

CERTIFICATE IN TEACHING CYBERSECURITY FOR HIGH SCHOOLS - GRADUATE



SACRAMENTO STATE
Redefine the Possible

In Workflow

1. CSC Committee Chair (shaverdian@csus.edu; haiquan.chen@csus.edu)
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18. Registrar's Office (k.mcfarland@csus.edu)

Approval Path

1. Thu, 13 Apr 2023 05:42:46 GMT
Anna Baynes (shaverdian): Approved for CSC Committee Chair
2. Thu, 13 Apr 2023 18:44:14 GMT
Jinsong Ouyang (jouyang): Approved for CSC Chair
3. Fri, 21 Apr 2023 16:33:02 GMT
Masoud Ghodrat Abadi (abadi): Rollback to Initiator
4. Thu, 04 May 2023 04:19:32 GMT
Haiquan Chen (haiquan.chen): Approved for CSC Committee Chair
5. Thu, 04 May 2023 05:12:49 GMT
Jinsong Ouyang (jouyang): Approved for CSC Chair
6. Fri, 05 May 2023 16:22:06 GMT
Masoud Ghodrat Abadi (abadi): Approved for ECS College Committee Chair
7. Fri, 12 May 2023 16:54:17 GMT
Behnam Arad (arad): Approved for ECS Dean

New Program Proposal

Date Submitted: Wed, 03 May 2023 07:39:29 GMT

Viewing: Certificate in Teaching Cybersecurity for High Schools - Graduate

Last edit: Wed, 03 May 2023 07:39:28 GMT

Changes proposed by: Jun Dai (217393411)

Academic Group: (College)

Engineering & Computer Science

Academic Organization: (Department)

Computer Science

Catalog Year Effective:

2023-2024 Catalog

NOTE: This degree major program will be subject to program review evaluation within six years after implementation.

Individual(s) primarily responsible for drafting the proposed degree major program:

Name (First Last)	Email	Phone 999-999-9999
Jun Dai	jun.dai@csus.edu	916-278-5163

Type of Program Proposal:

Certificate

Is this a pilot program?

No

Title of the Program:

Certificate in Teaching Cybersecurity for High Schools - Graduate

Designation: (degree terminology)

Certificate - Graduate

Abstract of the proposal:

This proposal proposes a Certificate in Teaching Cybersecurity for High Schools, which is designed to recognize high school teachers who have completed the four required courses through the National Cybersecurity Teaching Academy (NCTA) program offered by the Department of Computer Science at Sacramento State. The NCTA program with funding support from National Security Agency is to train high school teachers for teaching cybersecurity in their classes.

Briefly describe the program proposal (new or change) and provide a justification:

This is a new certificate designed for high school teachers, in order to upskill certified high school teachers based on the National Cybersecurity Teaching Academy (NCTA) program offered by the Department of Computer Science at Sacramento State. The ultimate goal is to promote cybersecurity workforce development. And it enhances Sacramento State's support and impact to the community.

University Learning Goals**Graduate (Masters) Learning Goals:**

Critical thinking/analysis
 Communication
 Disciplinary knowledge
 Professionalism

Program Learning Outcomes**Program Learning Outcomes****Learning Outcome**

1. Master, integrate, and apply knowledge and skills to solve cybersecurity problems.(Disciplinary Knowledge)
2. Communicate research findings, original work, technical and non-technical support materials in writing and via oral presentation to a variety of audiences. (Communication)
3. Demonstrate the ability to be creative and analytical, and to contribute to the field of cybersecurity. (Critical thinking/analysis)
4. Adhere to ethical standards of the profession when conducting academic and professional activities. (Professionalism)

Will this program be required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?

No

Please attach a Comprehensive Program Assessment Plan (required)

Program-Assessment-Plan-NCTA.docx

Please attach a Curriculum Map Matrix (required)

CurriculumMapMatrix-NCTA.docx

Please attach a five-year budget projection (required)

5-year-budget-certificate in teaching cybersecurity for high school teachers.xls

Catalog Description:

Total units required for the certificate: 12

This Certificate in Teaching Cybersecurity for High Schools is designed to recognize high school teachers who have completed the four required courses through the National Cybersecurity Teaching Academy (NCTA) program offered by the Department of Computer Science at Sacramento State. The NCTA program with funding support from National Security Agency is to train high school teachers for teaching cybersecurity in their classes. This program admits high school teachers based on their education, teaching, and/or professional experience.

This certificate is available **only** for high school teachers admitted into the National Cybersecurity Teaching Academy (NCTA) program offered by the Department of Computer Science at Sacramento State.

Admission Requirements: Course prerequisites and other criteria for admission of students to the degree major program, and for their continuation in it.

This program admits high school teachers based on their education, teaching, and/or professional experience.

Program Requirements: (If new courses are being created as part of a new program, it will be useful to propose courses first.)

CSC 296T Fundamentals in Cybersecurity for Teachers
 CSC 296U Introduction to Digital Forensics for Teachers
 CSC 296V Cybersecurity Teaching Methods for Teachers
 CSC 296W Cybersecurity Practicum for Teachers

Attach the results of a formal survey in the geographical area to be served indicating demand for individuals who have earned the proposed degree and evidence of serious student interest in majoring in the proposed program:

ISC2 Cybersecurity Workforce Study.pdf

For graduate programs, the number of declared undergraduate major and the degree production over the preceding years of the corresponding baccalaureate program:

NA

Professional uses of the proposed degree major program:

NA

The expected number of majors in:**1st Year Enrollment:**

25

3rd Year Enrollment:

25

5th Year Enrollment:

25

1st Year Graduates:

0

3rd Year Graduates:

25

5th Year Graduates:

50

Please attach any additional files not requested above:

Certificate in Teaching Cybersecurity for High Schools-v3.docx

Reviewer Comments:

Masoud Ghodrat Abadi (abadi) (Fri, 21 Apr 2023 16:33:02 GMT): Rollback: As discussed in the meeting

Amy Wallace (amy.wallace) (Wed, 03 May 2023 15:46:56 GMT): How does this relate to teaching credential, MATs, or Other Authorization. 12 units is akin to a concentration at the graduate level. How do students see these units...articulated and counting towards credential or degree? non-matriculated professional development?

Key: 556