offerings to master's programs with cybersecurity specializations in computer science, computer information systems, and engineering, as well as Ph.D. programs in fundamental and applied research. Flexible learning options—online, hybrid, and evening—are available through Boston University's Metropolitan College (BU MET), which also offers a Master of Science in Computer Science with a concentration in Security, designated the "Center of Academic Excellence (CAE) Program of Study."

BU MET's fully online programs in information technology, including the cybersecurity concentration, have been ranked among the top ten online programs since 2014 by US News & World Report.

### DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

### CONTACT INFORMATION

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BU Student Event



**Bowie State University (BSU)**, a member of the University System of Maryland, strives to be a comprehensive regional university with a continued commitment to its historical heritage and with the critical goal of achieving excellence in computer science and information technology education. BSU has been designated as a National Center of Academic Excellence in Cyber Defense (CAE-CD) for the Computer Science undergraduate program through academic year 2027. The mission of our program is to serve the educational needs of the Baltimore-Washington area, in general, and of the southern Maryland region by offering its citizens opportunities to seek and complete high quality education in the fields related to the science and application of computer and information technology.

As Maryland's first historically black public university, BSU empowers a diverse population of students

to reach their potential by providing innovative academic programs and transformational experiences as they prepare for careers, lifelong learning, and civic responsibility. BSU supports Maryland's workforce and economy by engaging in strategic partnerships, research, and public service to benefit our local, state, national, and global communities.

In recent years, the BSU Bulldog Cyber Club that organized by the Department of Computer Science became a very active student organization at BSU. This club is designed for students who are passionate about security and forensics studies and applications. Activities include preparation for the cyber competitions at all levels, tutorial workshops, hackathon preps and participations, and other types of cyber events.

The CAE Center for Cybersecurity and Emerging Technologies at BSU serves as the primary BSU interface with the U.S. National Security Agency (NSA) and Department of Homeland Security (DHS) regarding the requirements and obligations that support the University's designation as a CAE-CD.

## DESIGNATIONS

- CAE-Cyber Defense

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National Collegiate Cyber Defense Competition Team



Business and Engineering Convergence Center

**Bradley University** is a top-ranked, private, university in Peoria, Illinois, providing 5,400 students resources not found at small colleges, and more personalized experiences than large universities.

At the forefront of experiential cybersecurity education, Bradley's unique Advanced Ethical Hacking capstone course allows students to conduct red teaming security assessments for local businesses. The Bradley Red Team actively exploits digital and physical vulnerabilities, replacing traditional exams with practical experiences.

Extracurricular engagement is encouraged through the Cybersecurity Club and competitions like the NCAE CyberGames. In 2024, Bradley has ranked as high as #4 worldwide and #1 in the U.S. on Hack The Box, showcasing the caliber of its cybersecurity programs. Additionally, students can explore study

abroad opportunities, including visits to renowned locations like Bletchley Park.

Bradley's Center for Cybersecurity fosters cybersecurity education, research, and service. In conjunction with Cybersecurity Awareness Month, Bradley hosts Cybersecurity Day, the Cybersecurity Film Series, and BSides Peoria each October. In 2019, the Center for Cybersecurity joined forces with the National Whistleblower Center, forming a research partnership focused on enhancing whistleblower anonymity.

Bradley is dedicated to advancing cybersecurity education and research, while also contributing to societal discussions on privacy, accountability, and transparency.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Bradley Red Team



BYU Campus

**Brigham Young University (BYU)** became the first CAE in Utah in 2012. The Cybersecurity BS program, housed in the Department of Electrical and Computer Engineering (ECE), includes over 300 students. The curriculum requires technical mastery of cybersecurity concepts as they apply to computer architecture, operating systems, networking, web applications, databases, and internet of things devices. This is augmented by a focus on ethics, cyber and international law, organizational policies, communication, and leadership. Many cybersecurity graduate students are part of the IT and Cybersecurity MS or ECE PhD program.

BYU students are uniquely qualified to serve important cybersecurity needs due to BYU's strong focus on building men and women of character who act ethically in the service of others. BYU has over 32,000 undergraduate students from all 50 states

and over 100 countries. Over 60% speak a second language. BYU is known as a top school for student academic engagement and graduates who go on to earn PhDs.

BYU Cybersecurity students have been extremely successful in cyber competitions and student club activities. Alumni work at Amazon, Microsoft, Rapid7, DOD, NSA, Sandia NL, Idaho NL, and other leading institutions. BYU is the only CyberCorps Scholarship for Service site in Utah and runs annual GenCyber camps for high school students and teachers. Strong support from the BYU leadership promises a bright and growing future for cybersecurity at BYU in coming years.

## DESIGNATIONS

- CAE-Cyber Defense

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BYU Student Red Team



Center for Cybersecurity Education Ribbon Cutting

**Brookdale Community College** is a public community college in Lincroft, New Jersey. Established in 1967, Brookdale offers a variety of associate degree programs, certificate programs, and non-credit classes in several areas of study. The college provides affordable, accessible education, aiming to prepare students for transfer to four-year institutions, career entry or advancement, and lifelong learning. Brookdale is known for its diverse student body, experienced faculty, and diverse student support services designed to promote student success. The campus features modern facilities, including libraries, computer labs, and specialized training centers, catering to the educational needs of Monmouth County residents and beyond.

Cybersecurity threats are a growing national concern, requiring more skilled cybersecurity

workers with the hands-on skills needed to excel in the field. Cybersecurity professionals face rapidly evolving threats that imperil every sector of public life and the economy. This is further accelerated by the emergence of consumer artificial intelligence (AI), smart homes, wearable devices, and autonomous vehicles. The parallel trend of increased connectivity of industrial control systems (ICS) linked to critical infrastructure (power plants, water treatment facilities, etc.) creates new threats to national security and public safety.

Brookdale is among the more than 11,000 community colleges nationwide that serve a critical role in preparing the nation's workforce. Brookdale has taught networking courses since 2000 and introduced security into the program in 2003. A 2013 grant from the National Science Foundation enabled Brookdale to add courses in Computer Forensics, Network/Perimeter Security, and Ethical Hacking and develop an 18-credit certificate in cybersecurity. This certificate has also been integrated into the existing Networking program as a Cybersecurity track.

The center hosts a virtual lab environment for training and to support further course additions to the curriculum. The Brookdale Cyber Center is committed to addressing the shortage of skilled cybersecurity workers and to providing students with cutting-edge instruction and access to state-of-the-art hands-on experiences.

## DESIGNATIONS

- CAE-Cyber Defense

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Butler Community College Student Union

**Butler Community College's** Cyber Security program is designated a Center of Academic Excellence in Cyber Defense by the National Security Agency and the Department of Homeland Security.

Established in 1927 and located in Kansas, Butler recently celebrated its 90th year in higher education. With a proud tradition in academics, athletics and service to the communities it serves, Butler touches the lives of more than 13,000 students annually. At Butler, we take our cybersecurity curriculum very seriously and we view cybersecurity threats as learning opportunities. Butler offers pathways that prepare students for entry into the workforce or for transfer to a four-year university program.

In the classroom, students learn from experienced professionals what it truly takes to maintain IT security. Whether students choose a one-year

certificate or two-year degree, all completers hold certifications in TestOut PC Pro, Network Pro, Security Pro, Client Pro, and Server Pro and are prepared to sit for certification in CompTIA A+, Network+, Security+, and Microsoft MSCA.

Students learn first-hand how to secure networks and infrastructures against cyber attacks in a rigorous curriculum that produces graduates with the necessary expertise to reduce vulnerabilities within information infrastructures. Students can create secure network environments using risk and threat analysis, network monitoring, and host hardening as well as many other network defense mechanisms. Butler's cybersecurity graduates are well-positioned for success in an industry expected to grow by 28% in the next decade.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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BCC Cyber Class



Huntsville Research Park Campus, Huntsville, AL

The largest of Alabama's two-year community colleges, **Calhoun Community College** is an open-admission, community-based, state-supported, coeducational, comprehensive community college dedicated to providing affordable, high-quality and accessible education to individuals in its four-county service area.

Established in 1947, Calhoun offers a full array of university transfer and career training programs. Academic programs are aligned with those of Alabama's state universities through the Alabama Transfers program and provide students with a seamless path toward a baccalaureate degree. Technical degrees are designed to serve the area's manufacturing base and include participation in the Alabama FAME (Federation for Advanced Manufacturing Education) Advanced Manufacturing Technician program.

### DESIGNATIONS

- CAE-Cyber Defense

### CONTACT INFORMATION

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The Huntsville campus is situated in Cummings Research Park (the nation's second largest research park), in view of the US Space and Rocket Center and near Redstone Arsenal, home to NASA's Marshall Space Flight Center and the Army Aviation and Missile Research Development and Engineering Center (AMRDEC). With a mission that includes support for local economic development, Calhoun was an early leader in building ties to Huntsville's cybersecurity community, and its Computer Information Systems (CIS) department introduced its initial cybersecurity coursework in 2010.

It has since developed a cybersecurity degree program and received CAE-2Y-CD recognition in 2018 and re-designation in 2023. Calhoun's CIS department also offers degrees in programming and systems engineering technology, with coursework leading to industry-recognized certifications. Calhoun's Center for Cybersecurity Education (CCE) provides information assurance and cyber defense education along with community outreach to promote best practices within and outside our campus to prepare the next generation of cybersecurity professionals.



IT/Cyber Lab



# CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA



CPP Student Services Building

**California State Polytechnic University, Pomona (Cal Poly Pomona, CPP)** is among the best public universities in the West and is nationally ranked for helping students achieve economic success. As an inclusive polytechnic university, we cultivate success through experiential learning, discovery, and innovation. Our graduates are ready to succeed in the professional world on day one.

Since its initial designation as a National Center of Academic Excellence in 2004, the Cal Poly Pomona Cyber Collaborative has been a leader in cybersecurity education, research, and outreach, earning the respect of government officials, industry leaders, and national news media. The key to Cal Poly Pomona's strong cyber program can be attributed to the built-in interdisciplinary nature of the program by three different departments from three colleges: Science, Business, and Engineering.

The Department of Computer Information Systems offers an Information Assurance track and an M.S. in Information Security program. The Computer Science department offers a minor in Cyber Security and a graduate (M.S.) career focus in Cyber Security.

Cyber students are active in national cyber competitions. For two years, 2023 and 2022, the Cal Poly Pomona Cyber Team has been the Champion in the Global CPTC competition organized by RIT, defeating teams from top universities. The PolySec Cyber Lab leads the university's successful participation in NSF CyberCorps SFS, NSA GenCyber, NSF AF JRTOC Cyber Academy, ONR NROTC Cyber Training for cyber workforce development, and founding organizer of SF5Con.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CPP CCDC Team 2023



CSUSM Campus

**California State University, San Marcos’s (CSUSM)**

Master of Science in Cybersecurity is a fully online program that prepares students for advancement in the cyber industry by providing real-world experience in management skills, ethics and governance, and leading-edge technologies in security management, risk analysis, network protocols, incident response, encryption algorithms, ethical hacking, intrusion detection and much more. CSUSM was designated a National Center of Academic Excellence in Cyber Defense Education in 2019.

Responding to demand from industry, CSUSM’s MS in Cybersecurity develops graduates who are knowledgeable in both cybersecurity and organizational skills. As a Professional Science Master’s (PSM) degree, this program uniquely combines advanced study of technical science skills, MBA-level business courses and professional

experience through 38 semester hours of coursework and a culminating project intended to provide practical industry experience.

Nationally, there is increased focus on graduate degree programs that combine both technical and management skills. Reflected in the emergence of the PSM, this degree program adeptly addresses the documented need for management-trained professionals “for technology-based companies, governmental agencies, and non-profit organizations” (NPSMA.org).

As an interdisciplinary program, CSUSM’s MS in Cybersecurity incorporates multiple fields of study, emphasizes the development of critical thinking skills, and uses current case studies and hands-on labs to expose students to the emerging and evolving needs of the industry. The program also introduces students to the cybersecurity corporate world by developing the communication skills and the technical and problem-solving expertise needed to address cybersecurity issues in industry settings and to position graduates to become the next generation of industry leaders.

**DESIGNATIONS**

- CAE-Cyber Defense

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CSUSM Cybersecurity students



# CALIFORNIA STATE UNIVERSITY, SACRAMENTO



Students at CSUS

In 2005, the Department of Computer Science within the College of Engineering and Computer Science (ECS) at **California State University, Sacramento (Sacramento State)**, established the Center for Information Assurance and Security (CIAS) with a mission to enhance knowledge in information assurance and security. This mission is realized through several core activities, including education, training, and awareness programs focused on information assurance and security issues and practices.

Additionally, CIAS is dedicated to conducting applied research in the field, developing interdisciplinary programs, and engaging in outreach efforts to assist the community—which encompasses community colleges, K-12 schools, industry, and government—with information assurance and security challenges. An important aspect of CIAS's operation is forming

collaborations with educational, research, industrial, and governmental institutions to further its objectives.

Since 2007, CIAS has been recognized as a National Center of Academic Excellence (CAE) in Information Assurance Education (CAE-IA), a prestigious designation jointly sponsored by the National Security Agency (NSA) and the Department of Homeland Security (DHS). This designation, which is renewed every five years, attests to the institution's adherence to rigorous criteria in curriculum, faculty, research, and a comprehensive commitment to information assurance practices and education.

Recently, CIAS achieved a re-designation as a CAE in Cyber Defense (CAE-CD) for the academic years 2022 to 2027. This acknowledgment played a pivotal role in the National Science Foundation's decision to award Sacramento State more than \$3 million in funding for the period 2023 to 2028. This funding is part of the CyberCorps® Scholarship for Service (SFS) program, aimed at supporting students in computer science or computer engineering to become specialists in cybersecurity, further bolstering the center's impact on the field.

## DESIGNATIONS

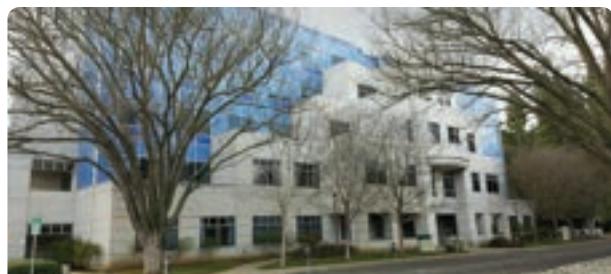
- CAE-Cyber Defense

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College of ECS

# CALIFORNIA STATE UNIVERSITY, SAN BERNARDINO



CSUSB main campus in Southern California

**California State University, San Bernardino (CSUSB)** stands as a pioneering institution in the realm of cybersecurity education, demonstrating a strong commitment to developing applied and innovative curricular approaches. These approaches are designed to meet the burgeoning needs of future cybersecurity leaders, thereby preparing the nation to tackle the growing cybersecurity and artificial intelligence threats to the global economy.

The journey of CSUSB's cybersecurity program is a testament to its success and leadership in the field. Starting in 2008 with a mere 17 students, the program experienced significant growth after receiving the prestigious NSA Centers of Academic Excellence designation. Today, it boasts over 600 students and is recognized as a national leader in cybersecurity education, influencing best practices across 480 colleges and universities.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CSUSB's unique contributions to cybersecurity education include leading the Centers of Academic Excellence (CAE) in Cybersecurity as the Community National Center, which is a collaborative effort of over 480 colleges and universities recognized by the NSA for excellence in cybersecurity education.

CSUSB plays a vital role in the leadership team of the National Cybersecurity Training and Education Center (NCyTE), a National Science Foundation-funded Advanced Technology Education Center that focuses on workforce initiatives for community colleges. The university also hosts the NICE Challenge Project/ XPCyber, a national cyber range that supports the training and evaluation of cybersecurity talent at over 700 educational institutions. CSUSB's efforts extend to pioneering cybersecurity apprenticeships, scholarships, and groundbreaking research.

CSUSB ranks first in the nation for diversity and among the top four for output in the NSF-funded CyberCorps®: Scholarship for Service program. The university also serves as the lead academic institution for the Inland Empire Cybersecurity Apprenticeship Initiative (IECI), which aims to train highly skilled cybersecurity experts in the inland Southern California region. Through these initiatives, CSUSB has established itself as a beacon of success and innovation in the cybersecurity education landscape.



Capitol's 52-acre Campus

**Capitol Technology University** is a leading STEM institution for the Washington, D.C. metropolitan area that offers undergraduate and graduate degrees in cyber and information security. In Laurel, Maryland, our campus resides near one of the largest national concentrations of tech companies, cyber defense contractors, and government agencies. Here, students experience an interactive learning environment, diverse peer population, and a core curriculum taught by award-winning faculty.

Our campus centers and labs provide hands-on training in simulated cyber-attacks, digital forensics, and research as well as the opportunity to join our Signal-9 cyber battle team. Designated as a National Center of Academic Excellence in Cyber Defense by the National Security Agency and Department of Defense, and recipient of the SC Media Award for Best Cybersecurity Higher Education Program, we are

laser-focused on advancing the field, addressing the nation's greatest defense challenges, and developing a skilled cyber workforce.

Selected as a leader of the Northeast Regional Hub for the NCAE program from 2020 to 2023 and awarded a grant from the GenCyber initiative, our university created the Capitol Cyber Sleuths program to help educate K-12 teachers in areas of cybersecurity to impart to their students. Our online and on-campus degree programs create the most employable graduates and sought-after workforce leaders in our technology-driven world. Explore all that Capitol can do for you!

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Our competitive cyber team



Carnegie Mellon University Campus

**Carnegie Mellon University (CMU)**, through the Information Networking Institute (INI) and Carnegie Mellon CyLab, has attained three federal designations as a National Center of Academic Excellence: Cyber Defense (CAE-CD), Cyber Operations (CAE-CO) and Cyber Research (CAE-R). Through these designations, the INI's M.S. in Information Security (MSIS) program has been validated by the National Security Agency (NSA) and a committee of academic peers. Carnegie Mellon is a longstanding leader in cybersecurity education and research.

In 2003, CMU launched CyLab, a university-wide institute representing over 300 researchers in security and privacy. That year, the INI established one of the nation's first security degrees: the MSIS (formerly the M.S. in Information Security Technology and Management). The INI has since produced over

525 graduates who are well equipped to defend our nation's cyberspace.

Through its CAE designations, Carnegie Mellon participates in scholarship programs that strengthen the pipeline of cybersecurity professionals who protect critical infrastructures and national defense. Since 2001, CMU has graduated over 250 students through the National Science Foundation (NSF) CyberCorps® Scholarship for Service (SFS) and 12 students through the Department of Defense Cyber Scholarship Program (DoD CySP). In 2022, CMU launched the nation's first artificial intelligence security graduate program. Through the M.S. in Artificial Intelligence Engineering - Information Security (MSAIE-IS), students learn how to integrate AI with cybersecurity practices while building solutions for the evolving security threats of AI.

CMU offers several opportunities for specialized learning through the INI. The Cyber Forensics and Incident Response (CyFIR) track equips security students to perform complex digital forensic investigations, culminating in a certification from the Software Engineering Institute's CERT Division. The Cyber Operations (Cyber Ops) certificate focuses on a range of Knowledge Units (KUs) representing important areas of study in cyber operations. Following guidelines from the NSA, the Cyber Defense Concentration prepares MSIS students with skills that are highly relevant to cybersecurity careers.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Cyber Operations
- CAE-Research

## CONTACT INFORMATION

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Situated in the beautiful Ohio countryside

**Cedarville University** offers a BS in Cyber Operations and a BS in Computer Science with a Specialization in Cyber Operations. Cedarville houses the Center for the Advancement of Cybersecurity. Led by Seth Hamman, Ph.D., the Center seeks to advance cybersecurity in our nation by developing tomorrow's cyber leaders in the classroom, shaping cyber education in the academy, and promoting cyber awareness in society. Cedarville benefits from its close proximity to Wright Patterson Air Force Base, the birthplace of flight, and a major hub of cyber-related research, internships, and jobs.

Cedarville's cyber program is designated as an NSA Center of Academic Excellence in Cyber Operations and Cyber Defense and is ABET accredited in Cybersecurity. The cyber operations major, the first BS degree of its kind in the state of Ohio, is deeply technical and interdisciplinary. It is designed to

prepare students for security clearance-required positions in the US defense and intelligence communities. Cybersecurity Guide ranked Cedarville #1 in the nation for best cybersecurity degree programs in 2024.

Cedarville is a private faith-based teaching college with a special focus on the traditional undergraduate experience. All undergraduates earn a Bible minor as part of their general education coursework, attend campus chapel five days a week, and affirm the Cedarville Covenant, which states, "We will love God and others, live with integrity, and pursue excellence in all we do."

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Cyber Operations

## CONTACT INFORMATION

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Cedarville's #1 ranked program



Photo of Davidson Hall

**Central Connecticut State University** offers an interdisciplinary Cybersecurity Bachelor of Science program leveraging the strengths of the Departments of Computer Science and Computer Electronics and Graphics Technology. This program strategically incorporates the robust foundation of their ABET-accredited Computer Science program and the ATMAE-accredited Networking Information Technology program, delivering a specialized and technically focused cybersecurity degree.

Our interdepartmental program provides deeply technical, inter-disciplinary skills grounded in computer science, networking, and computer engineering disciplines. Students can specialize in Cyber Defense or Cyber Operations, preparing them as cybersecurity experts to identify vulnerabilities, detect cyberattacks, and secure valuable assets.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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We offer a hands-on, practical cybersecurity curriculum to ensure students are well-prepared for roles in intelligence agencies, the federal government, the private sector, and academia. Our graduates evolve into professionals committed to ongoing learning and exploration in the ever-changing landscape of software, science, and technology.

We take pride in delivering an exceptional educational experience that distinguishes our program in several ways. A key hallmark is our commitment to personalized learning, where every class and lab is led by experienced faculty, not by teaching assistants. Our faculty are at the forefront of research and teaching in diverse research areas, including cybersecurity, artificial intelligence, data mining, machine learning, software engineering, the dark web, networking, and cybersecurity education methods.

Half of our faculty members have earned recognition on Central's Excellence in Teaching Honor Roll, underscoring our dedication to fostering student success inside and outside the classroom. We promote hands-on experiences through undergraduate research, mentoring, and leadership in student clubs, such as the Cybersecurity Club.

We offer a dynamic and empowering environment in which personalized attention, cutting-edge knowledge, and flexibility come together to prepare students for a rewarding future.



Central Georgia Technical College Campus

**Central Georgia Technical College (CGTC)** is a unit of the Technical College System of Georgia and serves the needs of 11 counties within middle Georgia. The College is a two-year public commuter college serving a diverse student population 10,204 by offering traditional on-campus and distance education academic programs and services, adult education, continuing education, and customized business and industry services. CGTC has campus locations in Macon, Milledgeville, and Warner Robins. CGTC is dedicated to excellence in fulfilling its mission by offering a Cybersecurity program to produce future generations of cybersecurity specialists and analysts.

CGTC's Division of Business and Computer Technologies offers information technology programs with leading-edge technology and faculty and small class sizes; graduates are ready to build

the computers and networking infrastructures of tomorrow. The Division offers an Associate of Applied Science degree in Cybersecurity and technical certificates of credit in Cybersecurity and Cybersecurity Fundamentals. Courses are available on-campus and online to provide flexibility with dual enrollment options for eligible high school students.

The Cybersecurity Club is a student-run club that provides outside-of-class activities relevant to the ever-growing world of cybersecurity. The club offers personal and professional networking opportunities for those interested in cybersecurity within CGTC and the community.

CGTC provides services to veterans through the Georgia Veterans Education Career Transition Resource (VECTR) Center in Warner Robins, Georgia. CGTC offers veterans the opportunity to complete a Cisco Networking Specialist Certificate in 15 weeks to work toward a Cisco Certified Network Associate (CCNA) certification with the opportunity to transfer on and complete a Cybersecurity credential.

Cybersecurity training and education have become increasingly relevant in today's world. Advancements in technology have made cybersecurity a vital component for every business and industry in the world. Graduates of the Cybersecurity program can support key employers in the middle Georgia area and across the United States.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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# CENTRAL MICHIGAN UNIVERSITY



Central Michigan University Aerial View

**Central Michigan University** prioritizes diversity, catering to first-generation, rural, and transferring students from community colleges. 25% our students represent ethnic minorities like Asian, Black, Hispanic, and Native Indian, we are situated near the Chippewa Indian Community, draw number of students from the Saginaw Chippewa Indian Tribe. Recognizing their unique challenges, we foster support, including cultural celebrations like Pow-Wow.

Our institution values all students, regardless of background, aiming to empower them academically and professionally. By offering resources and opportunities, we nurture inclusivity and equity, fostering a supportive community where every student can thrive, irrespective of their academic journey or origin.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CBA Faculty and Student



Champlain College Sunset over Lake Champlain

**Champlain College** provides a comprehensive and hands-on education in cybersecurity, equipping students with the skills and knowledge necessary to address the evolving challenges in the field. Champlain College, located in Burlington, Vermont, is known for its commitment to experiential learning and preparing students for real-world scenarios.

The Cybersecurity Education program at Champlain College provides an industry relevant curriculum that is designed to align with industry standards and best practices. It covers a broad spectrum of cybersecurity topics, including but not limited to network security, digital forensics, ethical hacking, cryptography, and risk management. In addition, Champlain students get to work with cutting-edge technology. Students utilize Champlain's state-of-the-art Cyber Range for most classes which allows them to develop the critical skills required in the workplace. Through

coursework, students are exposed to practical scenarios, simulated environments, and real-world projects to ensure they gain practical skills that are immediately applicable in the cybersecurity industry.

Champlain College is also home to the Leahy Center for Digital Forensics and Cybersecurity which further demonstrates Champlain's commitment to experiential learning. The Leahy Center serves as an interdisciplinary hub for research and learning in digital forensics and cybersecurity. Undergraduate students collaborate with industry partners, law enforcement, and government agencies on numerous projects.

These include providing managed cybersecurity services to community organizations, engaging in applied research, and conducting real-world investigations. Students at the Leahy Center are also actively involved in community outreach and education initiatives. It conducts workshops, training sessions, and awareness programs to educate the broader community about cybersecurity best practices and digital forensics.

### DESIGNATIONS

- CAE-Cyber Defense

### CONTACT INFORMATION

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Leahy Center for Digital Forensics and Cybersecurity



Earn your CIS degree at Chemeketa

**Chemeketa Community College** is a regional leader in cybersecurity education located in beautiful Salem, Oregon. It is the mission of Chemeketa Community College to help increase the security of our communities and country by preparing students to readily take on the challenges of being a cybersecurity professional.

While working through their education, Chemeketa students have the opportunity not only to earn a degree, but to earn multiple IT certifications through their coursework and to build real-world work experience through Chemeketa's cooperative work experience program. During the typical Chemeketa cybersecurity student's first year of education, they become familiarized with the foundational skills and concepts necessary to become a successful cybersecurity practitioner.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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In this initial year, students undertake classes in digital literacy, personal cybersecurity, programming, operating systems, computer hardware, and networking. During this time, students can earn their EC-Council Certified Secure Computer User certification, CompTIA A+ certification, and entry-level networking certifications. As students move into their second year of education, they will begin to narrow their focus on cybersecurity and begin thinking about their future careers as they take classes relating to data security, computer forensics, and ethical hacking and work towards EC-Council cybersecurity certifications such as Certified Ethical Hacker and Certified Hacking Forensics Investigator.

During this time, the foundational knowledge from their first year is continued to be built upon as students refine their understanding of IT concepts in the context of cybersecurity while studying server management, database management, and computer architecture.

Finally, a cybersecurity student's final term includes a class specifically designed to reinforce all of the concepts taught during their program and to prepare them for the CompTIA Security+ certification exam. Chemeketa's community involvement has created connections with local employers that provide students with myriad internship opportunities.



CVTC Main Campus

**Chippewa Valley Technical College** has served its 11-county district of Wisconsin since 1912, training graduates to fill positions in a wide range of fields. The IT-Network Specialist program at CVTC gives students a hands-on education that goes beyond the conceptual and focuses on practical applications of technology. The IT-NS program has a strong focus on problem solving throughout its courses. Students gain a solid foundation in core IT disciplines of networking, systems administration, and cybersecurity.

The mission of the IT-NS program is to train students who can make technology work. Students learn to securely deploy, maintain, repair, and troubleshoot a wide range of technologies. Program faculty work with the advisory board to continually evaluate and refine courses to ensure that students are prepared to enter the workforce.

Approximately 25 percent of program students come from under-represented demographics. The IT-NS program has been a CAE-CDE since 2022 and offers both face-to-face and online sections.

The IT-NS program fosters a collaborative learning environment, encouraging students to work on team projects and engage in group discussions to help students develop soft-skills. Students are exposed to diverse scenarios and case studies to explore the challenges businesses experience today. This helps students develop their ability to analyze and diagnose technical issues in addition to encouraging creativity in devising effective solutions to real-world problems.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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IT-Network Specialist Class



The City College  
of New York

# THE CITY COLLEGE OF NEW YORK



The City College of New York (CCNY)

The Cybersecurity M.S. Program at **The City College of New York** was developed in partnership with the New York City Economic Development Corporation (NYCEDC) to augment the cybersecurity talent pipeline for the city's public and private organizations. The curriculum combines a theoretical foundation with applied learning training to produce well-rounded cybersecurity practitioners.

As the program grows, the Cybersecurity team looks forward to expanding the range of its public-private partnerships and the breadth of the cybersecurity electives offered. Cybersecurity Program faculty are working on leading-edge research in areas such as cryptography, network security, and blockchain applications, and have been awarded numerous grants from organizations such as the National Science Foundation, Department of Defense, and Google, among others.

On an academic level, the program maintains a technically oriented, industry informed curriculum that provides students with the practical skills required for professional success, and seeks to integrate classroom learning with internships and other industry-supported events.

The program has welcomed numerous Professors of Industry who have worked to build new classes in critical areas such as Adversarial AI, Data Privacy, and Secure Cloud Computing. The integration of industry specialists into the classroom creates a virtuous cycle, whereby private and public sector experts bring a real-world perspective to their courses and help shape the curriculum, and City College students gain direct exposure to the cybersecurity skills currently demanded in the market.

As part of New York's public university system, ensuring access to higher education is fundamental and CUNY's highly competitive tuition rates make this possible.

## DESIGNATIONS

- CAE-Cyber Defense

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Foreign Students Visit



City University Seattle 521 Wall St Street View

**City University of Seattle** is a 51-year-old private nonprofit higher education institution. The mission changes lives for good by offering relevant high quality education for a diverse population of adult learners. CityU's is a destination for accessible, career-focused education preparing students with 21st century skills and technology tools. CityU's School of Technology and Computing (STC) provides courses in-person and asynchronously on-line.

STC career-focused education is taught by faculty, industry professionals, who embed cybersecurity core knowledge units into every degree. Technical prep tracks enable adults with non-technical baccalaureate degrees to succeed in on-line graduate degree programs. Active learning methods, virtual labs, team projects and a strong emphasis on cloud and cutting-edge technologies upskill CityU graduates.

The professional development culture of hybrid student clubs and on-line Invited Talk series provides access to industry innovators and leaders. Faculty led research groups encourage student publications and conference presentations. Every quarter the Applied Research Symposium features student capstones.

CityU's NCAE Center for Cybersecurity promotes cybersecurity teacher training, STARTALK integrates, Korean language and culture with technology and career development to prepare the next generation for national service.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cyber Teachers at Blue Origin



Clark State College Campus

Founded in 1962, **Clark State College** has campuses in Springfield, Beavercreek, Xenia and Bellefontaine, Ohio. Clark State offers the latest associate and bachelor degrees, certificates and transfer options in more than 130 professional fields. Enrollment is open year-round, and financial aid and Foundation scholarships are available for those who qualify.

The college's mission is to engage and empower diverse learners by providing high-quality educational programs and services that emphasize student and community success.

Clark State's Center for Cybersecurity Education mission is to provide high quality programs and courses that meet or exceed national academic standards and prepare Clark State graduates for the cybersecurity workforce. Additionally, the Center works with local businesses and members of the

community to increase awareness of the significant threats currently faced by owners and operators of information systems and by the public.

Clark State faculty are dedicated to student education, engagement and developing pathways to the workforce. The Cybersecurity program has a vibrant and active Cyber Club with guest speakers, competitions, trainings, and mentorship programs. Our degree programs are consistently monitored and updated to bring the latest coursework to students. Clark State focuses on hands-on interactive learning. Co-op programs are being developed and implemented as part of our continuous improvement endeavors.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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PC Hardware Class



The Duke Energy Electrical Grid Research Innovation and Development center (eGRID) at Clemson can simulate the electrical grid of any country in the world to test how cities would manage cyberattacks to power infrastructure

**Clemson University** continues to develop research infrastructure, educational programs, and faculty expertise in alignment with national security interests in cybersecurity.

With a focus on power systems security and on securing cyber-physical systems, Clemson takes a broad, multidisciplinary approach to cybersecurity research with at least 15 faculty from eight departments and Clemson Computing and Information Technology (CCIT) contributing. Clemson offers unique research equipment and facilities for research related to autonomous vehicles and systems connectivity, electrical grid simulation, cloud computing, social media listening, high-speed computing, and big data analytics. Clemson works closely with federal agencies and the private sector to pursue research projects with real-world impact. In the past five years, Clemson has secured \$27

million in grant awards for cybersecurity projects and Clemson faculty garnered more than 400 citations in 2017 alone for cybersecurity-related research.

Additionally, Clemson offers a broad range of cybersecurity courses at both the undergraduate and graduate levels, covering topics such as computer security principles, censorship, malware design, and penetration testing. Clemson aims to graduate more students to fill critical workforce needs in the cybersecurity sector and now offers a minor in cybersecurity for undergraduates with multiple paths for students in business, science, and engineering.

The mission of the new Clemson University Cybersecurity Center is to propel Clemson University as a leader in the field of cybersecurity in all aspects, including research, education, industry partnership, and community engagement.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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[clemson.edu/centers-institutes/cybersecurity](http://clemson.edu/centers-institutes/cybersecurity)



The Clemson Cybersecurity Operations Center trains students to monitor activity on Clemson's network, perform forensic investigations on past events, and create predictive analyses



Founded in 1976 as The College Beyond Walls

**Coastline College**, located in Orange County, California proudly holds the designation of CAE-CD since 2014. The college's fully online Associate of Science in Cybersecurity is designed to offer a comprehensive curriculum that equips students with the practical skills and knowledge necessary to earn a living wage in today's workforce and tackle real-world cyber threats with confidence.

As a Minority Serving Institution, Coastline serves the educational needs of over 18,000 students annually. Coastline College was founded in 1976 with a vision to reimagine education by offering flexible learning and services that open new avenues for social and economic advancement.

Coastline is a Hispanic-Serving Institution and an Asian American, Native American, Pacific Islander-Serving Institution, which strives to empower students

to become discerning, empathetic, and impactful contributors to a global society. By meeting students where they are, Coastline is committed to delivering innovative and holistic instruction and services, designed to achieve equitable outcomes.

What sets Coastline's cybersecurity program apart is its emphasis on hands-on learning experiences. Through innovative lab exercises, simulations, and immersive projects, students gain practical experience in analyzing, identifying, and mitigating cybersecurity risks. This practical approach not only deepens understanding but also cultivates essential problem-solving and critical-thinking skills vital for success in the field.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Empower and Inspire



Cochise College Downtown Center

Since its founding in 1964, **Cochise College** has become a nationally recognized community college with two campuses and four centers throughout Cochise County. This includes a center on Fort Huachuca which supports the defense contractor industry. The college is committed to providing accessible educational opportunities that support meaningful careers and lifelong learning. Cochise College welcomes nearly 10,000 students annually and offers various degrees and certificates.

Our Cybersecurity program has been educating and training students of all ages for nearly 20 years. It provides cyber education, awareness, and training for K-12 and college students, military and civilian employers, and the community. In 2023, we were designated a Center for Academic Excellence in Cyber Defense (CAE-CD) for our Cybersecurity AAS degree that equips students with the knowledge, skills, and

abilities to succeed in further academic endeavors or direct employment in cybersecurity.

The Cybersecurity AAS degree is an excellent choice for anyone interested in pursuing a career in this exciting field. The program provides students with hands-on training and real-world experience, preparing them to be successful cybersecurity professionals. Cochise College partners with all three Arizona four-year universities, allowing for transferring to Arizona State University, Northern Arizona University, or the University of Arizona. The college also has agreements with many other universities where students can transfer credits.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cybersecurity Students



College is Better by the Beach!

Not everyone gets to go to College in paradise. But for students at the **College of Coastal Georgia**, the Golden Isles is where they learn, study, and play.

There is much more to appreciate about the College than its location. A part of the University System of Georgia, Coastal Georgia offers high quality academics, competitive athletics, impeccable residence halls, and was named #1 Best Value in the state of Georgia - all in a vibrant collegiate community.

Many students take advantage of the College's location to pursue degrees in coastal ecology, hospitality and tourism management, or culinary arts. Others opt to join the nationally ranked nursing program or the criminal justice program, with instructors from the Federal Law Enforcement Training Center, and concentrations in Data and

Information Analytics, Cyber Defense, Homeland Security, or Public Management. Students in the Data Science program can concentrate their studies in Computational Data, Healthcare, or Financial Analytics. The recently established Lucas Center for Entrepreneurship provides students, and members of the Golden Isles community, access to mentoring services and consulting opportunities.

An exceptional education with personalized academic support just minutes from the beach... is it any wonder that students love the College of Coastal Georgia? And what a great place for parents to visit!

Come and see what brings students from all over our state, nation, and world to the Golden Isles!

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cyber Defense Class



College of DuPage Seaton Computing Center

**College of DuPage (COD)**, Glen Ellyn, IL, serves approximately 27,000 highly diverse, traditional and non-traditional students each semester on the largest single community college campus outside the state of California. COD has a highly developed infrastructure, deep academic expertise, and significant academic and industry relationships.

As we become increasingly engaged with and reliant on technology in our homes, schools and workplaces, our vulnerability to malicious cyberattacks and information theft increases.

The Center for Cyber Defense Education at College of DuPage is dedicated to the development, promotion and support of education, collaboration and innovation in security technologies and management, information security assurance and digital forensics across multiple academic and

professional disciplines.

The Cybersecurity and Defense A.A.S. degree at COD provides students with a comprehensive foundation in the principles of cybersecurity and covers a variety of topics, including computers and criminal justice, homeland security, networks, routing and switching, servers and virtualization. The program consists of a minimum of 64 credits in General Education, degree program and elective requirements. Upon completion of the program, students will be qualified for entry-level employment in a variety of positions in information systems.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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COD professors Justin Wagner and Tony Chen



# COLLEGE OF EASTERN IDAHO



CEI Campus

The **College of Eastern Idaho's** (CEI) Cybersecurity and Technology Department equips students with the skills and knowledge to succeed in the ever-evolving fields of cybersecurity, digital media, and IT services. The department's mission is to prepare graduates who are "technologically skilled, perform professionally, and provide excellent services" in the face of emerging security and technology challenges.

Programs are designed with industry input to ensure graduates have the skills employers seek. Students gain industry-relevant knowledge and certifications, opening doors to various career paths with strong earning potential. The department offers certificates and degrees in Cybersecurity, Digital Media, and IT Services, including the recent addition of a Bachelors of Applied Science degree in Digital Forensics and Analytics, one of two at CEI recently approved by the state. The upcoming bachelors degree will accept

associates graduates and is designed to be our next CAE program of study addition.

The current designated program of study is the Information Assurance and Cybersecurity (CSEC) program which offers an Associate of Applied Science Degree (AAS) and prepares students for entry-level Security Analyst roles. CSEC graduates plan and implement security measures, ensure data protection, and respond to breaches. The program also prepares students for a variety of industry certifications like Microsoft, Cisco, CompTIA, Python Institute, and Splunk certifications.

The CSEC program is built upon and shares its first year with the 30 year old Information Technology Services (ITS) program, providing a foundation in IT services and relevant certifications. This ensures a strong base for students pursuing either cybersecurity or IT services specializations. With its focus on industry relevance and practical skills, CEI's Cybersecurity and Technology Department empowers students to become valuable contributors in the ever-changing technological landscape and to shape their future careers in this exciting industry.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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North Las Vegas Student Union with Mascot

Founded in 1971, the **College of Southern Nevada** is the state's largest and most ethnically diverse, higher education institution, with more than 30,000 for-credit students per semester and 12,000 non-credit students per year. The college offers more than 180 degrees and certificates — including more than 25 available entirely online — in more than 70 areas of study. The college features several nationally or regionally prominent programs in high-demand fields, including cybersecurity.

The cybersecurity program is the only one of its kind at the community college level in Nevada, having earned the designation National Center of Academic Excellence in Cyber Defense (CAECD). Many students are involved in an active cybersecurity club that regularly participates in cyber competitions, including the National Cyber League competitions. Our students enjoy a robust experience in the program,

with access to the latest technology, including a fully functional Faraday Cage encompassing an entire room. CSN offers its students real-world, hands-on experience before they ever leave the classroom. Our cybersecurity faculty is comprised of experts with experience in business and industry, academia, and law enforcement.

CSN specializes in two-year degrees and workforce development that allow students to prosper. The college also offers nearly two dozen bachelor's degrees in specialized fields and is the state's largest provider of adult basic education and literacy training. CSN is a Minority Serving Institution and Nevada's first Hispanic Serving Institution. CSN is extremely accessible with three main campuses in Las Vegas, North Las Vegas, and Henderson, each covering 80 acres, as well as sites and centers placed throughout the southern Nevada area.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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[www.csn.edu](http://www.csn.edu) | [csn.edu/departments/cit](http://csn.edu/departments/cit)



Cyber Classroom w/Faraday Cage



# COLLEGE OF SOUTHERN MARYLAND



CSM Campus

## College of Southern Maryland's (CSM)

Cybersecurity Associate of Applied Science degree program prepares students for entry-level security positions and serves those already working in the field who wish to update their skills. On completion of the program, students will be prepared for entry-level positions in security or transfer to a four-year institution to complete a bachelor's degree in information assurance, information security, network management, network security, or cybersecurity.

Cybersecurity students will take classes that will help to prepare for the following in-demand entry level cybersecurity industry certifications: CompTIA A+, CompTIA Security+, CompTIA Linux+, and EC Council Certified Ethical Hacker (CEH). Depending on elective selections, students may take courses to prepare for these additional certifications: EC Council CHFI, AWS Certified Cloud Practitioner, and CISCO CCNA.

Students may be eligible to receive Credit for Prior Learning through Certification Evaluation for up to 15 credits with any of the following current certifications: CompTIA A+, CompTIA Security+, CompTIA Linux+, CISCO CCNA, EC Council CEH, EC Council CHFI, AWS Certified Cloud Practitioner, and ISC2 CISSP.

CSM also offers a certificate program that prepares students for entry-level positions in the information technology field such as Network Associate, Network Support Analyst, Network Technician, Network Administrator, Security Analyst, Security Administrator, IT Specialist. Graduates will be able to conduct network management and maintenance including router and switch configuration, firewall implementation and management, user access control, and network security monitoring.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CSM Cyber Class



CWI Nampa Campus

**College of Western Idaho (CWI)** is a two-year community college located in the Treasure Valley, Southwest Idaho's economic and cultural hub, which is an area experiencing significant growth in population and business activity. The College serves a geographic area that includes ten counties in southwest Idaho (Ada, Canyon, Elmore, Payette, Boise, Camas, Gem, Valley, Owyhee, and Washington).

CWI is committed to empowering students to succeed by providing affordable and accessible education to advance the local and global workforce. Serving more than 30,000 students a year at multiple campus locations and online, CWI offers five core educational areas including Academic Transfer, Career and Technical Education, Workforce Development, and Adult Education programs.

CWI offers an adaptive, industry-competitive, two-year Cybersecurity program that prepares students for continuing education and opportunities to connect with a global community of industry professionals. Upon successful completion of the program, students will be prepared for careers in the cybersecurity field requiring CompTia A+, Network+, Linux+, Security+, CYSA+, Server+, and Cloud+ industry certifications.

To increase enrollment, awareness, and interest, the Cybersecurity program engages the community and potential students through outreach, trainings, workshops, and summer camps with plans to offer dual credit options in the future.

The College also boasts a Cyber Defense Center which strives to advance United States Federal Government, State of Idaho, and industry initiatives in cyber defense by:

- Promoting best practices in cybersecurity to improve user security, preparedness, and resilience in cyberspace for the public, students, and faculty
- Providing access to cybersecurity information assurance resources for online protection and important cybersecurity news, policies, events, and activities
- Fostering partnerships with industry, higher education, business, and the government to improve cybersecurity for Idaho and the nation.
- Showcasing cybersecurity-related programs and facilitating dialog to embrace feedback and improve high-quality education for future workforce training

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Frisco Campus

**Collin College**, founded in 1985, began by offering classes at area high schools in Collin County, Texas. It has since grown significantly, now serving more than 58,000 credit and continuing education students annually. The college now has campuses throughout the county, including the flagship campus in McKinney, as well as locations in Plano, Frisco, Rockwall, Allen, Wylie, Farmersville, and Celina. It also offers an online presence through iCollin.

Programs include more than 200 degrees and certificates in diverse disciplines. Notably, Collin College offers bachelor's degrees in Nursing, Cybersecurity, Construction Management, and Clinical Operations Management. Continuing education, developmental courses and workforce development initiatives round out its offerings.

Enrollment has soared from 5,095 in 1986 to more

than 58,000, solidifying Collin College's growth. Scholarships and financial aid help students achieve their goals.

The college's mission is to be a student- and community-centered institution fostering valuable skills, character, and intellectual growth. Its vision is to deliver brighter future for students and communities. Core values include a passion for learning, service and involvement, creativity and innovation, academic excellence, dignity and respect, and integrity.

The mission of the Collin College cybersecurity program is to prepare students for careers in cybersecurity management and support. The program focuses on multiple aspects of cybersecurity, including network management, system administration, penetration testing, defensive operations, basic cryptography, privacy, cybercrime, and cyber policy.

Collin College's cybersecurity program has received several accolades. The National Security Agency (NSA) designated Collin College a National Center of Academic Excellence in Cyber Defense. Additionally, Collin College cybersecurity students have won prestigious competitions, such as the 2022 ISACA North Texas Collegiate Case Competition, where a team placed first. Collin College has been recognized with the 2023 Academic Circle of Excellence Award by the EC-Council and received \$35,000 in scholarships from the North Texas ISSA to support its cybersecurity students' education and training.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Colorado Mesa University - Quad

Cybersecurity comprises the study and practice of protecting systems, networks, and software programs from malicious threats, primarily in the form of digital attacks. As we progressively head towards a more digitized world and benefit from technological progress in every walk of life, cybercriminals are relentlessly looking into various nefarious ways to exploit the same. The importance of protecting the hardware and software that runs our digital world is paramount.

**Colorado Mesa University (CMU)** is doing its part by educating and training the next generation of cyber professionals. Our Computer Science program offers a Professional Certificate in Cybersecurity with a strong emphasis in secure coding best practices, and system, network, and application security fundamentals. Though most of the program graduates go into software engineering, some have

taken full-time cybersecurity roles in national labs, with defense contractors, and in the tech industry in general.

Computer Science and Cybersecurity programs share an external industry advisory board that advises the programs' current and future efforts to provide our students with the best educational experiences. See the board information at <https://www.coloradomesa.edu/computer-science/industry-advisory-board.html>.

Colorado Mesa University has established an academic partnership with CompTIA, the world's leading tech association, to help our students get various certifications in IT and cybersecurity such as Security+.

CMU's BSc in Computer Science with a Professional Certificate in Cybersecurity has been validated through the academic year 2026 by NSA and DHS. Furthermore, CMU has been designated as a National Center of Academic Excellence in Cyber Defense (CAE-CD) for the validated program of study through the academic year 2026. Visit the CAE Community Website here for more information.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CMU Athletes



# COLORADO SCHOOL OF MINES



MINES Campus

**Colorado School of Mines (Mines)** is a globally known public university devoted to the education and research in engineering and science to solve the world’s significant challenges related to the earth, energy, and environment. It is accredited through the doctoral degree by the Higher Learning Commission of North Central Association.

The mission of the Center for Cyber Security and Privacy (CCSP) is to support and promote cybersecurity and privacy education and research at the Colorado School of Mines and the region. CCSP is hosted in the Computer Science Department at Mines, which offers B.S., MS, and PhD degree programs in Computer Science. CCSP fulfills its mission by leveraging the unique strengths of Mines in engineering and applied science education and research, promoting high-quality and high-impact cybersecurity and privacy research, bolstering

cybersecurity and privacy education and training, fostering cross discipline and cross-institution collaboration, knowledge sharing, and resource sharing, and engaging the local communities and the region.

The education and research activities at CCSP are closely aligned with the Federal Cybersecurity R&D Strategic Plan, and with the Centers of Academic Excellence in Cyber Defense (CAE-CD) program requirements. The National Security Agency (NSA) and the Department of Homeland Security (DHS) have designated the Colorado School of Mines as a CAE-CD institution through academic year 2021. Mines undergraduate and graduate students who complete our Cyber Defense Education requirements will receive an official Cyber Defense Education Certificate authorized by NSA and DHS.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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MINES Students



Lory Student Center, Colorado State University

**Colorado State University** is one of the nation's top public Tier 1 research universities committed to achieving academic excellence, promoting diversity, and making education accessible. The university is home to 33,400 students pursuing degree programs in departments spanning eight colleges.

Cybersecurity education and research in Colorado State University spans multiple colleges and engages students at all levels. Colorado State University offers about 15 courses on different aspects of cybersecurity. Computer Science offers an undergraduate concentration in Cybersecurity. Computer Information Systems offers cybersecurity certificates at both the graduate and undergraduate levels.

Colorado State University also provides research mentoring to undergraduate

and graduate students. Some of the active areas of research are cyberbiosecurity

(Computer Science; Chemical and Biological Engineering), cognitive aspects of cybersecurity (Computer Science; Psychology; Journalism and Media Communication),

Energy Security (Computer Science; Energy Institute), Information Technology Security (Computer Science; Electrical and Computer Engineering), Internet of Things Security (Computer Science; Electrical and Computer Engineering), Supply Chain Security (Computer Science; Systems Engineering), and Transportation Security (Systems Engineering; Computer Science). Such research trains the students to take on new cybersecurity challenges and work in a multi-disciplinary team-environment.

Colorado State University actively engages with federal agencies, state government, and commercial organizations in its cybersecurity initiatives.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Summer High School Cybercamp



# COLORADO STATE UNIVERSITY-PUEBLO



CSU-Pueblo Campus

The **Center for Cyber Security Education and Research (CCSER) at Colorado State University Pueblo (CSU-Pueblo)** has been designated as a Center of Academic Excellence in Cyber Defense since 2016.

Mission objectives of CCSER include, but are not limited to providing educational outreach programs in cybersecurity to K-12 students, and all interested parties, institutions, and organizations in the wider Colorado area; producing a growing number of students and professionals with expertise in cyber defense that will contribute to the advancement of the field; providing collaboration opportunities among students, faculty, and public and private institutions committed to excellence in the areas of cybersecurity and information assurance; and seeking, encouraging, and developing alliances with other CSU-P departments and CAEs, as well

as educational institutions and industry in order to pursue joint educational, research, and grant opportunities.

The CCSER is a technically oriented program within the Computer Information Systems (CIS) sector of the Hasan School of Business. CCSER emphasizes threat vulnerability analysis, cyber threats, system vulnerabilities, network traffic analysis, cyber defense, network administration, and computer forensics in addition to areas of study in block-chain technology and cybersecurity risk strategies.

The CCSER encourages all interested students to compete in the National Cyber League (NCL) cyber competition. Our CSU-Pueblo “CyberWolves” team has been ranked among the top 10 NCL teams in the nation during the last 2 years.

Additionally, the CCSER has engaged several local area high schools students and teachers to compete in the NCL, which has created much excitement and interest in the fields of information technology and cybersecurity among high school students.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CSU-Pueblo CyberWolves: #4 NCL Ranked out of 373 National Teams, Fall 2018



CTU is a student-centric, tech-driven university committed to innovation

Through innovative industry-current curricula and technology-enabled student-centered teaching, the College of Computer Science, Engineering and Technology at **Colorado Technical University™ (CTU®)** empowers students to become motivated, creative, ethical, and skillful professionals who can resolve challenges in Computer Science, Computer/Electrical Engineering, and Information Technology to meet the needs of the digital economy.

CTU's Bachelor of Science in Computer Science-Cybersecurity Engineering degree program is designed for busy adults interested in pursuing a career path in computer software solutions using programming and algorithmic techniques.

For this Cybersecurity Engineering concentration, students effectively explore a broad range of methods, processes, and procedures to design

and develop computer software in addition to context-specific best practice and hands-on skills relevant to cybersecurity engineering. These include cybersecurity engineering-related theories, techniques and tools to construct software solutions to cost-effectively detect, mitigate, prevent and remove various types of security vulnerability and attacks.

- The Bachelor of Science in Computer Science program with a concentration in Cybersecurity Engineering was validated to map to the DHS/NSA cybersecurity knowledge units.
- The Department of Homeland Security and the National Security Agency have recognized Colorado Technical University as a National Center of Academic Excellence in Cyber Defense (CAE-CD).

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CTU is a student-centric, tech-driven university committed to innovation. The bachelor's in cybersecurity engineering is built on CTU's legacy of online degree programs, which have been offered since the early 2000's. Students in the Computer Science - Cybersecurity Engineering bachelor's program pursue their degrees online or at one of our Colorado campuses, including the newly remodeled Colorado Springs campus.

CTU has awarded more than 125,000 degrees since 1965 and has been ranked among the Best Online Bachelor's Programs by U.S. News & World Report for the last eight years.



# COLUMBIA BASIN COLLEGE



Columbia Basin Campus

**Columbia Basin College**, Computer Science (CS) Department, was designated as a Center of Academic Excellence in Cyber Defense (CAE-CD) in 2017. This designation is given to schools that have proven a commitment to excellence in the field of Information Assurance and Cyber Defense Education. We are one of a few community colleges in Washington State with this designation. The Computer Science Department is committed to providing students and the community with the training, academic studies, and valuable hands-on experience necessary for employment in the Information Technology industry.

The Computer Science department offers Bachelor of Applied Science (BAS) degrees in Cybersecurity and Information Technology. The majority of the students pursuing Computer Science A.A.S. degrees transfer into our B.A.S. degrees. We accept A.A. and A.A.S. degrees from other colleges into our Cybersecurity

B.A.S. degree and our Information Technology BAS degree. The Computer Science Department provides students with access to cybersecurity practitioners through internships, guest lecturers, and events. The department also partners with many local companies to provide student internships. The Computer Science Department also has a Cyber club that is very active in many competitions.

Students who complete the following two-year Associate in Applied Science (AAS) degrees will receive a letter that contains the designation along with a listing of the CAE Knowledge Units (KU) completed.

- Cybersecurity
- Database Administration
- Information Technology
- Network Administrator

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CSCC Campus in Columbus, OH

At **Columbus State Community College**, we strive to equip our students for successful careers in cybersecurity. Columbus State launched its specialized Cybersecurity degree program to address the critical need for skilled professionals who can safeguard sensitive information against rapidly evolving digital threats.

Columbus State upholds academic excellence through hands-on learning opportunities both in the classroom, and in the workplace, all while targeting diverse populations that can help us build a more equitable skilled workforce.

Through our successful College Credit Plus (CCP) program and transfer pathways, we can help students launch careers in cybersecurity as affordably and quickly as possible. High school students can take college-level courses to help

offset the cost and time it takes to earn a college degree. We also facilitate articulation agreements for bachelor's degrees in cybersecurity at many CAE-CD designated four-year institutions.

Our industry-aligned, NSA/NIST-informed curriculum reflects where the industry is going and prepares students with the technical skills, they need to complete a two-year degree and transition seamlessly to the workplace. Columbus State creates a space where students can hone their skills and capitalize on opportunities to learn in workplaces across central Ohio and the nation.

Our paid apprenticeship program partners with local industry leaders looking to expand their talent pipeline with second-year cybersecurity students hoping to gain valuable industry experience. Students receive on-the-job training with leading companies like Nationwide Insurance and American Electric Power while completing their degree. This collaborative effort translates into high conversion rates for apprentices landing full-time positions.

Columbus is experiencing a surge in tech prominence, solidifying its reputation as the "Silicon Valley of the Midwest." Companies are investing billions in central Ohio, establishing it as an epicenter for advanced chip-making and IT innovation.

Columbus State is prepared to meet this moment—providing a dynamic and agile learning environment for students looking to establish themselves as cybersecurity professionals.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CSU's Synovus Center for Commerce and Technology

**Columbus State University**, located just 100 miles southwest of Atlanta, Georgia, and adjacent to Fort Moore, offers 90 undergraduate and graduate degree options to over 7,000 students from the Southeast, across the nation, and around the world.

CSU prepares students to thrive in the 21st century by teaching through experience. Robust partnerships with businesses, outreach centers, and military organizations help our students create valuable professional connections. CSU cybersecurity students interact weekly with industry professionals. Internships, research projects, and fieldwork opportunities enhance learning by putting it in motion – empowering students through practical knowledge and hands-on skill.

CSU's TSYS Center for Cybersecurity was created to address the shortage of cybersecurity professionals

in today's workforce. With feedback from industry employers, CSU has designed several degree options that transform students into cybersecurity professionals in as little as one year, including a 12-month Cybersecurity Practitioner Certificate, 2-year Cybersecurity Nexus/Associates degree, 4-year Bachelor of Science in Cybersecurity degree, and Master of Science in Cybersecurity degree.

CSU cybersecurity students access specialized "state of the art" lab environments to enhance their technical skills by hacking into environments or defending systems from threats. CSU's world-class Cyber Range, a virtual environment that immerses students in hyper-realistic simulated cyber-attacks, offers the closest experience to a real-world cybersecurity incident available. Each scenario is designed to disrupt the availability of critical systems in the training network.

Columbus State University employs lab environments, industry interaction, and traditional education to train cybersecurity students to be workforce ready!

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CSU's Cyber Range



Catonsville Campus Math and Science Building

The **Community College of Baltimore County (CCBC)** is dedicated to transforming lives through an accessible, affordable, and high-quality educational journey, aimed at preparing students for both transfer and career success. This commitment extends beyond academic excellence to strengthening the regional workforce and enriching the community at large. CCBC stands out for its inclusive educational services, welcoming community members regardless of economic, social, or physical barriers, and for its active engagement in community outreach.

A notable highlight in CCBC's calendar was the special event held on January 11th, 2024, featuring the new Director of the National Cybersecurity Directorate, Mr. Cory Coker. This gathering brought together current and former Cybersecurity students, local business leaders, high school students, and

government officials, facilitating a rich exchange of ideas and networking opportunities. Earlier, on October 24, 2023, CCBC hosted a significant Cyber/Workforce and Academic forum. This event aimed to highlight the importance of cybersecurity readiness and to showcase CCBC's program offerings, internships, apprenticeships, and workforce development opportunities to the Baltimore area communities and high school students.

Since 2017, the Women in Tech program at CCBC has offered female students the chance to engage in free workshops, lectures, and social events, providing a platform for networking with successful women in the tech industry. Additionally, CCBC students have actively participated in cybersecurity competitions, such as Capture the Flag (CTF) and the Cyber Defense Competition, showcasing their skills and earning accolades, including a first-place victory in the CFT competition at Cyber Maryland in December 2023.

Regular engagement with the tech community is fostered through the bi-weekly Tech Club Forum, where students meet and interact with industry partners and experts who share the latest updates in Cyber and Digital Forensics. Furthermore, CCBC undertakes outreach initiatives with local middle and high schools, inviting students to explore the cybersecurity program offerings across its various campuses. Through these diverse efforts, CCBC not only educates but also actively contributes to the cybersecurity field, supports workforce development, and enhances the community's understanding and engagement with technology.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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# COMMUNITY COLLEGE OF RHODE ISLAND



Community College of Rhode Island - Warwick Campus

The National Security Agency has designated the **Community College of Rhode Island** as a National Center of Academic Excellence in Cyber Defense (CAE-CD) through academic year 2028. This is the second designation for the college following the original designation for the years 2018 through 2023. The CAE-CD designation reflects the college's ability to meet the increasing demands of contributing to the protection of the National Information Infrastructure and addresses the critical shortage of professionals with cybersecurity skills by promoting higher education and research in addition to providing the workforce with a pipeline of qualified cybersecurity professionals.

CCRI, the largest public, two-year, degree-granting college in New England, provides a variety of career, technical, and academic programs at four main campuses in Warwick, Lincoln, Providence, and

Newport as well as online and at the Westerly and Woonsocket Education Centers. CCRI's cybersecurity program is designed to provide students with a strong foundation in the principles and methods of cybersecurity, as well as the fundamental knowledge and tools for applying security measures across a variety of network architectures and settings.

In addition to providing the groundwork for pursuing a bachelor's degree in cybersecurity, this associate degree program provides the educational background and hands-on training necessary to prepare students for entry in the cybersecurity sector and meets NSA and Centers of Academic Excellence core foundational content and standards.

At the core of the associate degree program is the cyber defense path, composed of the critical networking and cybersecurity-based classes that are the courses used in the KU mapping for this designation.

The courses include: Scripting for Systems Administration, Introduction to Computer Ethics, Introduction to Cybersecurity, Database Design and Management, Networking I, Networking II, and Network Security Hardware. Students who complete these core courses are awarded a certificate of completion that recognizes that they have completed the cyber defense path as part of the cybersecurity curriculum at CCRI.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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The Winn Center at Cosumnes River College

On behalf of the entire faculty and staff, I would like to extend a warm welcome to **Cosumnes River College**. We are thrilled to possibly have you join our community of aspiring cybersecurity professionals. Our cyber program was recently ranked seventh in the nation and first in the state of California.

Cybersecurity is an ever-evolving field that plays a crucial role in safeguarding our digital world. As you embark on this journey, you will gain invaluable knowledge and skills that will equip you to tackle the numerous challenges posed by cyber threats.

Throughout your time in the program, you will have the opportunity to learn from faculty who are experts in this field. Our curriculum is designed to provide you with a comprehensive understanding of the principles, techniques, and technologies used to protect information systems. In addition to the

theoretical aspects of cybersecurity, we strongly emphasize hands-on learning. You will have access to state-of-the-art virtual lab material and cutting-edge tools, allowing you to apply your knowledge in real-world scenarios. This practical experience will not only enhance your understanding but also prepare you for the dynamic nature of the cybersecurity landscape.

As you embark on this exciting journey, remember that cybersecurity is not just a career path but a critical responsibility. The skills you acquire here will empower you to make a positive impact in the world by protecting individuals, organizations, and societies from cyber threats.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Computer Classroom



County College of Morris Campus

**County College of Morris (CCM)** has been a local and national leader in information security education for over two decades. CCM became the first community college in New Jersey to be designated as a National Center of Academic Excellence in Cyber Defense Two Year Education (CAE-2Y) in 2017 and re-designated in 2022.

Our faculty have been leaders in setting the direction of our college's information security curriculum. In 2018, we started a Share-time program called Cyber Security Information Protection (CSIP) for High School students. This program allows the students to spend their Junior and Senior years attending the program at CCM. These students will earn our Information Security Certificate of Achievement and more than 50% of the credits needed to complete an Associate of Applied Science (AAS) degree in Information Technology.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Our mission for the CCM Center for Cybersecurity is to further the education of our present and future cybersecurity professionals, increasing awareness for students in other disciplines, and in preparing our greater community to be better cyber citizens. We are actively involved in hosting GenCyber camps for our future students. CCM is committed to increasing the diversity of professionals in the cybersecurity field through our work with National Center for Women & Information Technology (NCWIT).

CCM has received significant attention recently by earning more than a dozen national recognitions. CCM has been recognized as the top 1.8% of the Best Community Colleges nationwide by Academic Influence. Additionally, Best Accredited Colleges places CCM as the Top Community College in New Jersey. The community college ranking looked at the salaries earned by alumni, the percentage of alumni who find high meaning in their jobs and the percentage of degrees awarded in science, technology (this includes our Information Technology and Cybersecurity offerings), engineering and math.

The college has also been recognized as #1 for Best Associate Degrees in the state and Best for Transfer Students in New Jersey by Intelligent. For five consecutive years, PayScale has ranked CCM #1 in New Jersey for associate degree holders who earn the best salaries.



Cypress College Campus

The **Cybersecurity Center at Cypress College** was designated as a Center of Academic Excellence in 2018. Our mission is to advance cybersecurity education by providing curriculum, resources, support, and collaboration to develop and implement effective pathways to increase cybersecurity professionals. We offer cybersecurity and cyber defense certificate programs and an Associate of Science in Cyber Defense. After completing our program, students are prepared for industry recognized certifications including ITF+, Cloud Essentials, Network+, Security+, CySA+, CCNA, and Cyber Ops.

Our center is involved in the Pathway to Advancement of Cybersecurity Education (PACE) program funded by Small Workforce Program (SWP) and the National Science Foundation (NSF). The goal of PACE is to develop and implement pathways from middle school all the way to a four-year college with multiple opportunities

for employment exit points. Specific goals include:

- Embed cybersecurity content in middle school/ high school curricula
- Provide outreach to generate interest in cybersecurity
- Offer cybersecurity dual-enrollment courses to middle school/high school students
- Provide articulation and alignment with high school and 4-year institutions
- Increase student enrollments in cybersecurity
- Recommend best practices and disseminate PACE results

During the 2019 academic year, 508 students completed our cybersecurity courses, 90 students obtained CompTIA and/or Cisco industry certificates, and 53 students completed one of our cybersecurity certificate programs (12 to 24 units). Additionally, 1708 middle and high school students participated in our CyberPatriot training and competition events. CyberPatriot is our outreach program where our college student mentors provide weekly after-school training at six different middle and high schools in the community.

### DESIGNATIONS

- CAE-Cyber Defense

### CONTACT INFORMATION

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Dr. Izadi Working with cybersecurity students.



Beacom Institute of Technology Building

Since its affiliation with the Center of Academic Excellence (CAE) Community in 2004, **Dakota State University (DSU)** in Madison, South Dakota, has distinguished itself as a vital contributor. DSU now prides itself on being among the elite group of institutions that have earned all three CAE designations. This recognition is largely due to the comprehensive suite of programs offered through The Beacom College of Computer & Cyber Sciences, which include Bachelor of Science degrees in Cyber Operations, Network and Security Administration, and Computer Science; Master of Science degrees in Cyber Defense and Computer Science; and doctoral degrees in Cyber Operations, Computer Science, and Cyber Defense. Over the years, DSU has emerged as a leader in the fields of computer and cyber sciences, defining itself as a special focus STEM university renowned for its achievements in computing, information technologies, and cybersecurity.

In an effort to further its academic prowess, DSU has initiated a joint PhD program in computer science with South Dakota State University in the last five years. Additionally, it has introduced two Bachelor of Science degrees in Artificial Intelligence—one focused on technology and the other on operational use in organizations.

Plans are underway to launch more advanced degrees, including a master's in Artificial Intelligence and a graduate degree in data privacy. Further expanding its academic and research horizons, DSU is collaborating with the South Dakota School of Mines & Technology to establish a Center for Quantum Information Science & Technology. These initiatives in developing new academic degree programs and research opportunities underscore DSU's commitment to advancing education in emerging technologies.

### DESIGNATIONS

- CAE-Cyber Defense
- CAE-Cyber Operations
- CAE-Research

### CONTACT INFORMATION

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Students collaborating



Center for Engineering & Computer Science

**Dartmouth** educates the most promising students and prepares them for a lifetime of learning and of responsible leadership through a faculty dedicated to teaching and the creation of knowledge.

Founded in 2000, Dartmouth's Institute for Security, Technology, and Society engages in interdisciplinary research, education and outreach programs that focus on information technology and its role in society, particularly the its in security and privacy broadly conceived. ISTS nurtures leaders and scholars, educates students and the community, and collaborates with its partners to develop and deploy IT, and to better understand how IT relates to socio-economic forces, cultural values and political influences.

ISTS pioneered new security paradigms such as language-theoretic security, the science of human

circumvention, and the "weird machine" theory of exploitation as emergent execution. We've played a leading role in long-lived consortia examining cybersecurity issues in the power grid and in health care; currently, we are building out our programs in software security, vulnerability analysis, and AI.

ISTS research improves our ability to design and deploy secure, usable computer systems and protect them from disruption and attack. Also, to address social, economic and policy issues that arise in the development, deployment and regulation of such information technology

Our NSA CAE programs (Computer Science, and Engineering) offer undergraduate, Master's, and Doctoral degrees.

## DESIGNATIONS

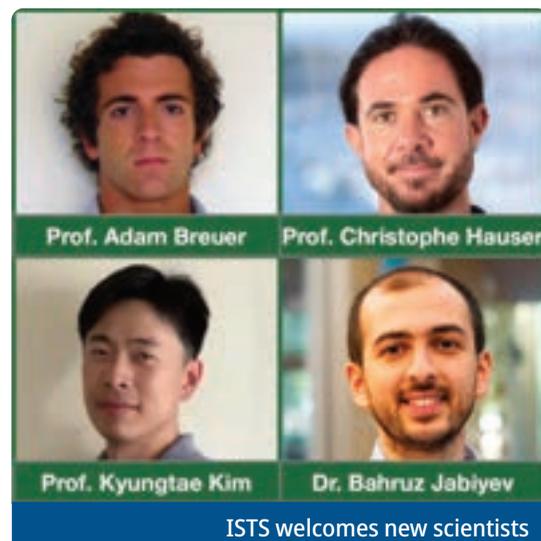
- CAE-Research

## CONTACT INFORMATION

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ISTS welcomes new scientists



Davenport University - W.A. Lettinga Campus

**Davenport University**, a private, non-profit, institution located in Michigan, offers a practical and career-oriented curriculum that leads to associate, bachelor's and master's degrees through a network of campuses located throughout the state of Michigan and online. Founded in 1866 in Grand Rapids, Michigan, Davenport University offers more than 80 undergraduate degrees, certification programs and graduate degrees, many of them available 100% online through our Global Campus Online+ experience. DU is accredited by the Higher Learning Commission – North Central Association of Colleges and Schools.

Since first achieving CAE status in 2011, the Davenport University College of Technology established and maintains an actively growing Information Security and Assurance Center known as ISaAC. ISaAC is a hub for up-to-date security-related

information including current news & research, faculty biographies, undergraduate and graduate program information, and security resources.

In addition to the Program of Study (PoS) in Cyber Defense, the College of Technology offers undergraduate & graduate degrees in Computer Science, Project Management, Network Management, and Data Analytics.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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DU SFS Scholars 2024



Daytona State College emphasizing student success

**Daytona State College**, founded with innovation at its core and within a culture of continuous improvement, provides open access to educational programs that transform students' lives and communities we serve.

The Advanced Technical Certificate in Cybersecurity and Cyberforensics program provides the student with an understanding of both technical and management aspects of computer and network security and forensics using exposition of theory, laws, and technical forensic and security tools and techniques. Students are exposed to hands-on projects where they are required to combine theory, legal issues, and technical knowledge to solve real-world problems. The program incorporates innovative, tested methods of instruction with hands-on lab work to encourage student learning and success.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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DSC FalconSec team members Brian McGrath, Caleb Pintello, Craig Sava and Jess Harness took first place in a statewide cybersecurity competition, besting 18 teams and setting a new record by completing the challenges in record time with a perfect score.

### Program Highlights:

At the College of Business, Engineering and Technology, our goal is to provide engaging and effective educational programs that lead to certificate, associate of science and baccalaureate degree completion, prepare students with diverse needs and backgrounds for continued education or successful employment, and are enhanced by collaborative partnerships with community stakeholders.

The Advanced Technical Certificate in Cybersecurity and Cyberforensics program provides the student with an understanding of both technical and management aspects of computer and network security and forensics using exposition of theory, laws, and technical forensic and security tools and techniques.

This program consists of 18 credits leading towards requirements for proficiency in protection and analysis of computer and network systems security and forensics. The program fulfills a critical need for IT professionals with expertise in cybersecurity and cyberforensics.



# DES MOINES AREA COMMUNITY COLLEGE



DMACC Ankeny Student Center

**Des Moines Area Community College (DMACC)** is a vital institution in Central Iowa, providing accessible education and training across a vast district spanning multiple counties. Accredited by the Higher Learning Commission and approved by the Iowa Department of Education, DMACC offers both career focused (CTE) and transferable curricula, ensuring its programs meet rigorous standards and are eligible for various benefits, including those for veterans.

One standout program at DMACC is the Cybersecurity AAS, approved by the National Security Agency (NSA) as a Center of Academic Excellence – Cyber Defense (CAE-CD). This program is designed to cultivate a skilled workforce adept in safeguarding digital assets. Notably, DMACC's faculty are highly regarded in their fields and actively work in industry and as trainers, bringing real-world expertise and experience into the classroom.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Collaboration lies at the heart of DMACC's approach, evident in its interdisciplinary partnerships with various programs, including computer science, criminal justice, agriculture, business, and nursing. As part of its core initiative, DMACC fosters pathways for higher learning by partnering with esteemed institutions such as Iowa State University, Western Governors University, Drake, Carnegie Mellon University, and Dakota State University.

In response to industry demands, DMACC actively involves professionals to keep its curriculum current. Initiatives like the Cybersecurity Ambassador Program engage K-12 students, educators, and the community expanding the reach of cybersecurity education. These collaborative efforts underscore DMACC's dedication to equipping students with cutting-edge skills for success in today's digital landscape.

Supported by partnerships with leading organizations like CompTIA, Microsoft, Google, and Amazon AWS, DMACC continuously expands opportunities for students to gain critical skills and pursue rewarding careers in cybersecurity. DMACC students are 1 of only 3 community colleges participating in the Techwise Talent Sprint program sponsored by Google. Through these collaborations, DMACC remains at the forefront of cybersecurity education, preparing students for success in an ever-evolving digital landscape.



Delta College Campus

**Delta College** is one of the country's leading community colleges – recognized for our innovation, our community leadership, and our teaching excellence. We're also known for caring about each student every step of the way.

Online Security is a growing and increasingly critical area of specialty. With Delta's Cybersecurity program, you will learn how to protect the private information of companies and their customers. Plus, at Delta College, you'll prepare for this rapidly growing career field through our nationally recognized Cybersecurity center.

Delta College's Cybersecurity Center is recognized by the Department of Homeland Security and the National Security Agency as a Center of Academic Excellence in Cyber Defense Education. The Cybersecurity Center provides a dedicated

cybersecurity simulation lab and is fully supported by Delta's cybersecurity faculty. You can study remotely using our new state-of-the-art NDG appliances that allow you to have the same lab experience from home as you do in the classroom.

Participate in virtual cybersecurity competitions in the Cyber Defense club and discuss industry trends, events, and news with guest speakers that work in the field full time.

Delta college started with an Information Security and Technology degree before 2011, in 2012, we changed the curriculum to Information Assurance, and in 2017 changed to a Cybersecurity degree. We work hard to keep up to date with the latest trends in Cybersecurity so you the student are well prepared for your future employment.

## DESIGNATIONS

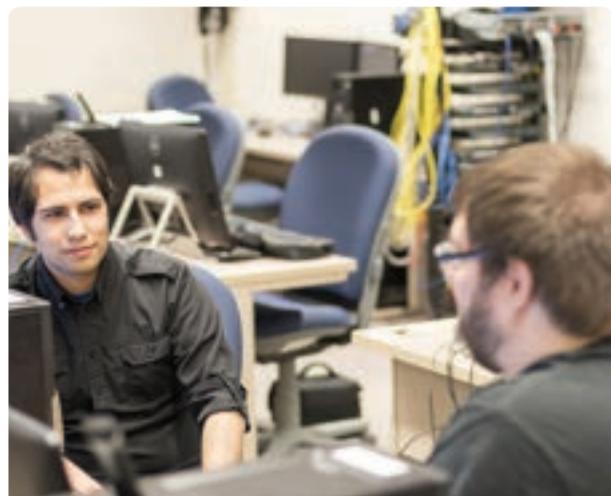
- CAE-Cyber Defense

## CONTACT INFORMATION

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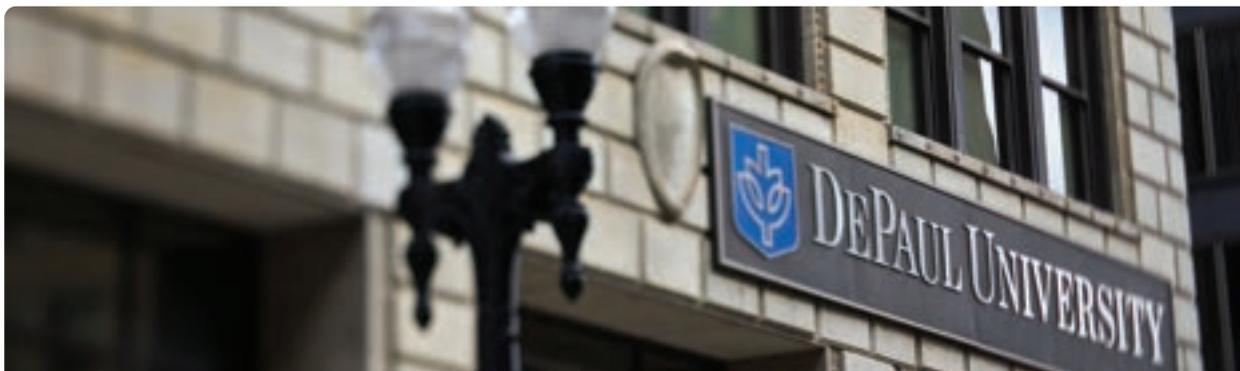
[www.delta.edu](http://www.delta.edu)



Cybersecurity students discussing possible solutions



# DEPAUL UNIVERSITY



The College of Computing and Digital Media Building, located in the heart of downtown Chicago

**DePaul University** is the largest Catholic university in the United States and the largest private, nonprofit university in the Midwest, with nearly 22,500 students. Our tradition of providing a quality education to students from many different ethnic, religious, and geographic backgrounds, with particular attention to first-generation students, has resulted in one of the nation's most diverse student bodies. DePaul offers over 300 academic and professional programs for undergraduate and graduate students. Here, our students gain hands-on experience through internships, service, and learning opportunities across Chicago.

The College of Computing and Digital Media houses the School of Computing, which features technical degrees in computing, cybersecurity, health informatics, information systems, and data science. Students in the BS and MS Cybersecurity programs

learn how to design, implement, and maintain systems designed to support security policy and networking architecture consistent with mitigating risk and preventing attacks. The program curriculum is developed in cooperation with an industry advisor board—leaders in business who meet regularly with our faculty to ensure students are getting the skills employers are looking for. Extensive labs, accessible locally and remotely, provide a great infrastructure to support a hands-on education.

Our campus is located in the heart of Chicago's business district and we offer a robust array of online courses as well. Students have access to 100 percent of their program's lectures captured and available online. The MS in Cybersecurity can be completed entirely online.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CDM emphasizes hands-on learning with equipment in a dedicated Security Lab



DeVry University Lisle, IL (Main Location)

**DeVry University's** Bachelor's Degree in Computer Information Systems, with a specialization in Cyber Security Programming, is designed to equip students with the skills needed to either kickstart or advance their careers in the realm of computer information systems. This program places students at the cutting edge of technological innovation and business problem-solving, with a particular focus on cyber security programming, cloud security, and the development of secure applications.

Our mission at DeVry University is to bridge the opportunity gap in our society and meet the demands of emerging talent by preparing learners to excel in careers that are continuously reshaped by technological advancements. We aim to achieve this through our innovative programs, relevant partnerships, and a commitment to exceptional care, thereby empowering our students to effect

significant improvements in their personal lives, their communities, and their workplaces.

Key highlights of our university and the program include the adoption of a Project-Based Learning (PBL) approach, which is hands-on and ensures that the concepts learned by our students can be immediately applied across various organizational contexts.

DeVry is proud to be a CompTIA Authorized Academic Partner, offering a curriculum developed in close collaboration with subject matter experts from the corporate and governmental sectors.

Additionally, students who enroll in our Bachelor of Computer Information Systems program are eligible to receive a complimentary laptop, further facilitating their learning journey. The program also aligns with and prepares students for a range of prestigious certifications, including CompTIA Linux+, Network+, Security+, Project+, and more, as well as certifications like the EC-Council Certified Ethical Hacker, ISC2 Certified Cloud Security Professional (CCSP), and ISACA Certified Information Systems Auditor (CISA), among others.

This comprehensive preparation not only enhances our students' expertise in cyber security and information systems but also significantly boosts their employability in the rapidly evolving tech landscape.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Drexel University Campus

**Drexel University** is a private urban university located in Philadelphia, PA. Its defining characteristics are its 100+ year tradition in cooperative education, its focus on research and innovation (Carnegie R1 classification), and its commitment to civic engagement. We are proud of our excellent research and education in cybersecurity and our longstanding designation as an NSA CAE.

Drexel has both undergraduate and graduate cybersecurity degree programs. The undergraduate cybersecurity program is the Bachelor of Science in Computing & Security Technology (BSCST), which offers both online and in-person modalities, and two concentrations (Computing Technology and Computing Security). Enrollment in the BSCST program is robust, with 275 students enrolled in Spring 2023 and 60 students received the degree in June, 2023.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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The Master of Science in Cybersecurity degree offers online and in-person modalities and three tracks (Computer Science, Electrical & Computer Engineering, and Information Systems).

Drexel offers both undergraduate and graduate cybersecurity-related coursework. CST classes focus on current, real-world challenges in cyber security. Examples of recent undergraduate courses include Computer Forensics, Virtual Environments & Cloud Security, and IT Security Risk Assessment. Examples of recent graduate courses include Quantum Computing, Social Network Analytics, and Multimedia Forensics & Security.

The Drexel Cyberdragons are the student-run student group focused on cybersecurity training and competition. The club offers practical hands-on knowledge and training with a students teaching students model. The club also fields teams to collegiate cybersecurity competitions such as the Global Collegiate Penetration Testing Competition and the National Collegiate Cyber Defense Competition.



Drexel CyberDragons - Student Cybersecurity Team



East Carolina University Campus

**East Carolina University (ECU)**, a public, four-year university established in 1907, is located in Greenville, North Carolina. ECU has 11 colleges/schools/institutes, 10 of which are degree-granting.

Since 2005, ECU has been offering CAE-CD education through the Department of Technology Systems, which is housed within the College of Engineering and Technology. The department offers degree programs with emphases on cybersecurity through our Bachelor of Science in Information and Cybersecurity Technology, Master of Science in Information and Cybersecurity Technology and post-baccalaureate certificate in Cybersecurity.

Significant investments made by the University, College, the National Security Agency, and the Department of Defense have led to the creation of a very robust program and cutting-edge facilities for

student learning and research.

Our students gain in-depth knowledge of cybersecurity through a myriad of courses and hands-on exercises in our state-of-the-art internetworking and cybersecurity labs. Students learn how to design, deploy, secure, simulate, attack/defend, and manage complex and heterogeneous systems and networks. They also learn techniques to conduct proper investigations of unauthorized intrusions, respond to intrusion incidents, apply regulatory processes, and report situations involving cyberattacks. These experiences help prepare our graduates with technical and professional skills needed for success and leadership in the field of cybersecurity.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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ECU Cybersecurity Workshop

# EAST COAST POLYTECHNIC INSTITUTE AND UNIVERSITY



ECPI University is a leader in career education

Established in 1966, **ECPI University (East Coast Polytechnic Institute)** is a pioneering career education institution with over 60,000 distinguished graduates. Offering accelerated programs, hands-on curriculum, dedicated faculty, and strong industry ties, ECPI is committed to transforming lives through education.

As a recognized Center of Academic Excellence in Cyber Defense Education, ECPI University takes pride in equipping students with the skills necessary for careers safeguarding the nation's digital infrastructure. Utilizing a year-round schedule, ECPI delivers a valuable and quality-driven educational experience tailored to adults who want to earn their bachelor's degree in as little as 2.5 years.

ECPI University's applications-based curriculum allows students to gain the necessary knowledge

and skills in cybersecurity policy, practices, and procedures. With careful consideration to the ever-changing cybersecurity landscape, the university consistently evaluates and enhances its programs and facilities, aiming to enrich the student experience by closely reflecting real-world scenarios.

Through quality education, hands-on learning, and a supportive environment, ECPI University is dedicated to helping students and alumni achieve their career goals in the exciting field of cybersecurity.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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A faster path to cybersecurity



ESU's Hoeffner Science and Technology Center

**East Stroudsburg University (ESU)** has been designated a National Center of Academic Excellence in Cyber Defense Education since 2003. The Computer Security program is taught by a dedicated team of faculty that are committed to advancing cybersecurity education, training, research, literacy, and awareness.

In 1999, the ESU Computer Science Department began to develop our Undergraduate Computer Security program, offering the first Computer Security course in 2000. By 2002, ESU offered students a Bachelor of Science degree in Computer Security, the first such undergraduate degree in the United States.

Our rigorous baccalaureate program requires courses in introductory computer science, advanced mathematics, and cybersecurity. Our students round

out their education with coursework designed to foster critical thinking, develop communications skills, and impart an ability to navigate a complex, diverse, and global society. We encourage our students to challenge themselves personally and academically, making the most of their tenure at ESU through a robust educational experience and a diverse offering of student activities organizations.

With small class sizes for courses within the major, ESU is able to provide quality education to the individual student. East Stroudsburg University is proud to play a significant role in developing a strong, capable, and technologically proficient workforce that is equipped to manage and protect our nation's critical cyber infrastructure.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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ESU Cybersecurity Students



Eastern Iowa Community Colleges

**Eastern Iowa Community Colleges (EICC)** is preparing the next generation workforce through its Information Technology – Cybersecurity Associate in Applied Science (AAS) degree. The program can be completed fully online and equips students with the skills they need to graduate and immediately step into the workforce. At EICC, earning one or more industry-standard certifications while taking classes is a seamless integration into the coursework. The curriculum is intentionally mapped to certifications, including those from CompTIA, AWS, and Cisco.

The college also provides students with tools for success, including practice exams and a testing center. Students in EICC cybersecurity programs also build on their online education through a variety of additional resources and opportunities. The EICC Cyber Center was designed to meet regional demand for high-quality cybersecurity education

and training. Through the Center, students access key cybersecurity resources, news and information, and events. In addition, students are active in EICC's chapter of the National Cybersecurity Student Association, compete in National Cyber League events, and participate in regional conferences including CornCon Cybersecurity and Women in IT. EICC is a CompTIA academic partner, an EC-Council academy, a Microsoft Academy, as well as an AWS academy.

EICC proudly serves more than 12,000 students each year, making it the sixth largest college in Iowa. The district spans five counties and holds 17 facilities, including three main campuses. The college also offers robust certificate, diploma and degree programs in Networking, Programming, Augmented and Virtual Reality, Data Analytics, and Web Development.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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EICC Students



EMU Campus

The Information Assurance and Cyber Defense program at **Eastern Michigan University** places emphasis on design, integration, administration, hardening, and protection of all types of computer information systems and network infrastructures in cyber environments.

Our mission is to support the computing and cybersecurity needs of local, regional, and national government and private organization through excellence in education, scholarship, and service. We are committed to providing quality educational opportunities to both traditional and non-traditional students and seek to equip our students with the knowledge and skillset necessary for future computing and cybersecurity professionals to build, maintain, and protect networks and computer systems in both government and industry.

Our students are immersed in solid theories as well as intensive hands-on practical experiences to enhance their critical thinking and problem-solving capabilities applied to all elements in modern computing disciplines.

Our curriculum covers:

- Computing and networking theories/practices
- System architecture and administration, integration, and troubleshooting
- Cybersecurity threat/risk evaluation
- Incident response analysis and practice
- Network/digital forensics and investigation
- Penetration testing and system auditing
- Cyber laws, legislation, policy/compliance, and project management

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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# EASTERN NEW MEXICO UNIVERSITY RUIDOSO BRANCH COMMUNITY COLLEGE



Eastern New Mexico University-Ruidoso Campus

**Eastern New Mexico University – Ruidoso Branch Community College (ENMU-Ruidoso)** currently serves as a Title V institution for Hispanics, has a strong dual credit program with nineteen high school students enrolled in cybersecurity certificate program for the Mescalero Apache Tribe, Mescalero High School, and is planning to expand to the local high schools in Lincoln County, New Mexico.

The A.A.S. in Information Systems (IS) Cybersecurity is designed to introduce students to contemporary information systems security and information assurance and to demonstrate how these systems are used throughout global organizations. The focus of this program will be on the key components of information systems assurance and cybersecurity; people, software, hardware, data, security, and communication technologies, and how these components can be integrated and managed to

create competitive advantage. The National Security Agency and the Department of Homeland Security have designated ENMU-Ruidoso as a National Center of Academic Excellence in Cyber Defense (CAE-CD).

This program is specifically designed to prepare students in the National Initiative in Cybersecurity Education (NICE) framework for Operate and Maintain and Protect and Defend, and the DoD Cyber Workforce Framework in IT/(Cyberspace) and Cybersecurity or to provide current information systems professionals with an Information Systems Security certificate to meet the needs of current and future employer requirements.

The program maps to a Cyber Defense Infrastructure Support Specialist job position based on NICE and DoD DCWF framework. Upon completion of this program, students will receive a university certification of completion, the CompTIA Security+ and ECCouncil Certified Ethical Hacker (CEH)<sup>™</sup> industry certification in addition to their degree.

The program aligns with the Cyber Defense Infrastructure Support Specialist role, meeting NICE and DoD DCWF standards. Graduates receive a university certificate, CompTIA Security+, and ECCouncil Certified Ethical Hacker (CEH)<sup>™</sup> certifications with their degree. ENMU-Ruidoso's IT and Cyber Security Department offers various programs, including the CAE/CD Program for an Information Systems Cybersecurity Associate of Applied Science degree, alongside non-validated programs like the Computer & Network Security Certification and Apprenticeship Programs.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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# EASTERN WASHINGTON UNIVERSITY



EWU Catalyst Building in Spokane, WA

The Cybersecurity Institute for Bridging Education and Research (CIBER) at **Eastern Washington University (EWU)** emphasizes real-world experience integrated with hands-on, practical, and ethical hacking laboratories. EWU prepares the next generation to design, harden, and protect computer and network systems for all cybersecurity environments.

Our mission is to train and support those who will fulfill the computing and cybersecurity needs of private organizations, as well as local, tribal, regional and national governments, by expanding opportunities for personal transformation through excellence in learning, scholarship, and service. We are committed to providing diverse, equitable, and inclusive educational opportunities to all students. EWU equips students with the knowledge and skill sets necessary for the future of computing and cybersecurity.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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EWU considers participation in cyber defense and cyber physical system competitions an important part of student development. The university supports clubs dedicated to cybersecurity in competitions that include the Department of Energy CyberForce Competition, regional and state capture-the-flag competitions, the Collegiate Cyber Defense Competition, and NCAE cyber games. EWU is the 2023 NCAE Cyber Games National Champion! EWU has excellent and well-known faculty members with practical experience and deep knowledge in network security, penetration testing, and cyber physical systems security.

CIBER at Eastern Washington University (EWU) has several key objectives. It aims to offer educational programs in critical areas of cybersecurity, including information assurance and network security, among others. Additionally, CIBER is focused on developing a top-tier research environment in cybersecurity for both faculty and students. An essential part of its mission involves establishing and nurturing partnerships at various levels, from local to national, to facilitate real-world, practical learning experiences. These goals collectively ensure that CIBER contributes significantly to the field of cybersecurity education and research.

Information assurance and cybersecurity topics are integrated into the undergraduate curriculums offered within the Department of Computer Science and Electrical Engineering into a Bachelor of Science in Computer Science with a cybersecurity minor. Students completing the NCAE-C course requirements will receive a certificate of completion.



ERAU - Daytona Beach Campus

**Embry-Riddle Aeronautical University – Daytona Beach** campus is designated as a National Center of Academic Excellence in Cyber Defense Education since 2016. As leader in aviation and aerospace education, ERAU has undertaken major efforts to address the need for a high-skilled aviation cybersecurity workforce. ERAU has extensive capabilities in all computation and communication services related to flight operations, such as airborne hardware and software, avionics equipment, and communication data links. ERAU cybersecurity programs instill the expertise to protect these critical systems.

The Cybersecurity and Assured Systems Engineering (CyBASE) Center coordinates cybersecurity activities across the university academic departments, with the Cybersecurity Engineering Lab serving as the main facility. CyBASE faculty and students have

made substantial contributions to the aviation cybersecurity body of knowledge through direct work with aviation industry stakeholders, and dissemination of their work through prestigious venues and expert forums.

ERAU – Daytona Beach offers a Cybersecurity Engineering Area of Concentration for the Bachelor of Science in Computer Science, and the Master of Science in Cybersecurity Engineering. ERAU is also an NSF REU site for unmanned aerial vehicles cybersecurity research and an NSF CyberCorps® Scholarship for Service institution.

ERAU graduates are well-positioned to become experts in the protection of the critical aviation cyber infrastructure.

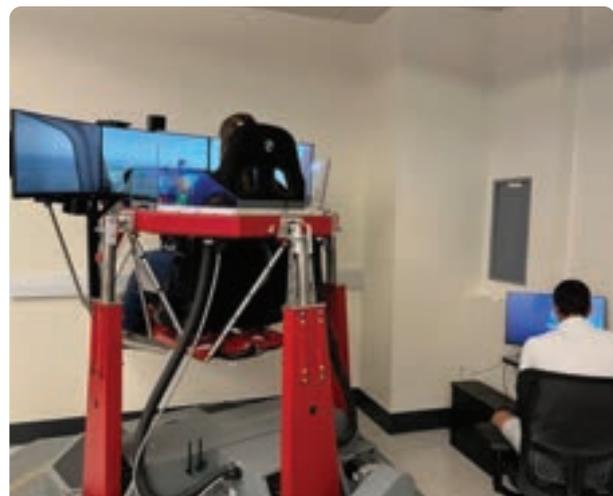
## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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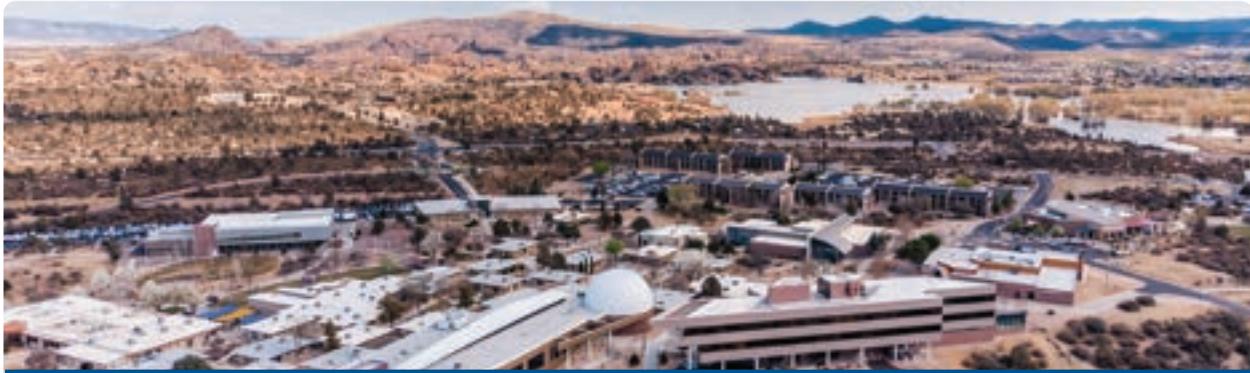
daytonabeach.erau.edu



CyBASE Student Activities



# EMBRY-RIDDLE AERONAUTICAL UNIVERSITY - PRESCOTT



ERAU-Prescott Campus

**Embry-Riddle Aeronautical University (ERAU)** is a private, not for profit, institution with a history dating from the early days of aviation. Its residential campus in Prescott, Arizona, opened in 1978 and has been designated as a CAE-CD since 2019. Over 3000 students are enrolled in 25 bachelor’s degrees in fields such as cyber intelligence and security (CIS), global security and intelligence studies, aeronautical science, engineering, and space physics, and three master’s degrees in CIS, security and intelligence studies, and safety science. The bachelor’s degree in CIS is one of a few ABET CSC accredited cybersecurity programs.

This CAE is centered in the Department of Cyber Intelligence and Security, in the nation’s first College of Security and Intelligence, preparing students for productive careers in public and private sectors. This center offers cyber education for the entire

Prescott campus. Faculty are experts in areas such as intelligence, security, forensics, cybersecurity, engineering, and aviation, enabling a truly interdisciplinary experience for students. The center’s state-of-the-art Cyber Lab and Global Security Operations Center enables hands-on education and research in traditional areas of cybersecurity and emerging topics such as artificial intelligence and cyber-physical system security.

The center has multiple DoD CySP scholars, supports cross-college cyber clubs including the first Women in Cyber Security (WiCyS) club in Arizona, and engages students in unique discovery and outreach activities in CIS. This center offered the world’s first aviation cybersecurity competition to high schools, community colleges, universities, and the professional community worldwide at conferences such as DEFCON and A-ISAC Summit in 2020.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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ERAU-Prescott Cybersecurity Students



# ENTERPRISE STATE COMMUNITY COLLEGE



Enterprise State Community College Campus

**Enterprise State Community College (ESCC)** is a highly regarded institution that plays a crucial role in the education and training of over 2,000 students each year. With campuses in Enterprise and the Alabama Aviation Colleges in Andalusia and Ozark, ESCC offers a comprehensive educational experience that caters to a diverse student body. These campuses collectively align with the mission of the Alabama Community College System, which is to provide education and training that prepares students for high-wage, high-demand careers on both a national and global scale.

At ESCC, students have a wide range of educational opportunities at their disposal. The college offers various associate degree programs and certificate options, ensuring that students can tailor their education to meet their specific goals and interests. These programs cover a spectrum of disciplines,

including but not limited to healthcare, technology, business, and aviation. This diversity of academic offerings allows students to pursue their passions and acquire the knowledge and skills necessary to excel in their chosen fields.

One of the notable aspects of ESCC is its focus on preparing students for the ever-evolving job market. By aligning its programs with high-wage, high-demand careers, the college ensures that its graduates are well-equipped to meet the demands of the workforce. This emphasis on practicality and relevance is a testament to ESCC's commitment to student success and its dedication to contributing to the economic development of the region.

Enterprise State Community College serves as a vital educational institution that not only provides diverse academic programs but also actively supports students in their pursuit of high-wage, high-demand careers. With campuses in key locations and a mission focused on the needs of the workforce, ESCC plays an integral role in shaping the future of its students and the broader community.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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ESCC Information Security Student



# ESTRELLA MOUNTAIN COMMUNITY COLLEGE



EMCC Main Campus Avondale

**Estrella Mountain Community College (EMCC)** was designated a CAE-CD institution in 2014. This Hispanic Serving Institution offers the Information Technology Security Certificate as well as the Information Technology and Power Systems Security Associate of Applied Science (A.A.S) degree.

This program is uniquely positioned to help combat the shortage of highly trained cybersecurity technicians. The program teaches students essential cybersecurity concepts and allows them to specialize in an area. Students are able to select from one or more of the following specializations: Network Security, Linux Systems Security, Microsoft Systems Security, and Power Systems Security. The Power Systems specialization focuses exclusively on the power and energy sector and has been described as a one-of-a-kind by various industry representatives. EMCC's cybersecurity curriculum was developed

through a close working relationship with an industry advisory board that is composed of representatives from the public and private sectors. Furthermore, the curriculum went through a rigorous vetting during the spring of 2017 by local cybersecurity industry members. The relationships and information gleaned from the vetting process has been used to improve EMCC's curriculum and to help guide students towards internships and/or employment.

As students' progress through the program, their coursework will provide them the required skills necessary to make them sought after job candidates. Additionally, the curriculum prepares them for the rigors of IT security industry certification exams.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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EMCC Instructional Computing faculty, Larry Heinz, explains cybersecurity to students



# EXCELSIOR UNIVERSITY



Excelsior University Commencement

**Excelsior University**, an accredited, not-for-profit online learning institution founded in 1971, focuses on providing educational opportunities to adult learners and contributes to the development of a diverse, educated society with an emphasis on serving individuals who are historically underrepresented by higher education. Excelsior meets students where they are—academically and geographically—removing obstacles to education through affordable access to quality instruction and learning assessment.

Excelsior University is designated by the National Security Agency and Department of Homeland Security as a Center of Academic Excellence in Cyber Defense Education. Its online, career-aligned, interdisciplinary BS in Cybersecurity and MS in Cybersecurity programs prepare students for advancement in the areas of cyber operations,

cybersecurity management, cybersecurity technology, and nuclear cybersecurity as well as for industry certification exams, including the Security+ certification.

Since 2017, Excelsior students have had the opportunity to practice what they learn by participating in the National Cyber League’s cybersecurity competitions. Through a series of challenges, students demonstrate their ability to identify hackers from forensic data, break into vulnerable websites, recover from ransomware attacks, and more.

The National Cybersecurity Institute (NCI) at Excelsior University is an academic and workforce development center dedicated to assisting government, industry, military, and academic sectors meet the employment challenges within the cybersecurity workforce. Collaborating with both public and private industry, NCI is leading a coordinated effort to build a diverse, equitable, and inclusive cybersecurity workforce and influence an informed leadership that implements cutting-edge education and policy.

## DESIGNATIONS

- CAE-Cyber Defense

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Excelsior meets students where they are—academically and geographically.



The Mansion - Florham Campus

**Fairleigh Dickinson University (FDU)**, a National Center of Academic Excellence in Cyber Defense, strives to offer students with the transformational, intercultural, and ethical experiences necessary to participate, lead, and prosper in the global marketplace of ideas, commerce, and culture.

Founded in 1942 by Dr. and Mrs. Peter Sammartino, FDU has grown into the largest private university in New Jersey. Today, more than 11,600 students from 32 states and 72 countries are enrolled on the University's two campuses in New Jersey and its international campuses in Wroxtton, England and Vancouver, Canada. FDU offers multiple undergraduate and graduate degrees and certificate programs in various disciplines through its 2 colleges and 7 schools. It has offered degree programs in computer science since 1975 and concentrations in cybersecurity since 2010. The undergraduate

information technology program started in 2004 offers a concentration in security and forensics since 2015. FDU Center for Cybersecurity and Information Assurance was established in 2012, paving the way for FDU's CAE-IAE, CAE-CDE, and CAE-CD designations in 2013, 2015, and 2021, respectively.

Our CAE designation has resulted in a steady growth of student enrollment, engagement of faculty in course and program developments, and thriving student research and scholarship for service experiences through the NSA Cybersecurity National Action Plan (CNAP) grant in 2017, DoD Cyber Scholarship funding since 2019, and a subaward from Education Pathway National Center (EPNC) since 2022. Ongoing faculty research on hardware security, IoT, artificial intelligence, and physical security further strengthens the training of cyber defenders for our country.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Dickinson Hall - Metro Campus



FTCC, Thomas R. McLean Administration Building

The **Fayetteville Technical Community College (FTCC)** Systems Security & Analysis program, a CAE-CD through 2028, provides students with an immersive educational journey, refining essential skills for analyzing and implementing information security. Our curriculum is intricately designed to address modern cybersecurity obstacles, seamlessly blending theoretical knowledge with practical proficiency that meets industry standards.

FTCC stands out due to our steadfast commitment to integrating academic excellence with practical, real-world applicability. By infusing industry insights and hands-on experience into our curriculum, we ensure graduates possess proficiency in both theory and application. This commitment positions our students as invaluable assets in the cybersecurity arena right from the start. We provide a solid foundation in IT fundamentals, with a focus on networking and

security. Moreover, we prioritize accessibility by reducing or eliminating book costs, collaborating with industry experts, and offering flexible online courses.

Furthermore, our program integrates cloud-based lab environments that mirror the real-world technology students will encounter in their careers. These platforms enable students to learn and practice their skills conveniently from any location at any time.

In addition, students engage in complimentary cyber competitions like NSA Codebreaker and NCAE Cyber Games to further hone their abilities. These initiatives promote hands-on learning and the practical application of cybersecurity expertise. As a member of the Carolina Cyber Network (CCN), we are committed to actively creating pathways for students to acquire real-world experience before graduating from our program.

In conclusion, at FTCC, our program is driven by our passion for student success and our faculty's dedication to mentorship. We're more than just educators; we're advocates for tomorrow's leaders. Together, we're making a meaningful impact on our students and the cybersecurity landscape. Our program fosters a vibrant community of learners united by a commitment to IT excellence. Through our student-centric approach, we empower individuals from all backgrounds to thrive in the dynamic field of cybersecurity.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Center for Cybersecurity & Data Science

**Ferris State University** is part of the state university system of Michigan. The ABET accredited Bachelor of Science in Information Security & Intelligence (ISI) program is available face to face, via hybrid and fully online. The ISI programs are designated as a National Security Agency Center of Academic Excellence in Cyber Defense.

Housed in a new \$32 million facility, the program is part of the Center for Cybersecurity & Data Science. This includes one of the most advanced man-trap secured double nested two room Faraday facilities in the United States, as well as built for purpose competition space, pen testing labs and a space/satellite lab. The facility also includes separate segmented research networks, collaboration facilities, and a working digital forensic cybercrime lab. The ISI program was one of the first cybersecurity programs in the United States and is

distinguished as being designed from the ground up rather than modifying an existing degree.

ISI students focus on cybersecurity, artificial intelligence, information assurance, compliance and auditing, digital forensics, business intelligence, incident response, and project management. The program has over a dozen industry partnerships including Amazon Web Services Academy, EC-Council Accredited Training Center, and CompTia Academy. Ferris State University was the first University in the United States to be designated as a Department of Defense/Air Force Cyber Command Center of Digital Forensic Academic Excellence.

The Master of Science in Information Security & Intelligence, which was ranked #14 in the United States by US News & World Reports for graduate IT programs in 2024. The graduate program is available as an accelerated master's program for ISI students.

Each ISI faculty member has more than 10 years of in-field work experience, an average of four industry certifications, and has published numerous books and journal articles. Further demonstration of research activity includes funding from the National Science Foundation, National Security Agency, Department of Defense, and other organizations. The faculty include 3 Fulbright Scholar recipients and students originating from 58 countries.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Entrance to FAU's Main Campus

**Florida Atlantic University's Center for Cryptology and Information Security (CCIS)** was established in the fall of 2003 by Spyros Magliveras as a FAU College of Science center with funding provided by a federal earmark. Today it is founded on the unique strengths of cryptology and information security specialists in four different colleges of FAU: the College for Design and Social Inquiry, the College of Business, the College of Engineering and Computer Science, and the College of Science. In July 2016, FAU and the Airforce Research Laboratory, Information Directorate, Rome, New York, US (AFRL/RI) entered into an Education Partnership Agreement for a period of 5 years. Moreover, CCIS established an MoU with the Spanish National Cybersecurity Institute (INCIBE).

Research of the center faculty is funded through various national and international sources and covers

a broad spectrum of topics, including cryptology, cybercrime, cyber forensics, operational cybersecurity, critical infrastructure security, data analytics, internet measurement, secure systems, security from an interdisciplinary perspective, social perspectives of information security, and more.

Center faculty is actively involved in the organization of major scientific conferences, and two managing editors of the Journal of Mathematical Cryptology are with CCIS. FAU is well known for its work in quantum-safe cryptography, including the co-authorship of four semi-finalists in NIST's ongoing standardization effort in post-quantum cryptography, participation in an International Telecommunication Union's study group to develop standards for quantum cryptography, and a 2018 NATO Science for Peace and Security Partnership Prize for a project in the area of post-quantum cryptography.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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A conversation on one of FAU's six campuses.



FAMU Campus

At **Florida A&M University**, we recognize the incessant importance of information security. The **Florida A&M University Center for Cyber Security (FCCS)** recognizes that as technology advances, the world becomes progressively more challenging. FCCS focuses on education and research and development for all aspects of information security, including systems vulnerability assessment, theory development and formalization methodologies and mobile digital forensics. FCCS is aligned with and supportive of Florida A&M University values and mission which include:

- To promote, coordinate, implement education research and innovation in cyber defense and cybersecurity
- Ensuring participation in FCCS research projects and educational endeavors is open to faculty, visiting scholars, undergraduate, and graduate

**DESIGNATIONS**

- CAE-Cyber Defense

**CONTACT INFORMATION**

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- students including students from diverse disciplines and underrepresented populations
- Promote and value teaching, scholarships, and active learning
  - Encourage experimentation, innovation, and creativity and involve graduate and undergraduates in cyber defense and cybersecurity research

FCCS core objectives and purpose include:

- Offer coursework leading to certificates in Cyber Defense and Cybersecurity that align with National Security Agency and Department of Homeland Security standards as defined by the National Centers for Academic Excellence Cyber Defense Program Office
- Increase minority participation in Cyber Defense and Cybersecurity related careers
- Support university initiatives and projects Cyber Defense and Cybersecurity
- Establish a program of research in Cyber Defense and Cybersecurity
- Serve as a community, regional, and national resource for educational institutions, small businesses, and the general population

The activities of the FCCS fall into five major areas which include:

- Research
- Curriculum and standards
- Education and training
- Service and outreach
- Efforts to gain certification as a CAE-CD



# FLORIDA INSTITUTE OF TECHNOLOGY



HIAI is located in the Harris Center for Science and Engineering

In 2009, **Florida Tech** founded the **Harris Institute for Assured Information (HIAI)** to serve as the University's focal point for research and education in cyber defense. The National Security Agency and Department of Homeland Security designated Florida Tech as a Center of Academic Excellence in Research in 2011.

HIAI provides labs and infrastructure for faculty and students engaged in cyber defense-related research. The president of Florida Tech and board of trustees designated cybersecurity as the first of five Pillars of Excellence. This designation represents the University's commitment to cyber defense research and education with significant local and national impact.

Research at HIAI includes distributed coordination and command and control for cyber operations,

cyber emulation environments, human-computer interaction, biometric authentication, and Internet of Things. Over the past 5 years, HIAI has been awarded over \$9 million in research funding and has supported the cyber defense-related research activities of a total of 12 Ph.D. and 9 master of science students.

Faculty and students at Florida Tech actively participate in research in all six of the core cyber defense areas, as demonstrated by a wide variety of publications, patents, research collaborations, and technology transfer agreements with local and national corporations, government agencies and universities, including DHS, DARPA, DoD, AFRL, Mitre, Harris Corporation, Raytheon/BBN, Notre Dame University, University of Florida, and Worcester Polytechnic Institute.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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Florida Tech Cyber Range



# FLORIDA INTERNATIONAL UNIVERSITY



Florida International University

**Florida International University (FIU)** is a leading education and research institution located in Miami, a growing technology hub. FIU is an urban, multi-campus, public research university serving a diverse student population engaging collaboratively with local and global communities.

At FIU's College of Engineering and Computing, our faculty and students are at the forefront of technological and economic developments. We offer a range of fully accredited bachelor's, master's, and doctoral degree programs in engineering, with more than 8,500 degree-seeking students. Since 2014, FIU has been offering CAE-CD education and CAE-R research through the department of Electrical and Computer Engineering (ECE). The department offers degree programs with emphases on cybersecurity through our Bachelor of Science in Computer Engineering with a concentration in Cyber

Defense, Master of Science Computer Engineering, and our Electrical and Computer Engineering Ph.D. specializing in cybersecurity. A large number of our faculty has considerable industrial experience, and many maintain active consulting roles to provide current and relevant knowledge to the students in classroom and research settings.

The ECE department is a leader in teaching and research with experimental and hands-on application of technology in cybersecurity throughout our programs. Our laboratories for cybersecurity, Advanced Wireless and Security Lab (ADWISE), Analytics for Cyber Defense, Center for Proactive ANalytics and Data-Oriented Research on Availability & Security (PANDORAS), Cyber-Physical Systems Security Lab (CSL), and other available resources fosters an environment for students to learn, innovate, and apply their knowledge to align with industry and academic demands addressing cybersecurity challenges and their solutions.

The ECE department has provided educational opportunities to students interested in cybersecurity through the NSF's CyberCorps Scholarship for Service (SFS) and other grants. It has also hosted GenCyber camps for middle and high school teachers, is a CyberNet Miami Academy, and has provided cybersecurity training for faculty from the CAE community.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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# FLORIDA MEMORIAL UNIVERSITY



Florida Memorial University

The BS in Cybersecurity Program supports **Florida Memorial University's** mission to enhance the lives of our constituency through leadership in cybersecurity by educating the future workforce in cybersecurity principles, engaging in lifelong learning, demonstrating ethical decision-making, and providing a commitment of service to society.

offers undergraduate and graduate degree programs designed to prepare students for today's highly competitive technological society.

Florida Memorial University is a Historically Black College and University (HBCU) in Miami Gardens, Florida, and is one of the oldest HBCUs in the state. Founded in Live Oak in 1879, FMU relocated to St. Augustine in 1900, and moved to its current location in 1968.

FMU has a culturally diverse and international student population and is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). The University

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Dr. Wongsaroj helping a student



# FLORIDA STATE UNIVERSITY



FSU's Westcott Building

**Florida State University** is dedicated to excellence in teaching, research, creative endeavors, and service. The university strives to instill the strength, skill, and character essential for lifelong learning, personal responsibility, and sustained achievement within a community that fosters free inquiry and embraces diversity. Florida State University is classified in the Carnegie Classification System as an R1: Doctoral University, with very high research activity.

The Computer Science Department hosts a diverse set of quality education programs: six distinct Bachelor programs, four Master of Science majors, including a Cybersecurity major and Computer Network and System Administration major, and a Doctoral program. We have over 1,000 major students in the BS/BA programs and over 280 graduate students working towards their Master of

Science and Doctoral degrees.

FSU's Center for Security and Assurance in IT (C-SAIT) was first established in 1999 and helped FSU get designated an NSA Center of Academic Excellence in Information Assurance Education (CAE-IAE) in 2002, and a Center of Academic Excellence in Research (CAE-R) in 2009.

C-SAIT serves as a focal point for members of different academic disciplines, government, and industry, to carry out world-class research and advance the practice and public awareness of information technology security and assurance through education and public service. The primary function of the Center is to provide an environment that fosters world-class, applied research in information security technology, with a focus on innovation and learning.

## DESIGNATIONS

- CAE-Cyber Defense

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Center for Security & Assurance in IT (C-SAIT)  
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Summer HS CTF training at FSU



Fordham University Lincoln Center Campus

Our mission at **Fordham University's** cybersecurity master's program is to cultivate top-tier cybersecurity professionals equipped to meet national and international demands. The Advanced Certificate in AI for Cybersecurity is unique to our program, emphasizing our commitment to integrating AI education within our master's curriculum. This initiative ensures graduates are versed in traditional cybersecurity techniques and skilled in applying AI and data science methods to address complex cybersecurity challenges.

The cybersecurity master's program offers rigorous programs that blend theoretical knowledge with practical experience, facilitated by expert educators from academia, government, and industry. We emphasize the importance of interdisciplinary research and outreach activities, providing a robust platform for students to engage in cyberdefense

exercises, competitions, and cybersecurity conferences. Our comprehensive approach extends to community outreach, enhancing cyber awareness across various sectors.

Our goals include establishing cutting-edge undergraduate and graduate programs addressing modern cybersecurity threats, promoting our programs globally, and executing research projects contributing to the field's body of knowledge. By doing so, we aim to attract students and faculty passionate about cybersecurity, further enriching the academic and research environment.

Fordham's unique positioning in hosting the International Conference on Cyber Security and our industry partnerships and community outreach efforts solidify our role as a leading cybersecurity education and research hub in New York and beyond.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Fordham University Rose Hill



Forsyth Tech Main Campus

At **Forsyth Tech**, proudly known as the home of the Trailblazers, we are deeply committed to fostering a culture of equity, inclusion, and belonging. Our foundational belief is that by empowering our students, we can instigate positive change within our community. This commitment is encapsulated in our mission statement, which asserts Forsyth Technical Community College's dedication to advancing student success through excellence in learning, completion, equity, and post-graduation outcomes. Our vision further elaborates on this commitment, positioning Forsyth Tech as a catalyst for equitable economic mobility, empowering lives, and transforming communities.

The college has earned recognition as a Leader College by Achieving the Dream (ATD), a national nonprofit that champions community colleges as vital agents of equity and economic mobility.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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This designation underscores our role in leading initiatives that support community development and student success. Additionally, in 2024, Forsyth Technical Community College faculty and staff have the honor of being part of the inaugural cohort of the Community College Growth Engine Fellowship Program. This innovative program brings together 11 higher education leaders from across five states to develop and implement micro-pathways. These are defined as short-term, stackable, job-relevant credentials that can be completed in a year or less, designed to equip students for the skills-driven contemporary work environment.

Our commitment to excellence is further exemplified in our Cybersecurity and Systems Security programs, which are actively involved in several prestigious projects, coalitions, and national centers. These include the Career Pathways National Center, aimed at facilitating K-12 articulation agreements; the Cyber Corps: Scholarship for Service, in collaboration with Charlotte; the North Carolina Partnership for Cybersecurity Excellence (NC PaCE); the Carolina Cyber Network (CCN); the NSF ATE Cyber Fellows Grant; and contributions to the RING Project.

Each of these affiliations demonstrates Forsyth Tech's dedication to not only advancing the educational and career prospects of our students but also to contributing significantly to the broader field of cybersecurity and systems security.



Clocktower, Franklin University, Columbus, OH

Since 1902, **Franklin University** has been a pioneer in meeting the needs of adult students who have the ambition to continue their college education in combination with other responsibilities. Serving adult learners wouldn't be possible without a dedicated team of staff, faculty and board members who live out our mission, vision and values every single day. Find out what drives us to serve you and the rest of our students with excellence.

Franklin's excellence is evident in our programs including the applied B.S. Cybersecurity degree. Cybersecurity topics include hands-on lab experience, realistic scenarios, and opportunities to create the work product for the content area such as a risk assessment or forensic report. Courses in cybersecurity include fundamentals, information assurance, network security. Risk management, digital forensics and incident reporting, application

security, and security engineering and assessment.

Franklin offers 100% online courses in 6- and 12-week format. With tuition under \$400 per credit we are one of the most economical options in education and students can transfer up to 94 previously earned college credit hours. Our program has 124 semester hours of essential instruction in topics including: communication skills, learning strategies, research writing, statistics, networking, database management fundamentals, programming, web page construction, Linux, and cloud fundamentals

Extra curricular opportunities include membership in the ACM club and Cybersecurity Group which hosts guest speakers, participates in cybersecurity competitions and challenges, supports study groups for popular certifications, and provides a calendar of cybersecurity events, pod and webcasts, and articles and current events related to cybersecurity.

Franklin University is proud that 98% of our graduating students would recommend Franklin to their family, friends, and/or colleagues. We provide a Tuition Guarantee to inflation proof your degree costs by locking-in your tuition rate from day one through graduation.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Fullerton College Library

**Fullerton College** is the most longstanding California community college in continuous operation and the number one transfer institution to California State University, Fullerton every year for the last eight years. The college serves a diverse student population earning the HSI and AANAPISI designations. Diverse Issues in Higher Education ranked Fullerton College among the top 10 community colleges in California and within the top 25 nationwide for awarding degrees to students from Black, Latino/Latina, Asian, and Pacific Islander communities in their "Top 100 Degree Awards List".

The CAE Cyber Defense program is dedicated to successfully equipping students with the necessary skills and knowledge in cybersecurity. Whether students aim to continue their education at four-year universities, become more savvy digital consumers, or enter the cybersecurity workforce directly, this

program offers both an associate degree and stackable certificates.

The Hornet Security Education Center cultivates meaningful collaborations with the broader industry, educational institutions, and professional bodies. Students gain invaluable insights and experiences through a variety of extracurricular activities, including student poster presentations, career fairs, competitions, and industry presentations. This enriching environment is further enhanced by the expertise of our dedicated faculty all aimed at guiding our students toward fulfilling and impactful careers in their chosen fields.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

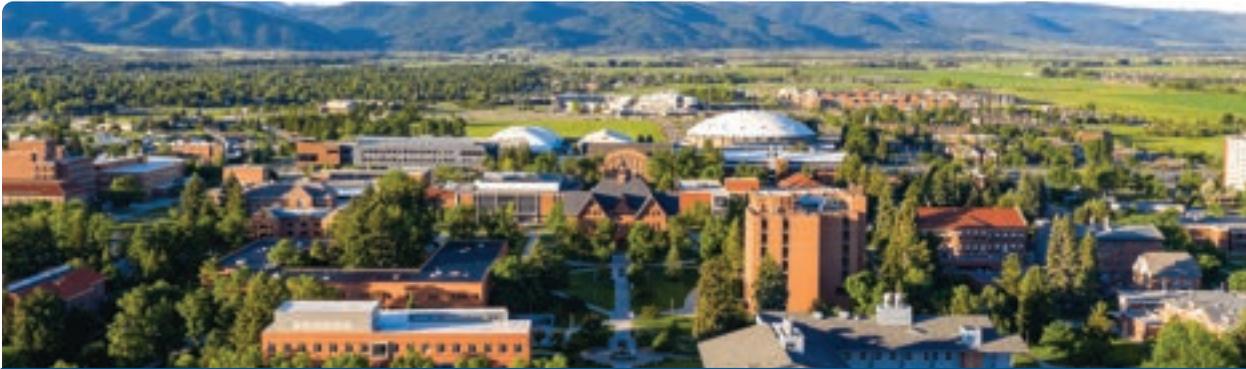
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Fullerton College Students



Montana State University campus in Bozeman, MT.

**Gallatin College Montana State University (MSU)**, located in Bozeman, Montana offers programs that accelerate the time to graduation and the start of a successful career. The Information Technology (IT) Cybersecurity and Information Assurance programs prepare students to support the information security needs of businesses. Program graduates are able to identify cyber threats, implement and maintain proper security measures, respond to system intrusions, and provide creative solutions to emerging risks. Students are also prepared to sit for numerous certifications including: CompTIA Security+, CompTIA Network+, CompTIA CySA+, and EC-Council's Certified Ethical Hacker.

Gallatin College MSU offers a two-year Associate of Applied Science (AAS) degree as well as a one-year Certificate of Technical Studies in Cybersecurity and Information Assurance. The AAS degree includes

foundational knowledge in IT network technology while the certificate program provides professional development in cybersecurity to IT professionals with previous IT experience. Gallatin College also offers concurrent enrollment and early college IT courses allowing regional high school students to earn college credit in anticipation of enrollment in the college's Cybersecurity program.

The college's programs are designed to support both students and the local economy, helping its talented graduates get their foot in the door in thriving industries while also preparing students who wish to pursue related education at MSU. With small class sizes and hands-on learning, students learn relevant skills, industry best practices, and work closely with instructors to discover their unique talents and passions on their journey to a fulfilling career.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Annual GC Cyber Competition



Aerial view of Mason's Fairfax, VA campus

Nestled in the National Capital Region, **George Mason University** stands as Virginia's largest public research university, enrolling over 40,000 students from more than 130 countries and all 50 states. Mason has grown rapidly over the past half-century and is recognized for its entrepreneurship, remarkable diversity, and commitment to accessibility. With over 200 degree programs, Mason empowers students to align their education with their career aspirations and personal interests. Notably, Mason boasts a six-year graduation rate across demographics, exceeding the national average and demonstrating its commitment to student success.

George Mason University is one of the National Security Agency's original seven Centers of Academic Excellence in Information Assurance Education and earned its CAE-R designation since it was first

introduced in 2008. Mason is currently designated as CAE-CD through 2027 and CAE-R through 2028. Its academic programs in cyber security include a BS in Information Technology (BS IT), with a concentration in Cyber Security (CYBR), and a BS in Cyber Security Engineering (BS CYSE). BS IT CYBR is Mason's NACE-C-validated cybersecurity Program of Study (PoS). The Center for Secure Information Systems (CSIS), established in 1990 as the first academic center in security at a U.S. university, leads cyber security research at Mason.

Renowned for its groundbreaking research, Mason holds the distinction of being one of the youngest universities to achieve R-1 research status in the Carnegie Classification of Institutions of Higher Education. Recognized by U.S. News and World Report as Virginia's top institution and ranked 9th nationally for innovation among public universities, Mason continually pushes the boundaries of knowledge and fosters an environment that values disruptive thinking.

With 88% of graduates reporting positive career outcomes, Mason's commitment to excellence transcends the classroom, as alumni make significant contributions across various sectors, including business, technology, and healthcare. Through interdisciplinary collaborations and innovative programs, Mason's faculty and students continue to lead the charge in addressing societal challenges and driving meaningful change.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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Student working on BSIT Capstone in lab

With over 25,500 students, **Georgia Southern University's** 10 colleges, schools and departments offer approximately 138 different degree programs at the bachelor's, master's and doctorate levels. These programs are offered on the University's beautiful campuses in Statesboro, Savannah, Hinesville and through online instruction. With a single vision of growing others, our research is focused on community impact. Our teaching is focused on our students. And our students are focused on their future.

Our Cybersecurity program is housed within the Allen E. Paulson College of Engineering and Computing's Department of Information Technology. Our college's vision is to be a recognized leader in student-centric experiential learning, applied research in engineering and computing, and service to our communities. Delivery of our Information Technology

Department's curriculum involves significant hands-on experiences in world-class facilities. Students are engaged and learn practical, current and applied skills that are valued by employers. Our department makes alliances with industry partners to provide IT majors and students specializing in Cybersecurity experience using state-of-the-art equipment and access to professional-level software.

Our IT internship program, required of all students earning the Cybersecurity specialization, assures that students are work-ready when they graduate. Through hands-on Cybersecurity labs, case studies, and extensive individual and group projects, our Cybersecurity program produces students who are ready to help solve our nation's Cybersecurity issues as soon as they graduate.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Ad for Georgia Southern's Annual Hackathon



# GEORGIA STATE UNIVERSITY



Georgia State University Campus

**Georgia State University (GSU)** is a public research university based in Atlanta, GA, the largest institution of higher education in the state of Georgia and in the top 10 in the nation with more than 54,000 students. GSU ranks among the nation’s top universities in Carnegie Foundation’s elite category of “R1: Doctoral Universities – Very High Research Activity” and is the only university in Georgia to have received both CAE-R and CAE-CD designations.

The Information Security and Privacy: Interdisciplinary Research and Education (INSPIRE) Center is an interdisciplinary center at GSU that brings together individuals and units with an interest in the areas of cybersecurity and privacy, and serves as a central point of collaboration for researchers from units across the campus. The interdisciplinary collaborations enable us to draw insights from different perspectives and effectively address today’s

multi-faceted and complex cybersecurity and privacy challenges.

GSU is a minority-serving institution (MSI), a predominantly Black institution (PBI), and leads the nation in graduating minority students. It ranks No. 1 in the nation among not-for-profit institutions as well as the nation’s historically black colleges and universities (HBCUs) in awarding bachelor’s degrees to African American students. The university has very high racial diversity and 74% percent of students are minorities or people of color (BIPOC) and the diversity of its student body continues to grow. It graduates more Hispanic, Asian, first-generation, and low-income students with a bachelor’s degree than any other university in Georgia.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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GSU Cyber Students



GWU is 3 blocks from the White House

One of the most successful feeder institutions into the federal cybersecurity workforce pipeline, educating and sending computer security experts into government service since 2004, is **The George Washington University (GW)**, with its Partnership in Securing Cyberspace through Education and Service (Project PISCES). Through its Cyber Security and Privacy Research Institute (CSPRI), GW is a Center of Academic Excellence in Research (CAE-R), focusing on research areas in cryptography, secure elections, mobile security, related AI, and social implications of cybersecurity.

GW provides education opportunities for students with diverse backgrounds to become cybersecurity professionals and help protect the safety and security of our nation's information infrastructure. We do this by combining scholarships, community college student access, university coursework

across disciplines, internships, laboratories, and government service. Our unifying and reinforcing Signature Seminar uses current practitioners and recognized leaders in cybersecurity to inspire and motivate our CyberCorps®: Scholarship for Service (SFS) students. It prepares them with the knowledge, perspective, and expertise to perform well in their future government positions, repay their obligation as scholarship recipients, and serve their country.

Our multidisciplinary academic program in cybersecurity and our location five blocks from the White House and a subway ride from hundreds of government agencies combine to make GW's CyberCorps® program attractive for students and for government. Our placement rate for CyberCorps® graduates reflects that fact, as does our success in recruiting and graduating higher than average numbers of women in the field.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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Seminars engage CyberCorps



Germanna Community College, Fredericksburg Campus

**Germanna Community College**, located in Fredericksburg, Virginia, has served the area for over 50 years. Germanna prides itself as a student-centered learning environment, where the needs of our diverse student population are met. Germanna is ranked in the NICHE 2024, “Best Community Colleges in Virginia”.

For the past several years, Germanna Community College has enjoyed the prestigious NSA, CAE-CD designation for our Information System Technology Networking Associate Degree program. Due to our geographic proximity to our nation’s Capital, the surrounding military installations, and industry needs, Germanna has expanded its Cybersecurity initiatives to include adding a Cybersecurity associate degree independent of our Networking Degree, where students can hyper-focus on gaining the knowledge, skills, and abilities necessary to transition

from Germanna directly into positions where they are responsible for contributing to the securing our nations physical and digital infrastructure.

To help facilitate the preparation of our students, Germanna is opening a new location at 10 Center Street, in Stafford, Virginia, where we will house our new Cybersecurity, classroom, range, and lab environment. Tuition assistance is available for applicants with financial need. The Germanna’s G3 tuition assistance program is available for Virginia residents who qualify and are seeking an education in Cybersecurity.

Our goal is to become the institution of choice for area residents to prepare for positions in cybersecurity, including recent high school graduates, career switchers, and industry professionals in need of certifications.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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IST Chair Diggs and Student



Glendale Community College - Established in 1965

**Glendale Community College (GCC)** is located in Glendale, AZ, and are the proud home of the Glendale Gauchos. In 1965 GCC opened their doors to 1,974 students in one liberal arts program housed in temporary facilities. By September 1966 GCC moved to their permanent location on a 147-acre campus anchored by 226 palm trees lining the central mall. They grew from 1 liberal arts program, to 41 associate degrees and 61 certificate programs and has served over 500,000 students.

With the GCC vision of fostering student success by providing innovative quality learning experiences, GCC's Cybersecurity Program was launched and became a CAE in 2018. In 2022, we were named as partner of the U.S. Cyber Command Academic Engagement Network (AEN).

Through a STEM grant, the program developed and built the Gaucho Security Operations Center; with the Grand Opening of phase I taking place in August 2023. The purpose of the GSOC is to partner with surrounding rural municipalities who need assistance in their cybersecurity efforts. The GSOC is a live SOC and is staffed by paid interns (students) in their last semester of their degree charged with monitoring, detecting and informing our clients of vulnerabilities and potential threats to their system.

GSOC provides graduating students with over 300 hours of real-world experience and are closing the gap between academia and workplace ready skills. Providing this opportunity to our students is a rewarding venture that fosters student success.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Gaucho Security Operations Center (GSOC)



# GRAND CANYON UNIVERSITY



Grand Canyon University Campus

**Grand Canyon University (GCU)** is committed to helping students engage in academic learning, develop as leaders, and become ethical professionals that contribute to their communities in the professions they pursue. During their time at GCU, students discover their purpose, develop their gifts, and deploy serving others. Technology programs in Grand Canyon University's College of Engineering & Technology (CET) prepare students for a successful career in the technology sector. GCU's technology programs provide students with hands-on education that fosters creativity and collaboration and allows them to use state-of-the-art equipment not typically available to undergraduate students. Degree programs within the department emphasize emerging and innovative technology trends with GCU's STEM-guiding principles at the core to ensure students receive technical education and develop highly desired soft skills.

GCU's Bachelor of Science programs in Cybersecurity and Information Technology with an emphasis in Cybersecurity strongly emphasize hands-on learning, such as labs, simulations, and real-world projects. Students can work on real-world problems and projects and develop the problem-solving and critical thinking skills needed to succeed in cybersecurity. Both programs have limited theoretical foundation content, necessary understanding is incorporated into the project and assignments to deliver enough cybersecurity principles, such as cryptography, network security, and security management, to meet industry needs. These programs are better suited for students looking for a more applied and hands-on approach to cybersecurity education and ready to join the workforce as soon as they complete their degree.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cyber Students at GCU



GRCC's ATC

The heart of Michigan, **Grand Rapids Community College (GRCC)** embodies a legacy of academic excellence with a modern twist—our Center for CyberSecurity Studies (GRC4S2). Positioned within the innovative Applied Technology Center, GRC4S2 is a beacon of cybersecurity education, reflecting our commitment to information security principles.

Nestled within the dynamic and comprehensive Computer Information Systems department, GRC4S2 is not just an educational experience but a journey into the depths of cybersecurity. Our programs are designed to mesh seamlessly with the professional world, ensuring our students are not only learners but future innovators in the field.

At GRCC, we believe that understanding cybersecurity is fundamental in today's digitized world. Hence, we have created an environment that

fosters intellectual growth, practical skills, and a deep understanding of cyber principles. This is where theory meets practice, where students get the chance to turn their aspirations into tangible skills that echo through the corridors of the industry.

With a proud association with the NSA CNSS national CAE program, GRC4S2 stands as a testament to our dedication to nurturing the next generation of cyber professionals. We invite you to explore the possibilities that GRCC offers in the realm of cybersecurity.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Hands on tech!



GVSU Allendale Campus

**Grand Valley State University (GVSU)**, established in 1960, is a four-year public university located on the west side of Michigan's lower peninsula along the banks of the Grand River. GVSU attracts more than 22,000 students with its high-quality programs and state-of-the-art facilities. The university provides a fully accredited liberal undergraduate and graduate education and has campuses in Allendale, Grand Rapids, and Holland, and regional centers in Battle Creek, Detroit, Muskegon, and Traverse City.

Grand Valley is a comprehensive university, serving students from across Michigan and dozens of other states and foreign countries. Grand Valley offers undergraduate and graduate degree programs in 300+ areas of study. The university is dedicated to individual student achievement, going beyond the traditional classroom experience, with research opportunities and business partnerships. Grand

Valley employs more than 3,000 people and is committed to providing a fair and equitable environment for the continued success of all.

In recognition of the growth and success of its highly regarded School of Computing, the university in 2024 created the College of Computing. GVSU's College of Computing offers undergraduate degree programs in Cybersecurity, Computer Science, Data Science and Analytics, Information Systems, and Information Technology. Graduate programs include Applied Computer Science, Cybersecurity, Data Science and Analytics, and Health Informatics and Bioinformatics. Additionally, GVSU offers 5-year combined BS/MS programs comprised of combinations of the above listed programs. GVSU also offers a variety of graduate-level digital badges, including a digital badge in Cybersecurity.

In 2023 the university established its Institute for Cybersecurity Education and Research (ICER), which has launched programs to expand outreach to middle and high school students to build a broader pipeline of students interested in developing skills in cybersecurity. In 2024, the university also completed installation of its second cyber threat range, allowing for hands-on training and simulation of cyberattacks and response measures.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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**GREAT FALLS  
COLLEGE**  
MONTANA STATE  
UNIVERSITY

# GREAT FALLS COLLEGE MONTANA STATE UNIVERSITY



Great Falls College Montana State University Campus

**Great Falls College Montana State University** is a two-year institution located in Great Falls, Montana. In 2019, it was designated as a Center of Academic Excellence in Cyber Defense for its Associate of Applied Science (AAS) in Network Support and Security degree. The degree is one of five computer technology degrees available through the college, including a Certificate of Technical Studies (CTS) in Cybersecurity for those already working in the computer industry who want to add to their skills and an AAS in Cybersecurity for those just entering the field. Outcomes for these programs are based on the National Institute for Cybersecurity Education (NICE) framework. An added bonus for students - they can complete the CTS in Cybersecurity and an AAS in Programming completely online.

At Great Falls College MSU, students have a lot of opportunities. They can earn industry credentials

such as CCNP, MCSA, CompTIA Network+, CompTIA PenTest+, and CCNA Security. Because of a collaborative working relationship with the military and local community industry partners, students have access to up-to-date training, which includes hands-on experiences and collaborative projects to simulate the workplace and culminates with an internship or capstone project.

On campus, students are able to participate in a Cyber Club, mentor high school and middle school students, and participate in cyber competitions. Of course, none of this would be possible without a strong faculty committed to teaching with backgrounds in government, military, finance and healthcare to distinguish the program.

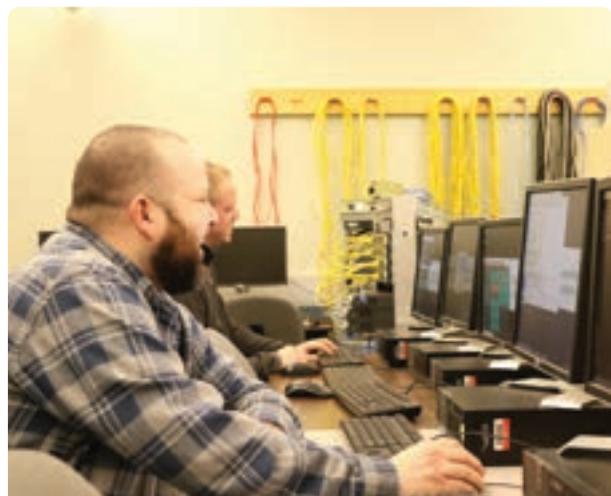
## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Students practice protecting networks



GRC Instructor

**Green River College's** AAS-T in IT Systems and Security program prepares students for entry-level employment in a variety of IT positions such as help desk technician, technical support specialist, network technician, and network or computer systems administrator. Students receive foundational training in a broad range of networking, systems administration, and software development, resulting in a well-rounded knowledge of information technology.

Currently, the AAS-T IT program has over 400 students enrolled in classes. During the second year of the program, students are able to choose between a focus on Software Development or Network Administration and Security. Individuals who graduate from the AAS-T program are able to continue their education at Green River College with a Bachelor of Applied Science Degree in either

Network Administration and Security or Software Development.

Students interested in the AAS-T program can complete classes on campus, in the evenings, or fully online. Classes are offered year round with the option for students to start any quarter. Funding is available through generous college foundation scholarships, financial aid, and worker retraining if applicable.

With over 400 AAS-T students, more than 300 BAS students, and 11 full time faculty to help guide them through the learning process, Green River College is excelling at training IT professionals that are prepared to start work immediately after graduation.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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GRC Cybersecurity Student



Grossmont Campus

**Grossmont College**, founded on the principles of accessibility and academic excellence, stands as a hub of opportunity in our community. Our mission is to provide quality education that empowers individuals to achieve their academic and career goals.

What sets Grossmont College apart is our unwavering commitment to student success. With many programs ranging from transferable general education courses to career technical education, we cater to our student body's diverse needs. Our dedicated faculty members provide personalized attention and foster an inclusive learning environment where every student feels valued and supported.

Grossmont College has promoted cybersecurity competitions with participation in the National Cyber

League (NCL) and the SoCal Cyber Cup for several years. Our students won first place in the SoCal Cyber Cup in 2021 and second place in 2022.

Our state-of-the-art facilities and technology resources further enhance the student experience, providing students with access to cutting-edge tools and equipment to explore their passions and gain real-world experience. As we look to the future, Grossmont College remains committed to our mission of providing accessible, quality education to all who seek it.

Currently, the CSIS department offers courses with a path of completion to a Certificate of Proficiency as a Network and Cybersecurity Technician in one semester, Certificate of Achievement in Cybersecurity and Networking in one year, and an Associate of Science (A.S.) degree in Cybersecurity and Networking in two years with the completion of general education requirements.

Grossmont College is more than just an institution of higher learning—it's a community where students are empowered to thrive academically, personally, and professionally. With our dedication to excellence, diversity, and innovation, we are proud to be a leading force in shaping the next generation of leaders, thinkers, and changemakers in cyber security.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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# GWINNETT TECHNICAL COLLEGE



Lawrenceville Campus

**Gwinnett Technical College** is proud to be designated as a National Center of Academic Excellence in Cyber Defense Two-Year Education (CAE2Y) through academic year 2025.

The goal of the CAE2Y program is to increase the understanding of Cyber Defense (CD) technology, policy, and practices that will enable our nation to prevent and respond to a catastrophic cyber incidents and events. This CAE2Y designation recognizes that Gwinnett Technical College meets the increasing demands of the program criteria that contribute significantly to the advancement of state-of-the-art CD knowledge and practice by developing this important technically skilled workforce.

This designation, issued jointly by the NSA and the DHS, is one of the most prestigious recognitions for cybersecurity excellence a college can receive.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Gwinnett Tech is the first-two-year college in Metro-Atlanta to receive this distinction.

Gwinnett Tech students will learn to master the 15 core competencies identified by NSA/DHS as appropriate for two-year programs. These include cyber defense, security design, cryptography, and ethics. The college designed the coursework to prepare students for entry-level positions in the cybersecurity workforce and to help them to prepare for and pass multiple cyber-related industry certification examinations required by many employers. Gwinnett Tech's associate degree in cybersecurity can be completed in two years or less. For more information on Gwinnett Tech's Cybersecurity program, please visit: [GwinnettTech.edu/cybersecurity/](http://GwinnettTech.edu/cybersecurity/)

Gwinnett Technical College provides a variety of training for faculty and staff, including biannual, mandated cybersecurity training. All Gwinnett Tech students receive information about cybersecurity in New Student Orientation and the First Year Experience course (FYES 1000). Additionally, ICDE's Resources Page also includes links to Gwinnett Tech's Information Technology policies and institutional security as well as general topics in information security.

Our Cybersecurity program will give you the necessary skills to work in the competitive market of cyber security and defense. For more information, reach out to the Center of Academic Excellence Community.



# HAGERSTOWN COMMUNITY COLLEGE



Hagerstown Community College Campus

The **Hagerstown Community College (HCC)** Center for Cybersecurity works to advance the practice and public awareness of information technology (IT) security through education and service. Our faculty offer guidance to students, members of different academic disciplines across the College, local government and industry partners. We are dedicated to bridging education with exploration to provide an environment that fosters applied research in IT security, with a focus on innovation and learning. The National Security Agency and the Department of Homeland Security have designated HCC as a National Center of Academic Excellence in Cyber Defense (CAE-CD) through academic year 2026.

HCC collaborates with a number of other community colleges in the Western Maryland area to provide a thorough and fun education for cybersecurity students to prepare them for the rigors and

challenges of working in the cybersecurity and information technology fields in a wide range of positions.

Some of the recent and upcoming highlights:

HCC's students participated in NSA's Codebreaker Challenge in 2023, and placed in 86th place, out of 461 participating institutions.

A team of HCC students, cybersecurity and computer science majors, took part at the NCAE Cybergames in March 2024, and placed in 5th place, out of 12 participating intuitions (which included both community college and four-year colleges) in this particular division.

In March 2024, HCC was notified that HCC will receive funds to establish and manage its own cyber range, in cooperation with BCR Cyber out of Baltimore. This cyber range will be utilized to create a capstone course for the Cybersecurity AAS program, which will put the students through its paces of engaging and defeating cyber events based on real world occurrences and input from business partners. Additionally, the cyber range will be operated in close cooperation with Garrett College and Allegany College of Maryland.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Hampton University, Hampton, Virginia

**Hampton University** is a dynamic, progressive institution of higher education, providing a broad range of technical, liberal arts, and graduate degree programs (over 80 academic programs). In addition to being one of the top historically black universities in the world, Hampton University is a tightly-knit community of learners and educators, representing 49 states and 35 territories and nations.

The mission of Hampton is to promote learning, the building of character, and the holistic preparation of students for positions of global leadership and lives of service. The University is a historically Black, research-focused institution grounded in a commitment to an education for life, innovation, the creation of new knowledge and artistic works, and respect for diverse cultures. In maintaining THE Standard of Excellence, the following are expected of each member of the Hampton Family: Respect,

Professionalism, Integrity, and Community.

The Information Assurance and Cyber Security Center at Hampton University (IAC@HU), housed within the Department of Computer Science in the School of Science, is a multidisciplinary center devoted to Information Assurance and Cyber Security Education, Research, and Training. The center provides program and curriculum development, workshops, multidisciplinary research opportunities, outreach to other HBCU/MI's and Community Colleges, and access to cyber security research resources.

Through the departmental computer literacy program, which services students across disciplines at Hampton University, the IAC@HU provides cyber security awareness throughout the University. The IAC@HU is designated as a National Center of Academic Excellence in Cyber Defense Education (CAE/CDE) by the Department of Homeland Security (DHS) and National Security Agency (NSA) through 2027.

The Department of Computer Science offers coursework leading to the Bachelor of Science degree in Computer Science, in Computer Information Systems, in Cyber Security – Computer Science Track, and in Artificial Intelligence and Machine Learning (newly added) as well as the Master of Science degrees in Computer Science and in Cyber Security.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

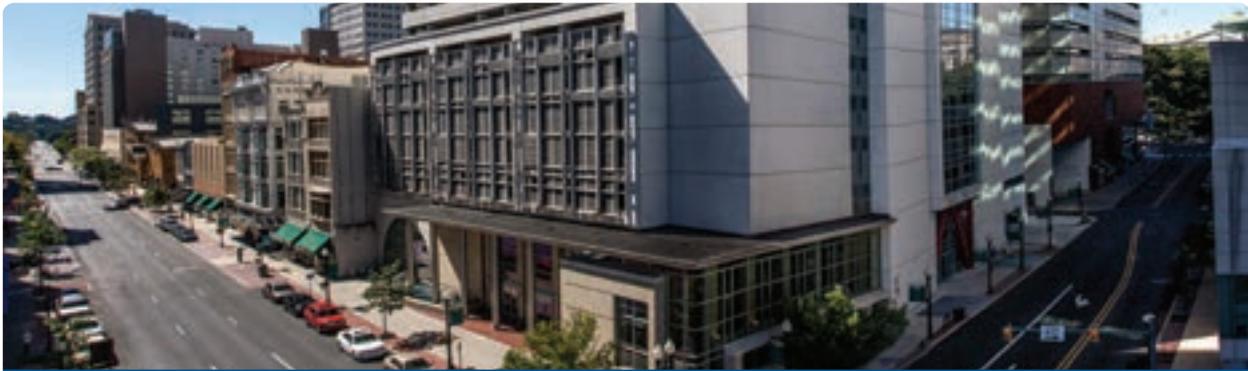
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# HARRISBURG UNIVERSITY OF SCIENCE AND TECHNOLOGY



Harrisburg University of Science and Technology

**Harrisburg University's** Security Center of Excellence (SCE) is dedicated to enhancing the skills of current cyber professionals and educating those aspiring to join the cyber profession. The SCE has adopted the National Security Agency's Center of Academic Excellence standards. Our goal is to contribute to the protection of the National Information Infrastructure. We accomplish this critical goal by providing a continuum of educational opportunities targeted to the current cybersecurity workforce and addressing the critical shortage of cybersecurity professionals through undergraduate and graduate-level education.

Harrisburg University provides a continuum of educational opportunities, starting with our undergraduate and graduate-level cybersecurity programs. For those currently in the cybersecurity profession, many programs and events are offered through the SCE to enhance skills to meet the ever-growing number of cyber threats. Our governments, communities, schools, and businesses, as well as the critical national information infrastructure, are all at risk. Education plays an essential role in meeting these challenges.

Harrisburg University provides undergraduate and graduate degrees in cybersecurity and enhances learning and mentoring opportunities for cybersecurity professionals, safeguarding organizations from cyber threats.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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HU - Class Room



Hennepin Technical College Campus

At **Hennepin Technical College**, you'll find yourself immersed in an Information Technology (IT) program that is recognized as one of the nation's finest. With the guidance of knowledgeable instructors and access to the most current training materials, Hennepin Tech ensures that students are well-prepared to maximize career opportunities through hands-on learning experiences. This program is not only designed for newcomers to the IT field but also caters to current IT professionals seeking advanced courses to propel their careers forward.

The IT program at Hennepin Technical College has earned its reputation for excellence, being ranked second in the list of the top 25 Best Associate Degrees in Information Technology by Grad Reports. This high rating is a testament to the quality education and the successful outcomes its

graduates achieve. On average, graduates from the IT program boast a median salary of \$47,000, against a median student debt of \$15,609, reflecting the program's strong return on investment. Furthermore, students from Hennepin Tech consistently shine in competitions, securing state and national awards annually, which speaks volumes about the quality of education and preparation they receive.

One of the standout features of the program is its Cyber Defense curriculum, which is meticulously designed to align with prestigious industry certifications such as CompTIA Security+, CompTIA CySA+, Cisco CCNA, and EC-Council CEH. This alignment not only enhances the learning experience but also significantly boosts the employability of graduates in the fast-evolving field of cyber security.

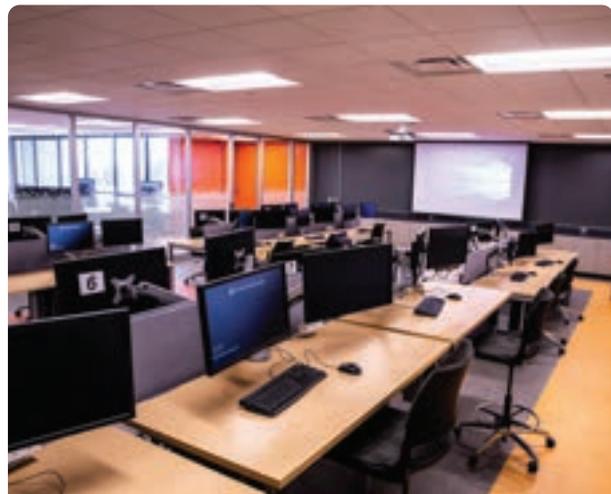
## DESIGNATIONS

- CAE-Cyber Defense

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ITEC Classroom



Henry Ford College

The Cybersecurity program at **Henry Ford College (HFC)** is renowned for its comprehensive coverage of critical areas such as networking, operating systems, databases, and the fundamentals of cybersecurity. Holding the distinction of being the first community college in Michigan accredited as a Center of Academic Excellence (CAE) in Cyber Defense Education by the Department of Homeland Security (DHS) and the National Security Agency (NSA), HFC exemplifies its commitment to excellence in education, scholarship, and service. The program aims to deliver unparalleled support in computing and cybersecurity to local, regional, and national government and private organizations, empowering students to proficiently build, maintain, and protect networks and computer systems across various sectors.

HFC offers a Cybersecurity Certificate of Achievement

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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and an Associate in Applied Science in Cybersecurity, providing a curriculum that spans a broad spectrum of vital computing and cybersecurity topics. This includes providing a solid foundation in computing and networking to understand system operations and communication, system administration for designing, implementing, and managing computer systems, and integration and troubleshooting skills for system and network issues. Furthermore, the program delves into digital forensics, teaching students to investigate cybercrimes and analyze digital evidence, as well as penetration testing, where students learn to assess system and network security through simulated attacks.

Upon completing the Cybersecurity program at Henry Ford College, students are well-prepared for entry-level positions in network administration or information security if they choose not to transfer to a four-year institution or delay further education. Additionally, to accommodate the needs of working professionals, many of the program's courses are available online, making it a flexible option for those looking to advance their skills in this critical and rapidly evolving field.



HFC Students



Highline College campus

**Highline College's** Computer Science and Computer Information Systems (CSCI/CIS) Department is dedicated to preparing students for a diverse range of Information Technology-related careers. These careers include roles such as Computer Programmers, Network Security Engineers, Specialists, Web/Database Developers, and experts in Global Cybersecurity Investigations. The field of Cybersecurity is particularly emphasized, reflecting its rapid growth within the IT industry.

Students at Highline College are trained to become proficient Information Security Analysts, equipped to monitor, test, and implement critical cybersecurity controls that safeguard the operational data and infrastructure of organizations. The curriculum covers the fundamentals of computing systems and networking, and goes beyond to offer hands-on practice with the tools and techniques used

by professionals in digital forensics and incident response.

Highline College provides several program options for those interested in pursuing a career in Cybersecurity, including an Associate of Applied Science (AAS) in Global Cybersecurity Investigations, an AAS in Network Security Engineer, and a Bachelor of Applied Science in Cybersecurity and Digital Forensics. The programs are designed to be comprehensive and practical, offering students valuable experience with real-life computer forensics tools.

This approach is highly appreciated by students and professionals alike, as evidenced by David Matthews, the Deputy Chief Information Security Officer for the City of Seattle. Matthews praised the curriculum for its extensive coverage and hands-on approach, which not only equipped him with the necessary knowledge and skills but also with the tools required in his field. His testimony underscores the program's effectiveness in preparing graduates for successful careers in the ever-evolving domain of cybersecurity.

## DESIGNATIONS

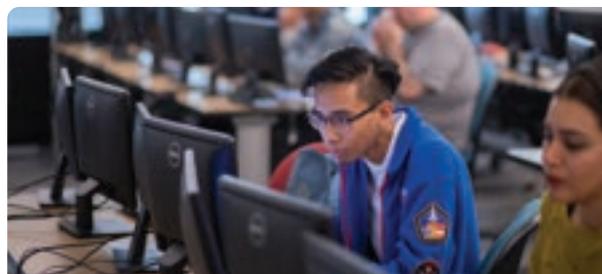
- CAE-Cyber Defense

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ICCDI Student Designers



Hill College Hill County Campus

The mission of **Hill College** is to provide high quality, comprehensive educational programs and services. The college enhances the educational, cultural, and economic development of its service area and assists both individuals and the community to prepare for a more productive life.

Hill College has a long-standing tradition of quality and comprehensive technical education programs. With 28 school district partners, the college promotes cybersecurity awareness, course offerings, curriculum sharing, and professional development, as well as university partnerships with 15 colleges, providing avenues for collaboration with the cybersecurity program. In addition, as a member of the North Texas Community College Consortium, students enjoy seamless transitions from an Associate of Applied Science (AAS) degree to four-year institutions.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Hill College is designated as a National Center of Academic Excellence in cyber defense education for its associate degree in computer science, networking cybersecurity. The curriculum path includes the completion of stackable certificates leading to an AAS. The certification programs leading to an AAS in networking cybersecurity include a Certification of Completion in computer science-technology core and a Certificate of Technology in computer science-networking. These programs prepare students to complete nationally recognized industry certification exams such as Microsoft's networking administration, CompTIA A+, Networking+, and Security+.

Hill College is proud to partner with industry leaders ensuring students obtain the marketable skills needed for successful technical careers. The Computer Science department works closely with workforce education, providing corporate training utilizing the resources received from the Texas Workforce Skills Development grant and the Texas Workforce Commission's Small Business grant, and the Texas Reskilling and Upskilling Through Education (TRUE) grant.

Through these partnerships, discounted exam vouchers, improved online instruction and interactive teaching, dedicated instructors, and professional development, as well as tuition support are provided to students in an effort to support their success in a career in cybersecurity.



Fountain Hall on the Raymond Campus

Since 1917, **Hinds Community College** has provided quality educational programs that are convenient and affordable as well as a wide variety of other opportunities for its community. The largest community college as well as the fourth largest higher education institution in the state, Hinds draws students from more than 70 Mississippi counties to the Jackson metro area. To help students find their purpose, passion and profession, Hinds offers academic, career/technical, secondary, adult, and workforce options at six locations in central Mississippi.

The information Systems Technology (IST) department initiated the cybersecurity AAS degree program in 2008 and received the CAE-Cyber Defense designation in 2022. Our focus is to provide exceptional education based on concepts aligned with Hands-On activities to develop an

understanding and quality skill set that employers desire and experts use in industry. As a Cisco Network Academy and CompTIA Partner, students also prepare for multiple national certifications. The IST department also offers degrees in networking and programming.

Hinds has an articulation agreement with Mississippi High Schools to offer dual credit IST courses used in the cybersecurity program. The Hinds' cybersecurity AAS degree articulates to a BAS in Cybersecurity at Mississippi State University, a CAE-CD, CAE-R, & CAE-CO institution.

Along with industry and government partners, Hinds is dedicated to yield highly skilled and prepared professionals for the future.

## DESIGNATIONS

- CAE-Cyber Defense

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Rankin Campus Cyber Classroom



# HOUSTON COMMUNITY COLLEGE



Houston Community College campus

**Houston Community College (HCC)** stands as a beacon of accessible education and community enrichment in the greater Houston area. Our primary mission is to enhance the local community by providing quality education programs that serve the diverse needs of students of all backgrounds and age, empowering students with the knowledge, skills, and credentials necessary for academic and career advancement. Through degree and certificate programs, continuing education classes, and dual-credit programs, we strive to create pathways for success for all learners.

HCC Southwest College houses the Digital and Information Technology (DIT) Center of Excellence (COE), which provides innovative training and industry credentials in emerging technologies such as artificial intelligence, cybersecurity, and digital gaming and simulation. This initiative aligns with the

increasing demand for skilled professionals in the IT sector.

The Cyber Security Specialization associate in applied science (AAS) degree is one of the most successful 2-year programs in the region. The National Security Agency (NSA) designated our program as a Center of Academic Excellence in Cyber Defense (CAE-CD). Our program offers opportunities to communities and individuals in the rich and always dynamic tech industry that would otherwise be excluded from higher education. We have an excellent faculty, well equipped cutting-edge labs, agreements with major industry partners, and we collaborate with major universities and other community colleges in the area.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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HCC being awarded the CAE-CD designation



Science Engineering & Technology Building

**Howard Community College (HCC)**, located in Columbia, Maryland, has been helping students achieve their academic goals since 1970.

As a designated National Center of Academic Excellence in Cyber Defense (CAE-CD) since 2012, HCC is the right choice for a rigorous and nationally recognized cyber technology education. With the CAE Knowledge Units (KUs) mapped to the associate degree and the certificate program courses, HCC aims to produce a task force capable of defending against the increasingly complex nature of cybercrime and intrusion in both government and industry. The cybersecurity courses are mapped not only to CAE KUs of NSA and DHS but also to proprietary industry exam certifications such as CompTIA Network+, Security+, CySA+, CCNA and EC-Council Certified Ethical Hacker (CEH).

Students benefit from industry partnerships and resources for experiential learning, opportunities for extracurricular and cyber competitions, and the expertise of experienced faculty and practicing professionals.

HCC's Science, Engineering and Technology Building houses state-of-the-art technology and facilities with hands-on lab instruction. HCC cybersecurity graduates may take advantage of HCC's transfer agreements and continue to 4-year programs or enter the workforce. Possible career paths include entry to intermediate industry positions, such as security specialist, information security specialist, network administrator, and computer forensics investigator.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Two students in computer lab



# HUDSON COUNTY COMMUNITY COLLEGE



HCCC STEM Center

Located in the most ethnically diverse, densely populated, and dynamic area of the United States, **Hudson County Community College (HCCC)** reflects the vibrancy, resilience and determination of its residents and its history.

Viewed by thousands as a promise of a better life, HCCC offers credit and non-credit programs that provide pathways to baccalaureate degrees and/or fulfilling and sustainable careers in today's global society. There are more than 70 degree and certificate programs, and more than 300 daytime, evening, and weekend classes, including an award-winning STEM (Science, Technology, Engineering, and Mathematics) Division.

The Cybersecurity Program is one of the most important programs offered by the STEM division. This division supports the mission of HCCC by

providing high-quality accessible and affordable programs in Science, Technology, Engineering and Mathematics that will lead either to gainful employment or transfer to a four-year college or university. A student who successfully completes a STEM program will be able to:

- Apply the scientific method or the engineering design process to real-world problems with appropriate rigor, accuracy, and precision.
- Incorporate the scientific and mathematical knowledge they have acquired into their understanding of the world.
- Successfully complete hands-on tasks safely in a laboratory environment.
- Work effectively on a team and ethically within a scientific community.
- Present scientific findings with clarity and confidence in both oral and written formats.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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HCCC Cybersecurity Students



ISU Lower Campus

**Idaho State University (ISU)** located in Pocatello, Idaho, is designated as a Center of Academic Excellence in Cyber Defense and continues to be a leader in cybersecurity.

The Industrial Cybersecurity Engineering Technology program prepares students to secure the systems that control power plants, oil and gas pipelines, and manufacturing facilities. The Information Assurance program (IAP) defines new directions and leads students to the beginning of a life-long learning process that helps them continue to define the future. The IAP program emphasizes information systems and security skills in organizations and many technical disciplines. Graduates from the IAP are information systems professionals with a broad spectrum of both technical and managerial skills. Our emphasis is on policy and procedure as well as training, education, and people issues. A recently

added Master of Science in Computer Science and new faculty enhances this program. ISU continues with outreach to the intermountain area through:

- Cyber range competitions
- Public media broadcasts
- K-12 classroom lectures
- Radio podcasts
- Regional and student newspaper editorials
- Journal publications
- ACM club meetings
- Poster sessions in the ISU SUB
- Awareness broadcast on the ISU broadcast system

As one of the original seven CAE programs, we continue to attract qualified students to enter the federal government through superior education, training, and awareness in cybersecurity for Idaho, the intermountain west, and the Nation.

### DESIGNATIONS

- CAE-Cyber Defense

### CONTACT INFORMATION

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ISU SFS Job Fair



IIT Campus

**Illinois Institute of Technology (IIT)** is world renowned for research and education in engineering, architecture, law, and design, and has now brought this same focused, real-world educational quality to cybersecurity. The only university in Illinois to earn ABET accreditation in information technology (IT), Illinois Tech's Department of Information Technology and Management now offers a Bachelor of Science in cybersecurity and IT in a curriculum designed to be accredited in both areas. The Master of Science in cybersecurity and digital forensics provides expanded opportunities for research, and the professional Masters' in the field is not only available at the Chicago campus but can be completed entirely online. Students, faculty, and practitioners have an opportunity to present research at Illinois Tech's annual ForenSecure, a regional Chicago-area cybersecurity and digital forensics conference now in its 17th year. Illinois Tech cybersecurity education

and ForenSecure are supported by the Center for Cyber Security and Forensics Education (C2SAFE) and the School of Applied Technology Forensics and Security Laboratory (ForSec Lab). C2SAFE is a collaborative space where business, government, academia, and security professionals intersect. The ForSec Lab hosts live lab facilities with multiple state-of-the-art workstations and is home to the Remotely-Accessible Dynamic Infrastructure for Students to Hack (RADISH) allowing students to have full access to lab resources from any location and from nearly any internet-connected device.

Illinois Institute of Technology offers quality, comprehensive cybersecurity education with significant depth and breadth in one of the world's great cities, opening tremendous opportunities for both students and faculty.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Director, Center for Cyber Security and Forensics Education Maurice Dawson



# ILLINOIS STATE UNIVERSITY



ISU Campus

**Illinois State University (ISU)**, founded in 1857, is the oldest public university in Illinois. Illinois State is a co-educational, residential university that offers 160+ degree programs to approximately 18,100 undergraduate students and 100+ graduate programs to about 2600 students. Illinois State works as a diverse community of scholars, educators, and staff to support our commitment to fostering a small-college atmosphere with large-university opportunities. Housed in the School of Information Technology, the Cybersecurity program at Illinois State is the first of its kind in the state and home to 300 undergraduate majors. Our program has been designated as a Center of Academic Excellence in Cyber Defense by the department of Homeland Security and National Security Agency since 2014.

Coursework in Cybersecurity significantly emphasizes hands-on learning for both defensive and offensive

aspects of the curriculum. The school has invested heavily in virtual lab environments, allowing students to work on practical aspects of Cybersecurity from anywhere with an Internet connection. A state-of-the-art Cybersecurity lab is currently under construction with a recent \$3M gift from State Farm Corporation and will significantly enhance our students' experience. Our relatively small class sizes offer students personal interaction with the faculty who are active researchers in a variety of fields in computer and network security. Our faculty enjoy the chance to work with students in undergraduate research and independent studies. The ISU security club offers students extracurricular opportunities via student led projects, and students in the club actively participate in cyber defense competitions. The school also hosts an annual high school cyber defense competition which has been well received in the Central Illinois region.

## DESIGNATIONS

- CAE-Cyber Defense

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ISU Cybersecurity Students



Indiana Tech Cybersecurity Class

In 2016, **Indiana Tech** introduced its cybersecurity degree program in response to a growth in cybercrime around the world. Today, as the work of cybercriminals becomes more prevalent, sophisticated and destructive, Indiana Tech's commitment to deliver world-class cybersecurity education has never been stronger. Our mission is to develop top-notch professionals who are proficient in combatting cybercrime at all levels of enterprise. We are succeeding, too, as graduates from our program have been hired by companies like Microsoft, Lincoln Financial Group and Emerson.

The following achievements further exemplify the growth of this program:

**New Learning Environments Added:** As part of an extensive expansion and renovation of its Talwar College of Engineering and Computer Sciences,

### DESIGNATIONS

- CAE-Cyber Defense

### CONTACT INFORMATION

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the following areas were created to strengthen the learning experience for cybersecurity and computer science students:

- A state-of-the-art security operations center, which allows students to monitor and learn from activity on the university's network.
- A digital forensics lab, where simulated crime scenes can be created to give students practice at incident response and digital forensics investigation.
- A data center, where professors can customize virtual environments to test their students' knowledge and skills.

Indiana Tech Collaborates on a Local High Tech Crime Unit: Driven by the solid reputations of Indiana Tech's Center for Criminal Justice and its cybersecurity degree program, the Indiana Prosecuting Attorneys Council chose to partner with the university for one of 10 High Tech Crime Units in the state. Through this collaboration, students assist prosecutors and local law enforcement in analyzing and processing digital evidence, which yields faster turnaround times and more thorough investigations.

Our Cyber Competition Team is a National Power: The university's cyber competition team, the Cyber Warriors, has won Indiana's Collegiate Cyber Defense Competition 15 of 17 times and finished among the nation's top 10 teams in 2007, 2011 and 2018. What's more, every member of the Cyber Warriors has secured a job in their career field prior to graduation for four years running.



Indiana State University Campus in Terre Haute, IN

**Indiana State University** is a public university in Terre Haute, Indiana founded in 1865 as a teaching college. Today, Indiana State University offers over 100 undergraduate and 75 graduate programs.

Indiana State University's major in Cybercriminology and Security Studies Cybercrime degree prepares students not only in Criminology but also digital forensics, security and risk and behavioral analysis. Students will get a cybersecurity education that is like no other such that they will learn receive an all-inclusive education that prepares them for a career in law enforcement, criminal justice, criminology and as well as private, public, or government.

Indiana State University's cyber program provides a unique opportunity for students to gain real-world experience. The Intelligence, Cyber, and Criminology Center (IC3) mission is to advance the nation critical

infrastructure through education, partnerships, real-world experience, and hands-on learning. In doing so the IC3 creates and runs one of 4 investigative internships. All internships are overseen by cyber faculty and provide either academic credit or paid internship. The four units include the Jail Intelligence Unit (JIU), Cold Case Unit (CCU) Human Trafficking & Intel Unit (HTIU) and the highly sought-after, High-Tech Crime Unit (HTCU). The HTCU students are paid sworn-in investigators through the local Prosecutor's Office and provide digital forensics for 25 law enforcement agencies and 8 counties.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cyber/Intel Lab



Indiana University's Sample Gates in the fall

Our program of study at **Indiana University** is meticulously crafted to ensure our students emerge as highly competent professionals in the multifaceted realm of computer security. This curriculum not only embraces the essential subjects that constitute the foundation of computer security—such as mathematics, protocol analysis, system and network security—but also spans the broader scope covered by Security Informatics. Security Informatics represents a fusion of security with human interaction, organizational theory, social engineering, and information technology, ensuring that security considerations are not isolated but integrated within the wider economic and social context.

The Security Informatics master's degree program is underpinned by several core educational objectives. These include developing a solid mathematical

foundation essential for Security Informatics and gaining a thorough understanding of the seminal work that forms the backbone of information security. Students are expected to acquire the technical skills necessary to leverage current and emerging design applications effectively.

At Indiana University there is a strong emphasis on understanding the socioeconomic impacts of security and privacy-enhancing technologies. The program aims to equip students with practical skills indispensable in the information security sector, alongside fostering a profound comprehension of how security operates within organizations, including systems and network administration.

Additionally, students will develop an appreciation for the insights offered by economics and organizational informatics, enabling them to make optimal business decisions within the security technology domain. Lastly, the program strives to cultivate an interdisciplinary understanding that empowers students to design and implement solutions addressing the social engineering and economic aspects of security.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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Students collaborating



# INDIANA UNIVERSITY OF PENNSYLVANIA



IUP Oak Grove

For over two decades, **Indiana University of Pennsylvania (IUP)** has been a leader in cybersecurity education through innovative curriculum, novel research initiatives, and community outreach. The B.S. in Computer Science/Cybersecurity track (originally Information Assurance) was first offered in 2002. This degree program combined core computer science and cybersecurity classes with a minor in criminology, creating a unique curriculum that helped students gain a broad understanding of the field and prepare them for their future careers. A minor in cybersecurity was also added in 2002 which continues to offer students in all disciplines a better understanding of cybersecurity.

Since the early 2000's, IUP has been a designated Center of Academic Excellence, and was one of the first institutions in the nation to receive this designation by the National Security Agency (NSA).

In 2005, IUP founded the Institute for Cybersecurity (ICS) to further encourage and promote cybersecurity at IUP and in the surrounding community.

In the years since its creation, the ICS has established high-quality cybersecurity programs, fostered strong faculty research and teaching expertise, and provided unprecedented cybersecurity learning opportunities, including the annual Cybersecurity Days, weekend workshops, and summer camps open to all students and teachers in the local community. Recently, IUP's cybersecurity program experienced record student enrollment, an unprecedented flow of federal awarded grants from DoD, NSA, and NSF, launched many novel initiatives including PC4A, CySP, GenCyber, and Expansion of CAE-C Education that not only improve our programs but also enhance cybersecurity research and education in Pennsylvania and beyond.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Dr. Farag and Students



IRSC Massey Campus

**Indian River State College (IRSC)** is a comprehensive institution accredited to offer Associate and Baccalaureate Degrees, along with Career and Technical Certificates. Renowned for its role in education and innovation, IRSC is committed to transforming lives through high-quality, affordable, and accessible education, leveraging both traditional and remote delivery methods. In 2018, IRSC was recognized as a National Center of Academic Excellence in Cyber Defense, underscoring its dedication to providing top-tier Cyber Security training to students and local organizations via its degree programs and the Cyber Security Institute (CSI).

The mission of the CSI at IRSC is to be a leading academic research and training facility focused on educating students and staff to be responsible leaders in the field of Cyber Security. This goal is

pursued through collaborative research, building community partnerships, and adhering to high ethical standards in Cyber Security practices and policies.

The vision and goals of the CSI include fostering excellence in Cyber Security education and training for all students, staff, and the local community. This is achieved by partnering with various college departments for education and training, collaborating with industry and government agencies to meet the demand for Cyber Security professionals, ensuring instructional excellence to contribute skilled professionals to the local workforce, strengthening community partnerships for wider education and training access, and enhancing Cyber Security education and awareness in local K-12 schools to develop and expand the institute's visibility.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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IRSC Cyber Lab



The largest educational institution in Iowa

Considered an innovator in cyber security education, **Iowa State University** in Ames, Iowa, boasts a keen eye for delivering programs that enhance its students' marketability in the ever-changing world of cyber security.

As one of the original seven charter schools honored to join the Center of Academic Excellence program, Iowa State has developed one of the nation's largest educational and research programs. Students were attracted to Iowa State more than 20 years ago for a graduate degree in the field. Today, the ISU offers over 20 courses in cyber security and created an ABET accredited bachelor's degree in cyber security engineering in the fall of 2019. The ISU Center for Cybersecurity Innovation and Outreach was created in 2000 and is recognized for its multidisciplinary research, teaching, and outreach.

Iowa State University pioneered a style of cyber defense competitions where students design, build, and then defend cyber systems. Today, students from high schools and colleges nationwide use university facilities for competitions held five times yearly. Since its start in 2005, more than 8,000 participants have attended the 85 CDCs. In 2022, ISU created the Internal Cybersecurity Exercise, where student teams from Kosovo competed with teams from the US.

Fulfilling our mission as a land-grant university, ISU has created security literacy opportunities for all Iowa citizens through the Iowa Cyber Hub and the Cybersecurity Ambassador Program.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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Hands-on and student focused



Moravec Hall - Ivy Tech Columbus Campus

**Ivy Tech Community College** stands as Indiana's largest public postsecondary institution and holds the distinction of being the nation's largest singly accredited statewide community college system. Our mission revolves around serving as the state's workforce development engine, providing affordable degree programs tailored to community needs and facilitating seamless transfers to other Indiana colleges and universities.

Notably accredited by the Higher Learning Commission and a member of the North Central Association, Ivy Tech's A.A.S. in Cybersecurity/Information Assurance, designated as a CAE-2Y since 2012 and re-designated in 2017 and 2023, underscores our commitment to cutting-edge education. Originating in 2008 at the Columbus campus, this program now extends across all 19 campuses.

Our diverse student body, spanning various ages and backgrounds, benefits from faculty engagement beyond traditional academics, with notable involvement in events such as TechFest and CyberPatriot camps. Successes in competitions like the National Cyber League, where a team secured 7th place nationally in 2023, showcase the caliber of our students. These events serve as platforms for students to interact with employers, fostering recognition of their capabilities.

Moreover, Ivy Tech's collaboration with industry leaders, such as hosting the Collegiate Cyber Defense Indiana Qualifier Competition and establishing the Cyber Academy training center at Muscatatuck in partnership with the military, enhances our students' opportunities and expedites degree completion to just 11 months.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cyber Security Ops Center



Jackson State Community College Campus

At **Jackson State**, we take pride in being at the forefront of Cyber Defense and networking education. Our Cyber Security Center serves as a hub for valuable resources, program information, and opportunities for collaboration within our community. As a Center for Academic Excellence, Jackson State is committed to providing students with the knowledge and skills necessary to excel in the dynamic field of cyber security. Our programs are designed to equip students with hands-on experience, practical skills, and theoretical understanding to succeed in the industry.

Our Cyber Security Center offers a comprehensive range of resources to support individuals interested in cyber defense, networking, or programming. From detailed program information outlining our curriculum and academic offerings to assistance in navigating various career pathways, our center

aims to provide the necessary guidance to align your aspirations with educational goals. Stay abreast of the dynamic cyber security landscape with our updates on the latest trends, threats, and best practices. Access a plethora of educational materials such as articles, tutorials, videos, and online courses to continuously enhance your knowledge and skills. Additionally, our collaborative platform fosters interaction among students, faculty members, and industry professionals, facilitating the exchange of ideas, questions, and discussions to deepen understanding in the realm of cyber security and networking.

Whether you're just starting your journey in cyber security or looking to advance your career, the Jackson State Cyber Security Center is here to support you every step of the way. Together, we can build a more secure future for our community and beyond.

## DESIGNATIONS

- CAE-Cyber Defense

Explore our resources, get involved, and embark on an exciting journey toward a rewarding career in cyber security. Welcome to the Jackson State Community College Cyber Security Center!

## CONTACT INFORMATION

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JSCC Networking Student



# JACKSONVILLE UNIVERSITY



Jacksonville University Campus

Named an “America’s Best College” in the south for more than 10 consecutive years by U.S. News & World Report, **Jacksonville University** is a premier private institution in northeast Florida. Founded in 1934, JU offers more than 100 majors, minors, and programs. The 240-acre campus includes a half-mile of riverfront, oak-lined paths, and a mix of historic and new campus buildings.

Jacksonville University offers a Bachelor of Science program in Cybersecurity and a Bachelor of Science program in Computing Science. We are building students’ knowledge, skills, and abilities through hands-on labs, team-focused collaboration, and real-world simulation of cyber threat scenarios. The Center of Cybersecurity at Jacksonville University serves as a regional cybersecurity training hub for Northeast Florida, (1) producing highly-skilled graduates to address the growing need for

cybersecurity experts and, (2) Provide cybersecurity training and certification for businesses, consultancies, governmental agencies, and military groups.

The curriculum of we offer integrates labs and live attack scenarios using the hyper-realistic simulation system, the Cyber Range platform, powered by Cloud Range. The Cyber Range simulates enterprise-level networks, security tools, and normal and malicious traffic. We empowered our education by labs and scenarios, providing out-of-the-box networks, traffic and threats, and integrated commercial level SIEM, firewalls, and SOC tools widely used in industry, such as Splunk, QRadar, SolarWind, Pfsense, etc.

The Bachelor of Science degree in cybersecurity provides a strong background in computing foundations along with rigorous, hands-on training in cutting-edge areas within cybersecurity, including: Intrusion Detection and Prevention, Network Security, Penetration Testing, Digital Forensics, Cybersecurity Practicum.

Our graduates are accepting jobs as cybersecurity specialists and information security analysts responsible for responding to cyber threats and the design and operation of computer systems and networks for businesses and government agencies.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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James Madison Campus

**James Madison University (JMU)** is one of the original seven Centers of Academic Excellence in Information Assurance Education (now Cyber Defense) (CAE-CD). Since January 1997, JMU has been a leader in online Information Security education. Designed for working professionals, our highly-ranked program is one of the most comprehensive online Information Security Master's degree programs in the country and is part of the College of Integrated Science and Engineering. We are an innovative collection of applied STEM units, focused on connecting students to cutting-edge tools and technology as they focus on real-world problems.

Our Computer Science Department offers an undergraduate Information Security Certificate program. We combine our cybersecurity with co-curricular activities, including hackathons, programming competitions, and the Cyber Defense

Club. We have also been active in the Hacking 4 Defense program. JMU also offers a Masters in Business Administration with an Information Security concentration, a Bachelor of Science in Intelligence Analysis and a new online graduate certificate program focusing on Cyber Intelligence. These programs are designed to address a variety of the information security needs of the nation.

Set in the beautiful Shenandoah Valley of Virginia, JMU is a tight-knit community of 22,000 undergraduate and graduate students and 3,000 faculty and staff who come from across the country and around the world. Only two hours from Washington D.C., JMU is fast becoming one of the nation's leading lights in higher education.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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100% Online



# JEFFERSON STATE COMMUNITY COLLEGE



Jefferson State Community College

**Jefferson State Community College** offers an Associate of Applied Science, Long-term and Short-Certificates for our Networking program. The program focuses on Cisco, Cloud, Cybersecurity, and Network Security. Courses for the Networking option correspond with the CAE-CD requirements.

The Networking option prepares students for the CCNA, CompTIA A+, CompTIA CySA+, CompTIA Network+, and CompTIA Security+ certifications. The option prepares students through hands-on labs and simulations to work in Informational Technology areas in networking and cybersecurity.

As the student's progress, they will be able to validate their expertise in applications and infrastructure of platforms, and implement, operate, secure, troubleshoot and perform core security functions with the network. Also, students will demonstrate

the ability to detect incidents, employee prevention strategies, behavioral analytics, and respond by continuously monitoring security within a network. This curriculum is designed for students planning to enter the field of computer information technology and those, already employed, who need specialized/ updated skills required by the computing industry.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Jefferson State Students



Beautiful John A. Logan Campus

**John A. Logan College (JALC)** actively participates in and contributes to the Cybersecurity community with pride. Our primary mission "To enrich lives through learning and community engagement." Revolves around the development of our students and the community, which is supported by dedicated staff, faculty, administration, and prominent community members, alongside our students themselves.

Our commitment to student and community development is evident through our active participation in various cyber events, virtual job fairs, training sessions, and conferences. Notably, we prioritize conference experiences for our students, including participation in events such as the Community College Cyber Summit and Women in Cyber Security.

At John A. Logan College, we boast a Collegiate Cyber

Defense Competition team and a computer club, both of which have successfully competed in events like CCDC, NCL's, Wicked6, Hivestorm, Hack the Port (CAE), Cyber Force Competition, and at prestigious venues such as Argonne National Laboratories. Moreover, our institution proudly serves as a WiCyS Women's Chapter.

Our students demonstrate exceptional dedication by voluntarily undertaking additional work, including tutorials, labs, training sessions, and community volunteering initiatives. One aspect of our program that fills us with immense pride is our students' active involvement in fostering a more aware and resilient community to cyber security threats.

Furthermore, our department collaborates with K-12 STEM/STEAM programs, Girl Scouts, Boy Scouts, boot camps, athletes, and parents, utilizing engaging demonstrations and projects to promote cybersecurity awareness and skills. We are deeply honored to play a role in such vital endeavors, and we remain committed to taking progressive steps in building a more secure future for our community and family.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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A day in the life at JALC



JHU Campus in Baltimore, Maryland

The **Johns Hopkins University Information Security Institute (ISI)** serves as a hub for interdisciplinary experts of the highest caliber, who are dedicated to safeguarding the nation's extensive online systems, infrastructure, and data through cutting-edge research.

At the heart of the institute's efforts is its pioneering research in scientific methods aimed at enhancing the security of health care devices and systems. This includes everything from electronic health records to critical devices like pacemakers and bedside infusion pumps.

Faculty members from the institute are at the forefront of a collaborative effort across multiple universities to push the boundaries of health care security practices. A key understanding among ISI researchers is the crucial role that robust

cryptographic protocols play in the security of systems, and they are actively engaged in the development of new applications designed to withstand malicious attacks.

Their achievements include uncovering security vulnerabilities in electronic voting machine software, which has led to the incorporation of paper ballots in most of today's voting systems; discovering a method by which hackers could remotely disable the indicator light on MacBook webcams, allowing for unauthorized recording and spying; and exposing a significant security flaw in Apple's iMessage system that could have permitted the decryption of messages, videos, and photos.

Beyond research, the ISI is deeply committed to education, offering a Master of Science in Security Informatics program. This program is designed to equip over 100 enrolled students with the necessary technical foundation and knowledge to address the nation's urgent need for highly skilled information security professionals.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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ISI students at a competition



Johnson County Community College Campus

**Johnson County Community College (JCCC)** was founded in 1969 to serve the residents of Johnson County, Kansas, an active suburb of Kansas City, Missouri. JCCC was awarded the National Center of Academic Excellence in Cyber Defense (CAE-CD) designation in April of 2019. We were recently redesignated through the academic year 2029.

The JCCC Information Technology-Networking program aims to be a local and national leader in cyber defense education. To further support cyber defense in education, the program created the Cyber Center. The mission of the center is to provide program guidance and oversight, general cyber defense information, and collaboration and outreach opportunities among students, faculty, and other institutions.

The Associate of Applied Science degree in

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Information Technology-Networking provides students with a foundation in designing, installing, implementing and securing computer networking resources. Course requirements include network operations and product-specific requirements for Microsoft, Linux and Cisco.

Our curriculum aligns with certification requirements of industry leaders, including: Microsoft Azure, Cisco Certified Network Associate (CCNA), Linux Professional Institute Certification (LPIC), CompTIA A+, CompTIA Security +, and CompTIA PenTest+. We offer transfer options to four-year programs, where students can earn a bachelor's degree in Cybersecurity, IT Management, or other related fields.

In addition to our Associate of Applied Science degree in Information Technology-Networking, we offer a Cybersecurity Certificate that prepares students to step into the role of Security Analyst. Students learn the skills to protect computers, networks, and data from unauthorized access, change, or destruction.

Upon completion, students have strong foundational skills in cyber defense, network security, ethical hacking, digital forensics, and scripting. We also offer a Cloud Certificate, which teaches students the foundational knowledge in Microsoft Azure, Amazon Web Services (AWS), Google Cloud, and VMware vSphere.



John J. Bowen Center for Science and Innovation

At **Johnson & Wales University**, our innovative Cybersecurity Center is designated as a National Security Agency/Department of Homeland Security Center of Academic Excellence in Cyber Defense Education. Our bachelor's programs include Cyber Threat Intelligence & Defense and Computer Science. We also offer a Master of Science in Cybersecurity.

From day one, we immerse our students in real-world, hands-on experiences, ensuring they gain the practical expertise required in this fast-growing industry. JWU stands out as pioneers in experiential education, seamlessly integrating industry-relevant experiences into our programs. As cyber threats become more sophisticated, we recognize the importance of practical learning.

Faculty come to Johnson & Wales after years of working in the field, gaining valuable expertise

and insights that they share with students. Professors bring connections from the industry that allow for real-world application. In addition, faculty mentorship offers support and guidance, so students feel confident and ready to launch careers. Internships are a core part of our academic programs, helping students build résumé-worthy experience.

Outside of the classroom, Johnson & Wales has a vibrant and active community. Student-led clubs such as Hack JWU, the Association of Computer Machining and the National Cybersecurity Student Association offer opportunities to make friends while building skills and networking.

"The cyber program is widespread, so you get exposure in different aspects of it. You're not coming out of the program as an expert in one area, but with experience in every little part so when you go into the field, you know where you want to end up. The cyber field is changing so fast, so getting this overarching view is a lot more useful because it helps us point ourselves in the right direction after college," shares cyber student Jordan Limor '24.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CyberPaw Competition



An aerial view of Anderson Hall at K-State

The Center for Cybersecurity and Trustworthy Systems (K-CaTS) at **Kansas State University** is dedicated to enhancing the field of cybersecurity through a multifaceted approach. It is committed to conducting both fundamental and applied research in various areas of information assurance and computer security. This includes a focus on distributed systems, embedded and ubiquitous computing systems, as well as safety-critical and cyber-physical systems. K-CaTS aims to advance the knowledge base of students pursuing Bachelor's, Master's, and Ph.D. degrees, ensuring they are well-equipped for the challenges of the field. Furthermore, the center places a strong emphasis on engaging with the professional community, fostering collaborative efforts that enhance the development, understanding, and operation of systems that are both safe and secure.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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In addition to its academic and professional engagements, K-CaTS is actively involved in conducting local and regional outreach initiatives. These efforts are designed to raise awareness about cybersecurity issues and improve the capabilities for secure operations within the community. The center also plays a crucial role in facilitating security-related collaboration across a wide range of disciplines throughout Kansas State University, promoting a comprehensive and interdisciplinary approach to cybersecurity.

K-CaTS supports broad and cutting-edge collaborations across the entire university, with 17 core and affiliated faculty members driving trans-disciplinary work in diverse fields. These fields include, but are not limited to, hardware and software cybersecurity, network and protocol security, trustworthy machine learning/ AI, criminology and anthropology, psychology, education, and communications. This wide-ranging expertise underscores the center's commitment to addressing cybersecurity challenges from multiple perspectives.

One of the notable achievements of K-CaTS has been its instrumental role in creating the new Bachelor's of Science in Cybersecurity degree program. This program not only offers a structured path to security education but also incorporates a comprehensive computer science curriculum. This initiative reflects K-CaTS's dedication to preparing students for the complex and evolving cybersecurity landscape, equipping them with the necessary skills and knowledge to succeed in the field.



Hynes Hall, Center for Cybersecurity

Welcome to the **Kean University** Center for Cybersecurity. The “Center” focuses on providing cyber defense and cybersecurity-related information, resources, and academic programs for students, staff, faculty, and the regional and extended global community.

Kean University has been designated as a National Center of Academic Excellence in Cyber Defense Education (CAE-CD) by the National Security Agency. This credential and designation recognize and provide acknowledgment that Kean University is contributing towards successfully training and educating the future workforce for positions in the high-demand cybersecurity field. This designation is active through academic year 2027.

The “Center” exists under the direction of pursuing a collaborative methodology, emphasizing a

multidisciplinary approach to cybersecurity and cybercrime education. This integrative approach, structure, and strategy recognize the benefits gained by providing cybersecurity education in both technical and non-technical fields. This collaboration includes true cybersecurity program integration, uniquely including both policy and technical education, between the Kean University School of Computer Science and Technology, the School of Criminal Justice and Public Administration, and the Office of Computer and Information Services (OCIS).

Kean University hosts chapters for Women in Cybersecurity (WiCyS), Cloud Security Alliance (CSA), National Cybersecurity Student Association, through the National CyberWatch Center, and is a Palo Alto Cybersecurity Academy, EC-Council Academia Partner and CompTIA Academy Partner.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Kean Cybersecurity Center



Kennesaw State University, Kennesaw Campus

**Kennesaw State** is a comprehensive university located on two suburban campuses in Kennesaw and Marietta, northwest of metro Atlanta. We are making an impact across the region, the nation and around the world. As the third largest university in Georgia, Kennesaw State has nearly 45,000 students enrolled in over 180 undergraduate, master's, doctoral degree and certificate programs.

The Kennesaw State University Cybersecurity program equips students with the necessary skills and knowledge to become leaders in the rapidly expanding field of cybersecurity. Through this program, students will learn to develop and implement cybersecurity strategies, respond to threats and incidents, manage risk to information assets, and solve real-world cyber problems using appropriate tools and methodologies. This multidisciplinary program is open to students from

all backgrounds, whether or not they have prior experience in cybersecurity.

Since 2004, KSU has been recognized as a National Center of Academic Excellence in Information Security Education/Cyber Defense Education program, with its Bachelor of Science in Cybersecurity program being the first validated Program of Study, valid through 2027.

Dr. Mike Whitman serves as the primary contact for all CAE-related communications and is designated as the Institutional Accounts Administrator for CAE at CCE.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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KSU and Kennesaw Mountain



Kent State University Campus Entrance View

**Kent State University** serves the Northeast Ohio region with its Cybersecurity programs in collaboration with the regional community colleges. The programs offer hands-on experiences in networking, cybersecurity operations, wireless networking, and computer hardware. In addition, the college offers opportunities for cybersecurity analysis projects for drone air traffic management, unmanned flight operations, mechatronics engineering concepts such as robotics and automation.

Our faculty activities include attendance of NCAE annual symposia and cybersecurity conferences. In addition, POC Dr. Gurkan is participating in the Cyber-Informed Engineering workgroup for Education to infuse the CIE principles into our programs. Furthermore, she is leading the college's faculty with diverse interests in air traffic control operations, model-based systems engineering, and

machine learning algorithm applications towards creating cybersecurity postures in engineering systems. Dr. Gurkan recently launched the student chapter of Women in Cybersecurity (WiCyS) in the college to attract and increase cybersecurity majors and to coordinate outreach efforts to the region's high schools.

The university has many other initiatives in cybersecurity: Criminology programs with cybersecurity concentration in global security, business computer information systems programs with cybersecurity emphasis, and emerging media and technology center that offers industry-academia partnerships in security software development principles in a hands-on setting. These initiatives are coordinated in collaboration with the university IT to create a holistic approach to cybersecurity education at the Kent State University.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Drone flight demo night



Partial aerial view of Klamath Community College

The Cybersecurity and Networking AAS degree at **Klamath Community College** is designed for new students and existing professionals who would like to acquire technical training in information system support and administration with an emphasis on cybersecurity techniques. This program is designed to help students each industry-recognized, third-party certifications in hardware, software, networking, and cybersecurity. The program includes an internship with a local company's information system (IS) department to add real job experience to the degree holder's resume.

Students who pursue this degree will have a strong foundation in hardware, software, networks, computer languages, embedded systems (robotics) as well as a solid background in cybersecurity skills such as perimeter defense design, business continuity and disaster recovery, penetration testing,

and ethical hacking. The curriculum will familiarize students with the theory and application of computer technology while offering an intensive, hands-on experience working with networks, hardware, software, embedded systems, and cybersecurity in a state-of-the-art computer lab facility.

A degree holder will have the additional benefit of being amply prepared for entry-level jobs in information systems support including technician positions involving a network environment in need of on-the-site cybersecurity monitoring. Work in the field of cybersecurity and network support includes the following: wired and wireless network design and administration, server management, robotic systems design, security design and administration.

Career opportunities for students who wish to enter the workforce immediately upon graduation include network systems support technician, computer user support technician, and network and systems administrator with cybersecurity skills.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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KCC ethical hacking demo



Lansing Community College West Campus

Embark on an exciting journey into the realm of cybersecurity at **Lansing Community College**, where our program is meticulously designed to equip you with the skills needed to detect, prevent, and mitigate cyber threats in today's dynamic digital landscape. Imagine yourself as a cybersecurity expert, fully prepared to tackle the challenges of an ever-evolving technological world.

Our program offers numerous highlights to boost your career and enhance your learning experience. You can attain industry-recognized certifications such as CompTIA Security+, Certified Information System Security Professional (CISSP), and more, which validate your expertise and significantly enhance your employability. Benefit from expert instruction as you learn from seasoned Subject Matter Experts who bring over a decade of hands-on experience in the cybersecurity field. Their real-world insights are

invaluable in preparing you for the complexities of the cyber realm.

Our approach to learning emphasizes hands-on experience, allowing you to engage in practical exercises in simulated real-world scenarios. This method provides insights into cyber defense strategies, threat detection methodologies, and incident response protocols, going beyond theoretical knowledge. The program also offers flexible learning options to fit your lifestyle and preferences, including small class sizes and our HyFlex modality, which allows you to choose between in-person and online instruction. By joining our vibrant Student Ethical Hacking Club, affiliated with the national Cybersecurity Student Association, you'll engage with like-minded peers, participate in cybersecurity challenges, and expand your network within the cybersecurity community.

For those looking to get an early start on their cybersecurity journey, our Dual Enrollment Program allows high school students to explore the field and gain a significant advantage in their career path. Additionally, veterans can transition smoothly from military service to a career in cybersecurity through our Military IT to IT Program, leveraging their experience and technical skills in a field where their expertise is highly valued. Lastly, the Michigan Reconnect Program offers students aged 25 or older the opportunity for free or reduced tuition, ensuring that quality cybersecurity education is accessible to all.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Grow with us!

**Laurel Ridge Community College**, formerly Lord Fairfax Community College, founded in 1970 is a comprehensive, multi-campus public institution of higher education. The College serves eight localities in the Shenandoah Valley and Piedmont regions of Virginia.

Laurel Ridge offers two pathways into the field of cybersecurity: 1) an Associate of Applied Science (AAS) in Cybersecurity and 2) a Cybersecurity Specialist Career Studies Certificate (CSC). The A.A.S degree program is designed to be completed in two years with articulation to bachelor's degree programs and/or the ability to enter into the cybersecurity workforce. The CSC completed in one year, is stackable with the AAS in Cybersecurity or the AAS in Information Systems Technology degree programs, and is a great addition for someone with a degree in another field.

The cybersecurity faculty at Laurel Ridge strive to incorporate into their classes the latest technologies and methods that a security defender must exercise to thwart attackers. Faculty incorporate a wealth of knowledge through education, capture-the-flag competitions, and internship experiences in several facets of cybersecurity (penetration testing, secured software development, security policies, risk management, firewalls, digital forensics, and cyber-law). These experiences provide a diverse and solid foundation, allowing students to pursue numerous opportunities in the field of cybersecurity.

As the only Virginia community college meeting the rigorous academic standards of the Computing Accreditation Commission (CAC) of The Accreditation Board for Engineering and Technology (ABET) on the Associate of Applied Science in Cybersecurity degree program. This accreditation acts an additional seal of approval that the Laurel Ridge AAS cybersecurity degree program has a solid STEM foundation, so that you can graduate with the potential to lead the way in innovation and emerging technologies while anticipating the welfare and safety needs of the public.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cybersecurity Classroom



Pu'uloa Campus at Leeward CC

**Leeward Community College's** Cybersecurity Center showcases a variety of cybersecurity related programs and resources available to students and faculty.

The core Cyber Defense program at Leeward CC is in the Information and Computer Science program (ICS). The ICS program provides students with a wide background in Information and Computer Science including programming, networking, operating systems, and security fundamentals. Embedded in this program are Certificates of Achievement in Information Security, and Competence in Information Security. These certificates are built on the Knowledge Unit (KU) requirements for a collegiate institution to be recognized as a CAE-CD. The program also features support for the following industry recognized certifications from CompTIA: A+, Network+, Security+, Linux+ and PenTest+.

In addition, our ICS program has an articulation agreement with the University of Hawai'i at West O'ahu (UHWO). Once Leeward CC ICS students receive their AS in ICS they can transfer to UHWO and complete the Bachelors of Applied Science in both IT and Information Security Assurance.

The ICS program provides students with an extensive amount of hands-on training. Courses are held in the classrooms that are supported and maintained by the campus. The classrooms provide students with computers and technical resources where the student gains experience programming computer applications, web applications, configuring and managing virtual systems and networking equipment such as routers, switches and firewalls. The ICS Program runs a datacenter which provides a virtual desktop infrastructure which is used to support the hands-on portion of various ICS courses.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Students in the Classroom



Campus of LeMoyne-Owen College

Founded in 1862, **LeMoyne-Owen College (LOC)** is a private, historically black, liberal arts institution that helps students discover and utilize their full potential in their career and social life. LOC is the only HBCU in city of Memphis. The Center for Cybersecurity at LOC hosts the only HBCU-based NSA Center of Academic Excellence (CAE) program in the state of Tennessee.

As one of the oldest HBCUs in the nation, LOC has produced hundreds of doctors, lawyers, political leaders, teachers, actors, movie producers, Internet and computer technology gurus, and professionals in various business over its history; and hence has left profound footprint in the Greater Memphis region, in Tennessee, and nationwide. LOC has established its excellence in making leaders, has brought opportunities in local, regional and national communities, and has boosted changes for good.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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The LOC CAE is affiliated with the Computer Science Division. The division is also the home of BS in Computer Science program, which has enjoyed a prestigious long history. First class of computer science students celebrated their commencement on Saturday, May 10, 1986. To face challenges and opportunities in the information age, the division has proudly cultivated first African American cohort of elites in Information Technology.

Computer Science Division and Center for Cybersecurity are housed in the Gibson-Orgill Hall. In 2019, the Information Assurance and Cyber Defense concentration was designated as a Center for Academic Excellence in Cyber Defense by the National Security Agency. In near future, most programs and concentrations of the CS Division will move to the LOC Center for Cyber Defense when the center is built. A brand-new BS in Cybersecurity was recently approved. The program will become effective in fall 2024 semester. The new BS in Cybersecurity program will be the flagship program of LOC CAE.

Besides winning research grants from NSA, NSF, and the state, LOC CAE has been very active in community outreach. Since 20120, LOC CAE has hosted the GenCyber summer camp every year, along with many other community activities for cybersecurity.



Liberty University Campus

Located in Central Virginia, **Liberty University (LU)** is a liberal arts institution with 17 colleges and schools and offers programs in fields such as education, counseling, religion, law, aviation, cinematic arts, business, and more.

Liberty's cybersecurity program emphasizes real-world experience, meeting and exceeding industry standards, and student success. With six programs in cybersecurity, including undergraduate and graduate, we prepare students for careers such as governance, risk management, compliance, technology, and secure development. Recognizing the importance of cybersecurity for both the public and private sectors, Liberty is committed to preparing cybersecurity experts, increasing cyber capabilities through novel research, and increasing cyber awareness throughout the university and the surrounding community. To this end, the Liberty

University Center for Cyber Excellence (CCE) is established to formalize and coordinate these activities. The CCE serves as the focal point for cyber programs and provides extracurricular activities, including a Cyber Defense Club that participates in regional and international competitions.

Liberty has been designated as a Center of Academic Excellence in Cyber Defense since 2018. The School of Business at Liberty University is dedicated to building up Champions for Christ, emphasizing the character, ethics, and integrity that comes from a Christian worldview. All cyber programs are located in the School of Business. Students learn from dedicated faculty with decades of real-world experience and who are committed to student success.

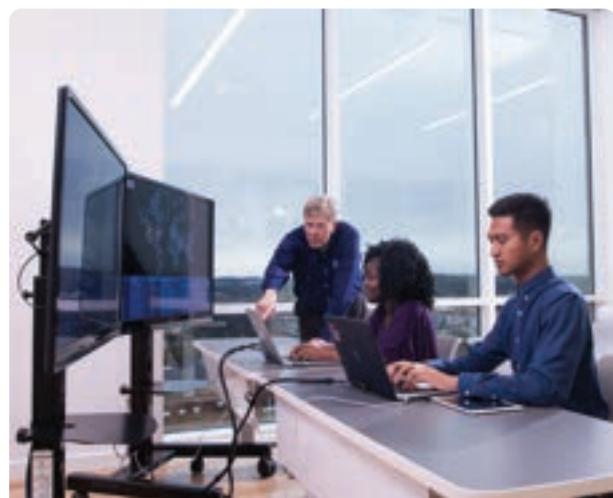
### DESIGNATIONS

- CAE-Cyber Defense

### CONTACT INFORMATION

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Liberty Students in the Cybersecurity Program



Long Beach City College Campus

Since 1927, **Long Beach City College** has been at the heart of the community providing educational programs with a commitment to excellence in student learning in a culturally diverse and vibrant environment.

LBCC is a two-year community college that encompasses state of the art, technology-rich learning environments, a broad range of academic and career technical instructional programs, strong community partnerships, and economic and workforce development initiatives that prepare students to be successful in the 21st century.

As one of the largest of the 114 community colleges in California, Long Beach City College is governed by the five-member, elected Long Beach Community College District Board of Trustees and serves the cities of Long Beach, Signal Hill, Lakewood, and

Santa Catalina Island. It offers many associate degrees and certificate programs which prepare students for transfer to four-year institutions, career advancement, and personal development.

With four schools to house its instructional programs, LBCC provides program offerings in Career and Technical Education, Language Arts and Communication, Social Sciences and the Arts, and Health, Science & Mathematics. Long Beach City College is a community college with the largest face-to-face Cybersecurity program in Southern California. A Hispanic Serving Institution, LBCC is dedicated to improving equitable outcomes in skills, employment, and transfer for first-generation college students, military veterans, and students from underrepresented groups.

LBCC has an active Cybersecurity club that meets every Saturday to practice ethical hacking and participate in cybersecurity competitions. Program graduates have taken on networking, IT, and cybersecurity roles at organizations such as East West Bank, Sony Entertainment, Netflix, and the Department of Defense.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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LBCC Students



Louisiana State University, Baton Rouge, Louisiana

Founded in 1860 as a military academy, **Louisiana State University** is the flagship institution for Louisiana, a comprehensive public R1 research university, and one of the few universities nationwide with land-, space-, and sea-grant research designations. LSU received its Center of Academic Excellence in Cyber Operations designation in 2022.

Cybersecurity is one of the university's top five research and talent development priorities. LSU students and faculty work at the intersection of cyber and areas critical to state and national security, including energy and critical infrastructure, industry, law enforcement, defense and intelligence, and education.

LSU's Division of Computer Science is now the largest unit in the university's College of Engineering. Launched in 2019, the Division's

Cybersecurity Concentration supports more than 400 undergraduate, MS, and PhD students, a broad research portfolio, and active student organizations participating in conferences and competitions. LSU students receive deep technical training in reverse engineering, malware analysis, software exploitation, memory and digital forensics, AI techniques in cyber, and AR/VR and hardware.

LSU prioritizes connecting students to exciting research and engagement opportunities. The university's Cyber Center supports new labs and classrooms and innovative faculty research in areas critical to national security and law enforcement, including tool and technology development. Students can apply to work in LSU's Security Operations Center (SOC), which supports the main campus and institutions across Louisiana in active detection, response, and analysis. Through the NSA's first funded Cybersecurity Clinic at LSU, cybersecurity and business students actively support small businesses statewide in increasing their cyber posture. LSU's cyber graduates are highly sought by defense and intelligence agencies, law enforcement, national labs, and industry.

## DESIGNATIONS

- CAE-Cyber Operations

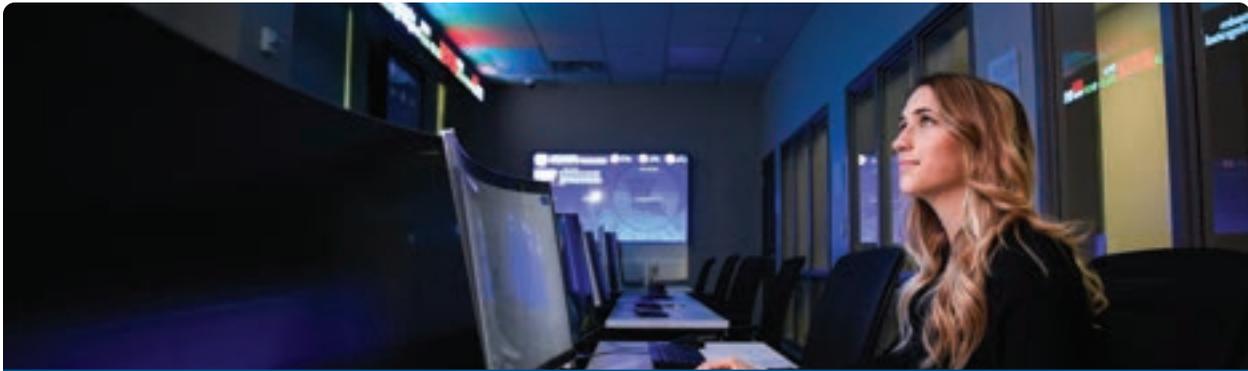
## CONTACT INFORMATION

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LSU CyberCorps® Students



Louisiana Tech Cyber Student

**Louisiana Tech University** is a selective-admissions, comprehensive public university. Louisiana Tech is committed to quality in teaching, research, creative activity and scholarship, public service, and workforce/economic development.

Louisiana Tech maintains as its highest priority the education and development of its students in a challenging environment within a safe and supportive, diverse community of learners. The Center of Information Assurance is housed in the College of Business and has been an NSA CAE member since 2009.

### DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

### CONTACT INFORMATION

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Louisiana Tech Campus



Landscape of Loyola Chicago

**Loyola University Chicago (LUC)** was established on June 30, 1870, as St. Ignatius College. The college was renamed to Loyola University Chicago in 1909. The university has two campuses in Chicago, one in Maywood (a suburb of Chicago), and one in Rome. Loyola University Chicago was designated as a National Center of Academic Excellence in Cyber Defense in 2020.

The Department of Computer Science in the College of Arts & Sciences offers B.S. degrees in cybersecurity, computer science, software engineering, information technology, and data science, and M.S. degrees in computer science, software engineering, information technology, and data science. The department provides program guidance and oversight for the Loyola Center for Cybersecurity and Privacy, which was established in 2019 to coordinate cybersecurity activities

throughout the university. The Center engages in interdisciplinary activities, collaborating closely with researchers and educators from the departments of Criminal Justice & Criminology, Psychology, Political Science, Engineering, Digital Humanities, and Sociology. The B.S. in Cybersecurity includes interdisciplinary courses as electives. Students participate annually in cybersecurity competitions, such as the DoE CyberForce competition, National Collegiate Cyber Defense Competition (CCDC), HackTheBox, NCAE Cyber Games, and National Cyber League (NCL). The Cybersecurity Club, 7968, offers students a place to further their experiential learning. Invited talks are also part of the Center and club activities. Faculty members are highly engaged in both cybersecurity research and education. These activities have been funded by the NSF, NIH, US DoD, NSA, Motorola Solutions Foundation, Dr. Scholl Foundation, and Intel.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cybersecurity Students



Marquette University's campus is located in Milwaukee, WI

The mission of **Marquette University's Center for Cyber Security Awareness and Cyber Defense** is to provide excellence in education about cybersecurity, service through partnerships with the university and community, and research opportunities in cybersecurity technology, cybersecurity preparedness and cybersecurity education.

Marquette's Master of Science in computing with a specialization in information assurance and cyber defense is designed to establish the knowledge about security planning and management, and cyber issues and defenses for networks, databases and computing infrastructure. This specialization is the academic focus for the designation of Marquette University as a Center of Academic Excellence in Cyber Defense Education by the National Security Agency and the Department of Homeland Security.

The courses for this specialization reflect a broad technical perspective. While studying theory and performing classroom exercises serve to provide foundational knowledge, practical experience reinforces understanding. Marquette has added faculty members, new electives, and increased research initiatives to support our students and to emphasize the convergence of ideas from data science with cybersecurity analysis.

In addition, the computing program had been recognized by U.S. News & World Report, consistently ranking in the top-20 in Best Online Graduate Computer Information Technology Programs.

Additionally, the program is enhancing workforce development through the online career change specialization, making cybersecurity career opportunities available to students who do not have a computer science or information technology background. Graduates have found successful careers as cybersecurity analysts and engineers.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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GSM Kohler Group



# MARSHALL UNIVERSITY



Old Main and Drinko Library in the Fall

**Marshall University**, established in 1837, is one of West Virginia's oldest institutions for higher education. Named after Chief Justice John Marshall, who played a defining role in shaping the Constitution, the university is a public comprehensive entity committed to advancing the public good. This commitment is manifested through its innovative, accredited educational programs. The mission of Marshall University is deeply influenced by its Vision and Creed, which guides its efforts to offer a broad spectrum of high-quality, affordable, and accessible education at the undergraduate, graduate, and professional levels. These programs are designed to prepare students for a rapidly changing global society.

Marshall aims to create opportunities that foster an understanding and appreciation of diverse thoughts and cultures. The university is also devoted

to maintaining a vibrant intellectual, artistic, and cultural life by supporting research and creative activities among its students and faculty.

The Marshall University Cyber Forensics and Security undergraduate program produces well-rounded graduates capable of using their knowledge of science and technology to solve investigative and cybersecurity problems.

The CFS program is practitioner-focused, intent on providing students with the education and skills they need to help fill the cybersecurity skills gap. This program emphasizes critical thinking, problem-solving, and communication through a challenging and hands-on environment. Students in the CFS program will learn to use many of the same professional tools, techniques, and procedures that are being utilized in the workforce.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Admitted Student Reception



MU Ballston Center

**Marymount University** is a Hispanic Serving Institute (HSI), focused on improving the economic mobility of the underserved by preparing them with the skills to enter high-paying jobs. Based in Arlington, Virginia, close to Federal agencies and technology companies, cybersecurity, and artificial intelligence (AI), are among our focus areas. Designated as a Center of Academic Excellence in Cyber Defense (CAE-CD), our cybersecurity programs are high quality and from undergraduate to doctoral level.

Marymount offers a BS in Cybersecurity which can be taken as a dual degree with a BS in Artificial Intelligence, a BS in Computer Science, or a BS in Information Technology. Students in these and other programs may also take a minor in cybersecurity. The program includes exposure to many hands-on tools found in the workplace, a required internship, as well as a focus on everyday skills such as ethics and oral

and written communication, including presentations. In addition to course activities, students can also engage in real-world cybersecurity research projects and participate in national and state competitions.

At the graduate level, Marymount offers a MS in Cybersecurity for IT/cybersecurity professionals as well as a MS in Information Technology (IT) with a track in cybersecurity, and a Dual Degree in both degrees, designed specifically for career changes. For those who have already qualified at the master's level, we offer a Doctor of Science (DSc) in Cybersecurity which gives working cybersecurity professionals an opportunity to research a specific area of cybersecurity in depth and become current in newer areas of cybersecurity such as cyberthreat intelligence and machine learning.

Of note is the diversity of faculty and students, including females, minorities, and the neurodiverse, enabling our students to be taught by people who look and act like them, emphasizing connectedness in our small classrooms and labs.

Marymount University is also an active participant in cybersecurity scholarships including the NSF CyberCorps Scholarship for service, and DoD SMART and CySP. You will find our alumni throughout government and industry.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Maryville University - Excellence in Cybersecurity

Located just 22 miles from downtown St. Louis, Missouri, **Maryville University** stands out as a nationally recognized private institution that offers a comprehensive and innovative education with a strong focus on student learning, outcomes, and success. Offering degrees in the ever-growing field of Cybersecurity, Maryville University prepares students for the cutting edge of a sector that is in increasing demand across business, government, and technology spheres.

The Bachelor of Science in Cybersecurity program at Maryville offers a curriculum filled with relevant coursework on digital forensics, cyber law, database design, and programming. To further tailor their education, students can choose from three unique program tracks: building a general foundation in the industry, focusing on offensive security measures including networks and mobile security,

or concentrating on defensive strategies such as security information and event management, and digital forensics.

For those seeking advanced education, the Master's of Science in Cybersecurity program at Maryville helps students enhance their cybersecurity credentials with technical skills, business acumen, and preparation for industry-relevant certifications such as Security+, CISSP, and CISM. The program offers two tracks of learning—Technical or Business/Leadership—and integrates case studies from recent events. It also enables students to prepare for certifications like ECSCA, ECES, and Splunk while completing their degree.

Both the Bachelor's and Master's programs offer students the invaluable opportunity to gain hands-on experience through Maryville's Cybersecurity Center of Excellence. This next-generation learning center allows students to provide cost-free cybersecurity services to a wide array of clients, further enriching their educational experience with practical exposure to the field.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Maryville University



Mercy Westchester Campus

Since 1950, **Mercy University** has embarked on a mission to revolutionize higher education, tailoring it to meet the evolving needs of our students. We believe that education transcends classrooms and textbooks—it’s about igniting passions, driving innovation, and nurturing an unwavering curiosity. We’ve dedicated ourselves to empowering generations of learners to pioneer new paths and make a meaningful impact that extends beyond individual achievements to enrich families and communities. We are a Hispanic-serving institution nestled in the New York metropolitan area serve around 10,000 students. These students are enrolled across six schools, pursuing over 100 graduate and undergraduate programs.

In 2007, we introduced the region’s first Bachelor’s and Master’s degrees in Cybersecurity, recognizing the critical need for skilled professionals in this

rapidly growing field. The Mercy Cybersecurity Education Center was established in January 2008. The center’s mission is to collaborate with the Centers of Academic Excellence (CAE) communities in overseeing, developing, and sustaining high-quality, dynamic curricula, and to address the growing demand for cybersecurity professionals. Through facilitating research, fostering innovation, enhancing education, increasing public awareness, encouraging entrepreneurship, and stimulating economic growth, the center stands at the forefront of shaping the future of cybersecurity.

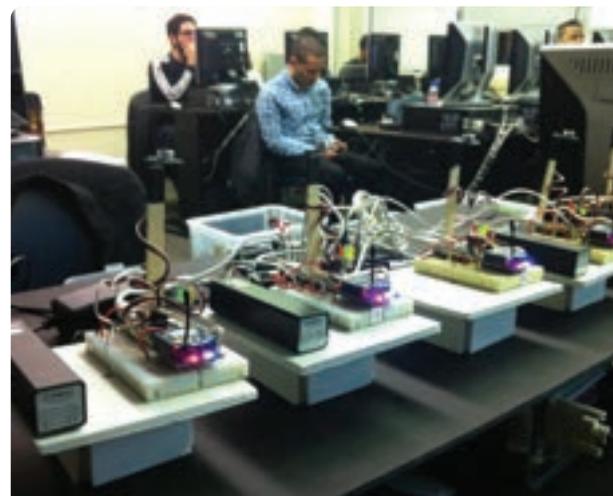
### DESIGNATIONS

- CAE-Cyber Defense

### CONTACT INFORMATION

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Tech Lab



Messiah University's scenic 375-acre campus

**Messiah University** is a nationally ranked, private Christian university of the liberal and applied arts and sciences with a student body of over 3,300 undergraduate and graduate students. Our scenic 375-acre suburban campus is located in central Pennsylvania, 12 miles from the state capital of Harrisburg, and a short drive from Philadelphia, Baltimore and Washington, D.C. Messiah embraces students from a wide variety of Christian faith traditions. We welcome and celebrate the richness of different human perspectives, offering a rigorous academic and professional learning experience rooted in an intellectually vibrant Christian community.

Designated as a National Center of Academic Excellence in Cyber Defense by the NSA in 2023, Messiah University's B.S. in Cybersecurity program prepares students to secure data, computer networks, and systems that house data. Students learn how

to write protected software applications as they analyze systems, identify and define security risks, and design solutions to mitigate those risks. Students work on real-life problems, engage in research projects, intern in the University's Security Operations Center (SOC), join clubs and participate in cybersecurity competitions.

The Messiah University Cyber Center aims to improve the capabilities of the educational, private, and governmental sectors through training, education, services, and outreach. Our Cyber Center empowers students with hands-on learning experiences, enabling them to develop their professional abilities by offering affordable security services to businesses. Students gain real-world cybersecurity experience by providing services such as security monitoring, digital forensics, and data recovery to businesses.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Messiah Cybersecurity Center



Metro State University-Saint Paul Campus

**Metro State University**, a member of the Minnesota State higher education system, is an accredited, comprehensive, urban university that provides accessible, affordable, high-quality student-centered educational programs to the citizens and communities of the Twin Cities metropolitan area. It caters especially to underserved communities, including people of color and adults, emphasizing the removal of barriers to higher education—a right that should be universally accessible. The university prides itself on its diverse faculty, staff, and student body, striving to create anti-racist working and learning spaces. As a “Yellow Ribbon” institution, Metro State extends comprehensive support to veterans, active military members, and their families, helping them achieve personal and professional success.

The university also houses the MN Cyber Institute, a hub for education, research, and training aimed at

making Minnesota a cybersecurity powerhouse. Through education, engagement with lawmakers and the community, and forging innovative public-private partnerships, the Institute seeks to strengthen the state’s cybersecurity infrastructure and workforce. It serves a wide array of stakeholders, including businesses, educational institutions, government entities, and local professional organizations, providing advanced infrastructure, research, education, and training.

The MN Cyber Institute is guided by an advisory board featuring senior security executives from leading organizations such as 3M, Best Buy, United Health Group, and US Bank, etc., alongside representatives from MN.IT, the Minnesota National Guard, and state lawmakers, ensuring its initiatives are aligned with industry and governmental needs.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Professor Kaleem with Students



MCC Sarpy County Center

**Metropolitan Community College** is a comprehensive, full-service public community college supported by the taxpayers of Dodge, Douglas, Sarpy and Washington counties. Its purpose is to provide high quality educational programs and services, primarily in career preparation and general education, to people of all ages and educational backgrounds.

The mission of the Metropolitan Community College Cybersecurity center is to prepare students to enter the industry with a well rounded education and experiences. The program focuses on both technical and non technical areas of cybersecurity. The program is unique in that the college is located 10 miles from one of the largest Air Force bases and US STRATCOM.

Additionally, the Omaha area has many large insurance and banking companies that allow students to enter the industry. Students in the program have participated in exercises like Cyber Tatanka hosted by the Army National Guard. Students also assist in staff education, training, and awareness efforts to ensure the college's data systems are secure.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Forensic Analysis



MCC Penn Valley Campus

**Metropolitan Community College (MCC)** is the oldest and largest public institution of higher learning in Kansas City, Missouri, founded in 1915 as the Kansas City Polytechnic Institute. The Junior College of Kansas City, as it was known starting in 1919, was one of the first schools in the country to award an associate's degree. Today, MCC offers more than 125 associate degrees and certificate programs.

MCC comprises 5 campuses serving more than 30,000 students annually on the Missouri side of the Greater Kansas City Area. MCC is accredited by the Higher Learning Commission of the North Central Associate of Colleges and Schools. Among its broad portfolio of programs, MCC offers a program path for students starting careers in IT and cybersecurity. The A.A.S. Secure Systems Administration and Engineering allows students to earn stackable certificates, mapped to industry credentials, while

working to complete an A.A.S degree.

MCC was an original member of Cybersecurity Education Consortium (CSEC) dating back to 2012. In 2018 MCC achieved the designation as a Center of Academic Excellence in Cyber Defense at 2-year institutions (CAE-2Y). In 2023, MCC re-designated as a National Center of Academic Excellence in Cyber Defense (CAE-CD) for the validated A.A.S Secure Systems Administration and Engineering program of study.

The Secure Systems Administration and Engineering program has experienced growth in recent years despite economic challenges from the Covid pandemic. During the past few years, the program has increased its online presence to now offer the entire degree online. Courses are also offered in 8-week, 16 week, and hybrid formats allowing students to flexible options to complete their program. MCC opened a brand new dedicated Cyber Lab in spring 2023.

MCC remains active in the CAE community being a member of the National CyberWatch Center and the NCyTE Center. Program Coordinator, Brian Hurley, has served as a mentor to other schools seeking CAE designation, performs application pre-submission reviews, and performs application final reviews since 2018.

## DESIGNATIONS

- CAE-Cyber Defense

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MDC's CyberSecurity Center

**Miami Dade College (MDC)** is one of the largest institutions of higher education in the nation with over 100,000 students. More than 90% of our students identify as minorities and more than half (57%) come from low-income households. The increasing demand for cybersecurity talent locally and nationally, and the high-paying jobs in the field, are the reasons behind MDC's decision to make cybersecurity education a priority. With over \$5M of grant-funded initiatives supported by the National Science Foundation, the American Association of Community Colleges and other private funders during the last 5 years, MDC has become a leader in the State of Florida in the development of cybersecurity talent.

MDC offers a stackable credential pathway in cybersecurity that takes students from a College Credit Certificate in Cybersecurity Analyst, to an

Associate in Science in Cybersecurity, to a Bachelor of Science in Cybersecurity. These programs support over 1,000 students per year of all skill levels, from beginners looking to enter the cybersecurity field to working professionals looking to upskill and advance their careers. Upon successful completion of the academic pathway, students will have the training to obtain multiple industry certifications and the skills to secure a job in the field.

We are proud to be one of the few institutions in the nation with two NSA CAE-designated programs: the Associate in Cybersecurity and the Bachelor in Cybersecurity.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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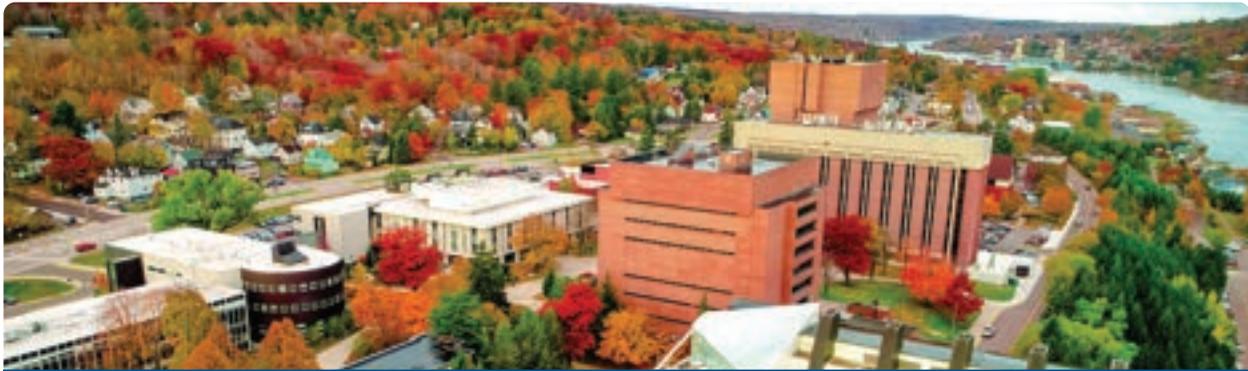
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MDC Cyber Class



Michigan Tech Campus During Autumn

**Michigan Technological University** has developed a national and international reputation in cybersecurity education, research, and outreach. Committed to excellence, Michigan Tech strives to provide top-tier cybersecurity research and education. The university fosters interdisciplinary activities, assists in resource development and sharing, and is focused on building a strong cybersecurity workforce to meet the needs of the nation.

Michigan Tech provides a comprehensive suite of cybersecurity degree programs, including bachelor's and master's degrees in cybersecurity, as well as an undergraduate minor and a graduate certificate. With more than thirty cybersecurity courses spread across multiple departments and colleges, Michigan Tech's cybersecurity curricula are strategically designed to align with industry standards and

academic guidelines, including the ACM curriculum guidelines, the ABET accreditation criteria, the NCAE-CD designation requirements, and the NICE Framework. Faculty members at Michigan Tech are at the forefront of cybersecurity research and scholarship, making significant contributions to the field.

In the past few years, they have published over 140 high-quality research papers on cybersecurity and have secured more than \$5 million in external funding for cybersecurity research and education. One of the notable achievements was the CyberCorps: Scholarship for Service Program funded by NSF in 2021. This grant is designed to nurture the next generation cybersecurity professionals for U.S. government agencies.

Michigan Tech also boasts a rich tradition of engaging in outreach and extracurricular activities aimed at a diverse audience. The RedTeam, a student-driven organization, has consistently achieved top rankings in the National Cyber League (NCL) competition and numerous CTF contents.

In the 2021 NCL competition, they distinguished themselves by securing third place among 900 teams nationwide. For K-12 outreach, Michigan Tech has organized six GenCyber camps and numerous summer youth camps since 2019, impacting over 800 educators and students. The CyberHusky team, comprising middle and high school students, has ranked in the state top ten at multiple cyber competitions such as CyberPatriot.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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# MIDDLE GEORGIA STATE UNIVERSITY



MGA Macon Campus

**Middle Georgia State University (MGA)** is a regionally focused university serving over 8,000 traditional and adult students with campuses in Macon, Cochran, Dublin, Eastman, and Warner Robins. The University is one of the state's best values in public higher education; a student can earn a bachelor's degree for about \$20,000, which is about \$2,500 in tuition and fees per semester.

MGA's School of Computing Department of Information Technology offers a Bachelor of Science in Information Technology (BSIT) program which is accredited by the Computing Accreditation Commission of ABET and includes a concentration in Cybersecurity. The Department also offers a fully online Master of Science in Information Technology with a concentration in Cybersecurity and Forensics.

With a student enrollment of over 1100 students,

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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the Department of Information Technology is fully equipped to produce the next generation of technology and cybersecurity experts. Students have one-on-one interaction with highly qualified faculty who are actively engaged in research publications and scholarly activities.

The Department is dedicated to developing the finest degree program and producing graduates with a diversified set of skills, roles and experiences, including knowledge in cybersecurity, networking, data analytics, media design, application development, and Informatics. All IT courses focus on critical thinking, problem solving, decision making and interpersonal and communication skills. They are offered day and evening in classroom settings, online and a blend of classroom and online.

Students utilize state-of-the-art digital forensics and security labs. Outside the classroom, students participate through CyberKnights, The Association of Information Technology Students (AITS), Alpha Iota Mu, or the new Cyber-Knight Student Ambassador program.

Each year the Department's Center for Cybersecurity Education and Applied Research (CCEAR) hosts an Academic Cybersecurity Seminar to provide students and the community the opportunity to network with experts in the cybersecurity field.



MSU's Old Main - home to the NCAE Cyber Center

**Minot State University** continues to expand competency-based cybersecurity learning opportunities that are incorporated through traditional lecture, seminar, mentor, and theory-based lessons. These competency-based programs create working knowledge skills while building students' leadership and analysis expertise. The use of labs, collaboration tools, applications, hardware, virtual environments, cloud configurations, and course discussions allow the development of technical and critical project management skills. Our program creates innovators, entrepreneurs, and leaders.

Interactivity between departments and disciplines is a continuing focus for our programs. As technology use expands across majors, so does the need to increase student cybersecurity skills and knowledge.

To help meet this need, students at Minot State University studying Management Information Systems and Cybersecurity Operations have formed a new technology club, SWIFT (Students With Interest in Future Technologies). The club's specialized subgroups focus on various tech interests, allowing members to dive into cybersecurity competitions as well as other tech fields. SWIFT is inclusive, welcoming students from all majors, and actively expands its connections with local schools, non-profits, businesses, and industry professionals. It also boosts opportunities for undergraduate research, internships, and collaborations with state, federal, and military bodies. Our ambition goes beyond producing cybersecurity graduates; we aim to nurture future industry leaders.

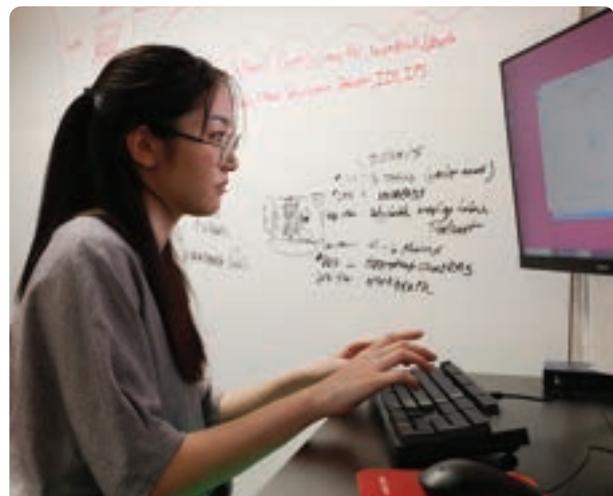
## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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MSU's SWIFT Club



MGCCC, Harrison County Campus

Cybersecurity is deeply embedded in the culture and operations of **Mississippi Gulf Coast Community College (MGCCC)**. In addition to offering a robust program in Cybersecurity Technology the College is home to the Mississippi Cyber Initiative (MCI), a conglomerate of organizations from higher education, state and local government, and the private sector, including Mississippi State University and Keesler Air Force Base.

The Mississippi Bureau of Investigation's cyber forensics lab is also housed in the MCI space on the College's Harrison County Campus. MGCCC students have the opportunity to participate in internships and events, such as cybersecurity competitions.

Faculty in the Cybersecurity Technology program bring extensive experience and expertise from the private sector, and the program's advisory board

consists of members spanning sectors from defense to gaming and tourism to geographic information systems. The College frequently promotes best practices in cybersecurity in the Community through events like Cybersecurity Awareness Month. With strong IT programs, vibrant relationships throughout the state, and an internal commitment to secure information and digital assets, MGCCC serves as a synergist for cybersecurity along the Mississippi Gulf Coast and throughout the state.

Cybersecurity Technology is a two-year program that offers practical training in the areas of confidentiality, integrity, and availability in information security. This program has been submitted as a program of study (PoS) and aligned with the NSA Knowledge Unit (KU) requirements.

The Cybersecurity Technology program is designed to provide students with the skills to recognize and prevent threats to information and information systems and to master techniques for defense against such threats. Security models, intrusion detection, incident handling, firewalls, perimeter protection, and network security laws are covered in the course work.

This program leads to an Associate of Applied Science Degree and is preparatory for employment upon graduation from MGCCC or students can transfer to four-year college or university if desired.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Welcome To Mississippi State University

**Mississippi State University (MSU)** has been a part of the NSA Center of Academic Excellence Program since 2001. Currently, MSU holds all three CAE designations. The MSU CAE effort is led by the Computer Science and Engineering Department. MSU offers Cyber security and Operations degrees in both undergraduate and graduate programs.

Starting in 2021, MSU offers a B.S. in Cybersecurity. The undergraduate program of study is aligned with our Master of Science in Cybersecurity and Operations (CYSO) to create a 4+1 program. This allows our students majoring in Computer Science and Engineering, along with Cybersecurity to enroll in a 4+1 program with the CAE-CO and complete their Masters Degree in just five years. MSU has been a pioneer in cyber defense research. Security architecture provides the blueprint for in-depth defense strategies. You cannot avoid cyber threats

if you do not know how systems connect and what software those systems are running. Scalable, security architecture is a critical enabling technology required to model, defend, and wargame network-intensive cyber networks.

MSU supports one of the most robust cyber infrastructures of any university. Security researchers have access to state-of-the-art high performance computing assets to include petabyte scale high-speed storage. MSU has the capability to scale up laboratory research into enterprise scale cyber demonstrations and to do so in NOFORN and other restricted environments. Academically, MSU students pursuing the CAE-CO path complete our Master of Science in Cyber Security & Operations. There are multiple paths for students from Arts & Sciences, Business and Engineering to complete the Information Assurance Certificate that completes the CAE-CDE path.

## DESIGNATIONS

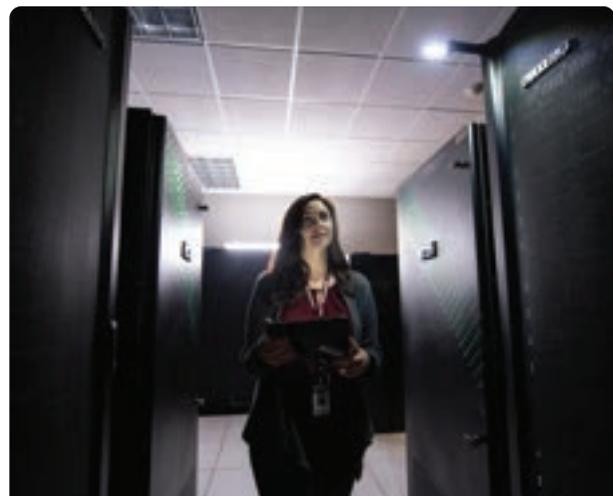
- CAE-Cyber Defense
- CAE-Cyber Operations
- CAE-Research

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MSU Super Computer



# MISSOULA COLLEGE UNIVERSITY OF MONTANA



Missoula College University of Montana

The mission of **Missoula College** is to create a comprehensive, accessible, student-centered learning environment that fosters individual growth, facilitates workforce development, and provides a foundation for advanced academic achievement.

Missoula College was designated a CAE-CD institution in 2017 and was the first such designation in Montana. We were re-designated in 2023 and work closely with institutions across the state to develop and mentor additional CAE-CD programs.

In conjunction with the State of Montana, Missoula College established the statewide CyberMontana initiative as the hub for cybersecurity education for residents of all ages. In addition to Missoula College's traditional for-credit programs, certificates, and degrees, CyberMontana offers numerous non-credit educational tracks for existing and

aspiring cybersecurity practitioners and the non-technical workforce. Security Awareness Training is a cornerstone of these programs and CyberMontana intends to reach over 10,000 residents with current, engaging information on best practices in day-to-day computing tasks.

Building on the work of CyberMontana, the University of Montana recently established the Center for Cybersecurity Workforce and Rural Policy to serve as a regional hub for cybersecurity workforce training, community outreach, policy development and practice, and research. The Center provides a home for new and existing multidisciplinary cybersecurity teaching and learning, creative scholarship, and collaboration.

A key component of Missoula College and CyberMontana activity is partnership with federal, state, local, public, and private entities to raise the defensive posture of businesses and entities operating across the state. We work with the Montana Army National Guard Cyber Defense team, CISA, and state-level collaborators to provide comprehensive resources for private business, governmental, and educational agencies.

The administration, faculty, and staff of Missoula College are proud of our accomplishments in and contributions to cyber defense across Montana, and we deeply appreciate the opportunities for collaboration and collegiality across the CAE community.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Missouri S&T Campus

With more than a decade as a CAE-R designated university and eight cybersecurity experts with active federal and industry research in the field, **Missouri S&T** is one of the nation's leaders in addressing cybersecurity threats. Missouri S&T's cybersecurity research program emphasizes cyber-physical security for critical infrastructures – from power plants to autonomous vehicles. The S&T computer science and computer engineering programs partner with 16 engineering and science disciplines across campus to create secure smart grid systems, manufacturing systems, sensor clouds, water treatment facilities, aerospace systems, and smart living environments.

S&T's cybersecurity experts are also highly regarded teachers. They actively mentor student researchers at the undergraduate, master's, and doctoral levels to prepare them for cybersecurity careers in government, industry, and education. Students have

access to cybersecurity courses that meet the NICE criteria at the advanced undergraduate and graduate levels.

Missouri S&T is a STEM-focused institution of 9000 students. It was founded in 1870 as one of the first technological institutions west of the Mississippi. The pursuit of innovative, collaborative applications with faculty and researchers at Missouri S&T has helped the university define its research and teaching strengths. The following four signature research areas connect to long-term critical national issues, research and entrepreneurship potential, and align with Missouri S&T's strategic plan. These areas are Advanced Manufacturing, Advanced Materials for Sustainable Infrastructure, Enabling Materials for Extreme Environments, and Smart Living.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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S&T students participate in a cybersecurity hackathon.



MVCC Utica Campus

Cybersecurity involves protecting information and systems from major cyber threats, such as cyber terrorism, cyber warfare, and cyber espionage. In their most disruptive form, cyber threats take aim at secret, political, military, or infrastructural assets of a nation, or its people. Governments, private industries, and institutions spend billions of dollars annually on cybersecurity.

Students examine a wide variety of security analysis/defensive tools and concepts, and then attempt to circumvent them. This program prepares students to transfer to upper-division cybersecurity programs or assume entry-level positions in the cybersecurity Industry.

### **Mohawk Valley Community College's**

Cybersecurity Associate Degree program combines the study of criminal justice and computer technology to address current needs in the cybersecurity field. It prepares students to identify vulnerabilities and threats that affect corporate and government computer networks; to protect critical information in cyberspace; and to effectively design, implement, and support security policies for a large-scale enterprise network.

### **DESIGNATIONS**

- CAE-Cyber Defense

### **CONTACT INFORMATION**

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MVCC Cybersecurity Class



Montgomery College students gain experience through internships with partners such as the Montgomery County Government

**Montgomery College's (MC)** three suburban Maryland campuses are conveniently located between Washington, D.C., and Baltimore. Drawing students from more than 155 countries around the world, MC is one of the most diverse institutions of higher education in the U.S. As a designated National Center of Academic Excellence in Cyber Defense (CAE-CD) by the National Security Agency and the U.S. Department of Homeland Security, MC's degree and certificate programs offer students hands-on, practical skills in cybersecurity from seasoned industry professionals.

The program, created with industry partners, emphasizes computer security and information assurance concepts augmented with current industry standard techniques. Topics cover threats and vulnerabilities, prevention at the technical and human levels, detection, response, and management

aspects of security. The program trains entry-level computer technicians with cybersecurity expertise and offers transfer options to four-year institutions. Students can also study for valuable industry certifications, including the Computing Technology Industry Association's (CompTIA) A+, Network+ and Security+ certifications; Cisco Certified Network Associate (CCNA) certification; and the Security Certified Network Professional certification.

Students in the program can enhance their skills at the College's Cyber Lab, which can host 100-plus virtual servers, 250-plus virtual desktops, isolated networks, and wireless and forensic technologies. The lab is home to academic competitions and research activities, but also provides opportunities to IT industry professionals for teaching, learning, and professional growth.

The strength of MC's cybersecurity program earned distinction as one the 10 Best Community College Online Programs according to Intelligent.com in 2022. In addition, in 2021 Montgomery College was ranked the best community college in Maryland with the highest earning graduates by Zippia, the Career Expert.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Montgomery College students work and train in the cybersecurity lab



Montreat College Gaither Hall

**Montreat College's** main campus is located in Montreat, North Carolina, nestled in the picturesque foothills of the Blue Ridge Mountains just outside Asheville. Since 1916, Montreat College has been committed to excellence in providing a private, Christian, liberal arts education emphasizing intellectual inquiry, spiritual formation, and preparation for calling and career. Today, Montreat College offers associate and bachelor's degrees in cybersecurity on campus and online, preparing students for one of the fastest-growing and most important industries in the United States and around the world.

Recognized as a Center of Academic Excellence in Cyber Defense (CAE-CD) by the National Security Agency (NSA) since 2017, Montreat's innovative program emphasizes not only technical skills but professionalism, communication, teamwork,

leadership, problem solving, critical thinking, and ethics as essential components of cybersecurity education. Graduates are prepared as trusted professionals to join the cyber workforce in both corporate and government environments. Montreat College offers a faith-based education with courses covering programming, penetration testing, networking, cyber defense, cyber law, cyber ethics, incident response, and contingency planning to prepare students to become leading professional cyber defenders and "ethical hackers," individuals employed by organizations to test their security measures.

Since receiving the CAE-CD designation, Montreat College has strengthened ties with other North Carolina Colleges and Universities by co-founding the Carolina Cyber Network (CCN) with Fayetteville Technical Community College. This initiative has enabled articulation agreements with community colleges across the state, so students can transfer seamlessly to Montreat's Bachelor of Science in Cybersecurity program.

The college's small class sizes ensure personalized attention and foster one-on-one interaction with professors. Additionally, all students complete internships, which often lead to permanent employment opportunities. Montreat College hosts an annual RETR3AT Cybersecurity Conference, allowing valuable networking opportunities between students and professionals in the field.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Moorpark College Campus

The Computer Network Systems Engineering (CNSE)/ Cybersecurity program at **Moorpark College** is designed to equip students with the necessary skills and knowledge to thrive in various Information Technology roles. By focusing on multi-platform network systems administration and analysis, the program offers a blend of hands-on training and online courses covering essential aspects of computer and network systems. Graduates of this program are well-prepared for entry-level positions such as Network/Systems Administrator, Cyber Security Analyst, Cloud Administrator, and Technical Specialist, among others.

To ensure a comprehensive learning experience, the CNSE program collaborates with several prestigious academies, including the Amazon Web Services Academy for Cloud Technology courses, VMware Academy, Microsoft Academy, Palo Alto Academy,

Redhat Academy, and Cisco Academy. Additionally, students benefit from simulation technology provided by Testout.com and access to the Safari O'Reilly online technical library. The curriculum is designed not only to impart knowledge but also to prepare students for industry certifications, enhancing their employability. The program has recently expanded its offerings to include new Cloud Courses and a Cyber Security A.S. degree, acknowledging the dynamic nature of the field.

Recognizing the importance of practical experience, the CNSE program supports a Cyber Security Team that engages in National Cyber League competitions, highlighting the growing opportunities for careers in Cyber Security and Penetration Testing.

Given the rapidly evolving landscape of the technology sector, Moorpark College is committed to staying ahead of industry demands by regularly updating and revising its CNSE courses. For the most current information on course offerings, students are encouraged to consult the Schedule of Classes available on the college's website. Additionally, full-time faculty members Edmond Garcia and Kevin Rickard are available to provide up-to-date information and can be contacted via their respective email addresses. Students seeking further guidance are encouraged to schedule an appointment with a counselor.

Moreover, the program outlines its credentials through a PDF list of certificates offered, ensuring prospective and current students are well-informed about their educational pathways.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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MVCC Campus

**Moraine Valley Community College (MVCC)** was one of the first community colleges in the country to offer an Associates of Applied Science (AAS) degree in cybersecurity. MVCC was a member of the 2010 inaugural class for two-year institutions earning CAE designation. As an early member of the academic cybersecurity community, the faculty and staff at MVCC addressed some of the challenges in offering a practical and relevant cybersecurity program. One of the first innovations addressed was teaching cybersecurity concepts and technologies in a safe environment in which students could learn and explore.

The MVCC team created a virtual teaching and learning center and has developed a lab library of over 400 exercises. This environment and lab library have been adopted by over 320 institutions nationwide. As a Cybersecurity National Regional

Resource Center, MVCC established a national Cybersecurity faculty development academy. The academy has served over 5000 teachers over the last ten years.

The MVCC team is very active in the NSA mentoring program. The college staff was one of the first group of two-year colleges (5 in total) to earn CAE2Y designation. Over the years, MVCC has mentored over 30 institutions in earning their CAE designations. The MVCC program services over 300 students each semester and has placed graduates in every major industry and in multiple government agencies.

MVCC also partners with several industry certification organizations and business partners in offering sponsored certification courses within our curriculum. These would include CompTIA, EC-Council, Palo Alto Networks, Cisco, LPI, Dell VMware, ISC2, and ISACA. The MVCC program is distinguished in the fact that we offer several leading-edge specializations including IoT, Mobile and Cloud Computing, and Industrial Controls Security.

The MVCC team currently serves as the CAE Midwest Hub manager. MVCC also leads or contributes to the following grant initiatives:

- Leads the RING K-12 cybersecurity career pathways project in partnership with the University of Alabama, Huntsville
- Contributes to the Feasibility Study
- Contributes to the Faculty Development initiatives
- Leads the Midwest States Cybersecurity Education Innovation Summits

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Morgan State University Campus

**Morgan State University's** vision is to be a national hardware and software security leader through excellence in education, research, and innovation. Moreover, our mission is to provide the intelligence community with knowledge, methodology, solutions, and a highly skilled workforce to protect our nation's cyber-physical infrastructure.

Due to advances in semiconductor manufacturing technology, heterogeneous integration, and ubiquitous connectivity, today's systems pose enormous security risks to society. Consumer demand for more intelligent devices with more functionality drives an insatiable appetite for speed and mobility. We interact with hundreds of these devices daily as we move from home to the workplace.

Therefore, we design and develop system-on-chip hardware and software security solutions for high-performance computing (HPC), automotive, artificial intelligence (AI), light weight cryptography, and embedded system applications. Anchored by a rigorous Ph.D. program in Secure Embedded Systems, we prepare our students for productive careers in industry such as Intel, federal agencies/ laboratories like the National Institute of Standards and Technology (NIST), and the DoD such as the National Security Agency (NSA).

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Secure Edge Device



# MOUNT ALOYSIUS COLLEGE



Mount Aloysius College

The Information Technology B.S. with a Concentration in Cybersecurity and Digital Forensics at **Mount Aloysius College** provides students a unique hands-on learning experience with real world applications. The mission of the program is to prepare students for employment in various cybersecurity related areas and/or for the pursuit of further education and advanced degrees by educating them in the fundamental concepts, knowledge and skills used in the ever-changing world of technology. Our hands-on approach to learning emphasizes sound application of cybersecurity knowledge combined with the technical skills to produce graduates who will become responsible, ethical, and contributing leaders in industry and government.

Our program is under the instruction of diverse faculty with years of professional, government and/

or military experience. Our faculty understand the need for lifelong learning skills necessary to keep abreast of advancing technology and stress this to students throughout the program.

Our dedicated Cybersecurity center includes virtual environments that can be used for classes, competitions, demonstrations, testing and research. In addition to the physical lab space, students utilize the Mount Virtual Lab and the Mount Mini Lab, a portable and scalable lab environment that can be transported to other sites and locations for training purposes. Students leverage Windows, Mac and Linux environments through virtual machine environments.

In addition, they are exposed to vulnerable applications and websites for cybersecurity analysis and testing purposes. Our cyber defense team uses these environments in depth to prepare for cyber competitions and challenges. Courses are offered in the classroom as well as in hybrid and fully online formats to meet the needs of our diverse student population.

## DESIGNATIONS

- CAE-Cyber Defense

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Faculty and students working in the Cyber lab



Mt. Hood Campus

The CyberSecurity and Networking Degree program at **Mt. Hood Community College (MHCC)** was initiated in 2011 and was the first AAS degree in cybersecurity in Oregon. Using support for curriculum, training, and travel generously provided by CyberWatch and CyberWatch West, MHCC faculty created the Oregon Center for Cyber Security (OCC-SEC) and became a CAE-CD college in 2014. Although founded on existing IT and Cisco Networking training, MHCC faculty chose to focus on training directed towards specific industry recognized certifications such as the A+, Linux+, Security+, CCNA and CCNA Security, Oracle certifications and more.

In 2018-2019, MHCC had the opportunity to dramatically enhance the entire cyber program with the addition of trainings specific for Cisco Cyber Operations, Certified Ethical Hacker, Red Hat CSA, and Palo Alto Network firewall implementation. Adding a

new degree pathway into Penetration Testing, as well as several certifications allows existing professionals in industry to hone their skills in a focused training path.

Using funding from an NSF grant, the CyberSecurity program created a collaborative effort with our Small Business Development Center (SBDC) and designed a small business advisory team using cyber student interns to deliver focused cybersecurity training, evaluation, and mentoring to local small and medium sized businesses. Between 2018 and 2019, over a dozen cyber students fulfilled their internship requirements by working directly to support members of the regional small business community.

Graduates from this program have gone on to excellent careers in local businesses, consulting firms, regional critical infrastructure, and military, and at least one-third of the graduates continue their education at some of the local four-year institutions.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Mt Hood Cybersecurity Students



Murray State University Gate

At **Murray State University** in Murray, Kentucky, the Cybersecurity and Network Management Program stands at the forefront of addressing the critical challenge of cybersecurity in an age of unprecedented global connectivity and digital dominance. With cybersecurity shifting from a periodic concern to a national imperative, the program has established itself as a leader not only in West Kentucky but also on a broader scale. The mission of the program is to provide students with the essential knowledge and tools needed for successful careers in cybersecurity and IT, while also contributing to the wider community whenever possible.

Central to the academic framework are five foundational pillars: cybersecurity, networking, teamwork, communication, and business acumen. The program's dedication to connecting with industry professionals and its agility in responding

to the changing threat landscape underscore its commitment to protecting our digital future—a commitment that has been unwavering since 1998. Recognized as Murray State University's Program of Distinction for over two decades, it shines as a model of excellence throughout the Commonwealth of Kentucky.

Students have the option to specialize in one of three tracks: Cybersecurity and Digital Forensics, which has earned the CAE-CD designation; Cloud and System Administration; and Wireless Communications. The Murray State Cyber Education and Research Center further enriches the program by facilitating research, development, and outreach activities. These initiatives not only enhance the educational experience for students but also serve the interests of the industry, the region, and the state at large. Past research efforts have focused on areas such as critical infrastructure resiliency, digital forensics, workforce development, and cyber-physical systems. The Cyber Center also hosts various outreach events, including Tech Mania, a competition for K12 students, and conferences like IT Matters and Security Matters, which concentrate on technology and cybersecurity, respectively.

## DESIGNATIONS

- CAE-Cyber Defense

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Murray State CNM Lab



National University Spectrum Campus

**National University (NU)**, a nonprofit serving 50,000 degree-seeking students and 80,000 workforce and professional development students annually, is an access innovator dedicated to offering world-class student experiences that result in career-relevant, meaningful degrees and certificates for a very diverse student population of non-traditional, working, and military-affiliated learners. NU also boasts 230,000 alumni around the globe.

NU, headquartered in San Diego, offers over 190 online and on-campus programs with flexible four-week and eight-week classes and one-to-one graduate education models designed to help students reach their goals while balancing busy lives. As an NSA CAE in Cyber Defense, the NU Center for Cybersecurity is committed to advancing the field of cybersecurity through the development of rigorous

academic programs and providing students with invaluable hands-on experiences that prepare them for the cybersecurity workforce.

NU's cybersecurity program, which is currently a part of the College of Business, Engineering, and Technology, offers bachelor's, master's, and doctoral degrees in cybersecurity.

Programs are tailored to meet workforce demands conveyed directly to faculty by NU's Cybersecurity Advisory Board with industry representatives from public, private, and government organizations. NU offers continuous training and development ensuring that faculty remain at the forefront of cybersecurity education and research.

Through community outreach, student-led projects that address real-world cybersecurity challenges, and efforts to raise cybersecurity awareness among K-12 students, NU strives to create a safer digital environment for all. The program's cyber team participates in national competitions like the Collegiate Cyber Defense Competition.

Founded in 1971 by former U.S. Navy captain, NU serves a large military population, with half of the undergraduate population being active-duty military, Veterans, or dependents. As one of the largest private Minority Serving Institutions (MSI) and Hispanic Serving Institutions (HSI) in the U.S., two-thirds of NU's students and graduates are Black, Indigenous, and people of color (BIPOC).

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

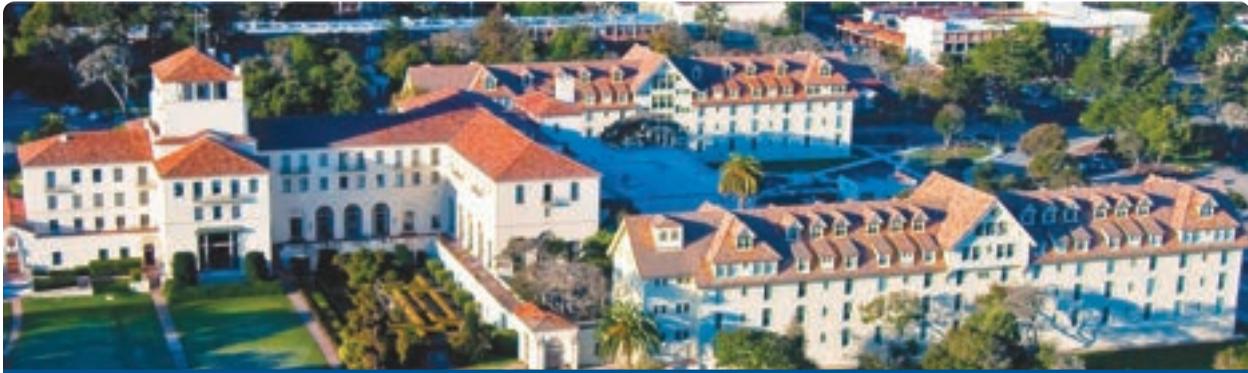
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# NAVAL POSTGRADUATE SCHOOL



Naval Postgraduate School, Monterey, California

The **Naval Postgraduate School** provides defense-focused graduate education to advance the operational effectiveness, technological leadership, and warfighting advantage of the Naval service. Today, NPS serves naval, defense and national security related interests by enhancing current and future readiness, fostering advances in technology, and providing educational and operational programs that directly support all facets of national defense and homeland security. Both classified and unclassified, focused and interdisciplinary, coursework and research are conducted on a secure campus.

Home to 13 academic departments and 4 interdisciplinary academic groups, cyber and information systems is one of NPS' 9 core programs. Diverse research and education programs focus on solutions for the warfighter, and their

wide-reaching applications make NPS a world leader in defense-focused graduate education.

Selected to study at NPS, students are operationally experienced, mid-career officers, many with recent combat experience. Over half of NPS students are officers of the U.S. Navy and Marine Corps. Other U.S. Armed Forces officers, DOD agency civilians, international officers, and homeland security practitioners complete the student body. At NPS they learn how to think critically and connect strategically, thus becoming proficient at navigating uncertainty, comfortable with ambiguity, and skilled at examining the employment of new techniques and technologies in dynamic, novel situations.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Cyber Operations
- CAE-Research

## CONTACT INFORMATION

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Students mark NPS graduation



New England Institute of Technology

### New England Institute of Technology's

Cybersecurity degree enables students to enjoy a fast-moving career path in an industry that is always changing. We are a leader in getting Cybersecurity professionals prepared for career opportunities by offering hands-on practice in simulated lab environments with industry-specific technology and software. Our Cybersecurity program dives deep into VMware, Fortinet Unified Threat Management, Virtual Cloud Platform, Kali Linux, and more.

As a student, you will immediately be learning technical skills from industry leaders who present real-world cases to solve. Our students graduate with the skills and knowledge that prepares them to take internationally recognized Cybersecurity exams, allowing them the opportunity to obtain both a Cybersecurity degree and valued industry certifications. We pride our program

on the preparation of our graduates for the best Cybersecurity jobs and career opportunities.

New England Institute of Technology is home to Central Rhode Island's only Cyber Simulation Range. The NEIT Cyberbit Range is a state-of-the-art virtual simulation tool that provides the critical hands-on training and confidence that Cybersecurity students need to stand out and meaningfully contribute to a real-world Cybersecurity team. Through a partnership between New England Tech and Cyberbit, the simulation platform trains students and IT professionals through exercises that are identical to modern day issues that address the technically complex and high-pressure situations being faced in today's world.

### DESIGNATIONS

- CAE-Cyber Defense

### CONTACT INFORMATION

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NEIT classroom



# NEW JERSEY CITY UNIVERSITY



NJCU Campus

The **New Jersey City University (NJCU)** Cybersecurity program is an interdisciplinary center for cybersecurity education, training, and research. The center aims to provide current and future professionals with the knowledge and skills necessary to strive and compete within the cybersecurity community. Our student's foundation is built through their degree program, certificates, and research opportunities.

NJCU students have realized significant career success as a result of our Information Assurance/Cybersecurity offerings. Students are working in agencies such as the New Jersey Office of Homeland Security and Preparedness, United States Department of Homeland Security, The Regional Operational Intelligence Center of the New Jersey State Police (Fusion Center), Coast Guard Intelligence, Naval Intelligence, National Security Agency (directly and with contractors), and others. Additionally, we have graduates that have

enhanced their careers even on the municipal policing level, working to develop their agency's information assurance programs. We also have those working in the private corporate sector.

The Cybersecurity Club at NJCU is a student-run organization focused on Cyber and Information Security topics. We provide free training using advanced technologies in digital forensics, log analysis, server configuration and hardening, virtualization, and industry leading certificates training. We utilize state-of-the-art Cyber Lab also known as Simulated Command Center with Cyber Lab located in the Professional Studies building.

President Sue Henderson Ph.D. is immensely supporting the advancement of our cybersecurity program, training, and research.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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President Dr. Sue Henderson (Middle), Dean Dr. Deborah Woo (Left) Dr. Kutub Thakur (Right) Assistant professor and director of cybersecurity program



NJIT's Newark campus

As one of the nation's leading public Polytechnic universities, **New Jersey Institute of Technology (NJIT)** is a Carnegie R1 Doctoral University and a world-class institution of higher education and research. NJIT has earned a minority-serving designation from the U.S. Department of Education, both as a Hispanic Serving institution (HSI) and as an Asian American Native American Pacific Islander Serving Institution (AANAPISI).

NJIT is currently designated as a CAE-CD through 2026 and has continuously maintained this designation (or its predecessor, the CAE-IA designation) since 2009. NJIT's designated CAE-CD Program of Study is the MS in Cyber Security and Privacy, which seeks to create a strong foundation and detailed technical knowledge in security, privacy, and cryptography applied to computer systems, networks, and web applications. In addition, NJIT houses the MS in IT Administration

and Security, which educates students in the concepts, principles, techniques, and practices needed to administer a modern IT environment and its security.

NJIT's Cybersecurity Research Center serves as the focal point for NJIT's research and educational activities in cybersecurity. Its mission is to address ongoing and long-term future needs to research new methods for understanding how systems can be compromised and fail, how to design cyber systems so they are secure, and how to improve or fix the cyber infrastructure that has already been deployed.

NJIT has been hosting since 2016 an NSF CyberCorps SFS program, the Secure Computing Initiative (SCI), which empowers students to lead our nation's next generation of cyber professionals.

NJIT contributes to the cybersecurity community by organizing JerseyCTF, a beginner-friendly Capture the Flag competition that aims to inspire interest in cybersecurity. Now in its fourth edition, JerseyCTF has had over 1,500 individuals registered in its last two editions (2023 and 2024).

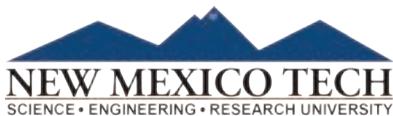
## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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# NEW MEXICO TECH



New Mexico Tech Entrance

**New Mexico Tech** is a public education and research university focused in science, technology, engineering, and mathematics, and is classified by the Carnegie Classification as a Research Doctoral: STEM-Dominant Institution.

With a long history of national defense related research, the Computer Science and Engineering (CSE) department at New Mexico Tech started to offer cybersecurity focused educational programs in 2001. The Information Technology (BS in IT) program, with the special emphasis on cybersecurity, was developed to serve as a national powerhouse for better training cybersecurity workforce with integrated research, training, and educational efforts. The CSE department offers BS in Computer Science, MS in Computer Science, and PhD in Computer Science degree programs. In addition, the department recently developed and offered

a graduate certificate program in cybersecurity for graduate students and post-baccalaureate professionals who want to build and strengthen their capabilities in cybersecurity for their academic and professional work. The cybersecurity program at the department includes foundational course offering such as Cryptography and Applications, Foundations of Information Security, Information Protection and Security, and Network Security, as well as many special topic and advanced courses on cybersecurity such as Access Control & System Security, Secure System Administrations, and Hardware-based Network Security.

New Mexico Tech is also the home of the Institute for Complex Additive Systems Analysis (ICASA), established by the New Mexico Legislature as a computer security and forensics division focused on cyberterrorism and cybercrime.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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NMT Cybersecurity Center



Welcome to NRCC

**New River Community College (NRCC)** is a comprehensive community college located in the New River Valley of Virginia and is one of 23 colleges in the Virginia Community College System (VCCS). NRCC serves Giles, Floyd, Montgomery, and Pulaski counties and Radford City. At NRCC, students find small classes and instructors who are invested in student success. In recent years, individual professors and college programs have received state and national awards for their quality including the NSA designation as a National Center of Academic Excellence in Cyber Defense .

NRCC's Cybersecurity program maps to the National Initiative on Cybersecurity Education (NICE) Workforce Framework 2.0. In addition, you will take seven industry recognized certification exams during your course of study. Our AAS Cybersecurity degree is transferable to many four-year institutions and

offers students the opportunity to participate in a variety of exciting competitions and extra-curricular activities. NRCC is a member of the National CyberWatch Center, a national consortium of colleges and universities focused on cybersecurity education.

NRCC's mission is to give everyone the opportunity to learn and develop the right skills so lives and communities are strengthened.

## DESIGNATIONS

- CAE-Cyber Defense

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Outstanding Students



New York Tech's Manhattan Campus

**New York Institute of Technology's** tech-focused degree programs focus on what the world needs—doers, makers, and innovators uniquely prepared to solve some of the world's most pressing challenges. Our six schools and colleges offer undergraduate, graduate, doctoral, and other professional degree programs in in-demand disciplines including computer science, data science, and cybersecurity; biology, health professions, and medicine; architecture and design; engineering; IT and digital technologies; management; and energy and sustainability.

A nonprofit, independent, private, and nonsectarian institute of higher education founded in 1955, New York Tech welcomes nearly 8,000 students worldwide. The university has campuses in New York City and Long Island, New York; Jonesboro, Arkansas; and Vancouver, British Columbia, as well as

programs around the world.

New York Tech has been advancing the field of cybersecurity for two decades. Our well-established undergraduate and graduate cybersecurity-focused degree offerings and related research efforts are well positioned for continued growth, thanks to several initiatives and ongoing developments with new partners, grants, and research-related opportunities.

Our undergraduate and graduate programs are taught by faculty experts who have been awarded research grants in biometrics, swarm intelligence, privacy, cryptography, information assurance, mobile, and cybersecurity. They bring their cutting-edge work into the classroom to engage students in real-world research.

Further integral to students' success is faculty dedication to teaching, scholarship, and service; the support of New York Tech alumni, industrial advisory boards, friends, and employers; and the College's state-of-the-art facilities, which provide students with a solid foundation for achievement.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Center for Cybersecurity R&D



**New York University (NYU)** is a private doctoral research university which is accredited by the Middle States Commission on Higher Education and New York State to award bachelor, masters, and advanced certificate degrees. The CAE-CO designation is for our Master of Science in Cybersecurity program. The CAE-R designation is for our Doctor of Philosophy in Computer Science program. The face-to-face program has been in existence at NYU for many years. This year, we extended the program to allow working adults from all over the country to remotely participate part-time in the program and attracted over a hundred students in our first cohort.

Due to the dedicated and successful work of promoting excellence in its cybersecurity programs, NYU has taken significant steps to institutionalize and sustain efforts through multiple educational and research initiatives. Recent initiatives include the

establishment of The NYU Center for Cybersecurity (CCS). NYU CCS is an interdisciplinary research institute dedicated to training the current and future generations of cybersecurity professionals and to shaping the public discourse and policy, legal, and technological landscape on issues of cybersecurity. NYU CCS is a collaboration between the NYU School of Law, NYU Tandon School of Engineering, and other NYU schools and departments. NYU CCS has institutional support as it helps NYU to deliver interdisciplinary cybersecurity education.

NYU offers students many diverse career and academic paths through four different graduate programs in cybersecurity. These include full and part-time online applied Master of Science degree in Cybersecurity, an interdisciplinary program in cybersecurity risk and strategy and a traditional academic Ph. D. in computer science with a focus in cybersecurity. The MS in Cybersecurity has the option to take courses both on-campus and online. A part-time lock-step curriculum for US citizens who want to pursue the MS in Cybersecurity online is available through the NY Cyber Fellowship program. The NY Cyber Fellowship provides a 75% scholarship towards tuition for the elite online Cybersecurity Master's Degree.

In the MS in Cybersecurity Risk and Strategy (CRS), courses are taught from a comprehensive perspective that combines the benefits of top-tier schools and leading faculty from computer science, law, policy, and business. CRS is a one-year program intended for experienced professionals from a range of backgrounds who seek to deepen their understanding of cybersecurity risk and strategy.

## DESIGNATIONS

- CAE-Research
- CAE-Cyber Operations

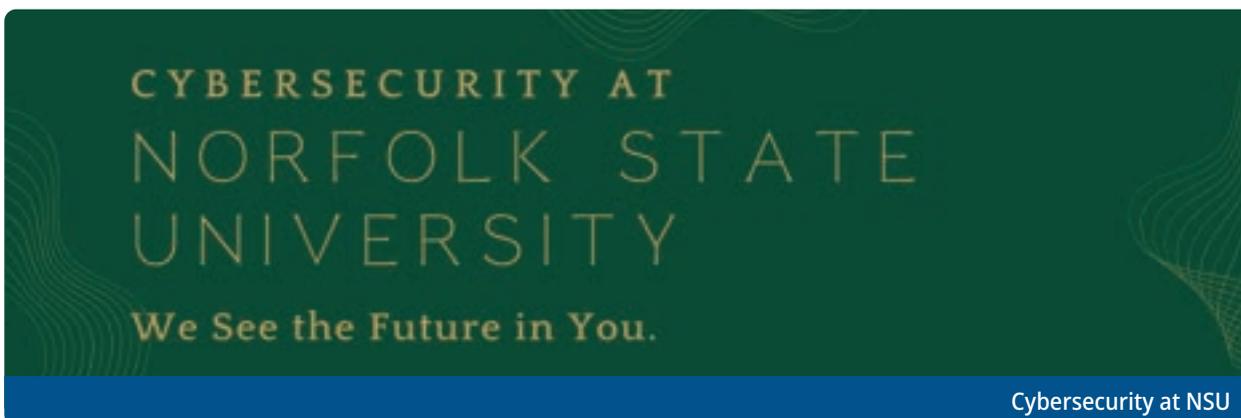
## CONTACT INFORMATION

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# NORFOLK STATE UNIVERSITY



Cybersecurity at NSU

**Norfolk State University (NSU)** is positioned to be a national leader in cyber related research and education, providing opportunities for students to learn about the theory and practice of Information Assurance and Cybersecurity. The programs address the nation's growing need for a diverse group of qualified cybersecurity professionals. NSU is leading the way in developing the next generation of cybersecurity professionals to offer cutting edge curriculum designed for providing real world impact.

The Master of Science in Cybersecurity program empowers graduates from multidisciplinary backgrounds with the knowledge and skills to realize their full potential as next generation technical and organizational leaders in the ongoing war against cyber-crime and cyber terrorism. Our cybersecurity offerings are varied to include every aspect of protecting our nation's infrastructure. NSU holds

several key designations for its education and research programs in cybersecurity. In addition to the National Center of Academic Excellence in Cyber Defense (CAE-CD) Research, they also hold designation for Intelligence Community Center for Academic Excellence and Cybercorps Scholarships for Service.

The NSU Cybersecurity Complex located in the Marie V. McDemmond Center for Applied Research, includes state of the art data centers and research labs that provide training for students in areas that include cloud computing, big data analytics, digital forensics, wireless security, cyber-psychology, socio-cybersecurity and more. As a leader in cybersecurity education and research, the Cybersecurity Complex prepares today's students to provide tomorrow's cybersecurity solutions.

The Master of Science in Cybersecurity is an "all online" program that focuses on computer and information security, and on increasing the pool of well-educated security professionals. Students engage in theoretical studies and practical training like digital forensics, while developing the critical thinking and communication skills required by professionals in the cybersecurity field.

Norfolk State University is proud to offer the first Master of Science in CyberPsychology in the United States. No matter the cyber discipline, our students are prepared to defend US citizens and public, private and government organizations against cyber-attacks.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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North Carolina A&T Martin Complex

**North Carolina Agricultural and Technical State University** (also known as North Carolina A&T State University, North Carolina A&T, N.C. A&T, or simply A&T) is a public, historically black, land-grant research university in Greensboro, North Carolina.

Renowned for its commitment to producing African American graduates in engineering, the university's College of Engineering (CoE) consistently ranks among the top producers in the United States. Within the College of Engineering, the Computer Science Department is dedicated to cultivating high-quality graduates poised to excel as professionals and researchers in the computing field.

Our mission is to deliver exceptional education in computer science through outstanding teaching, scholarly research, and public service. We prioritize the preparation of our students as leaders and

valuable contributors to society.

The Computer Science Department proudly hosts the Center for Cyber Defense, which is designed to educate and prepare students to serve as professionals in the field of cybersecurity in the United States. North Carolina A&T State University proudly holds the designation as the National Center of Academic Excellence in Cyber Defense (CAE-CD) and Cyber Research (CAE-R), further underscoring our commitment to excellence in this critical field.

## DESIGNATIONS

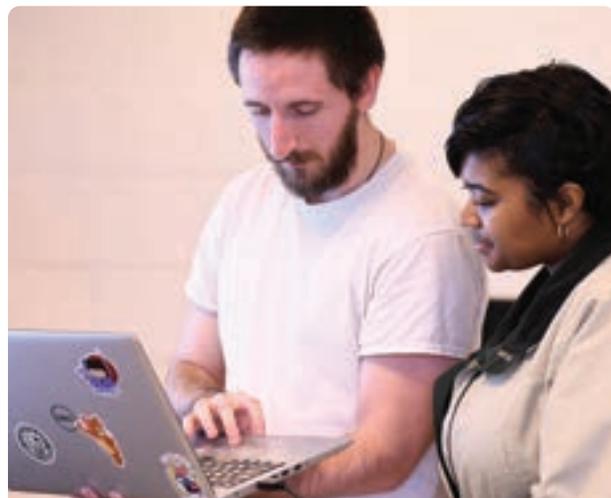
- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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North Carolina A&T Cyber Class



North Carolina School of Business, Computer Information Systems Department

**North Carolina Central University (NCCU)** - a four year open-access public institution located in Durham North Carolina - is part of the Historically Black Universities and Colleges (HBCUs) consortium.

North Carolina Central University School of Business offers high quality undergraduate and graduate business education programs through teaching and applied research focused on transforming our diverse learners into skilled leaders who can positively impact lives and communities and promote an inclusive global society.

Our purpose is to provide high-quality business education that engages, empowers, and enriches the lives of learners, equipping them to become leaders who advance positive societal impact in their communities, the region, and the world. We have two strategic Initiatives, which are to provide

high quality public education and promote lifelong learning for all and to promote Sustainable and Inclusive Economic Growth and Development for all NCCU School of Business stakeholders.

North Carolina Central University, School of Business, Bachelor of Science (BS) Information Technology with a concentration in Cybersecurity program has been designated as a Center of Academic Excellence (CAE-CD) by the National Security Agency and the Department of Homeland Security in April 2023. We will maintain this designation for five years. The Point of Contact (POC) for the center is Dr. Deanne Cranford-Wesley, Director of Cybersecurity Program, and Assistant Professor in the Computer Information Systems Department.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cybersecurity Center



Hunt Library on NC State's Centennial Campus

**NC State University** was one of the first 23 National Centers of Academic Excellence in Cybersecurity Research (CAE-R), holding its designation since 2008. The university is located in Raleigh, NC and is part of the "Research Triangle," which is home to three large research universities and many technology companies, including IBM, Cisco, RedHat, and Google.

NC State's cybersecurity research expertise is based in the Secure Computing Institute (SCI) whose mission is to enhance the security and privacy of computing systems for the betterment of society through (1) performing basic and applied research; and (2) advancing and delivering cybersecurity education. SCI includes the Wolfpack Security and Privacy Research (WSPR) Laboratory, the Secure Software Supply Chain Center (S3C2), the Hardware and Embedded Cybersecurity Research (HECTOR)

Lab, and the Secure Advanced Computer Architecture (SACA) Group. NC State is also the home of the NSA Laboratory for Analytic Sciences (LAS).

Cybersecurity research at NC State spans many CAE focus areas, including principles, security mechanisms, architecture, assurance, and analysis. It has made notable recent advances in software supply chain security, mobile and web security, telecommunications security, and hardware side-channel attacks. Researchers use a range of methodological tools, including formal proofs of security for cryptographic systems, static and dynamic program analysis of software, and large-scale empirical studies.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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SCI Co-Directors William Enck and Laurie Williams



North Dakota State University Main Gate

**North Dakota State University** is a Carnegie Classification R1 research institution located in Fargo, North Dakota that offers over 500 majors, minors and certificate programs. With more than \$170 million in research expenditures in FY 2022 alone, NDSU is a premier student-focused, land-grant, research university. NDSU allows students to combine on-campus and online coursework with participation in student organizations, hand-on activities and research involvement.

NDSU offers a bachelor of science and undergraduate and graduate certificates in cybersecurity. It also offers master of science and doctor of philosophy degrees in software and security engineering. Additionally, students can pursue a cybersecurity-focused track as part of NDSU's B.S. in computer science degree and conduct cybersecurity-focused research in its M.S. and Ph.D.

in Computer Science.

NDSU has an active cybersecurity student organization and hosts two annual cybersecurity conferences: BSides Fargo, in the fall, and the North Dakota Cybersecurity Conference, in the spring. NDSU student teams regularly compete and excel at cybersecurity competitions including the National Cyber League and the National Cyber Summit's Cyber Cup competition.

NDSU holds a CAE-R (research) designation, operates an NSA-funded Native American cybersecurity education and outreach program and is a Department of Defense Undersecretary of Defense for Research and Engineering Virtual Institutes for Cyber and Electromagnetic Spectrum Research and Employ (VICEROY) program lead institution.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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NDSU cybersecurity students



# NORTHEAST LAKEVIEW COLLEGE



Serving Bexar and surrounding counties

The **Northeast Lakeview College (NLC)** Cyber Defense Institute (NLC-CDI) was created in 2020 as a hub for the Information Technology programs at Northeast Lakeview College (NLC) and as a cyber security resource for the tri-county area of Bexar, Comal, and Guadalupe counties. NLC’s Cyber Defense program equips students with industry-relevant Cyber Security Training in Cisco, Windows, and Linux inside of a dedicated network environment. Our teaching methodology balances traditional classroom education with hands-on projects where students use “real world” tools to solve “real world” Cyber Security challenges. The primary degree for

Northeast Lakeview College students in this program is an associate of applied science in Cyber Defense. Completion of this program prepares a student for industry certifications such as CompTIA Security +, CompTIA Linux+, FortiNet Network Security Expert

(NSE4) and the CompTIA Cyber Security Analyst (CySA+). The NSA has recognized San Antonio as a regional hub for cybersecurity activity and hosts the largest cyber workforce outside of Washington, DC, and most recently the Cyber Defense program at NLC was recognized by the NSA as the area’s newest Center of Academic Excellence. Students in NLC’s Cyber Defense Program excel at national competitions.

In 2023, the College placed #74 nationally in the Cyber Power Rankings among over 7,820 students from 450 colleges and universities. And in 2022, the Nighthax Team ranked in the top 3% in the US at the National Cyber League Competition. Additionally, NLC’s Cyber Defense program was recognized as one of the best 20 Associate degree Programs in Cybersecurity in 2021.

Northeast Lakeview College is one of the five Alamo Colleges and provides access to quality academic programs and career and technical courses that prepare students for future success in in-demand careers. The College serves more than 8,200 students from northeast San Antonio and Bexar, Comal, and Guadalupe Counties. Offering a wide selection of degrees, certificates, pre-majors, and programs such as cyber defense, social media, logistics, and pre-nursing, NLC prepares students for in-demand careers or to transition to the university.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Northeast Welcome Center

Established in 1973 by the State Legislature, **Northeast Community College** is a comprehensive two-year college located on the northeast edge of Norfolk, Nebraska. It uniquely offers a broad spectrum of educational opportunities on one main campus, including vocational/technical programs, liberal arts, college transfer courses, and continuing education. As the sole community college in Nebraska that combines one- and two-year vocational, liberal arts, and adult education programs in a single location, Northeast serves a vital role in the educational landscape of the state.

The college caters to residents across a 20-county service area, where, according to 2010 census data, about 160,000 people reside in small towns, villages, and rural settings. This region is predominantly supported by agriculture and agribusiness. To accommodate students outside its main campus,

Northeast has expanded its reach through three extended campuses and two regional offices, ensuring that the educational needs of individuals in its extensive service area are met.

In response to the diverse career opportunities within the information technology field, Northeast Community College's information technology department offers several Associate of Applied Science (AAS) degree concentrations. These concentrations are designed to cover a wide range of topics, allowing students to tailor their education to their specific career interests.

Available concentration options include the Cisco Networking Academy, Information Security, Systems Administration, Web and Visual Application Development, and Technical Services Support. Notably, students who opt for Information Security as one of their two concentrations will complete the requisite Knowledge Units necessary for CAE-CD designation, further enhancing their qualifications in the rapidly evolving field of information technology.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Kernelcon Hacking Conference



West Village H (College of Computer Sciences)

Cybersecurity has been a major focus of research and education at **Northeastern University** since the turn of the century. The University has been recognized as a CAE-CD since 2002, as a CAE-R since 2008, and as a CAE-CO since 2012.

Cybersecurity is treated as a cross-disciplinary field involving computer science, electrical engineering, political science, and law. Interdisciplinary teams of researchers work on security and privacy challenges in cryptography, cloud security, mobile and wireless, and malware analysis and detection. To integrate the cross disciplinary collaborations, the Cybersecurity and Privacy Institute was formed in 2016 with nearly 100 faculty and student researchers funded by government agencies such as NSF, DARPA, ONR, and IARPA as well as industrial supports such as Google, Microsoft, and PwC.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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Northeastern University continuously expands its cybersecurity education programs. Students are encouraged to participate in cybersecurity activities such as Capture the Flag, Hack Beanpot, MITRE embedded CTF (winners in 2019, 2020, and 2021), the DoE CyberForce (local winners in 2019), the Industrial Control System security competition Hack The Port (winner in 2022). Since 2008, students participated in the National Collegiate Competition in Cyber Defense, winning the national championship in 2010, and more recently the Northeast CCDC (2022). Northeastern is also a recipient of the NSF CyberCorps (SFS) and DoD CYSP scholarships grants supporting students to focus on obtaining an excellent cybersecurity education and contribute to the U.S. National Cyber Strategy to develop a superior cybersecurity workforce. Strong student interest in the field prompted the creation of a PhD in Cybersecurity in 2011, and a BS degree in cybersecurity, introduced in 2017. On the research size Northeastern University researchers (led by PI Noubir) participated in several DARPA Wireless Competitions, winning in DARPA DSC 2013, SC2 2017, 2018, and a finalist in 2019 (over \$1.5M in prizes).

Realizing that cybersecurity problems cannot be solved by technology alone, computer science faculty led the effort in designing interdisciplinary MS and PhD programs in cybersecurity to provide students a holistic view of cybersecurity, from both technical and social/economical standpoints.

As one of the first CAEs in New England, Northeastern University has been frequently invited to serve on panels to discuss and to present cybersecurity education and research.



NKU Griffin Hall - NKU College of Informatics

**Northern Kentucky University (NKU)** is a public regional university of nearly 16,000 students and is in Highland Heights, Kentucky (KY), which is a few miles southeast of the major metropolitan area of Cincinnati. Since 2014, NKU has been an NSA accredited Center of Academic Excellence in Cyber Defense Education (CAE-CD).

The School of Computing & Analytics (SCA) within the NKU College of Informatics (COI) hosts 2 undergrad degrees plus 1 grad degree in cybersecurity, that are among the fastest growing NKU programs, and together have a growing population with currently 450 students. The first of these degrees is the cyber track within B.S. in IT, that is currently a validated program of study under the NKU CAE designation. The second undergrad cyber degree is the B.S. in Cybersecurity. The third cyber degree is an online grad program - M.S. in Cybersecurity.

Additionally, the NKU SCA has 2 minors in Computer Forensics and Info Security, 1 undergrad certificate in Cybersecurity, and an Info Security Management track within its Business Info Systems undergrad major, with altogether 130 students enrolled in the minors & certificate programs. The NKU COI also houses 2 active cyber student clubs - NKCyber and NKU WiCyS (Women in Cyber). The NKCyber club houses the NKU CyberDefense team, which is a top regional team, and regularly competes in the regional & national level cyber competitions. The NKU WiCyS club is the only WiCyS chapter within the state of KY.

Since 2007, NKU has been a proud host of the NKU Cyber Symposium, which is held every year during October to celebrate the national cyber awareness month. NKU is a regional leader in cyber outreach, and regularly hosts professional development & training programs, including summer camps, and year-round workshops for local/regional K-12 students & teachers. In fact, NKU is the only KY CAE institution that has hosted NSA GenCyber programs since 2021. NKU has been collaborating with other KY CAE institutions for planning and co-hosting the annual KY CAE conference (KY Cyber & Forensics Conference) every year.

NKU is also part of a current CAE coalition, that is contributing towards cyber educational innovation as part of an NSA workforce development grant project.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Northern Michigan University Campus

Located in Michigan's Upper Peninsula on the shores of Lake Superior in Marquette, **Northern Michigan University (NMU)** offers a stunning backdrop for students to launch exciting careers. NMU takes a hands-on approach to education, providing students with real-world experience in networking equipment, server administration, and cloud computing.

The university actively supports students' participation in cybersecurity conferences and competitions. Notably, NMU has facilitated students' attendance at esteemed gatherings like Cyber Auto and Cyber Truck, enabling them to hone their skills alongside industry professionals.

At NMU, students benefit from the expertise of professors with robust educational and professional backgrounds. NMU prioritizes teaching quality and effectiveness, maintaining small class sizes with an

average of about 24 students per cybersecurity class. This personalized approach ensures that professors know each student by name and can assist them in exploring their individual interests.

Housing the Upper Peninsula Cybersecurity Institute (UPCI), NMU regularly engages with an Industry Advisory Council to ensure that its curriculum remains current and relevant. Additionally, the UPCI organizes outreach events to K12 schools and the community, providing students with opportunities to share their knowledge through events like the annual YooperCon.

No matter your passion, NMU is a fantastic place to start your journey.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Hands-on learning in the lab



Future Steps: Students on the Path to Success

**Northern Virginia Community College (NOVA)** is the largest supplier of talent in Northern Virginia and one of the largest community colleges in the US, comprised of more than 80,000 students and 3,400 faculty and staff members.

We welcome students of all ages and back-grounds with the ultimate goal of ensuring every student succeeds, every program achieves and every community prospers.

NOVA's mission is to deliver world-class, in-person and online postsecondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and a globally competitive workforce.

NOVA boasts one of the largest cybersecurity programs in the nation. As an extension of NOVA's

leadership in cybersecurity, NOVA is a founding member of the National CyberWatch Center - a national consortium of colleges and universities focused on improving cybersecurity education.

As the first community college in Virginia to be designated as a Center of Academic Excellence for two-year institutions (CAE2Y), NOVA's program immerses you in course work setting students up for 4 industry certifications.

Focusing on practical skills and topical security issues makes it an ideal degree program for students who already have a degree in an unrelated discipline and want to transition into a cyber career. For students just starting out, it transfers to 9 different bachelor's degree programs (many of them CAEs).

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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2024 VA Cyber Fusion Team



# NORTHAMPTON COMMUNITY COLLEGE



Northampton Community College

Since its establishment in 1967, **Northampton Community College** is where area residents turn to earn a degree, access workforce training, learn new leisure activities and bring their children for enrichment. NCC prides itself on its expansive breadth of programs and commitment to student success and access. It offers a highly engaging, collaborative and entrepreneurial environment to learn and develop.

More than 30,000 students a year are served by NCC through for-credit, community and professional education offerings. These programs provide students with the education and training they need to enter and advance in the workforce, earn their degree or to continue their studies at a four-year college or university.

NCC continually grows to meet the needs of the community. The addition of the Follett Family Center for Innovation and Entrepreneurship in the Fowler Family Southside Center has expanded NCC's ability to provide excellent and accessible learning experiences and ensures the college's position as a workforce pipeline for area industries.

Recognizing that students are the primary reason that Northampton Community College exists, we seek to provide excellent, accessible and comprehensive learning experiences in partnership with the dynamic, diverse communities we serve.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Students on campus



# NORTHWEST ARKANSAS COMMUNITY COLLEGE



NWACC Main Campus

**Northwest Arkansas Community College** received the designation of a National Center of Academic Excellence in Cyber Defense in 2023. NWACC's mission is to Empower lives, inspire learning, and strengthen community through accessible, affordable, quality education.

Northwest Arkansas Community College (NWACC) provides quality and affordable higher education to empower lives and strengthen communities within Northwest Arkansas and the surrounding areas. The college offers a full range of certificates and associate degrees that lead to career pathways that Strengthen the workforce. NWACC is also accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

The NWACC Center for Cyber Security strives to improve and develop curriculum to increase the

number of information assurance and Cybersecurity professionals in the workforce, improve the skills of existing professionals, improve diversity among information assurance and security professionals, and advance the knowledge and practice of information assurance and cyber security.

NWACC's programs prepare learners for an entry-level position or augment existing skills using curriculum mapped to the NIST Knowledge Units and National Initiative for Cybersecurity Education (NICE) Workforce Framework for Cybersecurity. The Computer Information Systems Computer Networking program (AAS) prepares students for a career in Networking and Cybersecurity with entry level employment opportunities.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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NWACC Class



Northwest Missouri State University

The School of Computer Science and Information Systems at **Northwest Missouri State University** is committed to the personal and social development of its students by providing opportunities for students to build their professional skills and interact with others in a successful and ethical way. We are focused on developing students who will meet the needs of the local, regional and national IT workforce.

The school offers variety of programs to both undergraduate and graduate students, including 7 majors, 12 minors, 2 graduate degrees. The cybersecurity program offers Cybersecurity B.S, minor, and B.A.S. Throughout this program, the students will gain a strong understanding of security of computer systems, including hardware, networks, operating systems, information assurance and programming. The students will also learn

how to analyze computing problems and identify solutions to ensure a secure and safe network. We believe in learning by doing. We have recently built a cybersecurity lab with modern servers, computers, and network devices where students can conduct many cybersecurity activities. Furthermore, projects and assignments are designed to give students a taste of what their future jobs could look like.

Our students in cybersecurity program have a Cyber Defense Club, which is a very active student organization in our campus. They have won various awards in national cyber competitions in recent years, including individual and team awards.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cybersecurity Lab



Northwood Technical College

**Northwood Technical College**, part of the Wisconsin Technical College System, serves Northwest Wisconsin with campuses in Ashland, New Richmond, Rice Lake, and Superior, offering over 60 career paths. The college is dedicated to empowering students to achieve success, aiming to transform communities and lead in workforce development and community engagement through student success.

Its IT-Cybersecurity Specialist program, a two-year associate degree, prepares students to defend against digital attacks by providing practical experience in networking, virtualization, and security through hands-on learning. Students engage in configuring security settings, testing and monitoring systems, and learning about attacks and security measures to protect data.

The program covers a solid IT foundation, including

Windows and Linux environments, routers, switches, firewalls, VPNs, and servers, using both vendor tools and open-source resources. Embracing modern education methods, the program offers virtual learning with 24/7 access to Netlab pods, ensuring a flexible and comprehensive learning experience.

Northwood Technical College prioritizes advanced education aligned with business and industry needs, making its IT-Cybersecurity Specialist program notable for its practical approach, skill development, and virtual learning adaptability, equipping students for the ever-evolving cybersecurity field.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Northwood Tech Lab



Norwich cyber students

**Norwich University** offers three cybersecurity programs: Bachelor of Science in Computer Security and Information Assurance, Bachelor of Science in Cyber Security online degree completion program, and a Master of Science in Information Security and Assurance. The services of our graduates at all levels are in high demand by private industry, government, law enforcement, the military, health services, and academia. Whether they are focused on computer network security, malware, forensics, or cyber investigation, our students will be well prepared for the kind of job that never gets stale and protects our country and private interests. With a focus on both theory and hands-on experience, Norwich provides a truly unique program utilizing state-of-the-art forensic tools unheard of at other institutions of this size. Norwich faculty make sure students at all levels and programs have a command of the basics, and then find opportunities for them both to work with

companies on real cases.

Ranked #2 by the Ponemon Institute for Cybersecurity in the U.S., Norwich University programs are consistently ranked among the best in the nation for cybersecurity education. Norwich University is recognized as a Center of Academic Excellence in Cyber Defense by the NSA and DHS and has received designation as a Center of Digital Forensics Academic Excellence by the Defense Cyber Crime Center. Beginning in 2002, Norwich University became a member of what is now called National Science Foundation's CyberCorps®: Scholarship for Service (SFS) program. Norwich is partnered with the United States Army Reserve to develop cyber-education curricula that align with federal standards and cybersecurity needs. Most recently, Norwich's online graduate program was named one of the top 10 best cybersecurity graduate programs in the country by Universities.com.

## DESIGNATIONS

- CAE-Cyber Defense

Norwich is also home to GenCyber@NU, a National Security Agency and National Science Foundation-funded cybersecurity camp for high school students.

## CONTACT INFORMATION

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NSU, private nonprofit university situated in a sprawling, 314-acre Fort Lauderdale campus, established in 1964

### **Nova Southeastern University (NSU)'s**

College of Computing and Engineering (CCE), an ABET-accredited college, is situated in a sprawling, 314-acre Fort Lauderdale-Davie campus. Established in Fort Lauderdale, Florida, in 1964 as a small college with some revolutionary ideas, today we're a university dedicated to making our world a healthier and better place to live. Classified as a research university with "high research activity" by the Carnegie Foundation for the Advancement of Teaching, NSU is one of only 50 universities nationwide to also be awarded Carnegie's Community Engagement Classification. NSU is also the largest private, not-for-profit institution in the United States that meets the U.S. Department of Education's criteria as a Hispanic-Serving Institution (HIS). NSU offers more than 280 undergraduate, graduate, and professional degree programs that give students the edge they need to become confident, capable, and

caresing professionals who can outsmart, outperform, and outlast their competition. NSU's College of Computing and Engineering is always evolving to give students that edge. We stay current with the industry and government professionals to constantly evolve our curricula. Students learn what they need to solve problems, rather than how to simply work with the tools. We are preparing our students to go beyond problem-solving to influence, impact, create change, and learn by doing, under the close mentorship of our world-class faculty. In addition to advancing their technical knowledge, students gain the soft skills that Fortune 500 companies and government agencies look for in leaders. We offer several undergraduate and graduate programs including computer science, cybersecurity management, data analytics, and information technology. Not only are our programs designed for busy, working professionals, but students have the option to take courses in the format that's most convenient to them—online, in-person, or as a hybrid. In addition, our master's programs can be completed with 30 credits, so students can further their careers even faster.

NSU has been designated by the NSA and its federal partners as a National Center of Academic Excellence - Cybersecurity (NCAE-C) both in Cyber Defense (CAE-CD) since 2005 and in Cyber Research (CAE-R) since 2023. NSU is a recognized regional and national leader in cybersecurity education and research. Our distinguished faculty members engage students in unique, interactive learning and research environments that facilitate academic excellence and prepare our students for their future careers, while they earn a B.S., M.S., or Ph.D. degree, especially in our cybersecurity programs.

### **DESIGNATIONS**

- CAE-Cyber Defense
- CAE-Research

### **CONTACT INFORMATION**

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Oakland University

Created in 1957, **Oakland University (OU)** is public university in Michigan with approximately 20,000 students that offers a diverse set of programs. In 2018, OU was designated as the National Center of Academic Excellence in Cyber Defense (CAE-CD) by the National Security Agency (NSA). OU is reputed for its close integration of its education, research, and service to the community. The US World and News has consistently rated OU as one of the top ten regional universities in the mid-west. Oakland University is classified as a doctoral university with higher research activity (R2) by the Carnegie Classification of Higher Education.

Programs offered at OU closely related to cybersecurity are the Bachelor of Science in Information Technology, Bachelor of Science in Cybersecurity, the Master of Science in Cybersecurity, and professional certificates through Professional

and Continuing Education (PACE). In particular, The Bachelor of Science in Information Technology is the validated Program of Study (PoS) by the NSA.

OU established the Center for Cybersecurity (the Center) to promote interdisciplinary collaborative research, education and outreach in the area of cybersecurity at the university level in 2016. The Center has sixteen (16) faculty members from School of Engineering and Computer Science (SECS), School of Business Management (SBM) and College of Arts and Sciences (CAS) with six (6) departments, including the Department of Computer Science and Engineering (CSE), Department of Electrical and Computer Engineering (ECE), Department of Decision and Information Sciences (DIS), Department of Mathematics and Statistics (MS), Department of Political Science (PS), and Department of Sociology, Anthropology, Social Work and Criminal Justice (SASC).

At present, OU is hosting the NSF funded Scholarship for Service (SFS) program, NSF funded Bridge to Cyber (B2C) program, NSF funded Research Experiences for Undergraduate (REU) program in cybersecurity and AI (CyberAI), and NSA and NSF jointly funded GenCyber Student program and GenCyber Teacher program.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Ohlone College Newark Campus CNET Department

**Ohlone College** offers high quality educational and career pathways and personal enrichment courses to serve the diverse needs of all students and the community. Ohlone provides excellent instruction and support services, awards associate degrees and certificates, and promotes university transfer in an inclusive, equitable, and multicultural environment where student learning and achievement are paramount. Ohlone fosters innovation, encourages student expression, and promotes ethical behavior and global citizenship.

The CNET (Computers, Networks, and Emerging Technology) department at Ohlone College offer courses that prepare students interested in transferring to a four-year university. Our programs for Associate Degrees and Certificates prepare students for employment in the fields of computers, networking, and emerging technologies. Many of

our students go on to pursue successful careers as computer programmers, cybersecurity specialists, business analysts, database administrators, systems administrators, support specialists, network technicians, computer engineers, web developers, and other related positions.

Our CNET Department is a Cisco Network Academy, VMWare Authorized Academy, Palo Alto Network Academy, CompTIA Academy, and Microsoft IT Academy.

Our teaching philosophy is “learning by doing,” where students are taught by industry professionals and are given the opportunities to apply their academic studies to generate real-world solutions. In the classroom, our faculty, the majority of whom have deep backgrounds with Silicon Valley technology companies, share their real skills, experiences, and knowledge. Meanwhile, our advisory board consists of industry leaders to ensure that our programs are up to date with cutting-edge industry trends.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CNET Faculty with students



Oklahoma Christian University Campus

At **Oklahoma Christian University**, students receive a world-class education rooted in Christian values, empowering them to become a passionate, compassionate contributor to their community. Our holistic approach to education extends beyond academic excellence, fostering spiritual growth and career development, preparing students to lead a life aligned with God's purpose. Oklahoma Christian University student students study cybersecurity as a part of our Computer Science program. We believe that a good foundation in Computer Science will best prepare students for a career in the complex world of cybersecurity. Our B.S. cyber degree was awarded CAE designation in 2021. OC also offers a M.S. in Computer Science with Cybersecurity.

OC's cybersecurity program is a practical, hands-on program. Our cybersecurity classes use hands on labs, so cyber students develop good cyber skills

through lot of practice. Each of our cybersecurity classes also prepares students for specific cyber certifications. Our cyber students participate in national and international cyber competitions. Our teams have consistently ranked in the top 10% in these competitions.

OC's faculty have real-world industry computer science and cybersecurity experience. That experience allows them to mentor students in how best to prepare for a career, help them make connections in industry and prepare for the job application process. OC often hosts cyber professional organizations and conference on its campus.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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OC Students



Oklahoma City Community College - Main Campus

**Oklahoma City Community College (OCCC)** is the largest 2-year college in the Oklahoma City metropolitan area & the 4th largest institution for higher education in Oklahoma. OCCC has been a leader in providing cybersecurity education to our Oklahoma City constituents since 2003. OCCC was one of the first 2-year institutions to receive the prestigious CAE2Y designation as a National Center of Academic Excellence in Cyber Defense Education. We proudly continue to maintain that designation.

Students may earn an Associate degree and/or a Certificate in Cyber/Information Security. Classes focus on an offensive & defensive approach to cybersecurity by covering topics such as hardware, operating systems, programming, databases, information security principles, network defense, web security, forensics & IT project management. By following the NICE Cybersecurity Workforce

Framework, students are prepared for industry preferred certifications such as CompTIA ITF+, A+, Linux+ & Security+.

OCCC's mission is Student Success, Community Enrichment. We enrich our community by being a pipeline for educational institutions & workforce. Articulation agreements & grant partnerships with local & national institutions facilitates higher educational pathways. Our graduates have been placed in local & national private & government organizations.

Students are equipped to meet industry needs through course content, labs, projects, guest lectures, cyber club activities & competitions. The department encourages students to gain practical experience through internships, workshops, competitions like NCL, & NCAE. Historically, our team members have scored high in the individual & team competitions.

Our expert & engaged Advisory Board helps keep our curriculum attuned to the evolving workplace needs. InfraGard meetings at OCCC provides students opportunities to network with local industry partners.

OCCC promotes cybersecurity awareness through K-12 summer camps, workshops at local schools & cyber related exercises for students. The Division of Business and Information Technology hosts the Center for Cyber Defense Education as a point of contact to bring greater awareness of the threats & challenges faced in a digitally connected society.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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ODU Campus

**Old Dominion University (ODU)**, located in the coastal city of Norfolk, is Virginia's forward-focused public doctoral research university with a top R1 research ranking, rigorous academics, an energetic residential community, and initiatives that contribute \$2.6 billion annually to Virginia's economy.

The ODU's School of Cybersecurity was established in 2020 and strives for offering cutting-edge educational experiences to students and professionals in the field of cybersecurity, developing high-impact, cross disciplinary research initiatives that center on cybersecurity, and being a source of cybersecurity expertise to the community, the Hampton Roads, the Commonwealth of Virginia, and the Nation.

The School houses one of the largest cybersecurity programs in the Nation with a total of about 1450

students and has been rapidly growing. It offers Bachelor of Science in Cybersecurity with majors in Cybersecurity, Cyber Operations, Cyber Risk Management, and Master of Science in Cybersecurity with three Concentrations, and several graduate certificates. Coursework in programs balances theory, practice, and hands-on labs inspired by real-life scenarios. The students will graduate with the skills and proficiencies that are critical to intelligence, military, and law enforcement organizations, and will play a role in the enhancement of the national security posture of the Nation.

The School of Cybersecurity supports ODU's mission to serve its students and enrich the Commonwealth of Virginia, the Nation, and the world through rigorous academic programs, strategic partnerships, and active civic engagement. The mission of School of Cybersecurity is to promote cybersecurity research and education in an interdisciplinary setting. It brings together over 40 faculty members with a wide range of expertise in computer science, electrical and computer engineering, artificial intelligence, information technology, criminal justice, cyber laws, psychology, and philosophy. The interdisciplinary team enables a holistic approach to cybersecurity problems.

ODU has been designated by NSA as a National Center of Academic Excellence in Cyber Operations (CAE-CO) and a National Center of Academic Excellence in Cyber Defense (CAE-CD).

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Cyber Operations

## CONTACT INFORMATION

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Oregon State University

**Oregon State University (OSU)** is a leading international public research university in Oregon offering more than 200 undergraduate and 100 graduate degree programs. Oregon's largest university, boasting a student body of 36,636 and research funding of \$480 million in FY23, it is recognized for world leading research and community engagement.

Cybersecurity is a key research area at OSU with the largest cybersecurity faculty group in Oregon and among the largest in the pacific northwest. Cybersecurity areas of focus at OSU include cryptography, hardware and software security, cyber-physical system security, security and privacy of AI and ML, human-factors in security and privacy, counter-surveillance, forensics, and enterprise security operations. OSU faculty have published more than 110 peer-reviewed papers on cybersecurity and privacy topics in high-impact peer-reviewed

conferences and journals in the last five years, and have secured more than \$12M in grants and gifts over the last decade. The School of Electrical Engineering and Computer Science (EECS) offers doctoral degrees in Computer Science, and Electrical and Computer Engineering with a specialization in cybersecurity, along with Cybersecurity option in their B.S. Computer Science degree.

OSU is home to ORTSOC – Nation's First Cybersecurity Teaching Hospital providing experiential learning opportunities while addressing the cybersecurity needs of under-served entities. OSU boasts a vibrant cybersecurity community and includes a 350+ strong OSU Security Club leading to many accolades including i) Top 3 placement in NSA Codebreaker Challenge 2018-2022; ii) DEFCON CTF Finalist in 2022, iii) National Collegiate Cyber Defense Competition (NCCDC) Finalist in 2022 and 2023.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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Students in ORTSOC



Our Lady of the Lake University Main Building

The Computer Information Systems and Security (CISS) Department at **Our Lady of the Lake University (OLLU)** provides an innovative learning environment for the development of successful professionals capable of leading technological growth and change with an emphasis on protecting information and technology infrastructure through cybersecurity.

Our programs boast unique qualities. Small faculty to student ratios, typically 25 students per course, allow students to work closely with instructors to ensure their success. Students apply knowledge with hands-on projects like installing computer hardware, using software and tools common in industry, and working on lab exercises. All students are invited to join our CyberSaints student association, to work, study, and participate in competitions alongside other students. Our institution has a dedicated

Center for Service Learning and Volunteerism that assists the CISS department in creating a service-learning experience for all our students in which they work with a non-profit partner to create a usable prototype. Students gain real-world experience working with a client and experience the value of community service.

All CISS undergraduate programs can lead to a Cybersecurity Certificate and all students can participate in the Advanced Bachelor to Master program, earning graduate credits as undergraduate students. By engaging in this program students can expedite their academic journey, saving both time and money.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Main Building



# OWENSBORO COMMUNITY AND TECHNICAL COLLEGE



OCTC Main Campus

**Owensboro Community and Technical College (OCTC)** is a public, open-access institution in Owensboro, Kentucky. It is one of the 16 colleges that make up the Kentucky Community and Technical College System (KCTCS). OCTC, with four campuses, plays a vital role in the region for economic development, educational attainment, preparedness for transfer to a university, or transitioning directly to a professional career.

OCTC supports the dynamic Computer & Information Technologies (CIT) Program. The CIT program offers Associate in Applied Science degrees and multiple certificates in the focused areas of information security, programming, network administration, and website development and administration. Graduates of the CIT program are employed at many different organizations throughout the region. In addition, many CIT graduates continue their education at

Kentucky colleges and universities that have transfer agreements with KCTCS/OCTC.

The CIT – Information Security (IS) Program earned the CAE-CD designation in 2019. The IS option provides students with a comprehensive foundation in the principles of cybersecurity, as well as the fundamental knowledge required for entry-level positions in the cybersecurity industry. The IS option covers a wide variety of security analysis, defensive tools, and concepts. Students experience hands-on practical assignments that prepare them for the real world. Included in their experience at OCTC are opportunities to participate in service-learning projects where students give back to the community by providing technical expertise.

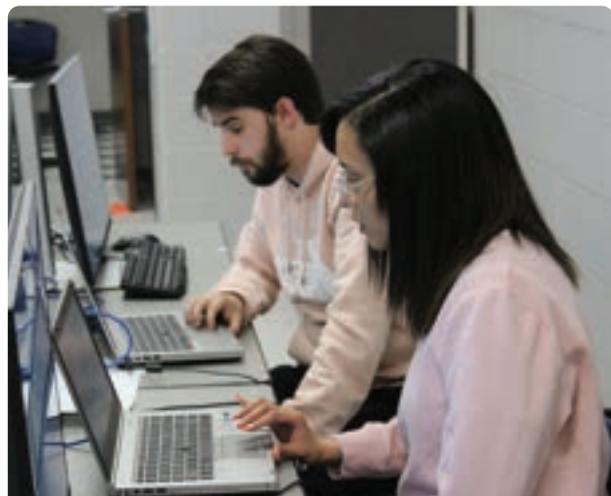
## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Students in the CIT lab.



Seidenberg School in New York City

The Seidenberg School of Computer Science and Information Systems at **Pace University (Pace)** offers robust academic programs for students to focus on cybersecurity topics such as cyber defense and threats, cryptography, biometrics, security design principles, web security, network and device forensics, human-centered attacks, information security policy, cybersecurity analytics, and machine learning.

Cybersecurity is embedded in all levels of Pace's academic programs, which includes a cybersecurity concentration in the Bachelor of Science in Information Technology and the Master of Science in Cybersecurity.

Pace has established a growing community of cybersecurity students through student club activities, competitions, and workshops. To enrich

the students' experience, we support professional development activities that assist students in career planning, enhance their technical skills and professional profiles and connect them with potential employers. Pace also offers two cybersecurity scholarship programs, including the CySP program supported by the Department of Defense and the CyberCorps: Scholarship for Service program supported by the National Science Foundation.

To increase diversity in our cybersecurity students, we focus on recruiting and retaining students from underrepresented groups and foster deeper understanding of cybersecurity through experiential learning and mentoring, including opportunities to work closely with faculty in research projects and in their research labs. Related labs include the Cybersecurity Education and Research Lab, the Computer Forensics Lab, and the Intelligent Agents Lab.

In addition the Pace Cyber Range is a collaborative environment for student teams to engage in scenario-based cyber defense training.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Pace University Cyber Range



PAC Cyber Students

**Palo Alto College** offers an Associate of Applied Science in Cyber Defense and Operations, designed to equip students with the necessary skills to design, implement, and secure computer networks, setting them on the path to rewarding careers in this essential sector. The program has earned the prestigious designation as a National Center of Academic Excellence in Cyber Defense (CAE-CD) through 2028, highlighting the institution's dedication to excellence in this field. The curriculum, developed in collaboration with industry experts, is aligned with current workplace demands, ensuring that students are well-prepared for the challenges they will face in the cybersecurity industry.

Students at Palo Alto College benefit from a hands-on approach to learning, with practical skills development emphasized through courses in Python programming and penetration testing, along with

experiences in labs such as the Cyber Range. This practical training prepares students for real-world challenges they will encounter in the cybersecurity field. Additionally, the competitive edge of students is sharpened through participation in the National Cyber League competition, where they have achieved impressive rankings, placing in the top 50 in Spring 2023 and top 80 in Fall 2023.

The College not only provides valuable real-world experience through partnerships with internship providers to enhance job placement prospects but also offers the certification advantage by covering the cost of industry certifications. Students have successfully passed notable certifications like CompTIA Security+ and PenTest+. Furthermore, the program prepares graduates for seamless transitions into entry-level cybersecurity positions or further education, with many choosing to continue their studies at institutions such as Texas A&M San Antonio.

Palo Alto College's program goes beyond technical training to emphasize the ethical and legal aspects of cybersecurity, empowering graduates to navigate complex situations with integrity. The collaborative learning environment fosters a community where students learn to analyze, troubleshoot, and solve problems effectively, equipping them with a comprehensive skill set for success in the cybersecurity field.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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# PENN HIGHLANDS COMMUNITY COLLEGE



Pennsylvania Highlands Richland Campus

**Pennsylvania Highlands Community College** stands as a leading two-year educational institution in West Central Pennsylvania. Committed to offering accessible, top-tier education, Penn Highlands provides a wide array of academic programs and career training opportunities, designed to meet the diverse needs of its students. Whether you're a potential student, educator, or community member, Pennsylvania Highlands Community College stands as a beacon of opportunity and growth.

The Computer Technology – Cyber Security associate degree provides students with the skills to not only manage networks but also to fortify them against potential threats. Additionally, students will gain expertise in conducting penetration tests to ensure the networks remain impervious to attacks. Upon graduation, students will possess comprehensive knowledge of computer hardware, operating

systems, networking, databases, and programming, as well as defensive and offensive security measures. Aspects of the CompTIA Linux+, Net+, Security+ and A+, Wireshark Certified Network Analyst, and the EC-Council Certified Ethical Hacker certifications will be covered giving our graduates the chance to not only hold an AAS degree but multiple certifications upon completion of the degree.

Our IT Cybersecurity program uses a hands-on approach to learning and allows our students to gain critical experience in the use of different cybersecurity tools and techniques that are valuable in the students learning path to success. The program is offered in two locations and includes in-class and online courses to meet our students needs.

Our new Cybersecurity certificate is allowing us to reach out to different high schools in our area to allow them to start learning cyber early and effortlessly transfer to our IT Cybersecurity AAS track. We are also connected to our community with our annual Cybersecurity Community event and high school workshops offered during the summer for local students.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cybersecurity Students



# PENNSYLVANIA STATE UNIVERSITY



Westgate Building, Penn State University Park

**Penn State** and the College of Information Sciences and Technology (IST) were recognized as a National Center of Academic Excellence (CAE) in Cyber Defense by the National Security Agency and the Department of Homeland Security. This prestigious designation was first awarded in 2008, with subsequent recertifications in 2014 and 2023. The CAE program's inception aimed to address the urgent demand for proficient cybersecurity professionals in the federal sector, which has also extended to state and local governments as well as the private sector.

The College of IST earned this distinction through its comprehensive cybersecurity-related academic offerings, positioning it as a prime institution for students aspiring to excel in the cybersecurity field. Additionally, this designation enables the College of IST to bestow a certificate of achievement and a letter of recognition upon graduates who fulfill

specific criteria.

Students enrolled in select programs have the opportunity to receive a certificate of achievement from the NSA. Eligible programs include the B.S. in Cybersecurity Analytics and Operations available at numerous campuses including Altoona, Beaver, Berks, Brandywine, Greater Allegheny, Harrisburg, Lehigh Valley, Shenango, Schuylkill, University Park, World Campus, and York. Also eligible are students in the B.S. in Information Sciences and Technology program, offered at campuses such as Abington, Beaver, Berks, Brandywine, Greater Allegheny, Harrisburg, Hazleton, Lehigh Valley, Mont Alto, New Kensington, Scranton, University Park, Wilkes-Barre, World Campus, and York, as well as those in the B.S. in Security and Risk Analysis program, available at Altoona, Berks, Harrisburg, University Park, and World Campus.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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To qualify for the certificate, a student must be admitted into one of the aforementioned programs and, prior to submitting their intent to graduate, they need to add the NSA certificate to their academic record through the LionPATH system's Update Academics feature. Meeting all the certificate's requirements ensures its notation on the student's transcript and the issuance of a physical certificate alongside their diploma upon graduation.



Pensacola State College Campus

Founded in 148, **Pensacola State College**, under the governance of a local Board of Trustees, is committed to providing quality, affordable, and accessible educational opportunities through a variety of delivery methods. The College, a member of the Florida College System, offers baccalaureate and associate degrees, workforce certificates, business and industry training, non-credit continuing education, community outreach, and cultural enrichment opportunities for students and the community.

PSC offers more than 100 degree and certificate programs to prepare students for the workforce and meet the needs of today's employers. PSC's pirate path to success and academic advisers provide students with a clear academic plan, ensuring they take the right courses to achieve their goals. Pensacola State College is the first state college in Florida to offer the Bachelor of Applied Science

in Cybersecurity degree. PSC's Mathematics and Computer Science Department offers a Technical Certificate, Associate in Science, and Bachelor of Applied Science in Cybersecurity. Enrollment in Cybersecurity programs continues to grow, with over 100 students in certificate programs, 300 students in associate in science programs, and 150 students in baccalaureate programs in Cybersecurity.

PSC became a National Center of Academic Excellence (CAE) in Cybersecurity in 2023. Students take cybersecurity courses in the College's Donald McMahon III Center for Cybersecurity. Through the College's Cyber Defense Club, cybersecurity students participate in local, regional, and national cybersecurity competitions and continue to meet the need for highly trained cybersecurity analysts who can handle complex security concerns.

## DESIGNATIONS

- CAE-Cyber Defense

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Donald McMahon III Center for Cybersecurity at PSC



PIKES PEAK  
COMMUNITY  
COLLEGE

# PIKES PEAK COMMUNITY COLLEGE



PPCC Rampart Range Campus

**Pikes Peak Community College's** cybersecurity degree program prepares people for the Cisco Certified Network Associate Security (CCNA Security) certification test or the Computing Technology Industry Association Security+ (CompTIA Security+) certification test. Students can then pursue careers as cybersecurity analysts, information systems security engineers, systems design engineers, and more. Easy job placement and a starting salary of \$60,000 a year make this a solid career path. With two new cyber labs at its Rampart Range and Centennial Campuses and an additional cybersecurity lab facility at the Catalyst Campus, PPCC has the capacity to provide affordable,

hands-on training to 75 qualified students at a time. In addition, PPCC's hands-on, non-credit cybersecurity courses are designed to teach experienced hobbyists and IT professionals all

they need to know to pass the Network+, Security+ and Certified Ethical Hacker (CEH) exams, the industry standards for anyone wanting to work in cybersecurity. Using brand new cybersecurity ranges, students work through realistic scenarios in the lab. With costs far less than most test-prep boot camps, the PPCC fast-track courses do not count toward a college degree but do come with a voucher to take the industry certification exam at no additional charge.

As part of our effort to become an NSA- and DHS-designated Center of Academic Excellence for Cyber Defense, PPCC is now part of both CyberWatch West (CWW), a group of universities and colleges interested in cyber defense and cybersecurity and the National CyberWatch Center, a consortium of higher education institutions, businesses, and government agencies focused on collaborative efforts to advance information security education and research and strengthen the national cybersecurity workforce. PPCC is also a member of the Department of Homeland Security (DHS) Stop. Think.Connect. Campaign.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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PPCC Centennial Campus



PPSC Centennial Campus

**Pikes Peak State College's** cybersecurity degree program prepares people for multiple industry certification exams like the Computing Technology Industry Association Security+ (CompTIA Security+) certification and over ten more. Students can then pursue careers as cybersecurity analysts, information systems security engineers, systems design engineers, and more. With a large defense sector within the region, there is easier student job placements. A typical local starting salary of \$50-60,000 a year make cybersecurity a solid career path. With a planned brand new cyber labs at the Centennial Campuses in addition to two other cyber/computer networking labs PPSC has the capacity to provide affordable, hands-on training to 75 qualified students at a time.

In addition, PPSC's hands-on, credit or non-credit cybersecurity courses are designed to upskill and/or

teach experienced hobbyists and IT professionals all they need to know to pass the Network+, Security+, CySA+, Linux+, PenTest+, and Certified Ethical Hacker (CEH) exams, the industry standards for anyone wanting to work in cybersecurity. Using a brand new cybersecurity lab, students work through realistic scenarios in the lab. With costs far less than most test-prep boot camps. Students also have an opportunity to compete in national and local cybersecurity competitions as part of the very active student led cyber club.

Toward the end of 2023 PPSC proudly renewed its Center of Academic Excellence for Cyber Defense designation. PPSC is now an active member of the National CyberWatch Center and MWCC (Mountain West Cyber Consortium), a group of universities and colleges interested in cyber defense and cybersecurity and a consortium of higher education institutions, businesses, and government agencies focused on collaborative efforts to advance information security education and research and strengthen the national cybersecurity workforce.

In the fall of 2024 PPSC is planning to launch an online BAS in cybersecurity as a partner with other Colorado Community Colleges across the state, further offering students an opportunity to advance their careers through in-demand education and learning.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Humber Building, PCC Main Campus

**Pitt Community College (PCC)** was founded in 1961 and is the sixth-largest college in the 58-member North Carolina Community College System. PCC educates and empowers people for success. With a culture of excellence and innovation, the college is a vital partner in the economic and workforce development of our community. PCC provides access to dynamic learning opportunities designed to foster personal enrichment, successful career preparation, and higher education transfer.

The College awards associate degrees, diplomas and certificates for more than 60 programs and provides adult basic education, literacy training and occupational extension courses. The college serves more than 23,000 credit and non-credit students annually. The Associate in Applied Science in Information Technology: Cyber Security degree was designated a National Center of Academic Excellence

in Cybersecurity in 2020. PCC offers an Associate in Applied Science in Cyber Security, a Cyber Security Certificate, and a Cyber Security Career and Technical Education Pathway for high school juniors and seniors.

The Cyber Security curriculum focuses on planning, implementing, and monitoring appropriate security controls to safeguard and protect computer networks and information. The program provides students with the skills required to implement effective and comprehensive information security controls. The program is supported by an active Advisory Board and academic partnerships with Cisco, Oracle, Microsoft, NDG, Palo Alto, Red Hat, and VMWare.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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PCC students working on a lab



Pittsburgh Technical College Campus

At **Pittsburgh Technical College (PTC)** within the School of Information Systems and Technology, our information technology (IT) associate of science degree students can choose between the Network Administration or Network Security and Computer Forensics concentrations which have earned the Center of Academic Excellence in Cyber Defense designation. You'll gain the rigorous theory and technical know-how employers are seeking as they build their cybersecurity teams. The program starts with faculty who not only know IT inside and out, they live it. PTC's instructors have the kind of experience that only comes from rolling up your sleeves and working in the industry. But just as important as all that knowledge and expertise is how they share it.

PTC's Jarrod Mochnick Center for Cyber Security (CCS) within the School of Information Systems

and Technology works to advance the practice and public awareness of IT and cybersecurity through education, service, and practice.

Our faculty offer guidance to students, members of different academic disciplines across the College, local government, and industry-aligned partners. PTC-CCS is dedicated to bridging education with study, practice, and research to provide an atmosphere that promotes applied hands-on research in IT and cybersecurity, with an emphasis on collaboration, innovation, and long-lasting learning.

Our students use leading forensics tools like FRED systems which set the standard for forensic acquisition and analysis workstations. PTC use of the Internet of Things (IoT) devices has increased rapidly in homes, businesses, factories, and hospitals. We use IoT devices to show how this growth has created an increase in security and cyberattacks. Businesses must address these new threats—and our students need to be prepared to meet those challenges. PTC also works with our community to assist and grow this knowledge.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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# POLYTECHNIC UNIVERSITY OF PUERTO RICO



PUPR Campus

**Polytechnic University of Puerto Rico (PUPR)** is recognized as a nationwide leader producing high quality engineers and STEM professionals from mostly Hispanic underrepresented groups. It has a very well-established mechanism to attract talented minority students and a very well-developed mentoring and support system to help them succeed, both academically as well as in job placement.

Our mission is to develop basic research in cybersecurity to enhance research and education capabilities in scientific and engineering disciplines critical to National Security and to the National Centers of Academic Excellence in Cybersecurity (NCAE-C) program.

PUPR was designated a National Center of Academic Excellence in Information Assurance Education (CAE/IAE) by the National Security Agency and

Department of Homeland Security (NSA/DHS) in June 2009. In 2016 PUPR was re-designated for a second time as a CAE in Information Assurance and Cyber Defense (IA/CD) until the year 2020-21. We were newly designated until the year 2027. We were the first institution in Puerto Rico to obtain the CAE Designation. Our PoS is the Master of Science in Computer Science in Cybersecurity. We also offer two graduate certificates in cybersecurity: the Graduate Certificate in Information Assurance and Security (GCIAS) and a Graduate Certificate in Digital Forensics (GCDF). PUPR is also offering a PhD program where security is one of the core research areas. This initiative focuses on developing an Interdisciplinary PhD in Engineering Science. Students will master two core areas straddling the interdisciplinary research area. Security is eminently interdisciplinary in engineering.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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POC's with Doctoral Student



Home of PCC's Cybersecurity program

**Portland Community College (PCC)** is designated a Center of Academic Excellence in Cyber Defense for its demonstrated excellence in cybersecurity education and its institutional practices and policies to protect PCC's network and information resources and promote security awareness among the PCC community.

Housed in the Computer Information Systems (CIS) department, PCC offers an AAS degree in Cybersecurity that aligns with the CAE knowledge units, as well as stackable Cybersecurity certificates that can be achieved on their own, or along the way to a degree. Cybersecurity is infused throughout all of PCC's CIS programs, encouraging all students to develop a security mindset. Students participate in National Cyber League competitions where they engage in defensive and offensive puzzle-based challenges. Faculty participate in the annual

CAE Symposium and other Cybersecurity-related conferences and events where they learn how to best prepare students for jobs in the field. PCC's Cybersecurity program is ABET accredited.

The college's CIO/CISO has made Cybersecurity a strategic priority, and PCC has invested heavily in a comprehensive Defense in Depth program. There is an intentional focus on people and education, from engagement of the Board of Directors, President and executive leadership to campaigns targeted at students, faculty, and staff actively promoting security awareness.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Students collaborate & succeed



The Urban Center Plaza

The Mark O. Hatfield Cybersecurity & Cyber Defense Policy Center at **Portland State University (PSU)** is a National Center of Academic Excellence in Cyber Research designated by the National Security Agency and the Department of Homeland Security.

The center convenes scholars, managers, and policymakers from Portland State University to train future leaders and translate research findings into effective policy. We achieve these goals through multi-disciplinary, multi-sector, and multi-stakeholder curricular and research partnerships.

Within PSU, we are a collaborative partnership between the Mark O. Hatfield School of Government of the College of Urban and Public Affairs, the Departments of Computer Science and Engineering, and the Department of Engineering and Technology Management of the Maseeh College of Engineering

& Computer Science, and the School of Business.

As a member of the National Centers of Academic Excellence in Cybersecurity community, our center collaborates with over 340 universities and community colleges in the United States with webinars, panel discussions, information meetings, research, and teaching materials and syllabi for undergraduate and graduate students.

Furthermore, PSU is the lead member of Oregon's cybersecurity initiative, partnering with Oregon State University, the University of Oregon, Chemeketa Community College, and Mt. Hood Community College.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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Student Life at PSU



The Center of Advanced Technology host the Cybersecurity program

**Prince George's Community College (PGCC)**, as a premier college in the Washington DC area, has delivered a superior and affordable education since 1958. Our students have become leaders in many career fields, including Cybersecurity. We give students a clear and direct path to their goals, which helps them save money, stay on track, and graduate faster. The Center of Cybersecurity at PGCC is also engaged in cybersecurity research with industry partners and outreach programs. PGCC hosts the National Cyberwatch Center, contributing to improving cybersecurity curricula across the nation. Furthermore, we were the only two-year college among 58 higher education institutions selected for the Protect Our Power Best Practice project, identifying, and recommending best cybersecurity practices to utility companies in North America.

The Cybersecurity programs at PGCC transform

students into highly skilled cybersecurity professionals who are ready for entry-level positions such as data security analysts, systems security administrators, and network security administrators. In this A.A.S program, students master the latest security technologies and examine the issues of information security awareness, network and system security breaches, systems and network security planning and defense, network security organization, as well as legal and ethical issues associated with Cybersecurity. Students also complete a capstone project in which they will design an information security system and implement a security strategy for a network. Importantly, we provide students with the opportunity to stack up credentials while working toward their degrees. In addition to the A.A.S. degree, several professional industry certifications and three certificates – the Network Security Certificate, the Cisco CCNA Preparation Certificate, and the Cybersecurity Certificate - may be earned and applied toward the degree. Moreover, students planning to pursue a bachelor's degree in Cybersecurity or related programs like Information Technology, Computer Science at area four-year institutions can leverage a growing number of articulation agreements.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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PGCC Students



# PUEBLO COMMUNITY COLLEGE



Pueblo Community College Main Campus

The National Security Agency and Department of Homeland Security have designated **Pueblo Community College** a Center of Academic Excellence in Cyber Defense (CAE-CD) for its cybersecurity program. The designation makes PCC the lone two-year accredited program in southern Colorado. "This designation is the culmination of years of dedication to training, development, education, and promotion of the cybersecurity discipline at PCC," said Jennifer Sherman, dean of business and advanced technology. "We are proud to be a leader in this field as we address the workforce demand and talent pipeline for business and industry."

Tim Gama, director of PCC's cybersecurity program, spent the past year completing the accreditation process. PCC's existing program had to meet stringent criteria to be approved.

"I was so pleased when told that the college had been awarded this distinguished accreditation," said PCC President Patty Erjavec. "I could not be more proud of Tim and his fine efforts to move our cybersecurity program to this level."

Students who complete PCC's 60-credit program will receive an Associate of Applied Science degree in Networking Cybersecurity and will be prepared to test for certification in several areas. They will be able to enter the workforce immediately upon graduation or transfer to a four-year program "We're training today for jobs not yet created," Gama said. "With this designation, the industry will recognize that our students are trained and ready for the cyber industry."

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Take the Next Step in Your Education and Career

**Purdue University Global's School of Business and Information Technology's** mission is to develop the competencies of career-focused students to empower them as ethical, insightful, and solution-oriented decision-makers, leaders, and lifelong learners in increasingly complex and diverse global environments. Faculty members are practitioners and scholars, committed to innovation in teaching and intellectual contribution.

Purdue University Global is a public, non-profit institution that delivers personalized, world-class online education tailored to the unique needs of adults who have work or life experience beyond the classroom. The approach taken enables students to develop essential academic and professional skills with the support and flexibility they need to achieve their career goals.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Purdue Global is part of the respected Purdue University system. One of the most prestigious research universities in the world, Purdue University is ranked in the top 10 best public universities in the U.S. by The Wall Street Journal/Times Higher Education. These rankings demonstrate Purdue's commitment to providing higher education at the highest proven value. The Bachelor of Science in Cybersecurity and the Master of Science in Cybersecurity Management are both CAE-CD programs of study. Both programs are completely online and available in our competency-based format as well for students who prefer the flexibility to move at their own pace and accelerate their program with skills and experience, they have achieved.

Our undergraduate students can submit a portfolio of their work experience and accomplishments to earn credit towards their degree as applicable. In addition, while the program prepares students for industry certifications across-the-board, the university also provides transfer credits for certifications earned prior to/during their enrollment. Ideally students can fill in skill gaps while not repeating foundational coursework when they can demonstrate competency via certifications or the portfolio process.

One major benefit for all students is the option to do an internship prior to completing their program. External placement is an option but for those students in geographic locations with limited job availability, they can still complete a virtual internship with our internal company that has been set up to provide students with essential workplace skills, both from a technical and leadership perspective.



PURDUE UNIVERSITY NORTHWEST

# PURDUE UNIVERSITY NORTHWEST



PNW Cyber Students

**Purdue University Northwest (PNW)** is a student-centered university that values academic excellence, supports growth, and celebrates diversity. Located near Chicago in northwest Indiana, PNW fosters a vibrant academic community through high quality and engaging undergraduate and graduate education.

PNW's College of Technology partners with business, industry and government to bring students opportunities to solve real-world problems, leading to internships and jobs. Most courses are application-oriented and include laboratories with state-of-the-art equipment.

The CAE path program, Bachelor of Science in Computer Information Technology (CIT) undergraduate program, is accredited by CAC-ABET. The curriculum is designed to follow IEEE/ACM

curriculum guidelines, and courses are implemented with extensive hands-on activities and lab practices. Students are prepared with knowledge, skills and abilities that can be mapped to multiple NICE Work Role Categories (Protect and Defend, Analyze, Operating and Maintain, Secure Provision). The B.S. in CIT program and the newly launched B.S in Cybersecurity program enroll over 230 undergraduate students, and the M.S. in Technology CIT concentration program enrolls over 70 graduate students.

PNW's workforce development is supported through an NSF SFS CyberCorps® Scholarship program, a NCAE-C pilot Cybersecurity workforce training program, as well as a Cybersecurity Credit Transfer Agreement Development program which is part of NCAE-C Career Preparation National Center. These programs prepare highly qualified cybersecurity professionals to be placed in government agencies, train primarily transitioning military and first responders to join the cybersecurity workforce and develop a K12 cybersecurity pipeline.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CyberCorps Study Session



Radford University Center for Information Security

At **Radford University's** School of Computing and Information Sciences (SCIS), undergraduate students can delve into the realm of cybersecurity through programs like the BS in Computer Science and Technology and the BS in Cybersecurity. The Center for Information Security, nestled within SCIS, spearheads a multi-disciplinary initiative in collaboration with the Departments of Criminal Justice, Mathematics and Statistics, and the Forensic Science Institute, underscoring the university's comprehensive approach to cybersecurity education.

Among its notable activities, SCIS hosts the annual RUSecure CTF cyberdefense contest, now in its ninth year, attracting over 1,200 high school students who first receive preparatory training in cybersecurity before engaging in the spring semester competition. Additionally, SCIS organizes camps for K-12 educators, recently supported by NSA Gencyber

camp funding for the years 2022 to 2024.

Faculty members at SCIS are actively involved in research alongside undergraduate students, focusing on emerging areas such as IoT security and 5G networks, bolstered by grants from the Commonwealth Cyber Initiative's Southwest node in 2022-23. Beyond the classroom, the university encourages participation in extracurricular and experiential learning opportunities, notably through the Cyber Defense Club team. This team has achieved remarkable success, including a 39th place ranking out of 521 colleges in the National Cyber League's Fall 2023 Cyber power rankings and a 4th place finish in the 7th annual Commonwealth Cyber Fusion competition in February 2024.

Student research initiatives have also garnered recognition, with a project on IoT security winning the People's Choice Award at the Southwest Virginia Commonwealth Cyber Initiative Student Researcher showcase in April 2023. Another group of students clinched victory in the entrepreneurial Spring Challenge sponsored by CyberCivilian and funded by a grant in June 2023.

Additionally, faculty and staff from the Mathematics and Statistics departments have enriched the academic experience with a cryptography-focused trip to Washington D.C., London, Paris, and Normandy in Spring 2024, further illustrating the university's commitment to offering diverse and impactful learning experiences in the field of cybersecurity.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Communications Building

**Regent University** is America's premier Christian university, with 13,000+ students studying in Virginia Beach, Virginia, and online around the world. Our mission is to serve as a leading center of Christian thought and action providing an excellent education from a biblical perspective and global context in pivotal professions to equip Christian leaders to change the world. Regent is the nation's academic center for Christian thought and action, with a multitude of programs, such as associate, bachelor's, master's, and doctoral degrees in 150+ areas of study, including cybersecurity, computer science, information systems technology, business, counseling, divinity, education, government, law, nursing, healthcare, and psychology.

Ranked among top national universities (U.S. News & World Report), Regent is one of only 23 universities nationally to receive an "A" rating for its

comprehensive liberal arts core curriculum (ACTA). Other accolades include #1 Best Accredited Online School (Study.com), #1 Online Bachelor's Programs in Virginia (U.S. News & World Report), Top Military Friendly School (MilitaryFriendly.com), and a Tier 1 Homeschool-Friendly School (HSLDA).

Regent University has risen to meet the growing need for professionals with proven cybersecurity skills. It offers bachelor's and master's cyber security programs as well as 16-week Cyber Practitioner Virtual Boot Camps that can prepare you for five certifications. A key resource is its state-of-the-art Cyber Range—accessible in programs on campus in Virginia Beach and online. The Institute for Cybersecurity was launched in 2017 and has since supported hundreds of students with advanced practical cybersecurity training.

For over 45 years, Regent has trained 35,000+ leaders to change the world with a holistic, Christ-centered approach that balances the knowledge and skills employers seek.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Institute for Cybersecurity



Regis University has three campuses in the Denver metro area, which receives an average of 300 sunny days a year and is at the foot of the Rocky Mountains. Top-rated snow skiing is an hour away.

With cyberattacks on the rise, employers need qualified professionals who can keep their data and technology protected. Data security and integrity are critical, whether in storage, processing, or transit.

**Regis University**, located in sunny Denver, Colorado, offers a complete approach to information systems and cybersecurity. Students learn how to protect all levels of confidentiality, integrity, and availability of data in their delivery systems. Pursuing an Information and Cybersecurity Master's degree, students choose from a cybersecurity or policy management specialization, with each geared toward a specific career track. The degree also offers three stackable certificates. Upon graduation, Regis students have the foundational skills and knowledge to sit for many in-demand professional certifications. Classes are offered online, on campus, or a combination of both.

Regis' accredited program is designated as a Center of Academic Excellence in Cyber Defense by the National Security Agency and Department of Homeland Security. Our curriculum is modeled on the curricula guidelines of the Committee on National Security Systems' 4000 training standards, the International Information System Security Certification Consortium's Eight Domains of Knowledge, the National Institute of Standards and Technology, and the International Security Audit and Controls Association.

Established in 1877, Regis University is a premier, globally engaged institution of higher learning in the Jesuit Catholic tradition that prepares leaders to live productive lives of faith, meaning, and service. One of 27 Jesuit universities in the nation, Regis has four campuses and extensive online offerings with more than 8,000 students.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Regis University partners with the Colorado Army and Air Force National Guard and the state of Colorado to provide cybersecurity trainings to the public throughout the year.



# RICHMOND COMMUNITY COLLEGE



The Robinette Building, Rockingham, NC

**Richmond Community College (RCC)** is proud to announce that it has been designated as a Center of Academic Excellence in Cyber Defense Education (CAE-CD). This prestigious recognition, awarded in December 2023, reflects RCC's commitment to providing high-quality cybersecurity education and training to students and the community.

RCC offers a variety of programs and courses that prepare students for careers in cybersecurity. One of these is a 14-week, continuing education networking/security course, funded by an NSA subgrant from the Carolina Cyber Network (CCN), of which RCC is a member. This course trains students for industry-recognized Network+ and Security+ certifications and provides them with certification vouchers and training materials as part of a low course fee. Thanks to this affordable and accessible opportunity, enrollment in this course has risen.

Another program that incorporates cybersecurity training is the Electric Utilities and Substation Relay Technology (EUSRT) program, which prepares students for careers in the electric power industry. RCC has added a new course to this program, which covers the fundamentals of supervisory control and data acquisition (SCADA) systems and their security implications. This course is required for EUSRT students, and it equips them with the skills and knowledge to protect our critical infrastructure.

RCC is honored to be recognized as a CAE-CD institution and is dedicated to continuing its excellence in cybersecurity education. RCC is confident it will prepare students for the challenges and opportunities in cybersecurity, and that its community and industry engagement will contribute to national and global cybersecurity efforts.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Brian Goodman, IT Professor



Riverside City College Admissions Building

**Riverside City College (RCC)** is honored to be the first California community college in the Inland Empire / Desert region to be designated as a National Center of Academic Excellence in Cyber Defense. RCC was established in 1916 and today serves a diverse population of 30,000 students annually through both in-person and online programs. The College is designated as a Hispanic Serving Institution. The Information Systems and Computer Science programs are accredited through the Accreditation Council for Business Schools and Programs (ACBSP) School of Business.

The Cybersecurity/Cyber Defense program is well-established with courses that lead students to gainful employment in the cyber defense workforce. Courses and programs are evaluated and guided by a Business and Industry Leadership Team and are strategically aligned with industry certifications

from CompTIA, Cisco Networking Academy, and EC-Council. To facilitate obtaining these industry certifications, there is an on-campus Pearson Vue testing center.

The NSA-validated certificate program in Information Security and Cyber Defense can be used as a foundation for obtaining an Associate Degree in Cyber Defense. The Cisco/Cyber programs have one of the largest deployments of a virtual learning NETLAB environment that provides students 24/7 365-day access to real networking equipment and virtual machines for labs and practice.

A unique program at RCC is the NSF-ATE grant-funded Cyberpreneurship program that combines cyber education with entrepreneurship education for individuals who desire to establish their own cybersecurity business to serve small to mid-sized organizations who do not have dedicated IT/Cyber employees.

RCC is proud to be one of the first institutions to have a state-registered apprenticeship program in cybersecurity with students working with employer partners. This program allows students to attend college (tuition-free) and earn while they learn in class and on the job.

The mission of the Cyber Defense program is to train and move students into the workforce who are professionally trained and prepared to defend small to large organizations and the nation from the ever-growing cyber threat and employment gap that exists.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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[cyber.rcc.edu](http://cyber.rcc.edu)



The Goff building where the cyber lab is housed

**Roane State Community College** is a two-year institution with nine locations, online classes, and evening classes that helps you fit college into your schedule. Our low cost and many financial aid options will help you afford college.

The AAS cyber security program is housed in the Math & Sciences Division. It has an official cyber security lab segregated from the rest of the college's internet and dedicated solely for the information assurance course. The cyber security lab boasts two dedicated servers with cisco switches and routers. It has 7 embedded labs that help students perform protocol sniffing, keylogging, identity theft, password cracking, PLC hacking, Hear monitor attacks, steganography, network and host detection tools, Mitre-Attack Frameworks, and much more.

It added last year a digital forensics lab which boasts

20 computers with dedicated professional licensed software including Access Data, Tenable, mobile forensics Software like Paraben Suite, and much more. It has been declared a National Center of Academic Excellence in Cyber defense since 2020.

Students are trained to become Cybersecurity professionals with data analytics including log files, network logs, etc. They review complex security architecture and design diagrams detailing ports and protocols, and they conduct and analyze vulnerability scans. They must also constantly learn to keep up with new threats and how to stop them. They boast several COMPTIA certifications including A+, Net+, Security+, PenTest+.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CMMC training (Dr. Meghabghab)



# ROBERT MORRIS UNIVERSITY



RMU Campus

**Robert Morris University (RMU)** is a nationally ranked non-profit private doctoral-granting university located in suburban Pittsburgh, PA. The mission of RMU is to be the gateway to engaged, productive, and successful careers and lives. RMU is accredited by the Middle States Commission on Higher Education to offer bachelor's, master's, integrated bachelor's/master's, and doctorate degrees.

RMU provides quality education in Cybersecurity and currently offers a Bachelor of Science (BS) degree program in Cybersecurity, a Master of Science (MS) degree program in Cybersecurity, and an integrated BS/MS in Cybersecurity program. RMU has been designated as a National Center of Academic Excellence in Cyber Defense (NCAE-CD) since April 2019 and holds ABET computing accreditations, including the ABET Cybersecurity accreditation. RMU

has been awarded DoD CySP and NSF SFS scholarship grants to support cybersecurity education.

The cybersecurity programs and courses at RMU provide students with strong knowledge, skills and abilities in fundamental and more advanced topics necessary for academic and professional success in the cybersecurity field. The core courses include networking, network security, operating systems, programming (Python, C, C++, C#, Java, etc.), database, ethical hacking and penetration testing, applied cryptography, digital forensic analysis, and a cybersecurity capstone project.

Students at RMU cybersecurity programs have extensive hands-on learning activities for problem solving and other activities to develop their skills and competencies in critical thinking, communication, teamwork and leadership. The course work also helps students to prepare for professional certifications in Cybersecurity, such as Security+, Certified Ethical Hacker (CEH), and Certified Information Systems Security Professional (CISSP).

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cybersecurity Course



Aerial View of Cybersecurity Hall on Main Campus

Established in 2012 as one of the first academic units of its kind in the nation, the Department of Cybersecurity at **Rochester Institute of Technology (RIT)** features 16 full-time faculty members and over 40 associated researchers through its partnership with the ESL Global Cybersecurity Institute. With over 500 students enrolled across Bachelor's, Master's, and PhD programs, the department has been designated as a CAE-CD program since 2006 and a CAE-R program since 2017.

Additionally, RIT is one of the primary universities offering both the Department of Defense Cyber Scholarship Program (CySP), and the NSF CyberCorps Scholarship for Service (SFS) program. These designations and scholarships have propelled the rapid growth of cybersecurity research and education programs at RIT.

RIT offers students unparalleled opportunities for hands-on learning and real-world experience. Through our innovative curriculum, covering topics such as network security, cryptography, digital forensics, and ethical hacking, students engage in practical exercises and simulations that mirror real-world scenarios, preparing them to tackle the challenges of today and tomorrow. From securing connected cars to defending wireless communications in the Internet of Things, our faculty and students are at the forefront of groundbreaking research shaping the future of cybersecurity.

In addition to engaging coursework, the program emphasizes experiential learning, offering extensive co-op opportunities with industry leaders and government agencies. Students work alongside seasoned professionals, gaining invaluable insights and experience in their field.

Additionally, RIT hosts the global finals of the Collegiate Penetration Testing Competition (CPTC) and regularly hosts the Northeast regionals of the Collegiate Cyber Defense Competition (CCDC), providing students with the opportunity to participate in these prestigious cybersecurity competitions. RIT's student teams have consistently excelled, including winning the CPTC global finals in 2021, the CCDC national finals in 2013, and the Northeast regionals of the CCDC 10 times. At RIT, students are empowered to become leaders, innovators, and agents of change in a rapidly evolving digital landscape.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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Rockland Community College Technology Center

**Rockland Community College**, State University of New York, offers a safe, supportive learning environment for thousands of students from diverse backgrounds. RCC has been first choice for parents and students. Our award-winning faculty works closely with students to ensure their success, and we have numerous student services to help students meet their goals. RCC serves as a unique and important resource for the community. Our cultural offerings attract thousands of community members, and the business community turns to RCC for workforce training and development.

RCC has a longstanding commitment to cybersecurity education. Rockland was the first community college in the SUNY system to offer a degree in local area networking in 1996 and have its courses certified as mapping to the Committee on National Security Systems NSTISSI Standard 4011 in 2008.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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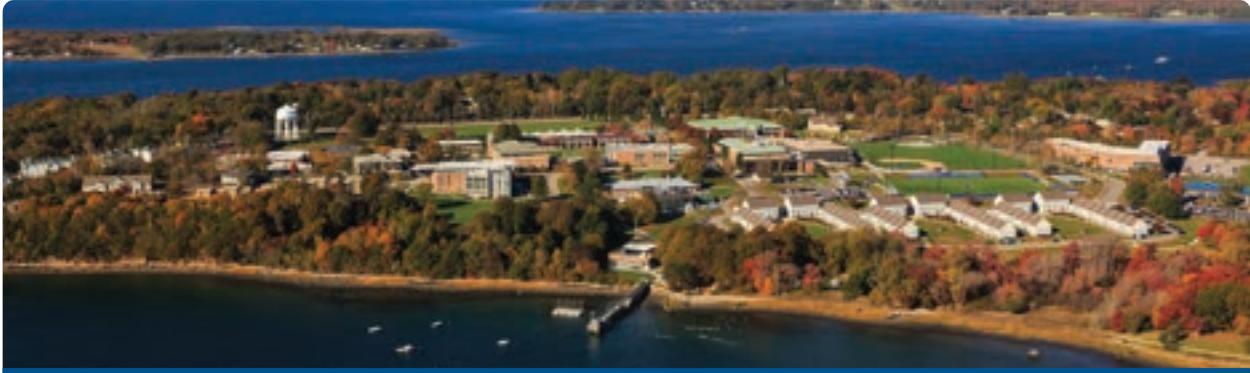
In 2017, RCC became a CAE in Cyber Defense 2-Year Education and re-designated in 2023. This gives cybersecurity graduates the advantage of transferring to a range of 4-year institutions and are eligible to apply for the prestigious CyberCorps••Scholarship for Service. The A.A.S. degree program provides students with the technological course work needed for careers in cyber security and also prepare students to enter the workforce with many industry-recognized certifications.

Cybersecurity topics are included in other degree programs, example HIPAA in Nursing and Occupational Therapy Assistant programs, information privacy topics in the Paralegal Studies program, and critical infrastructure protection in the Corporate and Homeland Security program.

The College is a CompTIA Authorized Academy, Cisco Academy, an affiliate school of the National Center for Systems Security and Information Assurance, and a member school of the National CyberWatch Center.



2024 NCL Competition



Roger Williams University, Bristol, RI.

**Roger Williams University** prepares students to be successful leaders and innovators in today's rapidly changing world. The distinctive focus on original research, engaged learning, and hands-on apprenticeships, practicums, and clinical learning opportunities provides students with real-world experiences, on and off campus, that empower them to be career- and job-ready, to succeed immediately, and to continue to advance throughout their careers. The commitment to academic excellence, engaged learning and student success is the foundation of the university's mission, RWU delivers a world-class education and inclusive student experience.

Cybersecurity & Networking is much more than a matter of Information Technology. When you major in Cybersecurity & Networking at RWU, you will learn how to create and maintain secure networks and track down hackers who aim to breach

that security. Students will learn many aspects of Cybersecurity, including intrusion detection and prevention systems, secure routing, switching, and firewall design, defensive and offensive guards, information assurance, computer, Internet security and privacy, cryptography, cybersecurity laws and regulations, risk assessment and management, and troubleshooting. In addition, you can indulge in an interdisciplinary capstone project, including cloud computing, IoT security, and artificial intelligence.

The cybersecurity plan of study at RWU will help meet this need by providing a comprehensive cybersecurity education that emphasizes critical security issues. The holistic approach combines analytical thinking and criminology skills such as secure coding, cryptography, digital forensics, systems administration, and Unix/Windows fundamentals.

Students will have plenty of opportunities for hands-on projects. Whether testing vulnerabilities or creating a new security protocol, you will put theories into practice. Because of industry partnerships, you will have access to internships that will put your cybersecurity knowledge to use quickly. You will be introduced to trending technologies such as IoT and cloud computing. You will learn about new domains of security that the world needs to secure.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Roosevelt University Campus

**Roosevelt University**, located in the heart of downtown Chicago, is a newcomer to the CAE community, having earned CAE-CD status for its Bachelor of Science in Cyber and Information Security in April 2018. Roosevelt was officially designated a Center of Academic Excellence in Cyber Defense (CAE-CD) at a June 2018 ceremony in Huntsville, Alabama.

Through its Center for Cyber Security and Information Assurance (CCSIA), Roosevelt University offers a comprehensive and distinctive range of academic and community activities. The CCSIA hosts a modern cybersecurity research laboratory and an ultra-modern teaching laboratory. The CCSIA sponsors a speaker series, student employment events, and community engagement opportunities for undergraduate and graduate students. CCSIA programs promote professional certifications for

students and sponsor a nationally ranked, award-winning competition cyber team, the RU CyberZ, whose members have won gold at local, state, and national competitions.

The involvement of an industry board and alumni board in the CCSIA ensures that the center and its programs remain at the leading edge of theory, practice, and the needs of the field. Roosevelt's BS in Cyber and Information Security degree distinctly combines comprehensive technical curriculum, application, and experience with a broad contextual and historical perspective on the people involved in cyber defense. Students also have the valuable opportunity to combine a CAE-CD program with studies in other disciplines, such as politics, business, and biotechnology, where cyber defense is practiced.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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RU CyberZ winning team members at Capture the Flag competition



Rose State College Midwest City, OK

**Rose State College (RSC)** is located in the heart of Oklahoma City, across the street from Tinker AFB. RSC was one of the first two year school in Oklahoma to earn the CAE designation and was the first to offer all 6 levels of the prior CNSS certifications. RSC has been teaching cybersecurity since 2003.

Students learn all aspects of Cybersecurity from computer hardware and networking up to digital forensics and cryptography. Students at Rose State can now continue their education and earn a Bachelor's in Applied Technology in Cyber Security and is the first community college to offer this capability.

RSC's cybersecurity program offers class in person, online, or flex where students determine the modality which best suits their needs. Students are engaged with practical hands on labs and exercises

along with real world scenarios to not only challenge them but to expand their knowledge and provide the training needed for today's ever-changing cyber environment.

RSC employs both full-time and adjunct faculty with real-world experience in many aspects of the cybersecurity field.

RSC also supports articulation agreements with numerous other two and four year schools along with agreements with many career tech centers around Oklahoma City where students can gain college credit while taking classes concurrently. RSC also offers summer campus such as GenCyber along with many other Kid's college courses to engage students and expand their knowledge in the cyber field.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Tanenbaum Cybersecurity Center



RCSJ Cumberland Campus

**Rowan College of South Jersey (RCSJ)** is a student success-oriented, accessible, and affordable learning center dedicated to enhancing its community's economic development and quality of life by striving for academic excellence in offering innovative programs and services to a diverse community of learners in a safe and caring environment.

RCSJ offers an Associate of Science in Cybersecurity to equip students with offensive and defensive security skills for every organization's computer network infrastructure against cybercrime. This transformative degree guides students toward industry certification. The cybersecurity program is designed to be approachable, practical, and a good foundation for an entry-level career in information security, computer network security, security engineer, cybersecurity specialist/technician, cybercrime analyst/investigator, and for further

study at any four-year college or university. For more information, visit [RCSJ.edu/CyberSecurity](https://RCSJ.edu/CyberSecurity).

Rowan College of South Jersey (RCSJ) is a student-centered, student success-driven college providing many educational opportunities for degree seeking students as well as professionals wanting to earn a much-needed credential or pursue workforce training.

RCSJ offers more than 100 in-demand and industry-informed degree, certificate, and workforce programs in two convenient locations - Gloucester and Cumberland counties. On both campuses, the College provides access to quality education, marketable credentials, experiential learning, and enhanced student experiences.

Our Flagship Partner, Rowan University, elevates the RCSJ experience. Students pursuing a bachelor's degree can take advantage of unique academic and tuition-saving programs like 3+1, 2+2 and Traditional Transfer.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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RCSJ Cybersecurity Student



Sacred Heart University's West Campus, home to the School of Computer Science & Engineering

**Sacred Heart University's** unique Master of Science in cybersecurity program is designed for both students from all majors and working professionals, imparting requisite skills to effectively address the constantly changing threat landscape faced by people, companies and governments today. Sacred Heart's cybersecurity courses are taught using a hands-on learning approach by subject matter experts with extensive experience from the academic and corporate worlds. A dedicated cybersecurity lab provides a collaborative learning environment to simulate cyber threats, design responses and defense strategies. The lab is used to support education, research training and community outreach in cybersecurity and privacy.

Housed in the Jack Welch College of Business & Technology, the master's program is offered by the School of Computer Science & Engineering. The

seamless integration of two distinct, yet interrelated worlds of business and technology offers students a unique experience to acquire a holistic view of cyberspace from both the technical and managerial sides.

As the second-largest independent Catholic university in New England, and one of the fastest growing in the U.S., Sacred Heart University (SHU) is a national leader in shaping higher education for the 21st century. SHU offers over 100 undergraduate, graduate, doctoral and certificate programs on its Fairfield, CT, campus. The university also has satellites in Connecticut and Ireland and offers online programs.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Students in Cybersecurity Lab



# SADDLEBACK COLLEGE



Saddleback College Football Stadium

**Saddleback College** offers a comprehensive Cybersecurity/Cyber Defense program that is designed to prepare students for a career as a Cyber Security Service Provider (CSSP) for the United States Department of Defense (DOD). The program leads to a Computer Science Associate in Science degree, which is built for transfer. Additionally, the program provides students with the necessary preparation to take the Certified Ethical Hacker exam, which meets the minimum certificate requirements for the CSSP Analyst, Infrastructure Support, Incident Responder, and Auditor Levels.

The DOD CSSP workforce is divided into five employment levels, each of which demands one or more industry certificates and a four-year degree. The CSSP certification is a highly coveted certification issued by the Department of Defense that indicates a candidate's suitability for the DOD CSSP workforce.

The CAE Cyber Defense initiative aims to strengthen the national information infrastructure by endorsing advanced education and research in cyber defense. The initiative empowers students to enhance their grasp of comprehensive cyber defense methodologies, strategies, and protocols. This, in turn, prepares them to work jointly as specialists, ensuring our nation can efficiently avert and address significant cyber incidents. The program plays a pivotal role in advancing cutting-edge cybersecurity insights and methodologies.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CyberForce Competition 2019



Saint Leo University Main Entrance View

Our mission is to provide students with highest quality cybersecurity education and to foster a culture of security awareness, and preparedness, and technical proficiency to safeguard our digital world.

**Saint Leo University** offers traditional-age undergraduates, working adults, and military veterans multiple ways to earn a degree in cybersecurity that will prepare them well for success in the field. Degree programs are available beginning at the associate degree level through the master's degree. Additionally, several degree options are available online or at various regional education centers away from the university's main campus north of Tampa, FL.

Starting at the associate degree level, a learner can opt to study at the university's main campus or online. Those graduates can continue their studies and enroll in the Bachelor of Science program, offered

at the main campus (on a daytime schedule or with weekend and evening classes), and online. Students new to Saint Leo (without the AA) may apply for direct admission into the four-year program as well.

The most advanced degree available, the Master of Science in Cybersecurity, is similarly available at the main campus, and online. The master's curriculum is aligned with requirements set by the National Security Agency as well as with requirements for many industry certifications.

The National Security Agency and the Department of Homeland Security have designated Saint Leo University as a National Center of Academic Excellence in Cyber Defense Education (CAE-CDE) through 2027. Saint Leo is private nonprofit university, founded by Catholic educators, and open to people of all backgrounds.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CTF Competition in Cyberlab



Saint Vincent College Campus

Veri Justique Scientia Vindex – Knowledge is the defender of Truth and Justice – motto of **Saint Vincent College** and the guiding motivation for our Cybersecurity program.

At Saint Vincent, Cybersecurity combines a technically rigorous skill set with a liberal arts foundation while instilling the values of our Catholic Heritage and Benedictine Tradition.

Housed in the CIS Department of the Boyer School of Natural Science, Mathematics and Computing; the BS degree in Cybersecurity includes courses that highlight knowledge areas of Computer Science and Cyber-specific fundamentals. All of our courses are based on a project oriented curriculum allowing students to gain experience alongside theoretical foundations.

The liberal arts core at Saint Vincent supports the

mission of our Cybersecurity program and the institution to “promote the love of values inherent in the liberal approach to life and learning.” Benedictine colleges are grounded in centuries of Catholic teaching but remain open and hospitable to other intellectual traditions. As charged by Pope John Paul II in Ex Corde Ecclesiae we “search for truth wherever analysis and evidence leads.”

All of these factors and more together create an environment unique in forming students prepared to tackle the cybersecurity challenges facing the world today – with technical skills, social consciousness, and a moral and ethical compass firmly directing them to fulfill a calling to serve their community and the common good. Go Bearcats!

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Saint Vincent Cybersecurity



Sam Houston State University

**Sam Houston State University (SHSU)** is one of the most innovative and fastest growing public universities in the state of Texas. Founded in 1879 as the first teacher-training school in the Southwest United States, SHSU currently serves more than 22,000 students involved in over 90 bachelor's degree programs, more than 50 master's degree programs, and 11 doctoral programs through eight schools and colleges. SHSU, a "Community-Engaged" institution, is classified as an R2 University by the Carnegie Commission on Higher Education.

Department of Computer Science:  
Started in 1971, the Department of Computer Science (CS) at SHSU is currently a research- and teaching-oriented department with curricula offerings at the Baccalaureate, Master's, and the Doctoral level. The department comprises nineteen full-time faculty who work on a wide

range of theories, systems, and applications of computing systems. The department faculty have been recognized nationally and internationally for their expertise through national grants and awards, publications, and presentations. While the department offers traditional, general Computer Science programs, it emphasizes Cybersecurity and Digital Forensics.

The department provides an environment that encourages innovative thinking, academic rigor, and the pursuit of scholarships at both undergraduate and graduate levels. The undergraduate degree in Computing Science is accredited by the Computing Accreditation Commission (CAC) of the Accreditation Board for Engineering and Technology (ABET). The department is proud of its record of producing high quality professionals for business and industry, and for the State and Federal agencies. In common with the university, a vast majority of our undergraduate students are drawn from the Houston/Dallas corridor but with a healthy minority of students from every continent. Our graduate students are recruited nationally and internationally with the majority being working professionals.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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SHSU Clocktower on Main Campus



SAC Moody Learning Center

At **San Antonio College**, the Information Technology (IT) courses within the Computer Information Systems (CIS) department are meticulously designed to cultivate skills highly sought after by employers in both the public and private sectors. The educational approach is grounded in instructional techniques that prioritize hands-on activities involving computer hardware, software, and systems. This practical engagement is intended to provide students with a deep understanding of their professional responsibilities and the essential skills required in the occupational landscape.

The goal of the programs is to foster occupational competency, ensuring that students can apply their acquired skills with minimal supervision, swiftly adapt to various computer equipment, effectively prepare and communicate necessary

documentation, and continually enhance their skills to master new and specialized techniques as demanded by the evolving IT field.

Students aiming for a degree or certificate in Computer Programming will delve into key programming languages like Java, C++, Visual Basic.NET, SQL, PHP, and Linux, along with web development skills using HTML and JavaScript. Those targeting careers as Computer Support Specialists will learn to support users across diverse operating systems and hardware in networked settings.

In the Computer Network Administration track, students will develop network and system administration capabilities for Windows and Linux systems, also working towards A+, CISCO CCNA, Microsoft Windows Server, and Linux+ certifications. The Information Assurance and Cyber Security program further provides in-depth knowledge in securing networks and systems, focusing on firewalls, intrusion detection, forensics, and TCP/IP to equip students for tackling advanced security challenges.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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San Antonio College Entrance



SANS.edu is the top college devoted only to cyber

The **SANS Technology Institute**, distinguished as the only US college dedicated entirely to cybersecurity, has an impressive track record, including multiple victories in the National Cyber League competition and a Top 3 finish in the NSA Codebreaker Challenge. SANS.edu is renowned for its career-focused programs, which are enhanced by a world-class faculty composed of top cybersecurity practitioners. Its courses are hands-on and continually updated to maintain real-world relevance, ensuring that students are well-prepared for the industry. Each program at SANS.edu leads to industry-recognized GIAC certifications, adding significant value to the educational experience. The institute offers flexible programs with various start dates throughout the year, catering to a wide range of schedules.

Unlike traditional institutions, SANS.edu does

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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[www.sans.edu](http://www.sans.edu)

not operate from a campus. Instead, it provides innovative online and in-person course delivery options, including fully online options for all its programs. This approach has garnered praise from graduates, such as Cathy Sowa, who highlighted the unparalleled level of support and resources available to students.

SANS.edu's undergraduate degree and certificate programs are lab-intensive and hands-on, designed for students of all ages aiming to embark on a cybersecurity career. Graduates like Tin Nguyen commend the institute for its clear roadmap and its effectiveness in facilitating a swift transition into the booming cybersecurity industry. Additionally, SANS.edu invites students from other colleges to join its career-launching certificate programs.

At the graduate level, SANS.edu offers a cybersecurity master's degree program focused on leadership and highly technical, job-specific graduate certificate programs for working professionals. A noteworthy aspect of the SANS.edu experience is the earning of GIAC certifications, which are highly valued in the industry. These certifications, such as the GSEC and GCIH, are ranked among the top 10 cybersecurity certifications and are a significant factor in job interview selections.

SANS.edu is also the home of the Internet Storm Center, the premier global cyber threat detection network. Bachelor's degree students have the unique opportunity to gain hands-on experience through virtual internships as Apprentice Handlers, enhancing their practical skills and industry readiness.



Simmons University located in Boston Massachusetts

Founded in 1899 by John Simmons, **Simmons University** is a small, women-centered liberal arts institution located in historic Boston, Massachusetts. From its inception, Simmons has been a community that unites passion with purpose, fostering a culture that celebrates diversity and cultivates leadership.

A Simmons education equips students with the critical thinking and leadership skills to excel within their area of focus and beyond. Our undergraduate curriculum spans an array of disciplines including the sciences, arts, global perspectives, writing skills, and leadership, providing students with a multifaceted understanding of the world and the ability to tackle complex challenges in their lives, careers, and communities.

Our Bachelor of Science in Information Technology & Cybersecurity, designated a Center for Academic

Excellence in Cyber Defense in 2023, is designed to provide the technical grounding in computer science and IT that students need to manage and defend networks and systems. Through interactive courses and practical experiences led by expert Simmons faculty, students explore future-facing concepts and technologies, learn to solve complex user issues, grow their interpersonal skills, and prepare for a career as a forward-thinking tech leader.

As the field of cybersecurity continues to evolve, Simmons is committed to advancing cybersecurity education and empowering students to effect meaningful change.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Simmons faculty and students



Sinclair's Centerville Campus

**Sinclair Community College's** Cyber Defense program is dedicated to preparing students for the dynamic and evolving field of cybersecurity in the 21st century. Our mission is to equip students with the skills and knowledge necessary to excel in cybersecurity roles, addressing the growing demand for qualified professionals in this critical sector. We achieve this through a curriculum that is continually updated to reflect the latest developments in the field, coupled with extensive hands-on learning opportunities that ensure our graduates are ready to tackle real-world challenges from day one.

What sets our program apart is not just our commitment to excellence in education but also our active collaboration with other Centers of Academic Excellence (CAE) in Cyber Defense across the Miami Valley and nationwide. This network of CAE institutions is invaluable, fostering a community of

learning and sharing that enhances the educational experience for our students and strengthens the cybersecurity workforce as a whole.

This year we are excited to hire our first professor who was went through the 3CP Community College Scholarship for Service (SFS) program and is now teaching Cyber Security for the intuition. Sinclair is also not offering bachelor's degree in integrated systems Technician. This 4 year program will prepare students for Industrial IOT and how to secure these devices from attacks.

At Sinclair Community College, we pride ourselves on creating an environment that not only educates but also inspires our students to pursue excellence in cybersecurity. Our program is designed to be rigorous, relevant, and responsive to the needs of both our students and the industries we serve. By fostering close ties with other CAE schools and leveraging the strengths of our faculty, we are proud to contribute to the development of a skilled and resilient cybersecurity workforce for the future.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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First IST Class



# SOUTH CAROLINA STATE UNIVERSITY



Engineering and Computer Science Complex

**South Carolina State University** is the first Historically Black College and University (HBCU) in South Carolina to hold the Center of Academic Excellence in Cyber Defense through its Bachelor of Science in Computer Science with cybersecurity curriculum. This curriculum is primarily designed for our computer science majors and is housed in the Computer Science and Mathematics Department. Students in this curriculum complete all required computer science courses along with seven cybersecurity courses (18 credit hours). The courses in cybersecurity are designed to introduce majors to the important field of cybersecurity.

Most of the courses, especially the cybersecurity courses, include hands-on and virtual laboratory experiences. The curriculum covers programming, data structures and algorithms, programming language, social implications of computing,

digital logic and computer architecture, database management, computer networks, software engineering, operating systems, computer forensics, cryptography and network security, application and data security with privacy, and a senior design/capstone.

The goal of South Carolina State University's Center of Excellence in Cybersecurity is to address the problem of the lack of awareness and participation in cybersecurity using a multi-tier approach to Cybersecurity Education, Training, and Awareness in the undergraduate curriculum (CSETA). South Carolina State University's Center of Excellence in Cybersecurity located in the Department of Computer Science and Mathematics serves as the focal point for all cybersecurity academic activities. The computer science program at SC State University is accredited by the Computing Accreditation Commission of ABET.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Program Students, Faculty, and Staff



The Center for Student Success at Olympia Campus

Recognized as a top 10 best community college in the U.S. by the Aspen Institute College Excellence Program, **South Puget Sound Community College (SPSCC)** is committed to student success in both postsecondary academic transfer and workforce education while catering to the needs of the South Puget Sound region. Working closely with the community and industry partners, SPSCC continuously seeks ways to offer innovative, accessible, and affordable learning experiences.

SPSCC's Cybersecurity and Network Administration program was recognized as a CAE-CD in 2023. The curriculum was designed to align with several industry certifications—including those from Microsoft, Cisco, and CompTIA—and prioritizes a hands-on approach to learning. Through synchronous online learning and in-person lab activities, students receive a comprehensive

educational experience that prepares them to enter the industry with confidence.

Many of the program's graduates have found careers in local managed service providers, school districts, private companies, and various Washington state agencies. Being located in the state capital and near Joint Base Lewis-McChord, SPSCC takes pride in providing students and veterans access to a broad spectrum of high-demand, high-wage career opportunities at both the regional and national level.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cybersecurity Alumnus Aaron S.



SEMOS Academic Building

**Southeast Missouri State University (SEMO)** leads in cybersecurity education in Missouri, being the first to offer a bachelor's degree in the field. Notably, it stands out as a premier institution for cybersecurity education. Its Bachelor of Science in Cybersecurity program is ABET accredited and recognized by the National Security Agency (NSA) as a National Center of Academic Excellence (CAE) in Cyber Defense Education. Graduates from this program report high employment rates within six months of graduation.

Beyond the undergraduate level, SEMO offers a Master in Cybersecurity program designed for both new graduates and existing professionals. This program prepares students with the skills needed to protect critical infrastructure and enter high-demand cybersecurity careers.

The Institute for Cybersecurity at SEMO enhances

student knowledge through real-world experiences in cybersecurity, research, and related fields. The university's Cyber Defense Team has demonstrated excellence by winning the Missouri Collegiate Cyber Defense Competition (CCDC) for 11 consecutive years.

SEMO also boasts advanced facilities like the Cyber Range, a remote-accessible platform with extensive computing resources for experimental, educational, and operational challenges. In partnership with IBM Security, the SEMO Cyber Range Command Center offers community training and competitions, further emphasizing SEMO's commitment to leading-edge cybersecurity education.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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SEMO Redhawks



# SOUTHERN MAINE COMMUNITY COLLEGE



Southern Maine Community College sits on a peninsula of land that was Fort Prebble built in 1808. SMCC has a lighthouse and its very own beach along with two residence halls which can accommodate about 450 students.

**Southern Maine Community College's** Cyber Security program has been designated as a Center of Academic Excellence in Cyber Defense, through academic year 2024.

The Cyber Security Program is an Applied Associate of Science two-year degree which can be taken all online or in person utilizing many of our cloud learning environments.

The Cyber Security program gives students an opportunity to train in one of the fastest-growing areas in Information Technology, known as Information Security and Security Assurance. Career opportunities for graduates include: Information Security Analyst, Incident Responder, Network Security Engineer, Chief Information Security Officer, Information Security Architect, and Forensics Analyst. The program covers a wide range of topics

including computer forensics, ethical hacking, laws, policies, network security, and physically securing systems in a data center. The curriculum is designed to aid students in preparing for many of the certification exams in the field. The curriculum will include hands-on experience using many cloud environments along with simulation training and group/team-based learning to simulate a professional work environment.

The curriculum is designed to prepare students for the most popular certification exams, which include:

- CCENT
- CCNA
- CISSP
- CompTIA Network+ Computing Technology Industry Association
- CompTIA Security+ Computing Technology Industry Association
- EC-Council Certified Computer Forensics Examiner
- EC-Council Certified Ethical Hacker

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Students working with the instructor using Cisco networking hardware in one of SMCC's labs.



Southern Methodist University Campus

The **Department of Computer Science at Southern Methodist University (SMU)** offers academic programs related to security. The BS in Computer Science offers a security track option, which facilitates a more in-depth study of computer and network security issues. Students in this track cover core computer science topics, then take advanced courses that focus on security-related topics.

The MS in Cybersecurity covers the design and development of secure systems and applications, including security of computer networks and systems as well as physical security. In addition to the technical aspects such as cryptography, protocols, and access control, the curriculum deals with policy and management issues, integration and logistics, and budgeting. Centering on the problems of working professionals in the critical

field of security, the program in security engineering serves the needs of both full-time and part-time students.

In addition to academic programs in security, SMU also houses the Darwin Deason Institute for Cyber Security. The mission of the Institute is to advance the science, policy, application, and education of cybersecurity through basic and problem-driven, interdisciplinary research. The Institute is committed to the goal of emerging as a world-class cybersecurity research center that innovates, develops, and delivers solutions to the nation's most challenging cybersecurity problems. The underlying philosophy guiding institute activities is based on establishing a foundational science of cybersecurity through adoption of a broad, interdisciplinary approach for solving cybersecurity problems.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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The Darwin Deason Institute for Cyber Security



Southern New Hampshire University - Manchester, NH

### **Southern New Hampshire University (SNHU)**

is a private, nonprofit institution with a deeply rooted mission to transform learners' lives. Since its inception as an accounting and secretarial school in 1932, SNHU has continually evolved, now offering affordable, innovative educational pathways to expand access to education.

With a commitment to serving over 175,000 students through more than 200 programs both on campus and online, SNHU stands out for its dedication to quality and career-focused education. Accreditation by the New England Commission of Higher Education (NECHE) underscores its pledge to maintain high standards across its academic offerings, which are regularly audited for alignment with industry-specific accreditations, standards, and designations.

SNHU takes pride in its designation as a National

### **DESIGNATIONS**

- CAE-Cyber Defense

### **CONTACT INFORMATION**

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Center of Academic Excellence in Cyber Defense (CAE-CD) by the National Security Agency (NSA), a testament to its dedication to excellence in cybersecurity education. The Bachelor of Science in Cybersecurity program, recognized for its robust curriculum, equips students with a security mindset essential for building secure systems, protecting information assets, and managing risks. This program emphasizes practical skills such as applying security principles, analyzing risks, defining computing requirements, and making ethical decisions. Students have the flexibility to tailor their education by choosing a general cybersecurity track or specializing in data analytics or project management fundamentals.

The online BS in Cybersecurity not only prepares students for the technical aspects of their future careers but also positions them advantageously in the increasingly remote workforce. Graduates emerge with a blend of practical and interpersonal skills highly sought after in today's distributed work environments, setting a solid foundation for their professional success.



SNHU student



SUU's Campus in scenic Cedar City, UT

The mission of the Computer Science & Cybersecurity (CSCY) Department at **Southern Utah University** is to provide a learning-centered environment that enables students, faculty, and staff to achieve their goals and to empower our students to compete on a global level for careers in government, industry, secondary education, and acceptance to graduate school. The Department provides programs in computer science and cybersecurity. The curricula are rich with opportunities for students to develop a sound understanding of fundamentals as well as specialized theories, ethics, and hands-on skills that enhance their learning.

The Bachelor of Science in Cybersecurity is the designated CAE program within the department. In addition, a student can earn an AAS degree in Information Technology in the course of earning

the Cybersecurity degree. A Minor in Cybersecurity is also offered, and often completed by Computer Science majors. Faculty from CSCY collaborated with SUU's Community Education division to develop a Cybersecurity Pathway for adult learners, who earn a certificate in Cybersecurity Essentials. Those credits can later be applied to the bachelor's degree if a student chooses to complete that degree.

Faculty in CSCY are active in outreach to the local community, with programs such as a K-6 computer club that teaches cyber hygiene, a joint program with NCWIT which gives college credit to high school students who complete cybersecurity curriculum, and talks on cyber hygiene to various civic groups.

## DESIGNATIONS

- CAE-Cyber Defense

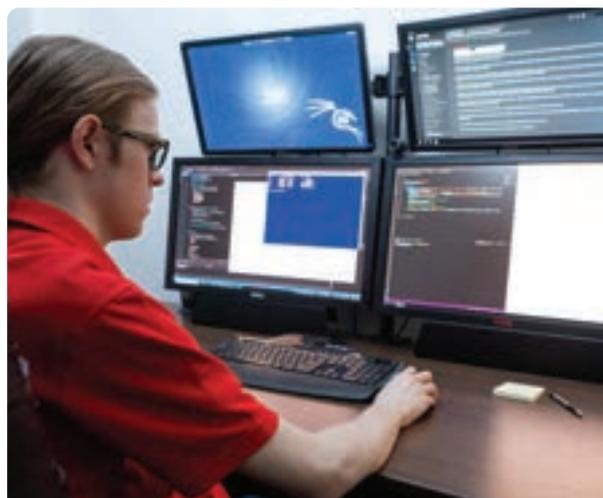
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Penetration testing in Action



# SOUTHWEST VIRGINIA COMMUNITY COLLEGE



SWCC Campus

**Southwest Virginia Community College (SWCC)** is a comprehensive two-year institution, providing quality education and cultural enrichment opportunities for lifelong learners, workforce, and community. The college began serving the region in 1967 and was designated as a Center of Academic Excellence in Cyber Defense in 2019. The Career Studies Certificate in Cybersecurity at SWCC is designed to introduce students at the basic level of study by beginning with the fundamentals. In fall 2020, students will have the opportunity to work in the newly redesigned onsite SWCC cybersecurity lab on the main campus.

Our continued mission is to provide information technology and cybersecurity education supporting the local, regional, and national workforce with training excellence. Students have the opportunity to complete the program 100% online or complete

some coursework on the main campus. The program begins with CompTIA IT Fundamentals and continues with A+, Security+, and Network+. The coursework includes in-depth study of topics such as incident response, cyber laws, and system architecture. In completion of the courses, students experience virtual labs which allow the practice and development of skill sets with the cybersecurity focus. The program also provides additional community outreach such as K-12 cybersecurity and STEM camps and a cybersecurity event within the annual SWCC Business Contest.

Students planning to transfer are advised to also complete the Associate of Applied Science in Information Systems Technology degree which shares some of the same courses as the career certificate program.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cybersecurity Faculty



# SPOKANE FALLS COMMUNITY COLLEGE



Spokane Falls Community College, Spokane WA.

**Spokane Falls Community College (SFCC)** is one of two accredited institutions of the Community Colleges of Spokane. SFCC is an educational leader that provides affordable programs of the highest quality, with faculty and staff dedicated to excellent instruction and student success. We have options for anyone seeking a career/technical degree or certificate, transfer to a four-year university, or continue their education with our expanding applied bachelor's degree programs. Our main campus is located west of Spokane, with locations in Pullman WA, and online.

SFCC's mission is to provide all students with an excellent education that transforms their lives and expands their opportunities while providing the best community college experience in the Northwest. SFCC has over 78 degree/certificate options (including all CTE degrees, certificates, and DTA/

MRPs) and an annual enrollment of approximately 5,000 students. Our student body encompasses a broad demographic, including our local military population.

First designated as a CAE-CD in 2019, our program is thriving. We currently offer both AAS and BAS degrees: an AAS degree in Information Technology/Cybersecurity with three areas of emphasis: Cyber Operations, Cyber Defender, and Cyber Security Operation Center, and a BAS in Cybersecurity. Our students experience great hands-on applications using state-of-the-art equipment and cutting-edge software. Our graduates are employed throughout the Northwest and beyond.

For your next opportunity, visit us; we are changing lives at SFCC.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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SFCC Cyber Lab



SCTCC is located in the heart of Central Minnesota

Founded in 1948 as the second technical college in the state, **St. Cloud Technical & Community College (SCTCC)** has committed to meeting the needs of our community with more than 90 program options that match the careers needed in the area.

More than 75% of our students come from the surrounding six counties and choose employment close to home after graduation in healthcare, business management, computer technology, manufacturing, construction, transportation, and more.

While SCTCC has offered liberal arts and sciences courses for years, in 2010, it became a comprehensive technical and community college offering an Associate in Arts degree in addition to technical programs.

Students who seek continuing study or employment outside of Central Minnesota find that their education is portable, especially when they choose to further their education at any one of Minnesota's state universities. St. Cloud Technical & Community College is one of 37 members of Minnesota State and is accredited by the Higher Learning Commission.

Cybersecurity Program - Graduates experience extensive, hands-on computer and network threat remediation. In-depth lab activities provide real-world skills that directly transfer to industry and the mission of protecting the digital environment.

By working with K-12 businesses and cybersecurity professionals, SCTCC strives to provide a community that is security-minded and vigilant. The St. Cloud Technical & Community College's Center for Cybersecurity is determined that all graduates have the opportunity to contribute to the overall betterment of the cybersecurity and computing fields.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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SCTCC Leadership and Faculty



St. John's University Queens Campus

**St. John's University** Division of Math, Computer Science, and Science where the Cyber Security Systems program is housed consists of 15 full time faculty members. The Division serves nearly 300 full time students pursuing B.S. degrees in Computer Science, Cyber Security Systems, and Information Technology. All 3 undergraduate programs are ABET accredited.

The B.S. degree in Cyber Security Systems is accredited by the Middle States Commission on Higher Education, New York State, and ABET (2023). Furthermore, the Cyber Security Systems B.S. degree is designated by NSA as a Program of Study (PoS) under St. John's University Center of Academic Excellence in Cyber Defense (CAE-CD) which is the central point of information with respect to the multidisciplinary research, education, training, and practice in the field of Cybersecurity. This universitywide center has been

created with the vision to promote collaboration and interaction with other students, faculty, and programs within St. John's University and the Cybersecurity community as a whole.

St. John's B.S. in Cyber Security Systems prepares students with a highly-technical, in-depth, and hands-on Cybersecurity curriculum which is facilitated in our state-of-the-art Cybersecurity lab and other supporting labs. Our B.S. in Cyber Security Systems allows students to concurrently (without any time extension) pursue minors which are in high demand by Cybersecurity employers such as Data Science, Digital & Mobile Forensics, Homeland Security, and Criminal Justice. Cyber Security Systems graduates enjoy, within 6 months of graduation, a 94.7 advancement rate in either a Cybersecurity related job or a graduate program in Cybersecurity or similar discipline.

## DESIGNATIONS

- CAE-Cyber Defense

St. John's also offers a M.S. program in Cyber and Information Security which is validated by the Department of Homeland Security (DHS) and the National Security Agency (NSA) as a Program of Study (PoS) in Cybersecurity through academic year 2029.

## CONTACT INFORMATION

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St. John's Cybersecurity Team



St. Louis Community College Forest Park Campus

Established in 1962, **St. Louis Community College** is the largest higher educational institution in the region and the second largest in Missouri. STLCC has served more than 1.3 million students; at least one person in more than one-half of the households in the St. Louis area has attended the College.

STLCC is the No. 1 community college in the state for number of students continuing their education at a public, four-year university in Missouri.

STLCC offers 15 college-transfer options and over 80 career-focused programs that prepare you for a high wage, high skill, and in-demand careers in the real world.

Over 50 years of continuous accreditation by the Higher Learning Commission of the North Central Association of Colleges and Schools gives your

degree meaning to employers and public, four-year universities.

Four campuses, two education centers and two workforce training centers make education accessible for all 718 square miles of our district, encompassing St. Louis City and St. Louis County, as well as portions of Franklin and Jefferson counties.

STLCC's mission is Empowering students. Expanding minds. Changing lives. We deliver exceptional instruction, collections, and services to foster academic success and lifelong learning.

Designated as a Center for Academic Excellence in Cyber Defense (CAE-CD), St. Louis Community College offers the associate of applied science (AAS), a 60-credit hour program designed to provide students the foundation for entry-level information assurance and security technicians positions. Graduates will support, plan, implement, upgrade and monitor security measures for the protection of computer networks and information systems. Students will develop the skills to ensure appropriate security controls are in place that will safeguard digital files and vital electronic infrastructure, and will develop skills to respond to computer security breaches and viruses.

The cybersecurity certificate of proficiency (CP) program is designed for students who already possess an associate's or bachelor's degree in any area but want to add cybersecurity skills to their portfolio.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Professor Ayad Barsoum Leads a Cybersecurity Class

**St. Mary's University (StMU)**, grounded in its Catholic Marianist tradition, is committed to nurturing faith and developing leaders dedicated to serving the common good. This is achieved through a blend of community engagement, a comprehensive liberal arts education, and a commitment to academic excellence. Within this context, the School of Science, Engineering, and Technology at StMU aims to produce ethical, service-oriented leaders in the fields of science, engineering, and technology. The school emphasizes experiential learning within a student-focused environment that promotes success.

One of the unique offerings at StMU is the Master of Science (MS) in Cybersecurity, designed to equip students with the necessary knowledge, skills, and best practices for protecting an organization's digital assets. This program not only emphasizes technical proficiency but also incorporates ethical

considerations and legal implications. Students engage in a variety of courses covering topics such as network security, digital forensics, cyber risk management, cryptography, software security, cloud computing security, and cyber law. These courses are practically oriented, allowing students to gain direct experience in defending networks, computers, programs, and data against cyber threats.

The MS in Cybersecurity program offers two paths to completion: one option includes 30 credit hours of coursework coupled with a 3-credit capstone project, while the other involves 27 credit hours of coursework and a 6-credit thesis project. Graduates are expected to demonstrate a comprehensive understanding of cybersecurity, showcasing their ability to protect cyber assets, employ effective digital forensic techniques, understand and mitigate software vulnerabilities, and apply these skills in a real-world context.

The cybersecurity field, particularly in San Antonio, is experiencing significant growth, presenting numerous opportunities for graduates. Notable employers in the region include NSA/CSS Texas, the 16th Air Force, Raytheon, and Booz Allen Hamilton. Furthermore, major companies such as Google, Microsoft, Amazon, IBM, SWRI, USAA, and IPSecure are also in search of skilled cybersecurity professionals, underscoring the demand for graduates with this expertise in both the public and private sectors.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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ALAMO COLLEGES DISTRICT  
St. Philip's College

## ST. PHILIP'S COLLEGE



SPC Campus

Founded in 1898, **St. Philip's College** is a comprehensive public community college whose mission is to empower our diverse student population through educational achievement and career readiness. As a Historically Black College and Hispanic Serving Institution, St. Philip's College is a vital facet of the community, responding to the needs of a population rich in ethnic, cultural, and socio-economic diversity.

St. Philip's College is designated as a Center of Academic Excellence in Cyber Defense through academic year 2020 for its Associate of Applied Science in Information Technology Cybersecurity Specialist. This degree prepares students to design, implement, and secure computer networks. Students with this degree will be able to install security software, monitor networks for security breaches, respond to cyber-attacks, and gather data and

evidence to be used in prosecuting cybercrime. Completion in this program prepares a student for industry certifications such as CompTIA Security+, Certified Security Professional (CSP), and Certified Ethical Hacker (CEH).

St. Philip's College seeks to engage its students in unique ways; one of these is through their Cyber Tigers Club. This club is a group of students who are interested in all things technology. The Cyber Tigers activities complement courses in networking, Microsoft applications, Linux, and security to form a unique club that helps channel schoolwork into real-world scenarios and experiences. The Cyber Tigers take part in IT conferences and inter-collegiate competitions, and help spread the word about the wonderful opportunities available in IT through STEM events.

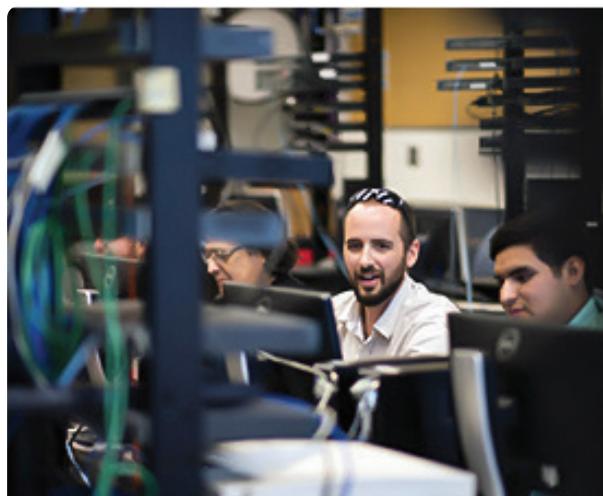
### DESIGNATIONS

- CAE-Cyber Defense

### CONTACT INFORMATION

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SPC GenCyber Camp



SPC Midtown Center

Founded in 1927, **St. Petersburg College** is Florida's first two-year college and the first to offer bachelor's degrees. SPC offers more than 187 degree and certificate programs, including many high-demand, high-skill industry - recognized workforce certifications. The college's career-focused curriculum is created with input from industry experts to give students the skills they need to meet the needs of today's employers.

SPC's Guided Pathways Program gives students a clear roadmap to success to ensure they are taking the right courses, in the right sequence, with wrap-around supports to help them achieve their goals. The college's mission is to "empower our students and community to achieve success and economic mobility through academic excellence and engagement. Located in Tampa Bay, SPC strives to remain on the forefront of cutting-edge curriculum

and technology to meet workforce demand.

SPC's College of Computer Information and Technology (CCIT) offers a Certificate and A.S. Degree in Cybersecurity, and two Bachelor's in Applied Science, Technology Management, with a Cybersecurity (ISA) Sub-plan, and in Cybersecurity. Enrollment in the Cybersecurity programs available through the College of Computer and Information Systems at St. Petersburg College continues to grow.

The college now offers a Bachelor of Applied Science Degree in Cybersecurity. Taken together, there are over 1,000 students enrolled in Cybersecurity programs at St. Petersburg College. These offerings are among the most rapidly growing programs at the St. Petersburg College. SPC received its designation as a National Center of Academic Excellence (CAE) in Cybersecurity in 2019.

SPC's Cybersecurity graduates meet the growing need for college-educated specialists who can tackle increasingly complex information technology security concerns. Demand will remain high for information security analysts who can stay a step ahead of hackers. The SPC Cybersecurity Club, TitanSec participates in Capture the Flag competitions, including the National Cyber League, SECCDC and the Raymond James CTF.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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# STANLY COMMUNITY COLLEGE



Cybersecurity Class with Instructor Gonda Watson

**Stanly Community College** is deeply committed to its mission of enriching the economic, social, and cultural life of the communities it serves. The college places a high value on effective teaching, fostering partnerships, and promoting life-long learning not just for the residents of Stanly County but also for students from other states and countries. To achieve this, the college prioritizes providing both face-to-face and virtual learning environments that are centered around the learner, thereby enhancing access, success, and completion rates.

The cybersecurity program at Stanly Community College stands out due to its comprehensive approach. This program is built on a foundation of a comprehensive curriculum that includes hands-on learning experiences facilitated through labs, simulations, and real-world projects, ensuring that students are not only knowledgeable but

also practical problem solvers. The college has established strong industry partnerships, which, alongside a team of expert faculty, helps in preparing students for industry-standard certifications. With flexible learning options such as online and hybrid formats, the program is designed to accommodate various learning preferences and schedules. Furthermore, the program places a significant emphasis on ethics and compliance, ensuring that students understand the importance of ethical behavior in the cybersecurity field. The inclusion of industry-relevant projects in class activities prepares students for the challenges they will face in the real world. Additionally, the program offers career services to support students in their professional development and job search efforts, making the cybersecurity program at Stanly Community College a well-rounded and effective pathway to a career in cybersecurity.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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SCC Albemarle Campus



Stark State College Main Campus

**Stark State College (SSC)**, which became a CAE in 2023, offers an associate of science degree in cyber security and computer forensics. The degree focuses on digital forensics and cybersecurity with a rigorous curriculum of in-demand skills that includes practical, hands-on lab assignments to give students the skills and discipline to progress in their education and obtain employment in these fields.

The College relies on the acumen and advice of area business and industry leaders to ensure SSC programs meet workforce needs, while workforce training helps employers find skilled workers and train current workers on- and offsite.

Graduates of the program have gone on to work for the Ohio Attorney General's Office Bureau of Criminal Investigation; cybersecurity companies such as TrustedSec, Binary Defense and Involta; and the

Department of Homeland Security.

SSC is a student-centered comprehensive community college with transferable higher education and career development programs. With nearly 14,000 credit-seeking students and more than 220 associate degrees and certificates, it's the largest among the five colleges and universities in Stark County, Ohio.

Among the College's many student organizations is the High Technology Crime Investigation Association student chapter. In 2009, Stark State became the first institution in Ohio and the second in the country to begin a HTCIA student chapter.

SSC is a Regional Programming Center for the Ohio Cyber Range Institute, holds an annual cyber security symposium in partnership with the Ohio HTCIA, hosts speakers who are professionals in the cyber security field, holds summer cyber boot camps for high school students and hosts a hacking challenge sponsored by Involta and HacWare.

Stark State's Cyber Security Center was established to promote cyber awareness, cyber security and workforce development by providing information, training and education to students, staff and the public.

Stark State also maintains articulation agreements with other CAE-accredited institutions, including the University of Cincinnati, Kent State University and Franklin University.

## DESIGNATIONS

- CAE-Cyber Defense

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Stevens Institute of Technology Campus

**Stevens Institute of Technology** is a premier, private research university in Hoboken, New Jersey, overlooking the Manhattan skyline.

Since its founding in 1870, technological innovation and entrepreneurship have been the hallmark of Stevens' education and research. Within the university's schools, Stevens prepares its nearly 9,000 undergraduate and graduate students for an increasingly complex and technology-centric world. Its exceptional students collaborate closely with world-class faculty in an interdisciplinary, student-centric, entrepreneurial environment, readying them to fuel the innovation economy.

Academic and research programs spanning finance, computing, engineering and the arts expand the frontiers of science and leverage technology to confront the most challenging problems of our time.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

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Stevens is consistently ranked among the nation's leaders in ROI and career services and is in the top 1% nationally of colleges with the highest-paid graduates.

Stevens offers a wide range of Cybersecurity-focused degree programs at the bachelor, master's, and Ph.D. levels across all schools. Stevens has held the designation as National Center of Academic Excellence in Cyber Defense Education (formerly Information Assurance Education) since 2003.

The validated program of study is the B.S. in Cybersecurity which is geared to provide students with a comprehensive expertise in Cybersecurity in the context of Stevens' traditional broad education. Stevens was one of the first institutions in the nation to offer a dedicated degree program in Cybersecurity at the undergraduate level, graduating its first class in 2011. In 2008,

Stevens was one of the first institutions to also receive the designation as National Center of Academic Excellence in Cyber Research.



Stevens Institute of Technology Students



Stillman College Landscape

Our mission at **Stillman College** is to educate students from all disciplines on implementing safe cybersecurity practices and enhancing employment opportunities in the cybersecurity workforce.

Our program offers a unique cybersecurity concentration program that combines hands-on learning experiences, industry engagement, and research opportunities with a focus on both technical and soft skills to prepare students for successful careers in the dynamic field of cybersecurity. This program is based on several factors that distinguish it from other programs. Here are the key elements that contribute to the uniqueness of our cybersecurity concentration program:

**Hands-On Learning Opportunities:** Our program provides practical hands-on experiences crucial for a cybersecurity concentration program. The

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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cybersecurity program includes labs, simulation exercises, and real-world projects that allow students to apply theoretical knowledge in practical scenarios.

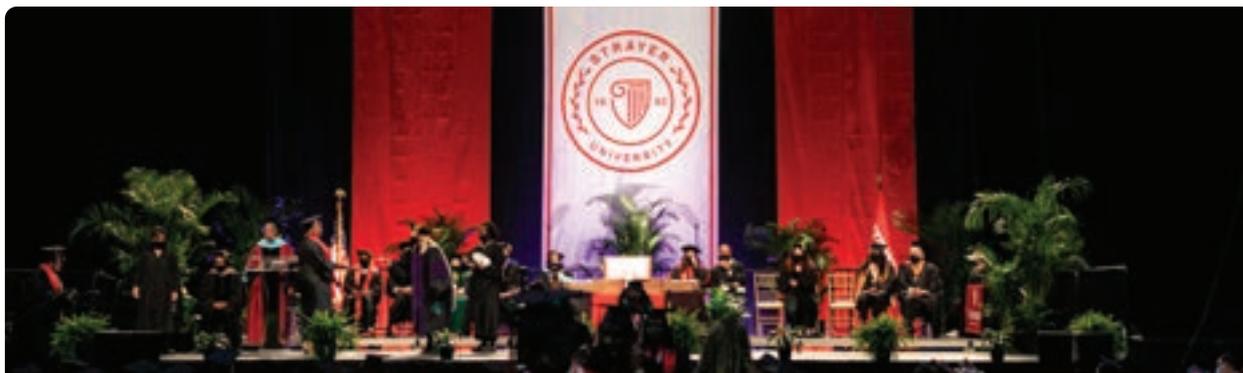
**Certifications and Digital Badges:** The integration of industry-recognized certifications within our curriculum enhances the uniqueness of this cybersecurity program. This includes certifications such as CompTIA Security+, IBM Digital Badges, and others.

**Internship Opportunities:** The program offers internships with industry partners, a unique feature that provides students with valuable real-world experience and the chance to apply their skills in professional settings.

**Engagement with Industry Professionals:** This program facilitates student and professional interactions. These include guest lectures, mentorship programs, and networking events to expose students to real-world challenges and insights from cybersecurity practitioners.

**Research Opportunities:** The cybersecurity program encourages and supports cybersecurity research and involves faculty-led research projects, student involvement in research initiatives, and partnerships with cybersecurity research centers.

**Competitions and Challenges:** Students participating in cybersecurity competitions and challenges is a unique aspect of this program. These competitions and challenges provide students with a platform to highlight their skills, compete with peers, and gain recognition in the cybersecurity community.



Strayer Graduation Ceremony

**Strayer University** provides an experience that allows students to control how they learn – day or night, online or on campus. We've taken higher education and reimagined it to work in today's world.

We offer high-quality and relevant certificate and degree programs that help our students in their chosen professions. Coursework is based on and designed around skills and knowledge that today's employers value.

Strayer students enjoy a supportive learning environment at every step of their educational journey – from enrollment to post-graduation resources. Faculty members have experience in their fields and Strayer faculty and staff are dedicated to helping students achieve their goals.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Our Master of Science in Information Security and Assurance (MSISA) program provides students with an exciting opportunity to increase their understanding, and expand their opportunities in the world of information assurance and computing security.

The MSISA program prepares cybersecurity professionals to provide leadership skills to operate, protect and defend information technology systems. Students in the program are exposed to technologies and strategies needed to administer and maintain information technology systems and help keep them secure and performing efficiently.

MSISA students explore real-world cybersecurity case studies and lab settings and learn advanced techniques for identifying threats, investigating cybersecurity events or crimes and mitigating their impact on information technology systems.

Since our founding in 1892, we have focused on helping students build their futures through innovative academic programs and services that are a foundation for personal and professional growth. We offer many tuition-saving programs as part of our mission to make education accessible and affordable to everyone.

Look to Strayer for a bright future you can afford – always striving, always Strayer.



Suffolk Community College Ammerman Campus

**Suffolk County Community College** offers a Cybersecurity and Information Assurance Associate in Applied Science (A.A.S.) degree program that prepares students for entry-level positions in the cybersecurity industry. The program focuses on practical, hands-on learning, covering topics such as network and computer systems security, information assurance concepts, and industry standards.

The experienced faculty collaborates to create challenging labs and exams, encouraging teamwork to solve complex problems. This approach has led to students achieving high marks in competitions such as the Department of Education CyberForce Competition, National CyberLeague, and (ISC)2 Long Island Chapter Capture the Flag competitions.

After completing the program, students are ready to take on various entry-level cybersecurity

positions, including maintaining computer network infrastructure and security, administering secure enterprise information networks, securing computer assets connected to the internet, and configuring and securing remote access networks. Graduates also possess the technical skills to configure and repair endpoint devices.

Approximately half of the program's students continue their education at four-year schools, while the other half find direct employment upon graduation. Employers and schools alike have provided positive feedback, citing the preparedness and professionalism of program graduates. Suffolk County Community College is proud of the program's success in equipping students with the knowledge and skills to launch successful careers in the cybersecurity industry.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

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DoE CyberForce SCCC Students



SUNY WCC Campus

**SUNY Westchester Community College's** main campus is centrally located on 218 rolling, wooded acres in Valhalla, New York (45 minutes north of Manhattan). Attractive, contemporary, and historic buildings set among the trees house a library, computer, science, laboratory, classroom, theater, arts, childcare, physical education, and administration facilities.

The Cybersecurity program is in the Gateway Building, where you will find our Robert Wiener Center for Cybersecurity and our state-of-the-art Cybersecurity Instructional Lab. Our major provides a strong foundation in computer technology security. It covers the functions of hardware, operating systems, databases, and networks. It is designed to bring students from beginner classes to advanced topics in security, such as Computer Forensics, Network Security, and Ethical Hacking. The program prepares

students for employment in entry-level positions in Information Technology departments, information assurance, security firms, and digital forensics. It is also designed for students who intend to seek full-time employment after graduation and those who wish to continue their studies at a four-year college.

Taught by industry-certified faculty, the program consists of a series of classes and practical applied training designed to increase students' competitive advantage in the workforce. SUNY WCC ranked second in the Northeast in completion rates among its Cybersecurity students. The success of the SUNY WCC Cybersecurity Program is directly linked to constant changes and collaborations that mold the program toward industry needs.

The SUNY WCC Cybersecurity Program is unique in the region. Students can acquire certifications, internship opportunities, cyber competitions, and other applied learning opportunities combined with hands-on approach classes that mimic what companies require you to know to be hired. Courses are taught by industry-certified faculty, who are highly sought consultants in the field and provide extensive mentoring, advising, career guidance, and networking. The Cybersecurity Program is highly technical and can be completed 100% online. It offers strong out-of-classroom experience to prepare students for careers in IT.

## DESIGNATIONS

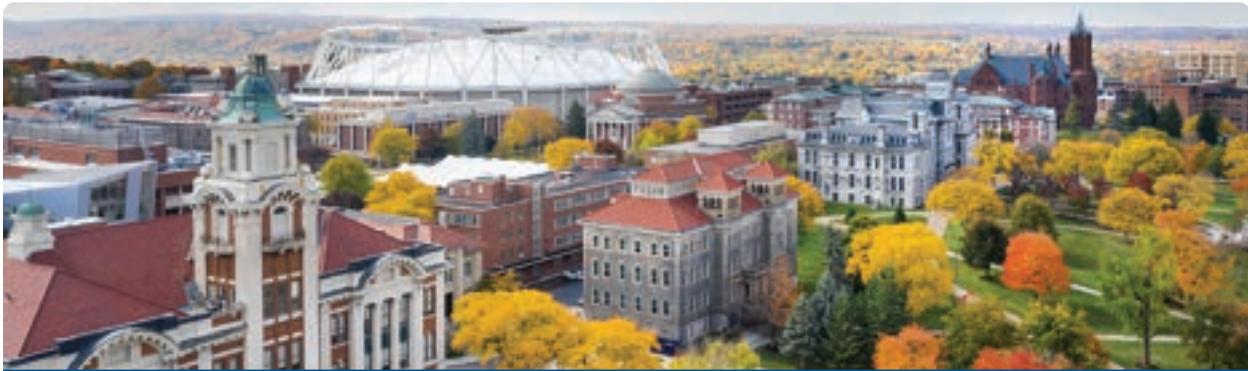
- CAE-Cyber Defense

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Syracuse University Campus

Founded in 1870, **Syracuse University** is a private research institution located in the heart of Central New York. Students can choose from more than 200 majors, 100 minors and 200 advanced degree programs across the University's 13 academic units. Our campus overlooks the City of Syracuse in the heart of New York state. Discover amazing restaurants, historic architecture, nature and wildlife, the Finger Lakes, the Great Lakes and much more.

From being the nation's first institution to offer a bachelor of the fine arts degree to founding one of the nation's first iSchool's, at Syracuse University, we've always had a legacy of firsts. We opened doors for women in 1870, welcoming leaders like Karen DeCrow, an icon in the women's rights movement, and Eileen Collins, the first female commander of a Space Shuttle. We played a role in the first G.I. Bill and continue to be recognized today as one of the

best private schools for military service members, veterans and their families—a commitment that is shown through our National Veterans Resource Center(NVRC). In 1890, a committee was formed and discovered that no other college or university had claimed their singular color orange.

Syracuse University offers various academic programs in the cybersecurity field that support the requested re-designation, including MS in Digital Forensics (College of Arts and Sciences and School of Information Studies), BPS in Cybersecurity Administration (College of Professional Studies), MS in Cybersecurity (College of Engineering & Computer Science), CAS in Information Security Management (School of Information Studies), CAS in Security Studies (Maxwell School of Citizenship & Public Affairs), and CAS in National Security and Counterterrorism Law (College of Law).

Syracuse University is among an elite group of academic institutions designated by federal agencies for research and education in cybersecurity. The University originally received the CAE-CD (Center of Academic Excellence in Cyber Defense Education) designation in 2001, CAE-R (Research) designation in 2009, and has been continuously re-designated by the agencies.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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Talladega College Landscape

The Mission of **Talladega College** is to equip its graduates for the global community through academic excellence, moral values, community service and professional. The Department of Computer Science (CS) mission is to strive for excellence in creating, applying, and imparting knowledge in the Computer Information Systems program (CIS). The CIS graduates will be equipped to make valuable contributions to cybersecurity, cyber operations, databases, and networking.

The program's mission is aligned with the College's Mission and Core Values: "EXCELLENCE: To teach high-quality educational programs and perform innovative research, thus being preeminent in all that we do." The CS department offers three Bachelor of Arts programs, majoring in 1) Computer Science, 2) Computer Information Systems, and 3) Cybersecurity.

Hands-On Learning and Research Opportunity:

The CS Department partners with CompTIA, Cisco Network Academy, and EC-Council to train students using simulated labs and provide opportunities to get Professional Certifications. TC also partners with I.B.M. Skill Academy to prepare students to obtain micro-credentials by obtaining IBM-Digital Badges. TC has developed initiatives that enhance the student experience, including internships and undergraduate research.

Internships: The CS department partners with Business Enabled Acquisition & Technology (B.E.A.T.) L.L.C., a Small Business Administration global cybersecurity & information technology solutions provider Headquartered in San Antonio, Texas, provides internship opportunities. The Interns will participate in a stimulating guided work experience using emerging technologies.

Cyber Center: TC always strikes for innovation and excellence in education. Gregory Vincent, President of Talladega College, has approved the building of a state-of-the-art Center for Cyber Security with a focus on cybersecurity education and research, including multidisciplinary programs and certificates, outreach activities, and industry partnerships to prepare students by placing them into cybersecurity work roles. The Center for Cybersecurity will be named in honor of Essye B. Miller, '85, a distinguished member of the Talladega College Board of Trustees.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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TSC Learning Commons

**Tallahassee State College** (formerly Tallahassee Community College), founded in 1966, is a dynamic and diverse institution dedicated to providing accessible, high-quality education and support services to students from all walks of life. With a commitment to excellence in teaching, learning, and student success, TSC prepares graduates to excel in their chosen fields and make meaningful contributions to their communities and beyond.

TSC offers a robust selection to meet various educational goals. The most popular programs include Associate in Arts and Associate in Science degrees. The college accommodates non-degree-seeking students and offers certificate programs, ensuring accessibility to all learners.

Student achievements are at the forefront of Tallahassee State College mission. From academic

excellence to community engagement, our students continually demonstrate their commitment to success. Whether it's through high graduation rates, exceptional performance in licensure and certification exams, or active participation in extracurricular activities, TSC students consistently excel in their endeavors. Our graduates are not only well-prepared for their chosen careers but also equipped with the skills and knowledge to make meaningful contributions to society. Tallahassee State College takes pride in celebrating these achievements and looks forward to nurturing the future successes of our students.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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TSC Students



Tarrant County College Campuses

**Tarrant County College** District's Information Technology Cybersecurity program serves as a crucial response to the shortage of cybersecurity professionals. The program's broad focus aligns with creating a more representative workforce. With its commitment to training, TCCD aims to contribute to the industry's growth and the state's cybersecurity preparedness.

The program has been updated to align with evolving employer requirements and is rapidly expanding across all six campuses through flexible in-person and online classes. In addition to the associate degree in Cybersecurity, the program also offers stackable certificates in Ethical Hacking and Cybersecurity Specialist at the South, Northeast, Northwest, Southeast, Trinity River, and Connect Campuses.

TCCD's strategic approach to collaborating with regional employers includes offering internships, apprenticeships, and in-school employment. These opportunities position its students for success in a high-demand job market.

As Texas continues to grapple with cyber threats at local and national levels, TCCD's high-quality program holds the potential to fill the gap in the availability of cybersecurity professionals while fostering a workforce equipped to address the evolving challenges of digital security.

Tarrant County College District provides affordable and open access to quality teaching and learning. TCCD offers college and career readiness services to residents across Tarrant County which is the third-largest county in Texas. The City of Fort Worth is the thirteenth largest city in the United States.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Computer Science Classroom



Temple University's Fox School Business

**Temple University** is located in Philadelphia with 30,000+ dynamic and diverse students taught by extraordinary faculty, offering world-class teaching, research and educational experiences in 600+ academic programs across 17 schools and colleges. Temple University's Fox School of Business transforms student lives, develops leaders, and impacts our local and global communities through excellence and innovation in education and research.

The Fox School is a leader in interdisciplinary approaches to business oriented translational research that influences, impacts, and solves real-world problems. Our faculty of leading researchers and industry practitioners couple technical innovation, business acumen and industry best practices within a collaborative and creative curriculum taught to students in a dynamic learning environment. This results in graduates prepared to

work within an ever-changing business environment and ready to join the cyber workforce to take on cybersecurity challenges facing business and government.

The Fox School's Management Information Systems Department provides our Information Technology Auditing and Cyber Security Master of Science degree program to prepare students with knowledge, skills, and business acumen for careers in information technology risk management, cybersecurity, and information systems auditing in business and government.

This STEM educational program is taught by practicing industry experts and is aligned with knowledge domains of the National Centers of Academic Excellence in Cyber Defense, ISACA®, and ISC2®. The results enable our graduates to earn a three-year education experience waiver toward the Certified Information Systems Auditor (CISA®) designation and a one-year education experience waiver toward the Certified Information System Security Professional (CISSP®) designation.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Professors and Students



The place to be for cyber in TN. #CyberWingsUp

The Cybersecurity Education, Research, and Outreach Center (CEROC) at **Tennessee Tech University**, established in 2015, is an NCAE-C center of academic excellence in cyber defense, with the designation being re-affirmed in 2021. The center was established by the Department of Computer Science and the College of Engineering to integrate university-wide activities and initiatives in cybersecurity education, research, and outreach, the emphasis of which makes it unique in the state.

CEROC was awarded the CyberCorps SFS grant in Dec 2015 (NSF 1565562) and renewed in 2021 (NSF 2043324). Tennessee Tech was the first university in the State of Tennessee to be awarded the opportunity to manage this prestigious scholarship and remains the largest such program in the state. CEROC is the home of the SFS New Scholar Seminar Series, which provides orientation and training for

new SFS students nationwide.

The program's primary focus is to graduate cyber workforce-ready candidates with integrated experiences in education, research, and outreach. Tennessee Tech was one of ten institutions participating in the SFS community college pilot. CEROC has also been participating in the DoD Cyber Scholarship program since 2018. Additionally, the center has participated in the NSA GenCyber program since 2016. CEROC now hosts the Tennessee GenCyber on Wheels Program, which takes a version of the summer camp to schools across the state through the facilities of the Tennessee Tech STEMobile.

CEROC supports several professional development, mentoring, and leadership-building opportunities through the CyberEagles student cyber club, WiCyS student chapter, and the affiliated CTF, defense, and offense cyber interest (competition) groups. The CEROC Cyber Range plays a key role in all competition, educational, outreach, and research programs, facilitating the dynamic creation of viable cyber environments for experimentation, outreach, research, and training.

Tennessee Tech, located in Cookeville, TN, provides students with the highest return on investment of any public university in Tennessee and ranks third overall among both private and public universities, as published by PayScale. Tennessee Tech has an R2 doctoral Carnegie classification.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Terra State Community College Campus

**Terra State Community College** is located in Fremont, Ohio and has proudly served northwest Ohio as a leading educational institution for over 55 years. Terra State prides itself in helping students reach their goals while staying true to the community college mission of providing open access to higher education.

Terra State is accredited by the Higher Learning Commission, a regional accreditation agency. Terra is committed to providing a quality teaching and learning environment for students, one that prepares them for future careers, continuing education, lifelong learning, and productive membership in the communities in which they live. While we honor and build upon Terra State's heritage, we continue to renew ourselves and our academic programs through creative partnerships that will keep college attainment affordable for all.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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In 2023, Terra State's Associate of Applied Science, Computer Information System (CIS) degree was redesignated as Center of Academic Excellence in Cyber Defense. This exciting accomplishment was a great achievement for the College. The CIS Degree has embedded many industry certifications directly into the courses including: CompTIA A+, Security+, CCNA Routing and Switching, The Fiber Optic Association: Premises Cabling Technician, Fiber Optic Technician, EC-Council Certified Ethical Hacker.

Terra has partnered with our local Post Secondary Education Center, Vanguard Tech Center to bring Terra faculty to the Vanguard campus to teach introductory computer courses. This exciting partnership allows our Faculty the opportunity to interact with potential students and share materials and resources with Vanguard instructors.

Each Fall Term since 2020, Terra's cyber students have competed in the annual National Security Agencies Code-Breaker Challenge. In 2023, Terra students placed 38th out of 456, a great experience and challenge for our students and one we are very proud of. Terra States goal in the end is to offer a high-quality academic experience that is dynamic, one that students will treasure long after graduation. Students are at the center of everything we do at Terra State!



Texas A&M University Academic Building

Founded in 1876, **Texas A&M University** has transformed into a global leader in education, research, and service. In today's digital age, cybersecurity threats loom large, endangering national security and individual privacy. Guided by its core values of integrity, excellence, leadership, loyalty, respect, and selfless service, A&M stands at the forefront of addressing these challenges. Through multidisciplinary education, cutting-edge research, and strategic partnerships, A&M develops innovative solutions and trains cybersecurity professionals, safeguarding critical systems and shaping a secure digital future.

Texas A&M's cybersecurity legacy began in the late 1990s, responding to escalating threats with pioneering defensive capabilities. This commitment culminated in the establishment of the Texas A&M Cybersecurity Center in 2015, which is

dedicated to advancing cybersecurity knowledge through research, education, and partnerships. Acknowledged by the NSA and DHS, Texas A&M's education and research is unrivaled, holding all three Center of Academic Excellence Designations: Cyber Defense (CAE-CD), Cyber Research (CAE-R), and Cyber Operations (CAE-CO).

The flagship program, the undergraduate cybersecurity minor, has over 1000 students yearly enrolled, while TAMC2's scholarship program has awarded over \$5 million to aspiring cybersecurity students. Beyond academia, student organizations like the TAMU Cybersecurity Club, Women in Cybersecurity, and the Corps of Cadets Cyber Special Unit foster hands-on learning and professional development, enriching the educational experience. Additionally, Texas A&M is one of the six Senior Military Colleges participating in the SMC Cyber Institute program established by the 2019 NDA. The Cyber Leader Development Program (CLDP) is creating a workforce pipeline of students with practical skills and industry certifications to tackle the challenges affecting national security.

Research at Texas A&M drives innovation, with initiatives like the Texas Cyber Range and the Texas SCADA Testbed addressing critical infrastructure security. Strategic partnerships with industry leaders enhance research capabilities and provide students with valuable internship opportunities.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Cyber Operations
- CAE-Research

## CONTACT INFORMATION

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Aerial Image of Texas A&M - Corpus Christi

**Texas A&M University-Corpus Christi (TAMU-CC)** is dedicated to equipping its students with the skills necessary for lifelong learning and responsible global citizenship. Situated on its own island, TAMU-CC currently hosts over 10,000 students across its undergraduate and graduate programs, with approximately half of its student body identifying as Hispanic. As part of the Texas A&M University System and classified among “R2: Doctoral Universities – High research activity.”

TAMU-CC plays a significant role in the Computing Alliance of Hispanic-Serving Institutions (CAHSI), contributing to collaborative research and educational initiatives in computing and cybersecurity on a national scale. The university’s BS and MS programs in Computer Science boast substantial enrollments of 276 and 380 students respectively. Notably, one-third of undergraduate

majors specialize in cybersecurity, with all MS students required to complete multiple cybersecurity courses. A distinctive feature of TAMU-CC’s BS program in Computer Science with a concentration in Cybersecurity and Infrastructure (CSIF) is its dual focus on cybersecurity and programming skills, providing graduates with a comprehensive skill set for the evolving technological landscape. TAMU-CC’s designation as a National Security Agency (NSA) and Department of Homeland Security (DHS) Center of Academic Excellence in Cyber Defense (CAE-CD), along with the NSA-validated CSIF option, underscores the university’s dedication to cybersecurity education and research.

Among the CS faculty, five cybersecurity faculty members of the Department of Computer Science contribute to cybersecurity-related community service initiatives and hold various roles within professional societies, such as serving on editorial boards and acting as reviewers. They also participate in ongoing professional development activities facilitated by the CAE and other cybersecurity communities. Among them, three faculty members lead cybersecurity research projects funded by the National Science Foundation (NSF), further enriching the university’s academic environment and contributing to advancements in the field of cybersecurity.

## DESIGNATIONS

- CAE-Cyber Defense

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Texas A&M University-San Antonio

**Texas A&M University-San Antonio (A&M-SA)** is a contemporary university reflective of the diverse and heritage-rich community it serves. As one of the fastest-growing universities in the A&M System, the University currently serves more than 7,600 students. The student body is 65.7 percent female and 77 percent Hispanic, and approximately 72 percent of students are the first in their family to attend college.

Through the University's 37 undergraduate degrees and 20 graduate degrees, students can pursue a wide variety of in-demand fields, such as computer science, information technology, cybersecurity, criminology, education, business, and science, empowered with knowledge and marketable skills for rewarding careers, responsible global citizenship and lifelong learning.

As a proud Hispanic-Serving and Military-Embracing

Institution with a predominantly first-generation student population, A&M-SA transforms lives and community by delivering a quality higher education experience that is accessible and inclusive.

A&M-SA is designated as a National Center of Academic Excellence in Cyber Defense by the National Security Agency (NSA) and Department of Homeland Security (DHS). The Center for Information Technology and Cyber Security (CITCS) offers students educational programs that will prepare them for careers in cyber security. A Cyber Defense Program Certificate is available when students complete the required coursework in Computer Science, Cyber Security, or Computer Information Systems.

The mission of the CITCS is to support the development of a comprehensive IT and cyber security education and research program that will prepare A&M-SA students for cyber careers, develop a sustainable middle-school-to-university cyber student pipeline, increase campus and community cyber security awareness, and promote faculty and student research in the field.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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A&M-SA Students Jaguar March



# TEXAS STATE TECHNICAL COLLEGE



TSTC Waco Campus

**Texas State Technical College (TSTC)** is a coeducational two-year institution of higher education with the mission to place more Texans in high-paying jobs. TSTC is the only state-supported multiple-campus technical college in Texas accredited by the Southern Association of Colleges and Schools Commission on Colleges. Degree programs offered at TSTC combine technical and academic courses to provide opportunities for immediate employment, upskilling/reskilling of the current workforce, and seamless transfer of credits to other colleges and universities.

Students can earn Associate of Science degrees, Associate of Applied Science degrees, certificates of completion in technical skills and trades, and workforce certificates. TSTC offers focused, hands-on customized curriculum at 10 locations and fully online. The Cybersecurity program of study is offered

online and at six campus locations statewide (East Williamson County, Fort Bend County, Harlingen, Marshall, North Texas and Waco).

The Cybersecurity program at TSTC prepares students for employment in a variety of entry-level careers in cybersecurity with a strong emphasis on practical hands-on training necessary to equip students with the skills employers expect. Students in the program have the opportunity to gain the fundamental skills and knowledge required to prevent, defend, detect and respond to cyberattacks and threats. They are trained to install and configure network devices, end-user workstations and devices, use cybersecurity tools, analyze security events, and implement security measures.

Courses are offered as performance-based education (PBE), the name of TSTC's course-based competency-based education (CBE) initiative, designed to focus on mastery of specific industry skills/ competencies. A competency-based curriculum provides added value to the student and employers (ensuring and enhancing workforce readiness).

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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TSTC Cybersecurity Students



Excellence in the Education of Principled Leaders

**The Citadel, The Military College of South Carolina** is a landmark in Charleston, South Carolina. The Citadel's mission is to educate and develop students to become principled leaders in all walks of life by instilling the core values of The Citadel in a disciplined and intellectually challenging environment. Founded in 1842, The Citadel has an undergraduate student body of about 2,300 students who make up the South Carolina Corps of Cadets. Another 1,000 students attend The Citadel Graduate College, a civilian evening and online program that offers graduate and professional degrees and undergraduate programs.

The Citadel has been re-designated as a National Center of Academic Excellence in Cyber Defense (CAE-CD) in 2021. The Citadel offers B. S. in Computer Science with a minor in Cybersecurity which is the Program of Study for CAE-CD. From Fall 2020, The

Citadel started offering B.S. in Cyber Operations that has been designed based on NSA CAE-CO Requirements.

The Citadel established Center for Cyber, Intelligence and Security Studies in 2015. The Citadel offers an undergraduate minor in cyber inter-disciplinary studies and a graduate certificate in cybersecurity. The Citadel has been hosting GenCyber Camps since 2016. The Citadel Cyber Team participates in NCL, NCX, and SECCDC.

The Citadel was awarded DoD CySP Grant in AY 2023-24. The Citadel was awarded NSF CyberCorps® SFS for 2020 – 2024. Citadel DoD Cyber Institute (CDCI), a joint initiative with six Senior Military Colleges (SMC), was established in Fall 2020 with a mission to prepare students for DoD Cyber Workforce. CDCI hosts Cyber Camp for SC Army National Guard and RING Cyber Camp for Teachers in summer.

The Citadel works with University of Memphis, University of West Florida, and North Carolina A&T State University on NCAE-C Grant for Cyber Education of Critical Infrastructure. The Citadel works with University of South Carolina and University of Memphis on NCAE-C Grant on Context-Aware and Adaptive Authorization Framework for Critical Infrastructure.

The Citadel hosted CyRF@C - Cyber Research Forum at Citadel for SMC Students on Apr 3-4, 2023, and Workshop on Cyber Education for Critical Infrastructure Protection on Oct 19–20, 2023.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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The College of Westchester

The School of Information Technology at the **College of Westchester** offers degrees that prepare graduates for a dynamic career in the diverse field of Information Technology (IT) as well as satisfies the industry's demand for IT professionals in the following areas: network technologies, network administration, programming, database administration, network and cyber security, and service and support of systems and users.

Through practical application of classroom theory in lab environments, students pursuing their studies in the Bachelor of Science degree program in Information Technology or the Associate in Applied Science degree program in Computer Network Administration learn the technical skills and gain the theoretical knowledge necessary to understand current computer and network technologies and interpret emerging technologies while developing

problem solving, critical thinking, communication and teamwork skills.

In addition, CW is one of 11,800 Cisco Networking Academies in 180 countries. The Cisco Networking Academy delivers a comprehensive, 21st century learning experience to help students develop the foundational information and communication technology (ICT) skills needed to design, build, and manage networks.

## DESIGNATIONS

- CAE-Cyber Defense

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Classroom Learning



# THOMAS NELSON COMMUNITY COLLEGE



Thomas Nelson Community College Campus

**Thomas Nelson Community College** is an accredited, two-year institution of higher education established as a part of a statewide system of community colleges. We primarily serve the residents of the cities of Hampton, Newport News, Poquoson, and Williamsburg, and the counties of James City and York.

Since 2002, Thomas Nelson has proudly provided cybersecurity training to the Virginia Peninsula. From certificate attainment to degree alignment, we provide career pathways for the Peninsula's cybersecurity professionals. Thomas Nelson strives to enable students to graduate with high-demand skills and content knowledge and establish additional cyber business-education partnerships. In order to accomplish this, we host cybersecurity conferences addressing cyber threats, malware, forensics, mitigation, industrial control systems, new technologies, governance, regulations, and

compliance and business/higher education issues, as well as maintain strategic partnerships with Cyber Watch, InfraGard, Armed Forces Communications Electronics Association, International Information Systems Security Certifications Consortium, Information Systems Security Association, and the HR Cyber Alliance.

Thomas Nelson's Cybersecurity program consists of two components: a career studies certificate for those who already have a degree and are seeking specialization, and an Associate of Applied Science (AAS) program for incoming freshmen seeking a career in cybersecurity, and industry certifications for those currently in the industry. Our AAS in IST degree with the cybersecurity focus is transferable to many four-year institutions and offers students the opportunity to participate in cybersecurity competitions and conferences.

## DESIGNATIONS

- CAE-Cyber Defense

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[tncc.edu/cybersecurity](http://tncc.edu/cybersecurity)



TNCC Cybersecurity Course



Tiffin University Cyber Security program

In **Tiffin University's (TU)** cyber security program, you'll study with faculty who bring vast industry experience. Our instructors bring years of both technical and managerial experience, having worked in the development and testing of security systems and technologies. Their sharing of real-world experience will greatly enhance your learning, as these experienced practitioners bring real-life examples of cyber security concepts and technologies to classroom discussions.

All students in the program complete an internship of at least 150 hours at a security-related job. TU cyber security majors have interned at the FBI, United States Coast Guard Research & Development Center, Department of Homeland Security, Maritime Security Center, Maritime Transportation System Information Sharing Analysis Center, Arctic Domain Awareness Center in Alaska, Seneca County Drug

Task Force, Cooper Tire, First Energy, District Attorney Offices, law enforcement agencies, major healthcare organizations, and financial institutions.

One of the hallmarks of our program is the focus on helping students develop a "security mindset." Students learn to view cyber threats as one component of a larger security landscape, rather than isolated technical issues. Therefore, students learn to perform holistic threat analysis, including considering the actor(s) involved, assessing their intent, and developing comprehensive security plans for organizations. TU's Student Cyber Security teams have routinely won capture the flag events and placed third out of 20 teams in a regional competition that included 15 professional cybersecurity teams from Fortune 500 companies.

In 2017, TU hosted the 8th Annual Maritime Risk Symposium, bringing together 225 attendees to discuss the threats and challenges to maritime cyber security and the marine transportation system. The attendees of the symposium represented 29 different educational institutions, five foreign nations, the United States' military services, multiple private-sector organizations, federal law enforcement and homeland security agencies. TU was the smallest university to ever host the Maritime Risk Symposium, which highlighted the quality and growing reputation of our cyber defense programs.

In addition to the CAE-designated Bachelor of Arts program in Cyber Security, TU also offers a Master of Science in Cyber Security and a Bachelor of Criminal Justice degree in Digital Forensics.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Towson University, Maryland

**Towson University (TU)** is a welcoming community for living and learning, and an important anchor institution for the greater Baltimore region since 1866. TU advances research and creates opportunities for the public good.

The Department of Computer & Information Sciences (CIS) offers a wide range of academic options to prepare students for the rapidly growing and changing field of computing. TU CIS serves over 2,000 undergraduate and graduate majors with particular tracks in cybersecurity. TU was one of the first undergraduate cybersecurity tracks in the nation and the first in Maryland. TU also specializes in research with assistive technology, cybersecurity, automated reasoning, cryptography, data mining, distributed computing, genomics, geographical information systems, human-computer interaction, and more.

The TU Center for Interdisciplinary & Innovative Cybersecurity (TU Cyber4All Center) is a global leader in interdisciplinary and inclusive cybersecurity education, research, and innovation. It is the first choice for the government, industry, and academia in need of innovative research, technical insights, and policy guidance about cybersecurity education and research. The National Security Agency and Department of Homeland Security has designated Towson University as a National Center of Academic Excellence in Cyber Defense Education since 2002 and a CAE in Cyber Operations since 2013. The Cyber4All Center works in conjunction with other TU divisions to address the grand cybersecurity challenges with interdisciplinary education and research. The Center engages local government, industry, the community and K-16 educators on cybersecurity issues, and transfers results into deployable technologies.

**DESIGNATIONS**

- CAE-Cyber Defense
- CAE-Cyber Operations

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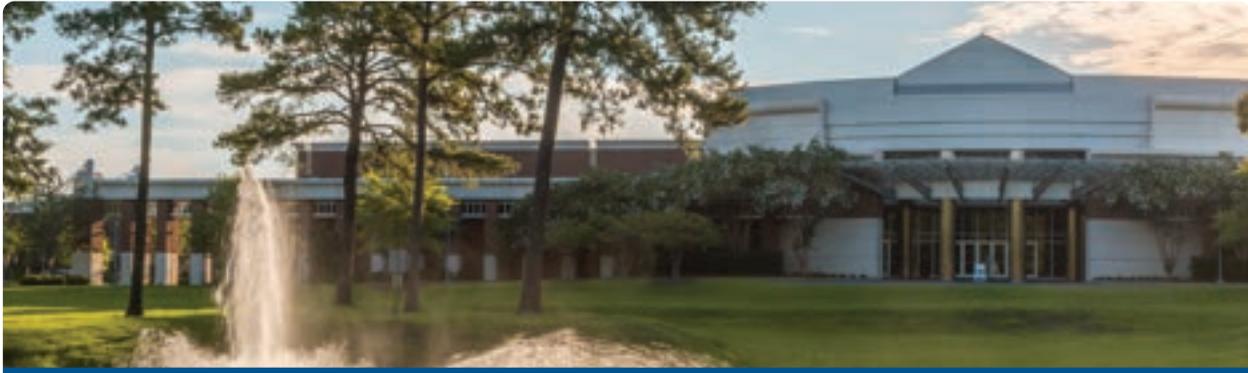
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Cyber4All Center's Mock SOC



Trident Technical College - Thornley Campus

**Trident Technical College**, located in historic Charleston, SC, is the first technical college in South Carolina to be designated as an NCAE-CD school. Its initial designation was in 2019 for its Certificate of Applied Science–Cybersecurity program. It has since added an A.A.S. in Cybersecurity degree. Currently, the two programs have an enrollment of over 500 students.

TTC has built a successful platform for developing highly skilled, workforce ready graduates. Students participate in multiple cybersecurity competitions, including SECCDC, NCAE Cyber Games, NCL, and PCDC. Its SNAP (Security, Networking & Programming) Club allows students to collaborate on cybersecurity topics and host regular meetings with speakers from local industry.

The College participates in the SC Relentless

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Challenge program, where students from HBCUs work as cybersecurity interns with local businesses and compete in an annual CTF hackathon. Students also intern with the TTC's own IT department, building hands-on skills in a real-world IT environment.

TTC hosts an annual Career Day, giving students a chance to network with local employers and identify potential job opportunities. Its also participates in the annual National Cybersecurity Virtual Career Fair, so its students can connect with employers from industry, government, and academia across the country.

TTC actively supports the surrounding community through Dual-Enrollment partnerships with local high schools whose students can earn college credit while completing their high school degrees. TTC's Charleston Regional Youth Apprenticeship program offers local high school students the opportunity to receive paid on-the-job training along with related classroom instruction at TTC at no cost. This 2-year program allows participants to seek paid apprenticeships with local businesses in a variety of careers, including Cybersecurity, while earning at least one Certificate of Applied Science degree.

TTC's CAE-CD designation has ensured its students are at the forefront of the cybersecurity industry, supporting the country's goal of preparing, growing, and sustaining a national cybersecurity workforce that safeguards and promotes America's national security and economic prosperity.



# TUSKEGEE UNIVERSITY



Tuskegee University Campus

**Tuskegee University** is a private, historically black university (HBCU) located in Tuskegee, Alabama. Over the past 138 years since it was founded by Booker T. Washington in 1881, Tuskegee University has become one of our nation's most outstanding institutions of higher learning. The Brimmer College of Business and Information Science is deeply rooted in Tuskegee University's historical mission.

The Center of Information Assurance Education (CIAE) at Tuskegee University (TU) is housed within the Computer Science Department at the College of Business and Information Science. The CIAE at TU was initially designated as a National Center of Academic Excellence in Information Assurance Education (CAE-IAE) by NSA/DHS in 2012, and was re-designated as National Center of Academic Excellence in Cyber Defense (CAE-CD) by DHS/NSA in 2017 and 2023.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CIAE at TU serves as the organizing body to offer resources and assistance for faculty, students, and community in conducting teaching, research, and other activities in Information Assurance.

The major accomplishments include: the computer science department launch of an inter-disciplinary master program in Information Systems and Computer Security (MS-ISCS) with two options: cybersecurity option and data science option, which is designed to fill current and future national needs for Information Assurance and Cyber Defense professionals; and with the efforts of CIAE, the university was awarded the CyberCorps: Scholarship for Service (SFS) funded by NSF to strengthen the national cybersecurity workforce in 2017, and successfully renewed in 2023 for a period of next five years.

Tuskegee University is very committed to Information Assurance/Cyber Defense program of education, research, and outreach because of the crucial nature of cyber security for the nation.



CAE Designation Acceptance



USAFA Graduation

The **United States Air Force Academy (USAFA)** serves as an unparalleled premier academic and military institute which educates, trains, and inspires men and women to become leaders of character, motivated to lead the United States Air Force and Space Force in service to our nation.

Cadets complete a rigorous and rewarding program of academic, military, athletic, and character development. The academic experience balances science, technology, engineering, and mathematics with arts and humanities. USAFA's robust core curriculum places cadets at the intersection of these disciplines, generating rewarding opportunities to cultivate and apply creative and complex problem-solving abilities and offering opportunities to complete cutting-edge research.

The Department of Computer and Cyber Sciences

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Cyber Operations

## CONTACT INFORMATION

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offers two ABET-accredited undergraduate majors - computer science and cyber science. Computer science emphasizes computing theory and software engineering. The USAFA cyber science major was the first in the world to earn ABET accreditation and focuses on networks, reverse engineering, forensics and other skills necessary to lead and execute offensive and defensive cyberspace operations.

USAFA integrates its world-class Critical Infrastructure Cyber Range (CICR), a 1:87 scale city with SCADA-controlled residential, industrial, and military infrastructure, throughout its curriculum enabling cadets to conduct cyberspace operations and experience the impacts on the physical world.



Critical Infrastructure Cyber Range



# UNITED STATES COAST GUARD ACADEMY



USCGA Campus

The **United States Coast Guard Academy** at New London, Connecticut, is one of the five United States Federal Service Academies. It is supported by the Federal Government and operated within the authority of the Department of Homeland Security. It is a highly respected institution offering a superb undergraduate education. It is the principal source of graduates with technical degrees for the United States Coast Guard officer corps. The Coast Guard Academy is dedicated to producing officers who meet the needs of the Service.

Within this broad perspective lie four primary objectives: (1) to provide, by precept and example, an environment that embraces the Coast Guard Core Values of Honor, Respect, and Devotion to Duty; (2) to provide a sound undergraduate education in a field of interest to the Coast Guard, (3) to provide leadership education, and (4) to provide professional

training which enables graduates to immediately assume their duties as junior officers.

The Cyber Systems (CYS) major prepares future officers for exciting careers in cybersecurity within the Coast Guard with a focus on developing, integrating, and implementing cutting-edge computing technologies in an interconnected cyber world. Cyber technology is inextricably linked with all aspects of Coast Guard mission performance. The Cyber Systems major comprises a strong academic foundation in secure technical computing balanced with a managerial cyber emphasis.

The major provides students with the necessary foundations for the design and development of assured, secure computer systems in order to defend computer networks, enable Coast Guard missions, and protect critical national infrastructure. The program challenges cadets to become critical thinkers who can design and implement computer systems and software to solve real-world technical problems.

This major includes managing information technology, understanding a systems approach, and achieving fluency with information systems. Research and capstone areas include such dynamic and diverse fields as security, physical systems, risk management, intelligence, policy, geospatial science, secure software development, and network security all within a cyber context.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

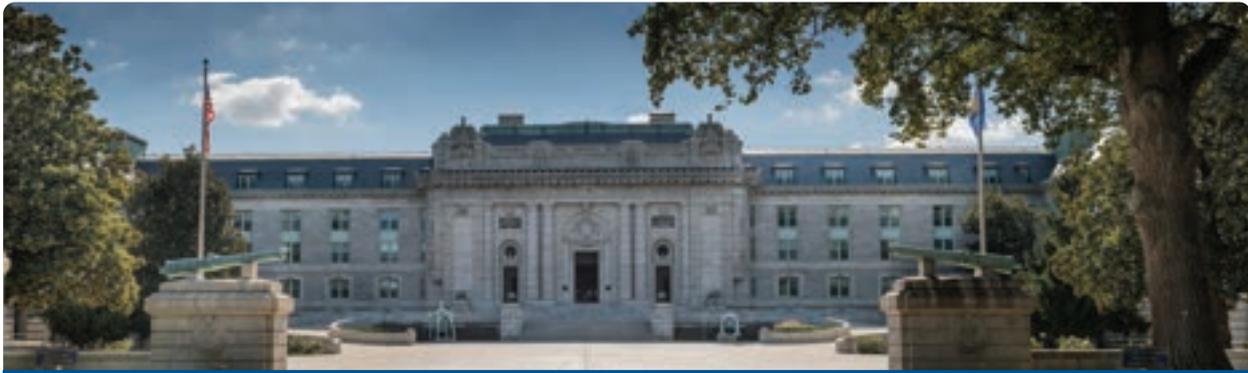
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# UNITED STATES NAVAL ACADEMY



USNA Bancroft Hall

As the undergraduate college of our country's naval service, the **United States Naval Academy (USNA)** prepares young men and women to become professional officers of competence, character, and compassion in the U.S. Navy and Marine Corps. Naval Academy students are midshipmen on active duty in the U.S. Navy.

They attend the academy for four years, graduating with bachelor of science degrees and commissions as ensigns in the Navy or second lieutenants in the Marine Corps. Naval Academy graduates serve at least five years in the Navy or Marine Corps. All students who attend the Naval Academy do so on a full scholarship. The Navy pays 100% of the tuition, room and board, medical and dental care costs of Naval Academy midshipmen.

USNA is one of just a handful of schools with an ABET

accredited Bachelor of Science in Cyber Operations along with the designation for NSA CAE-CO (Cyber Operations) and NSA CAE-CD (Cyber Defense). Graduates of the program serve our nation around the world in a variety of roles and missions.

The USNA mission is to:

"To develop Midshipmen morally, mentally and physically and to imbue them with the highest ideals of duty, honor and loyalty in order to graduate leaders who are dedicated to a career of naval service and have potential for future development in mind and character to assume the highest responsibilities of command, citizenship and government."

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Cyber Operations

## CONTACT INFORMATION

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USNA's Hopper Hall - home of the Cyber Program



# UNIVERSITY AT ALBANY STATE UNIVERSITY OF NEW YORK



180 years and 9 colleges

The **State University at Albany** boasts a distinctive academic environment encapsulated by its commitment to fostering innovation, diversity, and academic excellence. Our program is dedicated to providing a transformative educational experience that equips students with the skills and knowledge needed to thrive in an ever-evolving global landscape.

Our mission at the University at Albany is to cultivate a dynamic learning community that champions inclusivity, research-driven inquiry, and societal impact. We are committed to nurturing critical thinking, creativity, and a passion for lifelong learning among our students.

We prioritize research that addresses real-world challenges and contributes to the advancement of knowledge in various disciplines. Areas of

research include: Computer vision and machine learning, Data management systems, Data mining and management, Intelligent big data analytics, applications, and systems, Robotics, algorithm and computable systems, Personalized AI lab and Ubiquitous networking laboratory (UBINET).

With a focus on global engagement, our program encourages students to explore international perspectives and participate in research projects with a global impact. We believe in preparing students to navigate the complexities of an interconnected world. The University is home to many programs that have global impact including our College of Emergency Preparedness and Homeland Security where students excel in interdisciplinary programs and research initiatives from health and technology to government and education that allow them to be strong advocates of others.

Joining the University at Albany means becoming part of a strong and supportive alumni network. Our graduates go on to achieve success in diverse fields, forming a robust professional community that offers valuable connections and mentorship opportunities such as our EY Trajectory program.

Whether you're pursuing undergraduate or graduate studies, the University at Albany stands as a hub of intellectual curiosity, innovation, and inclusivity, preparing students to excel in their chosen fields and make a positive impact on the world.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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University at Buffalo North Campus

The mission of **University at Buffalo (UB)**'s center of excellence in cybersecurity is graduate education and coordinated research in computer security and information assurance (IA) by faculty members from several schools and departments at the university. This center has been conducting research in the area of intrusion detection, cyber situation awareness, insider threat assessment and mitigation, continuous authentication using behavioral biometrics, language-oriented security, hardware security, and trustworthy computing.

Since the establishment of the center of excellence, it received over \$16 million in research and education grants from agencies such as NSF, NSA, DARPA and AFRL and companies such as Intel Corporation and Harris Communication. This center has been running the NSF CyberCorps scholarship for service (SFS) program since 2008 and produced more

than 45 cybersecurity experts. Through the DoD's Information Assurance Scholarship Program (IASP), it produced nine scholars between 2004 and 2008.

The center has been running middle school and high school camps since 2015 under the GenCyber program pioneered by NSA. It has run more than 100 cybersecurity awareness workshops in the Western New York region and more than 3,500 middle school and high school students have taken part. The center offers an advanced graduate certificate in cybersecurity with both technical and managerial tracks and more than 175 students received the certificate since its inception. The center also offers a minor in cybersecurity and an MS program in cybersecurity. The center routinely conducts cybersecurity competitions, instilling interest among the participating students.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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Shelby Engineering Quad



# UNIVERSITY OF ADVANCING TECHNOLOGY



University of Advancing Technology's Tempe, Arizona campus

The **University of Advancing Technology (UAT)** is dedicated to providing students with an innovative and advanced technical education that prepares them for the challenges and opportunities of the future. UAT's mission is based on a culture of pride, celebration of technological advancement, and a dedication to maintaining authenticity within its community. The university's educational philosophy includes project-based learning, balancing tradition and innovation, and fostering inclusivity and diversity.

UAT's unique approach includes a technology-centric curriculum, specialized programs, real-world application, industry partnerships, innovative learning environments, small class sizes, and mentorship and advising. The university offers a wide range of cutting-edge degree options, including Artificial Intelligence and Virtual Reality, and

emerging disciplines.

UAT graduates are known for their innovation and entrepreneurial spirit, contributing significantly to the technology sector and starting businesses that drive progress and change. The university plays a crucial role in workforce development, supplying the tech industry with skilled professionals equipped to meet the demands of an ever-evolving landscape.

UAT's community contributions include local and global engagement, sustainability initiatives, leading-edge research, and collaborative ventures with industry partners. The university has a strategic vision for growth, including expanding its academic offerings, enhancing facilities, and increasing its reach to students around the world.

UAT is committed to adapting to the changing landscape of education and technology, ensuring that it continues to provide a cutting-edge and relevant education for future generations of tech leaders.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Students in the UAT Cyber SOC



The University of Alabama

Founded in 1831 as the state's first public college, **The University of Alabama (UA)** is dedicated to excellence in teaching, research, and service. Known as the Capstone of Higher Education, UA students are provided the opportunity to learn from exceptional faculty members and to enhance their education through both classroom and research lab experiences. The University of Alabama has been recognized as a National Center of Academic Excellence in Cyber Defense Research (CAE-R) since 2014.

At UA, cyber is identified as one of the four main thrusts of the University. To that end, the University offers numerous degrees, minors, and concentrations to provide students with a well-rounded knowledge and skillset in cyber-related fields. Students have the opportunity to obtain technical knowledge from the Computer Science

program, behavioral knowledge from the Criminology and Criminal Justice program, and organizational knowledge from the Management Information Systems program. This is a unique set of knowledge skills from complementary aspects of cyber security.

The most recent addition is a Bachelor of Science in Cyber Security offered by the Department of Computer Science that began Fall 2020. This program is designed to provide a rigorous, technical degree that imparts the necessary knowledge, skills, and motivations to protect and defend digital information from attacks.

In addition, the University provides opportunities in cyber-related fields on many levels including CyberCorps<sup>®</sup> Scholarship for Service (SFS), Graduate Assistance in Areas of National Need (GAANN), multiple student-led cyber security clubs, and K-12 outreach with our annual Capture the Flag (CTF) competition.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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Shelby Engineering Quad

# UNIVERSITY OF ALABAMA AT BIRMINGHAM



University Hall, home to the CS Dept and UAB CAE-R

The **University of Alabama at Birmingham (UAB)** is a comprehensive urban university with the nation's fourth-largest public hospital (eighth-largest hospital in the nation and best hospital in Alabama), which has rapidly evolved into a world-renowned research university and health care center that ranks in the top ten nationally for student diversity.

UAB is a Carnegie R1 research university which has been consistently ranked highly, including being named the 2018 and 2019 Top Young University in the U.S. (top 10 worldwide, Times Higher Education World University Rankings), America's Best Large Employer (Forbes, 2021), and America's No. 4 Best Employer for Diversity (Forbes 2021). UAB is Alabama's single largest employer.

The UAB Department of Computer Science offers four Bachelor's programs (BS and BA in CS, BS in Digital

Forensics, BS in Bioinformatics), three Master's programs (Cyber Security, Computer Science, and Data Science), and a doctoral program, with a total enrollment of close to 700 undergraduate, 700 master's, and 33 doctoral students. The Master's in Cyber Security program at UAB is ranked #1 in the nation for in-person Cyber security Master's programs (Fortune, 2023).

The UAB Center for Cyber Security, hosted within the UAB Computer Science department, is at the forefront of cyber defense and education. The Center's focus is to drive innovation, research, education, workforce development, and outreach in the area of cyber security. The Center has been designated as a National Security Agency Center for Academic Excellence in Research (CAE-R) since 2012. It brings together a diverse team of experts specializing in cyber security and forensics. The center's partnership with the is a testament its dedication to producing top-tier professionals in the field. The CS department and the Center also host the UAB Cybercorps – Scholarship for Services program, which trains graduate students to develop the cybersecurity workforce for our nation.

The Center's groundbreaking research initiatives are supported by grants from prestigious institutions such as the National Science Foundation (NSF), the Department of Energy, the Department of Homeland Security, and the Defense Advanced Projects Agency (DARPA).

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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The University of Alabama in Huntsville

The **University of Alabama in Huntsville (UAH)** has been designated as a National Center for Academic Excellence (CAE) since 2007. Currently a CAE both in Cyber Defense and in Research, the university offers numerous cybersecurity-related degrees at the undergraduate and graduate levels in the fields of cybersecurity engineering (B.S.), cybersecurity (M.S.), computer science (B.S., M.S., Ph. D.), computer engineering (B.S., M.S., Ph. D.), and information systems (B.S., M.S.).

The Center for Cybersecurity Research and Education (CCRE) at UAH leverages its partnerships with government entities and local industry to provide students with hands-on experience through sponsored research. Projects include SCADA security, physical and digital navigational lock cyberthreat modeling, and risk/supply chain assessments. The center supports the NSF/Scholarship for Service

and DoD/CySP. Additionally, the center advances cybersecurity education through curriculum development projects, GenCyber camps, and its Cyber Force Incubator.

UAH CCRE is proud to be the national leader of the RING program, a free high school cybersecurity course taught online to hundreds of students throughout the nation. UAH provides RING curriculum materials at no cost to hundreds of teachers across every U.S. state as well as D.C. and Puerto Rico. The RING program is a core component of the NCAE-C Education Pathways National Center.

UAH also leads the NCAE-C Virtual Internship and Varied Innovative Demonstrations (VIVID) program which provides internship opportunities for CAE Community students nationally, hosts cybersecurity competitions, and hosts the 2024 NCAE-C Cybersecurity Colloquium Event. Both programs are supported through grants by the NCAE-C program office located at the NSA.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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UAH Cyber Students



The Eller College of Management at the University of Arizona

**The University of Arizona**, the first four-year public university in the state of Arizona to be federally recognized as a Hispanic Serving Institution (HSI), is home to the Information Assurance and Security Education Center (IASEC) in the Eller College of Management.

Through education, training and research, the IASEC promotes responsible information and cybersecurity practice. Designated as a National Center of Academic Excellence in Cyber Defense Research and Education since 2009, IASEC offers faculty, students and the community resources to study and address the cyber vulnerabilities of our nation's information infrastructure.

One component of the IASEC is AZSecure Cybersecurity Scholarship program, a cutting-edge, research-intensive program for graduate

students designed to train the next generation of cybersecurity professionals. Students choose one of two employment tracks: the Government Scholarship for Service track, which offers full scholarships to U.S. citizens in exchange for public service following graduation, or the Scholarship for Industry track, which mirrors the Scholarship for Service track but does not require graduates to work for the government following graduation.

The IASEC also encompasses the online Master's in cybersecurity program. The degree focuses on applying analytical and critical thinking to plan and execute security measures to shield an organization's computer systems, networks and network devices from infiltration and cyberattacks.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research
- CAE-Operations

## CONTACT INFORMATION

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Cybersecurity students



Aerial View of The University of Arkansas

The **University of Arkansas** was designated as a National Centers of Academic Excellence in Information Assurance Research in 2012 and again in 2014 when the designation was modified to National Centers of Academic Excellence in Information Assurance / Cyber Defense Research.

The mission of the center is to promote education and research in the field of computer security and information assurance at the University of Arkansas. The activities of this center include, but are not limited to fostering multidisciplinary research, securing large-scale funding from federal, state, and other funding agencies, providing education and training to the future workforce, and increasing awareness in the field of information security and reliability by offering appropriate seminars and workshops.

The following faculty members are part of the center: Brajendra Panda, Center Director (cybersecurity / database security), David Andrews (architecture security), Jia Di (asynchronous integrated circuit design and hardware security), Chris Farnell (cybersecurity for critical infrastructure), Miaoqing Huang (cloud security), Kevin Jin (cyber-physical system security), Qinghua LI (cybersecurity and privacy), Yanjun Pan (wireless security), Dale Thompson (wireless systems security and network security), and Xintao Wu (cybersecurity and privacy).

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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Student Technology Center



Expect more in cybersecurity at UA Little Rock

**UA Little Rock**, a public research university in Little Rock, Arkansas, excels in fostering intellectual growth, research, innovation, and societal improvement. It is committed to providing high-quality, accessible education that equips students with critical thinking, professional readiness, and ethical leadership for a diverse global society. A highlight of its offerings is the comprehensive cybersecurity program, which features stackable certificates leading to a Bachelor of Science in Cybersecurity, designed to prepare students for careers in this essential field.

The cybersecurity curriculum is developed by faculty with rich industry experience, tailored to address the constantly evolving threat landscape. It includes hands-on training in the Trojan Cyber Arena, allowing students to practice cybersecurity applications in a secure, cloud-based environment. The program offers both undergraduate and graduate certificates

in cybersecurity, accommodating various educational and professional goals.

Additionally, UA Little Rock spearheads the National Cyber Teaching Academy, aimed at enhancing high school cybersecurity education for college credit. It also engages in significant research, especially in cybersecurity operations for the energy sector, applying cutting-edge AI and cryptographic techniques to critical infrastructure protection.

This educational and research approach not only positions UA Little Rock as a leader in cybersecurity education but also emphasizes its role in addressing the workforce needs of this critical and expanding field, ensuring students are well-prepared for the challenges and opportunities that lie ahead.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Developing Skills



Donald Bren Hall at UCI

**UC Irvine's Donald Bren School of Information and Computer Sciences (ICS)** is proud to celebrate 10 years as an NSA/DHS Center of Academic Excellence in Research. As one of the few computing-focused schools in the nation—and the only in the UC system after 50 years—ICS is uniquely positioned to advance cybersecurity research. UCI is centrally located in Irvine, known as the “City of Innovation,” which has quickly become one of Southern California’s fast-growing tech and security hubs—home to numerous tech Fortune 1,000 companies, fast-growing startups, and a collaborative community of highly innovative people.

ICS has long been at the forefront of cybersecurity in education, housing over a dozen internationally renowned professors, including senior faculty members Michael Franz, Ian Harris, Scott Jordan, Sam Malek, Sharad Mehrotra, and Gene Tsudik, as

well as new ICS faculty members Alfred Chan and Josh Garcia, whose research examines both technical and nontechnical dimensions of cybersecurity.

Over the last decade, ICS has also graduated over 30 Ph.D. students, and many more master’s students, with a cybersecurity focus who have gone on to work in academia and industry at organizations such as IBM, Xerox PARC and SPAWAR. In 2016, UCI deepened its commitment to cybersecurity research by opening the Cybersecurity Policy and Research Institute (CPRI), with the goal of finding multidisciplinary legal, policy and technological solutions to combat cyber threats while protecting and enhancing individual privacy and civil liberties. CPRI is led by Executive Director Bryan Cunningham, an international expert on cybersecurity law and policy who formerly served as a White House lawyer and CIA officer and helped draft the first National Strategy to Secure Cyberspace.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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Students competing at HackUCI



University of Central Florida

Founded in 1968, the **University of Central Florida (UCF)** has strived to produce the science and engineering talent required to meet the technological needs of the United States. UCF's College of Engineering and Computer Science is committed to providing educational opportunities that promote the innovation and real-world experience our students need to contribute significantly to the advancement of state-of-the-art in Cyber Defense knowledge and in Cybersecurity Research.

UCF has been designated as a National Center of Academic Excellence in both the Cyber Defense (CAE-CD) since 2016 and in Cyber Research (CAE-R) since 2017. At UCF, we have a strong history of producing graduates who have a distinct focus on technology and national cybersecurity. Besides the program of study for UCF's CAE-CD designation

in Secure Computing and Network (SCAN) minor degree, we also provide Cyber Operations Undergraduate Certificate, Master's Degree in Cyber Security and Privacy and Master's Degree in Digital Forensics. UCF Cyber Defense team has consistently won national championship in the well-known National Collegiate Cyber Defense Competition (CCDC) in 2014, 2015, 2016, 2021 and 2022, respectively; won DoE CyberForce championship in 2018, 2019, 2021 and 2022, respectively.

We strongly believe the work that our faculty and administration are doing has consistently impacted the advancement of cybersecurity and cyber defense education by promoting cyber competitions; providing state-of-the-art laboratory environments; delivering world-class cyber education; enabling industry collaboration and community outreach; and by creating an overall culture of winning together.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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Campus life



Donald Bren Hall at UCI

Since its humble beginnings as the State Normal School No. 2 in 1871, the **University of Central Missouri** has remained consistent in its mission – transforming students into lifelong learners who use their education to serve their communities. The heritage of UCM and the value of its meaningful degrees has and will continue to be passed from generation to generation. Opening its doors in a rented building with only 30 students, UCM is now home to nearly 10,000 students that represent 43 states and 32 countries.

The UCM Cybersecurity program is a leader in the state and nation. Our Cybersecurity program is one of the first two ABET accredited programs in Missouri, and one of only a handful of accredited Cybersecurity programs in the nation. Achievement of ABET accreditation is an indicator that our program exhibits the level of quality demanded by

industry and that we are able to produce graduates that are workforce ready. UCM's Cybersecurity department has been designated as a National Centers of Academic Excellence in Cyber Defense sponsored by the National Security Agency (NSA) since 2022. Our program is also managing and running the Center of Cybersecurity at the University of Central Missouri.

The program curricula provide foundational and hands-on training in technical, systems, human, organizational, and societal aspects of cybersecurity. The program includes courses like cryptography, secure programming, network security, cloud security, web applications security, cyber-physical systems security, information assurance, ethical hacking, usable security, and computer forensics. The curricula are designed according to the National Centers of Academic Excellence in Cyber Defense (CAE-CDE) Education Program Knowledge Units jointly sponsored by the National Security Agency (NSA) and the Department of Homeland Security (DHS). We provide an unmatched education to students in the region, and we're proud of it. With the demand for qualified technical personnel far exceeding the available supply, the opportunities awaiting Cybersecurity graduates are nearly limitless.

We have highly qualified and dedicated faculty members who have extensive experiences in research and/or industry. Seven of them received specialized information security training through the SANS Institute. In addition, seven faculty hold highly regarded cybersecurity industry certificates.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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# UNIVERSITY OF CINCINNATI



University of Cincinnati Campus

Since 2014, the **University of Cincinnati's** main goal is to strengthen the cyber workforce in quality and quantity for the NSA, DoD, and Defense Contractors. Ours is a Graduate Certificate Program but, given ambitious course requirements, the curriculum is more easily managed by ACCEND students who complete a BS after 4 years then an MS after another year. There has always been a strong partnership between Political Science (now School of Public and International Affairs), the College of Engineering and the School of Information Technology.

Creation of the program has inspired state funding and the rise of a cyber student group at UC. Thus, we have created a cyber lab (a mini cloud) which is managed by the student group Cyber@UC. The student group has been very active in outreach to area high schools, organizing cyber competitions and presenting current information related to

cybersecurity. They have also organized visits to local area Security Operation Centers, notably Siemens Global Cyber SOC, US Bank SOC, and GE Aviation SOC.

Each year a visitor from the NSA explains mono- and polyalphabetic cryptography to about 200 university, high school, and middle school students with a demonstration of a captured German Enigma machine. We have received letters of appreciation stating that the visits have inspired students to consider careers in cyber.

Funding from the state has enabled the creation, maintenance, and growth of the first Ohio Cyber Range and the Ohio Cyber Range Institute. The OCRI has assembled and created a large library of cyber material for courses, research, and competitions at universities and high schools around the state. This achievement was due, in part, to NSA designation.

Students at UC have been quite active in cyber competitions since 2014. They have won several first-place awards in cyber competitions and have finished in the top 10 in the annual NSA sponsored Codebreaker Challenge over the last several years.

The Electrical Engineering and Computer Science department heads the Center for Hardware and Embedded Systems Security which is supported by the NSF and has affiliates from several universities, including two that are designated as CAE-COs, as well as the Air Force Research Labs and industrial sponsors.

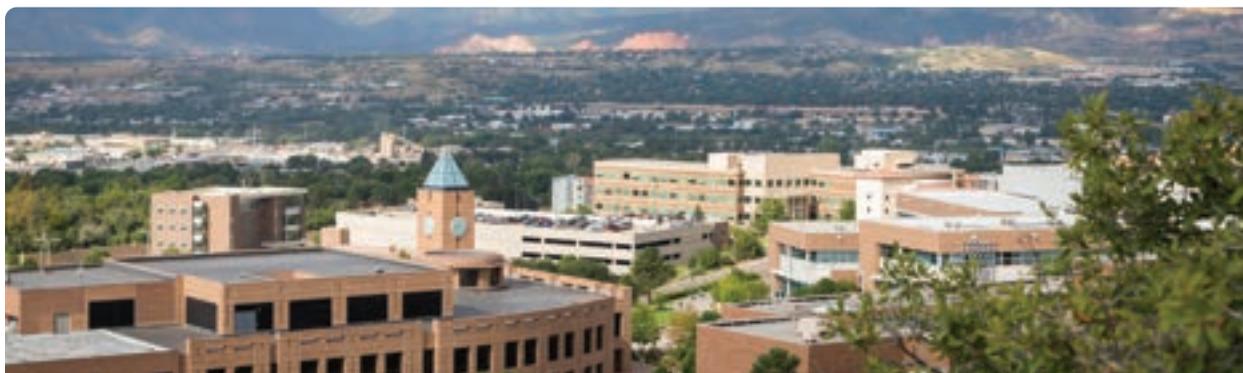
## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Cyber Operations

## CONTACT INFORMATION

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UCCS Campus and Pikes Peak

The **University of Colorado Colorado Springs (UCCS)** is a recognized leader in cybersecurity education in the region, having educated and trained almost 1,000 cybersecurity professionals since 2019 who work to ensure our nation's security. UCCS has formed strategic cyber partnerships across campus, with industry, government, military, academic institutions, and the National Cybersecurity Center.

These partnerships help UCCS students secure internship and employment opportunities, pursue cyber research, win hands-on cyber training competitions, and attend numerous career readiness events and opportunities.

UCCS now offers almost 40 cybersecurity degrees and programs across 5 of our 6 colleges, ranging from bachelors, masters, and doctorate degrees to certificates and areas of emphasis.

UCCS believes strongly that cybersecurity should be interdisciplinary, training not only the next generation of technologists, software developers, and IT professionals, but also law enforcement officers, psychologists, linguists, writers, and mathematicians.

Due to Colorado state funding for cyber education, from 2019 – 2023 UCCS awarded over \$3.5M in scholarships to almost 1,200 students and placed UCCS students in 90 internships. UCCS continues to expand and lead the cybersecurity ecosystem in the region by hosting cyber competitions with industry partners, building new education pathways, and supporting cybersecurity internships, faculty development, research, and outreach and educational opportunities for K-12 students and teachers across the region.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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UCCS Cyber Student Volunteers



University of Colorado Denver Campus

Founded in 1973, the **University of Colorado Denver (CU Denver)** offers a modern, comprehensive urban education with multiple paths to success—in life and career—delivered how, when, and where you want it. CU Denver is the state's premier public urban research university, offering more than 100 degree programs in seven schools and colleges and across a spectrum of bachelor's, master's, doctoral, and professional and continuing education options. Research, internship, and apprenticeship experiences are a hallmark of a CU Denver education, giving learners an excellent education and real-work skills and job experience along the way.

Globally connected and locally invested, CU Denver partners with more than 15,000 future-focused learners—among the most diverse in the state—to design accessible, relevant, transformative

educational experiences for every stage of life and career. Our proximity to downtown Denver enables many opportunities to enhance lives, careers, and professional networks as we are located within steps of the city's business, political, and arts corridor – and we have deep partnerships in the city, state, and region to help create or accelerate learners' paths.

Our leading faculty inspires and works alongside students to solve complex challenges through boundary-breaking innovation and impactful research and creative work. As part of the state's largest university system, CU Denver is a major contributor to the Colorado economy, with 2,000 employees and an annual economic impact of \$800 million.

CU Denver has a growing cybersecurity program, with both the Business School and the College of Engineering, Computing, and Design hosting degrees and certificates. Students have the option to pursue a traditional computer science approach or take a business risk orientated approach to cybersecurity. Students can also pursue both undergraduate and graduate level programs.

At CU Denver, we strive to make education work for all. Education has the power to transform lives, expand economies, uplift communities, and everyone must have access to these opportunities. That is why we seek to become the nation's first equity-serving institution—an inclusive, supportive university where all can excel.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Information Technologies and Engineering Building

The **University of Connecticut (UConn)** is dedicated to excellence demonstrated through national and international recognition. As Connecticut's public research university, through freedom of academic inquiry and expression, we create and disseminate knowledge by means of scholarly and creative achievements, graduate and professional education, and outreach. Through our focus on teaching and learning, the University helps every student grow intellectually and become a contributing member of the state, national, and world communities. Through research, teaching, service, and outreach, we embrace diversity and cultivate leadership, integrity, and engaged citizenship in our students, faculty, staff, and alumni.

As our state's flagship public university, and as a land and sea grant institution, we promote the health and well-being of Connecticut's citizens through

enhancing the social, economic, cultural and natural environments of the state and beyond.

UConn brings extensive resources and expertise in the area of cybersecurity having established the Connecticut Cybersecurity Center in 2015. The Center, now part of the Connecticut Advanced Computing Center, has more than 20 faculty members with over 100 graduate students and over \$8 million in active research funding. UConn is a leader in hardware security and assurance with the establishment of the Center for Hardware and Embedded Systems Security and Trust (CHEST).

UConn has active support of industry with the creation of the Synchrony Financial Center of Excellence in Cybersecurity focused on the security of financial systems and the Comcast Center of Excellence in Security Innovation focused on the security of the cable and telecommunications industry. The University of Connecticut is also home to the Voting Technology Research Center that has been established by the State of Connecticut to investigate secure voting solutions and voting equipment to develop and recommend safe use procedures for their usage in elections.

The University of Connecticut was the #1 team in the Spring 2023 National Cyber League competitions.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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University of Dallas - Gupta College of Business

The **University of Dallas** is a National Center of Academic Excellence in Cyber Defense (NCAE-CD) and was first designated by the NSA in 2003. The UD Cyber Program of Study (POS) resides within the Satish & Yasmin Gupta College of Business. The UD Masters POS has maintained its designation as a NCAE-CD for over twenty years. UD is accredited by the SACS and the international organization AACSB.

The UD Masters in Cybersecurity offers students a real-world cybersecurity education. The cybersecurity master's program dives into the critical topics facing organizations today. UD cyber students develop an in-depth understanding of the complexities in protecting and defending critical infrastructures and networks that contain valuable and highly sensitive private information. The master's program may be taken totally online from any city, state or international location with internet access. Courses offered

include securing the digital world, programming, data protection, governance, risk and compliance, operational cybersecurity management, penetration testing, digital forensics and strategic cybersecurity.

Students graduating from the University of Dallas Cyber POS can be confident they are receiving an excellent learning experience. UD Cyber courses are aligned to the NICE framework and advised by a cybersecurity advisory board. UD cybersecurity courses are taught by academically qualified professors with active cyber research streams and industry experience. The UD Cybersecurity Masters has positioned numerous students over the past twenty years to begin and advance their careers in cybersecurity. With more than 550,000 cyber job vacancies reported by Cyberseek, the UD Cybersecurity Master's program of study is an excellent career choice.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

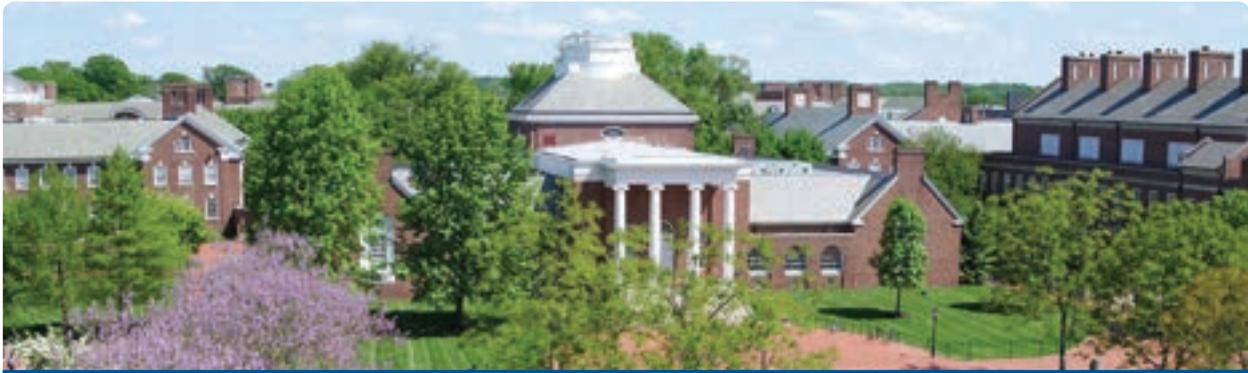
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University of Dallas - Campus Mall



University of Delaware Campus

The **University of Delaware** exists to cultivate learning, develop knowledge, and foster the free exchange of ideas. State-assisted yet privately governed, the University has a strong tradition of distinguished scholarship, which is manifested in its research and creative activities, teaching, and service, in line with its commitment to increasing and disseminating scientific, humanistic, artistic, and social knowledge for the benefit of the larger society. Founded in 1743 and chartered by the state in 1833, the University of Delaware today is a land-grant, sea-grant, and space-grant university.

The University of Delaware is a major research university with extensive graduate programs that is also dedicated to outstanding undergraduate and professional education. UD faculty are committed to the intellectual, cultural, and ethical development of students as citizens, scholars and professionals. UD

graduates are prepared to contribute to a global and diverse society that requires leaders with creativity, integrity and a dedication to service.

Entrepreneurship is the driving force for innovation and growth in the global economy, and UD's educational and research programs in electrical engineering provide numerous opportunities to explore this force underlying the competitiveness, success, and prosperity of society.

The Department of Electrical and Computer Engineering cybersecurity education programs include a Bachelor of Science, a minor, master's, doctorate, and graduate certificate programs to prepare our students at all career stages with the fundamentals, experience and innovative mindset to lead us to a better future. These programs combine rigorous cybersecurity fundamentals with the design and problem-solving skills UD engineers are known for. Students learn state-of-the-art skills for defending a rapidly changing digital frontier as they gain the expertise needed to analyze, design, and build secure devices and systems.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cyber Range



Ritchie School of Eng. and Computer Science (DU)

The **University of Denver (DU)**, a vibrant private institution dedicated to the public good, offers an exceptional environment to pursue your cybersecurity ambitions. DU fosters a culture of excellence, innovation, engagement, integrity, and inclusivity, preparing students for success with dedicated career services staff and a strong alumni network.

The Daniel Felix Ritchie School of Engineering and Computer Science stands out with its vision of empowering learners to become tomorrow's just, ethical, technological leaders. Students at the Ritchie School benefit from a well-rounded education, small class sizes, and personalized attention. Our commitment to using science and technology for positive change aligns perfectly with the growing need for ethical and responsible cybersecurity professionals. Diversity of thought, background,

and experience improves the fields of science and technology; at the Ritchie School, we are committed to justice, equity, diversity, and inclusion in everything that we do.

The Ritchie School's CAE-CD designated in-person Cybersecurity MS provides a solid, technical foundation in core computer science principles. Open to individuals with and without traditional computer science backgrounds, this two-year, cohort-based program allows you to earn your degree while building a professional network. The curriculum is designed to help you discover your passion within the diverse field of cybersecurity. Whether you're driven by technical expertise or a desire to contribute to a more secure future, DU and the Ritchie School offer a comprehensive and supportive environment to launch your cybersecurity journey.

DU offers a mix of online and in-person Cybersecurity options, allowing you to choose the path that best suits your learning style and career aspirations. DU University College offers two online Masters in IT degrees with a concentration in cybersecurity management and information systems security. These two programs enable students to analyze security needs, provide effective solutions, and combine advanced technical knowledge with management and leadership skills to manage cyber governance, compliance, and regulatory issues.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Detroit Mercy Campus

The **University of Detroit Mercy**, a Catholic university in the Jesuit and Mercy traditions, exists to provide excellent student-centered undergraduate and graduate education in an urban context. A Detroit Mercy education seeks to integrate the intellectual, spiritual, ethical, and social development of our students. Our students learn compassion and respect for all voices, especially those that are often muted. Moral and ethical issues are considered alongside academic and professional disciplines.

Detroit Mercy's degree programs encompass four distinct areas of cybersecurity: a technical Bachelor of Science in Cybersecurity, a Master of Science in Cybersecurity Management, an interdisciplinary Master of Science in Cybercrime with our Criminal Justice department, and a Master of Science and Graduate Certificate in Vehicle Cyber Engineering.

Designated since 2004, our Center for Cybersecurity and Intelligence Studies serves as a hub to provide students and faculty with opportunities to join a student-led Cybersecurity Club, compete in cyber competitions, meet excellent guest speakers who work in the discipline, engage in applied research projects, gain job experience with internships, apply for scholarships, and participate in a variety of professional development workshops.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Working on a Cyber Competition



UF Graduates

Our calling at the **University of Findlay** is to cultivate the potential within each student through academic excellence, transformative experiences and a supportive community that is grounded in Christian faith.

In 2022, the University of Findlay was designated as a CAE-CD for its BS degree in Computer Science - Information Assurance emphasis.

Strong believers in collaboration, the UF Computer Science Department partners with local organizations on an annual IA Forum, is part of a Regional Programming Center of the Ohio Cyber Range Institute, and has co-sponsored the local Boy Scouts Cyber Exploring Post #323.

The Annual IA Forum, held each October since 2001, allows our students to present on emerging

IA topics, and network with invited speakers and attendees from campus, local communities, and regional businesses. Students also work with the chamber of commerce on their business technology survey, gathering information on business security perspectives and preparedness in the region. The UF computer science department encourages sharing information about the purpose, use, maintenance, and security of electronic data through the Center for Electronic Data Education and Information Assurance (CEDEIA) web site.

A college education at the University of Findlay will be one of the most important investments you will make. At UF, 99% of students receive financial aid. The University of Findlay strives for an environment in which all individuals are treated with respect and dignity.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Students Sharing at IA Forum



University of Georgia Campus, Sanford Stadium View

The **University of Georgia**, a land-grant and sea-grant university with statewide commitments and responsibilities, is the state's oldest, most comprehensive, and most diversified institution of higher education. Its motto, "to teach, to serve, and to inquire into the nature of things," reflects the University's integral and unique role in the conservation and enhancement of the state's and nation's intellectual, cultural, and environmental heritage.

As the birthplace of public higher education in America, the University of Georgia is inspiring the next generation of entrepreneurs, researchers, and informed citizens who will change the world. For over 235 years, UGA has been engaged in a mission of leadership and service to our state.

In 2017, UGA established the Institute for Cybersecurity and Privacy (ICSP). The primary objectives of the Institute are to directly expand ongoing research excellence in cybersecurity and privacy, and to indirectly enhance the cybersecurity and privacy curriculum currently offered at UGA. The Institute functions within the School of Computing and currently houses seven outstanding faculty whose main areas of research are directly related to cybersecurity and privacy. At the same time, the ICSP also hosts several faculty from other UGA units who conduct multidisciplinary cybersecurity research, including technical and non-technical aspects of cybersecurity and privacy in engineering, mathematics, public policy, law, journalism and economics.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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ICSP Students and Professor



UNIVERSITY of HAWAI'I  
**KAPI'OLANI**  
COMMUNITY COLLEGE

# UNIVERSITY OF HAWAI'I KAPI'OLANI COMMUNITY COLLEGE



Kapiolani Community College Campus

The Information Technology (ITS) Program at **Kapi'olani Community College** is the core Cyber Defense program that offers students a comprehensive background in Information and Communication Technology. Through this program, students gain a solid understanding of various aspects of cyber defense, including computer hardware, software, networking, security, and programming.

To further enhance the students' learning experience, the ITS program includes a Certificate of Achievement (CA) in Information Security and Assurance (ISA) and a Certificate of Competence (CO) in ISA. These certificates are designed to provide students with specialized knowledge and skills in information security and assurance, which are essential for a career in cyber defense. The CA and CO in ISA are built on the knowledge

unit requirements for a collegiate institution to be recognized as a National Center of Academic Excellence in Cyber Defense (CAE-CD) by the National Security Agency (NSA).

The IT program also supports various industry-recognized certifications, including CompTIA (A+, Net+, Sec+, CySA+, PenTest+, Data+, Linux+, and Cloud+), Project Management International (PMI) (Certified Associate Project Manager (CAPM) and Project Management Professional (PMP)), and Microsoft (MS Certified Professional (MCP)).

Additionally, the IT program offers a third year of study that allows students to articulate to the Bachelor of Applied Science in both IT and ISA at the University of Hawai'i at West O'ahu (UHWO) or the Applied Bachelor of Applied Business and Information Technology (ABIT).

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Kopiko STEM Center



The beautiful Mānoa Valley

The cyber security research at the **University of Hawaii at Manoa (UHM)** covers many critical areas, including cryptography, cloud security, IoT security, information assurance, machine learning/AI security, mobile/wireless security, network security, privacy, smart grid security, software/hardware security, supported by AFOSR, AFRL, EPSRC, NASA, NSA, NSF, NRL, ONR, ODNI, and industrial partners. UHM faculty have published 400+ papers in prestigious peer-reviewed journals and conferences, mentored security-focused graduate students, served as journal editors and reviewers, led research conferences, and given keynotes/invited talks at research conferences. These research successes made UHM designated as a CAE-R in May 2015.

UHM CAE-R provided many opportunities for broad Hawaiian communities. We have then established the NSF CyberCorps SFS program in 2016. We have

enhanced computer science BA/BS degrees with Security Science Concentration and a management MS degree with Information Security. We have collaborated with local government, education institutions, and industry communities and founded CyberHawaii in 2016, which broadens our outreach with high schools, community colleges, Hawaii DOD, Hawaii DOE, etc. We have hosted 20+ NSF/NSA GenCyber Camps across 4 islands with 800+ campers since 2015.

We have improved our curriculums with new security courses, including digital forensics, special topics in security (AI, IoT, CPS, drone, ML, penetration testing, reverse engineering, SACDA, wireless security, etc.). We have worked with the UHM Airforce/Army/ Naval ROTC programs and built the Cyber Spectrum Collaborative Research Environment program at UHM.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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GenCyber Camp



UH Maui College Campus

Situated on one of the most beautiful islands in the world, the **University of Hawai'i Maui College (UHMC)** is an accredited college that offers two bachelor of applied science (BAS) degrees, a wide variety of associate degrees and certificates. UHMC has been designated as a National Center of Academic Excellence (CAE) in Cyber Defense Education (CDE) through academic year 2024 for the Bachelor of Applied Science (BAS) in Applied Business and Information Technology (ABIT) Degree.

The UHMC inspires students to develop knowledge and skills in pursuit of academic, career, and personal goals in a supportive educational environment that emphasizes community engagement, lifelong learning, sustainable living, Native Hawaiian culture, and global understanding. We will prepare students to respond to emerging challenges in their lives, communities, and the world through compassion,

leadership, problem-solving, and innovation.

The cybersecurity program at UHMC implements a program of cybersecurity education and workforce development that spans program disciplines and encourages newcomers to the field of cybersecurity. The project fosters a sense of inter-disciplinary collaboration and cooperation by creating a variety of engaging cybersecurity modules.

The cybersecurity program at UHMC introduces students to cybersecurity concepts with interactive and hands-on activities that span multiple disciplines. Participants include students majoring in criminal justice, accounting, hospitality and tourism, allied health, and electronics.

Students who wish to pursue additional studies in cybersecurity are provided with internship opportunities at local Hawaiian companies. Despite the Covid pandemic and health restrictions, several interns in the NSF ATE funded CyberSecure project were able to complete their internships.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cybersecurity students at Maui



# UNIVERSITY OF HAWAI'I WEST O'AHU



UHWO Campus

Based on the rapid expansion of cyberspace operations and the importance of cybersecurity to both industry and the Asia-Pacific Region, the **University of Hawai'i - West O'ahu (UHWO)** developed the Bachelor of Applied Science degree with a concentration in Information Security and Assurance. This degree program is the first of its kind at a public institution in Hawai'i and the Pacific, developed in response to national and state needs for graduates with expertise in cybersecurity. The program is designated as a Center of Academic Excellence in Cyber Defense (CAE-CD), certified by the National Security Agency (NSA) and the Department of Homeland Security (DHS). UHWO is the only four-year university in the state to earn this designation. Enrollment in this nationally recognized program has grown from 13 students in 2014 to 131 students in Fall 2018.

Cybersecurity students from the university have twice in the past three years won the National Cyber League competition as overall National Champions.

Though the support of the Office of Naval Research, UHWO established the UHWO Cyber Security Coordination Center (CSCC) in order to further promote Cyber Workforce Development. CSCC students research and analyze global and technical cyber events in order to coordinate with and support local and regional partners.

The Cybersecurity program is one of five signature programs at UHWO, which has been the fastest growing four-year baccalaureate public school in the nation during the past two years. The school based in Kapolei, Hawai'i was founded in 1976 and has an enrollment of 3,128 students.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Matthew Chapman, associate professor of information technology and cybersecurity



University of Houston Campus

Established in 1927, the **University of Houston (UH)** empowers students to pursue learning, discovery, leadership, and engagement. Ranked among the best colleges in America, UH is home to award-winning faculty, innovative research centers, one of the nation's most diverse student populations, and alums who have become international leaders. At UH, we prepare students to envision their future, emerge as leaders, and launch careers that transform the world.

The University of Houston has developed and operated a cybersecurity program under the aegis of the National Security Agency's Centers of Academic Excellence (CAE) Cyber Defense initiative since 2007. This program is situated within the Center for Information Security Research and Education, which combines elements of engineering, computing, the sciences, business, and social sciences in applied,

highly interdisciplinary programs. In 2015, the program expanded to include the Department of Computer Science's PhD program in cybersecurity, resulting in the CAE Research designation.

Our programs prepare students for careers in cybersecurity via undergraduate, master's, and doctoral degrees. The recognized CAE CDE program is a professional master's degree in cybersecurity. This degree is designed to provide hands-on skills for working security professionals to lead cybersecurity teams. The program specializes in critical infrastructure protection, digital forensics, and risk management. The Center for Information Security, Research, and Education at UH is the home of the CAE National Resource Center for Knowledge Unit development, an effort that leads the academic input that defines the academic requirements for CAEs.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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Students working on projects



University of Idaho Campus

With a tradition of cybersecurity education and research since 1990, the **University of Idaho (UI)** was among the first seven universities to be designated a Center of Academic Excellence in 1999. In 2002, the UI was one of the first five Universities to participate in the NSF Scholarship for Service program.

UI faculty at our main campus in Moscow, Idaho and our branch campuses in Coeur d'Alene and Idaho Falls work with undergraduate and graduate student researchers to help educate and train the next generation of cybersecurity workforce while developing cutting edge new technologies to improve the security of the nation's computer systems. Through the Computer Science Department and our Center for Secure and Dependable Systems (CSDS), students can earn a BS, MS or PhD in Computer Science with an emphasis in cybersecurity.

Students in Electrical and Computer Engineering can also take cybersecurity courses and work jointly with CSDS researchers on interdisciplinary research projects. Our partnerships with Idaho National Lab and local industry allow students to work on real-world problems related to critical infrastructure, including the power grid and transportation systems.

As an example of our expertise, our world class faculty include Dr. Alves-Foss, who, working with Dr. Jia Song (who was then a Postdoctoral Research Associate and has now joined the UI Faculty) participated in the DARPA Cyber Grand Challenge in 2014-2016, qualifying the smallest team for the finals. Using CSDS expertise, they built new tools to successfully compete against well establish, larger research teams in this cutting-edge competition.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Dr. Jim Alves-Foss with cyber students



# UNIVERSITY OF ILLINOIS SPRINGFIELD



UIS Campus

The Computer Science Department at the **University of Illinois Springfield** offers programs in Information Systems Security (ISS), Computer Science, and Data Analytics. The department prides itself on its small class sizes and distinguished faculty dedicated to research and teaching.

The UIS Computer Science Department provides a uniquely student-centered educational experience both in and out of the classroom through active learning, meaningful research, and impactful competition that prepares graduates to contribute fully to society. To this end, high-quality courses offered in our ISS program provide students with the best security theories and practices in all security areas, including but not limited to security programming, secured system design, and cryptocurrency.

Our classes are offered both online and on-campus in interactive virtual environments that enrich student experience and facilitate active learning. Cutting-edge virtual experiment environments support most courses offered in the ISS program. Students can access, build, and hack any operating systems, servers, and network structures during the experiment.

Meanwhile, our ISS program focuses on designing and implementing secure systems that have been widely adopted in industry and government. The unique training in secured system design grants students a significant advantage in their future careers. In addition, students in our ISS program have a tremendous amount of opportunities to participate in cybersecurity competitions, work on real-life problems, and engage in research projects.

Overall, our ISS program is well-known for its comprehensive course content, cutting-edge virtual experiment environment, student-centered learning, close relationship to industry and government, and for producing well-prepared graduates for both professional careers and graduate schools.

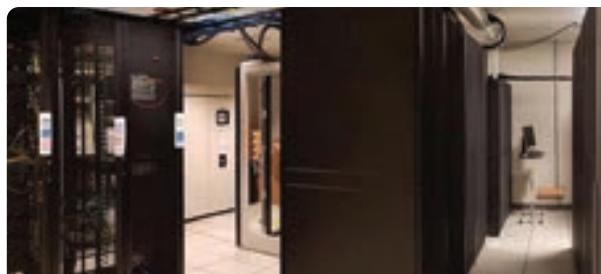
## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cybersecurity Lab



# UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN



A view of the north Engineering quad at Illinois  
Photo credit to the University of Illinois at Urbana-Champaign

Since its founding in 1867, the **University of Illinois at Urbana-Champaign** has earned a reputation as a world-class leader in research, teaching, and public engagement. With our land-grant heritage as a foundation, we pioneer innovative research that tackles global problems and expands the human experience. Entrepreneurship flows from our classrooms to our Research Park, a space that houses everything from Fortune 500 companies to student-founded startups. We are consistently ranked among the top five universities for NSF-funded research, and our total annual research funding exceeds \$600 million.

The Illinois Engineering program is one of the highest-ranked in the world, and our students, faculty, and alumni set the standard for excellence. We have a large and growing pool of faculty and projects concentrating on cybersecurity, both in

academic departments, such as Computer Science and Electrical & Computer Engineering, and in interdisciplinary research centers, such as the Coordinated Science Laboratory and the Information Trust Institute (ITI). ITI provides national leadership in the creation of trustworthy critical applications and cyber infrastructures.

Over 200 ITI faculty affiliates are working to design complex systems that deliver predictable levels of reliability, security, privacy, safety, performance, and availability, even in the presence of unknowns. The Center for Cyber Defense Education and Research at Illinois is in ITI. It advocates for and leads a variety of programs and events related to information assurance and cyber defense. Over 500 students take computer security courses every year at Illinois.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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Photo credit to the University of Illinois at Urbana-Champaign



# UNIVERSITY OF KANSAS



Cyber Blitz: the JayHackers , First Infantry Division and high school students

The Department of Electrical Engineering and Computer Science (EECS) and the Information and Telecommunication Technology Center (ITTC) at the **University of Kansas (KU)** are a designated National Centers of Academic Excellence in Cyber Defense.

The EECS Department offers five Bachelor of Science degrees, four Master of Science degrees and two Ph.D. degrees in Electrical Engineering, Computer Engineering, Computer Science, Interdisciplinary Computing, and Information Technology. The Department also offers a graduate certificate in Information Security and Assurance. KU ITTC performs research in security modeling and analysis, information security and privacy, network security, mobile security, CPS and IoT security, theoretical modeling, and high-assurance system synthesis and verification.

Several initiatives highlight KU's commitment to excellence in cybersecurity education, research and the overall student experience:

- KU is one of the six Science of Security Labels funded by NSA Research Directorate to conduct foundational research in cybersecurity
- KU's CyberCorps®: Scholarship for Service (SFS) program provides scholarships for up to three years of support for cybersecurity undergraduate and graduate education
- KU's Information Security Club (the "Jayhackers") is a competition-based student group
- Cybersecurity research in KU has been supported by government agencies and industry partners, including NSA, NSF, AFRL, NASA, Ripple, etc.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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KU's cybersecurity club, the JayHackers, participated in a recent cyber defense competition



UofL Belknap Campus

The **University of Louisville** is a state-supported research university located in Kentucky's largest metropolitan area. With roots back to 1798, the modern University of Louisville was a municipally supported public institution for many decades prior to joining Kentucky's university system in 1970. The university has three primary campuses including the 287-acre main Belknap Campus located three miles from downtown Louisville, containing seven of the university's twelve colleges and schools. The Health Sciences Center is situated in downtown Louisville's medical complex and houses the university's health-related programs (dentistry, medicine, nursing, and public health) and the University of Louisville Hospital, an academic hospital pioneering the treatments shaping the future of healthcare. The 243-acre Shelby Campus serves the growing residential and business needs of eastern Louisville. In addition, the university maintains an in-person

presence that serves nearby Fort Knox.

Our institution provides cybersecurity programs in two departments: the Speed School of Engineering's Computer Science and Engineering (CSE) department and the College of Business' Information Systems, Analytics, & Operations (ISAO) department. CSE offers a graduate certificate in cybersecurity, which is designed to help advanced computer professionals who want to strengthen their knowledge and skills in the fast-changing field of cybersecurity, as well as for students majoring in other disciplines who want to gain knowledge and skills in cybersecurity. ISAO offers an undergraduate track in information security through the Computer Information Systems Bachelor of Science degree that provides technical foundations in information systems and cybersecurity in the context of a business user or nascent manager.

Both programs provide educational, research, and service activities in cybersecurity, information assurance, digital forensics, and legal aspects of computing with an aim to promote secure and ethical use of information technology to the next generation of cybersecurity professionals.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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ACM Cyber Defense Team



# UNIVERSITY OF MAINE AT AUGUSTA



UMA Augusta Campus Aerial View

The **University of Maine at Augusta (UMA)** is the third largest public university in Maine. In addition to its main campus in the state's capital, UMA also serves students at our campus in Bangor and at eight UMA Centers and receiving sites in virtually every corner of the state.

UMA is committed to excellence in cybersecurity education. Our mission is to provide students with innovative technology and a curriculum designed to meet the growing demands in the field of cybersecurity. We are dedicated to providing student-centered learning and professional development for a maximum experience in cybersecurity education, while aligning with industry needs. Our B.S. in Cybersecurity program offers students focus areas in Information Assurance, Cyber Analyst, and Cyber Forensics.

UMA launched the Maine Cyber Range (MCR) in 2019 to provide an immersive training and simulation center that takes cyber education and workforce development to the next level. Our goals include enhancing UMA's academic cybersecurity program; addressing the cybersecurity skills shortage; and providing cyber support to businesses and organizations.

UMA has embraced the opportunity to boost relations with Maine organizations, fostering industry and academic collaboration for cybersecurity research and development. With help from grant funding, student researchers are helping Maine industries improve their security posture and incident response capabilities. The MCR has become a cybersecurity education hub for training, readiness, and assessment.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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UMA Cyber Lab Student



UMD, the state's flagship campus

The **University of Maryland (UMD)** is the state's flagship university and one of the nation's preeminent public research universities. It is home to more than 40,700 students and 14,000 faculty and staff.

Information security efforts at UMD are led by the Maryland Cybersecurity Center (MC2), a unique, multidisciplinary research and education powerhouse focused on theoretical and applied cryptography, data-driven security, human-computer interaction and security, network and wireless security, machine learning and security, blockchain and cryptocurrency security, and programming languages security.

The university is also active in quantum cryptography, with several centers on campus supporting more than a dozen federal scientists

embedded full-time on the UMD campus working with faculty and students on topics related to quantum computing and quantum information science. Cybersecurity education includes the Advanced Cybersecurity Experience for Students (ACES) undergraduate living and learning program, a master's degree and professional graduate certificate offerings in cybersecurity as well as several doctoral degrees focused on information security.

The university's advantageous location just outside of Washington, D.C. offers faculty, postdocs and students the opportunity to interact with the numerous federal agencies and labs that dot the region. UMD students—both at the undergraduate and graduate level—are active in summer internship programs offered by the National Security Agency (NSA), located less than 20 miles from the UMD campus. NSA has several labs located adjacent to the UMD campus, including the Laboratory for Telecommunication Sciences, which interact regularly with UMD faculty in areas related to networking and computing research and exploring the implications of new communications domains.

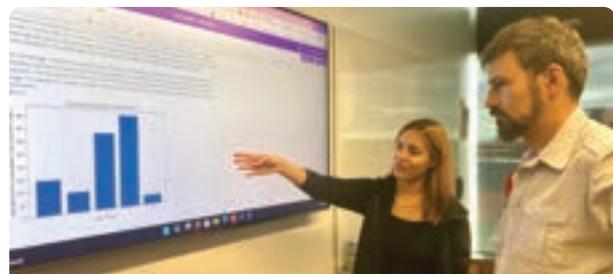
## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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Security research at UMD.



The UMBC Campus. Photos courtesy of UMBC.

At **University of Maryland, Baltimore County**, a Research 1 (R1) university, students study cybersecurity by pursuing a BA or BS, MS, combined BS/MS, or PhD degree through programs in computer science, cybersecurity, computer engineering, and information systems. These degrees are awarded through the Department of Computer Science and Electrical Engineering and Department of Information Systems, where there are tracks in cybersecurity at the undergraduate and graduate levels. UMBC offers scholarships for students to study cybersecurity under the DoD Cybersecurity Scholarship Program (CySP), NSF CyberCorps: Scholarship for Service (SFS), and UMBC CyberScholars.

Undergraduate and graduate students can work with a variety of faculty in their labs spanning all

aspects of cybersecurity—from hardware security, to systems and network security, to mobile/IoT/CPS security, to securing applications. For example, projects at the Cyber Defense Lab include protocol analysis, educational cybersecurity assessment tools, and high-integrity voting systems. The CyberDawgs, UMBC's cyber competition team, took first place in the 2021 Mid-Atlantic Collegiate Cyber Defense Competition (MACCDC).

The interdisciplinary Center for Cybersecurity (UCYBR) at UMBC streamlines the university's cybersecurity-related academic, research, workforce development, and technology incubation activities. It provides Maryland and the nation with cybersecurity leadership, collaboration, innovation, and outreach.

UMBC is known for inclusive excellence. Our undergraduate programs in computing are significantly more diverse than the national averages. For instance, the CyberScholars program is nearly 50% women and 40% students from groups historically underrepresented in computing.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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Students walk on Academic Row



Women in Cybersecurity at UMGC

The **University of Maryland Global Campus (UMGC)** plays a crucial role in addressing the significant demand for trained cybersecurity professionals through its comprehensive online and hybrid educational offerings. These include a wide array of cybersecurity degrees, specializations, and certificates designed to equip students with the latest industry knowledge, advanced technical skills, and practical expertise needed to excel in their chosen cybersecurity fields. The curriculum for these programs is developed with direct input from employers and industry experts, ensuring relevance and applicability. These courses are delivered by experienced scholar-practitioners, guaranteeing a rich educational experience.

At the undergraduate level, UMGC offers certificates in Computer Networking, Cyber Threat Hunting, and Vulnerability Assessment. For those pursuing

bachelor's degrees, the university provides programs in Cybersecurity Technology, Cybersecurity Management & Policy, and Software Development & Security. Graduate students can choose from certificates in Cloud Computing & Networking, Cyber Operations, Cybersecurity Management & Policy, Cybersecurity Technology, Digital Forensics & Cyber Investigation, and Information Assurance. Master's degree options include Cloud Computing Systems, Cyber Operations, CyberAccounting, Cybersecurity Management & Policy, Cybersecurity Technology, Digital Forensics & Cyber Investigation, and Information Technology: Information Assurance, with the latter two programs being NCAE validated.

UMGC is renowned for its academic excellence within the cybersecurity sector, offering a virtual lab that allows students to gain practical experience in detecting and addressing cyber threats. The university also boasts a globally ranked cyber competition team, providing students with invaluable real-world experience and networking opportunities.

The university holds the CAE-Cyber Defense designation for its MS in Cybersecurity Management & Policy and MS in Cybersecurity Technology programs, underscoring its commitment to providing top-tier education in the field of cybersecurity.

For more information or to contact UMGC, individuals can reach out via email to [css@umgc.edu](mailto:css@umgc.edu) or directly to Dr. Loyce Pailen at [loyce.pailen@umgc.edu](mailto:loyce.pailen@umgc.edu). Further details about UMGC and its cybersecurity programs can be found on their website at [umgc.edu/cybersecurity](http://umgc.edu/cybersecurity).

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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UMass Dartmouth Entrance

The **University of Massachusetts Dartmouth** Cybersecurity Center is a multi-disciplinary entity with affiliated faculty from Computer and Information Science (CIS), Electrical and Computer Engineering (ECE), and Physics. The CIS and ECE Departments offer bachelor's degrees in computer science and computer engineering with concentrations in cybersecurity, two minors in cybersecurity, as well as graduate certificates, which are compatible with master's degree requirements.

Faculty possess extensive research expertise, including secure software engineering, software assurance, cyber security risk assessment, hardware, network and cyber-physical system security, mobile security, cryptography, operating system and database security, privacy, forensics, reverse engineering, and biometrics.

Members of the Massachusetts Air National Guard who have completed the Joint Cyber Analysis Course program and meet UMass Dartmouth admissions standards are granted a minimum of 30 transfer credits toward a bachelor's degree in computer science or computer engineering.

UMass Dartmouth students have extensive opportunities to participate in undergraduate research. Before graduating, many students undertake one or more internships with Federal Government Agencies, Federally Funded Research and Development Centers, Major Defense Contractors, and private industry. Doctoral students secure tenure-track faculty positions at nationally ranked universities and positions as research scientists and engineers.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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Cybersecurity Education Club



# UNIVERSITY OF MASSACHUSETTS LOWELL



University of Massachusetts Lowell Campus

**University of Massachusetts Lowell (UML)** runs a number of cybersecurity programs. The School of Computer & Information Sciences (CIS) offers BS, MS and PhD programs and has two programs dedicated to cybersecurity: CS BS – Cybersecurity Option and CS MS – Cybersecurity Option. Students can also perform frontier cybersecurity research through the PhD program. The Division of Graduate, Online & Professional Studies offers the Graduate Certificate in Network Security. The School of Criminology and Justice Studies offers the Master of Science in Security Studies: Cybersecurity Concentration.

Our Center for Internet Security and Forensics Education and Research (iSAFER) has 16 faculty members. Four CIS professors and one Criminology professor dedicate their research to cybersecurity while other members of iSAFER apply cybersecurity in their research and courses. Faculty expertise

includes software security, system security, blockchain, applied cryptography, digital forensics, mobile security, network security, security and privacy in machine/meta learning, language-based security, digital sociology, cognitive radio networks & security, SDN Security, and database security and privacy.

Our cybersecurity programs and facility advance cybersecurity knowledge and practice through research, education, and outreach. We advocate for the collaboration across various fields to enhance productivity in research, grants, education, and service; cultivate and reinforce partnerships with industry, academic peers, and governmental entities; support and engage in the commercialization of research findings; reach out to K-12 students; provide ongoing education and training opportunities.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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UML's CCDC team placed third in NECCDC 2024



University of Memphis Main Campus

The Center for Information Assurance (CfIA) at the **University of Memphis** has received millions of dollars in research, and education funds, stands as a nationally-designated Center of Academic Excellence in Cyber Defense Education and Research (CAE-CDE, CAE-R) by the NSA/DHS (National Security Agency/ Department of Homeland Security).

Among different research areas Negative Authentication, Adaption Multi-Factor Authentication, Smart-Grid Security are the current focus. Also Game Theory and Cyber Security (GTCS) group conducts cutting-edge research to explore how they can apply game theoretic approaches to address network security issues. The center provides student-centered research environment where both undergraduates and postgraduates get to work on federal-funded projects. Apart from working on world-class research, the CfIA provides training and career development

services for students and professionals through online and hands-on training and community events, special purpose conferences, and vendor specific training programs. Students will also have the opportunity to listen first-hand from industry leaders through the annual Cyber Security Summit.

The center administers two graduate certificates in cyber security, one from Computer Science Department and the other from Business Information Technology Departments as the University fully appreciates the importance of the subject in the midst of the digital age.

The Computer Science Department in collaboration with the Management of Information Systems department of the Fogelman College of Business and Economics, the Cecil C. Humphreys School of Law, the Department of Criminology and Criminal Justice, the Electrical and Computer Engineering Department of the Herff College of Engineering and The Center for Information Assurance also spearheads the efforts of The UofM as a Center of Excellence in Information Assurance Education.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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Students running experiments



The Columns at the Univ. of Missouri, Columbia

The **University of Missouri, Columbia**, was recognized as an NSA Center of Academic Excellence-Research in 2019. As a member of the Association of American Universities (AAU), the University of Missouri is on the leading edge of innovation, scholarship, and solutions that contribute to scientific progress, economic development, security, and the well-being of citizens.

The Cybersecurity Center at the University of Missouri is located within the College of Engineering. The faculty collaborates actively across different units: engineering, information technology, education, business, law, medicine, social science, and mathematics. The cybersecurity research at the Cybersecurity Center is supported through research grants from the National Science Foundation, the U.S. Department of Energy, and U.S. DOD agencies, including the U.S. Army Research Laboratory, the

National Security Agency, and the U.S. Army Engineer Research and Development Center.

With a commitment to student success, the cybersecurity faculty has successfully mentored and continues to mentor several graduate students and post-doctoral scholars. Prior students have joined cybersecurity careers in industry and academia. Cybersecurity Center faculty lead a Scholarship for Service (SFS) project sponsored by the National Science Foundation that funds M.S. and Ph.D. students specializing in cybersecurity. The scholarship recipients go on to serve at federal agencies or national labs upon their graduation. The cybersecurity faculty also actively mentor high-school students by organizing the annual “Hacker Tracker” camp at the University.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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CERI Center



UMSL Millennium Student Center

At the **University of Missouri-St. Louis (UMSL)**, we understand that cybersecurity is a multifaceted issue that requires a combination of technical and management skills. That's why we offer innovative cybersecurity programs that teach students how to approach cybersecurity challenges from both a technical and business perspective. UMSL is a leader in cybersecurity education, providing comprehensive programs that equip students with the skills they need to tackle digital threats in today's interconnected world. Our cybersecurity programs focus on cutting-edge research and practical learning experiences with an emphasis on experiential learning.

Our students have access to state-of-the-art labs and tools that enable them to gain hands-on experience with real-world cybersecurity challenges. Through internships, research collaborations with industry

partners, and project-based learning, our students develop the practical skills and industry experience they need to succeed in cybersecurity careers.

Our faculty is made up of renowned experts and practitioners in the field who are actively engaged in groundbreaking research and industry partnerships. This ensures that our students receive high-quality instruction and exposure to the latest developments in cybersecurity.

UMSL is committed to promoting cybersecurity awareness and outreach initiatives within the community. We offer workshops, seminars, and outreach programs to educate all about the importance of cybersecurity and empower them to protect themselves online. One of our notable initiatives is *STLCyberCon*, a cybersecurity conference held annually in St. Louis, Missouri. The event brings together industry experts, researchers, and students to discuss emerging trends, share best practices, and explore cutting-edge technologies in the field. It also serves as a platform for networking and knowledge exchange.

UMSL's strategic location in the thriving technology ecosystem of St. Louis provides our students with unique opportunities for internships, networking, and career advancement in cybersecurity. Through our dedication to innovation, collaboration, and community engagement, UMSL continues to be a leader in cybersecurity education and research.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Missoula College Campus

**Missoula College (MC)** delivers cybersecurity education through coursework, internships, apprenticeships, certifications, certificates of technical skills, two-year degrees, pathways to baccalaureate degrees, and community outreach. MC was designated as a Center of Academic Excellence in Cyber Defense (CAE-CD) by the National Security Agency (NSA) and Department of Homeland Security (DHS) in September 2017. The MC CAE-CD is based upon four pillars of excellence:

- Relevant two-year college curricula mapping to Cyber Defense KUs designated by the NSA/DHS
- Qualified faculty with the appropriate credentials in cyber defense as recognized by the NSA/DHS
- An institutional culture of interdisciplinary cybersecurity education and best-practices
- Ongoing outreach and partnerships with the

local community and industry partners

The Center provides community outreach in cybersecurity through high school dual-enrollment education programs, summer camps for middle school students, a cybersecurity higher education summit, and the annual Cybersecurity Awareness Week event.

Associate degree students at Missoula College are required to participate in a work-based learning experience. The “Earn While You Learn” program provides students over 2000 hours of paid on-the-job training, while earning the associate degree and a credential from the Montana State Department of Labor & Industry.

MC is a CompTIA Academy, Cisco Networking Academy, a member of the Microsoft IMAGINE, and Amazon EDUCATE. Certifications are integrated into academic curriculum to validate industry-relevant skills. A local employer advisory committee meets regularly to advise, assist, and advocate for cybersecurity education at Missoula College.

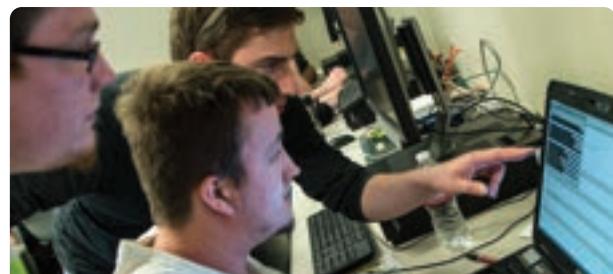
## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cybersecurity Competition at Missoula College



# UNIVERSITY OF NEBRASKA OMAHA



NUCIA: Home of Nebraska University's Cybersecurity Programs

At **University of Nebraska Omaha (UNO)** we make cybersecurity fun and exciting for everyone at all levels. Our mission is the train the next generation of cybersecurity professionals and improve cybersecurity awareness locally, regionally, and nationally.

As one of the earliest universities to join the NSA/DHS Center for Academic Excellence (CAE-CD) program in 2003, UNO has led the region in cybersecurity education and research. It started its Bachelor's in Cybersecurity program in 2007 and the Master's in Cybersecurity program in 2012. It also offers the 5-year integrated master's degree in cybersecurity and a graduate certificate. Students are free to choose a managerial track or a cyber operations track at the master's level. UNO's cybersecurity programs has over 350 students completing various degrees, certificates, and concentrations. UNO

has offered the NSF CyberCorps Scholarship for Service program continuously since 2003 and is often recognized as one of the best universities for veterans by Military Times. UNO was also designated as the Center for Academic Excellence in Cyber Operations (CAE-CO) in 2017 – an elite hands-on program by NSA/DHS.

UNO also hosts the Nebraska University Center for Information Assurance (NUCIA), the University of Nebraska system wide center for all things related to cybersecurity. The Center organizes various outreach events in the community, hosts the curriculum advisory board, invites nationally and internationally recognized speakers for seminars and talks, and engages with the Omaha community and other cybersecurity centers in the region. It also sponsors the student computer security/hacking group Nullify.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Cyber Operations

## CONTACT INFORMATION

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Cybersecurity students learning new ways to secure systems



# UNIVERSITY OF NEVADA, LAS VEGAS



The University of Nevada, Las Vegas Campus

The **University of Nevada, Las Vegas (UNLV)** stands as a public, urban research institution distinguished by the highest recognition for both research and community engagement from the Carnegie Foundation. With over 70% being minority students, UNLV boasts one of the most diverse campuses in the nation. UNLV's commitment to cybersecurity education is evident through its rigorous undergraduate Computer Science and graduate Cybersecurity programs, along with vibrant student organization activities. Through these avenues, UNLV equips students with the knowledge and skills necessary to excel in the cybersecurity workforce, fostering expertise in both technical and non-technical domains.

Notably, the UNLV Cyber Clinic offers students invaluable real-world experience by providing free cybersecurity services to local small businesses and

by educating the community on cybersecurity best practices. At the forefront of student engagement are Layer Zero, UNLV's cybersecurity student club, and the Women in Cybersecurity (WiCyS) chapter. These organizations spearhead competitions, organize CTF events, host workshops, and facilitate resources for certifications such as Security+ or CEH.

Since 2018, UNLV has been hosting the NSA GenCyber camp for high school students, with many camp graduates subsequently enrolling in UNLV's BS and Ph.D. programs. The university has garnered over \$7M in cybersecurity research and education grants from NSA, NSF, DoE, SBA, AFRL, Google, and private donors. These grants provide students with paid research opportunities, internships at national labs, and access to conferences. With its diverse array of experiences, UNLV offers a robust foundation for launching a successful career in cybersecurity.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Students and Faculty at DEFCON



University of Nevada, Reno

# UNIVERSITY OF NEVADA, RENO



University of Nevada, Reno Campus

The **University of Nevada, Reno** located in the heart of Reno, Nevada is a Carnegie R1, Tier1 institution. The University of Nevada, Reno has been highly instrumental in interdisciplinary cybersecurity education, research and outreach since the establishment of the university-wide Cybersecurity Center in 2014.

Our mission is to master the challenge of cybersecurity by bringing together cross-disciplinary teams to work in synchrony, examining each problem through disciplinary lenses and seeking solutions that incorporate societal, technical, ethical, political, and economic considerations. Currently, nine disciplines (Computer Science & Engineering, Criminal Justice, Political Science, Psychology, History, Information Systems, Journalism, Electrical Engineering and Public Health) are affiliated with the Center as active participants in cybersecurity

research, education, and outreach. The Cybersecurity Center provides educational and research opportunities for both undergraduate and graduate students that prepare them to pursue careers in cybersecurity and related fields.

The UNR Cybersecurity Center plays an active role in the placement of students in federal, state, and local government organizations as well as high-tech industries. In 2022, the Center received the highly prestigious CyberCorps® Scholarship for Service award from the National Science Foundation. The Center is actively engaged with its student population and encourages them to participate in a broad range of cybersecurity-related activities in addition to education and research, resulting in the Nevada Cyber Club becoming one of the top collegiate cybersecurity competition teams nationally.

## DESIGNATIONS

- CAE-Cyber Defense

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Nevada Cyber Club Students



Thompson Hall

Students in the **University of New Hampshire (UNH)** homeland security program build the analytical, decision making, technical and strategic skills to create and sustain more resilient organizations and communities and a more secure nation. This broad, interdisciplinary field requires professionals who possess critical thinking, problem solving, analytical and communication skills. At UNH, HLS students are empowered to identify and address challenges of national and international significance and to pursue diverse and rewarding careers in the public and private sectors.

Fully available on both the Manchester and Durham campuses, the HLS program prepares you with a wide array of skills and best practices in leadership, decision making, strategic planning, emergency management, cybersecurity, open-source intelligence production and risk assessment, professional writing

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Terry O'Sullivan  
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and public speaking. Our nationally recognized program offers substantive interdisciplinary flexibility and career-specific preparation because all HLS majors combine a B.S. in HLS with a dual or double major, 2 minors or an associate degree.

The University of New Hampshire's fully online Master of Science in Cybersecurity Policy and Risk Management (CPRM) blends strategy and policy with preparedness, incident response, continuity and resilience — the heart of the security studies discipline. In as few as 12 months, you will graduate prepared to assess cybersecurity risk and to design, implement and oversee the necessary cybersecurity policies and processes for resilient, secure and successful organizations.

The demand for master's-level cybersecurity and risk management professionals is on the rise in the U.S. and globally. Guided by full-time faculty, practicing experts and senior executives, the CPRM degree fosters the strategic thinking, policy development and risk management skills that will set you apart in the high-demand cybersecurity field.



Dimond Library Hubbard Room



Bergami Center for Science, Technology, and Innovation

The **University of New Haven's** Connecticut Institute of Technology at the Tagliatela College of Engineering houses the Samuel S. Bergami Jr. Cybersecurity Center. This is the home of the only National Security Agency designated Center of Academic Excellence in Cyber Operations (CAE-CO) in the state. One of only 20 nationwide.

To advance knowledge in technology-driven domains that will serve and protect the state, nation, and the world by educating students in hands-on, competitive, environments, leading to inclusive and entrepreneurially minded graduates that are highly employable.

Our cybersecurity and networks program is one of the best in the country. Its research, program offerings, multidisciplinary approach, and performance in cyber competitions, among other

factors, led to the University being designated as a CAE-CO. Our computer science with concentration in cybersecurity program is also part of this designation. Our programs will give you a solid understanding of both practical and conceptual cybersecurity and network technology, including computer hardware, software, and design.

Our students take hands-on courses in networking, network defense, cybersecurity, cyber forensics, mobile device forensics and exploitation, and reverse engineering. They are conducting leading-edge research in cybersecurity, cyber forensics, and more. They are in high demand and have been offered opportunities by organizations such as the NSA, DoD, Lockheed Martin, Raytheon, MITRE, Accenture, Tesla, and IBM.

These programs for cybersecurity undergraduate and graduate students are designed to recruit and train the next generation of cybersecurity professionals to meet the needs of the U.S. Government. In return for generous financial support, recipients must agree to work for the U.S. Government after graduation in a cybersecurity position, for a period equal to the length of the scholarship.

CyberCorps® Scholarship for Service (SFS) Program: funded by grants from the National Science Foundation (NSF).

Department of Defense Cyber Scholarship Program (CySP): we can submit your application to this highly selective job and scholarship program for students from CAE-C programs.

## DESIGNATIONS

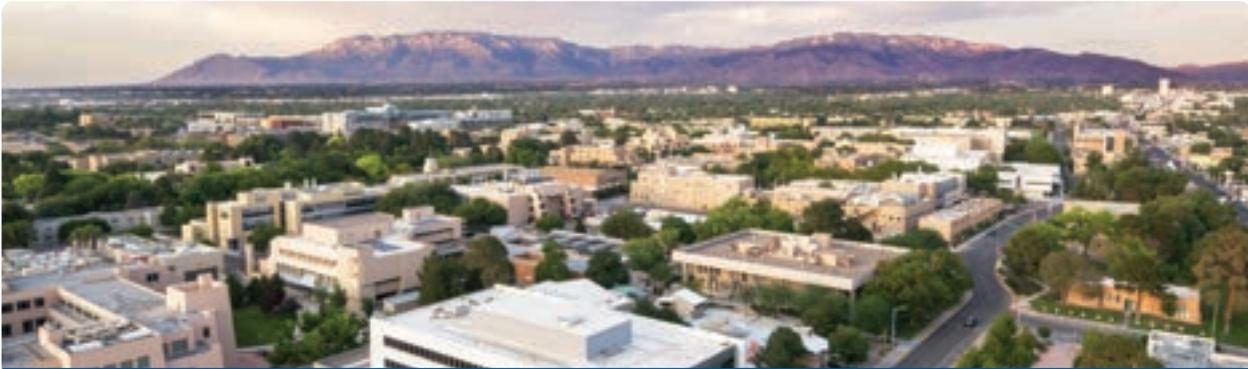
- CAE-Cyber Operations

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University of New Mexico Main Campus, Albuquerque

The **University of New Mexico** is a Center of Academic Excellence in Research (CAE-R), due to the collective research efforts of its AACSB-accredited business school: the Anderson School of Management, and the departments of Electrical and Computer Engineering and Computer Science in the School of Engineering.

Anderson's Master of Science in Cybersecurity and Business Analytics examines information security and security risks that impact business and government. Its two tracks explore digital forensics, systems and network administration, advanced information system security, data mining and security risk management.

Computer Science Department boasts very high research activity in areas including high-performance computing, game theory and collaborative

computing, computational medicine, DNA computing, biologically inspired computation, formal methods and automated reasoning and privacy, security, and computational immunology.

Internationally recognized for its excellence in research, the Electrical and Computer Engineering Department faculty explore areas including applied electromagnetics, photonics, and nanotechnology, communications and signal processing, biomedical technologies, renewable energy, control systems, information systems and networking systems.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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Anderson Hybrid Classroom



Woodward Hall, UNC Charlotte

The **University of North Carolina at Charlotte** stands at the forefront of cybersecurity education and research, particularly poised for the evolving landscape of the artificial intelligence era. As North Carolina's premier urban research university, we are committed to a mission that goes beyond traditional academic boundaries transforming lives, communities, and industries through access, affordability, exemplary programs, and a focus on scholarship, creative work, innovation, and service.

Recognized for its excellence and leadership in the field, the program has held the prestigious designation as a Center of Academic Excellence (CAE) in Information Assurance/Cyber Defense Education since 2001. One of the program's standout features is its hands-on cybersecurity education approach, facilitated through a professional cyber range providing students with an immersive environment

to apply their knowledge, develop practical skills, and engage in live-fire exercises.

Furthermore, UNC Charlotte places a significant emphasis on security analytics and automation. Recognizing the increasing role of artificial intelligence and machine learning in cybersecurity, the curriculum integrates advanced topics in these areas. This ensures that graduates are not only proficient in current technologies and practices but are also prepared to lead and innovate in the AI-driven future of cybersecurity.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

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SECCDC at Kennedy Space Center



The Museum of the Southeast American Indian located in historic Old Main.

The **University of North Carolina at Pembroke (UNCP)** is the only four-year public institution in the US founded by and for American Indians. It is highly diverse, ranking .73 on the diversity scale published by U.S. News and World Report. UNCP offers a personalized education that prepares students for successful careers, postgraduate studies, leadership roles, and fulfilling lives. The university emphasizes critical thinking, effective communication, service, and social responsibility.

The Department of Mathematics & Computer Science at UNCP offers high-quality academic programs supported by dedicated faculty. Their Cybersecurity degree programs focus on computer and information technology security, teaching students to address information security threats through the design, implementation, and evaluation of computing-based solutions. The curriculum includes offensive and

defensive computer security techniques, enhancing students' marketability in the cybersecurity field. Faculty research areas include Cybersecurity, Cryptography, Authentication, Networking Security, Blockchain Technology, Databases, Data Mining, Data Visualization, Data Analytics, CPS Security, Bioinformatics, and Machine Learning.

UNCP is committed to providing cyber defense educational opportunities beyond the campus. Through outreach, partnerships, and extension services, the university collaborates with organizations like the North Carolina Partnership for Cybersecurity Excellence, Defense Alliance of North Carolina, and National Security Agency/Central Security Service. These initiatives aim to extend the reach of cyber defense education in the local region and beyond.

UNCP supports and offers admissions to transfer students through various programs, including Traditional Transfer, NC Community College Transfer, Non-Traditional Transfer, Military Transfer Students, College Transfer/Articulation Agreements, and Reverse Transfer. For transfer credit inquiries, students can contact [amber.dial@uncp.edu](mailto:amber.dial@uncp.edu). Educational institutions interested in credit transfer articulation agreements with UNCP can reach out to [cyb@uncp.edu](mailto:cyb@uncp.edu).

With its diverse student body and dedicated cybersecurity faculty, UNCP is making a significant impact on the cybersecurity workforce through undergraduate education and research opportunities.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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# UNIVERSITY OF NORTH CAROLINA WILMINGTON



Active student-led Cyber Defense Club (CDC)

**The University of North Carolina Wilmington (UNCW)** is dedicated to producing graduates who rigorously adhere to fundamental cybersecurity concepts and possess the skills needed to think critically and effectively solve problems in the cyber domain. Interdisciplinary from inception, our cybersecurity efforts are infused with the collaborative energy of faculty from the College of Science and Engineering and the Cameron School of Business with diverse offerings ranging from deeply technical to pragmatically managerial.

UNCW cybersecurity programs: 1) BS in Cybersecurity (first among NC public universities); 2) BS in IT with Cybersecurity concentration; 3) BS in CS with Security conc.; 4) BS in Intelligent Systems Engineering (ISE) with Cybersecurity conc.; 5) BS in ISE with Cyber-Physical Systems conc.; 6) BS in Business Administration with Cybersecurity conc.;

7) Cybersecurity minor; 8) MBA with Cybersecurity specialization; 9) Graduate Certificate in critical infrastructure security (proposed Fall 2024).

UNCW cultivates a vibrant, collaborative cybersecurity ecosystem. As NC's coastal university, we resolutely support the blue economy, which includes major efforts to address the need for a high-skilled maritime cybersecurity workforce and establish the Maritime Cybersecurity Applied Research, Technology, and Education Center (MCARTEC). Rich partnerships propel our success and include a committed cybersecurity advisory board of regional business partners; an active student-led Cyber Defense Club (CDC) that meets and competes frequently; strong collaborative academic coalitions including the Carolina Cyber Network (CCN) and the North Carolina Partnership for Cybersecurity Excellence (NC-PaCE).

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Student replica Enigma machine



University of North Dakota Memorial Union

In 2017, the School of Electrical Engineering & Computer Science (SEECs) at the **University of North Dakota** was established through the merger of the Department of Computer Science and the Department of Electrical Engineering. This unification was driven by the recognition of the vast interdisciplinary opportunities that collaborative teaching and research between these closely aligned fields could unlock. Beyond its foundational disciplines, SEECs plays a crucial role in supporting the Biomedical Engineering program, offering both M.S. and Ph.D. levels, and actively engages in collaboration with various units within the College of Engineering & Mines and throughout the campus.

SEECs houses the University of North Dakota's Center for Cyber Security Research (C2SR), which aims to position itself as both a national and global leader in the realm of cyber security research. The

center's mission is focused on developing innovative security solutions to address the challenges of the next generation of cyber security issues. Through a holistic approach encompassing research, education, innovation, and discovery, the center aims to achieve its vision by pursuing several key goals. These include conducting basic and applied research to bolster the security of critical infrastructures, assets, or information resources, increasing research funding in cyber security to facilitate the transition of discoveries to commercialization, and offering guidance to a wide range of stakeholders facing cyber security challenges.

Additionally, the center is committed to providing research training to foster creative thinking for new discoveries in cyber security, thereby preparing the next generation of cyber scholars. It also serves as a vital resource and liaison for cyber security-related research activities across the UND campus, the state, and the nation, and coordinates educational, research, outreach, and policy activities related to cyber defense and security.

## DESIGNATIONS

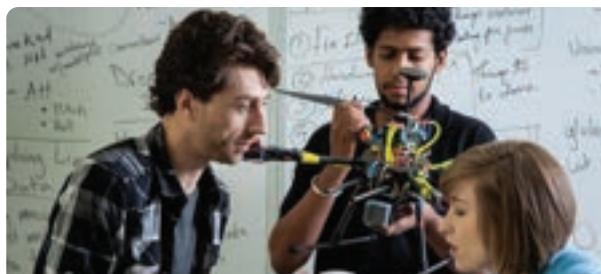
- CAE-Cyber Research

## CONTACT INFORMATION

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UND Center for Cyber Security Research



Skinner-Jones Hall

The **University of North Florida** is a nationally ranked university in the heart of Jacksonville committed to student success. Located on a beautiful campus just minutes from the beach, UNF offers students small class sizes and individualized attention, countless opportunities to gain real-world experience while in school, strong job placement, an active student life, Division I athletics, and a welcoming and engaged community.

UNF's Center for Cybersecurity is housed in its School of Computing (SoC), which, in turn is part of the larger College of Computing, Engineering, and Construction (CCEC). The College is composed of three academic units: the School of Computing, the School of Engineering, and the Department of Construction Management.

The School of Computing's Bachelor of Science in

Information Technology program is designated CAE-CD. The program is also accredited by the Computing Accreditation Commission of ABET. Information Technology students study cybersecurity and the administration of computing systems.

The Information Technology curriculum focuses on courses related to computer networks, cloud computing, cybersecurity systems, intrusion detection, forensics, systems administration, and IT project management. Graduates of the program will be able to analyze, design, secure, and maintain computing infrastructures. Typical first job titles include Cybersecurity Engineer, Network Engineer, and Systems Administrator.

## DESIGNATIONS

- CAE-Cyber Defense

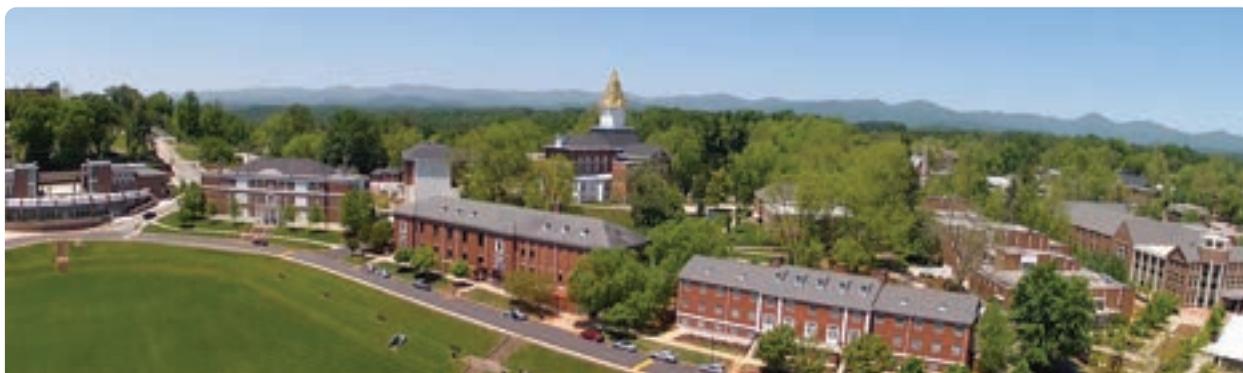
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Housing and Residence Life



University of North Georgia - Dahlonega Campus

The **University of North Georgia** is The Military College of Georgia and one of six federally designated senior military colleges in the nation. UNG comprises of five campuses united by the mission of academic excellence that prepares students to become civic, professional, and military leaders. Currently, UNG enrolls more than 18,000 students in over 100 programs of study ranging from certificates and associate degrees to professional doctoral programs.

In the Department of Computer Science and Information Systems, UNG offers a B.S. in Computer Science with a Concentration in Information Assurance and Security, which is the Program of Study for CAE-CD. UNG also offers a B.S. in Cybersecurity, which was designed in alignment with the NIST/NICE Cybersecurity Workforce Framework, and a M.S. in Computer Science with focus areas in

Cyber Operations and Machine Learning. In 2020 the Institute for Cyber Operations was established to develop highly capable cyber professionals through innovative co-curricular opportunities, interdisciplinary research, and community outreach. Each summer the Institute connects students to internships, including with NSA NET and ARCYBER.

Eleven UNG undergraduate and graduate students have received the DoD Cyber Scholarship in the past 5 years. The UNG CyberHawks won the 2019 and 2020 NSA Codebreaker Challenges and placed 2nd in 2021 and 2023. UNG hosted GenCyber student camps from 2016 to 2022 and will host their 4th GenCyber teacher camp in June 2024.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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[ung.edu/degrees/bachelors/computer-science.php](http://ung.edu/degrees/bachelors/computer-science.php)



3rd Place NCL Team



# UNIVERSITY OF NORTH TEXAS



UNT Campus

The **University of North Texas (UNT)**, established in 1890, stands as a prominent figure among the nation's largest public research universities, located near the bustling Dallas-Fort Worth metroplex. As of 2023, it boasts an enrollment of over 44,000 students, witnessing a steady annual increase of 5.6% in its student body. UNT has earned the prestigious designation of a Tier One research university by the Carnegie Classification, underscoring its commitment to high-level research and academic excellence. The university offers a wide array of programs including 114 bachelor's, 97 master's, and 39 doctoral degrees. As a Hispanic Serving Institution (HSI), UNT is home to a significant Hispanic student population, comprising 25% of its total student body, with 37% of those students being Pell Grant eligible. It stands out among 500 HSI-eligible institutions as one of only 12 to achieve the status of a Tier One Research Institution.

Additionally, UNT is recognized for its commitment to cybersecurity education as a member of the Cybersecurity Education Diversity Initiative (CEDI) (NCAEC-002-2020), serving as one of nine sub-awardees that offer programs for Minority Serving Institutions (MSIs) in their region.

Within UNT, the Department of Computer Science and Engineering, established in 1971 under the College of Engineering, offers a comprehensive range of programs. These include a BA in Information Technology, BS and MS degrees in Computer Science, Computer Engineering, Cybersecurity, and specialized MS programs in Artificial Intelligence, Data Engineering, along with a Ph.D. in Computer Science and Engineering. The department has seen significant growth, currently enrolling almost 4,000 students, which includes over 1,500 undergraduate, 2,300 master's, and 151 Ph.D. students.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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Further enriching UNT's focus on cybersecurity, the Center for Information and Cyber Security (CICS) operates as an interdisciplinary hub. It aims to unite individuals and organizations with a vested interest in information security, computer security, information assurance, and cybercrime. The CICS is dedicated to coordinating and promoting educational, research, and service projects within these domains. It emphasizes the importance of cross-disciplinary initiatives, offering quality courses in information and computer security from diverse discipline-specific viewpoints, coordinating joint research projects to advance the knowledge in the field, and providing service and expertise in information and computer security to both the university and the broader North Texas area.



Cathedral of Learning, University of Pittsburgh

The **University of Pittsburgh** has established itself as a beacon of excellence through its Department of Informatics and Networked Systems (DINS), especially in the domains of education and research related to cybersecurity, network security and resiliency, and privacy. Since 2004, the university has proudly held the title of National Center of Academic Excellence in Cyber Defense Education and Research.

The university offers a comprehensive suite of programs in this field, including the Bachelor of Science in Information Science (BSIS) with a pathway in Cybersecurity, the Master of Science in Information Science (MSIS) with a specialization in Information Security, the Master of Science in Telecommunications (MST), Graduate Certificates in Cyber Security, Policy and Law, and PhD degrees in Information Science and Telecommunications.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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Functioning as a vital center for research, education, and innovation, DINS occupies a unique position at the intersection of information, networks, and the study of human cognition, perception, and behavior. The curriculum and research projects within the department are specifically designed to tackle cybersecurity challenges through a multifaceted approach that includes networks, human behavior, and information. Moreover, students have the opportunity to apply their classroom learning in real-world scenarios by participating in numerous cybersecurity competitions, such as CyberForce, the Collegiate Cyber Defense Competition, and Hivestorm.

Over the last five years, the Pitt Cyber Institute has been instrumental in nurturing future talent through its annual free week-long CyberCamp for high school students, catering to a variety of technical skill levels from basic digital literacy to cyber ethics and systems security. Looking ahead to 2024, the school is set to host its second annual GenCyber event, this time for high school teachers, with the aim of integrating cybersecurity concepts and theories into their curricula.

DINS' research efforts are dedicated to pioneering innovations in cybersecurity, ranging from enhancing infrastructure resiliency to developing advanced access control measures, ensuring location privacy protection, and creating trusted systems. This research is crucial for devising solutions that will safeguard industries and individuals alike for many generations to come.



The University of Rhode Island Campus

The **University of Rhode Island's** Digital Forensics and Cyber Security Center (DFCSC) is a multidisciplinary hub on the Kingston, RI campus that harnesses the resources of Computer Science, Electrical and Computer Engineering, and the Office of Information Technology. Established in 2004 with a grant from the U.S. National Science Foundation, the DFCSC provides courses and degree programs, research, services, and consulting in multiple cyber security disciplines. Its research objective is to formulate new concepts that help digital forensics and cyber security professionals protect the nation's citizens. The DFCSC also focuses on preparing the workforce of tomorrow through extensive outreach into K-12 education in computer science, data science, and cyber security.

The DFCSC members work closely with a number of different academic institutions, government

organizations, state and local law enforcement agencies, and private companies. We draw on the expertise of these partners to help in developing digital forensics and cyber security related capabilities and guiding the direction of DFCSC projects and education. The Digital Forensics and the Cyber Security programs approach teaching as a mixture of academic and practical points of view. This hybrid approach allows students to build a strong foundation and expand their knowledge by applying real-world techniques and tools to the subjects being taught. Students also leverage the close knit nature of the State of Rhode Island to obtain experience through internships, job shadowing, and apprenticeships.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cyber Competition Workshop



University of San Diego Campus

The **University of San Diego** is set at the edge of an international gateway on a campus that is consistently ranked among the nation's most beautiful. Our focus on academic excellence — inspired by faith, infused with contemporary Catholic values and nurtured in a warm, community environment — empowers innovative, confident, original thinkers to make positive contributions by confronting humanity's urgent challenges in places near and far.

The Center for Cyber Security Engineering and Technology offers a comprehensive focus on all aspects of cybersecurity, encompassing education and training through degree programs, community outreach programs, evaluation and development of systems and strategies to mitigate cyber threats, as well as leadership on cybersecurity law, forensics and incident response.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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Our MS in Cyber Security Engineering program stands as a beacon of academic excellence, having been recognized as a National Center of Academic Excellence in Cybersecurity by the federal government. This prestigious designation is a testament to our unwavering commitment to providing a curriculum that is not only robust and aligned with the NICE Cybersecurity Workforce Framework but also deeply integrated with the real-world needs of industry, military, intelligence community, and government stakeholders

We pride ourselves on offering a dynamic and highly relevant curriculum, meticulously crafted by instructors who bring invaluable, applied experience in protecting both public and private assets against formidable cyber threats. At the core of our program is an intensive focus on the engineering aspects of software and hardware security, aimed at developing and deploying cutting-edge solutions to mitigate cybersecurity threats. We are dedicated to equipping our students with the knowledge, skills, and insights needed to effect positive change and advance their careers in this critical field. Our mission-centric approach and emphasis on practical, in-depth training prepare our graduates to confront and overcome the most critical issues and threats in cybersecurity today.



# UNIVERSITY OF SOUTH ALABAMA



University of South Alabama Campus

The **University of South Alabama School of Computing** has been a National Center of Academic Excellence in Cyber Defense Education since 2011 and was last redesignated in 2022.

USA School of Computing was the first institution in the state where all computing disciplines are housed in the same academic unit. This centralization creates unique opportunities for faculty and students to collaborate through academics, research, internships, and technology transfer. The School offers ABET-accredited bachelor's degrees in Computer Science, Information Systems, and Information Technology, as well as a bachelor's degree in Health Informatics. At the graduate level, we have Master's degrees in Computer Science, Cybersecurity, and Information Systems. Our PhD in Computing degree integrates coursework and research projects from computer

science, information systems, and information technology, merging different perspectives and creating impactful advancements in areas such as Cybersecurity, Digital Forensics, Artificial Intelligence, Machine Learning, Big Data, and Cloud Computing.

Our faculty are engaged in cutting-edge research funded through the National Science Foundation (NSF), the Department of Defense, as well as numerous defense contractors. Our academic programs provide both a strong theoretical foundation and practical hands-on experience in the core aspects of security. Students in our programs gain sound preparation for various computing careers and for continuing their education to the terminal degree.

In coordination with our Center for Forensics, Information Technology and Security, students at all levels can participate in cutting-edge research and internships beginning as early as the freshman year. Students completing the CAE-designated curriculum are awarded certificates upon completion of the program.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

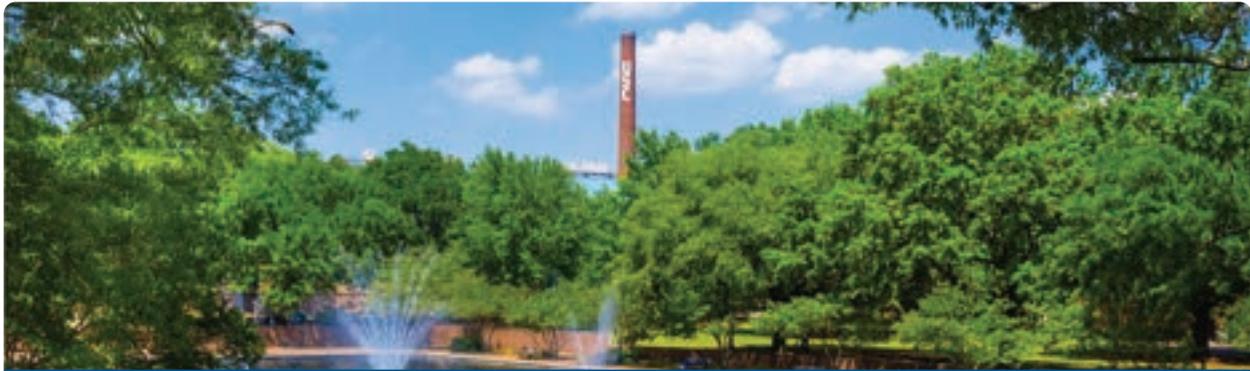
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Shelby Hall, School of Computing



UofSC Campus

The **University of South Carolina (UofSC)**, founded in 1801, is one of the three research universities of South Carolina. The College of Engineering and Computing hosts the departments of Computer Science and Engineering, the primary unit for the CAE-CD and CAE-R designations, and Integrated Information Technology.

The mission of these departments is to provide undergraduate and graduate instruction, to undertake research in computing and information technology, and to serve the community and the profession.

UofSC has offered cybersecurity courses and programs since 2000. Cybersecurity research accomplishments of our faculty and students are demonstrated by externally funded grants, peer-reviewed conference and journal publications, and graduation and placement of our students.

Faculty and staff of UofSC are actively reaching out to local industry and educational institutes to promote cybersecurity collaboration and awareness. A small sample of our collaborative efforts include those with The Citadel, Clemson University, Trident Technical College, and local HBCUs. In 2019, UofSC and the Medical University of South Carolina jointly hosted the 33rd annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy in Charleston.

UofSC works with the South Carolina National Guard and the Naval Information Warfare Center Atlantic to develop state-level cybersecurity capabilities. At the national level, UofSC signed an Educational Partnership Agreement with the Air Force Research Laboratory Information Institute in 2013, leading to research collaborations and student internships.

UofSC also strengthened collaboration with national laboratories and agencies, such as Savannah River and ESnet, by providing internship opportunities to our students and by co-organizing technical workshops.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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The Storey Innovation Center hosts the Departments of Computer Science and Engineering (CSE) and Integrated Information Technology (IIT)



University of Southern Mississippi Campus

The **University of Southern Mississippi (USM)** offers an inclusive and welcoming environment for all persons seeking to develop expertise in cybersecurity. USM is a Carnegie Foundation R1 doctoral research university located on two campuses in MS, Hattiesburg and on the Mississippi Gulf Coast in Long Beach, in addition to an online campus. The School of Computing Sciences and Computer Engineering provides a student-engaged environment that blends theoretical knowledge with practical experience, with a portfolio of programs that include ABET-accredited programs in Computer Engineering, Computer Science, and Information Technology. In addition to those face-to-face offerings, students may choose an online pathway to their baccalaureate degree in Computer Science or with the Bachelor of Applied Science in Cybersecurity. USM offers masters and PhD programs of study in computer science.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Of the program listed above, the following are focused on cybersecurity content:

Information Technology with Cybersecurity concentration (the NSA validated program of study, also available online starting in fall 2024)  
Cybersecurity BAS (The first BAS in Cybersecurity offered in Mississippi, available fully online)  
USM provides a rich landscape for broadening participation in cybersecurity. Enrollment figures from Fall 2023 reveal more than half of the student undergraduate population are female and over one-fourth are Black/African American. The undergraduate population in the School of CSCE grew 39.5% between fall 2023 and 2024, with 22.89% total women; 26.65% Black/AA; 26.95% First Generation students in the School's undergraduate majors.

USM boasts a distinguished faculty comprised of industry professionals and researchers with extensive knowledge and experience in cybersecurity. This faculty actively contributes to the R1 research environment, ensuring students receive instruction from individuals at the forefront of the field, equipped with not only theoretical knowledge but also practical insights from cutting-edge research and simulated real-world scenarios. USM's curriculum aligns with NICE criteria, ensuring students graduate with the knowledge and skills necessary to excel in the cybersecurity workforce.



University of South Florida, Tampa, Main Campus

The **University of South Florida (USF)**, with its vibrant community of 50,000 students, holds a distinguished R1 Carnegie Classification and is a member of the AAU. It has been consistently ranked among the top 50 public universities in the nation by U.S. News & World Report for the last five years. The university stands out for its wide range of cybersecurity programs across several colleges, highlighting its commitment to excellence and interdisciplinary innovation in this critical field.

USF is a large research university in the Florida State University System (SUS) and has multiple campuses across the Tampa Bay region. Founded in 1956, USF is comprised of 14 colleges and offers a wide range of undergraduate, graduate, and doctoral degrees. The institution is also recognized as one of the nation's top veteran-friendly schools.

USF is a leader in cybersecurity education and offers a breadth of degrees and certificates. The undergraduate offerings include ABET-accredited BS degrees in Cybersecurity, Computer Science, Electrical Engineering, and Computer Engineering. Other programs include Bachelors degrees in Business Analytics and Information Systems, Criminology, and Global Business. Meanwhile, graduate cybersecurity programs include several CAE-CD designated MS degrees, such as the MS in Cybersecurity, MS in Information Assurance & Cybersecurity Management, MS in Cybercrime, and MS in Cyber Intelligence & Information Security. As a CAE-Research institution, USF also offers advanced doctoral degrees in cybersecurity research. The institution also runs a NSF CyberCorps Scholarship for Service (SFS) program that provides support for students interested in government cybersecurity careers.

As an AAU institution, USF is a preeminent research university with annual research expenditures exceeding \$460 million in 2023. Its faculty are leaders in the cybersecurity field and involved in many interdisciplinary research projects, i.e., network security, software security, cyber-physical and IoT systems, cybercrime, cybersecurity education, security policy, and machine learning and artificial intelligence. Many of these initiatives are funded by key federal agencies (such as NSF, NSA, DHS, and DoD) and top industry organizations. USF is also home to Cyber Florida, a state-funded center focusing on cybersecurity research, education, and outreach. This center actively supports collaborations across the state and numerous student and teacher training programs.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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University of Tampa Campus

The **University of Tampa (UT)** offers a world-class combination of academic excellence, personal attention, and real-life experience. The cybersecurity programs provide a comprehensive education on the fundamentals of information systems and advanced topics in network security, cryptography, risk management, governance, security architecture, and critical infrastructure.

The programs focus on providing students with real-world experience through courses and supporting activities such as workshops, training programs, competitions, and student club activities. The courses teach students technical skills and emphasize teamwork, effective communication, and the ability to address technical issues in an organizational context by balancing “learning by thinking” with “learning by doing.” The dedicated cybersecurity network hosts the cyber labs, cyber

range, and Security Operations Center, equipped with state-of-the-art technology available to students.

Undergraduate cybersecurity students often complement their degree with a minor in information systems, computer science, or criminology. In addition to the undergraduate degree, UT offers a Master of Science degree, a 4+1 combined degree, and a stackable graduate certificate in cybersecurity. The cybersecurity program is offered in the Information and Technology Management Department and housed in the Sykes College of Business. Strong partnerships between UT and local companies create employment opportunities for the students in the programs.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Security Operations Center



The University of Tennessee at Chattanooga Campus

The **University of Tennessee at Chattanooga (UTC)** Information Security (InfoSec) Center is located within the College of Engineering and Computer Science, in collaboration with the Rollins College of Business, College of Arts and Sciences, and College of Health, Education & Professional Studies. As a multidisciplinary center, the UTC InfoSec Center currently holds the designation of National Center of Academic Excellence in Cyber Defense (CAE-CD).

The mission of the Center is to serve as a regional model for promoting excellence in cybersecurity education and research, assisting businesses, government agencies, education institutions, and industries in their cybersecurity needs, and serving as the first point of call for cybersecurity emergency.

The UTC InfoSec Center is dedicated to a multifaceted mission aimed at addressing the complex landscape

of information security. First and foremost, the center focuses on preparing students to navigate the challenges posed by the swift advancements in information technologies, alongside the rise of new threats and attacks targeting the critical cyber infrastructure that modern society relies heavily upon.

In addition to educating the next generation of cybersecurity professionals, the center is committed to providing working professionals with the most current cybersecurity skills and best practices. This ensures that they are well-equipped to handle the challenges that arise in the workplace as a result of ongoing developments in computing and information technologies. Furthermore, the UTC InfoSec Center places a strong emphasis on promoting excellence in cybersecurity research. This is achieved by staying informed about and contributing to developments in emerging areas within the field. Lastly, the center aims to serve the University and the surrounding communities with leadership and distinction, underscoring its role as a beacon of knowledge and expertise in the realm of information security.

## DESIGNATIONS

- CAE-Cyber Defense

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Student Learning Cybersecurity



# UNIVERSITY OF TEXAS AT DALLAS



UT Dallas campus in Richardson, Texas

Over the past two decades, cybersecurity has become one of the key areas of strength at **UT Dallas**. In 2004, UT Dallas established its Cybersecurity Research and Education Institute (CSI) with the mission to be a national resource for by conducting interdisciplinary research and providing comprehensive education in cybersecurity and training students with the capability to carry out cyber operations. CSI houses 15 core and over a dozen affiliated faculty members conducting funded research and supervising over 40 Ph.D. students in cybersecurity.

UT Dallas has been designated as a Center of Academic Excellence in Cyber Defense Education (CAE-CDE) since 2004. The CAE designation has us to compete in NSA and NSF scholarship programs, which have graduated over 75 domestic students and placed them into government jobs. The designation also enabled us to receive competitive NSA research funding.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Cyber Operations
- CAE-Research

## CONTACT INFORMATION

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The CS Department at UT Dallas is one of the largest in the nation, with more than 5000 students. With a focus on academic and research excellence, the Department has gained national prominence in fields such as cybersecurity, artificial intelligence and natural language processing, software engineering, machine learning, and data science. The Department places a high priority on establishing and maintaining innovative research programs that enhance education quality and make the Department a vital regional, national, and international resource for discovering, integrating, and applying new knowledge and computing technologies.

UT Dallas is an essential component of the entrepreneurial ecosystem. Our undergraduate students consistently qualify for the International Collegiate Programming Contest North America competition and have advanced to the world finals in the past several years. Our graduate students (including PhD) are sought after by top computing technology companies, such as Amazon, Google, Microsoft, and Apple.

Our faculty excel in externally funded research and have won many recognitions, from best paper awards at top conferences to test of time awards to being named IEEE and ACM Fellows. Our tenure track faculty includes sixteen NSF Faculty Early Career Development Program award winners.



# UNIVERSITY OF TEXAS AT EL PASO



University of Texas at El Paso Campus

The **University of Texas at El Paso (UTEP)** is located along the U.S.-Mexico border in one of the world's largest binational communities. We are America's Leading Hispanic-Serving University with a student body that is 84% Hispanic. UTEP is an Open-Access university, and with more than \$130 million in total annual research expenditures, is designated an R1 research university, a designation given to the top 5% of colleges and universities nationally. UTEP is a comprehensive public research university that is increasing access to excellent higher education. We advance discovery of public value and positively impact the health, culture, education, and economy of the community we serve.

The Computer Science (CS) Department at UTEP resides in the College of Engineering. The department places great emphasis on students' professional development and advancements

through faculty mentoring and involvement in research at the early stages of students' education. Our graduates are heavily recruited by leading companies and government agencies. The college of Engineering is consistently ranked among the top schools in the U.S. in awarding Bachelor's degrees to Hispanics.

The CS department offers B.S., M.S., and Ph.D. degrees in Computer Science and M.S. degrees in Software Engineering and Data and Information Sciences. The undergraduate program offers concentrations in software engineering, secure cyber-systems (SCS), and data analytics. Graduates of the undergraduate program and SCS concentration are highly recruited and quickly employed, earning average starting salaries of up to \$110,000 annually.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Cyber Operations

## CONTACT INFORMATION

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America's Leading HSI



UTSA Main Campus

Today's world calls for greater collaboration to protect America's national security infrastructure. **The University of Texas at San Antonio (UTSA)** is leading this charge, fueled by the most influential teams of professionals in cybersecurity and related disciplines as well as its students. Five research centers and institutes advance UTSA's work to solve global security challenges.

UTSA is an undisputed leader in cybersecurity education. Among the academic programs it offers are an M.S. in Cybersecurity Science, a fully online B.B.A. in Cyber Security and a pioneering B.S. in Applied Cyber Analytics, the only one of its kind in the nation. Also, it is home to the National Security Collaboration Center, the Cybersecurity Manufacturing Innovation Institute and the only School of Data Science at a U.S. Hispanic Serving Institution.

As part of UTSA's commitment to lead in advanced technologies, it is creating a new college in artificial intelligence, cybersecurity, computing and data science. At the same time, UTSA is deeply committed to providing students with hands-on learning opportunities that make them extremely competitive job candidates upon graduation.

UTSA cybersecurity graduates are heavily recruited and employed quickly. They are hired in governmental positions and with top national and global companies.

San Antonio is among the nation's largest cybersecurity hubs and home to the largest concentration of cybersecurity experts and industry leaders outside Washington, D.C.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Cyber Operations
- CAE-Research

## CONTACT INFORMATION

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UTSA students are competitive job candidates



UC Boswell Campus Center

**University of the Cumberland** sets itself apart with its “One Price Promise,” ensuring affordability for all students. This commitment includes covering all costs within the tuition fee, reflecting our founding principle of making college education accessible to everyone. As a Military Friendly® accredited university, we waive application fees for veterans, reserves, and active-duty military personnel. Students can enroll in online degree programs, from associate to doctoral levels, at one of Kentucky’s fastest-growing colleges. The university has been repeatedly recognized by Colleges of Distinction, an organization that provides comprehensive information about U.S. colleges.

Cumberland has been ranked as Kentucky’s top institution for student social mobility for two years running. We outperform other state colleges in providing resources for socioeconomic advancement.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Besides being the safest campus in Kentucky, Niche data also ranks us as the best Christian and online college in the state. We’re also second-best for college campus, small college campus, and top private university.

Our students have also made their mark in the National Cyber League (NCL) Spring 2023 Competition, ranking in the top 1 percent of competitors across the country. Competing against more than 7,820 students in both individual and team events, our students achieved a national ranking of 78 out of 450 participating colleges and universities.

The university’s information security program is committed to excellence in creating, applying, and sharing IT knowledge. This is achieved through comprehensive educational programs, research, and service to professional societies, communities, states, and the nation. The program aligns with the (ISC)2 CISSP Common Body of Knowledge, a top certification for cybersecurity professionals.

Cumberland ranks among the top cybersecurity education programs in the Commonwealth, producing a well-qualified workforce to safeguard national systems and networks. It is one of only three universities in Kentucky to maintain status as a National Center of Academic Excellence in Cyber Defense (CAE-CD).



# THE UNIVERSITY OF TULSA



First cyber department with BS, MS and PhD degrees

The School of Cyber Studies at **The University of Tulsa (TU)** equips future leaders with knowledge and skills to protect the world's information and computing infrastructure in an ever-changing environment. TU offers undergraduate and graduate degrees taught by a world-class interdisciplinary faculty from varied professional backgrounds spanning computer science, engineering, business, law, social sciences, and humanities.

The School of Cyber Studies is the nation's first and only dedicated academic department in cyber, offering BS, MS, and PhD degrees. The BS and MS degrees in Cyber Security prepare graduates using a hands-on curriculum adhering to NSA Center of Academic Excellence in Cyber Defense guidelines. In the PhD in Cyber Studies, students pursue interdisciplinary research to tackle pressing open problems while guided by a faculty member. The

BS and PhD programs are residential and taught in person, while the MS is delivered online and is geared towards working professionals across the country.

The University of Tulsa is Oklahoma's highest-ranked private university, with approximately 4,000 students in a metro area of over 1 million. TU has been designated as a CAE since 2000 and was one of the first 14 institutions awarded this distinction. TU's Cyber Corps program has graduated over 350 students since Fall 2001, with 70 percent working at the NSA or CIA. U.S. News & World Report recently ranked TU #23 nationally for cyber security academic programs.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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Students working in campus SOC



University of Virginia Central Grounds

The **University of Virginia (UVA)** is a Tier 1 comprehensive University with a high level of activity in cybersecurity education, research, and scholarship. The center of activity is the Department of Computer Science (CS) in the School of Engineering and Applied Science. The CS department offers a Bachelor of Science in Computer Science (BSCS), a Bachelor of Arts in Computer Science (BACS), and a Bachelor of Science in Computer Engineering (BSCpE). Students in these degree programs may complete a CAE Cybersecurity Focal Path by completing ten courses approved by the National Centers of Academic Excellence Program office. UVA also has a robust cybersecurity research Ph.D. program.

CS faculty and students are active in national cybersecurity competitions. In 2023, two student-led Computer and Network Security Club teams competed in the Mid-Atlantic Collegiate Cyber

Defense Competition (MACCDC). One of those teams advanced to compete in the 2023 National Collegiate Cyber Defense Championship (NCCDC). Another undergraduate team competed in the 2023 Virginia Cyber Fusion competition and won first place. This competition is open to Virginia colleges designated National Centers of Academic Excellence in Cyber Defense.

Faculty in CS received a \$3M 2021 NCAE-C in Cybersecurity Education Innovation Award to create the Virginia Cyber Navigator Internship Program. This innovative experiential learning program bundles a cybersecurity course and internships to give students real-world experience in supporting Virginia election registrars. UVA is also home to the Cyber Innovation & Society Initiative, National Security Policy Center, and National Security Law Center.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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UVA Cyber Defense Team



University of Washington Bothell

The **University of Washington (UW)** is one of the world's preeminent public universities. Our impact on individuals, our region and the world is profound — whether we are launching young people into a boundless future or confronting the grand challenges of our time through undaunted research and scholarship. Ranked No. 6 in the world on the U.S. News & World Report's Best Global Universities rankings, the UW educates more than 60,000 students annually. We turn ideas into impact and transform lives and our world.

UW has been a major center of cybersecurity research and education since 2004, has earned both CAE-CD and CAE-R designations. We provide an extraordinarily broad and deep range of undergraduate, graduate, and professional education opportunities at all three UW campuses, in addition to world-class interdisciplinary research.

Our undergraduate curricula include a degree option within a number of programs of study. At the graduate level, opportunities are available within computing and software systems (cybersecurity engineering), technology and business (cybersecurity and leadership), international studies (cybersecurity and international policy), and in conjunction with a number of world languages. UW also provides continuing education for working professionals around the world via online and in person certificates. The campuses close proximity to the Seattle tech sector gives our students a unique opportunity to join the local workforce of skilled professionals ready to make an impact in industry.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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UW Bothell Graduate Students



University of West Florida campus

The **University of West Florida** advances cybersecurity through nationally-recognized educational programs, research, and the Center for Cybersecurity. UWF offers a stand-alone CAE-designated and ABET accredited B.S. in Cybersecurity in addition to multidisciplinary undergraduate and graduate cybersecurity-related programs and certificates. UWF's MS in Cybersecurity offers several online concentrations.

UWF leads the National Cybersecurity Workforce Development Program, CyberSkills2Work, funded by the NSA NCAE-C Program and CISA. With a coalition of 10 CAE-C institutions, the program provides free cybersecurity training for transitioning military, veterans, first responders, military spouses, women, underrepresented minorities, and government employees to prepare them for cybersecurity careers.

The UWF ACES NSF Scholarship for Service and DoD Cybersecurity Scholarship Programs prepare students for careers in federal government and industry. The UWF Cyber Club participates in cyber competitions, and placed first in the 2023 Southeast NCAE Cyber Games and second in the 2024 competition.

UWF leads K-12 outreach initiatives, including GenCyber camps, CyberPatriot, and Cybersecurity Ambassadors to enhance cybersecurity awareness. UWF faculty collaborate with academic, industry, and government partners on cutting-edge research projects, including critical infrastructure security and AI in cybersecurity.

UWF received the 2023 NCAE-C Community Outreach first-place award.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Students in the UWF Center for Cybersecurity eSOC



# UNIVERSITY OF WISCONSIN-STOUT



University of Wisconsin - Stout Campus

**University of Wisconsin - Stout** is a comprehensive, career-focused, polytechnic university. Our students, faculty and staff use applied learning, scientific theory and research to solve real-world problems, grow the state's economy, and serve society.

Located in scenic Menomonie, Wisconsin, our campus has a long and rich history of providing a distinct array of programs. Our students enjoy a 98.2% rate of finding employment or continuing their education after they graduate. We're proud of our tremendous industry partnerships and our contribution to the local and regional economy.

UW-Stout's Computer Networking and Information Technology (CNIT) program will provide you with the strong technical, communication, teamwork, leadership and problem-solving skills you need to succeed.

Our IT industry-experienced faculty will challenge you with hands-on experience in our cutting-edge computer network laboratories. CNIT classes with embedded industry certification examinations will prepare you for rewarding, high-paying careers as a:

- Network Engineer
- Security analyst
- Network consultant
- Network and systems administrator
- IT project manager

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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CNIT Equipment



Utica University Cybersecurity Building

**Utica University** is an independent, private, nonsectarian, comprehensive college located in the city of Utica, in the heart of central New York State. Accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, Utica University offers many of the advantages of a large university, but with an intimacy, and a high degree of personal attention more closely associated with smaller private colleges. Recognized for the close, personal attention they give to students, our faculty help students define their educational goals and plan their future. A small, personal environment and a student-to-faculty ratio of 11 to 1 helps reinforce a focus on student-centered teaching.

Cybersecurity is essential to the confidentiality, integrity, and availability of defending and protecting computers. Utica University students

explore innovative techniques to protect, prevent, and investigate cyber-attacks, including detection and remediation methods. In the Utica University Cybersecurity program, our students learn how to secure an organization's data and intellectual property from both an attack and defense perspective. Through experiential learning and real-world simulated exercises, students leave the program with industry-recognized certifications and micro-credentials from organizations such as CompTIA and RangeForce.

The cybersecurity faculty have identified several advising specializations, groups of courses within the elective offerings that provide students with a focused path of study. Elective specializations are not formal parts of the curriculum but options within the elective section of the program. Students do not have to focus on a specialization but can with the consent of their advisor, simply elect to take courses that meet their needs or interests. The specializations identified by the faculty are Cybercrime and Fraud Investigation, Cyber Operations, and Digital Forensics and Incident Response.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Utica Cyber Classroom



Valencia College West Campus

In 2007, **Valencia College** was awarded an NSF ATE grant entitled: "Computer Engineering Technology Security Curriculum Expansion and Enhancement," DUE-0703070, for the project period October 1, 2007 - September 30, 2013. This ATE project developed and implemented a cybersecurity specialization within the Network Engineering Technology Associate in Science degree program.

Valencia College launched the Cybersecurity and Digital Forensics Associate in Science degree specialization in 2010 and has successfully developed curriculum, faculty, and articulation. The following state-approved technical certificates have also been developed: Cybersecurity (30 college credits), and Digital Forensics (32 college credits).

In 2013, the National Security Agency and the Department of Homeland Security recognized Valencia

College as a National Center of Academic Excellence in Information Assurance Education 2-Year program (CAE2Y).

Since its inception, the program has taken a hands-on approach, using portable labs deployable in virtual and remote-access environments. Program courses cover the exam blueprint for some of the top cybersecurity and digital forensics industry certifications, including Access Data Certified Examiner, Certified Ethical Hacker (C|EH), and CompTIA Security +.

The program has expanded educational resources to K-12 institutions through the delivery of various workshops and summer camps. The program also successfully built an effective education pipeline model with 4-year programs, including the Cybersecurity program at the University of Maine at Augusta (UMA).

Furthermore, in 2018, Valencia College's Network Engineering Technology program was named a winner of the inaugural Siemens-Aspen Community College STEM Award by the Aspen Institute College Excellence Program and the Siemens Foundation. The Network Engineering Technology program was one of eight community college programs in Science, Technology, Engineering and Math (STEM), recognized for providing outstanding preparation for high-demand jobs in information technology.

### DESIGNATIONS

- CAE-Cyber Defense

### CONTACT INFORMATION

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Vanderbilt University Department of Computer Science

**Vanderbilt University** is committed to fostering cybersecurity research, facilitating advanced academic research and development, and cultivating the next generation of cybersecurity experts. This deep commitment to tackling the cybersecurity challenges facing our nation is most recently highlighted, for example, in our sponsorship of two Vanderbilt University National Summits on The Future of Modern Conflict and Global Threats that hosted a wide range of cybersecurity experts and policy leaders.

Our academic initiatives, distinguished faculty, dedicated students, research achievements, and substantial investments in the field of cybersecurity collectively underscore our institution's robust capability to significantly contribute to the objectives of the NCAE-C program.

Vanderbilt University will fulfill the expectations and responsibilities associated with the CAE-R Designation primarily through the Institute for Software Integrated Systems. The Institute for Software Integrated Systems is dedicated to advancing system science and the engineering of security and resilience.

The institute conducts basic and applied research in the area of systems and information science, engineering, and operation of trustworthy secure systems and has a long history of cybersecurity research with multiple active projects sponsored by NSA, DARPA, NSF, and other agencies.

Our core mission is to cultivate transformative research and innovative engineering methodologies that bolster our national cybersecurity. By fostering leading-edge opportunities dedicated to cyber research, our PhD programs in Computer Science and Electrical and Computer Engineering are a cornerstone of this commitment designed to develop world-class leaders who will shape the future of cybersecurity and contribute to building a more secure and resilient digital world.

## DESIGNATIONS

- CAE-Cyber Research

## CONTACT INFORMATION

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PhD programs in CS and ECE



# VIRGINIA COMMONWEALTH UNIVERSITY



VCU College of Engineering

The **Virginia Commonwealth University (VCU)** Cybersecurity Center is the hub of the university's cybersecurity education activities. VCU provides leadership to advance cyber defense education and cybersecurity support throughout the region.

The VCU Cybersecurity Center is dedicated to cybersecurity research, education, and workforce development. The center provides opportunities for collaboration among VCU's cybersecurity programs within the departments of Computer Science and Electrical and Computer Engineering, the Homeland Security and Emergency Preparedness program at the Wilder School of Government and Public Affairs, and the VCU School of Business' Department of Information Systems. It facilitates student and faculty participation in cybersecurity activities such as faculty and industry led talks, a student-run cybersecurity club, cybersecurity competitions, internships,

scholarships, and undergraduate and graduate-level research. The center is also active in community outreach, including Virginia academic and industry initiatives such as the Virginia Cyber Range, the Virginia Cyber Security Partnership (VCSP) and the Commonwealth Cyber Initiative (CCI) Central Virginia Node.

The Department of Computer Science offers a Bachelor of Science in computer science with a concentration in cybersecurity. Students who earn this concentration gain a firm command of cyber defense, cyber forensics, and cyber ethics. They understand and can apply the best practices of computer systems and network security, security architecture, and cryptography. The Cybersecurity Club at VCU qualified for the 2019 National Collegiate Penetration Testing Competition in Rochester, New York.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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VCU Cybersecurity Team at CPTC Nationals  
(Photo: Mariah Rose Whitmoyer)



# VIRGINIA STATE UNIVERSITY



Virginia State University Landscape

The Computer Science program at **Virginia State University (VSU)**, nestled within the College of Engineering and Technology, stands out for its commitment to excellence, inclusivity, and innovation. This program strives to equip students with the foundational and advanced knowledge necessary for success in the ever-evolving fields of computing and information technology.

The mission of the Department of Computer Science at VSU is multifaceted, focusing on providing a high-quality education that prepares students for rewarding careers in industry, government, and academia. The department aims to nurture future leaders who are not just adept at solving complex problems and leading projects, but who are also effective communicators and ethical participants in a global society.

One of the unique aspects of the VSU Computer Science program is its relationship with industry partners to establish industry projects pertaining to cybersecurity. Students at VSU have the opportunity to engage in experiential learning, with numerous relationships and partnerships with industry and government entities facilitating real-world experience. Partners include government agencies, cyber security consulting groups, and other academic institutions. Additionally, the emphasis on hands-on learning, through labs and a variety of applications, ensures that students gain practical experience alongside their theoretical studies.

VSU's Computer Science program's distinctiveness also lies in its community and resources. With dedicated faculty members who are readily available to offer guidance and advice, students are supported throughout their academic journey. The department's mission, emphasizing the preparation of students for productive careers and contributions to the computing field within a global context, reflects VSU's broader commitment to excellence and community engagement. Students work on projects to support the local Petersburg community, such as the development of a Petersburg website showing resources useful for citizens.

For anyone looking to embark on a career in computer science, VSU offers a rich, supportive, and dynamic environment to learn, grow, and prepare for the challenges and opportunities of the future.

## DESIGNATIONS

- CAE-Cyber Defense

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The Virginia Tech Pylons

**Virginia Tech** is leading the nation in national security research and education. In 2021 the university established the Virginia Tech National Security Institute, building off the long-standing success of the Ted and Karyn Hume Center for National Security and Technology and centralizing all national security related research at Virginia Tech.

The Hume Center leads the Virginia Tech National Security Institute's education programs focused on the challenges of cybersecurity, autonomy, and resilience for the national security community. Educational programs provide mentorship, internship, scholarship, and seek to address key challenges in qualified US citizens entering federal and industry service.

Virginia Tech offers multidisciplinary opportunities in cybersecurity education and research, with

participating faculty from the departments of Computer Science, Electrical and Computer Engineering, Political Science, and Business. With its strong engineering and science focus, Virginia Tech offers deeply technical undergraduate and graduate programs in cybersecurity, and our faculty conduct world-class research in information security, network security, hardware security, and software security.

The Bradley Department of Electrical and Computer Engineering administers multiple relevant majors and programs related to the mission of the Virginia Tech National Security Institute, including the Computer Engineering major and the Networking and Cybersecurity major. Additional majors housed within the College of Liberal Arts and Human Sciences and the Pamplin College of Business include National Security & Foreign Affairs, Business Information Technology, and International Studies.

Centers such as the Hume Center for National Security and Technology and the Integrated Security Education and Research Center (ISERC) research defense and intelligence applications of cyber-attack and defense. The IT Security Lab, part of the university's CIO organization, is able to use the university's production network as a teaching hospital for cybersecurity. Additionally, the university will host the 2024 GenCyber at Virginia Tech: Residential Computer & Network Security Camp for Secondary School Teachers.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Cyber Operations
- CAE-Research

## CONTACT INFORMATION

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Campus nestled in the Blue Ridge Mountains

**Virginia Western Community College (VWCC)** offers comprehensive cybersecurity education programs to prepare students for the rapidly growing field of cybersecurity. These programs are designed to cater to a range of needs, from students seeking to enter the workforce quickly to those aiming for more comprehensive education in cybersecurity and network administration.

VWCC offers a Cyber Security Career Studies Certificate (CSC). This certificate can be completed in one year and is perfect for those seeking to specialize further or gain specific certifications in the field. This program is structured to provide a robust foundation primarily in practical skills. Students learn about securing servers and network infrastructures, developing security infrastructures, and identifying and mitigating security threats. The CSC focuses on preparing students for roles such as Network

Analyst, Security Analyst, or Security Architect, with coursework that counts towards the AAS degree for those who wish to continue their studies.

The programs at VWCC are aligned with national standards and expectations for cybersecurity education. They are designed to give students the skills needed to secure IT infrastructure, recognize and respond to security threats, and ensure the safety of networked systems. Students in these programs also have the opportunity to prepare for and earn industry-recognized certifications, such as CompTIA Security+, A+, and Linux+, CCNA, and others through their coursework. This emphasis on certification, combined with the college's commitment to maintaining status as a National Center of Academic Excellence in Cyber Defense Education designation, underscores the quality and relevance of VWCC's cybersecurity education.

Overall, Virginia Western Community College's cybersecurity programs are designed to meet the growing demand for trained cybersecurity professionals in an evolving digital landscape. With a blend of theoretical knowledge, practical skills, and industry certifications, graduates are well-equipped to enter the cybersecurity workforce and contribute to the safety and security of information technology infrastructures.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Wake Tech Research Triangle Park (RTP) Campus

**Wake Technical Community College** is committed to providing equitable access to education, fundamentally aiming to transform lives through enhancing economic mobility and ensuring personal fulfillment. At the core of its mission, the college maintains an open-door admissions policy, emphasizing the provision of quality, accessible, and affordable educational opportunities. This inclusive approach welcomes all adults, regardless of age, sex, socioeconomic status, ethnic origin, race, religion, or disability.

To adequately serve the diverse needs of Wake County’s citizens, Wake Tech concentrates its efforts on offering robust support services, resources, community outreach, and partnerships. Furthermore, the college prides itself on delivering comprehensive programs in basic skills development, vocational, technical, and occupational training, as

well as facilitating preparation for those aiming to transfer to four-year colleges or universities.

With a forward-looking vision, Wake Tech aspires to extend its reach to students across every part of Wake County, embracing a collective effort to support them in realizing their potential, fueled by their dreams, talents, and resilience. The college has set forth clear goals to ensure its mission and vision are realized. These goals include guaranteeing equitable access, ensuring that students from underrepresented groups, such as minority and low-income students, can enter Wake Tech programs and access necessary support services. The college also focuses on equitable outcomes, aiming for student success irrespective of race, gender, or socioeconomic status.

Additionally, Wake Tech is committed to enhancing learning outcomes, ensuring students acquire the requisite knowledge, skills, and abilities for success in the labor market and higher education transfers. The goals further emphasize the importance of completion, aiming for a significant increase in the rate and number of students completing degrees and meaningful credentials.

The college also seeks to improve the transfer process, enabling more students to transition to bachelor’s degree programs efficiently. Lastly, a crucial goal is to facilitate successful entry into the labor market, ensuring students secure sustainable employment and earn a living wage post-completion of their credentials.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Wallace State Campus Aerial View

The Center for Cybersecurity Education (CCE) at **Wallace State Community College** envisions becoming a hub for cyber defense education and community engagement, fostering cyber safety locally and beyond. Situated just an hour away from Birmingham and Huntsville, our campus serves as a strategic base for promoting information assurance (IA) and cyber defense (CD) education.

Our mission is to cultivate cybersecurity expertise through various initiatives, including events and classes, collaborating closely with local agencies, businesses, and organizations. By championing ethical conduct and legal standards in cybersecurity practices, we aim to empower the next generation of professionals in this field.

Supported by Wallace State Community College's AAS degree and certificate programs in Cybersecurity

and Networking, the CCE endeavors to bolster the cybersecurity workforce in Central and North Alabama. We recognize the importance of industry input in shaping our educational offerings. Hence, our Business and Industry Leadership Team (BILT), comprised of professionals from local businesses and educational institutions, provides invaluable guidance. Leveraging their expertise, we refine our programs to meet industry standards and promote excellence in cybersecurity education.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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First Day of Classes



Walsh College, Troy Location (Photo Credit: Justin Maconochie)

**Walsh College**, in Troy, Michigan, was designated a Center of Academic Excellence in Information Assurance Education in 2003 and was one of the first schools in Michigan to be designated as a Center of Academic Excellence in Cyber Defense (CAE/CD). Walsh is a private, nonprofit, upper-division school offering undergraduate, graduate, and doctoral business and technology degrees. Our information technology degrees include concentrations in cybersecurity and the nation's first concentration in automotive cybersecurity. A graduate business certificate in cybersecurity is also offered. Walsh's IT degrees align with the Department of Defense and Department of Homeland Security NICE Framework standards and are F1 DHS STEM designated programs. Walsh has been recognized by thebestschools.org for having one of the best online Master's in Network Security in the nation.

Our cybersecurity curriculum follows a technology tradecraft model, combining academic rigor and dozens of hours of hands-on exercises with enterprise-level equipment in our Cyber Lab. This state-of-the-art research and training environment was custom designed to develop highly skilled cybersecurity professionals. Coursework includes automotive threat and malware analysis, securing cyber physical systems, ethical hacking strategies, cryptography, penetration testing and threat analysis, and more, using current industry tools, programming languages, standards and protocols. Walsh faculty have decades of industry experience and teach real-world scenarios in small class settings. Students receive personal attention whether a class is online or on ground and graduate with the knowledge, critical thinking, and ethical problem-solving skills they need to compete in the constantly evolving field of cybersecurity.

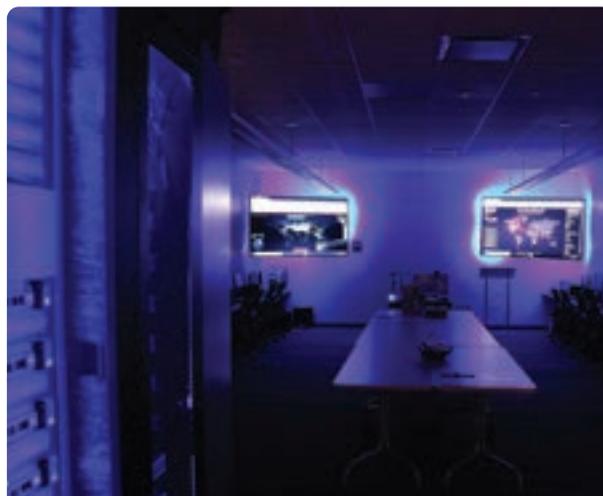
## DESIGNATIONS

- CAE-Cyber Defense

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Walsh Cyber Lab



WCC Campus

The Cyber Defense Program at **Washtenaw Community College (WCC)** provides students with opportunities to learn and practice the skills and strategies needed to operate, maintain, protect and defend an organization's networks and systems. Practical lab experiences that enhance critical thinking and problem-solving capabilities are the foundation of our program. We align our curriculum to meet the needs of local and regional industry partners, which includes an alignment to industry certifications where appropriate.

Our Cybersecurity associate degree is divided into three focus areas that cover cyber defense from infrastructure to operations:

- Computer Networking
  - > Routing & Switching
  - > Operating & Network System Administration

- Cybersecurity Principles & Network Defense
  - > Network Security
  - > Penetration Testing
  - > Perimeter Protection
- Cyber Operations
  - > Cyber Operations
  - > Digital Forensics & Incident Response

We know that cybersecurity extends far beyond the traditional computer network. In addition to computer networks, the Cyber Defense program at Washtenaw Community College integrates concepts related to all networked systems, including embedded technologies such as automotive networks. Students work with mobile hacking workbenches that simulate a vehicle network utilizing actual OEM technologies to find vulnerabilities and assess risk.

We are building cyber defense education programs not only for today but for the future.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Waukesha County Technical College

**Waukesha County Technical College** stands at the forefront of a new era in higher education. Surrounded by a rapidly-changing landscape, we're forging ahead while keeping our eyes on the horizon.

At the precipice of a new educational frontier, WCTC recognizes the importance of being proactive, agile and forward-thinking in order to meet the diverse needs of learners in the 21st century. We invite our students, faculty, staff, and the entire WCTC community to join us in transforming the future of higher education.

Waukesha County Technical College is proud to be a designated National Center of Academic Excellence in Cyber Defense (CAE-CD). WCTC remains committed to reducing threats to national infrastructure by promoting higher education and research in cyber defense as well as developing a pipeline of qualified

cybersecurity professionals.

WCTC offers three avenues for Cybersecurity education: IT - Cybersecurity Specialist Associate of Applied Arts, CAE-CD Cybersecurity Certificate, and IT Security Administrator Certificate.

The WCTC Cybersecurity Club competes in a wide array of competitions and holds regular meetings to train and grow skill sets beyond the classroom. Currently, WCTC students compete in the National Cyber League, Collegiate Cyber Defense Competition, Hivestorm, Cyber Patriot and VIVID, among others. If you'd like to get involved, keep an eye out for announcements from the IT and cybersecurity clubs. In addition to competitions, the club hosts student events including guest speakers, team-building events, field trips and other fun activities.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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WCTC CCDC Team



Wayne Community College Campus

**Wayne Community College**, located in eastern North Carolina, provides access to high-quality education, and produces the backbone of the workforce in the communities it serves. We do this while staying committed to cultivating and sustaining a supportive and respectful environment where all individuals feel welcome. The National Security Agency and the Department of Homeland Security have designated Wayne Community College as a Center of Academic Excellence in Cyber Defense (CAE-CD) through academic year 2028. Our mission is to advance cybersecurity education by providing top-notch curriculum, access to cutting-edge resources, and support along students' educational journey.

Wayne Community College offers more than 200 degrees and certificates in a wide variety of disciplines, including an Associate of Applied Science in Cybersecurity. Coursework includes networking

technologies, secure communications, ethical hacking, penetration testing, network vulnerabilities, perimeter defense, computer crime investigations, and more. This coursework also prepares students for industry-recognized certifications such as Cisco, CompTIA, EC-Council, Microsoft, and more. Beyond the technical skills, you also develop critical thinking, problem-solving abilities, risk management principles and strong ethical standards. Cybersecurity enrollment at the college has increased more than 200% in the past four years.

In addition to Cybersecurity, the Information Systems Technology department at Wayne Community College offers degrees in Artificial Intelligence (first in the state), IT Support & Services, Software Development, Game Art & Animation, Game & Automation Programming, and Entertainment Technologies.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cyber Student and Instructor



WSU Bell Tower in Fall

Our mission at **Weber State University** is to prepare students to design and implement computing systems of the highest quality that will provide a foundation for their academic and career goals while simultaneously meeting the evolving needs of industry partners.

As graduates of the Cybersecurity and Network Management program gain career experience following graduation, they will make positive contributions to industry, technology, and/or education, will demonstrate and exemplify professional and ethical practices in all aspects of their careers, will practice and exemplify effective and collegial collaboration in all team activities, and will be continuously engaged in effective self-directed learning that supports the acquisition of new skills demanded by their careers and the understanding of new concepts necessary for

continued contributions to the computing field.

Graduates of the program have an ability to: Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions, Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of Cybersecurity, Communicate effectively in a variety of professional contexts, Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles, and Function effectively as a member or leader of a team engaged in activities appropriate to the Cybersecurity Program.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Waldo Wildcat in Winter



Home of the Webster University Cyber Center

Founded in 1915, **Webster University** is a private non-profit university with campuses in North America, Europe, Asia, Africa, and online. We are committed to quality learning experiences that transform students for global citizenship and individual excellence. The Cybersecurity program resides in the Walker School of Business and Technology's Department of Computer and Information Sciences.

Our Bachelor of Science in Computer Science with Emphasis in Cybersecurity is designated as an CAE-CD program; when combined with our three distinct Master of Science in Cybersecurity degrees, and two Cybersecurity certificates (Information Assurance and Threat Detection), our program is the most robust, and one of the largest, programs in the nation. The program integrates academics and training to include certification opportunities through our academic partner – The EC Council. Students

are able to complete coursework in class, online, via WebNet+/Zoom, or through a blended mode course of study at campus locations across the world. Students learn to apply critical thinking toward information protection, threat detection, intelligence/counterintelligence, forensics, social engineering, cloud, and space and strategic force operations; and benefit from the university's leadership in the Gateway Higher Education Cybersecurity Consortium, and partnerships with the EC-Council and the Global Cybersecurity Center.

Webster University places special emphasis on supporting women in the Cybersecurity discipline through the Women in Cybersecurity organization and programs such as our Junior High School Girl's Cyber Explorers Workshop focusing on engaging girls about career opportunities in Cybersecurity and Computer Science.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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A student in the cyber lab



# WESTCHESTER COMMUNITY COLLEGE



WCC Campus

**Westchester Community College's** Associate of Applied Science (A.A.S.) and certificate programs in cybersecurity provides a strong foundation in computer technology security.

The A.A.S. program covers the functions of hardware, operating systems, databases, and networks. It is designed to cover beginner to advanced topics in areas such as computer forensics, network security, and ethical hacking. This program prepares the student for employment in entry-level positions in information technology, information assurance, security, and digital forensics.

The curriculum is for the student who intends to seek full-time employment after graduation, who wishes to make a career change/enhancement into information assurance and information systems, or

to transfer into an information technology program at a four-year college.

The cybersecurity certificate provides students with a firm foundation in the basic principles of business security. It is designed for those with prior computer experience and those who need to enhance their job skills. Students may apply the courses towards the A.A.S. degree in cybersecurity. Graduates of the certificate program can expect opportunities to use their expertise in private industry, government, law enforcement, the military, health services, and academia.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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WCC Cyber Class



Western Colorado University in Gunnison, Colorado

At **Western Colorado University**, the Computer Science program focuses on software development, information security and data science. You'll have the opportunity to learn fundamental concepts, languages, tools and techniques in the new, state-of-the-art Paul M. Rady School of Computer Science & Engineering.

This experience will prepare you with the skills and expertise you'll need to thrive in a career in software development, systems engineering or information technology. Each track within the Computer Science program is built on a core of programming in current languages such as Python, C++ and Java, while focusing on skills such as database management, GUI design, web development and software engineering.

The Information Security emphasis (also referred to

as "Cybersecurity") will introduce you to principles and concepts of information security and hacking. Coursework uses real-world examples to illustrate attacks on computer systems and networks and teaches you basic hacking concepts with defensive measures.

As a computer scientist, you'll also need to be more than technically proficient. Reading, writing, critical analysis and presentation skills are essential for those who wish to do more than develop software. The dynamic blend of Western's liberal arts and computer science courses will provide you with the hard and soft skills necessary to manage people and projects.

To put your knowledge to practice, you'll execute difficult projects in software development, learn state-of-the-art security methods and become proficient with leading industry hardware and software systems. You can get hands-on experience in competitive internships with Fortune 500 companies and work on original research projects developing facial recognition software, machine learning and more.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Student Coding an IoT Project



WDTC Campus

**Western Dakota Technical College (WDTC)** is the first two-year Technical College in South Dakota to earn the Center of Academic Excellence in Cyber Defense (CAE-CD) designation for its Program of Study Validation: Computer Science – Information Technology Specialist.

The mission of the Computer Science department is: We are committed to providing students with the knowledge and skills to successfully analyze and solve complex problems that come with a technologically advanced world. Our Computer Science programs are innovative learning environments that provide hands-on experience, promote community collaboration through communicative efforts, and foster confidence within students to feel equipped with various forms of technology.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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The Computer Science – Information Technology Specialist program is led by faculty who are industry leaders and practitioners. An advisory board of business and industry leaders provide course guidance regarding theory-to-practice ideas, global business perspectives, and emerging topics.

WDTC Computer Science - Information Technology Specialist graduates are working in IT Support Specialist, IT Networking Specialist, and Cybersecurity Specialist arenas.

Established in 1968, Western Dakota Technical College is the only technical college that serves the western South Dakota region. The college offers nearly 40 programs in a variety of fields. WDTC delivers a personal, career-oriented education ideal for the student pursuing a meaningful profession and prideful future. Faculty, staff, and administration are committed to teaching the knowledge, skills, and behaviors students need to find be successful.

Ninety-nine percent of Western Dakota Technical College's most recent graduates are working, continuing their education, or are enlisted in the military. We pride ourselves on providing the best possible facilities and technology. Through hands-on learning, simulation, internships, and industry partnerships, our students graduate ready to make a real and immediate contribution to their employers and communities.



Western Governors University Headquarters

Our mission and focus at **Western Governors University** all comes back to expanding access to education. It's the driving force behind why we do everything the way we do here at WGU. Understanding our mission helps make clear why we have certain initiatives, programs, and partnerships in place. All of it is geared toward expanding our mission of higher education for all.

Our unique approach to learning is called competency-based education, and it's proven to help students accelerate their degrees and get into the workforce. We measure impact in individuals, and competency-based education allows us to do that. We're working to expand competency-based education practices so even more students can benefit.

WGU's online B.S. Cybersecurity and Information

Assurance degree program was designed with input from cybersecurity experts and leading IT employers to meet the most recent Department of Homeland Security (DHS) and National Security Agency (NSA) guidelines.

The WGU cybersecurity program boasts 15 top certifications that are built into the IT degree program and do not add time or additional costs—but do add to your résumé as soon as you've earned them, even before you complete your degree!

The WGU cybersecurity program offers a flexible, personalized approach to how education should be. No rigid class schedules. Just a solid, career-focused teaching program that meshes with your current lifestyle. You'll be challenged. You'll work hard. But if you commit yourself and put in the hours needed, WGU makes it possible for you to earn this degree.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Western Governors University Headquarters



WIU students on campus

**Western Illinois University (WIU)**, an Illinois public university founded in 1899, provides student-centered graduate and undergraduate programs through innovative teaching, research, and community service. Over the years, WIU has been consistently rewarded as “Best Midwestern College” by Princeton Review. Also, WIU is considered a military-friendly university. At WIU, millions are awarded in scholarships annually. WIU offers more than 100 programs, including a B.S. in Cybersecurity in the School of Computer Sciences, College of Business and Technology.

Along with Cybersecurity, the School also offers programs in Computer Sciences and Information Systems. The School provides the opportunity for Cybersecurity freshman and transfer scholarships in addition to various other Computer Sciences discipline-specific scholarships. The School has

more than 20 faculty members with advanced degrees, such as Ph.D., several research publications, published books, and industry certifications.

The Cybersecurity program offers a unique blend of technical and non-technical aspects of cybersecurity, harnessing the expertise from multiple programs offered by the School. We designed the program to prepare students to enter the cybersecurity workforce to serve in national defense, safeguard critical infrastructure, and protect industrial information systems.

The curriculum is regularly revised to equip students with vital cybersecurity skills. Furthermore, the School hosts a dedicated cybersecurity lab facility for providing hands-on experience. Students are trained to use a variety of forensic tools and receive training on professional cyber range environments.

Our cybersecurity program is built on the foundations of computer science, offering a comprehensive major in Cybersecurity, to enable students to choose most of their coursework from a variety of Cybersecurity-related courses, e.g., Linux system administration, advanced network security, secure coding, penetration testing, ethical hacking, wireless LAN and security, and information assurance.

The faculty members teaching within the Cybersecurity program actively participate in student learning and proactively advise Cybersecurity student club activities.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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# WESTERN WASHINGTON UNIVERSITY



Western Washington University Bellingham

**Western Washington University**, catering to over 15,000 students in Bellingham and across the Puget Sound and Central Salish Sea regions, offers a distinctive Cybersecurity degree through a collaborative academic partnership with Washington State community colleges. This program follows a 2+2 pathway, where students spend the first two years earning a specific cybersecurity transfer degree at one of eight partner colleges.

In the subsequent two years, they complete their Bachelor of Science in Cybersecurity at one of WWU's three Washington State locations: Bellingham, Poulsbo, or Kirkland. Tailored to meet the high demand for cybersecurity professionals, this program equips students with the necessary skills to prevent and respond to internet security breaches that endanger businesses, corporations, and governmental entities. Graduates of Western's

Cybersecurity program have successfully secured positions at prominent companies such as Amazon Web Services, Premera Blue Cross, and CI Security.

The program ensures that graduates possess a comprehensive skill set, including the ability to analyze complex cybersecurity problems, design and evaluate technical solutions that meet specific security requirements, and communicate effectively across various professional contexts. Moreover, graduates will understand their professional responsibilities and make informed decisions based on legal and ethical principles. They are also prepared to function effectively as either a member or leader of a team engaged in cybersecurity activities and apply security principles across the cybersecurity field to maintain operations amidst risks and threats.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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WWU - Poulsbo



# WEST VIRGINIA UNIVERSITY



West Virginia University's Woodburn Hall

Founded in 1867, **West Virginia University** is a public land-grant research university with its main campus in Morgantown, West Virginia. WVU holds an R1 Carnegie Research Classification and features a comprehensive medical school.

WVU's cybersecurity programs are housed in the Lane Department of Computer Science and Electrical Engineering (CSEE), which enrolls approximately 500 undergraduate students and 150 graduate students. At the undergraduate level, ABET-accredited degrees are offered in the areas of Computer Science, Computer Engineering, Electrical Engineering, and Cybersecurity. Ph.D. and M.S. degrees are offered in EE and CS. The department also offers a highly ranked MS degree in Software Engineering, which is delivered online via the Coursera platform.

Owing to the proximity to the FBI's Criminal Justice

Information Services (CJIS) division, a key research focus area at WVU is biometric identification. To support this research, WVU is a member of the multi-university Center for Identification Technology Research, an NSF Industry/University Cooperative Research Center.

WVU supports several student organizations of interest to cybersecurity students including CyberWVU, Women in Cybersecurity (WiCyS), the WVU AI Club, ACM, and IEEE. In 2023, the CyberWVU club competed alongside the West Virginia National Guard in the Locked Shields Competition, highlighting the practical application of their studies and research in real-world scenarios.

## DESIGNATIONS

- CAE-Cyber Defense
- CAE-Research

## CONTACT INFORMATION

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The Locked Shields Competition



The Gathering Fountain, WCC campus

**Whatcom Community College (WCC)** in Bellingham, WA is a national leader in cybersecurity education and was among the first community colleges to earn the Center of Academic Excellence in Cyber Defense designation.

The WCC Computer Information Systems (CIS) program aims to advance cybersecurity education by supporting students, working closely with industry representatives, and developing new tools to educate students as they enter the workforce, offering multiple pathways for students in cybersecurity, a two-year degree in cybersecurity, a direct transfer degree to Western Washington University in cybersecurity, and a Bachelor of Applied Science in cybersecurity.

Whatcom's CIS program is continuing to grow and adapt to meet the continuously changing industry

environment. The CIS program is well known for its SCADA courses and has recently developed new unmanned aircraft systems (UAS) courses that cover piloting (FAA Part 107), fleet management, and automation and mapping.

WCC is also host institution to the National Center of Academic Excellence Candidate National Center (CCNC, <https://www.ncyte.net/institutions/centers-of-academic-excellence>), the National Cybersecurity Training and Education (NCyTE, <https://www.ncyte.net/>) Center, and the Washington state Cybersecurity Center of Excellence (CCoE, <https://coecyber.io/>).

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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Cyber camp hosted at WCC



# WILMINGTON UNIVERSITY



Wilmington University hosts 15 sites throughout the Mid-Atlantic region

**Wilmington University's** Center for Cybersecurity Education offers accredited, affordable, academically rigorous programs that adapt with agility to changing industry needs. Bachelor's and master's degree programs, concentrations, and certificates are available online, offering working adults maximum flexibility.

The BS in Computer and Network Security has been designated as a Center of Academic Excellence in Cyber Defense since 2011. Students are prepared to sit for industry-recognized certifications, including CISA, CISSP, A+, Linux+, Security+, and Network+. Students in this program can apply their bachelor's degree coursework toward a graduate certificate in SCADA Cybersecurity. An optional concentration in Digital Forensics is also available.

The MS in Cybersecurity equips graduates to battle

cyberterrorism and protect against multi-vector attacks. It addresses cyberintelligence, cybercrime investigative principles, forensics, preservation of critical infrastructures, counter sabotage, and espionage. The program also teaches threat modeling and analysis, constructing defense scenarios, and guarding against asymmetric warfare and attack.

The MS in Information Systems Technology/ Information Assurance Concentration provides students with a practical understanding of the principles of data protection, cybersecurity, cloud security, and data security analytics, as well as highly sought-after hard and soft skills in networking, disaster recovery and high availability, and internet security detection, prevention, and remediation.

Certificate programs in Digital Evidence Discovery and Digital Evidence Investigation, SCADA, and Cyberterrorism allow professionals to quickly expand their skills and credentials in targeted areas. Expert instructors provide practical, realistic, and standards-based approaches to assessing, protecting, detecting, and auditing critical infrastructure/control systems.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

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WilmU students learn skills that can be immediately applied on the job



# WORCESTER POLYTECHNIC INSTITUTE



WPI Campus

**Worcester Polytechnic Institute's** cybersecurity program prepares students to be effective leaders in a world where actual and potential digital cyberattacks and security threats can disrupt entire industries. With the skills to keep systems secure and the drive to remain a step ahead, our cyber students are committed to making the world safer.

WPI is a leader in project-based learning. In cybersecurity, our multidisciplinary teams work within four distinct research areas: Analysis, Architecture, Principles, and Security Mechanisms/Functionality. They tackle subjects from cryptography and cloud computing to forensics and authentication, learning to approach challenges from multiple angles and hone their skills in team settings.

Students are involved in all aspects of cybersecurity from the beginning of their studies and may apply

for the National Science Foundation's CyberCorps Scholarship for Service or the U.S. Department of Defense Cyber Scholarship program.

WPI's undergraduate curriculum allows for exploring and developing preemptive measures, comprehensive solutions, and ongoing safeguards. Graduate students may choose between an industry-focused non-thesis track or a research-intensive thesis track. Either choice allows for independent study and research under the guidance of an engaged advisor. Graduates are sought after for jobs in academia, industry, and government. WPI's cybersecurity program supports real-world impact in a field where employees are in high demand.

## DESIGNATIONS

- CAE-Research

## CONTACT INFORMATION

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WPI's Project-based Learning



Xavier University Campus

**Xavier University's** Computer Science Cybersecurity concentration is dedicated to achieving excellence and distinction in the discovery, dissemination, and application of knowledge. Aligned with the university's mission to advance the common good and foster responsible and productive citizenship through informed action, our curriculum focuses on intellectual, moral, and spiritual development, setting our program apart in the region. We approach cybersecurity with a focus on its societal impact and contribution to the greater good. Embedded within the computer science discipline, our Cybersecurity program underscores critical thinking, logical reasoning, and precise expression of ideas. By integrating cybersecurity with our programming curriculum, we equip students for diverse career pathways. Classes within Xavier's Computer Science department, including those in Cybersecurity, typically have small class sizes ranging from 10 to

30 students, ensuring personalized attention both inside and outside the classroom. Xavier's combined Computer Science programs attract approximately 110 majors, with an average of 15 students graduating annually.

Xavier University draws upon a rich 500-year-old Jesuit Catholic tradition of academic excellence in the liberal arts and is deeply committed to promoting equity, inclusion, and diversity. Ninety-seven percent of students from Xavier's undergraduate STEM programs, including Computer Science, are employed, engaged in volunteer work, or enrolled in graduate school within six months of graduation. The College of Arts and Sciences stands as Xavier's oldest and largest college, providing a liberal arts education within the Jesuit tradition. Our curriculum prepares students for careers, professional or graduate studies, and life in a global society. We proudly hold a ranking among the Top 50 Colleges for Liberal Arts (College Factual) and confer nearly 400 degrees annually. Committed to fostering diversity and inclusion, the College of Arts and Sciences serves as a catalyst for genuine dialogue across differences, enriching the Xavier community.

## DESIGNATIONS

- CAE-Cyber Defense

## CONTACT INFORMATION

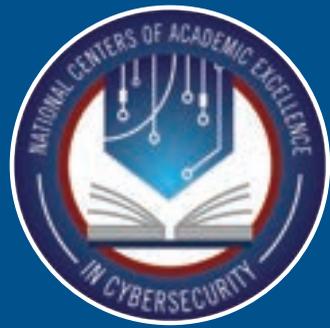
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Cyber Club





[www.caecommunity.org](http://www.caecommunity.org)