

CAE2Y

Kyle Jones Sinclair Community College



Outline

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2. CAE2Y Help and Resources
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What is the CAE2Y

NSA and the Department of Homeland Security (DHS) jointly sponsor the National Centers of Academic Excellence in Cyber Defense (CD) Education (CAE-CDE), Two-Year Education (CAE-2Y) and Research (CAE-R) programs. The goal of these programs is to reduce vulnerability in our national information infrastructure by promoting higher education and research in CD and producing a growing number of professionals with CD expertise in various disciplines. Students attending CAE-CDE and CAE-R schools are eligible to apply for scholarships and grants through the Department of Defense Information Assurance Scholarship Program and the Federal Cyber Service Scholarship for Service Program. Designation as a Center does not carry a commitment for funding from NSA or DHS. - <https://www.iad.gov/NIETP/>

National IA Education & Training Programs



National IA Education &
Training Programs

Welcome guest

General Information

Home
CAE Requirements and Resources
CAE-CD Designated Institutions
Current IACE Certified Institutions
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Security Warnings
Login/Join

WELCOME

What's New?

CAE Application Website Is Now Open

The CAE Application Website is now open for submissions for the 2018 cycle. Program requirements and other resources can be found [here](#). Please see an important notice to all applicants below:

New Applicant Checklist

* While not mandatory, applicants that wish to take advantage of application assistance may complete the New Applicant Checklist (<https://www.caecommunity.org/cae-program-applicant-checklist>). The checklist will guide the applicant through the program requirements and provide a self-assessment of readiness. Applicants that opt to receive support will have their checklist reviewed and will be referred to one of two assistance paths.

Program Development & Application Assistance

* Program Development - Applicants who are assessed to require more than one year to be ready for designation will be assigned to Program Development. In this phase, the applicant will have access to workshops, seminars and an advisor to help in their preparation for designation. Schools in this phase will also be invited to programs and events hosted by the CAE Community (caecommunity.org) and have access to other resources offered by the Program Office only for the CAE audience.

* Application Assistance - Applicants who are assessed to be within one year of readiness for designation will be assigned to Application Assistance. In this phase, the applicant will work directly with a mentor to complete the application.

* Applicants that choose to opt out of Application Assistance must acknowledge that they do not wish to receive support via the New Applicant Checklist.

About The Programs

NSA and the Department of Homeland Security (DHS) jointly sponsor the National Centers of Academic Excellence in Cyber Defense (CD) Education (CAE-CDE), Two-Year Education (CAE-2Y) and Research (CAE-R) programs. The goal of these programs is to reduce vulnerability in our national information infrastructure by promoting higher education and research in CD and producing a growing number of professionals with CD expertise in various disciplines. Students attending CAE-CDE and CAE-R schools are eligible to apply for scholarships and grants through the Department of Defense Information Assurance Scholarship Program and the Federal Cyber Service Scholarship for Service Program. Designation as a Center does not carry a commitment for funding from NSA or DHS.

CAE-CD institutions receive formal recognition from the U.S. Government as well as opportunities for prestige and publicity for their role in securing our Nation's information systems.

CAE Naming Convention

National Centers of Academic Excellence in Cybersecurity (CAE-C)

- NSA/DHS National Centers of Academic Excellence in Cyber Defense (CAE-CD)
 - * NSA/DHS National Centers of Academic Excellence in Cyber Defense Education (CAE-CDE)
 - * NSA/DHS National Centers of Academic Excellence in Cyber Defense Two-Year Education (CAE-2Y)
 - * NSA/DHS National Centers of Academic Excellence in Cyber Defense Research (CAE-R)
- National Centers of Academic Excellence in Cyber Operations (CAE-CO)

NIETP

First Steps

- Make an account at
- <https://www.iad.gov/NIETP/>

CAE REQUIREMENTS AND RESOURCES

<https://www.iad.gov/NIETP/CAERequirements.cfm>

C5 Program

<http://www.c5colleges.org/>

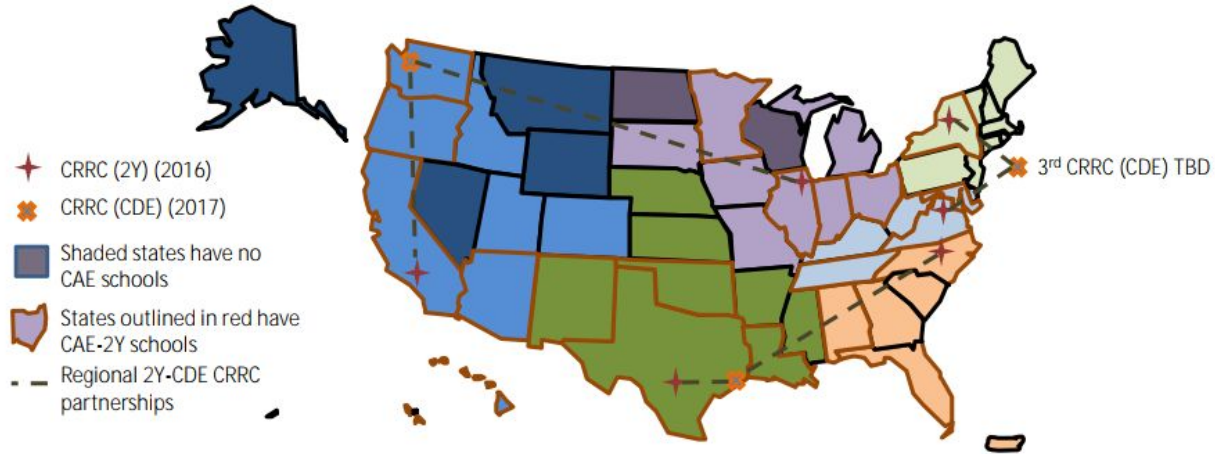
In August 2015, the National Science Foundation (NSF) awarded a major grant to Whatcom Community College in Bellingham, Wash., to drive a substantial nationwide expansion of cybersecurity programs in other colleges and universities.

Primary Goals

- Strengthen and expand the number of community colleges across the United States that meet national standards in cybersecurity education (CAE2Y)
- Develop content modules to enhance computer science and cybersecurity courses



CRRC's



<u>Western Region</u>	<u>South Central Region</u>	<u>North Central Region</u>	<u>S. Eastern Region</u>	<u>Central Eastern Region</u>	<u>New England Region</u>
California (9) Oregon (2) Washington (4) Idaho (2) Nevada (0) Arizona (4) Utah (1) Colorado (7) Wyoming (0) Montana (0) Hawaii (3) Alaska (0) Total: 32	New Mexico (3) Texas (14) Oklahoma (6) Arkansas (2) Louisiana (3) Mississippi (1) Kansas (3) Nebraska (2) Total: 34	Ohio (4) Michigan (5) Indiana (4) Illinois (8) Wisconsin (0) Minnesota (5) Iowa (1) Missouri (2) S. Dakota (1) North Dakota (0) Total: 30	N. Carolina (6) S. Carolina (2) Georgia (6) Florida (14) Alabama (9) Puerto Rico (1) Total: 38	Virginia (10) W. Virginia (2) Kentucky (2) Delaware (2) Maryland/DC (19) Tennessee (5) Total: 40	Maine (1) Vermont (2) N. Hampshire (1) Massachusetts (4) Rhode Island (1) Connecticut (1) New York (11) New Jersey (6) Pennsylvania (8) Total: 35

Hub CAE Regional Resource Centers

- Central Eastern Region - Forsyth Technical Community College
- New England Region - Mohawk Valley Community College
- North Central Region - Moraine Valley Community College
- South Central Region - San Antonio College
- South Eastern Region - University of West Florida
- Western Region - Coastline Community College

CAE Community Site

<https://www.caecommunity.org/>

 **CAE**
IN CYBERSECURITY
COMMUNITY

HOME ABOUT US NEWS CALENDAR RESOURCES DISCUSSIONS

WELCOME TO THE
CAE COMMUNITY PORTAL

A community of Universities and Community Colleges that have distinguished themselves as centers of academic excellence to the NSA and DHS.

CERTS
2018
CYBER EDUCATION RESEARCH AND TRAINING SYMPOSIUM
OCTOBER 11, 2017
AFCEA INTERNATIONAL

CYBER EDUCATION RESEARCH AND TRAINING SYMPOSIUM (CERTS)
October 11, 2017 / 0 Comments / in Academia

COMMUNITY PORTAL SEARCH
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AFCEA International is pleased to host the first Cyber Education



CAE2Y

Starting the Process

Knowledge Units (KUs)

A Guide for Mapping Courses to Knowledge Units (KUs)

This 47-page guide, from Dr. Fred Klappenberger and the National CyberWatch Center, offers information on mapping the National Centers of Academic Excellence in Information Assurance/Cyber Defense (CAE IA/CD) required Knowledge Units (KUs) to courses within an institution's degree programs. The document explains the benefits of the CAE IA/CD designation, the application process, and the importance of course mapping to that process. Mapping is broken down into three phases: data gathering, course data entry, and formal mapping.

<https://scout.wisc.edu/cyberwatch/r131>

Knowledge Units (KUs)

Two-year institutions: the required Core KUs is 11

1. Basic Data Analysis (Core)
2. Basic Scripting (Core)
3. Cyber Defense (Core)
4. Cyber Threats (Core)
5. Fundamental Security Design Principles (Core)
6. IA Fundamentals (Core)
7. Intro to Cryptography (Core)
8. IT System Components (Core)
9. Networking Concepts (Core)
10. Policy, Legal, Ethics and Compliance (Core)
11. Systems Administration (Core)

KU's How To

[CAE Mapping Approach](#)

[Phase 1 – Intro & Data Gathering](#)

[CAE Mapping Approach](#)

[Phase 2 – Entering Courses](#)

[CAE Mapping Approach](#)

[Phase 3 – Course to KU Mapping](#)



CAE2Y

Program Criteria

Program Criteria

1. Cyber Defense Curriculum Path
2. Student Skill Development and Assessment
3. "Center" for Cyber Education
4. Cyber Faculty Qualifications and Courses Taught
5. Cyber Defense is a Multidisciplinary Practice at the Institution
6. Institutional Security Plan
7. Cyber Outreach/Collaboration Beyond the Institution

Program Criteria

7 areas of Program Criteria

- https://www.iad.gov/NIETP/documents/Requirements/CAE_CD-2Y_Criteria.pdf

Why CAE2Y

Marketing and Grants

[Cybersecurity National Action Plan](#)



SINCLAIR
COLLEGE

130 YEARS

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