

CCNC

at Whatcom Community College

CAE
Candidates
National
Center

Centers of Academic Excellence Overview

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CAE Overview Agenda:

- CAE Candidates National Center
- Application Process
- Program of Study Overview
- CAE Overview
- Tool Review
- Q&A

NCYTE
CENTER

CCNC | CAE
Candidates
National
Center
at Whatcom Community College

CAE Candidates National Center (CCNC) Resources

National Cybersecurity Training & Education (NCyTE) Center at Whatcom Community College

- www.NCyTE.net
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NCyTE CENTER



CAE Candidates National Center

Designated
Under
updated CAE
Process

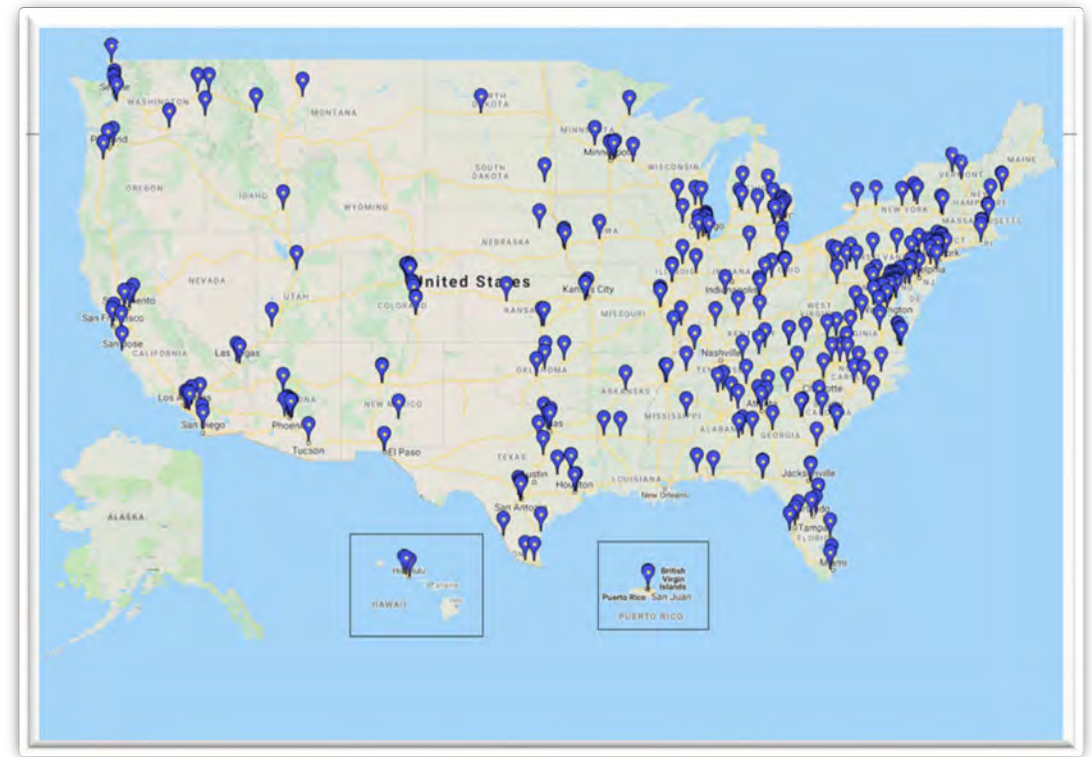
- 163 CAE designations as of October 2022

Application
Assistance:

- 135 active institutions as of October 2022

Program
Development

- 53 Active institutions as of October 2022



CAE-C Designations



**National Centers of Academic Excellence in Cybersecurity
CAE 2021
Proposed Designation Requirements and Application Process
For
CAE-Cyber Defense (CAE-CD)**

*Prepared by the
Application Process and Adjudication Rubric (APAR)
Working Group (WG)*

June 2021

20210608_CA2021_Proposed_CA-CD_Designation_Requirements



**National Centers of Academic Excellence in Cybersecurity
NCAE-C 2022
Designation Requirements and Application Process
For
CAE Cyber Operations (CAE-CO)**

*Prepared by the
Application Process and Adjudication Rubric (APAR)
Cyber Operations Working Group (COWG)*

September 2022

20220901_CA2022_CA-CO_Designation_Requirement_Ver1.6
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**National Centers of Academic Excellence in Cybersecurity
CAE 2022
Proposed Designation Requirements and Application Process
For
CAE-Cyber Research (CAE-R)**

*Prepared by the
Cyber Research Focus Group (CRFG)*

June 2022

20220624_CA2022_CA-R_ProposedDesignation_Requirements_Draft9
This publication was partially supported by the NCAE Center at Whatcom Community College,
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<https://public.cyber.mil/ncae-c/documents-library/>

Getting Started

The screenshot shows the CAE in Cybersecurity Community website. The top navigation bar includes links for HOME, ABOUT US, NEWS, EVENTS, CAE MAP, and RESOURCES. A search icon is also present. The main content area features a large banner with the text "Interested in Becoming a C" and "Did you know designated education grants through the Department apply for the National Science Program (SFS)? Check out the". A blue arrow points to the "APPLICANT CHECKLIST" link in the navigation menu. Below the banner, there are three dots indicating a carousel. At the bottom, a blue button labeled "Apply Now" is visible. The footer contains the text "CONNECT WITH THE CAE COMMUNITY" flanked by horizontal lines.

<https://www.caecommunity.org/about-us/national-cae-cybersecurity-program/applicant-checklist>

Getting Started

CAE-CD Program Eligibility and Summary

The CAE-CD Program is open to current regionally accredited:

- Four-year Colleges
- Graduate-level Universities
- Two-year Community Colleges
- Technical Schools
- State or Federally Endorsed Cybersecurity Training Centers
- U.S. Government Cybersecurity Training Centers

[Start Applicant Checklist](#)

[Download CAE-CD Checklist](#)

CAE-CO Program Eligibility and Summary

The CAE-CO Program is open to current regionally accredited:

- Four-year Colleges
- Graduate-level Universities
- Must be based within a Computer Science, Electrical Engineering or Computer Engineering Department, or a degree program of equivalent Technical Depth, or a Collaboration between Two or more of these Departments

[Start Applicant Checklist](#)

[Download CAE-CO Checklist](#)

CAE-R Program Eligibility and Summary

The CAE-R Program is open to current:

- Department of Defense (DoD) schools
- Ph.D. producing military academies
- Regionally accredited, degree granting four-year institutions rated by the Carnegie Foundation Basic Classification system as either:
 1. Doctoral University – Highest Research Activity (R1),
 2. Doctoral University – Higher Research Activity (R2), or
 3. Doctoral University – Moderate Research Activity (R3)

[Start Applicant Checklist](#)

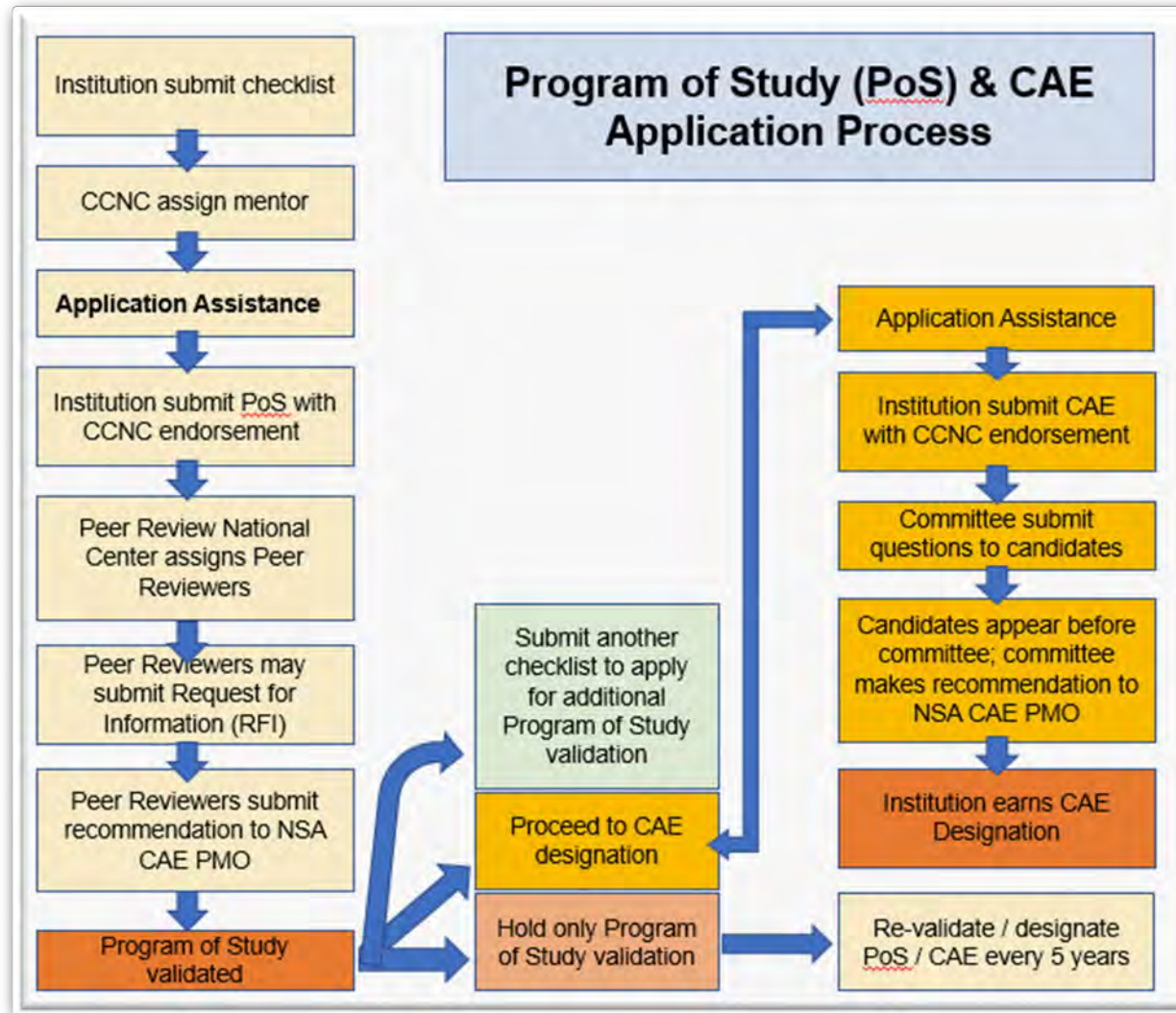
[Download CAE-R Checklist](#)

Updated Submission Cycle

| PoS Cycle | Access to Application | Application Due | Pre-submission Review (PSR) Feedback Deadline | Final Submission |
|--------------|-----------------------|-----------------|---|------------------|
| PoS Cycle 8 | 8/16/2021 | 3/15/2022 | 3/30/2022 | 4/15/2022 |
| PoS Cycle 9 | 10/5/2021 | 3/15/2022 | 3/30/2022 | 4/15/2022 |
| PoS Cycle 10 | 4/15/2022 | 6/15/2022 | 6/30/2022 | 7/15/2022 |
| PoS Cycle 11 | 7/15/2022 | 9/15/2022 | 9/30/2022 | 10/15/2022 |
| PoS Cycle 12 | 10/15/2022 | 12/15/2022 | 12/30/2022 | 1/15/2023 |
| PoS Cycle 13 | 1/15/2023 | 3/15/2023 | 3/30/2023 | 4/15/2023 |
| PoS Cycle 14 | 4/15/2023 | 6/15/2023 | 6/30/2023 | 7/15/2023 |
| PoS Cycle 15 | 7/15/2023 | 9/15/2023 | 9/30/2023 | 10/15/2023 |
| PoS Cycle 16 | 10/15/2023 | 12/15/2023 | 12/30/2023 | 1/15/2024 |

| CAE Cycle | Access to Application | Application Due | Pre-submission Review (PSR) Feedback Deadline | Final Submission |
|--------------|-----------------------|-----------------|---|------------------|
| CAE Cycle 8 | 7/15/2022 | 9/15/2022 | 9/30/2022 | 10/15/2022 |
| CAE Cycle 9 | 7/15/2022 | 9/15/2022 | 9/30/2022 | 10/15/2022 |
| CAE Cycle 10 | 10/15/2022 | 12/15/2022 | 12/30/2022 | 1/15/2023 |
| CAE Cycle 11 | 1/15/2023 | 3/15/2023 | 3/30/2023 | 4/15/2023 |
| CAE Cycle 12 | 4/15/2023 | 6/15/2023 | 6/30/2023 | 7/15/2023 |
| CAE Cycle 13 | 7/15/2023 | 9/15/2023 | 9/30/2023 | 10/15/2023 |
| CAE Cycle 14 | 10/15/2023 | 12/15/2023 | 12/30/2023 | 1/15/2024 |
| CAE Cycle 15 | 1/15/2024 | 3/15/2024 | 3/30/2024 | 4/15/2024 |
| CAE Cycle 16 | 4/15/2024 | 6/15/2024 | 6/30/2024 | 7/15/2024 |

Updated Application Process



Program of Study Overview



1. PoS Curriculum



2. Students



3. Faculty Members



4. Continuous Improvement

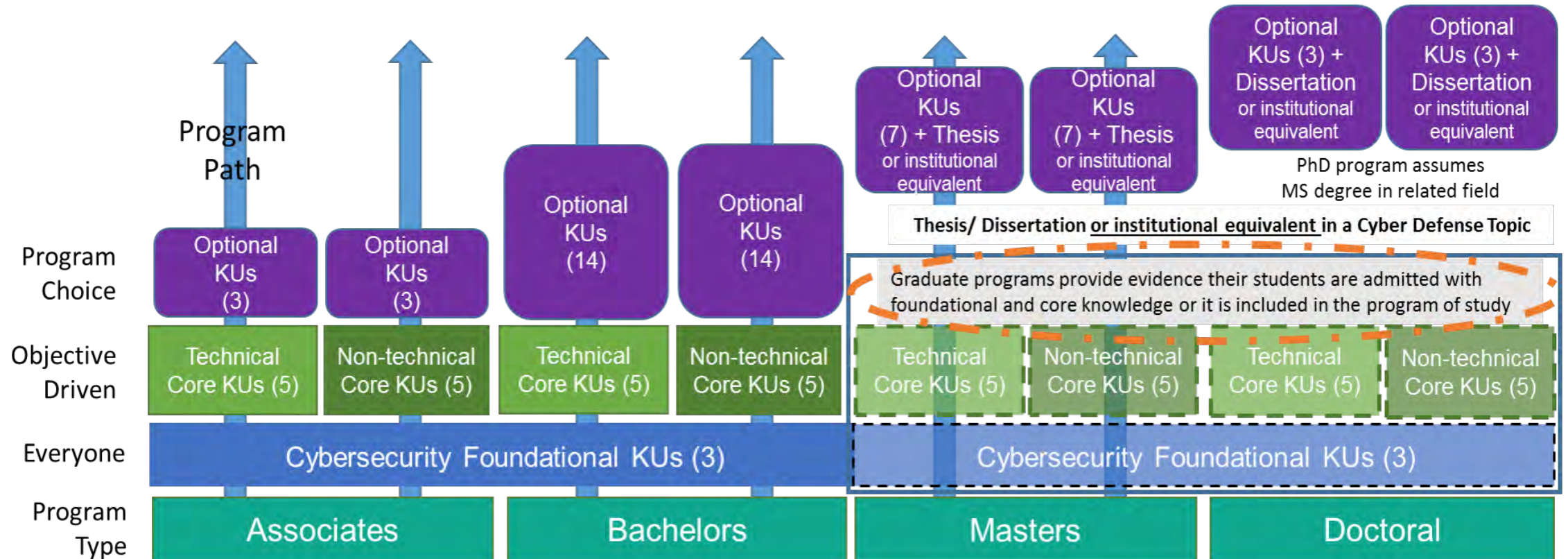


Program of Study Curriculum

1. PoS Curriculum

| Section | Action |
|---|------------------------|
| 1a. The cybersecurity PoS offered by the institution | Resume |
| 1b. NICE Framework crosswalk alignment | Resume |
| 1c. Courses Syllabi and Courses Requiring Applied Lab Exercises (For KU Aligned Courses Only) | Resume |
| 1d. Curriculum Map and Plan with Assessment Documentation | Resume |
| 1e. KU alignment | Start |
| 1f. Graduate Thesis/Dissertation/Equivalent Guidelines/ Process (Masters & Doctoral only) | Start |

NICE Cybersecurity Workforce Framework: Seven Categories



Program of Study: Students

2. Students

| Section | Action |
|---|-----------------------|
| 2a. Student enrollment/graduation in the PoS(s) | Start |
| 2b. Sample student certificate/notation on transcript/official letter | Start |
| 2c. Students Work Products (papers, assignments, labs, etc.) | Start |
| 2d. Students Participation in Extracurricular Activities | Start |

Program of Study: Faculty Members

3. Faculty Members

| Section | Action |
|---|-----------------------|
| 3a. Cyber Program(s) of Study POC + Alternate POC | Start |
| 3b. Full-time, part-time, and adjunct faculty members + Faculty qualifications/CV/Resume (publications, research, industry involvement, certifications, etc.) related to PoS type | Start |
| 3c. Faculty support of enrolled students | Start |
| 3d. Process of Faculty Promotion/Reappointment (e.g. Faculty Policy Manual) | Start |

Program of Study: Continuous Improvement

| 4. Continuous Improvement | |
|------------------------------------|-----------------------|
| Section | Action |
| 4a. Continuous Improvement plan | Start |
| 4b. Continuous Improvement process | Start |
| 4c. Regular evaluation schedule | Start |

CAE Overview



Section

1. Accreditation

2. Institution Commitment

3. Evidences of Sound Cybersecurity Posture and Plan

4. Established "Center" for Cybersecurity

5. Affirmation of the CAE Core Values and Guiding Principles

6. Sustainability

7. Professional Development

8. Cybersecurity Academic Integration

9. Outreach

10. Transfer of Credit/Articulation Agreements

CAE Overview



| Section |
|--|
| 1. Accreditation |
| 2. Institution Commitment |
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Institutional Commitment

Letter must:

- Be written on official institution letterhead, signed by the Provost or higher.
- Identify regional accreditation information.
- Express institutional commitment to excellence in the cyber defense field.
- Provide institutional support of an official Cyber “Center” within the institution.
- **Identify the name of a designated CAE Institutional Accounts Administrator.**
 - Oversees the CAE accounts across the institution - one who is authorized to switch POCs, activate new users, etc.
- List the program(s) of study supporting the requested designation.



Established “Center” for Cybersecurity

Whatcom
COMMUNITY COLLEGE

ACHIEVING SUCCESS. BUILDING COMMUNITY.
ADVANCING EQUITY. ENHANCING EFFECTIVENESS.

GET STARTED

ACADEMICS

STUDENT SERVICES

CAMPUS LIFE

ABOUT THE COLLEGE

I WANT TO...

▼ CYBERSECURITY CENTER

Academic Options

Student Activities and Resources

Information Assurance Resources

Organizations

WCC Cybersecurity Camp



[About the College](#)

CYBERSECURITY CENTER

Academic Integration

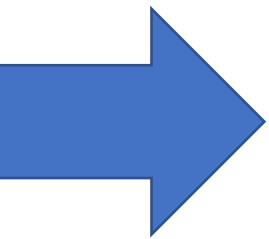
Section 8: Cybersecurity Academic Integration

- Demonstrate that cybersecurity is not treated as an isolated discipline.
 - Cybersecurity concepts must be integrated into additional degree programs within the institution **outside the PoS(s) applied for or previously validated**
- Three different syllabi with course name and cyber modules clearly **highlighted**, AND
- One sample student work for each of the three courses.



Outreach

Section 9: Outreach

- 
- **9a:** Provide evidence of how the institution has shared cyber related curriculum.
 - **9b:** Evidence (three) that the applying institution has attended CAE events.
 - **9c:** Evidences that faculty members from the applying institution has contributed to the CAE community.
 - **9d:** Provide evidence of faculty members collaborating with current CAE-C institutions on research, grants, course development, etc.
 - **9e:** Evidence of faculty members/employee sponsorship or oversight of students for Cyber events for the community at large.
 - **9f:** Evidence on how the institution works with employers and students to support placement for cyber related internships and jobs.
 - **9g:** Provide evidence of obtaining input on curriculum to meet industry needs.

Outreach

Participate

- CAE Forum / CAE Tech talk
 - www.caecommunity.org
- Participation in workshops

Contributions

- Submit to CLARK.CENTER
 - <https://clark.center/home>
- The CAE Resource Directory (CARD)
 - <https://caeresource.directory/home>

Centers of Academic Excellence
Forum



Centers of Academic Excellence
Tech Talk



Tool Review

NCAE Tool:

- <https://nsa-ncae.com/login>

Contact information:

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Stephen Troupe – Associate Director

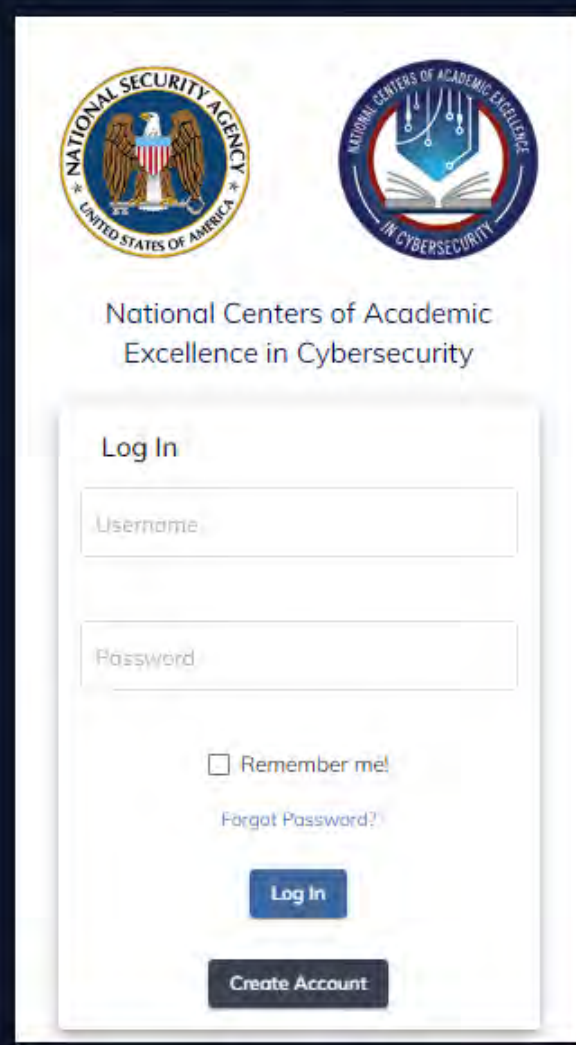
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Tosha Amos – Project Manager

- Tamos@whatcom.edu

NSA CAE Program Office:

- CAEPMO@nsa.gov



The screenshot shows the login interface for the National Centers of Academic Excellence in Cybersecurity. At the top left is the National Security Agency (NSA) seal, and at the top right is the NCAE logo. Below the logos, the text reads "National Centers of Academic Excellence in Cybersecurity". The main content area is titled "Log In" and contains two input fields: "Username" and "Password". Below these fields are a "Remember me!" checkbox, a "Forgot Password?" link, a blue "Log In" button, and a dark grey "Create Account" button.

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Questions?

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