National Centers of Academic Excellence in Information Assurance/Cyber Defense (IA/CD) Education Program Guidance

Jointly Sponsored by the National Security Agency (NSA) and the Department of Homeland Security (DHS)

Eligibility

All regionally accredited two-year, four-year and graduate level institutions in the United States (US) can apply for designation as a NSA/DHS National Center of Academic Excellence in Information Assurance/Cyber Defense (CAE IA/CD). Mapping courseware to the Committee on National Security Systems (CNSS) training standards is no longer a prerequisite to apply.

Submission Process

The CAE IA/CD application must be completed via the CAE application website. The application website is still under development. Current and interested institutions will be notified when the application becomes available. Institutions must clearly demonstrate, in sufficient detail and with supporting documentation where required and appropriate, how the institution meets the requirements for each of the designations they apply for. The institution must also include an official letter (*pdf copy uploaded into the website- do not mail a hard copy*) stating the institution's intent to apply for CAE IA/CD designation. The letter must be on official institution letterhead, signed by a collegiate official at an appropriate level (Dean or higher) and addressed to:

National Security Agency Attn: NSA/DHS CAE Program Manager 9800 Savage Road, Suite 6744 Fort Meade, MD 20755-6744

Requirements

NSA/DHS CAE IA/CD in Two-year Education (CAE2Y):

Applicable to regionally accredited two-year community colleges, technical schools, state or federally endorsed IA/Cybersecurity training centers or U.S. Government IA/Cybersecurity training centers.

The criteria include:

- Demonstration of program outreach and collaboration, student development, IA/CD Center establishment and maintenance, IA/CD multidisciplinary efforts, practice of IA/CD at the institution level, IA/CD faculty, and student curriculum path and recognition (See 2014 CAE 2Y Criteria)
- Successful mapping of the institution's curriculum to the two-year Core Knowledge Unit (KUs) (See 2014 CAE IA-CD KUs)

NSA/DHS CAE IA/CD in Education Four-year+ (CAE IA/CD)¹:

Applicable to regionally accredited four-year colleges, graduate-level universities, and DoD schools.

The criteria include:

- Demonstration of program outreach and collaboration, student development, IA/CD Center establishment and maintenance, IA/CD multidisciplinary efforts, practice of IA/CD at the institution level, IA/CD faculty, and student curriculum path and recognition; (See 2014 CAE IA/CD Criteria)
- Successful mapping of the institution's curriculum to all of the two-year Core KUs, the four-year Core KUs, and five (5) Optional KUs of the institution's choice. (See 2014 CAE IA-CD KUs)

¹ Regionally accredited 4-year colleges, graduate-level universities, and DoD schools can apply to be designated as both a CAE IA/CD and CAE-R.

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NSA/DHS CAE IA/CD in Research Designation (CAE-R):

Applicable to DoD schools, PhD producing military academies or regionally accredited, degree granting four-year institutions rated as either Research University - Very High Research Activity (RU-VH), Research University - High Research Activity (RU-H), or Doctoral/Research University (DRU) as determined by the Carnegie Foundation Basic Classification system (and/or other independent body to measure IA/CD) or written justification as to significant IA/CD research)

The criteria include:

• Demonstration of IA/CD Research initiatives (faculty and student), publications, graduate-level production and research funding (See 2014 CAE-R Criteria)

NSA/DHS CAE IA/CD Focus Area (Optional)

All CAEs have the option to apply for one or more CAE IA/CD Focus Area designations, but the institution **must specifically identify** the Focus Area(s) of intent.

The criteria include:

- Successful mapping of the institution's curriculum to all of the KUs identified in the Focus Area
- Demonstration that a student can reasonably complete the necessary course of study to include all KUs identified in the Focus Area.
- The institution must provide student certificates to those that complete the FA course of study. The certificates must clearly identify the specific Focus Area achieved

Optional Focus Area designations:

- Provide valuable differentiation among institutions for marketing purpose
- Allow students who wish to study in a specific area the ability to make an informed decision
- Prove hiring managers the ability to recruit from institutions more efficiently to find skill needed for their line of business
- Foster and encourage further development of strong IA focused education and research depth at US institutions

Available Tools

The following tools are available to assist in gathering the information needed to map to the following KU sets:

- 1. Two-year Core KU matrix and reviewer checklist
- 2. Four-year Core KU matrix and reviewer checklist
- 3. Optional KUs
- 4. Focus Area KUs

These tools are useful to identify the topic/objective/week/session/project/lab/etc numbers (whatever is used in the syllabi/course outline) that covers each of the KU topic and/or outcome elements. The spreadsheets consolidate mapping information which expedites entering it in the CAE application website. Many also find the spreadsheets useful in determining what is actually being taught in their /other department(s) - an overall picture so they can see overlaps, gaps, ensure updates are made to all courses covering same topic (such as adding new law/access control method), etc. The checklists can be used by the institution to double-check the KU mapping before the application is officially submitted.

Program Evaluation:

Institutions will be evaluated by CAE Program staff with assistance from Subject Matter Experts. The last
phase of the criteria may be an on-site evaluation focused on course content, course relevance, laboratory
facilities, and faculty involvement.

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• The Program Office may request additional documentation regarding a submission. It is incumbent upon the institution to answer any additional requests in a timely manner, usually within seven calendar days.

Application Schedule

- Institutions not currently a CAE in IA may apply at anytime, but reviews of institutions of current CAEs in IA take precedence. Due to the requirement to have all institutions designated by 2014, designation periods for the first cycle will range from three to six years from the institution's application. Subsequent cycles will revert to a five year cycle.
- Current CAEs in IA can apply for the new CAE IA/CD designation as indicated on the 2014 schedule. The schedule is based on the current CAE in IA designation year and other programmatic requirements. Institutions may submit their application ahead of schedule, but may not be evaluated until their scheduled quarter. Due to the requirement to have all institutions designated as a CAE IA/CD by 2014, designation periods for the first cycle will range from three to six years from the institution's application. This will allow a more distributed range of re-applications in the future. Subsequent cycles will revert to a five year cycle. The initial designation period will be dependent upon timing of the application, with allowances for changes by the program office. Institutions that project a hardship in meeting their assigned schedule should contact the CAE Office at: AskCAEIAE@nsa.gov as soon as practicable.

Knowledge Unit, Focus Area, and Criteria Update Process

- Anyone may propose updates to the KUs, FAs, and CAE Criteria at any time. There will be space in the CAE IA/CD website application to propose updates, or email them to AskCAEIAE@nsa.gov.
- A joint academia/industry/government panel will review proposals on a quarterly or semi-annual (TBR) basis. Volunteers for this panel will be solicited from the CAE Community, industry, and government.
- Changes will take effect annually, beginning with the cycle starting in 2015.

Please direct CAE IA/CD program questions or concerns to <u>AskCAEIAE@nsa.gov</u>.